



**Health and Consumer Protection  
Directorate - General**

## **Drug policy and harm reduction**

**(General invitation to tender n° SANCO/2006/C4/02)**

## **Report**

### **Quality of treatment services in Europe – drug treatment situation and exchange of good practice**

**February 2008**



University of Hamburg



Centre for Interdisciplinary Addiction Research (CIAR)

**The content of this report does not necessarily reflect the opinion of the European Commission. Neither the Commission nor anyone acting on its behalf shall be liable for any use made of the information in this publication.**



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### **Report (Part 1)**

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## **“Drug treatment situation and exchange of good practice” (executive summary)**

The project on the drug treatment situation and exchange of good practice provides results regarding the situation of evidence-based drug treatments, their implementation and the exchange of good practice in Europe:

### ***The efficacy of drug treatment interventions in Europe***

This review provides the currently available scientific evidence of the efficacy, effectiveness and cost effectiveness of European treatment interventions for dependency on illicit drugs.

The results of all existing reports on the effectiveness of drug treatment interventions and the results of recent published literature on the efficacy and effectiveness of drug treatment interventions are summarised:

In Europe numerous effective pharmacological interventions are available for the treatment of opioid dependence which take into account the consumption pattern, the health situation and the treatment career.

Methadone and buprenorphine are effective agents for the detoxification treatment of opiate dependence. Methadone, the most commonly used detoxification agent in Europe, is the most effective opiate agonist for detoxification treatment, leading to reduced withdrawal symptoms and increased completion rates.

Methadone is also the most commonly used and most effective agent for maintenance treatment in Europe, but the efficacy of methadone in maintenance treatment is strongly dose-related. Methadone and buprenorphine are nearly equal in their efficacy with respect to the reduction of illicit opioid use and treatment retention, but buprenorphine maintenance treatment provides a better safety profile at high doses, a lower abuse potential and the possibility of a less-than-daily administration compared to methadone.

Psychosocial interventions are efficient in reducing drug use, maintaining abstinence and improving treatment retention.

Psychosocial interventions are especially useful where no pharmacotherapy is available. For the treatment of heroin dependence psychosocial interventions enhance treatment outcomes in combination with maintenance therapy.

The effectiveness of the different approaches differs concerning outcome and target group. Cognitive-behavioural interventions have a rather long-term effect on treatment retention and abstinence or moderation of use, especially in cocaine users. Interventions based on Motivational Interviewing improve the motivation to change consumption behaviour, especially in those with initial low motivation. Family therapy was found efficacious mainly for young cannabis users. Different counselling approaches show

positive effects concerning reduction of use especially in cocaine and concurrent opiate use in maintenance treatment.

Most studies on the treatment effectiveness of pharmacological and psychosocial interventions were conducted outside of Europe, mainly in the United States of America (USA). Especially for research in the pharmacotherapy of psychostimulant- and cannabis-related disorders and several psychosocial interventions (like cognitive behavioural treatment, contingency management and motivational interviewing) evidence from outside of Europe is strongly predominant. With the exception of pharmacological trials for the evaluation of new agents for maintenance treatment of opiate dependence, European high quality randomised controlled trials on the efficacy of drug treatment interventions are rare, especially for the evaluation of psychosocial interventions.

### ***Drug treatment types, provision and utilisation of drug treatment services in the Member States and Norway***

One specific objective was to set up a country-wise inventory of the available types of drug treatment services, the extent of service provision and their utilisation which covers all 27 European Member States and Norway. The major question was how the treatment situation appears as regards treatment provision and coverage. First of all, information on drug treatment provided by the national reports and the standard tables of EMCDDA has been collected for the inventory. Secondly indicators have been determined to characterise the national provision of drug treatment in a comparable way. However, difficulties of comparability became apparent which are mainly related to a) lack of a common definition of drug treatment and types of intervention, and b) limitations in the validity and completeness of the available data. In consideration of these limitations the main results drawn from the country-wise inventory of the drug treatment system are:

- The majority of the countries (26 out of 28) have developed a national Action Plan or a National drug Policy Strategy which defines the objectives for drug-related treatment.
- Drug treatment is often predominately provided by public agencies, especially in the Eastern European countries. In contrast, in Finland, Germany, Malta, the Netherlands and in Spain drug treatment is mainly provided by NGOs. In the majority of the countries drug treatment is financed by public budget of the state or the regions, by health or social insurances and pension funds. However, the funding of drug treatment depends much on the type of intervention.
- In the Member States and Norway the vast majority of clients are treated in outpatient settings. Furthermore most of the countries reported that clients primarily attend outpatient medically-assisted treatment. Only the Czech Republic, Hungary, Poland and Slovakia reported that most of the clients are in outpatient psychosocial (drug-free) treatment. Clients in Spain, Romania, Sweden and Slovenia are reported

to be to equal degrees in both outpatient psychosocial and outpatient medically-assisted treatment.

- Maintenance treatment is one of the major responses to heroin-related problems. Since 2001, methadone became available in 26 Member States and Norway, and in 2007 also in Cyprus. The use of buprenorphine increased over the past few years, especially by office-based medical doctors. Currently buprenorphine treatment is not available in only four Member States – Bulgaria, Hungary, Poland and Romania.

### ***The status quo and models of transfer of drug treatment know-how and good practices***

An inventory of status quo of knowledge transfer and models of transfer of drug treatment know-how and good practice and the identification of examples of exchange especially in the area of drug treatment has been realised. For the inventory of existing resources and exchange mechanism of good practice in drug treatment the central dimensions of quality assurance are investigated as indicators for the current situation of quality in drug treatment and knowledge transfer.

The investigation of the “quality system” and transfer of drug treatment know-how in Member States and Norway shows that quality assurance systems have been developed in the majority of the Member States and Norway. Guidelines for the implementation of drug treatment services are in place. Most developed is the commitment to standards and “good practice” in maintenance treatment. In other drug treatment areas this is inadequate.

In general, up to now the main components for knowledge transfer and best practice transfer are only partly implemented. This counts especially for evaluation and research, reviews or evidence reports, implementation of a systematic procedure for producing and controlling new protocols, consensus process for the development of guidelines. This means in general that the area of evidence-based development of guidelines and transfer of good practice is at an initial stage compared to other areas of the health system and referring to tasks of the EU drug action plan.

For the enhancement of knowledge transfer, a support in establishing evidence-based cultures und qualifications of knowledge infrastructure in drug treatment at the level of Member States is especially recommended. This is mainly the task of political decisions about concepts and the appropriate implementation of authorised institutions or platforms for the coordination and dissemination, as well as for quality assurance and development. Complementary at EU level in addition to existing activities and the science-based platform of the EMCDDA a self-contained network is required in the field of drug treatment, prevention and policy action in close cooperation with EUnetHTA.

## 1. Introduction

The overall aim of the project was to gather specific information in order to provide technical support for the reporting obligation of the Commission on drugs policy and harm reduction.

The two areas of the Commission commitments are:

- “A report on the situation regarding drug treatment and exchange of good practice, i.e. the quality of treatment services in Europe, with a specific focus on (available mechanisms for) the development of know-how on drug treatment and the exchange of best practices;
- A proposal for a Council Recommendation to develop “prevention, treatment and harm reduction services for people in prisons, reintegration services on release from prisons and methods to monitor/analyse drug use among prisoners”.

The investigations of the project undertaken in these areas contribute to the general aim of further progress of the EU drugs strategy with respect to

- “the improvement of the dissemination of reliable and high quality information and of best practices, and
- the follow-up by the Commission on the key points of the 2003 Council Recommendation on the prevention and reduction of health related harm associated with drug dependence”, which is ongoing in DG SANCO and which already includes a recommendation to Member States (MS) regarding the equivalence of services in prison.”

This part of the report refers to the situation and quality of drug treatment in the Member States and Norway and the corresponding support for reporting. The tender specification specified expected results as to the following listed issues:

1. „review of the literature and scientific data on the drug treatments and their efficacy,
2. overviews of types, characteristics, current levels of provision and utilisation of drug treatment services,
3. identification of target groups with regard to transfer of treatment know-how and good practice,
4. overview of existing resources and models of scientific evidence/ know-how and exchange of good practice,
5. assessment of level of utilisation of identified resources and
6. analysis of the potential and the cost-benefit of different mechanisms for information dissemination on treatment know-how (scientific evidence) and on good practice.“

The Consortium developed a special procedure, to investigate the named questions. The detailed steps and corresponding results are presented in the attached three work packages.

In this prefixed report the results of the investigation are presented according to the six above-mentioned issues. At the beginning the procedures for the main work packages are introduced.

## **2. Methods**

To answer the complex questions as to the drug treatment situation of the call for tender the consortium proposed an investigation of the following connected aspects:

First: Investigation of what is known about the effectiveness of drug treatment interventions that are implemented in the Member States. This required a review of existing knowledge on the efficacy of different drug treatment interventions.

The second complementary step is: What intervention types, to what extent and with what coverage are implemented in the Member States? This needed first a compilation of available information, then the identification of gaps, and is then followed by additional investigation concerning the treatment situation.

The third step is the investigation of the quality of treatment, the implemented quality assurance and good-practice transfer system. The quality of implemented treatment interventions and the corresponding transfer system required the compilation of information per Member State and Norway, the identification of examples of good-practice development and transfer systems in the drug field and other health related areas.

### **2.1 Procedures for reviewing the effectiveness of drug treatment (work package 1)**

This part provides a review of currently available scientific evidence of the efficacy, effectiveness and cost effectiveness of European treatment interventions for the dependency on illicit drugs. The findings of existing published reports on the effectiveness of drug treatment form the base of the results part of this review. An additional systematic search strategy was carried out, to identify relevant recently published randomized controlled trials, focusing on the treatment of illicit drug dependency. In the absence of RCTs less rigorously designed studies were included. The results of the available reports and the results of the recently published literature on the efficacy and effectiveness of drug treatment interventions are summarised in the results part including a short introduction, summarised results with fact sheets and detailed results.

## **2.2 Procedures for assessment of levels of provision and utilisation of drug treatment services (work package 2)**

With respect to the procedure a number of different interrelated methodological approaches have been undertaken. Firstly indicators to characterise the national provision of drug treatment have been determined. These indicators are the “prevalence of problem drug users”, the “number of available drug treatment interventions”, and the “number of drug users reached by the drug services”; these three indicators are regarded as relevant categories to come close to the question of “treatment coverage”. The basic sources for achieving information on drug treatment provided in the Member States and Norway are the respective national reports and the standard tables collected by the EMCDDA. In order to understand the context of information collected according to the indicators, the institutional framework with regard to drug policy, organisation and financing of treatment became also part of the investigation.

Based on a first compilation of available information, the following approach consisted in the identification of information gaps. The main gap that occurred was related to the lack of common understanding of the term “treatment” and of the main types of “interventions”. Similar problems have been found for the number of clients utilising treatment services. As a consequence difficulties of comparability became apparent as regards a unique description of the national drug treatment system. The identification of gaps built the basis for the following approach which on the one hand included the definition of the terms “treatment” and “intervention”. On the other hand an additional investigation concerning treatment situation was carried out by means of a questionnaire that has been developed to fill the gaps and which was distributed among all Member States and Norway.

The final approach was to conduct a systematic and comparable inventory which follows the determined indicators. To come to a comprehensive and systematic characterisation of the national drug treatment provision and treatment coverage, a clear set of indicators or criteria has been defined which built the structure of the national treatment profiles.

## **2.3 Procedures for the investigation of drug treatment quality and knowledge transfer (work package 3)**

The procedure of the investigation for this part was the following: Based on the

- inventory of status quo of knowledge transfer and models of transfer of drug treatment know-how and good practice and the
- identification of examples of exchange (in other health areas as well as drug treatment)
- recommendations are presented for the improvement of the dissemination of good practice in the European Member States and Norway.

The investigation refers to such a model of quality development in health care in European and other societies as it has stepwise emerged and been implemented in different ways over the last decades. Knowledge exchange and dissemination of evaluated best practices are a central part of this system.

Therefore, for the inventory of existing resources and exchange mechanism of good practice in drug treatment the central quality dimensions are: concept and structures, financing and supporting organisations, sources of presented models, consensus process for improvement, quality assurance and standards for presented models, level of utilisation, dissemination, effectiveness, coverage concerning target groups. These dimensions are regarded as indicators for the situation and are starting points of the investigation.

Based on these indicators the current situation of quality in drug treatment and the corresponding procedures are assessed.

Complementary examples in other areas of health care are identified and some exemplary programmes for knowledge exchange in the drug field are described. The description of the current situation and the introduced examples serves as background for the presentation of variations in the exchange of good practice and the assessment of their pros and cons.

### **3. Drug treatment situation and exchange of good practice – detailed results**

In the following the results of the project as to the treatment situation in Europe, the effectiveness, quality of drug treatment, and knowledge transfer are presented along the line of the call for tender.

#### **3.1 Review of the literature and scientific data on the drug treatments and their efficacy**

1. Drug treatment interventions are efficacious ("Can it work?") and effective ("Does it work under real circumstances?") or not with regard to the objectives of control of harm, moderation, reintegration, and abstinence. In Europe there are numerous pharmacological and psychosocial interventions available for the treatment of dependency of illicit drugs.

2. In Europe numerous effective pharmacological interventions are available for the treatment of opioid dependence, taking into account the health situation and the treatment career of the person (Crisis intervention, Care (Maintenance treatment), Cure (Detoxification), Relapse prevention).

- For crisis prevention the opioid receptor antagonist naloxone is effective in treating respiratory depression and coma in patients with an opiate overdose, but the extended use of opioid antagonists can lead to a supersensitivity and therefore to an increased risk of overdose after leaving treatment.
  - The opiate agonist methadone, buprenorphine, including the combination with naloxone, and clonidine and lofexidine are effective agents for detoxification treatment of opiate dependence. Methadone, the most commonly used detoxification agent in Europe, is the most effective opiate agonist for detoxification treatment, leading to reduced withdrawal symptoms and increased completion rates compared to placebo or other opiate agonists. Buprenorphine, also commonly used in Europe for detoxification treatment of opiate dependence, provided a nearly equal efficacy as methadone. Also the combination of buprenorphine and naloxone is effective and safe for the detoxification of opioid dependents. Clonidine and lofexidine are commonly used to manage the acute phase of opioid withdrawal. They are especially effective for patients, who prefer non-opioid treatment for detoxification, but lead to more side effects and higher drop-out rates than methadone or buprenorphine.
  - In Europe methadone is the most used agent for maintenance treatment so far and the most effective opioid agonist, but the effectiveness of methadone in maintenance treatment is strongly dose-related. Higher doses are associated with better treatment retention rates and lower rates of illicit opioid use. Besides a nearly equal efficacy of methadone with regard to reduction of illicit opioid use and treatment retention, buprenorphine maintenance treatment provides a better safety profile at high doses, a lower abuse potential, the possibility of a less-than-daily administration compared to methadone. The efficacy of buprenorphine in combination with naloxone seems to be comparable to buprenorphine alone. The prescription of diamorphine (heroin) is especially effective for people with opioid dependence who continue intravenous heroin use while on methadone maintenance or who are not enrolled in treatment. Furthermore, other substances for maintenance treatment, such as codeine and slow-release morphines, could be valuable additions to the current treatment repertoire in Europe. The maintenance with the opioid antagonist naltrexone for relapse prevention of opiate dependence seems not to be effective as a stand-alone treatment and should therefore be part of a broader treatment programme. No medication has been found yet that can be considered a standard for treating stimulant or cannabis dependence effectively, although a number of different medications have been tried. Much hope is being placed in the development of the cocaine vaccine.
3. Generally speaking, psychosocial interventions are efficacious to reduce drug use, maintain abstinence and improve treatment retention. Psychosocial interventions are especially useful where no pharmacotherapy is available, e.g. for the treatment of cocaine and amphetamine dependence. For the treatment of heroin dependence psychosocial interventions do enhance treatment outcomes in combination with maintenance therapy.

The effectiveness of the different approaches differs concerning outcome and target group. Cognitive-behavioural interventions improve treatment retention and abstinence or moderation of use for a rather long-term period of time, especially in cocaine users. Voucher-based treatment approaches on the other hand are especially helpful for short-term treatment. Interventions based on Motivational Interviewing improve the motivation to change consumption behaviour, especially in those with initially low motivation. Family therapy was efficacious mainly for young cannabis users. Different counselling approaches show positive effects concerning reduction of use especially in cocaine and concurrent opiate use in maintenance treatment, whereas cue exposure intervention seems to be counterproductive in terms of treatment retention and relapse.

4. In general, the combination of pharmacological and psychosocial treatment interventions leads to broader effectiveness and a greater range of treatment outcomes, especially a reduction of illicit drug use and drug-related delinquency. In Europe, methadone maintenance treatment in combination with psychosocial interventions is the most common treatment option for the treatment of opiate related disorders. Different studies show the effectiveness of the combination of MMT and psychosocial interventions, such as counselling and behavioural interventions.

5. Most research on treatment effectiveness of pharmacological and psychosocial interventions is conducted outside of Europe, mainly in the United States of America (USA). Especially with regard to some pharmacological treatments (like opiate antagonists for crisis intervention and relapse prevention, pharmacotherapy of psychostimulant- and cannabis-related disorders) and most psychosocial interventions (especially cognitive behavioural treatment and contingency management), evidence from outside of Europe is strongly predominant. On the other hand, pharmacological drug-related research from Member States of the European Union is leading in the field of implementation of new agents for maintenance treatment of opiate related disorders (such as slow-release morphine and diacetylmorphine (heroin)).

6. In general, in the Member States of the European Union, there is a lack of research on the efficacy of drug treatment interventions. With the exception of pharmacological trials for the evaluation of new agents for the maintenance treatment of opiate dependence, European high quality randomised controlled trials on the efficacy of drug treatment interventions are rare, and European comparative studies on the evaluation of psychosocial interventions are even extremely rare.

### **3.2. Overviews of types, characteristics, current levels of provision and utilisation of drug treatment services**

With regard to the drug treatment situation, a main result is that it turned out to be impossible to give a clear and coherent picture on the treatment situation in the Member States and Norway. This is mainly due to several limitations in the available data sources which have been the national reports of the Focal Points and the treatment data

collection tools (Structured Questionnaire 27 “Treatment programmes” (SQ27) and the Standard table 24 “Treatment availability” (ST24) collected by the EMCDDA. These limitations built the basis for the identification of information gaps. In this respect it appeared that primary difficulties are related to the lack of a common definition of the terms “drug treatment” and “types of interventions”. As precise and unique definitions of drug treatment types are missing, it was experienced to be rather difficult to develop a comparable and unique characterisation of drug treatment provision for each of the countries. For instance, the National Focal Points report on “medically-assisted treatment” does not provide any differentiated information on detoxification, maintenance treatment and other medical treatment. In addition, in many countries there are shortcomings as regards information on the number of clients in treatment and the number of available treatment units. The coverage of the reported availability and utilisation of treatment depends on the monitoring system implemented in a country.

As a consequence definitions have been given for drug treatment and intervention types which are based upon discussion with the EMCDDA and the National Focal Points. To cover the existing different treatment reality in the Member States and Norway, drug treatment has been defined as: all structured interventions provided in the community, with specific pharmacological and/or psychosocial techniques, and aiming at reducing or abstaining from the use of illicit drugs. The main types of interventions were differentiated according to outpatient and inpatient interventions (reported by the countries as “drug-free” treatment), and in maintenance treatment and detoxification (reported as “medically-assisted treatment”). This differentiation has been used in the overview (country profiles), if the available data allowed this attribution.

In addition, a set of indicators has been developed in order to define a scheme for a comparable description of the national drug policy, organisation and financing of treatment, the provision of intervention types and the number of clients utilising treatment. Based on this scheme a systematic and criteria-oriented characterisation of the drug treatment system, and the availability and utilisation of treatment services in the Member States and Norway has been compiled.

With respect to the drug treatment situation in 2005 the following results are derived from the systematic characterisation of the treatment systems in the Member States and Norway:

- The treatment profiles reveal that the majority of the countries developed a national Action Plan or a National drug Policy Strategy which defines the objectives for drug-related treatment. Only Malta neither has a national drug strategy nor specifically defines objectives for drug treatment. In Malta a first draft of a national drug policy document has been distributed for public consultation in June 2007, and should be finalised during 2007. Italy and Austria also show peculiarities: Italy has no ongoing drug strategy but the development of a national action plan on drugs is currently underway. The respective initiative, coordinated by the Italian Ministry of Solidarity, aims at drafting an action plan until the end of 2008, and then at adopting a four-year

plan (2009-2012). In Austria there is no national (federal) drug strategy or action plan although the development of a federal strategy is in progress.

- Implementation, coordination and financing of drug treatment differ greatly among the Member States and Norway. However, in most countries, a National Drug Council or another public organisation is responsible for the implementation and coordination at national level. In countries with federal structure such as in Austria, Germany, Belgium, Italy and Spain, regions or communities play an important role in the implementation, coordination and often also in funding of drug treatment. Ireland, Finland, and the Netherlands have different and complex systems which do not fit to one of the described frameworks.
- The provision and financing of drug treatment also differs greatly among the Member States and Norway. In 14 countries – especially in the Eastern European countries – drug treatment is mainly provided by public agencies. . Only in four countries - Finland, Germany, the Netherlands and Luxembourg - drug treatment is mainly provided by NGOs. However, in seven countries (Austria, Cyprus, Greece, Italy, Malta, Poland and Portugal) public agencies as well as NGOs provide drug treatment. As regards the funding, in the majority of the countries drug treatment is financed by public budget, either of the state or the regions, by health insurances and by social insurances and pension funds. However, funding of drug treatment often depends greatly on the type of intervention, with different funding for medically-assisted treatment and for psychosocial interventions. Some countries have a complex funding system – this is the case for the Netherlands, Germany and UK.
- In the Member States and Norway the vast majority of clients are in outpatient treatment. Moreover, most of the countries (n=17) reported that clients primarily attend outpatient medically-assisted treatment. Only the Czech Republic, Hungary, Poland and Slovakia reported that most of the clients are in outpatient psychosocial (drug-free) treatment. Clients in Spain, Romania and Sweden are reported to be to equal degrees in both outpatient psychosocial and outpatient medically-assisted treatment. For Estonia, Belgium and Finland it remains unclear what kind of treatment the majority of the drug users attend.
- As regards specific services for specific groups the analyses shows that in all countries but Romania specific treatment programmes for adolescents (less than 18 years) and/or for co-morbid or double diagnosed drug users exist. Even though the availability and accessibility of these programmes varies enormously between the countries, the European Member States and Norway obviously put emphasis on the providing treatment for young (cannabis) users and co-morbidity. Furthermore in 17 countries there are, to a different extent, gender specific programmes for women. In nine countries treatment programmes for migrants or ethnic groups are offered. However, in particular the Member States Romania, Bulgaria, Estonia, Hungary, Latvia and also Cyprus show a poor diversification in their treatment provision with respect to specific groups.

- Maintenance treatment is one of the major responses to heroin-related problems. Since 2001, methadone has been made available in 26 Member States and Norway, and in 2007 it was also made available in Cyprus. Methadone is available in all countries, but the use of buprenorphine increased over the past few years, especially by office-based medical doctors. Currently buprenorphine treatment is not available in only four Member States – Bulgaria, Hungary, Poland and Romania.

The most important indicators to approach “treatment coverage” are the prevalence of problem drug users (PDU)<sup>1</sup> and the number of drug users reached by the drug services. As not all countries define PDUs according to the definition of the EMCDDA, and as the data on treatment utilisation depend on the quality of documentation and monitoring and is, therefore, often incomplete, there are considerable limitations to determine the treatment coverage. In fact, the shortcomings only allow a limited approach to coverage. Such a limited and reliable approach is to consider only figures from prevalence studies which captured exclusively opiate users and to match them against clients in maintenance treatment. In this respect data from 11 Member States and Norway can be used (Austria, Bulgaria, Czech Republic, Estonia, Germany, Greece, Latvia, Malta, Romania, Slovakia, UK (England)).

- In relation to the estimated number of problem opiate users the coverage of substitution treatment varies considerably between the 12 countries. In 2005 and 2006 respectively the percentage of clients receiving substitution treatment ranged from 2.5% in Romania to about 50% in Italy and the UK. Beside Romania also Bulgaria and Estonia (both about 3.6%), Latvia (about 4%) and Slovakia (about 5%) show a very low substitution treatment coverage rate. This low coverage appears not so much to be related to difficulties in accessing substitution treatment (strict admission criteria, waiting times), but rather to the low availability of substitution treatment in these countries. As a matter of fact, in Romania methadone treatment is only available in Bucharest. The same is the case for Latvia where methadone maintenance is only provided in Riga. In Slovakia methadone maintenance treatment is available only in two cities. In addition buprenorphine treatment is not widespread in Slovakia, and in Latvia this treatment has to be paid by the patients. In Estonia and Bulgaria, substitution maintenance programmes are provided in the main cities but the treatment capacities still seem not to meet the demand.
- In 13 out of 25 countries more than 50% of the clients who entered drug treatment in 2005 and 2006 respectively reported a primary use of opioids. A high number of clients with primary opiate use is to be observed in particular in Bulgaria and Slovenia (more than 90% of the clients), Greece and Malta (more than 80% of the clients), Lithuania (80%) and Luxembourg (70%)., Five countries – in particular Spain and the Netherlands, but also Italy, Luxembourg, and the UK - reported that a considerable number of cocaine users requested treatment. With exception of Spain

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<sup>1</sup> “Problem drug use” is defined by the EMCDDA as “injecting drug use or long duration or regular use of opioids, cocaine and/or amphetamines”

which documented 47% of clients with primary cocaine use, all other countries assessed the availability and accessibility of specific treatment for cocaine users as low.

- In Czech Republic most clients requested treatment due to amphetamine use (58%). Four further countries (Sweden, Latvia, Slovakia, and Finland) reported also a noticeable number of amphetamine users among the treatment clients, ranging from 24% to 35%. However, with exception of Slovakia none of the countries provide specific treatment options for amphetamine users. Slovakia reported a good availability of treatment programmes for amphetamine users.

As a consequence of the limitations of the data, there is a clear need for a more precise reporting on the number of different types of interventions and on the number of clients reached by the different treatment services. The structure applied for the characterisation of types and provision of drug treatment may guide the future data collection in order to achieve the required information.

### **3.3 Identification of target groups with regard to transfer of treatment know-how and good practice**

1. The most important target groups of knowledge transfer in the field of drug related actions are

- policy makers, commissioners (depending on national specific responsibilities and organisation of drug treatment)
- providers, managers of facilities (in different areas of treatment – psychosocial and medical area) and corresponding associations
- professionals (different professions in drug treatment: social workers, nurses, psychologists, physicians and also professional associations, study courses, training centres)
- research institutes (public health, care research, drug research)
- drug users

In principle the target groups are all “decision makers” in the area of drug treatment, ranging from policy makers to researchers to drug users. At present, these target groups are not addressed by the different platforms of knowledge transfer regarding drug treatment options. Positive exceptions are for example the comprehensive platforms of the Netherlands ([www.ggzkennisnet.nl](http://www.ggzkennisnet.nl)) and United Kingdom ([www.nta.nhs.uk](http://www.nta.nhs.uk)).

2. The results of the investigation reveal that the different platforms of transfer of drug treatment know-how in the Member States and Norway currently reach mainly professionals in drug treatment and not the above-mentioned other target groups. Beside the groups of professionals (social workers, psychologists and physicians). the actual usage of these platforms by the other target groups is not well known, but is estimated to be low.

3. The platforms or knowledge transfer systems for “good practice” in drug treatment implemented so far are conceived too restrictively. The contents do not adequately correspond to the needs of the different target groups. For example occupational standards or concepts for professionals or support for decision building of drug consumers concerning treatment options as prospective users of platforms are considered only occasionally. This shortcoming should be considered for future initiatives as to common standards for knowledge transfer.

### **3.4 Overview of existing resources and models of scientific evidence/ know-how and good practice exchange**

1. The investigation of the situation concerning the “quality system” in the Member States has been realised starting with existing information of the EMCDDA. These sources have been completed with an additional survey. The inventory of existing resources and exchange mechanism of good practice in drug treatment investigates the following central dimensions of quality assurance as indicators for the situation: concept and structure, financing and supporting organisations, sources of presented models, consensus process for improvement, quality assurance and standards for presented models, level of utilisation, dissemination, effectiveness, coverage concerning target groups.

2. The development and implementation of a knowledge base in the main areas of the drug problems – supply and demand reduction – and the corresponding circle of “quality assurance” have been developed to a different extent in all Member States over the last decades. This means that in some Member States a corresponding programme or system is completely in place, while in others it is just starting with first steps.

Up to now the main components for knowledge and best practice transfer are only partly implemented. This is especially true for evaluation and research, reviews/evidence reports, implementation of a systematic procedure for producing and controlling new protocols and consensus process for the development of guidelines. This means in general: The area of evidence-based development of guidelines and transfer of good practice is at an initial stage compared to other areas of the health care system (especially somatic) and with reference to tasks of the EU drug action plan.

3. Regarding the implementation of guidelines and standards in the treatment system (as an important indicator of the quality of guidelines, their relation to “good practice” and the transfer system), the situation in the Member States can be described according to the following basic categories.

- In the first group of Member States, the dissemination of guidance mainly occurs through policy makers and institutions authorised by them. The guidelines are mainly limited to general structural aspects of treatment services or interventions. This kind of development and dissemination of guidelines has only a loose connection to drug research; existing research is not regularly involved in the evaluation. There is no

regular adaptation or improvement of guidelines based on evaluation, research or evidence reports.

- In a second group of Member States the development of standards and guidelines is influenced to a greater extent by professional associations. The transferred guidelines are based on experience in combination with evaluation of treatment interventions and research. Professional associations and public authorities are responsible for the dissemination. Dissemination is carried out through professional and scientific channels. These are e.g. publications in national scientific journals, newsletters of involved associations, manuals for interventions, workshops and congresses. This is the traditional structure of quality assurance and a transition to evidence-based identification and dissemination of knowledge is ongoing.
- The third presently small group of Member States represents a fully developed knowledge infrastructure as background for knowledge transfer in drug treatment. Dissemination of treatment know-how is based on continuous data collection and evaluation of existing services. The process of identification, preparation and transfer of “good practice” is concentrated in a commissioned institution acting at the national level. This agency as institutionalisation of a knowledge infrastructure can be organised in very different ways. Depending on the national tradition, there exist very different forms of relations to research. Research can be directly integrated (e.g. if the responsible institution emerged from public health or drug research) or the connexion is assured by relations of cooperation (with institutes for quality assurance, institutes for clinical excellence, public health and drug research units). Depending on the constituting role played by the associations of providers in drug treatment, the professional associations of different professional groups involved in drug treatment, public health or drug research units, or university hospitals involved in treatment and research, the “national agencies” for preparation and knowledge-transfer are either directly attached to the health ministries or operate as relatively independent networks.

At European level, networks for the identification and dissemination of drug treatment know-how have been firmly established. Most of these networks, e.g. EUnetHTA, Cochrane Collaboration or WHO-HEN, focus on other health topics. The EMCDDA and the Pompidou Group are mainly involved in the issue of drug treatment or general response to the drug problem and the corresponding compilation and processing of know-how. Both organisations are currently in a phase of reorganisation concerning the definition of their tasks in knowledge transfer and therefore in an initialising phase. These developments should be supported.

### **3.5 Assessment of level of utilisation of identified resources**

1. The relevance of guidelines and models of “good practice” for the implementation of drug treatment is investigated in detail. The result is that up to now, guidelines and

standards are not binding for most of the existing services or interventions in drug treatment in the Member States. For most of the facilities guidelines or evidence-based models are not binding or mandatory, neither for implementation nor for financing.

2. Up to now the existing resources for knowledge-transfer are mainly used by the professional groups working in drug treatment. In order for affected people to get the best available care for their problems, an enhancement for the usage of standards and guidelines is required. Therefore political decisions, the constitution of the corresponding infrastructure for knowledge-transfer and the allocation of resources are essential.

### **3.6 Analysis of the potential and the cost-benefit of different mechanisms for the dissemination of information on treatment know-how (scientific evidence) and on good practice**

1. For the enhancement of evidence-based drug treatment and the corresponding infrastructure for dissemination of “good practice”, different options are in place, which should not be seen as alternatives but complementary to one another:

- Strengthening and facilitation of evidence-based interventions in drug treatment on the level of the Member States
- Foundation of a centralised European institution (e.g. a Centre of Clinical Excellence for Drug Treatment in Europe) for collecting, preparation and dissemination of “good practice”
- Networking of existing national institutions for knowledge-transfer on European level and enhancement of existing networks in the area of health research
- Concerning the listed options (national and European) there are in principle two different possibilities for the preparation and dissemination of good practice in drug treatment: The development can take place within the frame of the general movement for evidence-based interventions in health care or within an independent effort.

2. The option of a centralised European institution in the area of drug treatment, responsible for the preparation and dissemination of models, is probably not feasible politically, since in other areas of health care research a European centralisation was not achieved either. Centralisation seems to be contradictory to current public health policy in Europe.

The experiences of the last decades in the development of drug treatment demonstrates that a certain autonomy for the preparation and transfer of “good practice” in the area of drug treatment independent from other areas of health care is essential.

The cost-benefit consideration regarding these different options that are partly ongoing based on different public health policy decisions at European level and in the Member States leads to the following consequences:

3. For the area of identification, preparation and transfer of drug treatment know-how in the Member States and on the EU level, the following steps should be enhanced:

- At the level of the Member States, the establishment of a “culture of best practice in drug treatment” will be ongoing against the background of the described different baseline situations. The most important processes will consist in a greater integration of research (in particular regarding the evaluation of interventions), a systematic appraisal of available evidence and enhancement of the infrastructure of knowledge transfer. This is the basis for the national development of guidelines for various interventions in the drug field and for appropriate systems of quality development and assurance. Up to now only in some countries the development is extended to more education and training opportunities for professional groups. This is a generally needed step in all Member States. These scopes are in the responsibility of the Member States as part of different national action plans and their official policy.
- At EU level, in addition to existing activities and the developments within the Pompidou Group and the science-based platform of the EMCDDA, a self-contained network is required in the field of drug treatment, prevention and policy action complementary to and in close cooperation with EUnetHTA. The initiation of these steps should be based on a detailed inventory of the situation in the Member States concerning the knowledge-based infrastructure in the field of drug related responses and an the corresponding drug research situation.

## **4. Annexes to the report**

### **4.1 Review of the efficacy of drug treatment interventions in Europe (Workpackage 1)**

### **4.2 Overview of types, characteristics, level of provision and utilisation of drug treatment services (Workpackage 2)**

### **4.3 Inventory of status quo and models of transfer of drug treatment know-how and good practice (Workpackage 3)**



**Politique relative aux drogues et la réduction des risques**

**(General invitation to tender n° SANCO/2006/C4/02)**

**Rapport final (1ère partie)**

**La qualité des services de traitement en Europe – situation du traitement des drogués et échange de bonne pratique**

**Février 2008**

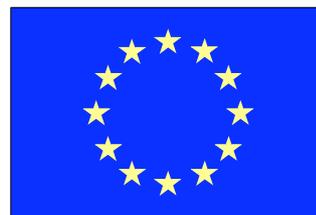


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## **“La qualité des services de traitement en Europe – situation du traitement des drogués et échange de bonne pratique” (résumé)**

Le projet concernant la situation du traitement des drogués et l'échange de « bonne pratique » fournit des résultats par rapport au fondement sur l'évidence, la propagation et l'échange de « bonne pratique » en Europe:

### *L'efficacité des interventions de traitement des toxicomanies en Europe*

Le rapport fournit l'évidence scientifique actuelle concernant l'efficacité, l'effectivité et l'effectivité économique des interventions de traitement des dépendances aux drogues illégales en Europe.

Les résultats de tous les rapports existants sur l'efficacité des interventions de traitement des toxicomanies ainsi que les résultats de la littérature récente sont condensés dans l'aperçu suivant:

En Europe, un grand nombre d'interventions pharmacologiques effectives sont disponibles, qui tiennent compte des habitudes de consommation, de l'état de santé et de la carrière de traitement des drogués.

La méthadone et la buprénorphine sont des agents effectifs pour le traitement de détoxification des drogués dépendant aux opiacés. La méthadone, l'agent de détoxification le plus souvent utilisé en Europe, est l'agent agoniste d'opiacés le plus effectif pour le traitement de détoxification, conduisant à moins de symptômes de privation et des taux d'achèvement plus élevés.

La méthadone est également l'agent le plus souvent utilisé et le plus effectif dans la thérapie de substitution en Europe; pourtant, l'efficacité de la méthadone dépend fortement de la dose appliquée. À part l'efficacité à peu près égale à celle de la méthadone par rapport à la réduction de la consommation d'opiacés illégaux et la rétention en traitement, la thérapie de substitution par la buprénorphine offre un meilleur profil de sécurité pour les doses élevées, un potentiel d'abus moins élevé et la possibilité d'une application moins que quotidienne comparé à la méthadone.

Les interventions psychosociales sont efficaces pour réduire la consommation de drogues, maintenir l'abstinence et améliorer la rétention en thérapie. Elles sont particulièrement utiles en absence de pharmacothérapies. Pour le traitement de la dépendance à l'héroïne, les interventions psychosociales augmentent les résultats de traitement en combinaison avec une thérapie de substitution.

L'effectivité des divers procédés diffère selon les résultats et le groupe cible. Les interventions basant sur la cognition et le comportement améliorent la rétention en traitement ainsi que l'abstinence ou la modération de consommation plutôt à longue-vue, particulièrement pour les consommateurs de cocaïne. Les interventions basées sur

le Motivational Interviewing améliorent la motivation de changer le comportement de consommation, en particulier pour les personnes ayant une faible motivation initiale. La thérapie familiale a prouvé être efficace surtout pour les jeunes consommateurs de cannabis. Diverses mesures de conseil ont montré des effets positifs sur la réduction de consommation, particulièrement la cocaïne avec consommation additionnelle d'opiacés, pour les personnes en traitement de substitution.

La plupart des références à l'effectivité de traitements pharmacologiques ou psychosociales se rapportent à des études ayant été effectuées hors de l'Europe, surtout aux Etats-Unis (USA). Surtout en ce qui concerne la recherche en pharmacothérapie des désordres relatifs aux psychostimulants et au cannabis et plusieurs interventions psychosociales (p.e. les interventions relatives à la cognition et le comportement, contingency management et motivational interviewing), l'évidence venant hors de l'Europe est fortement prédominante. A l'exception des essais pharmacologiques pour l'évaluation de nouveaux agents dans le traitement de substitution de la dépendance aux opiacés, les études de haute qualité randomisées et contrôlées de l'efficacité d'interventions sont rares en Europe, surtout en ce qui concerne l'évaluation d'interventions psychosociales.

*Types de thérapies des toxicomanies, mise à disposition et utilisation des services de traitement dans les états-membres et la Norvège*

Un objectif spécifique était d'établir, pour chaque pays, un inventaire des services de traitement disponibles, la prévalence des services et leur utilisation, couvrant tous les 27 états-membres de l'UE et la Norvège. La question principale était comment la situation de traitement se présente concernant la mise à disposition et la dissémination. Pour répondre à l'objectif, toutes les informations sur les traitements des toxicomanies fournies par les rapports nationaux et les tables standard de l'EMCDDA ont tout d'abord été rassemblées pour l'inventaire. Ensuite, des indicateurs ont été déterminés pour caractériser la mise à disposition de traitements toxicomanes sur le plan national d'une façon permettant la comparaison. Cependant, des difficultés de comparabilité se sont montrées par rapport à a) défaut d'une définition commune relative aux traitements toxicomanes et types d'intervention, et b) limitations de la validité et de l'intégralité des données disponibles. Tenant compte de ces limitations, les principaux résultats de l'inventaire par nation relatif au système de traitement des toxicomanies sont les suivants:

- La majorité des pays (26 sur 28) ont développé un plan d'action national ou une stratégie politique nationale qui définit les objectifs des traitements des toxicomanies.
- Surtout dans les pays de l'Europe de l'Est, le traitement des toxicomanies est souvent offert surtout par des agences publiques. Par contre, en Finlande, Allemagne, Malte, Pays-Bas et Espagne, le traitement est surtout offert par des ONGs. Dans la plupart des pays, le traitement des toxicomanies est financé par le budget public de l'état ou

des régions, par les assurances maladie ou sociale ou par la caisse de retraite. Le financement du traitement dépend en bonne partie du type d'intervention.

- Dans les états-membres et la Norvège, la grande majorité des clients est traitée dans des centres de traitement ambulants. En plus, la plupart des pays rapportent que les clients se soumettent surtout à un traitement avec assistance médicale ambulante. Seulement la République Tchèque, la Hongrie, la Pologne et la Slovaquie rapportaient que la plupart des clients se trouvent en traitement psychosocial ambulants (sans drogues). Les clients en Espagne, la Roumanie, la Suède et la Slovénie se trouvent à part égale en traitement psychosocial ambulants et traitement ambulants avec assistance médicale.
- La thérapie de substitution est une des réponses les plus importantes aux problèmes relatifs à l'héroïne. Depuis 2001, la méthadone est disponible dans 26 états-membres et la Norvège, et depuis 2007, elle est aussi disponible en Chypre. L'utilisation de la buprénorphine a augmenté au cours des dernières années, particulièrement par les médecins établis. Actuellement, la buprénorphine n'est pas disponible dans quatre états-membres seulement – la Bulgarie, la Hongrie, la Pologne et la Roumanie.

*Le status quo et modèles de transfert du savoir-faire en traitement des toxicomanies et de « bonnes pratiques »*

Un inventaire a été établi concernant le status quo du transfert de connaissances et les modèles de transfert du savoir-faire relatif au traitement des toxicomanies et de la « bonne pratique » et l'identification d'exemples d'échange particulièrement dans le domaine du traitement des toxicomanies. Pour l'inventaire des ressources disponibles et des mécanismes d'échange de « bonne pratique », les dimensions centrales de l'assurance de qualité sont explorées comme indicateurs de la situation actuelle relative à la qualité des traitements des toxicomanies et du transfert de connaissances.

L'investigation du « système de qualité » et du transfert du savoir-faire dans les états-membres et la Norvège montre que des systèmes d'assurance de qualité ont été développés dans la majorité des états-membres et la Norvège. Des directives pour l'introduction de services de traitement des toxicomanies ont été établies. Le plus haut degré de développement des standards et de la « bonne pratique » se trouve dans le domaine de la substitution et est inadéquat dans d'autres domaines de traitement des drogués.

En général, les principaux éléments du transfert de connaissances et de « bonne pratique » sont installés seulement en partie. Ceci est le cas surtout pour l'évaluation et la recherche, les rapports d'évidence, l'introduction d'un procédé systématique pour la production et le contrôle de nouveaux protocoles et les procédés de concordance pour le développement de directives. En général, cela signifie que le domaine du développement de directives basées sur l'évidence et le transfert de « bonne pratique » est à un stage initial comparé à d'autres domaines du système de la santé publique et avec référence aux tâches du plan d'action de l'UE.

Pour l'amélioration du transfert de connaissances, il est surtout recommandé de développer une culture mettant plus d'importance sur l'évidence et l'infrastructure de connaissances qualifiées concernant le traitement des toxicomanies au niveau des états-membres. Ceci est surtout la tâche des décisions politiques concernant les conceptions et les établissements d'institutions autorisées ou de plateformes pour la coordination et la diffusion, ainsi que pour l'assurance de qualité et le développement. Au niveau de l'UE, complémentairement aux activités et la plateforme basée sur la science de l'EMCDDA, un réseau autonome est nécessaire dans le domaine de traitement, de la prévention et des activités politiques en étroite coopération avec l'EUnetHTA.

## 1. Introduction

L'objectif général du présent projet était d'assembler les informations spécifiques nécessaires pour assister la Commission dans son obligation de fournir un compte-rendu concernant la situation politique et la réduction de risques par rapport aux drogues.

L'engagement de la Commission s'étend sur les deux domaines suivants:

- « Un rapport sur la situation du traitement relatif aux drogues et l'échange de « bonne pratique », c'est-à-dire la qualité des services de traitement en Europe, mettant l'accent sur le développement des connaissances spéciales du traitement drogues et l'échange de « bonne pratique »;
- Une proposition pour une Recommandation du Conseil de développer « des services de prévention, de traitement et de réduction des risques pour des personnes en prison, des services de réintégration à la mise en liberté et des méthodes de surveillance/analyse de la consommation de drogues parmi les prisonniers ».
- des services de réintégration à la mise en liberté et des méthodes de surveillance/analyse de la consommation de drogues parmi les prisonniers ».

Les enquêtes effectuées dans ces domaines contribuent à l'objectif général de faire progresser les stratégies relatives aux drogues dans l'UE, à l'égard de

- « l'amélioration et la diffusion d'information éprouvée et de haute qualité et de « bonnes pratiques », et
- du suivi par la Commission concernant les points-clés de la Recommandation du Conseil de 2003 par rapport à la prévention et la réduction de risques pour la santé associés à la dépendance aux drogues », qui continue dans DG SANCO et qui inclut déjà une recommandation à l'adresse des états-membres (MS) concernant l'équivalence des services en prison.”

Cette partie du rapport se rapporte à la situation et la qualité des traitements drogues dans les états-membres et en Norvège et le support correspondant pour le reportage. Les spécifications des résultats escomptés sont les suivants:

7. « Recherche de la littérature et des données scientifiques par rapport au traitement des drogues et leur efficacité,
8. Aperçu des types, caractérisations, niveaux actuels de mise à disposition et d'utilisation des services de traitement,
9. Identification de groupes cible par rapport au transfert du savoir faire en traitement de « bonne pratique »,
10. Aperçu des ressources disponibles ainsi que des modèles d'évidence scientifique/savoir-faire et de l'échange de « bonne pratique »,
11. Évaluation des degrés d'utilisation des ressources identifiées et
12. Analyse du potentiel et des coûts et bénéfices des différents mécanismes de diffusion d'information du savoir-faire en traitement (évidence scientifique) et de la « bonne pratique ».

Le consortium a développé un procédé spécifique pour investiguer ces questions. Les démarches détaillées d'investigation et les résultats correspondants se trouvent dans les trois modules en annexe.

Le rapport présent décrit les résultats des enquêtes à la file des six sujets ci-dessus.

Un résumé des démarches est présenté d'abord.

## **2. Méthodes**

Pour répondre aux questions complexes de la demande d'offres concernant la situation du traitement toxicomane, le consortium proposait une investigation des aspects suivants:

Premièrement: une investigation de ce qui est connu sur l'effectivité des interventions de traitements toxicomanes introduits dans les états-membres. Ceci exigeait une vue d'ensemble sur les connaissances qui existent sur l'efficacité des différentes interventions de traitement toxicomane.

Le second pas complémentaire est le suivant: Quels sont les types d'interventions dans les états-membres, dans quelle mesure et avec quel degré de dissémination sont-ils introduits? Il fallait d'abord compiler les informations disponibles, identifier les lacunes et faire suivre des investigations additionnelles concernant la situation de traitement.

Le troisième pas est l'investigation de la qualité de traitement, du système de transfert concernant l'assurance de qualité et de « bonne pratique » déjà établi. La qualité des interventions de traitement introduites et le système de transfert correspondant exigeait la compilation d'information par états-membres et la Norvège, l'identification d'exemples de développement de « bonne pratique » et de systèmes de transfert dans le domaine des drogues et d'autres domaines de la santé publique.

## **2.1 Procédures pour la supervision de l'effectivité du traitement toxicomane (WP1)**

Cette partie établit un aperçu des évidences scientifiques disponibles à présent concernant l'efficacité et l'effectivité économique des interventions de traitement des dépendances de drogues illégales en Europe. Les résultats des rapports publiés sur l'efficacité du traitement toxicomane forment la base du chapitre sur les résultats de cet aperçu. En plus, une recherche systématique fut effectuée pour identifier des études randomisées et contrôlées récemment publiées qui se concentraient sur le traitement de dépendance aux drogues illégales. En l'absence de RCTs, des études avec une conception moins rigoureuse étaient incluses. Les résultats des rapports disponibles et les résultats de la littérature récemment publiée sur l'efficacité d'interventions de traitement toxicomane ont été condensés dans le chapitre sur les résultats incluant une brève introduction, un résumé des résultats avec les « fact sheets » et des résultats détaillés.

## **2.2 Procédures pour l'évaluation des degrés de disponibilité et d'utilisation des services de traitement toxicomane (WP2)**

Pour effectuer cette évaluation, un nombre de différentes méthodes liées entre elles ont été utilisées. Premièrement, des indicateurs ont été déterminés qui devaient caractériser la disponibilité nationale de traitement toxicomane. Ces indicateurs sont la « prévalence de consommateurs de drogues problématiques », le « nombre d'interventions de traitement toxicomanes disponibles » et le « nombre de consommateurs de drogues atteints par les services de toxicomanie »; ces trois indicateurs sont considérés comme catégories importantes pour déterminer la « dissémination de traitement ».

Les sources de base procurant les informations sur le traitement toxicomane offert dans les états-membres et la Norvège sont les rapports nationaux respectifs et les tables standard collectionnés par l'EMCDDA. Afin de comprendre le contexte des informations gagnées selon les indicateurs, le cadre institutionnel formé par la politique relative aux drogues, l'organisation et le financement du traitement est aussi devenu partie de l'enquête.

Sur la base d'une première compilation de l'information disponible, le pas suivant consistait en l'identification des lacunes d'information. La lacune principale consistait dans le fait qu'il n'y avait pas de consentement sur le terme « traitement » et les principaux types « d'interventions ». Les mêmes problèmes se montraient par rapport au nombre de clients faisant usage des services de traitement. Par conséquent, des difficultés de comparabilité devenaient apparentes concernant une description uniforme des systèmes nationaux de traitement toxicomane.

Cette identification de lacunes formait la base pour le procédé suivant qui, d'un côté incluait la définition des termes « traitement » et « intervention ». D'autre part, une

enquête additionnelle concernant la situation du traitement fut effectuée à l'aide d'un questionnaire qui avait été développé pour remplir les lacunes et qui était distribué parmi tous les états-membres et la Norvège.

Ce dernier procédé avait pour but d'établir un inventaire systématique et comparable selon les indicateurs déterminés. Pour aboutir à une caractérisation compréhensive et systématique de la disponibilité et dissémination de traitements au niveau national, un set explicite d'indicateurs ou de critères, qui formaient la structure du profil national de traitement, a été défini.

### **2.3 Procédures pour l'investigation de la qualité de traitement et du transfert de connaissances – WP3**

Le procédé pour cette partie de l'enquête était le suivant: Sur la base de

- l'inventaire du status quo concernant le transfert de connaissances et les modèles de transfert du savoir-faire en traitement toxicomane et de « bonne pratique » et de
- l'identification d'exemples d'échange (dans les domaines de traitement toxicomane et d'autres domaines de la santé publique)

des recommandations sont présentées pour l'amélioration de la dissémination de la « bonne pratique » dans les états-membres européens et la Norvège.

Les enquêtes se rapportent à un modèle de développement de qualité dans les domaines de la santé publique en Europe et autres sociétés tel qu'il émergeait graduellement et fut introduit de façons différentes au cours des dernières décades. L'échange de connaissances et la dissémination de « bonne pratique » évaluée forment les parties centrales de ce système.

Pour établir l'inventaire des ressources et des mécanismes d'échange de « bonne pratique » disponibles dans le traitement toxicomane, les dimensions centrales d'assurance de qualité sont les suivantes: conception/structure, financement et organisations d'assistance, sources des modèles présentés, procédé de consensus pour l'amélioration, l'assurance de qualité et standards pour les modèles présentés, niveau d'utilisation, dissémination, efficacité, dissémination par rapport aux groupes cible. Ces dimensions sont considérées comme indicateurs de la situation et forment les points de départ du questionnaire.

Sur la base de ces indicateurs, la situation actuelle concernant la qualité de traitement toxicomane et les procédés correspondants est évaluée.

Des exemples complémentaires provenant d'autres domaines de la santé publique sont identifiés et certains programmes servant d'exemples pour l'échange de connaissances dans le domaine des drogues sont décrits. La description de la situation actuelle et les exemples présentés servent d'arrière-plan pour la présentation de variations dans l'échange de « bonne pratique » et de l'évaluation controversée.

### **3. La situation du traitement des drogués et l'échange de « bonne pratique » – résultats détaillés**

Ci-après, les résultats du projet concernant la situation de traitement en Europe, l'effectivité et la qualité d'assistance sont présentés suivant les thèmes de la demande d'offres.

#### **3.1 Aperçu bibliographique et scientifique des traitements toxicomanes et leur efficacité**

1. Les interventions de traitement de drogue sont efficaces (« Fonctionnent-elles ? ») et effectives (« Fonctionnent-elles dans des conditions réelles ? ») ou bien elles ne le sont pas par rapport aux objectifs de contrôle des risques, modération, réintégration et abstinence. En Europe, il existe un grand nombre d'interventions pharmacologiques et psychosociales pour le traitement des dépendances aux drogues illégales.

2. En Europe, de nombreuses interventions pharmacologiques effectives sont offertes pour le traitement des dépendances aux opiacés tenant compte de l'état de santé et de la carrière de traitement du client (crisis intervention, care (maintenance treatment), cure (détoxification), relapse prevention).

- Pour la prévention de crises, l'antagoniste récepteur opiacés naloxone est effectif dans le traitement de dépression respiratoire et du coma pour les patients avec un surdosage d'opiacés, mais l'emploi prolongé des antagonistes des opiacés peut engendrer une super sensibilité et par conséquent un risque élevé de surdosage après avoir quitté le traitement.
- L'agoniste opiacé méthadone, la buprénorphine incluant la combinaison avec naloxone et clonidine et lofexidine sont des agents effectifs pour le traitement de détoxification de dépendances d'opiacés. La méthadone, l'agent détoxificateur le plus en usage en Europe, est l'agoniste opiacé le plus effectif pour le traitement de détoxification, engendrant moins de symptômes de privation et des taux élevés de terminaison comparé au placebo ou d'autres agonistes opiacés. La buprénorphine, qui est également employée généralement en Europe pour le traitement de détoxification de la dépendance d'opiacés, présente une efficacité à peu près égale à celle de la méthadone. La combinaison de buprénorphine et de naloxone est également effective et sûre pour la détoxification des dépendants aux opiacés. Clonidine et lofexidine sont généralement employés pour ménager la phase aiguë de privation. Ils sont effectifs surtout pour les patients qui préfèrent un traitement sans opiacés pour la détoxification, mais ils produisent plus d'effets secondaires et un taux plus élevé d'interruption que la méthadone ou la buprénorphine.
- En Europe, la méthadone est, jusqu'à présent, l'agent de substitution le plus souvent employé et l'agoniste d'opiacés le plus effectif, mais son effectivité dans la thérapie

de substitution dépend fortement de la dose. Les doses plus élevées sont accompagnées de taux plus élevés de rétention en traitement et de taux moins élevés de consommation d'opiacés illégaux. En outre, à part d'une efficacité à peu près égale à celle de la méthadone concernant la réduction de consommation d'opiacés illégaux et la rétention en traitement, la substitution à la buprénorphine offre un meilleur profil de sécurité en cas de doses élevées, un potentiel d'abus moins élevé, la possibilité d'application moins que quotidienne comparé à la méthadone. L'efficacité de la buprénorphine combinée au naloxone semble être comparable à la buprénorphine employée seule. La prescription d'héroïne est particulièrement effective pour les dépendants d'opiacés qui continuent de consommer intravéneusement pendant la substitution à la méthadone ou qui ne sont pas en traitement. D'autres types de substitution comme la codéine et « slow-release morphines » pourraient aussi être des additions importantes au répertoire de traitement actuel en Europe. La substitution avec l'antagoniste naltrexone pour la prévention d'une récurrence ne semble pas être effective en qualité de seul traitement et de ce fait devrait faire part d'un programme de traitement plus large. Nulle médication n'a encore été trouvée qui pourrait être considérée comme standard de traitement effectif de la dépendance aux stimulants ou au cannabis, bien qu'un nombre de différentes médications ait été essayé. De grandes espérances sont actuellement placées dans le développement d'un vaccin de cocaïne.

3. En général, les interventions psychosociales sont efficaces pour réduire la consommation de drogues, maintenir l'abstinence et améliorer la rétention en traitement. Les interventions psychosociales sont particulièrement utiles si aucune pharmacothérapie n'est disponible, par exemple pour le traitement des dépendances à la cocaïne et aux amphétamines. Pour le traitement de la dépendance à l'héroïne, les interventions psychosociales, en combinaison avec un traitement de substitution, augmentent les résultats du traitement.

L'effectivité des différents procédés diffère concernant les résultats et la clientèle cible. Les interventions de cognition et de comportement améliorent la rétention en traitement et l'abstinence ou la modération de consommation pour une plus longue durée de temps, particulièrement en cas de consommateurs de cocaïne. Les traitements « voucher-based », d'autre part, sont particulièrement importants à courte durée de temps. Les interventions basées sur Motivational Interviewing en effet augmentent la motivation de changer l'attitude à l'égard de la consommation de drogues, particulièrement dans les personnes avec une faible motivation initiale. La thérapie familiale a prouvé être efficace particulièrement dans la thérapie des jeunes consommateurs de cannabis. Divers programmes de guidance ont eu des effets positifs concernant la réduction de consommation, particulièrement en ce qui concerne la consommation simultanée de cocaïne et d'opiacés dans le traitement de substitution, tandis que les interventions de « cue exposure » semblent être contre-productives par rapport à la rétention en traitement et récurrences.

4. En général, la combinaison d'interventions de traitement pharmacologiques et psychosociales résulte en une plus grande efficacité et une plus large bande de résultats de traitement, en particulier la réduction de consommation de drogues illégales et moins de délinquance en relation avec les drogues. En Europe, le traitement de substitution avec la méthadone en combinaison avec des interventions psychosociales est l'option de traitement la plus souvent appliquée pour le traitement des désordres liés aux opiacés. Des études diverses ont montré l'efficacité d'une combinaison de MMT et d'interventions psychosociales, par exemple les interventions de guidance et de comportement.

5. La plupart des études concernant l'efficacité des interventions pharmacologiques et psychosociales a été effectuée hors de l'Europe, surtout aux États-Unis (USA). Particulièrement pour certains aspects de la pharmacothérapie (p.e. antagonistes opiacés pour la prévention de crises et de récurrences, pharmacothérapie de psychostimulants – et les désordres liés au cannabis) et la plupart des aspects psychosociaux (en particulier les interventions de cognition et de comportement, contingency management et motivationnel interviewing), l'évidence venant hors de l'Europe est fortement prédominante. En ce qui concerne les drogues pharmacologiques, la recherche des États-membres de l'Union Européenne est prédominante relative à l'introduction d'agents nouveaux pour le traitement de maintien des désordres liés aux opiacés (e.g. slow-release morphines et diacétylmorphine (héroïne)).

6. En général, il y a une pénurie de recherche concernant l'efficacité d'interventions pour le traitement toxicomane dans les États-membres de l'Union Européenne. À l'exception des essais pharmacologiques pour l'évaluation des agents nouveaux pour le traitement de maintien de la dépendance des opiacés, les études randomisées et contrôlées de haute qualité concernant l'efficacité du traitement toxicomane sont rares en Europe. En particulier, les études européennes comparatives concernant l'évaluation des interventions psychosociales sont même extrêmement rares.

### **3.2. Aperçus des types, des caractéristiques, des niveaux actuels de mise à disposition et de l'utilisation des services de traitement des toxicomanies**

Concernant la situation des traitements des toxicomanies, le résultat principal est la constatation qu'il est impossible de présenter une idée claire et cohérente de la situation de traitement dans les États-membres et la Norvège. Ceci est dû surtout à plusieurs limitations des sources de données disponibles, qui étaient les rapports nationaux des Focal Points et les instruments pour la collection des données sur les traitements (Structured Questionnaire 27 "Treatment programmes" (SQ27) et le Standard table 24 "Treatment availability" (ST24) rassemblés par l'EMCDDA. Ces limitations formaient la base pour l'identification de lacunes d'information. Il devenait apparent à cet égard que les difficultés primaires sont liées au manque d'une définition commune de « traitement des toxicomanies » et « types d'interventions ». Comme il n'existait pas de

définitions précises et uniques des types de traitement, il était plutôt difficile de développer une caractérisation comparable et unique qui décrivait la disponibilité de traitements des toxicomanies pour chaque pays. Par exemple, les National Focal Points informent sur les «traitements avec assistance médicale», ce qui ne fournit pas d'information différenciée sur la détoxification, thérapies de substitution et autres traitements médicaux. En plus, il y a très peu d'informations dans beaucoup de pays concernant le nombre de clients en traitement et le nombre d'unités de traitement disponibles. La dissémination de la disponibilité et de l'utilisation des traitements dépend du système de surveillance introduit dans le pays respectif.

Comme conséquence, des définitions ont été introduites pour le traitement et les types de traitement qui émergeaient des discussions avec l'EMCDDA et les National Focal Points. Pour couvrir la réalité des différents traitements existant dans les états-membres et la Norvège, le traitement des toxicomanies a été défini comme suit : Toutes les interventions structurées disponibles dans la communauté, avec des techniques pharmacologiques et/ou psychosociales spécifiques, et visant à la réduction ou l'abstinence de la consommation de drogues illégales. Quant aux principaux types d'interventions, on a distingué entre les interventions ambulantes et les interventions hospitalières (reportées par les pays comme traitement « sans drogues »), ainsi qu'entre les thérapies de substitution et de détoxification (reportées comme « traitement avec assistance médicale »). Cette distinction a été utilisée dans l'aperçu (profils des pays), si les dates accessibles permettaient cette transformation.

En plus, un set d'indicateurs a été développé pour définir un schéma permettant la description comparable des politiques nationales, l'organisation et le financement, la mise à disposition des types d'intervention et le nombre de clients utilisant le traitement relatif aux drogues. Sur la base de ce schéma, une caractérisation systématique et orientée aux critères du système de traitement a été développée pour établir la disponibilité et l'utilisation des services de traitement dans les états-membres et la Norvège.

Par rapport à la situation en 2005/2006, les résultats suivants peuvent être dérivés de la caractérisation systématique du système de traitement dans les états-membres et la Norvège:

- Les profils de traitement montrent que la majorité des pays ont développé un plan d'action national ou une stratégie politique nationale par rapport aux drogues, où les objectifs pour le traitement relatif aux drogues sont définis. Seulement en Malte, il n'existe ni une stratégie nationale ni des objectifs bien définis pour le traitement des drogués. En Malte, une première conception d'un document de politique relative aux drogues a été ébauchée et distribuée pour consultation publique en juin 2007 et devrait être finalisée au cours de 2007. Des aspects particuliers se trouvent également en Italie et en Autriche : L'Italie ne dispose pas d'une stratégie actuelle relative aux drogues, mais un plan d'action national est actuellement en train d'être développé. L'initiative est coordonnée par le ministère de la solidarité et a pour but d'ébaucher

un plan d'action jusqu'à la fin de l'année 2008, et ensuite de s'engager dans un plan de quatre ans (2009-2012). En Autriche, il n'existe aucune stratégie ou plan d'action nationale (fédérale) par rapport aux drogues, mais une stratégie fédérale est en train d'être développée.

- L'établissement, la coordination et le financement des traitements diffèrent beaucoup parmi les états-membres et la Norvège. Toutefois, dans la plupart des pays, un National Drug Council, une autre organisation publique, est responsable de l'introduction et de la coordination au niveau national. Dans les pays avec une structure fédéraliste tels que l'Autriche, l'Allemagne, la Belgique, l'Italie et l'Espagne, les régions et les communes jouent un rôle important dans l'introduction, la coordination et souvent aussi dans le financement du traitement. L'Irlande, la Finlande et les Pays-Bas ont des systèmes différents et complexes qui ne sont pas compatibles avec les cadres décrits.
- La disponibilité et le financement diffèrent également beaucoup parmi les états-membres et la Norvège. Dans 14 pays – particulièrement dans les pays de l'Europe de l'Est – le traitement relatif aux drogues est surtout offert par des agences publiques. Dans quatre pays seulement - la Finlande, l'Allemagne, les Pays-Bas et le Luxembourg - le traitement est surtout offert par des ONGs. Toutefois, dans sept pays (Autriche, Chypre, Grèce, Italie, Malte, Pologne et Portugal), le traitement est offert par des agences publiques et par des ONGs. Quant au financement, dans la plupart des pays, le traitement relatif aux drogues est financé par budget public soit par l'état soit par les régions, par les assurances maladie ou sociale et par les caisses de rentes. Pourtant, le financement dépend en grande partie du type d'intervention, c'est-à-dire que le financement diffère selon qu'il s'agit d'un traitement avec assistance médicale ou d'une intervention psychosociale. Quelques pays ont un système de financement complexe – c'est le cas pour les Pays-Bas, l'Allemagne et le Royaume-Uni.
- Dans les états-membres et la Norvège, la grande majorité des clients sont traités par traitement ambulatoire. En plus, la plupart des pays (n=17) rapportaient que les clients se font traiter surtout par des traitements ambulatoires avec assistance médicale. Seulement la République Tchèque, la Hongrie, la Pologne et la Slovaquie rapportaient que la plupart des clients sont dans un traitement psychosocial ambulatoire (sans drogues). Les clients en Espagne, en Roumanie et en Suède sont à part égale en traitement psychosocial ambulatoire et en traitement ambulatoire avec assistance médicale. Pour l'Estonie, la Belgique et la Finlande, il n'est pas devenu clair quel est le type de traitement suivi par la plupart des consommateurs de drogues.
- En ce qui concerne les services spéciaux pour certains groupes, l'analyse révèle que tous les pays excepté la Roumanie offrent des traitements spéciaux pour les adolescents (moins de 18 ans) et/ou pour les consommateurs de drogues avec diagnostics psychiatriques et somatiques. Bien que la disponibilité et l'accessibilité de ces programmes varient énormément parmi les pays, les états-membres européens et

la Norvège évidemment considèrent que les programmes pour les jeunes consommateurs (de cannabis) et les personnes comorbides sont très importants. En plus, 17 pays offrent, en degré variable, des programmes spéciaux pour les femmes. Neuf pays offrent des programmes de traitement spéciaux pour les migrants ou certains groupes ethniques. Cependant, surtout les états-membres Roumanie, Bulgarie, Estonie, Hongrie, Lituanie et aussi la Chypre n'offrent guère de diversifications pour le traitement de groupes spéciaux.

- La thérapie de substitution est une des réponses les plus importantes aux problèmes relatifs à l'héroïne. Depuis 2001, la méthadone est disponible dans 26 états-membres et la Norvège, et depuis 2007, elle est aussi disponible en Chypre. La méthadone est disponible dans tous les pays, mais l'utilisation de la buprénorphine a augmenté au cours des dernières années, particulièrement par les médecins établis. Actuellement, la buprénorphine n'est pas disponible dans quatre états-membres seulement – la Bulgarie, la Hongrie, la Pologne et la Roumanie.

Les indicateurs les plus importants par rapport à la « dissémination de traitement » sont la prévalence des consommateurs de drogues problématiques (PDU)<sup>2</sup>, et le nombre de consommateurs accédés par les services de drogues. Comme la définition de PDU ne correspond pas à celle de l'EMCDDA dans tous les pays, et comme les données sur l'utilisation des traitements dépendent de la qualité de documentation et de surveillance et sont, par conséquent, souvent incomplètes, il y a des obstacles considérables pour déterminer la dissémination des thérapies. En fait, les obstacles permettent seulement une approximation limitée concernant la dissémination. Un procédé limité et fiable serait de considérer seulement les données des études de prévalence qui se concentraient sur les consommateurs d'opiacés et de les accorder avec les clients en thérapie de substitution. Alors les données de onze états-membres et la Norvège peuvent être utilisées (Autriche, Bulgarie, République Tchèque, Estonie, Allemagne, Grèce, Lituanie, Malte, Roumanie, Slovaquie, Royaume Uni).

- Par rapport au nombre estimé de consommateurs d'opiacés problématiques, la dissémination de thérapies de substitution varie considérablement parmi les douze pays. En 2005 et 2006 respectivement, le pourcentage de clients recevant une thérapie de substitution rangeait de 2,5% en Roumanie à environ 50% en Italie et au Royaume-Uni. À part la Roumanie, aussi la Bulgarie et l'Estonie (3,6% chacune), la Lituanie (environ 4%) et la Slovaquie (environ 5%) ont un taux très bas de dissémination de thérapies de substitution. Ce niveau bas ne semble pas être relié à des difficultés d'accès au traitement de substitution (critères d'admission stricts, délais d'attente), mais plutôt au bas niveau de disponibilité du traitement dans ces pays. En effet, en Roumanie, le traitement de méthadone est seulement offert à Bucarest. C'est la même chose pour la Lituanie, où la méthadone est seulement

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<sup>2</sup> „Problem drug use“ (consommation de drogues problématique) est défini par le EMCDDA comme „consommation de drogues par injection ou consommation de longue durée ou consommation régulière d'opiacés, de cocaïne et/ou d'amphétamines“.

offerte à Riga. En Slovaquie, elle peut être obtenue dans deux villes seulement. En plus, le traitement de buprénorphine n'est pas répandu en Slovaquie, et en Lituanie, ce traitement doit être payé par les patients. En Estonie et en Bulgarie, les programmes de substitution sont offerts dans les villes principales, mais les capacités de traitement ne semblent pas encore être suffisantes.

- Dans 13 des 25 pays, plus de 50% des clients qui commençaient un traitement en 2005 et 2006 respectivement reportaient une consommation primaire d'opiacés. Un nombre élevé des clients consommant principalement des opiacés se trouvent surtout en Bulgarie et en Slovénie (plus de 90% des clients), en Grèce et Malte (plus de 80% des clients), en Lituanie (80%) et au Luxembourg (70%).
- Cinq pays – en particulier l'Espagne et les Pays-Bas, mais aussi l'Italie, le Luxembourg et le Royaume-Uni) constataient qu'un nombre considérable des consommateurs de cocaïne demandaient un traitement. À l'exception de l'Espagne, qui documentait 47% des clients consommant la cocaïne en premier lieu, tous les autres pays jugeaient que la disponibilité et l'accessibilité de traitement spécifique pour la cocaïne étaient faibles.
- En République Tchèque, la plupart des clients réclamaient un traitement à cause de leur consommation d'amphétamines (58%). Quatre autres pays (la Suède, la Lituanie, la Slovaquie et la Finlande) constataient également un nombre considérable de consommateurs d'amphétamines parmi les clients, rangeant de 24% à 35%. Pourtant, à l'exception de la Slovaquie, aucun de ces pays n'offre des traitements spécifiques pour les consommateurs d'amphétamines. La Slovaquie reportait une bonne disponibilité de programmes de traitement pour les consommateurs d'amphétamines.

Comme conséquence, les limitations des données démontrent un grand besoin d'établir un système de reportage précis concernant le nombre de différents types d'interventions et le nombre de clients accédés par les différents services de traitement. La structure appliquée à la caractérisation des types et de la mise à disposition de traitements pourra servir de guide pour la future collection de données afin de réaliser les informations nécessaires.

### **3.3 Identification de groupes cible concernant le transfert du savoir-faire en traitement et de la « bonne pratique »**

1. Les groupes cible les plus importants par rapport au transfert de connaissances dans le domaine des drogues sont les suivants :

- politiciens, commissionnaires (dépendant des responsabilités nationales spécifiques et de l'organisation du traitement des drogués)
- fournisseurs, dirigeants des services (dans les divers domaines de traitement – psychosociaux et médicaux) et associations correspondantes

- professionnels (différentes professions dans le traitement des drogués: assistants sociaux, infirmiers, psychologues, médecins et en plus les associations professionnelles, cours d'études, centres d'entraînement)
- instituts de recherche scientifique (santé publique, recherche concernant les soins, recherche concernant les drogues)
- consommateurs de drogues.

En principe, les groupes cible sont tous des « decision makers » dans le domaine du traitement toxicomane, rangeant des « policy makers » aux investigateurs jusqu'aux désabuseurs de drogues. Adresser ces groupes cible ne correspond pas à la réalité de l'infrastructure du transfert de traitement. Des exceptions positives sont par exemple les plateformes compréhensives des Pays-Bas ([www.ggzkennisnet.nl](http://www.ggzkennisnet.nl)) et du Royaume Uni ([www.nta.nhs.uk](http://www.nta.nhs.uk)).

2. Concernant l'audience réelle des plateformes (par rapport aux groupes cible actuels dans les états-membres et en Norvège concernant le transfert du savoir-faire en matière de traitement toxicomane), les résultats de l'investigation révèlent qu'il s'agit surtout de professionnels dans le traitement des drogues. À part les groupes des professionnels (assistants sociaux, psychologues et médecins), on ne connaît pas exactement l'usage réel de la plateforme par les différents autres groupes cible, mais il paraît être faible.

3. Les plateformes, c'est-à-dire les systèmes d'échange de connaissances de « bonne pratique » dans le domaine des traitements toxicomanes introduits jusqu'à présent, sont conçues trop étroitement. Les contenus ne sont pas suffisamment orientés aux nécessités des différents groupes cible. Les questions de formation continue pour les professionnels ou l'assistance en matière de décisions des consommateurs de drogues en leur qualité de d'usagers potentiels des plateformes sont considérées seulement de façon isolée. Ces détriments doivent être considérés par les initiatives futures s'occupant des standards généraux pour le transfert des connaissances.

### **3.4 Aperçu des ressources existantes et des modèles d'évidence scientifique/savoir-faire et de l'échange de bonne pratique**

1. L'investigation de la situation concernant le « système de qualité » dans les états-membres a été réalisée partant des informations de l'EMCDDA. Ces sources ont été complétées par recherche supplémentaire. L'inventaire des ressources et des mécanismes d'échange par rapport à la bonne pratique dans le domaine du traitement des drogues explore les dimensions centrales d'assurance de qualité suivantes comme indicateurs de la situation: concept/structure, financement et organisations assistantes, sources des modèles présentés, procès de consensus pour l'amélioration, assurance de qualité et standards pour les modèles présentés, niveau d'utilisation, dissémination, effectivité, champ d'application concernant les groupes cible.

2. Le développement et l'introduction d'une base de connaissances par rapport aux principaux domaines du problème des drogues – réduction de l'approvisionnement et de

la demande – et le domaine correspondant de l' « assurance de qualité » se sont développés dans des proportions différentes dans tous les états-membres au cours des dernières décades. Cela signifie que, dans quelques états-membres, un tel programme ou système est déjà complètement introduit tandis que, dans d'autres états, il ne fait que commencer ses premiers pas.

Jusqu'à présent, les principaux éléments du transfert de connaissances et de bonne pratique sont introduits partiellement seulement. Cela concerne surtout l'évaluation et la recherche, aperçus/rapports d'évidence, introduction d'un procédé systématique pour produire et contrôler de nouveaux procédés de protocoles et de consensus pour le développement de directives. Cela veut dire en général: le développement de directives basées sur l'évidence et le transfert de « bonne pratique » est à un stage initial comparé à d'autres domaines du système de la santé publique (en particulier somatique) et se réfère à des tâches du « drug action plan » de l'UE.

3. Concernant l'introduction de directives et de standards au système de traitement (comme indicateur important de la qualité des directives, leur relation avec la « bonne pratique » et le système de transfert), la situation dans les états-membres peut être décrite en accord avec les catégories de base suivantes.

- Dans le premier groupe des états-membres, la dissémination de directives se fait surtout à travers les policy makers et les institutions qu'ils autorisent. Les directives sont surtout limitées à des aspects généraux de structure des services de traitement et d'interventions. Cette manière de développement et de dissémination de directives est reliée seulement légèrement à la recherche concernant les drogues; les études existantes ne sont pas normalement considérées pour l'évaluation. Une adaptation/amélioration des directives sur la base d'évaluation, de recherche ou de rapports d'évidence n'est pas effectuée régulièrement.
- Dans un second groupe des états-membres, le développement des standards et codes est influencé en grande partie par les associations professionnelles. Les directives transférées sont basées sur l'expérience combinée avec l'évaluation des interventions de traitement et la recherche. Les associations professionnelles et les autorités publiques sont responsables de la dissémination. La dissémination est effectuée par voies professionnelles et scientifiques. Ce sont par exemple des publications dans les journaux scientifiques nationaux, des lettres d'information par les associations, des manuels concernant les interventions, des séminaires et des congrès. C'est là la structure traditionnelle de l'assurance de qualité, et la transition vers l'identification et la dissémination de connaissances basées sur l'évidence se fait actuellement.
- Le troisième groupe d'états-membres, encore petit à présent, présente une infrastructure pleinement développée comme arrière-plan du transfert de connaissances. La dissémination du savoir-faire concernant le traitement est basée sur la collecte des données et l'évaluation des services continuelles. Le procédé de l'identification, de la préparation et du transfert de la « bonne pratique » est concentré dans une institution commissionnée agissant au niveau national. Cette

agence, en sa qualité d'infrastructure de connaissances institutionnalisée, peut être organisée très différemment. Dépendant des traditions nationales, les formes de relations avec la recherche sont très différentes. La recherche peut être intégrée directement (par exemple, si l'institution responsable émergeait de la santé publique ou de la recherche concernant les drogues) ou bien la connexion est assurée par des relations de coopération (instituts d'assurance de qualité, instituts pour excellence clinique, santé publique et unités de la recherche toxicomane). Dépendant du rôle constituant joué par les associations des fournisseurs de traitements toxicomanes, les associations professionnelles des différents groupes professionnels impliqués dans le traitement des drogués, la santé publique ou les unités de recherche concernant les drogues, ou bien les hôpitaux universitaires impliqués dans le traitement et la recherche, les « agences nationales » sont ou bien directement attachées aux ministères de la santé publique ou bien opèrent en qualité de réseaux relativement indépendants.

Sur le plan européen, des réseaux pour l'identification et la dissémination du savoir-faire en traitement toxicomane sont solidement établis. La plupart de ces réseaux, par exemple EUnetHTA, Cochrane Collaboration ou WHO-HEN, se concentrent sur des sujets généraux de santé. L'EMCDDA et le Groupe Pompidou s'occupent surtout des aspects concernant le traitement toxicomane ou des réponses générales au problème des drogues et la compilation et l'exploitation correspondantes du savoir-faire. Les deux organisations se trouvent actuellement dans une phase de réorganisation concernant la définition de leurs tâches et par conséquent dans une phase d'initialisation. Ces développements doivent être encouragés.

### **3.5 Évaluation du degré d'utilisation des ressources identifiées**

1. L'importance des directives et modèles de « bonne pratique » pour l'introduction de traitements toxicomanes a été explorée en détail. Le résultat en est qu'à présent, les directives ne forment pas la base de la plupart des traitements toxicomanes appliqués. Pour la plupart des institutions, les directives ou bien les modèles basés sur l'évidence ne sont pas de rigueur, ni pour l'introduction ni pour le financement.

2. Jusqu'à présent, ce sont surtout les professionnels de traitement qui utilisent les ressources disponibles. Afin d'offrir aux clients la meilleure assistance possible, il est nécessaire d'élargir l'exploitation de standards et de directives. Ceci exige des décisions politiques, l'établissement des infrastructures requises pour le transfert de connaissances et la mise à disposition des ressources nécessaires.

### **3.6 Analyse du potentiel et du coût-bénéfice des différents mécanismes pour la dissémination d'information concernant le savoir-faire en traitement (évidence scientifique) et la « bonne pratique »**

1. Pour renforcer le traitement des drogués basé sur l'évidence et l'infrastructure correspondante pour la diffusion de la « bonne pratique », des options différentes existent, qui ne sont pas considérées comme alternatives, mais qui sont en grande partie complémentaires. Ces options, qui s'entrecoupent, sont les suivantes:

- Renforcement et promotion des interventions de traitement de drogues basant sur l'évidence au niveau de chaque état-membre
- Création d'une institution européenne centrale (par exemple un centre d'excellence clinique pour le traitement des toxicomanies en Europe) pour la quête, la préparation et la diffusion de la « bonne pratique »
- Interconnexion des institutions nationales existant au niveau européen et renforcement des réseaux existant dans la recherche de la santé
- Par rapport à ces options (nationales et européennes) il est possible d'effectuer la préparation et la diffusion de la « bonne pratique » dans le cadre du mouvement général des procédés basant sur l'évidence qui s'établit dans le système de la santé publique ou bien de l'effectuer par des efforts séparés et autonomes.

2. L'option d'une institution européenne centrale se consacrant au développement et la diffusion de modèles dans le domaine du traitement des toxicomanies n'est pas une option politique réelle, parce qu'une telle centralisation n'est pas réalisée dans d'autres domaines de la santé publique et par conséquent contredirait la pratique en Europe.

Les expériences des dernières décades concernant le développement des traitements des toxicomanies montrent que la préparation et le transfert de la « bonne pratique » dans le domaine des drogues requièrent une certaine autonomie des autres domaines de la santé publique.

La considération des coûts-bénéfices des différentes options, qui sont en partie déjà réalisées à cause de diverses décisions dans le domaine de la santé publique en Europe et les états-membres, a les conséquences suivantes :

3. Pour l'identification, la préparation et le transfert du savoir-faire concernant le traitement des drogués dans les états-membres et au niveau de l'UE, les pas suivants doivent être stimulés:

- Au niveau des états-membres, l'établissement d'une « culture de la meilleure pratique en traitement des drogués » sera poursuivi sur l'arrière-plan des différentes situations de départ décrites plus haut. Les procédés les plus importants consisteront en une plus grande intégration de la recherche (en particulier concernant l'évaluation des interventions), l'évaluation systématique de l'évidence disponible et l'amélioration de l'infrastructure du transfert des connaissances. Ceci forme la base du développement national de directives pour diverses interventions dans le domaine des drogues et de systèmes appropriés du développement et de l'assurance de qualité.

Jusqu'à présent, seulement quelques pays s'engagent également dans le développement des possibilités d'éducation et d'entraînement pour les groupes professionnels. Ceci est une mesure nécessaire dans tous les états-membres. Elle est sous la responsabilité des états-membres formant partie des différents plans d'action nationaux et de la politique officielle.

- Au niveau de l'UE, en plus des activités actuelles et les développements dans le Groupe Pompidou et la plateforme basée sur la science de l'EMCDDA, un réseau autonome est nécessaire dans le domaine des traitements des toxicomanies, de la prévention et des activités politiques, complémentaires et en étroite coopération avec la EUnetHTA. L'initiation de ces démarches doit être basée sur l'inventaire détaillé de la situation dans les états-membres par rapport à une infrastructure basée sur l'évidence, d'une part en réponse aux problèmes des drogues, d'autre part en réponse aux exigences de la recherche dans le domaine des drogues.

#### **4. Annexes au rapport final (Partie 1)**

##### **4.1 Aperçu sur l'efficacité des interventions de traitement des drogués en Europe (WP1)**

##### **4.2 Aperçu sur les types, les caractéristiques, la dissémination et l'utilisation des services de traitement des drogués (WP 2)**

##### **4.3 Inventaire de la situation actuelle et des modèles de transfert du savoir-faire concernant le traitement des drogués et de la bonne pratique (WP 3)**



## **Drug policy and harm reduction**

**(General invitation to tender n° SANCO/2006/C4/02)**

## **Abschlussbericht (Teil 1)**

## **Qualität der Drogenbehandlung in Europa – Behandlungssituation und Austausch von “good practice”**

**Februar 2008**



Universität Hamburg



Zentrum für interdisziplinäre Sucht und Drogenforschung (ZIS)

**Der Inhalt dieses Berichts gibt nicht notwendig die Meinung der Europäischen Kommission wider. Weder die Kommission noch ihre Vertreter können verantwortlich gemacht werden für jedwede Folgen der Verwendung von Informationen dieser Publikation.**



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## Abschlussbericht (Teil 1)

### Qualität der Drogenbehandlung in Europa – Behandlungssituation und Austausch von “good practice”

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## **Die Situation der Drogenbehandlung und der Austausch von “good practice” (Executive summary)**

Das Projekt bereitet bestehende Erkenntnisse zur Situation der Drogenbehandlung in Europa hinsichtlich der Evidenzbasierung, der Verbreitung und dem Austausch von “good practice” auf:

### ***Die Wirksamkeit von Interventionen zur Behandlung der Drogenabhängigkeit in Europa***

Der Bericht bietet einen Überblick über aktuelle wissenschaftliche Evidenz zur Wirksamkeit, Effektivität und Kosteneffektivität zur Behandlung von Abhängigkeitserkrankungen bei illegalen Drogen in Europa. Die Ergebnisse aller in englischer Sprache vorhandenen Studien über die Wirksamkeit von Interventionen zur Behandlung von Drogenabhängigkeit sowie die aktuellen Erkenntnisse der gegenwärtigen Literatur werden in diesem Bericht zusammengefasst: Zur Behandlung der Opiatabhängigkeit stehen in Europa zahlreiche effektive pharmakologische Interventionen zur Verfügung, die sowohl Konsummuster, die gesundheitliche Situation als auch frühere Behandlungserfahrungen für die Therapie berücksichtigen. Methadon und Buprenorphin sind wirkungsvolle Medikamente zur Entgiftungsbehandlung bei Opiatabhängigen. Methadon, das in Europa meist genutzte Medikament in der Behandlung der Opiatabhängigkeit, reduziert in der Entgiftungsbehandlung die Entzugssymptome bei Patienten und erhöht somit die Chancen für einen erfolgreichen Behandlungsabschluss. Die Wirksamkeit von Methadon in der Substitutionsbehandlung ist stark dosisabhängig und erfordert daher eine adäquate Dosierung. Im Vergleich zu Methadon bietet Buprenorphin eine ähnliche Wirksamkeit, zeigt jedoch insbesondere bei hohen Dosierungen eine vergleichsweise geringere Ausprägung von Nebenwirkungen, ein reduziertes Abhängigkeitspotential und eine verlängerte Wirkungsdauer.

Psychosoziale Interventionen sind wirksam bei der Reduzierung des Drogenkonsums, bei der Verlängerung von Abstinenzphasen und sie sind hilfreich bei der Bindung der Patienten an die Behandlung. Insbesondere bei Fehlen Erfolg versprechender medikamentöser Behandlungsoptionen sind psychosoziale Interventionen Mittel der Wahl. In Kombination mit einer medikamentösen Substitutionsbehandlung verbessern psychosoziale Interventionen die Behandlungsergebnisse deutlich. Die psychosozialen Behandlungsansätze unterscheiden sich hinsichtlich ihrer Wirksamkeit je nach Zielgruppe. Kognitive Verhaltenstherapien führen langfristig zu einer verbesserten Haltequote in der Behandlung, zu längeren Abstinenzphasen und zur Reduzierung des Konsums, insbesondere bei Kokainkonsumenten. „Motivational Interviewing“

verbessert wirksam die Motivation zur Änderungen des Konsumverhaltens insbesondere bei Patienten mit einer niedrigen Ausgangsmotivation.

Familientherapeutische Ansätze zeigen sich hauptsächlich wirksam bei jungen Cannabiskonsumenten. Unterschiedliche Beratungsansätze zeigen positive Effekte in der Reduzierung des Drogenkonsums insbesondere bei Klienten mit gleichzeitigem Kokain und Opiatkonsum.

Die meisten in die Analyse einbezogenen Studien zur Wirksamkeit pharmakologischer und psychosozialer Interventionen kommen aus Ländern außerhalb Europas, und wurden hauptsächlich in den Vereinigten Staaten von Amerika (USA) durchgeführt. Insbesondere zur medikamentösen Behandlung der Stimulantien- und Cannabisabhängigkeit sowie hinsichtlich einiger psychosozialer Ansätze (wie kognitive Verhaltenstherapie, „Contingency Management“, oder CRA) dominieren Forschungsergebnisse von außerhalb Europas. Demgegenüber werden in Europa deutlich mehr Studien zur Wirksamkeit und Effektivität neuer Substanzen in der Substitutionsbehandlung der Opiatabhängigkeit durchgeführt. Insgesamt fehlen qualitativ hochwertige, randomisierte kontrollierte Studien zur Überprüfung der Wirksamkeit von Interventionen zur Behandlung der Drogenabhängigkeit in Europa. Dies gilt im besonderen Maße für Evaluationsstudien zur Wirksamkeit von psychosozialen Interventionen.

### ***Versorgungsangebote und Nutzung von Drogenbehandlung in den Europäischen Mitgliedsstaaten und Norwegen***

Mit dem Projekt wird eine länderbezogene Bestandaufnahme zu den Typen von Drogenbehandlungen, dem Ausmaß der Versorgungsangebote und ihrer Nutzung vorgelegt, die alle 27 europäischen Mitgliedstaaten und Norwegen umfasst. Untersucht wurde, wie sich die Behandlungssituation im Hinblick auf die Verfügbarkeit von Drogenbehandlungen und damit die Versorgungslage darstellt. Bezogen auf diese Aufgabe wurden zunächst alle Information zur Drogenbehandlung gesammelt, die durch die jeweiligen nationalen Drogeberichte und die Standardtabellen der EMCDDA zur Verfügung stehen. In einem weiteren Schritt wurden Indikatoren festgelegt, um die nationale Versorgung mit Behandlungsangeboten in einer vergleichbaren Weise zu erheben. Allerdings zeigten sich Schwierigkeiten in der Vergleichbarkeit, die im Wesentlichen auf a) das Fehlen einer allgemeinen Definition von Drogenhandlung und Interventionstypen und b) einer eingeschränkten Gültigkeit und Vollständigkeit der verfügbaren Daten zurückzuführen sind. Unter Berücksichtigung dieser Einschränkungen lassen sich folgende Hauptergebnisse aus der länderbezogenen Bestandaufnahme des Drogenbehandlungssystems ableiten:

- Die Mehrheit der Länder (26 von 28) hat einen nationalen Handlungsplan oder eine Nationale Drogenpolitikstrategie entwickelt, in der auch Ziele für die Drogenbehandlung definiert sind.

- Die Drogenbehandlung wird, besonders in den osteuropäischen Ländern, zumeist von staatlichen Hilfeeinrichtungen zur Verfügung gestellt. Im Gegensatz dazu werden Behandlungsangebote in Finnland, Deutschland, Malta, den Niederlanden und Spanien primär von nicht-staatlichen Einrichtungen und Organisationen bereitgestellt. In der Mehrheit der Länder werden Drogenbehandlungen durch öffentliche nationale oder regionale Gelder, durch Kranken- oder Rentenversicherungen und durch Sozialversicherungen finanziert. In der Regel ist die Finanzierung von Drogenbehandlung stark davon abhängig, um welche Art der Behandlung es sich handelt.
- In den europäischen Mitgliedstaaten und Norwegen erhält der Großteil der Klienten ambulante Versorgungsangebote. Zudem zeigt sich den meisten Ländern, dass sich Klienten primär in ambulanter medikamentengestützter Behandlung befinden. Nur von Tschechien, Ungarn, Polen und der Slowakei wird berichtet, dass die meisten Klienten mit ambulanten psychosozialen (drogenfreien) Interventionen behandelt werden. Klienten in Spanien, Rumänien, Schweden und Slowenien wiederum befinden sich zu einem annähernd gleichen Ausmaß in ambulanter psychosozialer und in ambulanter medikamentengestützter Behandlung.
- Substitutionsbehandlungen sind eine der Hauptmaßnahmen im Umgang mit Problemen bei Opiatkonsumenten. Seit 2001 wird Methadon in 26 Mitgliedsstaaten und Norwegen in der Behandlung eingesetzt, seit 2007 ist die Substitutionsbehandlung auch in Zypern verfügbar. Die Drogenbehandlung mit Buprenorphin ist in den letzten Jahren stetig gestiegen, insbesondere in Arztpraxen. Zurzeit ist eine Behandlung mit Buprenorphin nur in den vier Mitgliedsstaaten – Bulgarien, Ungarn, Polen und Rumänien, nicht verfügbar.

### ***Situation und Modelle zur Verbreitung von Wissen und “good practice” in der europäischen Drogenbehandlung***

Es erfolgte eine Bestandsaufnahme zum Status von Wissenstransfer und Modellen zum Wissensaustausch und “good practice” in der Drogenbehandlung, um Beispiele für Austauschplattformen im Bereich von Drogenbehandlung zu identifizieren. Für die Bestandsaufnahme von bestehenden Konzepten und Austauschmechanismen von “good practice” in der Drogenbehandlung wurden die zentralen Dimensionen der Qualitätssicherung als Indikatoren für die Beurteilung der aktuellen Lage hinsichtlich der Qualität und Wissensübertragung genutzt.

Die Bestandsaufnahme in den Mitgliedsstaaten und Norwegen verdeutlicht, dass Qualitätssicherungs-Systeme sich in der Mehrzahl der Länder etabliert haben. Leitlinien für den Aufbau von Behandlungseinrichtungen sind vorhanden. Am weitesten ist die Verpflichtung auf Standards und „good practice“ im Bereich der Substitutionsbehandlung entwickelt. In anderen Behandlungsbereichen dagegen ist der aktuelle Stand noch unzureichend.

Bislang sind die wesentlichen Voraussetzungen für die Verteilung von Wissen und „good practice“ Verfahren nur teilweise vorhanden. Das gilt insbesondere für die Bereiche Evaluation und Forschung, der Verankerung systematischer Vorgehensweisen für die Entwicklung und Prüfung neuer Protokolle und entsprechende Konsensus-Prozesse für die Entwicklung von Leitlinien. Insgesamt zeigt sich, dass sich Bereiche evidenz-basierte Entwicklung von Leitlinien und Verbreitung von „good practice“ noch in einem Anfangsstadium befinden. Das zeigt sich insbesondere, wenn der aktuelle Stand mit anderen Bereichen des Gesundheitssystems verglichen und an den Zielsetzungen des EU Drogen-Aktions-Plans gemessen wird.

Für die Weiterentwicklung des Wissenstransfers innerhalb des Behandlungssystems wird insbesondere empfohlen, die Etablierung evidenz-basierter Behandlungskulturen und eine entsprechende Wissens-Infrastruktur im Bereich der Drogenbehandlung auf der Ebene der einzelnen Mitgliedstaaten zu fördern. Dabei geht es im Wesentlichen um (gesundheits-)politische Entscheidungen für entsprechende Konzepte, die Bildung autorisierter Institutionen oder Plattformen für die Koordination und Verbreitung von Qualitätssicherung und -entwicklung. Ergänzend zu den auf der Ebene der Europäischen Union bestehende Aktivitäten sowie den Konzepten der Europäischen Beobachtungsstelle für Drogen und Drogensucht ist ein eigenständiges Netzwerk in den Bereichen Drogenbehandlung, Prävention und drogenpolitischer Aktivitäten erforderlich, das in enger Abstimmung mit EUnetHTA agiert.

## **1. Einleitung**

Das Ziel des Projekts bestand in einer Aufbreitung spezifischer Informationen für eine technische Unterstützung von Berichtspflichten der Commission zu Drogenpolitik und Schadensminderung.

Die zwei verpflichtenden Bereiche der Commission sind:

- „Ein Bericht zur Situation der Drogenbehandlung und dem Austausch von „good practice“, d.h. zur Qualität von Behandlungseinrichtungen in Europa, unter besonderer Berücksichtigung der (bestehenden Mechanismen für die) Entwicklung von Wissen zur Drogenbehandlung und dem Austausch von „best practice“;
- Empfehlungen für die Entwicklung von „Interventionen zur Prävention, Behandlung und Schadensminderung bei Inhaftierten, Diensten für die Integration nach der Haftentlassung, Methoden des Monitoring und der Analyse des Drogenkonsum von Inhaftierten“.

Die Bestandsaufnahme des Projekt in den genannten Bereichen soll zur Weiterentwicklung der Drogenstrategie EU hinsichtlich folgender Punkte beitragen:

- „Verbesserung der Verbreitung zuverlässiger und hochwertiger Informationen und von ‚good practice‘, sowie

- die Überprüfung von Schlüsselpunkten durch die Commission zu den Empfehlungen des Rats von 2003 zur Prävention und Reduktion von gesundheitlichen Folgeschäden in Verbindung mit Drogenabhängigkeit“, die durch die Europäische Kommission (DG SANCO) erfolgt und die schon die Empfehlungen der Mitgliedstaaten hinsichtlich der Angleichung von Leistungen in Haftanstalten umfasst.

Dieser Teil des Projektberichts bezieht sich auf die Situation und die Qualität von Drogenbehandlung in den Mitgliedsstaaten und Norwegen und die Unterstützung zu den entsprechenden Berichten. Die Erläuterungen zur Ausschreibung präzisieren erwartete Ergebnisse insbesondere zu folgenden Aspekten:

- „Review der Literatur und wissenschaftlicher Daten über Drogenbehandlungen und ihre Wirksamkeit,
- Übersicht über Typen, Charakteristika, gegenwärtige Versorgungssituation und Inanspruchnahme von Einrichtungen für Drogenbehandlung,
- Identifikation der Zielgruppen für den Transfer von Behandlungswissen und „good practice“,
- Übersicht über bestehende Verfahren und Modelle zur Aufbereitung wissenschaftlicher Evidenz und Verbreitung von „good practice“,
- Abschätzung der Nutzung verschiedener aufgefundener Verfahren und
- Analyse der Möglichkeiten sowie des Nutzwerts verschiedener Mechanismen für die Verbreitung von Behandlungswissen (wissenschaftliche Evidenz) und von ‚good practice‘

Das Konsortium hat ein Vorgehen entwickelt, um die genannten Fragen zu untersuchen. Die detaillierten Untersuchungsschritte und entsprechenden Ergebnisse befinden sich in den drei Workpackages im Anhang.

In diesem vorangestellten Bericht werden die Ergebnisse der Untersuchungen entlang den vorher genannten sechs Themen vorgestellt.

Eingangs wird das Vorgehen für die Untersuchungsschritte zusammengefasst.

## **2. Methoden**

Zur Beantwortung der durch die Ausschreibung aufgeworfenen komplexen Fragen hinsichtlich der Situation der Drogenbehandlung sieht der Antrag des Konsortiums eine Untersuchung der folgenden zusammenhängenden Aspekte vor:

Zunächst geht es um die Untersuchung des Wissensstandes zur Effektivität von Drogenbehandlungen, die in den EU Mitgliedsstaaten zur Verfügung stehen. Dies erfordert einen Review zu bestehendem Wissen über die Wirksamkeit von verschiedenen Interventionen in der Drogenbehandlung.

Der zweite ergänzende Schritt ist: Welche Art von Interventionen sind in welchem Ausmaß und mit welcher Reichweite in den Mitgliedsstaaten umgesetzt? Dies erfordert zunächst eine Zusammenstellung der erforderlichen Informationen, dann die Feststellung von Informations-Lücken und anschließend die ergänzende Untersuchungen zur Versorgungssituation.

Der dritte Schritt besteht in der Untersuchung der Qualität von Behandlung, der aufgebauten Qualitätssicherung und dem System von „good practice“-Transfer. Die Qualität der bestehenden Interventionen und des entsprechenden Transfer-Systems erfordert die Zusammenstellung von Informationen für alle Mitgliedsstaaten, die Identifizierung von Beispielen für die Entwicklung von „good practice“ und entsprechender Transfer-Verfahren in die Drogenbehandlung und andere Gesundheitsbereiche.

## **2.1 Vorgehen zur Untersuchung der Wirksamkeit von Interventionen zur Behandlung von Drogenabhängigkeit (Work Package 1)**

Dieser Berichtsteil beinhaltet die aktuell verfügbare wissenschaftliche Evidenz zur Wirksamkeit, Effektivität und Kosteneffektivität europäischer Interventionen zur Behandlung von Abhängigkeitserkrankungen aufgrund des Konsums illegaler Drogen. Die Ergebnisse bestehender, in englischer Sprache veröffentlichter Berichte zur Wirksamkeit von Drogenbehandlungen bilden die Grundlage für den Ergebnisteil des Berichtes, der durch eine systematische Literaturrecherche nach aktuellen randomisiert kontrollierten Studien zur Behandlung der Drogenabhängigkeit ergänzt wurde. Bei Fehlen von randomisierten, kontrollierten Studien, wurden auch andere Studientypen in die Analyse einbezogen. Der Ergebnisteil fasst die Erkenntnisse der vorhandenen Berichte und der aktuellen Literatur zusammen. Neben einer kurzen Einleitung enthält der Ergebnisteil eine Zusammenfassung inklusive einer Übersicht zu detaillierten Ergebnissen der Analyse.

## **2.2 Vorgehensweisen zur Einschätzung der Versorgungssituation und Nutzung von Drogenbehandlungsangeboten (Work Package 2)**

Im Zusammenhang mit der Untersuchung wurden eine Reihe unterschiedlicher methodischer Ansätze eingesetzt. Zunächst wurden Indikatoren bestimmt, um die nationale Versorgung mit Drogenbehandlungen zu charakterisieren. Diese Indikatoren umfassen die „Prävalenz problematischen Drogenkonsums“, die „Anzahl verfügbarer Interventionen“, und die „Anzahl an Drogenkonsumenten, die durch die Drogenhilfeangebote erreicht werden“; diese drei Indikatoren wurden als relevant erachtet, um die Frage der „Versorgungssituation“ zu beurteilen. Die Hauptquellen für Informationen über die verfügbaren Behandlungsangebote in den Mitgliedsstaaten und Norwegen bestanden in den Länderberichten und den Standardtabellen, die von der

EMCDDA regelmäßig erfasst werden. Um die Informationen, die zu den Indikatoren zusammengestellt wurden, in ihrem jeweiligen Kontext zu verstehen, war es notwendig, auch die institutionellen Rahmenbedingungen im Hinblick auf die Drogenpolitik sowie die Organisation und Finanzierung von Drogenbehandlungen mit in die Bestandsaufnahme einzubeziehen.

Auf Grundlage einer ersten Zusammenstellung aller verfügbaren Informationen wurden in einem nächsten methodischen Schritt Informationslücken identifiziert. Als eine wesentliche Lücke erwies sich das Fehlen eines gemeinsamen Verständnisses der Begriffe „Behandlung“ und der Haupttypen von „Interventionen“. Ähnliche Schwierigkeiten zeigten sich auch im Zusammenhang mit den Informationen zur Anzahl der Klienten, die Behandlungsangebote nutzen. Folglich ergaben sich Schwierigkeiten, eine vergleichbare und einheitliche Beschreibung des nationalen Drogenbehandlungssystems zu erstellen. Die Identifizierung von Lücken bildete die Basis, zum einen um Definitionen von „Drogenbehandlung“ und „Interventionen“ zu entwickeln und in der Bestandsaufnahme zu berücksichtigen. Zum anderen wurde eine zusätzliche Befragung mittels eines speziell dafür entwickelten Fragebogens durchgeführt, um ergänzend die Behandlungssituation zu erfassen und bestehende Lücken zu schließen. Der Fragebogen wurde an alle Mitgliedsstaaten und an Norwegen versandt.

In einem letzten methodischen Schritt wurde eine systematische und vergleichbare Bestandsaufnahme durchgeführt, die sich an den festgelegten Indikatoren orientierte. Um zu einer umfassenden und systematischen Charakterisierung der nationalen Verfügbarkeit und Nutzung von Drogenbehandlungsangeboten zu kommen, wurde eine Reihe von Kriterien definiert, die zugleich die Struktur der nationalen Profile zur Drogenbehandlung darstellt.

### **2.3 Vorgehen für die Bestandsaufnahme zur Qualität von Drogenbehandlung und Wissenstransfer (Work Package 3)**

Für diesen Teil der Fragestellung wurde folgendes Vorgehen gewählt: Auf Grundlage

- der Untersuchung der aktuellen Situation von Wissens-Transfer und Modellen zur Verbreitung von Wissen sowie
- der Identifikation von Beispielen für Austauschplattformen (in anderen Gesundheitsbereiche ebenso wie der Drogenbehandlung)

werden Empfehlungen für die Verbesserung der Verbreitung von „good practice“ in den Mitgliedsstaaten und Norwegen vorgestellt.

Die Untersuchung stützt sich auf ein Modell von Qualitätsentwicklung im Gesundheitswesen in europäischen und anderen Gesellschaften, wie es in den letzten Jahrzehnten auf unterschiedlichen Wegen schrittweise konzipiert und umgesetzt wurde. Wissensaustausch und Verbreitung von evaluierten Verfahren von „good practice“ sind ein zentraler Aspekt dieses Systems der Qualitätssicherung.

Entsprechend sind für die Bestandsaufnahme von bestehenden Verfahren und Austausch Mechanismen von „good practice“ in der Drogenbehandlung die folgenden Indikatoren die entscheidenden Aspekte von Qualität: Konzept und Strukturen, Finanzierung und unterstützende Organisationen, Verfahren zur Gewinnung der vorgestellten Modelle, Konsensbildung für Verbesserungen, Qualitätssicherung und Standards für die vorgestellten Modelle, Ausmaß der Nutzung, Verbreitung, Effektivität sowie Reichweite entsprechend verschiedener Zielgruppen. Diese Dimensionen werden als Indikatoren für die Beurteilung der aktuellen Situation der Qualitätssicherung genutzt und fungieren als Ausgangspunkte der Untersuchung. Bezogen auf diese Indikatoren wird die aktuelle Situation hinsichtlich der Qualität in der Drogenbehandlung und entsprechende Verfahrensweisen beurteilt.

Ergänzend werden Beispiele aus anderen Bereichen der Gesundheitsversorgung betrachtet und einzelne exemplarische Programme für Wissenstransfer im Drogenbereich vorgestellt. Die Beschreibung der aktuellen Situation und die vorgestellten Beispiele dienen als Hintergrund für die Präsentation von Varianten für den Austausch von „good practice“ und die Beurteilung ihrer Vor- und Nachteile.

### **3. Die Situation der Drogenbehandlung und der Austausch von „good practice“**

Im Folgenden werden die Ergebnisse des Projekts hinsichtlich der Behandlungssituation in Europa, der Effektivität und der Qualität der Versorgung entlang den Themen der Ausschreibung präsentiert.

#### **3.1 Literaturreview: Wirksamkeit europäischer Interventionen zur Behandlung der Drogenabhängigkeit**

1. Interventionen zur Behandlung von Abhängigkeitserkrankungen aufgrund illegalen Drogenkonsums können hinsichtlich ihrer Zielsetzung (Schadensminimierung, Konsumreduktion, Reintegration, Abstinenz) wirksam und/oder effektiv sein. In Europa gibt es eine Vielzahl verschiedener pharmakologischer und psychosozialer Interventionen zur Behandlung von Drogenabhängigen.

2. So stehen in Europa zahlreiche effektive pharmakologische Interventionen zur Behandlung der Opiatabhängigkeit zur Verfügung, die sich sowohl auf das Konsumverhalten des Patienten sowie die gesundheitliche Situation beziehen als auch bisherige Behandlungserfahrungen einbeziehen.

- Der Opiatantagonist Naloxon erweist sich als wirksam in der Behandlung von Opiatüberdosierungen, von komatösen Zuständen und von daraus resultierenden Atemstillständen. Andererseits kann der langfristige Gebrauch von Opiatantagonisten

zu einer Opiathypersensitivität und demnach zu einer erhöhten Gefahr einer Opiatüberdosis führen

- Mit Methadon, Buprenorphin (auch in Kombination mit Naloxon), Clonidine und Lofexidine stehen in Europa wirkungsvolle Medikamente für die Entgiftungsbehandlung der Opiatabhängigkeit zur Verfügung. Methadon, das in Europa meist genutzte Medikament in der Behandlung der Opiatabhängigkeit, reduziert in der Entgiftungsbehandlung die Entzugssymptome des Patienten und erhöht somit die Chancen für einen erfolgreichen Behandlungsabschluss. Die Verwendung von Buprenorphin zur Entgiftungsbehandlung der Opiatabhängigkeit ist in Europa ebenfalls weit verbreitet und ähnlich wirksam wie Methadon. Clonidin und Lofexidin sind wirksam in der Behandlung der Akutphasen von Entzugssymptomen und sind insbesondere für Patienten effektiv, die eine nicht opiatgestützte Entzugsbehandlung bevorzugen. Jedoch führen beide Medikamente, verglichen mit Methadon und Buprenorphin häufiger zu Nebenwirkungen und Behandlungsabbrüchen.
  - Methadon ist in Europa das meist genutzte Medikament zur Substitutionsbehandlung und hat sich als der wirkungsvollste Opiatagonist erwiesen, auch wenn die Wirksamkeit stark dosisabhängig ist. Höhere Methadondosen gehen mit einer erhöhten Haltequote in der Behandlung und einer Reduktion der Opiatbegebrauchs einher. Verglichen mit Methadon weist Buprenorphin in der Substitutionsbehandlung bei gleicher Wirksamkeit hinsichtlich der Reduzierung des Begebrauchs, in hohen Dosierungen vergleichsweise wenige Nebenwirkungen, ein reduziertes Abhängigkeitspotential und eine verlängerte Wirkdauer über mehrere Tage auf. Die Substitutionsbehandlung mit Heroin erscheint insbesondere für Patienten sinnvoll zu sein, die auch unter der Methadonsubstitution den intravenösen Heroingebrauch fortsetzen. Weitere Medikamente, wie Kodein und retardierte Morphine, können das Spektrum der Substitutionsmedikamente sinnvoll ergänzen. Die Substitution mit dem Opiatantagonist Naltrexone zur Rückfallprophylaxe scheint als allein stehende Behandlungsoption nicht wirkungsvoll zu sein und sollte folglich vorwiegend als Bestandteil eines erweiterten Behandlungsangebots eingesetzt werden. Zur Behandlung der Stimulantien- und Cannabisabhängigkeit bestehen derzeit keine effektiven pharmakologischen Optionen, die als Standardmedikament eingesetzt werden könnten, obgleich eine Vielzahl von Medikationen and Substanzen in Studien geprüft worden sind. Demgegenüber gelten die Forschungsergebnisse hinsichtlich der Entwicklung eines Kokainimpfstoffs als Erfolg versprechend.
3. Psychosoziale Interventionen sind wirksam zur Reduzierung des Drogenkonsums, in der Verlängerung von Abstinenzphasen und hilfreich, den Patienten in der Behandlung zu halten. Insbesondere in Abwesenheit Erfolg versprechender medikamentöser Behandlungsoptionen sind psychosoziale Interventionen Mittel der Wahl. In Kombination mit einer medikamentösen Substitutionsbehandlung verbessern psychosoziale Interventionen die Behandlungsergebnisse deutlich. Die psychosozialen

Behandlungsansätze unterscheiden sich hinsichtlich ihrer Wirksamkeit und Zielgruppe. Kognitive Verhaltenstherapien führen langfristig zu einer verbesserten Haltequote in der Behandlung, zu längeren Abstinenzphasen und zur Reduzierung des Konsums, insbesondere bei Kokainkonsumenten. „Motivational Interviewing“ trägt wirksam zur Motivation zur Änderungen des Konsumverhaltens insbesondere bei Patienten mit einer niedrigen Ausgangsmotivation bei. Familientherapeutische Ansätze zeigen sich hauptsächlich wirksam bei jungen Cannabiskonsumenten. Unterschiedliche Beratungsansätze zeigen positive Effekte in der Reduzierung des Drogenkonsums insbesondere bei Klienten mit gleichzeitigen Kokain und Opiatkonsum.

4. Die Kombination aus pharmakologischen und psychosozialen Behandlungsansätzen erhöht grundsätzlich die Wirksamkeit der Gesamtbehandlung und geht insbesondere mit einer Reduzierung des Beigegebrauchs einher. In Europa ist die Methadonsubstitution in Verbindung mit einer psychosozialen Begleitintervention (Drogenberatung, Verhaltenstherapie) die meistgebräuchliche Kombinationstherapie in der Behandlung der Opiatabhängigkeit. Die Wirksamkeit dieser Kombination wird von verschiedenen Studien gestützt.

5. Die meisten in die Analyse einbezogenen Studien zur Wirksamkeit pharmakologischer und psychosozialer Interventionen entstammen Ländern außerhalb Europas, hauptsächlich den Vereinigten Staaten von Amerika (USA). Insbesondere zur medikamentösen Krisenintervention und Rückfallprophylaxe, zur medikamentösen Behandlung der Stimulantien- und Cannabisabhängigkeit sowie hinsichtlich verschiedener psychosozialer Ansätze (wie z.B. kognitive Verhaltenstherapie, „Contingency Management“) überwiegt die Forschungsleistung außerhalb Europas deutlich. Demgegenüber werden in Europa mehr Studien zur Wirksamkeit und Effektivität neuer Substanzen in der Substitutionsbehandlung der Opiatabhängigkeit (z.B. retardierte Morphine, Diacetylmorphin/Heroin) durchgeführt. Insgesamt zeigt sich, dass qualitativ hochwertige, randomisierte kontrollierte Studien zur Überprüfung der Wirksamkeit von Interventionen zur Behandlung der Drogenabhängigkeit vergleichsweise selten in Europa durchgeführt werden. Dies gilt in besonderem Maße für Evaluationsstudien zur Wirksamkeit von psychosozialen Interventionen.

6. Insgesamt zeigt sich in den Mitgliedsstaaten der europäischen Union ein Mangel an Evaluationsforschung zur Wirksamkeit von Interventionen zur Behandlung verschiedener Formen der Drogenabhängigkeit. Mit Ausnahme von pharmakologischen Studien zur Wirksamkeitsprüfung neuer Substitutionsmedikamente in der Behandlung der Opiatabhängigkeit, sind europäische hoch qualitative Studien (z.B. randomisiert kontrollierte Studien) im Vergleich zur Forschungsleistung außerhalb Europas selten. Dies gilt insbesondere für Vergleichstudien zur Wirksamkeit psychosozialer Interventionen.

### **3.2 Überblick über Typen, Merkmale, gegenwärtige Versorgungsangebote und Nutzung von Angeboten der Drogenbehandlung**

Ein wesentliches Ergebnis im Hinblick auf die Behandlungssituation ist, dass es sich als unmöglich herausgestellt hat, ein eindeutiges und schlüssiges Bild von der Versorgungslage in den Mitgliedsstaaten und Norwegen zu zeichnen. Dieser Umstand ist hauptsächlich auf verschiedene Einschränkungen in den verfügbaren Datenquellen zurückzuführen, welche in den nationalen Berichten der Focal Points und in den Fragebögen der EMCDDA zu Erfassung von Behandlungsdaten (Standardisierter Fragebogen 27 „Behandlungsprogramme“ (SQ27) und die Standardtabelle 24 zur „Verfügbarkeit von Behandlungen“ (ST24) bestanden. Die vorhandenen Einschränkungen stellten die Grundlage für Identifizierung von Informationslücken dar. In dieser Hinsicht hat sich herausgestellt, dass die Hauptschwierigkeiten auf das Fehlen eines gemeinsamen Verständnisses von „Drogenbehandlung“ und von „Interventionstypen“ zurückzuführen sind. Da eine präzise und einheitliche Definition von Behandlungstypen fehlen, war es außerordentlich schwierig eine für jedes Land vergleichbare und einheitliche Charakterisierung der vorhandenen Behandlungsangebote zu erstellen. Zum Beispiel berichten die National Focal Points über „medikamentengestützte Behandlungen“ was keinerlei differenzierte Informationen zu Entgiftung, Erhaltungstherapien und andere Formen der medikamentösen Behandlung bietet. Hinzu kommt, dass in vielen Ländern unzureichende Informationen zu Anzahl von Klienten und Behandlung und zur Anzahl der verfügbaren Behandlungsangebote vorliegen. Das Ausmaß der berichteten Verfügbarkeit und Nutzung von Drogenbehandlungen hängt von dem jeweils in einem Land implementierten Monitoring-System ab.

Als eine Konsequenz der vorgefunden Schwächen wurden Definitionen zur Drogenbehandlung und zu Interventionstypen erstellt, wobei die Definitionen auf den Diskussionen mit der EMCDDA und den National Focal Points basieren. Um die vorhandene unterschiedliche Versorgungsrealität in den Mitgliedsstaaten und Norwegen abzudecken, wurde Drogenbehandlung definiert als: Jede strukturierte und in der der Kommune bereitgestellte Intervention, die auf spezifischen pharmakologischen und/oder psychosozialen Techniken beruht und auf die Reduktion oder Abstinenz des Konsums illegaler Drogen abzielt. Als Hauptbehandlungstypen wurde eine Unterscheidung vorgenommen in ambulanten und stationären psychosozialen Interventionen (von den Ländern als „drogenfreie“ Behandlung berichtet) und Erhaltungstherapien und Entgiftung (von den Ländern als „medikamentengestützte“ Behandlung berichtet). Die genannte Unterscheidung wurde in der länderbezogenen Bestandaufnahme verwendet, sofern die verfügbaren Informationen dies zuließen.

Des Weiteren wurden Indikatoren entwickelt, um ein Schema für eine einheitliche Beschreibung der nationalen Drogenpolitik, der Organisation und Finanzierung von Drogenbehandlung, der Verfügbarkeit von Interventionstypen und der Anzahl von

Klienten in Behandlung festzulegen. Auf Grundlage des Schemas wurde eine systematische und kriterienbezogene Charakterisierung des in den Mitgliedsstaaten und Norwegen vorhandenen Drogenbehandlungssystems, und der Verfügbarkeit und Inanspruchnahme von Versorgungsangeboten erstellt.

Bezogen auf die Behandlungssituation im Jahr 2005/2006 können folgende Ergebnisse zum Drogenbehandlungssystem in den Mitgliedsstaaten und Norwegen zusammengefasst werden:

- Aus den Behandlungsprofilen geht hervor, dass die Mehrheit der Länder einen nationalen Handlungsplan oder eine Nationale Drogenpolitikstrategie entwickelt hat, in der auch Ziele für die Drogenbehandlung definiert sind. Lediglich Malta weist weder eine nationale Drogenstrategie noch spezifische Zielsetzungen im Hinblick auf die Drogenbehandlung auf. In Malta wurde eine erste Fassung zu einer nationalen Drogenpolitik im Juni 2007 zur öffentlichen Beratung eingereicht, eine endgültige Fassung soll im Laufe des Jahres 2007 erstellt werden. Italien und Österreich zeigen ebenfalls Besonderheiten: In Italien existiert bislang keine fortlaufende Drogenstrategie, die Entwicklung eines nationalen Aktionsplans ist jedoch gegenwärtig auf den Weg gebracht. Die entsprechende Initiative wird vom italienischen Ministerium für Solidarität koordiniert und zielt darauf ab, eine Vorlage für einen Aktionsplan bis Ende 2008 zu erstellen um diesen dann als einen Vier-Jahres-Plan (2009-2012) zu verabschieden. In Österreich gibt es keine nationale Drogenstrategie oder einen Handlungsplan, allerdings wird eine nationale Strategie zurzeit erarbeitet.
- Implementierung, Koordination und Finanzierung von Drogenbehandlungen variieren stark unter den Mitgliedsstaaten und Norwegen. Allerdings ist in den meisten Ländern ein Nationales Drogenreferat oder ein andere staatliche Organisation für die Implementierung und Koordination von Drogenhilfen auf nationaler Ebene verantwortlich. In Ländern mit einer föderalen Struktur wie Österreich, Deutschland, Belgien, Italien und Spanien übernehmen Regionen oder Kommunen eine zentrale Funktion bei der Implementierung und Koordination, und häufig auch bei der Finanzierung von Drogenbehandlungen. Irland, Finnland und die Niederlande haben wiederum ein unterschiedliches und zugleich komplexes System etabliert, das keinen der beschriebenen Rahmenbedingungen entspricht.
- Auch die Versorgung mit und Finanzierung von Drogenbehandlungen unterscheidet sich stark in den einzelnen Mitgliedsstaaten und Norwegen. Dennoch werden Drogenbehandlungen in 14 Ländern - vor allem in den osteuropäischen Ländern - zumeist von staatlichen Hilfeeinrichtungen zur Verfügung gestellt. lediglich in vier Ländern - Finnland, Deutschland, Niederlande und Luxemburg - werden Behandlungsangebote primär von nicht-staatlichen Einrichtungen und Organisationen bereitgestellt. In sieben Ländern (Österreich, Zypern, Griechenland, Italien, Malta, Polen und Portugal) bieten sowohl staatliche Einrichtungen wie nicht-staatliche Träger oder Organisationen Drogenhilfen an. In der Mehrheit der Länder

werden Drogenbehandlungen durch öffentliche nationale oder regionale Gelder, durch Kranken- oder Rentenversicherungen und durch Sozialversicherungen finanziert. Wie auch immer, in der Regel ist die Finanzierung von Drogenbehandlung stark davon abhängig, um welche Art der Behandlung es sich handelt. So ist die Finanzierung von medikamentengestützten Behandlungen häufig eine andere als für psychosoziale Interventionen. Einige Länder weisen ein höchst komplexes Finanzierungssystem auf; das gilt für die Niederlande, Deutschland und das Vereinigte Königreich.

- In den europäischen Mitgliedstaaten und Norwegen erhält ein Großteil der Klienten ambulante Versorgungsangebote. Zudem wird von den meisten Ländern (n=17) berichtet, dass sich Klienten primär in ambulanter medikamentengestützter Behandlung befinden. Nur aus Tschechien, Ungarn, Polen und der Slowakei wird berichtet, dass die meisten Klienten mit ambulanten psychosozialen (drogenfreien) Interventionen behandelt werden. Klienten in Spanien, Rumänien und Schweden befinden sich wiederum zu einem annähernd gleichen Ausmaß in ambulanter psychosozialer und in ambulanter medikamentengestützter Behandlung. Im Hinblick auf Estland, Belgien und Finnland bleibt unklar, welche Behandlungsform ein Großteil der Drogenkonsumierenden nutzt.
- Bezogen auf das Angebot von spezifischen Hilfen für spezielle Gruppen zeigt die Analyse, dass mit Ausnahme von Rumänien in allen Ländern spezifische Behandlungsprogramme für Jugendliche (unter 18 Jahren) und/oder für Drogenkonsumierende mit Doppeldiagnosen oder Komorbidität bestehen. Obgleich die Verfügbarkeit und Zugänglichkeit dieser Programme erheblich zwischen den Ländern variiert, legen die Europäischen Mitgliedsstaaten und Norwegen offensichtlich einen Schwerpunkt darauf, Behandlungen für jugendliche (Cannabis-) Konsumenten und für komorbide Drogenkonsumenten bereit zu stellen. Überdies gibt es in 17 Ländern in einem unterschiedlichen Ausmaß genderspezifische Programme für Frauen. In neun Ländern werden Behandlungen für Migranten oder ethnische Gruppen angeboten. Dessen ungeachtet weisen die Mitgliedsstaaten Rumänien, Bulgarien, Estland, Ungarn, Lettland und auch Zypern insgesamt eine geringe Ausdifferenzierung ihres Behandlungssystems mit Blick auf spezielle Gruppen auf.
- Substitutionsbehandlungen stellen eine der Hauptmaßnahmen im Umgang mit heroinbezogenen Problemen dar. Seit 2001 wird Methadon in 26 Mitgliedsstaaten und Norwegen in der Behandlung eingesetzt, seit 2007 ist die Methadonsubstitution auch in Zypern verfügbar. Die Drogenbehandlung mit Buprenorphin ist in den letzten Jahren - insbesondere in Arztpraxen - stetig gestiegen. Zurzeit ist eine Behandlung mit Buprenorphin nur in den vier Mitgliedsstaaten – Bulgarien, Ungarn, Polen und Rumänien, nicht verfügbar.

Die wichtigsten Indikatoren zur Annäherung an eine Bestimmung der „Versorgungslage“ sind die Prävalenz des problematischen Drogenkonsums (PDU)<sup>3</sup> und die Zahl der Drogenkonsumenten, die durch die vorhandenen Versorgungsangebote erreicht werden. Da nicht alle Länder PDUs gemäß der Definition des EMCDDA definieren, und da die Daten zur Nutzung von Behandlungen von der Qualität der Dokumentation abhängen und somit häufig unvollständig sind, gibt es gravierende Beschränkungen bei der Einschätzung der Versorgungslage. Tatsächlich erlauben die vorhandenen Mängel nur eine begrenzte Annäherung an die Versorgungslage. Für eine derart beschränkte und zugleich zuverlässige Annäherung sollen nur diejenigen Prävalenzstudien betrachtet werden, die ausschließlich Opiatkonsumenten erfasst haben. Die Angaben dieser Studien werden dann im Verhältnis zu den Klienten in Substitutionsbehandlungen analysiert. Unter den genannten Bedingungen können die Daten aus 11 EU-Ländern und Norwegen verwendet werden (Österreich, Bulgarien, Tschechien, Estland, Deutschland, Griechenland, Lettland, Malta, Rumänien, Slowakei, Großbritannien (England)).

- Im Verhältnis zur geschätzten Anzahl an problematischen Opiatkonsumenten variiert das Ausmaß der Versorgung mit Substitutionsbehandlungen beachtlich innerhalb der 12 Länder. Im Jahr 2005 bzw. 2006 reicht der Anteil an Klienten in Substitutionsbehandlung von 2,5% in Rumänien bis etwa 50% in Italien und Großbritannien. Abgesehen von Rumänien zeigen auch Bulgarien und Estland (beide etwa 3,6%), Lettland (etwa 4%) und die Slowakei (ca. 5%) eine sehr niedrige Versorgungsrate in Bezug auf Substitutionsbehandlungen. Die niedrige Versorgung scheint weniger auf einen schwierigen Zugang zu Substitutionsbehandlungen (strikte Zugangskriterien, Wartezeiten), als vielmehr auf die geringe Verfügbarkeit von Substitutionsbehandlungen in diesen Ländern zurückzuführen zu sein. In der Tat ist in Rumänien eine Substitutionsbehandlung lediglich in Bukarest verfügbar. Das gleiche gilt für Lettland, wo eine Substitutionsbehandlung nur in Riga vorhanden ist. In der Slowakei gibt es eine Substitutionsbehandlung lediglich in zwei Städten. Hinzu kommt, dass auch eine Buprenorphinbehandlung in der Slowakei nicht sehr verbreitet ist, und in Lettland müssen die Klienten für diese Behandlung selbst zahlen. In Estland und Bulgarien sind Substitutionsprogramme in den wichtigsten Städten verfügbar, jedoch entsprechen die vorhandenen Kapazitäten nicht den Behandlungsbedarfen.
- In 13 von 25 Ländern haben mehr als 50 % der Klienten wegen des primären Konsums von Opiaten eine Behandlung im Jahr 2005 bzw. 2006 aufgenommen. Eine hohe Anzahl an Klienten mit einem primären Opiatkonsum lässt sich insbesondere in Bulgarien und Slowenien (mehr als 90% des Klientels), Griechenland und Malta (mehr als 80% des Klientels), Litauen (80%) und Luxemburg (70%) beobachten.

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<sup>3</sup> „Problematischer Drogenkonsum“ („problematic drug use“ – PDU) wird von der EMCDDA definiert als „intravenöser Drogenkonsum oder lang-andauernder bzw. regelmäßiger Konsum von Opiaten, Kokain und/oder Amphetaminen“.

- Fünf Länder – insbesondere Spanien und die Niederlande, aber auch Italien, Luxemburg und das Vereinigte Königreich - berichten von einer beträchtlichen Zahl an Kokainkonsumenten, die eine Behandlung in Anspruch nahm. Mit Ausnahme von Spanien, 47% des Klientels primär Kokain konsumieren, bewerteten alle anderen Länder die Verfügbarkeit und Zugänglichkeit von spezifischen Behandlungen für Kokainkonsumenten als niedrig.
- In Tschechien haben die meisten Klienten (58%) wegen ihres Amphetaminkonsums eine Drogenbehandlung nachgefragt. Vier weitere Länder (Schweden, Lettland, die Slowakei und Finnland) gaben an, dass sich eine nennenswerte Zahl von Amphetaminkonsumenten unter den Klienten befindet. Der Anteil an Amphetaminkonsumenten unter allen Klienten in Behandlung beläuft sich in den vier Ländern auf 24% bis 35%. Mit Ausnahme der Slowakei stellt jedoch keines der Länder spezifische Behandlungsoptionen für Amphetamin-Benutzer zur Verfügung. Die Slowakei berichtet von einer guten Verfügbarkeit spezifischer Interventionen für Amphetaminkonsumenten.

Aus den Beschränkungen in dem vorhandenen Datenmaterial ergibt sich die Notwendigkeit, in Zukunft präziser über die Anzahl verschiedener Interventionstypen und über die Zahl der durch die verschiedenen Behandlungsangebote erreichten Klienten zu berichten. Die zur Charakterisierung von Interventionstypen und Versorgungsangeboten verwendete Struktur kann als Orientierung für eine zukünftige Datenerfassung dienen, die geeignet ist alle erforderliche Information zu sammeln.

### **3.3 Identifikation der Zielgruppen für den Transfer von Behandlungswissen und „good practice“**

1. Die wichtigsten Zielgruppen für Wissenstransfer im Bereich von drogenbezogenen Aktivitäten sind

- Politiker, Beauftragte (in Abhängigkeit von spezifischen nationalen Verantwortlichkeiten und Organisationsweisen von Drogenbehandlung)
- Anbieter, Management von Einrichtungen (in den verschiedenen Bereichen von psychosozialen bzw. medizinischen Behandlungen) und entsprechenden Vereinigungen
- Professionelle (verschiedene Berufsgruppen in der Drogenbehandlung: Sozialarbeiter, Pflegekräfte, Psychologen, Ärzte sowie die entsprechende Berufsverbände; entsprechende Studiengänge und Weiterbildungs-Einrichtungen)
- Forschungseinrichtungen (Gesundheitsforschung, Versorgungsforschung, Drogenforschung)
- Drogenkonsumenten

Prinzipiell sind die Zielgruppen von Wissenstransfer im Bereich von Drogenbehandlung alle „Entscheidungsträger“ im Bereich von Drogenbehandlung. Dies beinhaltet

Politiker, Wissenschaftler und auch Drogenkonsumenten. Bislang werden diese Zielgruppen bei den verschiedenen Plattformen zu Drogenbehandlung nicht angesprochen. Hiervon gibt es positive Ausnahmen wie beispielsweise die umfassenden Plattformen in den Niederlanden ([www.ggzkennisnet.nl](http://www.ggzkennisnet.nl)) oder im Vereinigten Königreich ([www.nta.nhs.uk](http://www.nta.nhs.uk)).

2. Hinsichtlich der aktuellen Reichweite gegenüber Zielgruppen von Plattformen für den Transfer von Wissen zu Drogenbehandlungen zeigen die vorliegenden Ergebnisse für die Mitgliedsstaaten und Norwegen, dass bislang vorwiegend die in der Behandlung tätigen Gruppen von Professionellen erreicht werden. Neben diesen Berufsgruppen (Sozialarbeiter, Psychologen und Ärzten) ist der Erreichungsgrad der weiteren Zielgruppen eher gering, wobei genaue Informationen zu Nutzungsgraden nicht vorliegen.

3. Die bisher implementierten Plattformen bzw. Systeme zum Wissensaustausch zu "guter Praxis" in der Drogenbehandlung sind zu eng konzipiert. Die Inhalte sind unzureichend auf die Bedürfnisse der verschiedenen Zielgruppen ausgerichtet. Weiterbildungsfragen für die Professionellen oder Unterstützung der Entscheidungsbildung von Drogenkonsumenten als potentiellen Nutzern von Plattformen sind nur vereinzelt berücksichtigt. Diese Defizite sollten bei der Planung künftiger Initiativen zur Entwicklung von Standards im Bereich von Wissenstransfer-Plattformen berücksichtigt werden.

### **3.4 Übersicht über bestehende Verfahren und Modelle zur Aufbereitung wissenschaftlicher Evidenz und Verbreitung von „Good practice“**

1. Die Untersuchung der Situation zum Stand von "Qualitätssicherungssystemen" in den Mitgliedsstaaten erfolgt ausgehend von vorhandenen Informationen des Europäischen Beobachtungsstelle für Drogen und Drogensucht (EMCDDA). Diese Quellen wurden durch eine zusätzliche Erhebung ergänzt. Die Bestandsaufnahme der vorhandenen Verfahren und Austausch-Mechanismen von „good practice“ in der Drogebehandlung erfasst die zentralen Indikatoren der Qualitätssicherung zur Beurteilung der gegenwärtigen Situation: Konzept und Strukturen, Finanzierung und unterstützende Organisationen, Verfahren zur Gewinnung der vorgestellten Modelle, Konsensbildung für Verbesserungen, Qualitätssicherung und Standards für die vorgestellten Modelle, Ausmaß der Nutzung, Verbreitung, Effektivität sowie Reichweite entsprechend verschiedener Zielgruppen.

2. Die Entwicklung und Umsetzung von Wissensbasierung in wesentlichen Bereichen des Umgehens mit Drogenproblemen – Reduktion von Angebot und Nachfrage – und der entsprechende Kreislauf der Qualitätssicherung wurden in unterschiedlichem Ausmaß in allen Mitgliedsstaaten in den letzten Jahrzehnten realisiert. Das bedeutet, dass in einigen Mitgliedsstaaten ein solches System vollständig eingerichtet ist,

während andere Mitgliedsstaaten gerade mit den ersten Schritten der Umsetzung begonnen haben.

Bislang sind die zentralen Bestandteile von Wissens- und „best practice“-Transfer erst teilweise implementiert. Das gilt hauptsächlich für die Bereiche von Evaluation und Forschung, von Reviews und systematischer Aufbereitungen der verfügbaren Evidenz, der Etablierung eines systematischen Verfahrens für die Erarbeitung und die Kontrolle neuer Protokolle und von Verfahren für die Konsensbildung zur Erarbeitung neuer Protokolle. Das bedeutet zusammengefasst: der Bereich evidenz-gestützter Entwicklung von Leitlinien und Verbreitung von „good practice“ steckt in den Mitgliedsstaaten noch in der Anfangsphase verglichen mit anderen Bereichen der Gesundheitsversorgung (insbesondere bei körperlichen Krankheiten) und bezogen auf die Ziele des europäischen Drogen-Aktions-Plans.

3. In der Frage der tatsächlichen Umsetzung von Leitlinien und Standards im Versorgungssystem für Drogenbehandlung (als einem zentralen Indikator für die Qualität von Leitlinien, ihre Anbindung an „good practice“ und ein System der Verbreitung) sind die Mitgliedsstaaten den folgenden Gruppen zu zuordnen:

- In der ersten Gruppe von Mitgliedsstaaten erfolgt die Verbreitung von Leitlinien hauptsächlich durch die Politik bzw. durch politische autorisierte Institutionen. In diesen Fällen sind die Leitlinien meist beschränkt auf strukturelle Aspekte von Versorgungseinrichtungen oder Interventionen. Diese Art der Entwicklung und Verbreitung von Leitlinien hat meist nur eine geringe Verbindung zu Drogenforschung; bestehende Forschung ist nicht regelmäßig in die Evaluation eingezogen. Es besteht keine regelmäßige Überarbeitung oder Verbesserung von Leitlinien, die sich auf Evaluation, Forschung bzw. Aufarbeitung von Wirkungen stützt.
- In einer zweiten Gruppe von Mitgliedsstaaten ist die Entwicklung von Standards und Leitlinien in stärkerem Ausmaß beeinflusst durch die professionellen Vereinigungen. Die verbreiteten Leitlinien basieren auf Erfahrungen und einer Verbindung mit der Evaluation von Behandlungsinterventionen und Forschungsergebnissen. Die Vereinigungen von Professionellen und öffentliche Autoritäten sind verantwortlich für die Verbreitung. Die Verbreitung erfolgt über die entsprechenden professionellen oder wissenschaftlichen Kanäle. Sie erfolgt beispielsweise durch Publikationen in nationalen wissenschaftlichen Zeitschriften, Mitteilungen der entsprechenden beruflichen Verbände, Manuale zu den Interventionen, Workshops oder Kongresse. Diese Verfahren bewegen sich zunächst in den traditionellen Strukturen von Qualitätssicherung. Der Übergang zu einer eher evidenzbasierten Erarbeitung und Verbreitung von Wissen vollzieht sich schrittweise.
- Eine dritte, bislang kleine Gruppe von Mitgliedsstaaten verfügt über eine vollständig entwickelte Infrastruktur zur Erarbeitung und Verbreitung von Wissen in der Drogenbehandlung. Die Verbreitung von Behandlungswissen beruht auf einer kontinuierlichen Datensammlung und der Evaluation bestehender Einrichtungen. Der

Prozess der Sammlung, Aufbereitung und Verbreitung von „good practice“ wird in einer beauftragten Institution gebündelt, die landesweit agiert. Diese Einrichtung einer Institutionalisierung einer Wissens-basierten Infrastruktur kann in ganz unterschiedlicher Art und Weise organisiert werden. Ausgehend von den entsprechenden nationalen Traditionen bestehen unterschiedliche Arten der Verbindung mit der Forschung. Forschung kann unmittelbar in die Institution integriert sein (beispielsweise wenn die verantwortliche Institution aus der Gesundheits- oder Drogenforschung hervorgegangen ist) oder die Verbindung wird auf der Grundlage von Kooperationsbeziehungen gesichert (mit Einrichtungen zur Qualitätssicherung, klinischen Exzellenz-Zentren für Evaluationsforschung, Gesundheits- oder Drogenforschungseinrichtungen). Abhängig von der jeweiligen Rolle, die die Trägerschaften von Behandlungseinrichtungen, die Berufsorganisationen der verschiedenen Professionellen in der Drogenbehandlung, öffentliche Gesundheits- oder Drogenforschungseinrichtungen sowie die in Versorgung und Forschung eingezogene Universitäts-Kliniken spielen, sind die „nationalen Institutionen“ für Wissensaufbereitung und Transfer entweder direkt verbunden mit den entsprechenden Gesundheits-Ministerien oder operieren als relativ unabhängige Netze.

Auf der europäischen Ebene sind Netzwerke zur Erarbeitung und Verbreitung von Wissen über Drogenbehandlung bislang kaum etabliert. Die meisten der bestehenden Netze, wie etwa EUnetHTA, Cochrane Collaboration oder WHO-HEN konzentrieren sich auf andere Gesundheitsthemen. Die Europäische Beobachtungsstelle für Drogen und Drogensucht oder die Pompidou Group befassen sich hauptsächlich mit dem Bereich der Drogenbehandlung bzw. generellen Verfahren im Umgang mit Drogenproblemen und der entsprechenden Aufbereitung und Verbreitung von Wissen. Beide Organisationen befinden sich aktuell in einer Phase der Reorganisation und neuer Verständigung hinsichtlich ihrer Aufgaben im Bereich von Wissens-Transfer und daher eher in einer Anfangsphase. Die hier eingeleitete Entwicklung sollte unterstützt und gefördert werden.

### **3.5 Abschätzung der Nutzung verschiedener aufgefundener Verfahren für Wissens-Transfer**

1. Die Bedeutung von Leitlinien und Modellen von “good practice” für die Implementierung von Drogenbehandlung ist ausführlich untersucht. Das Ergebnis ist: bislang sind Leitlinien und Standards noch nicht verbindliche Grundlage der meisten der bestehenden Drogenbehandlungen bzw. -einrichtungen in den Mitgliedsstaaten. Für die meisten Einrichtungen sind Leitlinien bzw. evidenzbasierte Modelle nicht verpflichtend weder für die Implementierung noch die Finanzierung.

2. Bislang nutzen die bestehenden Ressourcen für Wissens-Transfer hauptsächlich die in der Behandlung tätigen Professionellen. Damit die Betroffenen eine bestmögliche Versorgung für ihre Probleme erhalten, ist eine Ausweitung der Nutzung von Standards und Leitlinien erforderlich. Dafür sind politische Entscheidungen, der Aufbau der entsprechenden Infrastruktur für Wissens-Transfer und die Bereitstellung der entsprechenden Ressourcen erforderlich.

### **3.6 Analyse der Möglichkeiten sowie des Nutzwerts verschiedener Mechanismen für die Verbreitung von Informationen über Behandlungswissen (wissenschaftliche Evidenz) und von „good practice“**

1. Für die Stärkung evidenz-basierter Drogenbehandlung und der entsprechenden Infrastruktur zur Verbreitung von „good practice“ gibt es unterschiedliche Optionen, die nicht als Alternativen gesehen werden, sondern die sich weitgehend ergänzen. Diese sich überschneidenden Optionen sind:

- Stärkung und Förderung der „evidenz-basierten“ Interventionen in der Drogenbehandlung auf der Ebene der einzelnen Mitgliedsstaaten
- Schaffung einer zentralen europäischen Institution (etwa ein „Exzellenz-Centrum für Drogenbehandlung“ in Europa) für Sammlung, Aufbereitung und Verbreitung von „good practice“
- Vernetzung bestehender nationaler Institutionen für Wissens-Transfer auf europäischer Ebene und Stärkung bestehender Netze in der Gesundheitsforschung
- Hinsichtlich der genannten Optionen (national und Europe) besteht die Option, die Aufbereitung und Verbreitung von „good practice“ in der Drogenbehandlung im Rahmen der allgemeinen Bewegung für evidenz-basierter Verfahren im Gesundheitswesen oder gesonderter, eigenständiger Anstrengungen zu vollziehen.

2. Die Option einer zentralen europäischen Institution im Bereich der Drogenbehandlung, die sich der Entwicklung und Verteilung von Modellen widmet, ist politisch als keine reale Option, weil sich zum einen in anderen Bereichen gesundheitsbezogener Forschung eine solche Zentralisierung nicht vollzieht und sie damit der gesundheitspolitischen Praxis in Europa widerspricht.

Die Erfahrungen der letzten Jahrzehnte in der Entwicklung der Drogenbehandlung zeigen, dass eine gewisse Eigenständigkeit von Entwicklung und Transfer von „good practice“ im Bereich der Drogenbehandlung unabhängig von anderen Bereichen der Gesundheitsversorgung erforderlich ist.

Die Nutzenabschätzung dieser verschiedenen Optionen, die sich teilweise aufgrund verschiedener gesundheitspolitischer Entscheidungen in Europa und den Mitgliedsstaaten schon real vollziehen, führt zu folgenden Konsequenzen.

3. Für den Bereich der Identifikation, Aufbereitung und Verbreitung von Know-how für die Drogenbehandlung in den Mitgliedsstaaten und auf der europäischen Ebene geht es um die Förderung der folgenden Bereiche:

- Auf der Ebene der Mitgliedsstaaten erfolgt die schrittweise Etablierung einer Kultur von „best-practice“ in der Drogenbehandlung vor dem Hintergrund der unterschiedlichen Ausgangssituationen. Die dabei wichtigsten Prozesse liegen in einer stärkeren Einbeziehung von Forschung (insbesondere hinsichtlich der Evaluation von Interventionen), einer systematischer Aufarbeitung bestehender Wirkungsnachweise (Evidenz) sowie der Stärkung der Infrastruktur für den Wissensaustausch. Dies ist die Basis für die jeweils nationale Entwicklung von Leitlinien für die verschiedenen Interventionen im Drogenbereich sowie für ein geeignetes System der Qualitätsentwicklung und -sicherung. Bislang ist es nur in einzelnen Ländern gelungen, die Entwicklung in Richtung auf mehr Weiterbildung und Trainings für die verschiedenen Professionellen voranzubringen. Das ist ein generell erforderlicher Schritt in den Mitgliedsstaaten. Diese Aufgaben liegen in der Verantwortung der Mitgliedsstaaten und sollten Bestandteil ihrer nationalen Drogen-Aktion-Pläne sowie der Gesundheitspolitik sein.
- Auf der europäischen Ebene ist zusätzlich zu den bestehenden Aktivitäten im Rahmen der Pompidou Group und der wissens-basierten Plattform der EMCDDA ein eigenständiges Netzwerk im Bereich von Drogenbehandlung, Prävention und Drogenpolitik erforderlich, das eng mit dem bestehenden gesundheitsbezogenen Netz EUnetHTA kooperiert. Die Einleitung dieser Schritte sollte auf eine detaillierten Bestandsaufnahme der Situation in Europa hinsichtlich der wissens-bezogenen Infrastruktur im Feld von Drogenbehandlung und anderer Interventionen zu Drogenproblemen und der entsprechenden Drogenforschung basieren..

## **4. Anhänge zum Bericht**

- 4.1 Review of the efficacy of drug treatment interventions in Europe (Workpackage 1)**
- 4.2 Overview of types, characteristics, level of provision and utilisation of drug treatment services (Workpackage 2)**
- 4.3 Inventory of status quo and models of transfer of drug treatment know-how and good practice (Workpackage 3)**



Health and Consumer Protection  
Directorate - General

Drug policy and harm reduction

SANCO/2006/C4/02

**Report on WP 1**

**Review of the efficacy of drug treatment interventions  
in Europe**

February 2008



University of Hamburg



Centre for Interdisciplinary  
Addiction Research (CIAR)

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## **2. Abbreviations**

**AA** - Alcoholics Anonymous

**ACRA** - Adolescent Community Reinforcement Approach

**ADHD** - Attention Deficit Hyperactivity Disorder

**APA** - American Psychiatric Association

**ASI** - Addiction Severity Index

**BE** - Benzoyllecgonine

**BMPT** - Brief Motivational Psycho-educational Therapy

**BNT** - Behavioural Naltrexone Therapy

**BTSAS** - Behavioural Treatment for Substance Abuse in Severe and Persistent Mental  
Illness

**CA** - Cocaine Anonymous

**CBT** - Cognitive-behavioural Therapy

**CET** - Cue exposure therapy

**CM** - Contingency Management

**CNS** - Central Nervous System

**CPMP** - Committee of Proprietary Medicinal Products

**CRA** - Community Reinforcement Approach

**CRAFT** - Community Reinforcement Approach Family Training

**DA** - Dopamine

**DAM** - Diacetylmorphine

**DFST** - Dual Focus Schema Therapy

**DHC** - Dihydrocodeine

**DSM-IV** - Diagnostic and Statistical Manual of Mental Disorder (4th edition)

**EMCDDA** - European Monitoring Centre for Drugs and Drug Addiction

**GABA** - Gamma-aminobutyric Acid

**HCV** - Hepatitis C Virus

**HIV** - Human Immunodeficiency Virus

**ICD-10** - International Classification of Diseases (10<sup>th</sup> edition)

**IDU** - Injecting Drug User

**IPT** - Interpersonal Psychotherapy

**LDA** - Longest Duration of Sustained Abstinence

**MA** - Methamphetamine

**MDFT** - Multidimensional Family Therapy

**MET** - Motivational Enhancement

**MI** - Motivational Interviewing

**MMT** - Methadone Maintenance Treatment

**MSC** - Motivated Stepped Care

**NEPOD** - National Evaluation of Pharmacotherapies for Opioid Dependence

**NHS** - National Health Service (UK)

**NIDA** - National Institute on Drugs and Drug Abuse (USA)

**NTA** - National Treatment Agency (UK)

**NTORS** - National Treatment Outcome Research Study (UK)

**QOL** - Quality of Life

**QOLI** - Quality of Life Inventory

**RCT** - Randomised Controlled Trial

**RPMG** - Relational Psychotherapy Mothers Group

**SI** - Standard Psychiatric Interview

**SROM** - Slow-release Oral Morphine

**SSRI** - Selective Serotonin Reuptake Inhibitors

**STAR** - Supportive Treatment for Addiction Recovery

**TC** - Therapeutic Community

**TdP** - Torsade de Pointes

**Trimbos** - Netherlands Institute of Mental Health and Addiction

**TSF** - Twelve-step Fellowship

**UNODC** - United Nations Office on Drugs and Crime

**URICA** - University of Rhode Island Change Assessment

**WHO** - World Health Organization

### **3. Executive summary**

This report provides a review of currently available scientific evidence of the efficacy, effectiveness and cost effectiveness of European treatment interventions for dependency on illicit drugs. The findings of the actual existing effectiveness reports and recently published randomized controlled trials (RCTs) were summarised in this review. In the absence of RCTs less rigorously designed studies were included. Most included studies were conducted outside of Europe, mainly in the United States. The strength of drug related research in the European Union lies in the diversification of maintenance treatment of opiate related disorders. Several interventions for the treatment of illicit drug dependency were found to be effective, taking into account the health situation and the treatment career of the person (Crisis intervention, Care (Maintenance treatment), Cure (Detoxification), Relapse prevention). The opiate agonist methadone, the partial  $\mu$ -agonist and  $\kappa$ -antagonist buprenorphine (including in combination with naloxone) and the  $\alpha$ -2 adrenergic agonists clonidine and lofexidine are effective agents for the detoxification treatment of opiate dependence and commonly used in Europe. Methadone and buprenorphine are in adequate doses the currently most effective agents for the maintenance treatment of opiate dependency. The prescription of heroin is especially effective for people with opioid dependence who continue intravenous heroin use while on methadone maintenance. Other maintenance approaches, such as with codeine and slow-release morphines, could be valuable additions to the current treatment repertoire. The maintenance with the opioid antagonist naltrexone for relapse prevention seems not to be effective as a stand-alone treatment. With respect to the pharmacological treatment of cocaine, amphetamine or cannabis dependence, there is a low evidence level for the efficacy of all pharmacological agents. In combination with pharmacological approaches psychosocial interventions improve treatment outcomes. Different counselling approaches, although not all, show positive effects in terms of reductions of drug use (esp. cocaine and concurrent opiate use in methadone maintenance treatment (MMT)) and treatment retention, whereas there is some indication, that cue exposure is counterproductive. Behavioural approaches like cognitive behavioural treatment (CBT) show long-lasting results. Methods of Motivational Enhancement were to improve motivation to change consumption

behaviour. With regard to cost-effectiveness, drug treatments shown to be effective and make economic sense. More studies and data are needed, however, especially data taking into account the European context, and data on treatment options other than maintenance therapy.

## 4. Introduction

This review is the main deliverable of the work package No. 1 of the „Drug policy and harm reduction“ work commissioned by the Directorate General for Health and Consumer Affairs - DG SANCO (General invitation to tender no SANCO/2006/C4/02). The objective of this work package is to provide a review of currently available scientific evidence of the efficacy and cost effectiveness of European treatment interventions for dependency on illicit drugs. A number of studies of varying quality and reviews of the efficacy of drug treatment interventions have been carried out. The present review brings together the main results of the six actual existing reports on the efficacy (and effectiveness) of drug treatment interventions and compiles them with further recent clinical studies and existing major reviews on the efficacy (and effectiveness) and cost-effectiveness, they are compiled into a summary.

### *Efficacy, effectiveness and cost effectiveness*

An intervention is efficacious, when it shows better results compared to another intervention or non-intervention (such as placebo) and effective, when this impact is shown under real circumstances. Thus, studies on the effectiveness of an intervention give also information about the efficacy of this intervention.

*Table 1: Definition of efficacy, effectiveness and cost-effectiveness*

<b>Term</b>	<b>Definition</b>
<b>Efficacy</b>	Impact of an intervention to produces a beneficial outcome under controlled circumstances. <i>Question: Can it work?</i>
<b>Effectiveness</b>	Impact of an intervention to produces a beneficial outcome in real world situations. <i>Question: Does it work under real circumstances?</i>
<b>Cost-effectiveness</b>	Comparison of the relative expenditure (costs) and outcomes (effects) of two or more interventions

Economic considerations have become more and more important for health care planning and medical decision-making. Thus, economic studies establishing relations between the costs and outcomes of different types of treatments have gained importance in this field. Although the field of illicit drug research has been slow in implementing these changes, because of the traditional importance of non-medical and non-public health considerations, it is no exception.

Cost-effectiveness is an economic analysis type, which compares the relative costs of interventions for achieving specific health outcomes or other outcomes (e.g. drug free days; abstinence over a certain time period, etc.), by dividing the incremental cost by the incremental outcome, and by comparing this ratio for two or more interventions. The intervention with lower cost per unit outcome is preferred, if there are no other considerations (side effects; ideology). This incremental cost-effectiveness (CE)-ratio can be interpreted as the additional treatment cost that is needed to achieve a one-unit improvement in a specific outcome.

Several drugs are subject of misuse, including alcohol, heroin and other opiates, nicotine, psychostimulants (cocaine and amphetamines) and benzodiazepines, the latter frequently used in combination with opioids or psychostimulants. Only little research has been done on treatment interventions for persons dependent on benzodiazepines alone. Therefore, this review concentrates on the efficacy, effectiveness and cost-effectiveness of drug-treatment interventions for opioid-, psychostimulant- and cannabis-related disorders.

## 5. Definition and objectives of drug treatment

This report is based on the drug treatment definition specified in the report “Classifications of drug treatment and social reintegration and their availability in EU Member States plus Norway” (EMCDDA, 2002): „Treatment comprises all structured interventions in the community with specific medical and/or psychosocial techniques aiming at reducing or abstaining from the use of illegal drugs“. This drug treatment definition refers to all drug specific interventions beyond open access services (such as needle exchange, information and advice). Therefore, the provision of information and advice is consequently not regarded as treatment, but for example care planned counselling is. Thus, a characterisation of drug treatment types in Europe comprises:

- all structured interventions<sup>4</sup>
- with specific pharmacological and/or psychosocial techniques
- aiming at reducing or abstaining from the use of illicit drugs.
- provided in the community

This definition follows the classification of the EMCDDA<sup>5</sup> (2002) and drug-specific treatment can therefore be structured into different treatment approaches:

- ***Outpatient psychosocial interventions***  
including interventions from counselling, motivational enhancement, brief interventions, case management to day care and aftercare
- ***Inpatient psychosocial interventions***  
including interventions from residential treatment to therapeutic communities
- ***Substitution/maintenance treatment***  
including pharmacological interventions with/without psychosocial care/support
- ***Detoxification***  
including interventions for detoxification normally in specialised medical centres

All drug treatment services established in Europe are related to one or to the combination of two or more general treatment types. Medical substitution treatment and psychosocial care (both outpatient – in a common or divided facility) or medical

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<sup>4</sup> regardless type or place of facility

<sup>5</sup> “Classifications of drug treatment and social reintegration and their availability in EU Member States plus Norway” (EMCDDA, 2002)

detoxification and psychosocial rehabilitation are examples for a combination of drug treatment types. Accordingly, the combination of different drug treatment interventions is very common (e.g. the combination of motivational interviewing, counselling, cognitive behavioural therapy). However, scientific evidence<sup>6</sup> for combination of interventions is available only for some areas and mostly evidence is investigated and reported for defined parts or aspects of existing drug treatment. This review about the efficacy of drug treatment types in Europe structured accordingly the main types of drug treatment – pharmacological interventions and psychosocial interventions.

The experience of substance misuse could include a range complex health and social problems that often lead on to the requirement of drug treatment. The treatment needs of substance misusers are influenced by factors like personal demographic characteristics (e.g. gender, ethnicity, age), the types of drugs used, the extent of impairment and complications, and the nature of living situations, social supports and stressors. The following dimensions (or domains) of substance misuse can be identified (Table 2).

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<sup>6</sup> = empirical support for scientific theory or hypothesis

*Table 2: Dimensions and Criteria of substance misuse*

<b>Dimension</b>	<b>Possible measurable criteria</b>
Drug use	Drug use pattern, source, intoxication, and dependence
Alcohol use	Frequency, hazardous use, harmful use, intoxication, and dependence
Physical consequences	e.g. overdose, infection diseases (e.g. Hepatitis C)
Psychological consequences	e.g. psychiatric co-morbidity, other emotional problems/disorders
Social problems	e.g. employment, housing, family, childcare, finance
Criminal justice problems	e.g. arrests, imprisonment, fines

Based on the main objectives for drug treatment and their criteria, goals of treatment could be defined for drug treatment services:

- Reduction of psychological, social & other problems in-/directly related to drug use
- Reduction of harmful or risky behaviours (e.g. sharing injecting equipment)
- Attainment of controlled, non-dependent, or non-problematic drug use
- Abstinence from main problem drugs
- Abstinence from all illicit and licit drugs

Therefore, the objectives of drug treatment interventions (also the interventions included in this report) focus on control of harm, moderation, reintegration, and abstinence. Drug treatment interventions are efficacious and/or effective or not as regard to these objectives.

## 6. Methods

The identification of existing reports on the efficacy of drug treatment interventions was carried out through a comprehensive search of electronic literature databases and internet based platforms of international and national organisations in the field of drug research in the European Union and outside of Europe (Table 3).

Abbreviation	Full Title	Webpage
APA	American Psychiatric Association	<a href="http://www.apa.org">www.apa.org</a>
EMCDDA	European Monitoring Centre for Drugs & Drug Addiction	<a href="http://www.emcdda.europa.eu">www.emcdda.europa.eu</a>
NHS	The National Health Service	<a href="http://www.nhs.uk">www.nhs.uk</a>
SBU	Swedish Council of Technology Assessment in Health Care	<a href="http://www.sbu.se/sv">www.sbu.se/sv</a>
TRIMBOS	Netherlands Institute of Mental Health & Addiction	<a href="http://www.trimbos.nl">www.trimbos.nl</a>
UNODC	United Nations Office on Drugs & Crime	<a href="http://www.unodc.org">www.unodc.org</a>

*Table 3: Organisation's reports on the efficacy/effectiveness of drug treatment types*

In addition, several experts (Prof. M. Gossop, London; Prof. W van den Brink, Amsterdam; Dr. Wouter Vanderplasschen, Gent; Prof. J. Rehm, Toronto; Prof. A. Uchtenhagen, Zurich) were requested to provide further information. Overall, six reports (published in English) on the efficacy and effectiveness of drug treatment types were found (Table 3). The findings of these reports were summarised and form the base of the results part of this review. A comprehensive search strategy based on combinations of index and free text search terms was developed and adapted to the respective electronic literature database. Due to the wide range of research literature on the efficacy and effectiveness of drug treatment interventions, the analysis was limited to the findings and discussion of the existing evidence reports and to the latest experiments in the form of "Randomized Controlled (Clinical) Trials" (RCTs), meta-analyses/systematic reviews including RCTs or at least clinical trials. From a methodological point of view, RCTs have the highest evidential value in terms of efficacy, because they are less susceptible to methodological biases. Therefore, a

comprehensive literature review was carried out, including a systematic search strategy to identify all relevant randomized controlled trials and clinical trials (Annex I). However, this report also refers to less rigorously designed studies (such as observational studies), case series and reviews, especially in the absence of RCTs. Therefore, in addition to general limitations (heterogeneity of the assessment of outcomes, widely varying approaches with regard to duration, design and treatment objectives etc.), the inclusion of less rigorously designed studies leads to limitations.

The literature update was carried out through a literature search in the following electronic databases:

<b>MEDLINE</b>	“Medical Literature Analysis and Retrieval System Online”
<b>EMBASE</b>	Bibliographic database for biomedical and pharmacological information
<b>DARE</b>	“Database of Abstracts of Reviews of Effects”
<b>Cochrane</b>	Central register of controlled trials/systematic reviews
<b>HTA</b>	Health Technology Assessment (HTA) Database
<b>PsychInfo</b>	Electronic bibliographic database provides abstracts to the literature in the behavioural sciences and mental health

The specification and sensitivity of the search strategy was refined through literature scoping. Additionally, available on-line and electronic journals in the field of addiction were searched for further relevant publications. Several general limits and selection criteria (inclusion and exclusion criteria) were set to avoid analysis iterations of existing reports.

*Table 4: Inclusion criteria*

<b>Inclusion criteria</b>
<ul style="list-style-type: none"> <li>• <b>Focus on illicit drugs</b></li> <li>• <b>Study type:</b> (Controlled) clinical trials, randomised controlled trials, meta-analyses and systematic reviews</li> <li>• <b>Language:</b> published in English</li> <li>• <b>Publication date:</b> Jan 2002 - July 2007</li> </ul>

The selection of publications was done by a first analysis of the abstracts and the full text was ordered for literature considered relevant. In a second step, based on the full text, further publications were excluded from the analysis. The content analysis of publications on the efficacy of interventions was oriented towards outcome criteria such as abstinence from drug use (measured by urine test results or self-reported illicit drug use), reduction of illicit drug use, withdrawal severity, length of stay and retention in treatment, treatment completion, safety profiles, and evidenced dose-related effects. The database programme FileMaker was used to prepare a data extraction form for the analysis of the recent research literature. The results of the available reports and the results of the recent literature on the efficacy and effectiveness of drug treatment interventions in Europe are summarised in the results part. The comprehensive description of results for each addictive disorder is supplemented by fact sheets in table form providing an overview at a glance of effective interventions for the treatment of addictive disorders. In addition, these fact sheets include an assessment of the underlying level of evidence. The results part is structured according to the interventions, with the exception of results related to pharmacotherapies of opiate-related and psychostimulant-related disorders, which are structured according to the indication (such as crisis intervention, withdrawal treatment, and maintenance treatment and relapse prevention).

## 7. Included efficacy and effectiveness reports

*Kleber et al., (2006)*

*Practice Guideline for the Treatment of Patients with Substance Use Disorders, American Psychiatric Association (APA).*

The Practice Guideline for the Treatment of Patients With Substance Use Disorders, 2nd Edition, was published in August 2006 and has been developed by psychiatrists of the American Psychiatric Association (APA). The practice guideline consists of three parts (A, B, and C). Part A, “Treatment Recommendations for Patients with Substance Use Disorders,” summarizes and discusses the key recommendations of the guideline. This Part provides also specific recommendations for the treatment of nicotine-, alcohol-, marijuana-, cocaine-, and opioid-related disorders, respectively. Part B, “Background Information and Review of Available Evidence”, provides an overview of substance use disorders, including general information on their natural history, course, and epidemiology and also a structured review with a synthesis of the available evidence. Based on the previous sections, Part C, “Future Research Needs”, identifies those areas in which more research data are needed to guide clinical decisions. The APA practice guideline was developed according to the “APA Guideline Development Process”, which provides search specifications for a detailed comprehensive literature review to identify all relevant randomized clinical trials as well as less rigorously designed clinical trials and case series when evidence from randomized trials was unavailable. The key features of each identified study, including funding source, study design, sample sizes, subject characteristics, treatment characteristics, and treatment outcomes were summarised in evidence tables. In their guidelines the APA used a coding system (distinguishing the study quality between [A] = double-blind randomized controlled trials and [G] = e.g. case report) to state explicitly the nature of the supporting evidence. The literature research includes a high systematic approach for the search strategy and study selection criteria. The 2<sup>nd</sup> edition of the (APA) Practice Guideline for the Treatment of Patients With Substance Use Disorders is available at [www.psych.org/public\\_info/libr\\_publ](http://www.psych.org/public_info/libr_publ).

*Rigter et al., (2004)*

*Treatment of Problematic Use of Drugs. State of the Art for evidence based treatments and other interventions. Utrecht (Niederlande), National Institute of Mental Health and Addiction (Trimbos Instiute)*

The Treatment of Problematic Use of Drugs Report was published in 2004 by the National Institute of Mental Health and Addiction (Trimbos Instiute) on behalf of the Thematic Report National Drug Monitor and under the authority of the Netherlands Ministry of Health. This report is a background overview to offer assistance to policy, practice and science and provides comprehensive information about treatment options of problematic drug use until 2004. Several national and international experts were consulted to assure a high quality of analysis. The introduction provides an overview about drug consumption, the need of treatment, and terminology and includes information about the methods of tracing and assessing scientific literature. The main part is subdivided according to substances (Cannabis, Amphetamines, Cocaine and Opioids). A short outline summarises the findings, followed by options of pharmacotherapy, psychosocial interventions and harm reduction. This report mainly considers randomised controlled trials (RCT), but if no RCTs were found for a certain topic, other study designs were taken into account. All primary sources were rated according to their evidence: three stars for the highest evidence, two stars for reasonable evidence and one star for some evidence of efficacy. The Trimbos report was based upon the findings of the Australian report in 2001. Therefore, the search strategy was limited to literature published between 2001 and 2004, except for literature about new subjects. Different international databases like the Cochrane Collaboration, PsychInfo, Medline/PubMed and Embase were searched. The bibliographies of the thus traced documents were searched for additional literature. Moreover, the contents of 40 international journals were screened. The Treatment of Problematic Use of Drugs 2004 report is available at <http://www.trimbos.nl/producten>.

*Simoens et al., (2002)*

*The effectiveness of treatment for opiate dependent drug users. Aberdeen, University of Aberdeen.*

The effectiveness of treatment for opiate dependent drug users report from the Scottish executive effective interventions unit was issued in June 2000. This report identifies, reviews and appraises what is effective and efficient in the practice of prevention, treatment, rehabilitation of drug dependence and addresses the needs of the individuals and the community. Moreover, the objective of the report is to transfer effective practice based on evidence and evaluation to policy makers, scientists and practitioners, and the support of agencies to deliver effective practice by developing good practice guidelines, evaluation tools, criteria for funding, models of service.

In a systematic search of databases, journals, and grey literature, studies from 1990 to 2002 were identified that enrolled clients aged 18 years or over who were dependent on opiates and were involved in a community maintenance, community detoxification or residential rehabilitation programme. For the assessment of effectiveness studies, the Cochrane Collaboration and “Critical Skills Appraisal Programme” (CASP) guidelines were used. The methodological quality of reviews studies was examined in terms of search strategy, in/exclusion criteria, design and quality assessment of primary studies, number and dates of primary studies, method of combining effectiveness estimates, and scope for bias. The most focused primary outcomes were abstinence from opiate use, reduction of illicit opiate use, withdrawal severity, length of stay and retention in treatment. As cost-effectiveness literature was scarce, a very general search strategy was exerted to avoid missing relevant articles. In a systematic search of electronic databases, any study between 1990 and 2002 that included some form of economic evaluation was considered, except those, where a passing reference to costs or cost effectiveness was given without any supporting data. The assessment of economic evaluations was done by a check list of items like the choice of comparator, the scope of the costs and benefits included, the sources of data regarding costs and outcomes, the detail with which cost data were reported, the use of discounting and sensitivity analysis, where appropriate,

and the relevance of results to the United Kingdom (UK). The report is available under:  
<http://www.drugmisuse.isdscotland.org/eiu/eiu.htm>

*Berglund et al., (2003)*

*Treating Alcohol and Drug Abuse. An Evidence-Based Review. Weinheim, Wiley-VCH.*

The treating alcohol and drug abuse report was edited by M. Berglund et al. in 2003. The aim of this systematic review was to review all published, randomised controlled trials, to assess conclusions about the effects of interventions for alcohol/drug consumption and alcohol/drug related problems. The findings for the treatment of alcohol and drug dependence were subdivided into ten parts and differentiated according to psychosocial treatment and pharmacotherapy. The literature included search terms like “alcohol”, “substance abuse” and “RCT”, to detect related articles in Medline and the Cochrane Library from 1966 through 2000. Furthermore reference lists in published articles and reviews were hand-searched. Results rest exclusively upon randomised and double blind controlled studies. The Treating Alcohol and Drug Abuse Review is available for order at: <http://www.wiley-vch.de/publish/dt/books/highlights/3-527-30682-X/?SID=>

*Gossop, (2006)*

*Treating drug misuse problems: evidence of effectiveness. London, National Addiction Centre Maudsley Hospital Institute of Psychiatry King's College London.*

The report: “The treating drug misuse problems: evidence of effectiveness report” was published by M. Gossop et al. in May 2006 on behalf of the National Treatment Agency for Substance Misuse (NTA). The aim of the report was to inform commissioners and treatment providers about the state of the art concerning evidence-based drug treatment. The report summarised the international research evidence on drug effectiveness. This report is divided into three parts: Pharmacotherapies (with the special focus on opioids), psychosocial interventions and a general part, where other interventions, treatment processes, multiple treatment and combined treatment and service issues are discussed. The “treating drug misuse problems: evidence of effectiveness report” is available at: <http://www.nta.nhs.uk/>

*European Monitoring for Drugs and Drugs Addiction (EMCDDA) literature review (2007)*

*Treatment of problem cocaine use: a review of the literature. Lisbon, EMCDDA*

The literature review on cocaine treatment responses and effectiveness, including responses to mental health disorders among crack/cocaine users was published by the EMCDDA in May 2006. Different aspects of cocaine dependence like epidemiology of cocaine use, patterns of consumption, social aspects of cocaine users, physical, psychosocial and mental health issues, risk factors, treatment, prevention and finally cocaine-related policy were discussed. This report provides an update of the summary of research focusing on treatment approaches to cocaine dependency and their effectiveness. From the research perspective, the aim was to review all the existing literature on cocaine use. Databases like Medline and PsychInfo were searched for the years 2002-2006 (March) including the following keywords: cocaine, treatment, dependence. In addition, the bibliographies of all retrieved articles were searched, and reports from different European Research Centres were considered. From the clinical perspective, all participants in the “Support for Cocaine and Crack Users in Europe “ (CocinEU) project as well as other key opinion leaders and clinicians working in the field of cocaine dependence were interviewed with respect to innovative treatment methods that had not been published so far. The literature review is available at:

<http://www.emcdda.europa.eu/index.cfm?fuseaction=public.content&nnodeid=18945&Languageiso=EN>

*UNODC (2002)*

*Contemporary Drug Abuse Treatment - A Review of the Evidence Base. New York, United Nations Office on Drugs and Crime.*

The contemporary drug abuse treatment review was published by the United Nations Office on Drugs and Crime (UNODC) in October 2002 and is subdivided into the detoxification/ stabilization phase of treatment, the rehabilitation/relapse prevention phase of treatment and the effective components in the rehabilitation/relapse prevention

phase of treatment. The aim of the review is to be a counselling resource for practitioners and policy makers. The review is mainly based on randomized trials and uncontrolled observational evaluation of treatments. A literature search was performed by using electronic databases from 1980 to May 2002. The review is available online at: [http://www.unodc.org/odccp/treatment\\_toolkit.html](http://www.unodc.org/odccp/treatment_toolkit.html)

## **8. European and non-European evidence**

### *Introduction*

Results of this report are based on research from all available countries (inside and outside of Europe). In order to separate the studies conducted in Member States of the European Union from those conducted in other European states or those conducted outside of Europe, the country of origin of all included references was identified. The number of included references was counted for each chapter and allocated as evidence from a Member State of the European Union, from another European state or from a state outside of Europe. Usually it is indicated if the research was conducted in the Member States of the European Union, although the evidence of effectiveness is not influenced by the location of the study concerned. Generally there are some reviews and systematic reviews on the effectiveness of drug treatment conducted by researchers in countries of the European Union (EU) (e.g. Berglund et al 2003, Rigter et al. 2004, Amato et al. 2007), but these reviews cover research from all over the world as well.

### *Summary*

Most research on the effectiveness of pharmacological and psychosocial interventions is conducted in the United States of America (USA). In the pharmacological part two of three; in the psychosocial part four of five included studies are from outside of Europe, mainly from the USA. In several pharmacotherapeutic issues (like opiate antagonists for crisis intervention and relapse prevention, pharmacotherapy of psychostimulant- and cannabis-related disorders) and most psychosocial issues (especially cognitive behavioural interventions and contingency management), evidence from outside of Europe, mainly USA but also Australia, is predominant. On the other hand, pharmacological drug related research from Member States of the European Union is leading in research on the implementation of new agents for maintenance treatment of

opiate related disorders (such as slow-release oral morphine (SROM) and diacetylmorphine (heroin)).

### *Fact Sheet 1 – Included studies*

#### ***Key points***

Most research on treatment effectiveness of pharmacological and psychosocial interventions is conducted outside of Europe, mainly in the United States of America (USA)

The strength of drug related research in the European Union lies in the diversification of maintenance treatment of opiate related disorders

Research on all psychosocial interventions predominantly comes from countries outside of Europe

#### *Detailed results*

Most studies included in pharmacological part of this review were conducted outside of Europe. Overall two of three studies were conducted outside of Europe, whereas some differences in several chapters attract attention. In the research on treatment of psychostimulant- and cannabis-related disorders the included evidence from outside of Europe is strongly predominant. Of the seventy-four studies, mainly randomised clinical trials and other clinical studies included in the chapter of pharmacotherapy of psychostimulant related disorders, sixty-four were conducted outside of Europe (Table 6).

Similarly, the chapter on pharmacotherapy of cannabis-related disorders leaves a nearby similar picture even though the number of included references is lower: Six of seven studies were conducted outside of Europe. Furthermore all included studies on crisis intervention and most on relapse prevention (thirteen out of twenty) of opiate-related disorders were conducted from outside of Europe.

A more balanced picture is found for the pharmacotherapeutic detoxification and maintenance treatment of opiate-related disorders (Table 5). In the implementation of new maintenance agents for the treatment of opiate related disorders (like SROM, diamorphine) the main research is conducted in Member States of the European Union. Most studies on psychosocial interventions come from outside Europe, mainly USA but also Australia. Especially for cognitive behavioural interventions and for contingency management there is hardly any evidence from European Member States, whereas for other interventions it is more balanced (Table 7).

*Table 5: Number and provenance of included studies:  
Pharmacotherapy for opiate-related disorders*

Chapter/Aim	Number of included studies			
	Total	EU	Europe	Outside of Europe
Crisis intervention with opiate antagonists	12	-	-	12
Detoxification with methadone	19	13	-	6
Detoxification with buprenorphine	19	6	-	13
Detoxification with alpha 2 adrenergic agonists	11	2	1	8
Detoxification with buprenorphine - naloxone	4	-	-	4
Detoxification with codeine/dihydrocodeine	1	1	-	-
Maintenance with methadone	22	6	-	16
Maintenance with buprenorphine	19	8	-	11
Maintenance with buprenorphine + naloxone	6	1	-	5
Maintenance with codeine/dihydrocodeine	2	1	-	1
Maintenance with slow-released morphine	6	5	-	1
Maintenance with diacetylmorphine (heroin)	7	6	-	1
Relapse prevention with opiate antagonists	20	5	1	13

*Table 6: Number and provenance of included studies:*

Chapter/Aim	Number of included studies			
	Total	EU	Europe	Outside of Europe
Stimulant related disorders - Detoxification	4	1	-	3
Stimulant related disorders - Substitution	15	3	-	12
Stimulant related disorders - Abstinence	55	6	-	49
Cannabis related disorders	7	1	-	6

*Pharmacotherapy of psychostimulant- and cannabis-related disorders*

*Table 7: Number and provenance of included studies:  
Psychosocial interventions for the treatment of drug dependency*

Chapter	Number of included studies			
	Total	EU	Europe	Outside of Europe
Cognitive-Behavioural Therapy (CBT)	15	1	-	14
Motivational Interviewing (MI)	18	8	-	10
Community Reinforcement approach (CRA)	4	3	-	1
Contingency management (CM)	31	3	-	28
Cue exposure therapy (CET)	5	3	-	2
Psychodynamic and interpersonal therapies	5	1	-	4
Counselling	9	3	-	6
Group counselling	4	2	-	2
Twelve-step and other self-help	3	1	-	2
Therapeutic Communities (TC)	2	1	-	1
Other group and family therapies	6	3	-	3

## 9. Results

### *9.1.1 Pharmacological treatment agents for opioid-related disorders*

Worldwide annual prevalence<sup>7</sup> of opioid use is estimated to be around 0.4% (United Nations Office on Drugs and Crime, 2005), with great regional differences: While the annual prevalence in Europe ranges from 0.2% in Greece, Poland and the Netherlands to 0.8% in Italy and the United Kingdom (European Monitoring Centre for Drugs and Drug Addiction, 2005), it is around 0.4% in the United States (National Institute on Drug Abuse, 2005) and 1.2% in China (Tang et al., 2006). In Canada the annual prevalence is about 0.4% (Fischer et al., 2006). Opioid dependence is associated with severe physical disorders - mainly human immunodeficiency virus (HIV-) and hepatitis C virus (HCV-) infections - as a consequence of intravenous use, and with severe social, psychological and physical harm as a consequence of the illicit status of the drug and the chronic nature of the disorder. Opioid dependence is a chronic relapsing disease, which is considered to be due to a combination of genetic, drug-induced and environmental factors<sup>8</sup> (Hser et al., 2001; Leshner, 1997; McLellan, 2002). Treatment of opioid dependence can therefore have different aims, depending on the health situation and the treatment career of the person (Table 8).

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<sup>7</sup> = total number of cases of the disease in the population at the given time

<sup>8</sup> The environment in which people live heavily affects their attitudes and behaviour around drug use

Table 8: Situation and related aim of drug treatment

Treatment situation	Treatment aim
<b>Crisis intervention</b>	Immediate survival
<b>Cure</b>	Abstinence oriented treatment aimed at stable abstinence and ultimately recovery from addiction
<b>Care</b>	Maintenance treatment directed towards reduction of illicit drug use and drug related delinquency ultimately resulting in improvement of health and social functioning
<b>Relapse prevention</b>	Psychosocial or pharmacological support after detoxification to ensure abstinence

There are numerous pharmacological interventions available for the treatment of opioid dependence. Despite the different aims of these interventions, they all share the common goal of improving health and social outcomes and reducing drug-related criminality and public nuisance. The common effects of the different drugs on neural circuits account for the key features of the pharmacological interventions. Different stages in the addiction process have been identified, often indicated with terms like initiation, continuation, withdrawal and relapse. The role of these different processes and the related neurotransmitters and their interactions are crucial for the understanding of all therapeutic strategies. For example, one may block the reward process, replace illicit drugs by other less harmful or less addictive compounds, prevent or reduce hyperactivity in the stress axis or the balance between the different neural systems can be restored. Currently available agents for the treatment of opioid dependence include full  $\mu$ -agonists (like methadone), combined partial  $\mu$ -agonists /  $\kappa$ - antagonists (like buprenorphine; alone or in combination with an opioid receptor antagonist like naltrexone), opioid antagonists (like naltrexone) and  $\alpha$ 2-adrenergic agonists (like clonidine, lofexidine) (Table 9).

Table 9: In Europe approved agents for the treatment of opiate related disorders

Receptor-Type	Agent	Indication
Full $\mu$ -(mu)-agonist <sup>1</sup>	- Methadone - Morphine - Codeine/Dihydrocodeine	- Detoxification - Maintenance treatment
Partial $\mu$ -agonist <sup>2</sup> / $\kappa$ -(kappa)-antagonist <sup>3</sup>	- Buprenorphine	- Detoxification - Maintenance treatment
Opioid receptor antagonist	- Naltrexone - Naloxone	- Crisis intervention/prevention - Abstinence maintenance
$\alpha$ 2-adrenergic agonist	- Clonidine - Lofexidine	- Detoxification

<sup>1</sup> **Full agonists** have affinity for and activate a receptor, displaying full efficacy at that receptor

<sup>2</sup> **Partial agonists** also bind and activate a given receptor, but have only partial efficacy at the receptor

<sup>3</sup> A receptor **antagonist** is a drug that does not provoke a biological response itself upon binding to a receptor,

but blocks or attenuates agonist-mediated responses. Antagonists have an affinity but no efficacy for their cognate receptors.

### ***Agents for the treatment of opiate related disorders***

#### ***Methadone***

Methadone is a synthetic opioid and acts as an effective  $\mu$ -opioid receptor agonist with a high oral bioavailability and relatively long terminal half-life. Therefore, methadone is used medically especially in the detoxification and maintenance treatment of opioid dependence and is presently the first choice agonist maintenance treatment in most European countries (EMCDDA, 2006).

#### ***Buprenorphine***

Buprenorphine, a partial  $\mu$ -agonist and  $\kappa$ -antagonist, is a semi synthetic long-acting opioid and commonly used agent for withdrawal and maintenance treatment of opioid addicts. Buprenorphine produces agonist-like subjective effects and the long duration of therapeutic action provides the opportunity to administrate buprenorphine in a less than daily schedule. Buprenorphine exists in a solution and tablet formulation with a longer

bioavailability of the solution formulation. However, while a recent RCT indicated that somewhat higher doses may be needed with the tablets, another RCT showed that the extent of withdrawal symptoms or illicit opioid use were not associated with buprenorphine dose, formulation, or plasma buprenorphine levels (Chawarski et al., 2005; Compton et al., 2006). Patients seem to prefer the sublingual formulation, which seems to be associated with a significant improvement in completion rates compared to intramuscular buprenorphine (Gandhi et al., 2003; Soeffing & Rastegar, 2007). Nevertheless clinical trial results should be interpreted with caution. Through the sublingual application the initial resorption is quick and the maximum plasma levels are reached 60 to 90 minutes after intake.

A most recent development is an injectable depot formulation of buprenorphine, which may offer effective options for the treatment of opioid dependence and enhance treatment delivery while minimizing risks of patient non-adherence or illicit diversion of the medication (Sigmon et al., 2006). While methadone has been the first choice treatment of opioid dependence in most countries, buprenorphine has been the primary medication used for this indication in France, due to its ready availability to general practitioners, who can prescribe and treat opioid dependent persons in an office-based setting. Buprenorphine might be an alternative for those heroin dependent patients who do not seem to benefit from methadone in adequate dosages<sup>9</sup>.

#### *Combination of buprenorphine and naloxone*

Buprenorphine is generally administered as a sublingual (sl) tablet, and therefore it must be water-soluble. As a consequence, buprenorphine tablets can be dissolved and injected and abuse has already been reported from several countries, especially from countries with office-based prescription (Varescon et al., 2002). Due to this abuse potential, interest has shifted to the development of a tablet that contains both buprenorphine (good sublingual bio-availability) and naloxone (poor sublingual bio-availability). Thus a combined buprenorphine/naloxone tablet taken sublingually should produce a buprenorphine effect, whereas a tablet dissolved and injected will produce an opioid withdrawal syndrome. These assumptions were confirmed in several experimental studies indicating that a 4:1 buprenorphine/naloxone combination has

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<sup>9</sup> No empirical data are available for this second line indication

indeed a low abuse potential (Stoller et al., 2001), but equal efficacy with regard to reduction of illicit opiate use and craving (Fudala et al., 2003). It should be noted, however, that the additional value of the (more expensive) combination strategy has not been proven in a routine clinical setting. The combination of buprenorphine and naloxone is comparable to buprenorphine alone with regard to reduction of illicit opiate use and craving and has indeed a lower abuse potential (Kleber et al., 2006).

#### *Levo- $\alpha$ -acetylmethadol (LAAM)*

Levomethadyl acetate, also known as levo- $\alpha$ -acetylmethadol (LAAM), is a synthetic opioid similar in structure to methadone. It has a long duration of action due to its active metabolites. Treatment with LAAM was found to be related to the Torsade de Pointes (TdP), a potentially fatal ventricular arrhythmia and LAAM was therefore suspended in Europe. Therefore the efficacy of LAAM will only be summarised in this report.

#### *Codeine/Dihydrocodeine*

Codeine is an analgesic agent available as tablet, oral solution and injection. Codeine is authorized for maintenance treatment only in Germany, where a comparable effectiveness to methadone maintenance treatment has been described (Krausz et al., 1998). The administration of codeine is deemed to be safe, although clinical trials about the efficacy are rare. In comparison to other opiate agonists, dihydrocodeine (DHC) has a shorter-acting bioavailability and a much lower affinity of binding to the  $\mu$ -opioid receptor, which requires a more than daily administration.

#### *Slow release oral morphine (SROM)*

Slow release oral morphine (SROM) acts as an agonist on the  $\mu$ -receptor and the long duration of action permits a once-a-day administration. SROM has been authorized for maintenance treatment of opioid dependence in few European countries<sup>10</sup> (EMCDDA, 2007).

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<sup>10</sup> in Austria, Bulgaria and Slovenia

### *Heroin/Diacetylmorphine*

Some clients do not benefit from maintenance treatment with methadone or buprenorphine and continue to be extremely difficult to treat and continue illicit drug use and criminal behaviour. Furthermore, despite the widespread introduction of maintenance treatment in the early 1990s, the mortality rate remains high and only decreased slightly (Raschke et al., 2000; Rathod et al., 2005). These facts have resulted in a discussion for a modification of maintenance treatment and lead to the question of the effectiveness of heroin prescription, especially for patients who dropped out of treatment or who continued illicit opioid use while in treatment. Heroin (diacetylmorphine, diamorphine) is a semi-synthetic opioid synthesized from morphine and acts on the endogenous  $\mu$ -opioid receptors. Heroin is crossing the blood-brain barrier, which occurs soon after introduction of the drug into the bloodstream. Once in the brain, heroin is rapidly metabolized into morphine by removal of the acetyl groups, therefore, it is known as a prodrug. It is the morphine molecule that then binds with opioid receptors and produces the subjective effects of the heroin high. Heroin can be administered in a number of ways, including snorting and injection. It may also be smoked by inhaling the vapors produced when heated.

### *$\alpha$ 2-adrenergic agonists*

Centrally active  $\alpha$ 2-adrenergic blocker such as clonidine hydrochloride and lofexidine are prescribed historically as anti-hypertensive agents, but newly approved and used for the management of withdrawal symptoms in patients undergoing opiate detoxification.  $\alpha$ 2-adrenergic agonists reducing the symptoms associated with opiate withdrawal such as chills, sweating, stomach cramps, diarrhoea, muscle pain, runny nose and eyes.  $\alpha$ 2-adrenergic agonists are not opiates and therefore non-addictive. Furthermore, they do not induce withdrawal symptoms of their own.

### *Naltrexone/Naloxone*

Opioid antagonists block the opioid effect, avert the opioid-induced euphoria and have no potential of abuse. Naltrexone, a long acting opioid antagonist, is used as a maintenance pharmacotherapy for persons who have detoxified completely from heroin

and is also used for rapid detoxification followed by oral naltrexone daily for up to 12 months for relapse prevention.

Naloxone is a non-selective, short-acting opioid receptor competitive antagonist and has an extremely high affinity for  $\mu$ -opioid receptors in the central nervous system (the largest part of the nervous system, which has together with the peripheral nervous system a fundamental role in the control of behaviour). Naloxone leads to a rapid blockade of those receptors often produces rapid onset of withdrawal symptoms and is therefore indicated for the acute treatment of opioid-overdose-induced respiratory depression. Furthermore naloxone has an antagonist action, though with a lower affinity, at  $\kappa$ - and  $\delta$ -opioid receptors.

### **9.1.1.1 Crisis Intervention**

#### *Use of naloxone and naltrexone for crisis intervention*

At all seven studies (including one RCT) and five reviews were included in this chapter, all conducted outside of Europe, mainly in the United States.

#### *Introduction*

Heroin overdose is one of the leading causes of death among heroin addicts (Sporer, 2003) and non-fatal overdoses are highly prevalent among opioid addicts (Warner-Smith et al., 2001). One study showed that 23-33% of injecting heroin users have taken a non-fatal overdose in the last year, and 43% have witnessed a heroin overdose in another user within the last year (Sporer, 1999).

#### *Summarised results*

The short-acting opioid-antagonist naloxone is effective in treating in patients with an overdose. However, an extended use of opiate antagonists can lead to a reduction of tolerance and therefore to an increased risk of overdose.

*Fact sheet 2 - Pharmacological treatment options for crisis intervention*

<i>Key points</i>	<i>Strength of evidence</i>
• Naloxone is an effective substance in treating respiratory depression and coma in patients with an overdose	***
• Extended naltrexone use can increased the risk of overdose	**

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

The short-acting opioid-antagonist naloxone is considered to be an effective substance in treating respiratory depression and coma in patients with an overdose (Kaplan et al., 1999), This has prompted a discussion on a new strategy to reduce the risks of overdose, by making naloxone available in addicts' homes for peer administration in order to prevent fatal overdose (Baca & Grant, 2005; Lagu et al., 2006; Sporer, 2003). A recent study supports this recommendation by showing, that especially drug users with an overdose history have a great willingness to administer naloxone in the case of a friend's overdose (Lagu et al., 2006).

There is no evidence to suggest that subcutaneous or intramuscular routes of administration are inferior to intravenous administration of naloxone (Clarke, 2001), where as another route, the nasal application of naloxone, seems to be comparably effective to the intravenous application (Barton et al., 2005). Others studies investigated the preventive effect of sustained release naltrexone implants, where initial findings support the clinical efficacy in preventing opioid overdose (Hulse et al., 2005).

As a recent period of abstinence may lead to a reduction in tolerance and has been shown to be a time of particular risk, the best prevention of heroin overdoses is participation in opioid-assisted maintenance treatment. All opioid dependent persons who opt for abstinence based treatment need to be made aware of the particular risk of overdose after a period of abstinence. This is especially true when abstinence was temporarily obtained through maintenance treatment with the long-acting opioid

antagonist naltrexone. Extended use of naltrexone can result in supersensitivity of the  $\mu$ -opioid receptors and an increased risk of overdose (Lesscher et al., 2003). Digiusto et al. showed eight times higher rates of experienced overdoses in naltrexone treated participants after leaving treatment, compared to participants who left agonist treatment (Digiusto et al., 2004). Recently, Gibson et al. found the overdose-related risk of death related to oral naltrexone appears to be higher than that related to methadone treatment (Gibson et al., 2007). This results lead to an open discussion about the overdose-related death risk of oral naltrexone.

### **9.1.1.2 Pharmacotherapy of opioid withdrawal/detoxification**

Withdrawal or detoxification treatment is a necessary step to enter a following drug-free treatment and during detoxification various pharmacological substances can be used to manage withdrawal symptoms, including (partial/full) opioid agonists (e.g. methadone, buprenorphine), opioid antagonists (e.g. naltrexone) and  $\alpha$ 2-adrenergic agonists (e.g. clonidine). The major goal of pharmacotherapy during detoxification is to relieve the severity of opiate withdrawal symptoms in order to avoid unnecessary human suffering and medical complications (e.g. epileptic seizures) as well as to enhance motivation to continue treatment (Gonzalez et al., 2004). The various Cochrane reviews on detoxification indicate that the most extensively tested effective strategy for the detoxification of heroin dependent patients is replacement of the illicit short-acting opioid by the long-acting opioid-agonist methadone, which is subsequently tapered and finally discontinued (Amato et al., 2005). The process and outcome of long-acting opioid-agonist tapering may be improved through additional prescription of a calcium channel blocker such as nimodipine (Jimenez-Lerma et al., 2002), whereas additional prescription of amantadine (antiviral drug also used as an antiparkinsonic) does not seem to improve the effectiveness of methadone tapering in heroin dependent patients with or without a co-morbid cocaine dependency (Perez de los Cobos et al., 2001).

#### ***Methadone as a detoxification agent (including methadone reduction treatment)***

Seven systematic reviews (six of them from EU Member States), two RCTs (one from a EU Member State), four other studies (three from EU Member States) and six reviews (three from EU Member States) were included in this chapter.

#### ***Introduction***

Methadone the most commonly used opiate agonist for detoxification treatment in Europe, mainly carried out in a linear reduction schedule with equal dose decreases. Reducing doses of methadone is currently accepted as a standard detoxification approach and despite the low retention rate, most patients in Europe are treated in an outpatient treatment setting (Gossop, 2006).

### Summarised results

There is evidence that detoxification treatment using tapered doses<sup>11</sup> of methadone is associated with adequate rates of completion of withdrawal, reduction of withdrawal symptoms to tolerable levels, and minimal adverse effects. Control by the clinician rather than the patient of the rate of reduction of the methadone dose is associated with greater reductions in methadone doses. Compared to the effects of methadone in maintenance treatment, the efficacy of methadone for detoxification treatment is limited. The attrition rate of methadone detoxification treatment remains high, particularly in an outpatient setting compared to an inpatient setting. Despite the findings related to methadone and  $\alpha$ 2-adrenergic agonists of one recent RCT, the current systematic Cochrane review shows that methadone had better outcomes than other opioid agonists in terms of completion rate, and patients have shown less severe withdrawal symptoms.

### Fact sheet 3 - Methadone as a detoxification agent

<i>Key points</i>	<i>Strength of evidence</i>
Opiate detoxification using methadone in tapered doses lead to reduced withdrawal symptoms and increased completion rates compared to placebo	****
Compared to other opioid agonists, methadone detoxification showed better outcomes in terms of completion rate and less severe withdrawal symptoms	****
Fixed methadone detoxification programmes may lead to higher retention rates than flexible methadone detoxification schedules	?

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCTs with a very low risk of bias, more than one RCTs a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

### Detailed results

Methadone has been described as the most effective pharmacotherapeutic agent currently used in detoxification (Kreek, 2000) and detoxification treatment with tapered doses of methadone showed fewer severe withdrawal symptoms and fewer drop out

rates compared to placebo (Amato, Davoli et al., 2007). Nevertheless, various patients relapse to heroin use and in comparison to methadone maintenance treatment, methadone withdrawal treatment leads to high drop-out rates, even though the effect on the proportion of positive urine samples in both treatment modalities remains high (Amato, Davoli et al., 2007; Kleber et al., 2006; Simoens et al., 2002). Because of the poor treatment outcomes especially in rapid detoxification approaches (e.g. 10% dose reduction per week) like taper interruptions, illicit drug use and withdrawal symptoms, a gradual methadone taper (like 3% per week) is recommended (Kleber et al., 2006).

Methadone reduction treatment, as a special form of long-term methadone detoxification treatment, has similarities with gradual methadone treatment (Gossop, 2006). Likewise the results are analogical to those of methadone maintenance programmes. As only two thirds of the patients in methadone reduction treatment received the planned reducing doses, methadone reduction treatment is frequently not delivered as intended (Gossop, 2006). Even if methadone reduction treatment is delivered as intended, the outcomes remain poor especially in comparison to methadone maintenance treatment in terms of reduction of illicit opioid use and criminal behaviour (Gossop, 2006).

Higher doses of methadone (60 mg) for non-rapid detoxification were found to be more effective than lower doses (20 mg) with regard to treatment retention (Berglund et al., 2003). Also fixed methadone detoxification programmes may lead to higher retention rates than flexible methadone detoxification schedules, maybe because of reduced mean doses in the flexible regime group (Simoens et al., 2002). However, another report found no differences between fixed and flexible reduced mean doses (Gossop, 2006). Patients who are informed about the methadone withdrawal schedule have better outcomes than uninformed patients, although patients do not have better outcomes, when they control their methadone schedule on their own (Gowing et al., 2001; Kleber et al., 2006; Rigter et al., 2004). One effectiveness report found that detoxification with tapered doses of methadone is more likely to be completed if withdrawal is scheduled to occur over a short period of time (21 days or less) (Gowing et al., 2001).

Compared to other opioid agonists, methadone showed better outcomes in terms of completion rate and less severe withdrawal symptoms (Amato et al., 2004). Different

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<sup>11</sup> Gradually reducing methadone over time

effectiveness reports demonstrated that the potential of methadone to alleviate withdrawal symptoms is equal to  $\alpha$ 2-adrenergic agonists, like clonidine or lofexidine (Berglund et al., 2003; Rigter et al., 2004), and low doses of methadone were found to be equal to clonidine in the effectiveness to suppress withdrawal symptoms (Gowing et al., 2001; Kleber et al., 2006). However, in comparison to methadone treated patients, patients treated with clonidine were more likely to leave the treatment early, possibly because opioid agonists suppress withdrawal symptoms early in treatment (Kleber et al., 2006). No differences were found between clonidine and low doses of methadone with respect to withdrawal symptoms, but patients treated with clonidine tend to dropout earlier compared to patients treated with methadone (Gowing et al., 2001; Kleber et al., 2006). Nonetheless, a recent RCT found that patients randomised to lofexidine + naloxone had longer periods of abstinence before relapse than those who received methadone (McCambridge et al., 2007). Furthermore, patients treated with lofexidine were more likely to complete detoxification, and more likely to be abstinent from opiates after 5 months, than those who detoxified with methadone. These findings were found to be consistent with the results of former studies reporting a more rapid resolution of withdrawal symptoms after lofexidine compared to methadone detoxification (McCambridge et al., 2007). Nevertheless, due to several important limitations, these recent findings should be interpreted with caution and the most recent Cochrane review found no statistically significant differences between methadone and adrenergic agonists (Amato et al., 2005). Furthermore, an analysis of single studies in this systematic review showed that methadone detoxified patients experience fewer side effects and withdrawal symptoms than patients treated with adrenergic agonists. In particular, early withdrawal symptoms were more adequately controlled with methadone than with lofexidine (Amato et al., 2005). These results correlate with former suggestions that methadone treatment is more effective than  $\alpha$ 2-adrenergic agonists in terms of treatment retention and relapse rate and provide a better safety profile (Amato et al., 2004).

One effectiveness report suggested that the combination of methadone and nimodipine, a dihydropyridine calcium channel blocker, could improve treatment outcomes, but no recent clinical trial could confirm these findings (Rigter et al., 2004). Buspirone, an azipirone used primarily as an anxiolytic agent, administered in addition to methadone,

could lead to a more rapid methadone taper with larger and more frequent methadone decrements, but more trials will be needed to confirm this hypothesis (Buydens-Branchey et al., 2005).

There is evidence to show that severity of withdrawal under methadone tapering can be reduced by different psychosocial measures, such as having patients well-informed (Green & Gossop, 1988), contingency management (Hall et al., 1979) or counselling (Rawson et al., 1983). A Cochrane review found psychosocial treatment offered in addition to any pharmacological detoxification program to be effective in terms of completion of treatment, results at follow-up and compliance (Amato et al., 2004). Kleber et al. (2006) suggests combining pharmacological treatment with behavioural and psychosocial approaches to increase efficacy (Kleber, 2003).

The recent Cochrane review found only one randomised controlled clinical trial comparing inpatient and outpatient settings for opioid detoxification, suggesting that opioid detoxification in inpatient settings is slightly more effective, but the underlying available research remains limited (Day et al., 2007).

### ***Buprenorphine as a detoxification agent***

From nineteen included studies in this chapter, thirteen are from outside of Europe: Five systematic reviews (two of them from EU Member States), six RCTs (two from EU Member States), five other studies (one from a EU Member State) and two reviews (one from a EU Member State)

#### *Introduction*

The partial  $\mu$ -agonist and  $\kappa$ -antagonist buprenorphine is a commonly used agent for the detoxification treatment of opiate dependents in Europe. Like methadone, the detoxification treatment with buprenorphine is carried out in a linear reduction schedule with equal dose decreases.

#### *Summarised results*

Buprenorphine seems to have similar efficacy as tapering doses of methadone for the treatment of opioid detoxification with comparable effectiveness in improving withdrawal symptoms and in completing detoxification treatment. Compared to

clonidine, buprenorphine provides at least more effectiveness in withdrawal management and has fewer adverse effects. Therefore, a replacement of heroin by buprenorphine in tapered doses followed by the prescription of  $\alpha$ 2-adrenergic agonist (e.g. clonidine or lofexidine) to reduce withdrawal symptoms proved to be an effective strategy for detoxification of opioid addicts (Gowing et al., 2004; Gowing et al., 2004a). However, it should be noted that patients on high doses of heroin are sometimes difficult to stabilize with the partial agonist buprenorphine, resulting in precipitated withdrawal symptoms and early drop out.

*Fact sheet 4 - Buprenorphine as a detoxification agent*

<i>Key points</i>	<i>Strength of evidence</i>
Opiate detoxification using buprenorphine in tapered doses lead to reduced severe withdrawal symptoms and increased completion rates compared to placebo	****
Buprenorphine seems to have similar efficacy as tapering doses of methadone for the treatment of opioid detoxification	***
Buprenorphine is more effective in withdrawal management compared to clonidine including a better safety profile	****
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

*Detailed results*

The efficacy of buprenorphine in the detoxification of opioid dependents is comparable to methadone with regard to treatment retention, illicit drug use, and suppression of withdrawal symptoms, though detoxification with buprenorphine can be completed more quickly, within 3 to 8 days (compared to a normally duration of 14 days in methadone detoxification (Gowing et al., 2007; Kleber et al., 2006; Rigter et al., 2004). Also, no significant differences were found between buprenorphine and methadone in terms of completion of withdrawal, despite quicker resolution of withdrawal symptoms with buprenorphine (Gowing et al., 2007). Furthermore, the current Cochrane review found that neither buprenorphine nor methadone is associated with significant adverse

effects when used to manage opioid withdrawal (Gowing et al., 2007). However, Gossop et al. suggested that detoxification with buprenorphine has less severe withdrawal symptoms in comparison to methadone detoxification and may lead to a higher number of completed detoxification treatments (Gossop, 2006). Nevertheless, Kornor et al. (Kornor et al., 2006) recommend that outpatient buprenorphine tapering should be closely monitored due to the substantial psychological distress and increased death risk. The recent Cochrane review suggested that gradual tapering of buprenorphine after buprenorphine maintenance appears to be more effective than rapid tapering, but further research is needed to confirm this assumption (Gowing et al., 2007).

Like methadone the efficacy of buprenorphine for detoxification treatment depends on the treatment setting; the relative efficacy of outpatient and inpatient withdrawal remains somewhat unclear (Lingford-Hughes et al., 2004). The Trimbos effectiveness report found buprenorphine to be less effective in outpatient than in inpatient setting, but with better retention rates than methadone in outpatient setting (Rigter et al., 2004). Kosten and O'Connor (Kosten & O'Connor, 2003) prefer buprenorphine over methadone as their first choice opioid tapering and detoxification strategy, because withdrawal symptoms of methadone last longer than those of buprenorphine. Conventional inpatient detoxification (clonidine and other medications for a mean of 3.5 days) was found to be more effective in achieving initial abstinence than outpatient detoxification using buprenorphine (Digiusto et al., 2005). Only 12% of patients treated with buprenorphine in an outpatient setting achieved initial abstinence compared to 24% of patients in conventional inpatient treatment (Digiusto et al., 2005), although outpatient detoxification was found to be more effective with buprenorphine than when conventional symptomatic medications (e.g. clonidine) were used in an outpatient setting (4%) (Digiusto et al., 2005).

The efficacy of buprenorphine for detoxification treatment depends on the dosage; low doses of buprenorphine were found to be effective in attenuating withdrawal symptoms with acceptable rates of treatment retention, despite additional medication for non-specific symptoms such as anxiety and insomnia (Fuscone et al., 2005). Assadi et al. (2004) suggest that opioid detoxification using high doses of buprenorphine (12 mg) in 24 hours is a reasonable approach to reduce the time required for opioid detoxification

(Assadi et al., 2004). One group of twenty patients were treated with 12 mg buprenorphine in 24 h, the other patients received conventional doses of buprenorphine tapered down over 5 days. No significant group differences were found regarding treatment retention, severity of subject-rated opioid withdrawal, and side effects profile. Patients treated with a high dose of buprenorphine in 24 hours, developed early the maximal withdrawal symptoms, and patients in the conventional protocol group were more likely to use more adjuvant medications for symptom palliation. However, larger studies are needed to confirm these results.

The additional application of carbamazepine, an anticonvulsant and mood stabilizing drug in the treatment of epilepsy and bipolar disorders, seems to improve the clinical outcomes of buprenorphine assisted detoxification in opiate dependents with additional multiple drug abuse (Seifert et al., 2005). Patients treated with buprenorphine and carbamazepine showed better outcomes in psychological status and a more effective short-term relief of affective disturbances than patients treated with methadone and carbamazepine. However, only 26 patients were included in this clinical trial, so further studies are needed to confirm these findings. Buprenorphine tapering was found to be more effective than clonidine or clonidine combined with naltrexone for the management of opioid withdrawal, especially in the suppression of withdrawal symptoms (Gowing et al., 2007; Kleber et al., 2006). Buprenorphine probably improves withdrawal symptoms better than clonidine (Gowing et al., 2001). Furthermore, buprenorphine has fewer cardiac side effects than clonidine and methadone (Gossop, 2006; Gowing et al., 2001; Rigter et al., 2004). Compared to clonidine, buprenorphine has also more positive effects on well-being and psychosocial variables (Ponizovsky et al., 2006). Collins et al. (2005) found no significant differences, but greater rates of treatment retention and naltrexone induction in patients detoxified with buprenorphine than in anesthesia-assisted or clonidine-assisted heroin detoxification, but no differences in completion rates of inpatient detoxification and opioid free urine samples (Collins et al., 2005). Additional behavioural treatment added to detoxification treatment with buprenorphine (and voucher incentive programme and community reinforcement approach) leads to better outcomes on the measure duration of abstinence than in standard methadone detoxification treatment (Simoens et al., 2002).

A recent proposal is to detoxify heroin addicts with a single high dose of buprenorphine

(32 mg), because the combination of a high dose, the relative long plasma half-life and the slow dissociation kinetics of the drug from the opioid receptors seems to create a slow and effective tapering process (Kutz & Reznik, 2002). Future research should focus on determinants of withdrawal following cessation of buprenorphine in tapered doses and the optimum approach to withdrawal following long-term buprenorphine substitution treatment. Also the effectiveness of buprenorphine for managing withdrawal from methadone as compared to withdrawal from heroin still remains unclear, even though some studies indicated that the use of buprenorphine for the management of withdrawal from methadone is feasible (Gowing et al., 2007). Also more information is needed about the transition from methadone to buprenorphine, which can lead to precipitated withdrawal (Johnson et al., 2003).

### ***α2-adrenergic agonists as detoxification agents***

In this chapter eleven studies are included, eight of them were conducted outside of Europe: Two systematic reviews, eight RCTs (two from EU Member States) and one review.

#### *Introduction*

The use of α2 adrenergic agonists (clonidine, lofexidine) to manage the acute phase of opioid withdrawal is common in Europe.

#### *Summarised results*

Adrenergic agonists (clonidine and lofexidine) could be considered as an effective detoxification option especially for patients, who prefer non-opioid treatment for detoxification. Compared to tapering doses of methadone, opioid withdrawal management with α2-adrenergic agonists like clonidine and lofexidine leads to equal rates of completion of withdrawal and overall severity of withdrawal, but to more side effects and therefore to higher drop-out rates especially at an earlier stage of treatment. Buprenorphine seems to be superior to clonidine, with regard to the better safety profile, well-being and self-efficacy. Lofexidine showed fewer side effects with similar clinical effectiveness in comparison to clonidine. The most described adverse effect of the opioid withdrawal treatment with clonidine is hypotension, which leads to the

recommendation to check patients' blood pressure regularly. Due to the hypotensive side effects of clonidine, lofexidine should be preferred in outpatient settings.

*Fact sheet 5 -  $\alpha$ 2-adrenergic agonists as detoxification agents*

<i>Key points</i>	<i>Strength of evidence</i>
Adrenergic agonists are an especially effective for patients, who prefer non-opioid treatment for detoxification but leads to more side effects and higher drop-out rates	***
Clonidine is less effective than buprenorphine with regard to the better safety profile, well-being, completion rate and self-efficacy	***
The combination of lofexidine and opiate antagonists showed higher completion rates and longer periods of abstinence compared to lofexidine alone or methadone alone	***
Lofexidine showed fewer side effects with similar clinical effectiveness in comparison to clonidine and should be therefore preferred in outpatient settings	**

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

The  $\alpha$ 2-adrenergic agonists clonidine and lofexidine have been approved for detoxification treatment. Clonidine reduces opioid related withdrawal symptoms, although does not completely relieve symptoms like anxiety, restlessness and insomnia (Kleber et al., 2006). In comparison to morphine, clonidine is more effective in suppressing objective withdrawal symptoms, but less effective than morphine in attenuating subjective withdrawal symptoms (Kleber et al., 2006). Low doses of methadone were found to be equally effective in suppressing withdrawal symptoms as clonidine, but patients treated with clonidine were more likely to drop out early (Gowing et al., 2001; Kleber et al., 2006). No differences were found between clonidine and low doses of methadone in resolving withdrawal symptoms, but patients treated with clonidine tend to drop out earlier compared to patients treated with methadone (Gowing et al., 2001; Kleber et al., 2006). Maybe one reason for the high attrition rate

in the early stage of treatment with clonidine is that patients treated with clonidine develop withdrawal symptoms early in treatment compared to methadone tapering (Gowing et al., 2001). Another reason for lower retention rates of withdrawal with clonidine could be higher rates of adverse effects. Despite more evidence supporting the efficacy of clonidine, it has now been shown that lofexidine is to be preferred over clonidine, because hypotension is less likely to occur with lofexidine (Gowing et al., 2004). This makes lofexidine particularly suitable in a prison context when methadone prescription is not possible (Howells et al., 2002).

The comparison of  $\alpha_2$ -adrenergic agonists with methadone tapering shows some differences - the longer duration of methadone tapering, no difference in completion rates, similar or marginally greater withdrawal severity with  $\alpha_2$ -adrenergic agonists, earlier resolution of withdrawal under  $\alpha_2$ -adrenergic agonists, more adverse events for clonidine - but no overall difference in clinical efficacy (Gowing et al., 2004).

A systematic review, including ten clinical trials, indicates that the clinical effectiveness of buprenorphine is superior to clonidine regarding suppression of opioid withdrawal symptoms, treatment retention, side effects and completion of treatment (Gowing et al., 2004). Recent randomised trials confirmed these findings. Oreskovich et al. (2005) demonstrated in their randomized, prospective pilot study the superiority of high doses of buprenorphine to clonidine for acute detoxification from heroin in different measures, like suppression of withdrawal symptoms (Oreskovich et al., 2005). Ponizovsky et al. (2006) compared detoxification programs using buprenorphine and clonidine with regard to side effects and effects on well-being and psychosocial variables in a randomised controlled trial design (Ponizovsky et al., 2006). Patients, who received clonidine, developed significantly more side-effects. The authors suggested that buprenorphine is preferable for inpatient detoxification due to these findings. The application of buprenorphine in combination with behavioural interventions proved to be more effective than the combination of clonidine and behavioural interventions with regard to treatment retention in the detoxification of opioid-dependent adolescents (Marsch et al., 2005). Patients treated with buprenorphine were also more likely to provide negative urine samples. On the other hand, Digiusto et al. (2005) found higher retention rates in patients treated in an inpatient detoxification setting with clonidine plus other symptomatic medications than in patients in outpatient

detoxification using buprenorphine or clonidine plus other symptomatic medications (Digiusto et al., 2005).

Higher completion rates were found for patients in clonidine-naloxone precipitated withdrawal treatment under sedation (rapid opioid detoxification), than in clonidine-assisted detoxification (Arnold-Reed & Hulse, 2005). However, the reasons for these findings remain unclear: No differences were found in secondary outcomes, like severity of withdrawal or craving, and also oral naltrexone compliance levels and abstinence from heroin four weeks following detoxification were similar (Arnold-Reed & Hulse, 2005).

Lofexidine, the other approved  $\alpha_2$ -adrenergic agonist, provided like clonidine the benefit that detoxification and naltrexone induction can be achieved within 5 days and without risk of opiate diversion. Raistrick et al. (2005) used an open-label randomized controlled trial design to examine the equal clinical effectiveness of buprenorphine and lofexidine in a community opiate detoxification. Two hundred and ten patients were randomised either to buprenorphine or lofexidine detoxification treatment in a specialist out-patient clinic according to a predefined protocol. 46% of the patients treated with lofexidine and 65% treated with buprenorphine completed the detoxification program. A 7-day buprenorphine detoxification showed to have some benefit in comparison to 5-day lofexidine detoxification with regard to the severity of withdrawal (Raistrick et al., 2005).

Sinha et al. (2007) found higher opioid abstinence rates and better relapse outcomes in patients treated with lofexidine-naltrexone compared to those treated with placebo-naltrexone (Sinha et al., 2007). Furthermore, patients treated with the combination of lofexidine and naltrexone showed lower opioid craving symptoms in laboratory as patients in the placebo-naltrexone group. The authors concluded that lofexidine has the potential to decrease stress-induced and cue-induced opioid craving and improves opioid abstinence in naltrexone-treated opioid-dependent individuals (Sinha et al., 2007). McCambridge et al. (2007) found longer periods of abstinence before opiate relapse in patients treated with lofexidine and naloxone compared to patients receiving lofexidine and placebo naloxone or methadone (McCambridge et al., 2007). Moreover, patients treated with lofexidine had higher completion rates and were more likely to be abstinent from opiates in the month prior to follow-up than patients detoxified with

methadone (McCambridge et al., 2007). However, the recent Cochrane review found no significant differences between  $\alpha$ 2-adrenergic agonists and methadone for detoxification treatment in opioid dependents (Amato et al., 2005). The combination of opioid antagonists like naltrexone and  $\alpha$ 2-adrenergic leads to a more intense (higher peak) but less overall withdrawal severity than withdrawal managed with clonidine or lofexidine alone (Gowing et al., 2006). The additional provision of symptomatic medications enhanced the effectiveness of adrenergic agonists, and especially the combination with opioid antagonists such as naltrexone and naloxone leads to less severe withdrawal symptoms in detoxification compared to the treatment with lofexidine alone (Buntwal et al., 2000; Gowing et al., 2006).

### ***Buprenorphine-naloxone combination as a detoxification agent***

There are no European studies included in this chapter, so all four RCTs comes from outside of Europe.

#### *Introduction*

In Europe the combination of buprenorphine and naloxone is available for the maintenance and detoxification treatment of opioid dependence. The intention of adding naloxone to buprenorphine is to deter intravenous misuse and reduce the symptoms of opiate dependence.

#### *Summarised results*

The combination of buprenorphine and naloxone is effective and safe for the detoxification of opioid dependents and well tolerated by patients.

*Fact sheet 6 - Buprenorphine-naloxone combination as a detoxification agent*

<i>Key points</i>	<i>Strength of evidence</i>
The combination of buprenorphine and naloxone is an effective, safe, and well-tolerated medication for the detoxification treatment of opioid dependents	****

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

Recent RCTs show that a direct and rapid detoxification with buprenorphine-naloxone is safe and well tolerated by patients with good results in terms of treatment retention, detoxification completion and abstinence rates in treatment (Amass et al., 2004; Ling et al., 2005). Amass et al. (2004) treated 234 mostly intravenous heroin-dependent participants in a thirteen-day buprenorphine-naloxone taper regimen for short-term opioid detoxification. Most patients received an initial dose of 8 mg buprenorphine-2 mg naloxone and reached a target dose of 16 mg buprenorphine-4 mg naloxone in three days. Treatment compliance and treatment retention were high: Four of five patients showed compliance with regard to the medication and two of three patients completed the detoxification treatment. Only one serious adverse event<sup>12</sup> was possibly related to buprenorphine-naloxone (Amass et al., 2004). Ling et al. (2005) used a multi-centre randomized trial design to investigate the clinical effectiveness of buprenorphine-naloxone and clonidine for opioid detoxification in inpatient and outpatient settings. 113 inpatients and 231 outpatients were recruited, short-term treatment seeking opioid-dependent individuals were randomly allocated in a 2:1 ratio to buprenorphine-naloxone or clonidine detoxification treatment over a period of 13 days. Appreciably more participants treated with buprenorphine-naloxone completed the detoxification treatment and provided also opioid-free urine samples on the last day of clinic attendance (Ling et al., 2005). With respect to dose related effects of buprenorphine/naloxone, a recent double-blind randomised controlled trial found that

<sup>12</sup> SAE = untoward medical occurrence results in e.g. death, life-threatening, inpatient hospitalization etc.

patients did not additionally benefit from buprenorphine/naloxone doses higher than 8 mg/2 mg with regard to opioid blockade and withdrawal symptom suppression (Correia et al., 2006). However, Hopper et al. (2005) showed that a single high dose of a 32 mg buprenorphine/naloxone combination tablet is a feasible method for rapid detoxification. In this pilot study, twenty patients were randomly allocated to one-day vs. three-day buprenorphine inpatient detoxification protocols for heroin dependence. No group differences were found with regard to completion rates, retention in treatment, intensity of withdrawal symptoms, and provision of opiate-free urine samples (Hopper et al., 2005).

### ***Codeine/dihydrocodeine as a detoxification agent***

Only one RCT from a EU Member State were included in this chapter.

#### *Introduction*

The analgesic agent dihydrocodeine is available as tablet, oral solution or injection.

#### *Summarised results*

The included study provides only little evidence to support dihydrocodeine as a first line agent for opiate detoxification. Compared to buprenorphine, dihydrocodeine leads to higher drop-out rates and to a lower rate of opiate free urine samples.

#### *Fact sheet 7 - Codeine/dihydrocodeine as a detoxification agent*

<b><i>Key points</i></b>	<b><i>Strength of evidence</i></b>
Compared to buprenorphine, dihydrocodeine leads to higher drop-out rates and more opiate positive urine samples	**
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

### *Detailed results*

A recent open label randomised controlled trial compared buprenorphine with dihydrocodeine for detoxification from illicit opiates in primary care<sup>13</sup> (Wright et al., 2007). Sixty illicit opiate using participants were randomly treated either with daily sublingual buprenorphine or daily oral dihydrocodeine, both under a standard regimen including reduction of not more than 15 days. Abstinence was indicated by a urine sample and the secondary outcomes were recorded during the detoxification period and three and six months after detoxification. The attrition rate was high: Only 23% of the participants stayed in the prescribed course of detoxification medication and provided a urine sample at the final prescription. Risk of non-completion of detoxification was higher in the administration of dihydrocodeine, and a lower proportion of people allocated to dihydrocodeine provided a clean urine sample compared with those who received buprenorphine (3% vs. 21%). Furthermore, the participants allocated to dihydrocodeine were more likely to call on professional carers during detoxification and more participants allocated to buprenorphine were abstinent at three months and six months post detoxification.

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<sup>13</sup> = Health care provider as a first point of consultation or treatment

### 9.1.1.3 Pharmacotherapy for opioid maintenance

Given the chronic, relapsing nature of the disease and the generally disappointing long-term results of detoxification in combination with relapse prevention, stabilization of illicit drug use, improvement of well-being and reduction of drug related harm have become the most important treatment modality in many countries. Opioid-assisted maintenance programs are among the most important strategies in this respect, as they are associated with reductions of heroin use and HIV risk behaviour (Kerr et al., 2005). Considering the high rate of relapse after detoxification of opioid dependence, maintenance therapy is currently considered to be the first-line treatment for such patients (O'Connor, 2005). Opioid-assisted maintenance programs have been introduced in most countries of the world, yet the medication of choice differs from one country to the next. Methadone is the most extensively studied and most widely used opioid in maintenance treatment. Other  $\mu$ -opiate agonists that are used include levo-acetylmethadol (LAAM), codeine, slow-release oral morphine and diacetylmorphine, as well as the partial  $\mu$ -opioid agonist buprenorphine.

Table 10: In Europe approved agents for maintenance treatment of opiate dependents

Agent	Receptor-Type
Methadone	Full $\mu$ -(mu)-agonist <sup>1</sup>
Buprenorphine	Partial $\mu$ -agonist <sup>2</sup> / $\kappa$ -(kappa)-antagonist <sup>3</sup>
Buprenorphine + Naloxone	Partial $\mu$ -agonist <sup>2</sup> / $\kappa$ -(kappa)-antagonist <sup>3</sup> + opiate antagonisit
Slow-released oral morphine (SROM)	Full $\mu$ -(mu)-agonist <sup>1</sup>
Codeine/Dihydrocodeine	Full $\mu$ -(mu)-agonist <sup>1</sup>

<sup>1</sup> **Full agonists** have affinity for and activate a receptor, displaying full efficacy at that receptor

<sup>2</sup> **Partial agonists** also bind and activate a given receptor, but have only partial efficacy at the receptor

<sup>3</sup> A receptor **antagonist** is a drug that does not provoke a biological response itself upon binding to a receptor, but blocks or attenuates agonist-mediated responses. Antagonists have an affinity but no efficacy for their cognate receptors.

### ***Methadone as a maintenance agent***

Of all twenty-two studies are included in this chapter, sixteen are from outside of Europe: Seven systematic reviews (three of them from EU Member States), four RCTs, seven other studies (two from EU Member States) and four reviews (one from a EU Member State) were included in this chapter.

#### *Introduction*

The synthetic opioid methadone is an effective  $\mu$ -opioid receptor agonist with a high oral bioavailability and relatively long terminal half-life and is the most extensively studied and most widely used opioid in maintenance treatment (Methadone maintenance treatment (MMT)). MMT can be defined as the administration under medical supervision of prescribed doses of methadone to provide the opioid dependent individual with an array of rehabilitative services. Therapeutically prescribed doses of methadone range generally between 60 - 120 mg and relieve withdrawal symptoms, eliminate opiate craving and allow normal functioning. Methadone is taken orally and is rapidly absorbed from the gastrointestinal tract, appearing in plasma within thirty minutes of being ingested, but is also widely distributed to body tissues where it is stored and then released into the plasma. This combination of storage and release keeps the patient comfortable, feeling stable, and free from craving. Methadone is taken once per day and has duration of therapeutic action of between 24 and 36 hours. It is orally ingested and is released into the body over the course of time through the liver. This is why methadone maintenance does not cause greatly euphoric effects in the stabilized patient. Medical personnel supervise treatment and nurses or pharmacists administer the medication to patients, most typically on a daily regimen until the individual is stabilized. The efficacy of MMT increases significantly with counselling and on-site medical and other supportive treatment services. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has found, as of 2003, that more than 422,000 individuals in Europe are being treated in specialised units for methadone treatment programs (EMCDDA, 2006).

### *Summarised results*

Methadone is the best-studied and most effective opioid agonist for maintenance treatment so far. Treatment outcome in methadone maintenance has been shown to improve substantially with increased dosages of methadone: Higher doses are associated with better treatment retention rates and lower rates of illicit opioid use. Daily methadone doses of 60mg/day or more were found to be most effective in methadone maintenance treatment (Berglund et al., 2003). Adequate dosing is an important issue and avoids on the one hand unpleasant withdrawal symptoms, especially in the latter half of each inter-dosing interval, and on the other hand significant adverse effects. The combination with psychosocial treatment such as counselling and behavioural interventions leads to a broader effectiveness and a greater range of treatment outcomes such as reduced craving, reduction of illicit drug use and drug-related delinquency, improvement of health and well-being and reduction of drug related harm. However, even methadone maintenance treatment without adequate psychosocial care as an interim solution until entry into a comprehensive methadone maintenance treatment program has shown to increase the likelihood of entry into comprehensive treatment and reduce heroin use and delinquency (Schwartz et al., 2006; Teesson et al., 2006).

Fact sheet 8 - Methadone as a maintenance agent

<i>Key points</i>	<i>Strength of evidence</i>
• MMT is more effective than methadone detoxification treatment or outpatient drug-free treatment in reducing heroin use, criminal behaviour and risky sexual behaviour	***
• The efficacy of MMT is dose related and depends also on the treatment duration	****
• Low doses of methadone ( $\leq 20$ mg) are more effective than placebo	**
• Daily methadone doses of 60mg/day or more are most effective in MMT	***
• Additional psychosocial treatment leads to a broader effectiveness	***
• In flexible doses of MMT are more effective than flexible doses of buprenorphine, especially in higher doses	***
• Retention in MMT is better in a take-home approach with corresponding doses and reduced frequent treatment centre visits	*
• The combination with psychosocial treatment lead to a broader effectiveness	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

Methadone maintenance treatment constitutes an effective treatment modality in reducing illicit opiate use, although not all patients benefit from methadone substitution, indicated through further illicit heroin use (Gowing et al., 2001). Nevertheless, several pre- and post-treatment outcomes confirmed the effectiveness of methadone maintenance treatment in a wide range of age and ethnic groups of patients and showed that MMT leads to higher retention rates and longer treatment duration than placebo or no treatment.

Even lower doses ( $\leq 20$  mg methadone) were found to be more effective in retaining individuals in treatment than placebo or no treatment (Connock et al., 2007). However, the spectrum of efficacy is connected to the methadone dose and the treatment duration (Berglund et al., 2003). For example, methadone dosages ranging from 60 to 100 mg/day were found to be more effective than lower dosages in terms of treatment retention and reduction of heroin and cocaine use during treatment (Faggiano et al.,

2003; Connock et al., 2007). A comparative meta-analysis indicated that high doses of methadone ( $\geq 50$  mg/day) were more effective than low doses of methadone ( $< 50$  mg/day) in reducing illicit opiate use, that high doses of methadone were more effective than low doses of buprenorphine ( $< 8$  mg/day) and equally effective compared to high doses of buprenorphine ( $\geq 8$  mg/day) in terms of treatment retention and reduction of illicit opiate use (Farre et al., 2002). Higher doses (60 mg - 110 mg) of methadone are in general associated with a lower number of opioid-positive urine samples than moderate and lower doses ( $< 40$  mg) (Connock et al., 2007). Indeed, lower doses of methadone seem to be sufficient to stabilize the patient and might be helpful to keep the patient in treatment, but are inadequate to suppress opiate use (Kleber et al., 2006; Simoens et al., 2002). In comparison, the treatment retention rates are higher with moderate doses of 40-60 mg/day of methadone, which are normally necessary to suppress the opioid withdrawal symptoms (Kleber et al., 2006). Higher methadone doses are needed during maintenance treatment to block craving for opiates and illicit drug use (Donny et al., 2005), and especially heroin addicts with axis 1 disorders benefit from high methadone doses ( $\geq 100$  mg/day) (Kleber et al., 2006). Besides the better outcomes in retention rates and prevention of illicit drug use, higher methadone doses lead also to an improved physical and psychological situation for the patient and therefore to a better quality of life (Rigter et al., 2004). Yet, one effectiveness report found no significant difference in the retention rate between patients with moderate ( $\geq 40$ -50 mg/day) and high methadone doses ( $\geq 80$ -100 mg/day), maybe due to a plateau of dose related efficacy of methadone, but marked declines in self-reported illicit drug use in both groups (Kleber et al., 2006). As the illicit drug use significantly declines in patients with higher methadone doses, the explanation of a plateau of dose related efficacy of methadone is only valid for the retention rates (Kleber et al., 2006). Other reports confirmed the dose-related retention rate including better outcomes for patients with higher methadone doses (Simoens et al., 2002). In order to avoid overdose related deaths, it is recommended to initiate methadone maintenance treatment with lower doses varying between 10 to 40 mg/day. At the end of the treatment the dose should be in the range between 60 and 120 mg/day to be effective (Rigter et al., 2004). However, adequate daily dosing has an important effect on retention in methadone maintenance treatment (Anderson & Warren, 2004). In the US, low dosages of methadone have to a

large extent been replaced by higher dosages: In 1988, almost 80% of the patients received dosages of less than 60 mg/day, in 2000, this was the case in 36% of the cases (D'Aunno & Pollack, 2002). Low dosage of methadone has been described to be one of the main problems of methadone treatment also in other countries, such as Italy (Schifano et al., 2006), Israel (Peles et al., 2006) and The Netherlands (Termorshuizen et al., 2005). Suboptimum methadone doses lead to a lower retention rate, and when patients remain in treatment, MMT reduces heroin use, delinquency, and HIV-related risk behaviour and HIV transmission (Ward et al., 1999). Nonetheless, since very high dosages of methadone have also been associated with the occurrence of Torsade de Pointes (TdP), high dosages need to be monitored carefully (Krantz et al., 2002). However, sporadic cases of TdP have also been reported in patients receiving a recommended dose between 60 and 100 mg methadone per day (Pearson & Woosley, 2005) and the risk of death caused by overdoses in heroin users seems to substantially reduce after stabilisation on methadone (Gowing et al., 2001).

MMT seems to be superior to methadone detoxification treatment or outpatient drug-free treatment in reducing heroin use, criminal behaviour and risky sexual behaviour and is associated with greater retention in treatment than therapeutic communities, outpatient drug-free treatment or naltrexone treatment (Gowing et al., 2001). Observational studies suggested that the treatment retention is better in a take-home approach with corresponding doses of methadone and reduced frequent treatment centre visits (Gowing et al., 2001).

Opioid dependence is commonly associated with psychiatric co-morbidities like depression and, therefore, associated with poor outcomes. Dean et al. (2004) used a double-blind, double dummy, randomised controlled trial design to examine whether heroin users maintained on buprenorphine demonstrate greater improvement in depressive symptoms than those on MMT (Dean et al., 2004). Contrary to former findings, which reported depression as a side effect of buprenorphine or described greater depressive symptom improvement with methadone, no differential benefits of buprenorphine compared to methadone were found on depressive symptoms in heroin users engaged in maintenance treatment (Dean et al., 2004). However, a conclusion based on these results could not be made and requires further investigations.

Table 11: Efficacy of low, moderate and high doses of methadone for maintenance treatment

<i>Dose of methadone</i>	<i>Effect</i>
low ( $\leq 30$ mg)	<ul style="list-style-type: none"> <li>- higher retention in treatment than placebo</li> <li>- possibly sufficient to stabilize the patient</li> <li>- inadequate to suppress illicit opiate use</li> </ul>
moderate (30 mg-60 mg)	<ul style="list-style-type: none"> <li>- higher retention rates than low doses</li> <li>- normally necessary to suppress the opioid withdrawal symptoms</li> </ul>
high ( $\geq 60$ mg)	<ul style="list-style-type: none"> <li>- high rates of treatment retention</li> <li>- block craving for opiates and most reduced illicit drug use</li> <li>- improves physical and psychological situation for the patient</li> <li>- effective for opiate dependents with psychiatric co-morbidities</li> <li>- lower number of opioid-positive urine samples</li> </ul>

Flexible doses of methadone were found to be more effective than flexible doses of buprenorphine for maintenance treatment, maybe because of the higher potential of methadone to suppress heroin use, especially if high-doses of methadone are used (Connock et al., 2007; Mattick et al., 2007). Compared to buprenorphine maintenance treatment, the administration of an average maximum dose of 80 mg methadone leads to higher treatment durations, longer periods of sustained abstinence and a greater proportion of cocaine- and opioid-free urine samples than liquid buprenorphine in an average maximum dose of 15 mg (Schottenfeld et al., 2005). Furthermore, MMT is associated with a reduction of self-reported adverse effects, a reduction of the relative mortality risk, an improvement of HIV-related behaviour and a reduction of delinquency (Gowing et al., 2001) (Johnson et al., 2003).

### ***Buprenorphine as a maintenance agent***

From nineteen included studies in this chapter, eleven are from outside of Europe: Five systematic reviews (two of them from EU Member States), six RCTs (two from EU Member States), six other studies (two from EU Member States) and two reviews (both

from EU Member States)

### *Introduction*

Besides methadone, buprenorphine is the most used agent for the maintenance treatment of opiate dependence in Europe. Due to its partial  $\mu$ -opioid agonist properties, buprenorphine has lower abuse potential and a lower risk for overdose compared to full  $\mu$ -agonists like methadone or LAAM (Berglund et al., 2003) and like methadone, the efficacy of buprenorphine is dose-related. The longer duration of therapeutic action of buprenorphine provides the advantage of a less than daily schedule.

### *Summarised results*

In general, maintenance treatment with buprenorphine provides some advantages for the treatment of opioid dependence in comparison to methadone, e.g. a better safety profile at high doses, a lower abuse potential, the possibility of a less-than-daily administration and lower impairment in psychomotor and cognitive functioning. Similar to methadone, the efficacy of buprenorphine in maintenance treatment is dose related; higher doses of buprenorphine (12 mg/day or more) improve the treatment retention and reduce illicit heroin use. Provided equieffective doses, buprenorphine appears to be at least as effective as methadone with regard to reduction of illicit opioid use and treatment retention, whereas methadone maintenance in high doses is associated with higher rates of retention in treatment and better suppression of withdrawal symptoms than buprenorphine maintenance treatment (Mattick et al., 2007). The recent Cochrane review recommends that buprenorphine maintenance should be supported as a maintenance treatment, when higher doses of methadone cannot be administered (Mattick et al., 2007). However, Marsch et al. (2005) demonstrated that predictors of treatment success of LAAM, buprenorphine, and methadone appear to be largely comparable, and they did not detect any factors that would prefer one medication over the others (Marsch et al., 2005).

### *Fact sheet 9 - Buprenorphine as a maintenance agent*

<i>Key points</i>	<i>Strength of evidence</i>
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Buprenorphine appears to be at least as effective as methadone with regard to reduction of illicit opioid use and treatment retention	****
Buprenorphine maintenance treatment provides a better safety profile at high doses, a lower abuse potential, the possibility of a less-than-daily administration compared to methadone	***
****	Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
***	Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
**	Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
*	Expert opinion
?	Insufficient evidence/unclear/unable to assess

### *Detailed results*

Buprenorphine proved to be effective and clinically useful in the maintenance treatment of opioid dependence. Compared to placebo, buprenorphine was found to be an effective agent for the treatment of opioid dependence in a maintenance approach and several studies have shown efficacy of buprenorphine in maintenance treatment of opioid dependence (Ling & Wesson, 1984) (Mattick et al., 2007). Like methadone, the efficacy of buprenorphine is dose-related: Higher doses of buprenorphine showed better outcomes than lower doses, although these differences were not always robust in their values (Kleber et al., 2006). Low and moderate doses (2 - 8 mg) of buprenorphine are superior to placebo in the measures of treatment retention, provision of opioid-negative urine samples, mortality, and psychological and social functioning (Kleber et al., 2006; Rigter et al., 2004). Similar to methadone, higher fixed doses of buprenorphine are more effective than lower doses with superior levels of retention in treatment and opiate use (Berglund et al., 2003; Connock et al., 2007). When using equipotent doses, the efficacy of buprenorphine in the maintenance treatment of opioid dependents is comparable to that of methadone (Kleber et al., 2006). Therefore no significant differences were found between low dose buprenorphine and low dose methadone with regard to treatment retention, opiate free urine samples and self-reported heroin use (Mattick et al., 2007). However, moderate doses of methadone (50-65 mg/day) were found to be slightly more effective than moderate doses of buprenorphine (2-8 mg) (Simoens et al., 2002), whereas moderate doses of buprenorphine are superior to low doses of methadone (Kleber et al., 2006). High doses of buprenorphine lead to equal retention rates as high doses of methadone, although methadone seems to be more effective in reducing illicit

opioid use (Rigter et al., 2004). However, and in general contrary to these dose-related results, (Connock et al., 2007) found that methadone in comparable and especially in flexible doses is superior to buprenorphine with regard to treatment retention, with the exception of lower doses (Connock et al., 2007).

The maximum therapeutic effect of sublingual buprenorphine tablets occurs in the range of moderate (8 mg) to higher doses (16 mg), comparable to moderate methadone doses of 40-60 mg (Kleber et al., 2006). In flexible dosage, methadone is significantly more effective than buprenorphine in retaining patients in treatment, perhaps because of the higher potential of methadone to suppress heroin use, especially if high doses of methadone are used (Mattick et al., 2007).

Methadone seems to be superior to buprenorphine in the maintenance treatment of opioid dependents with co-occurring cocaine dependence (Schottenfeld et al., 2005). The administration of an average maximum dose of 80 mg methadone leads to higher treatment durations, longer periods of sustained abstinence and a greater proportion of cocaine- and opioid-free urine samples than liquid buprenorphine in an average maximum dose of 15 mg (Schottenfeld et al., 2005). However, Montoya et al. (2004) showed in their double-blind, controlled clinical trial with strict eligibility criteria that daily doses of 8 and 16 mg of buprenorphine solution in combination with drug abuse counselling are feasible and effective in maintenance treatment of outpatients with co-occurring opioid and cocaine dependence (Montoya et al., 2004). Kakko et al. found a considerably higher level of treatment retention in patients treated with buprenorphine in a maintenance approach compared to detoxification (Kakko et al., 2003).

The longer duration of therapeutic action of buprenorphine provides the advantage of a less than daily schedule, however, the comparison of daily vs. intermittent administration lead to different results. Some findings showed no increase of buprenorphine doses under intermittent administration, while others found a doubling of doses (Kleber et al., 2006). However, another trial found that intermittent doses for 48-hours provide adequate effects and are preferable to daily dosing (Kleber et al., 2006). From a clinical point of view, dosing of buprenorphine on every fourth day is possible and was found to lead to similar effects on the measures of adverse effects and efficacy than daily doses (Kleber et al., 2006). Other effectiveness reports found similar effects in the measure of treatment retention in thrice weekly administration compared to daily

administration (Rigter et al., 2004; Simoens et al., 2002). A recent controlled trial confirmed these results (Marsch et al., 2005). In this comparison no differences were found between one per day, three times a week and twice a week administration of buprenorphine regarding treatment retention and opiate use (Marsch et al., 2005). However, the less-than-daily schedule with adapted doses was found to be effective, is often preferred by the patient and provides the opportunity to serve a greater number of opioid-dependent patients.

The efficacy of buprenorphine maintenance treatment was found to be comparable to methadone maintenance with advantages in some treatment settings, in alternate day dosing, better safety profile, and milder withdrawal syndrome (Mattick et al., 2007). In two small-scale studies, buprenorphine prescription in primary care was associated with good retention (70-80%) and reasonable rates of opiate free urines (43-64% achieving three or more consecutive weeks of opiate free urines) (Fiellin et al., 2002; O'Connor et al., 1996). These positive effects were confirmed in a larger trial, showing a reduction of opiate use and craving under buprenorphine (Fudala et al., 2003). Similar results were obtained in France some years ago (Duburcq et al., 2000). Buprenorphine reduced the risk of overdose related death compared to methadone (Gossop, 2006; Kleber et al., 2006; Simoens et al., 2002) and was found to reduce mortality in maintenance treatment (Auriacombe et al., 2001), unless buprenorphine was injected in combination with benzodiazepine (Kleber et al., 2006). However, recently, Lofwall et al. (2005) examined the safety and side effect profiles in 164 opioid dependents in buprenorphine and methadone outpatient treatment. After randomisation to buprenorphine (n = 84) or to methadone (n = 80) all patients were maintained for 16 weeks. Besides very few clinical gender differences, common profiles of safety and side effects were found for both groups (Lofwall et al., 2005). Connock et al. (2007) found in their recent health technology assessment no generalisable results in the comparison of methadone and buprenorphine with regard to mortality (Connock et al., 2007). Buprenorphine has further advantages for special groups of opioid dependents, like pregnant women, indicated by a low level of withdrawal symptoms in newborns (Simoens et al., 2002), and is in general associated with lower levels of withdrawal symptoms than heroin or methadone (Gowing et al., 2001). Giacomuzzi et al. (2006) suggested that buprenorphine treatment is as effective as methadone with respect to quality of life and

physical symptoms (Giacomuzzi et al., 2006). Another possible advantage of buprenorphine is the antidepressant effect. The maximum effective dose of buprenorphine seems to be limited to five days (Simoens et al., 2002) and a switch from methadone to buprenorphine maintenance treatment seems to be possible, but more research on this topic is needed (Rigter et al., 2004). The effects of buprenorphine maintenance treatment on HIV risk behaviour and delinquency compared to placebo or no treatment also remains unclear (Connock et al., 2007).

### ***Buprenorphine-naloxone combination as a maintenance agent***

At all six studies are included in this chapter: Four RCTs (one of them from a EU Member State) and two other studies

#### *Introduction*

The Buprenorphine-naloxone combination contains the partial opiate agonist and antagonist buprenorphine as well as the opioid antagonist naloxone to deter illicit intravenous preparation of the tablet. This is intended to attenuate the effects of buprenorphine on opioid-naive users should this formulation be injected.

#### *Summarised results*

The efficacy of buprenorphine in combination with naloxone seems to be comparable to buprenorphine alone in the maintenance treatment of opiate dependency. Patients treated with buprenorphine and naloxone showed lower rates of opiate-positive urine samples, showed fewer craving symptoms for opiates, and greater improvement in overall health and well-being than patients who received placebo.

*Fact sheet 10 - Buprenorphine-naloxone combination for a maintenance treatment*

<i>Key points</i>	<i>Strength of evidence</i>
Buprenorphine in combination with naloxone is comparable effective in the maintenance as buprenorphine alone	***
Compared to placebo, maintenance treatment with buprenorphine/naloxone lead to lower rates of opiate-positive urine samples, fewer craving symptoms for opiates, and greater improvement in overall health	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

Fudala et al. (2003) used a randomized blinded placebo-controlled trial design including 4-week follow-up to demonstrate that sublingual tablet formulation of buprenorphine and naloxone is effective for the treatment of opiate dependence compared to placebo (Fudala et al., 2003). Recently, Mintzer et al. (2007) showed the feasibility and efficacy of buprenorphine-naloxone treatment in primary care settings (Mintzer et al., 2007).

An Australian pilot study showed the tolerability and feasibility of unsupervised administration of buprenorphine-naloxone combination tablets in the maintenance treatment of opioid dependence (Bell et al., 2004). Another double-blind crossover study found only minor impairment with buprenorphine-naloxone administration in the highest dose of 32 mg/8 mg (Mintzer et al., 2004). However, both recent studies included only a small number of patients and further investigations are needed with larger sample sizes in a control group design to confirm these findings. Kakko et al. (2007) used a randomized controlled trial design to show that an adaptive, buprenorphine/naloxone based stepped care strategy is equally effective than an optimal methadone maintenance treatment (Kakko et al., 2007). Both for methadone or buprenorphine maintenance alone, new research focuses on the improvement of adherence through additional psychosocial treatment. Fiellin et al. (2006) conducted a 24-week randomized, controlled clinical trial with 166 patients to investigate the effect

of adding two different kinds of counselling to buprenorphine-naloxone maintenance therapy for opioid dependence (Fiellin et al., 2006). The participants were randomly allocated to a brief, manual-guided, medically focused counselling and either once-weekly or thrice-weekly medication or enhanced medical management with extended sessions and thrice-weekly medication dispensing. The patients in all three treatment types showed significant reductions of illicit opioid use, although no differences were found regarding opioid-negative urine samples, the duration of abstinence from illicit opioids and the retention in treatment.

### ***LAAM as a maintenance agent***

LAAM was at least as effective as high dose methadone, but patients treated with LAAM were more likely to leave treatment prematurely (Farre et al., 2002). Especially in long-term treatment with high doses (>250mg/week), LAAM seems to be at least comparable to methadone maintenance treatment (MMT) in terms of effectiveness in reducing illicit drug use (Gowing et al., 2001). Maintenance treatment with LAAM seems to be at least as promising, if not better than maintenance treatment with other opioid agonists. In a randomized cross-over clinical trial the majority (69%) of 62 stable methadone patients preferred LAAM over methadone because of less withdrawal symptoms, fewer side effects, less craving for heroin and fewer pick-up days with LAAM (White et al., 2002). LAAM maintenance treatment also proved to be feasible and potentially effective in heroin dependent prisoners: 61% of the prisoners who were initiated on LAAM during imprisonment entered maintenance treatment after release (Kinlock et al., 2002), a success rate very similar to the findings of a methadone prison program (Tomasino et al., 2001). However, in March 2001, the Committee of Proprietary Medicinal Products (CPMP) recommended to the European Commission to stop LAAM after noting seven cases of treatment related Torsade de Pointes (TdP), a potentially fatal ventricular arrhythmia, during LAAM treatment; the marketing licence was recommended to be suspended in Europe in 2001 (European Agency for the Evaluation of Medicinal Products, 2001). In the USA, the Food and Drug Administration (FDA) changed the labelling for LAAM for the same reason to emphasize that the drug should be used only to treat opioid dependent patients who do

not respond to other adequate treatments (Schwetz, 2001). However, due to the suspension in Europe, LAAM will be not further considered in this review.

### ***Heroin as a maintenance agent***

This chapter includes seven studies, six of them were from EU Member States: Two systematic reviews, three RCTs and two reviews (one of them is from outside of Europe).

#### *Introduction*

Some clients do not benefit from maintenance treatment with methadone or buprenorphine, which lead to the question of the effectiveness of heroin prescription, especially for patients who dropped out of treatment or who continued illicit opioid use while in treatment. Heroin (diacetylmorphine, diamorphine) is a semi-synthetic opioid synthesized from morphine and acts on the endogenous  $\mu$ -opioid receptors.

#### *Summarised results*

Heroin-assisted treatment is especially effective for people with opioid dependence who continue intravenous heroin use while on methadone maintenance or who are not enrolled in treatment, and it is a valuable addition to the treatment repertoire (Ward et al., 1999). Furthermore, there is some evidence that heroin-addicted patients with a history of abstinence-orientated treatment notably benefit from the prescription of heroin. Due to a higher risk of serious adverse events, heroin prescription should be applied under medical supervision.

*Fact sheet 11 - Heroin as a maintenance agent*

<i>Key points</i>	<i>Strength of evidence</i>
Heroin dependent patients who failed in several abstinence oriented or standard treatments benefit from heroin prescription	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

A first British randomised clinical trial comparing heroin (diamorphine) and methadone found that the prescription of heroin is not clearly superior in comparison to methadone (Gossop, 2006). However, later clinical trials demonstrated the feasibility and clinical effectiveness of heroin prescription, with better outcomes in patient recruitment, treatment retention and treatment compliance (Gossop, 2006; Rigter et al., 2004). Also reduced delinquency and reduced illicit heroin and cocaine use were found, although the uses of other drugs were less marked and the use of benzodiazepine declined slowly (Gossop, 2006). Some patients benefit from prescribed heroin right after initiation, while other patients improve after several months (Gossop, 2006). Especially patients, who were unsuccessfully treated in conventional drug treatment programmes, benefit from prescribed heroin treatment (Rigter et al., 2004). Nevertheless, up to 60% of the clients did not profit from the prescription of heroin and continue to be difficult to treat (Rigter et al., 2004). Blanken et al. (2005) pooled the data of two open label randomised trials including four hundred and thirty heroin dependents to investigate predictors for the treatment response to medical heroin prescription compared to standard methadone maintenance treatment (Blanken et al., 2005). The participants were randomly allocated to methadone plus injectable heroin or methadone plus inhalable heroin administration or to methadone alone prescribed over 12 months. The outcome measures were recorded according to a response index, including indicators of physical health, mental status and social functioning. An intention-to-treat analysis resulted in a significant

better treatment response for the participants in heroin-assisted treatment. Heroin dependent patients with a history of several abstinence oriented treatments benefit more from heroin prescription and show a higher treatment response compared to patients in methadone maintenance treatment. Patients without a history of abstinence-orientated treatment do not benefit more from heroin-assisted treatment than from methadone maintenance treatment and show equal treatment response rates (Blanken et al., 2005). A limitation of previous heroin trials was that psychosocial treatments were not standardised and uncontrolled. A recent randomised controlled trial assessed the efficacy of prescribed intravenous diacetylmorphine (DAM) versus oral methadone including clinical, psychological, social and legal support (March et al., 2006). Sixty-two opioid-dependent individuals, who failed in standard treatments, were directly street-recruited and randomly assigned to the administration of intravenous diacetylmorphine or oral methadone with equivalent opioid dosage. Both groups improved with respect to physical and mental health as well as social integration, but the experimental DAM group showed greater improvement in terms of physical health and risk behaviour. Furthermore, in the experimental group, the use of street heroin decreased as well as the number of days with drug problems (March et al., 2006).

In the recent open-label randomised controlled trial, Haasen et al. examined the effectiveness of medically prescribed and supervised heroin injection (Haasen et al., 2007). Overall, 1015 persons were included who represent one of two groups of people with heroin dependence: those who do not sufficiently respond to methadone maintenance treatment and those who are currently not in substance misuse treatment. To control for the impact of psychosocial treatment, participants in each group were randomised to one of two types of psychosocial care: psychoeducation including individual counselling or case management and motivational interviewing. Each of these interventions has been described in manuals, and training of all therapists was conducted prior to the study to minimise site differences. Heroin-assisted treatment of severe opioid dependent and treatment resistant persons was found to improve health and reduce illicit drug use more effectively than methadone maintenance treatment. Retention was higher in the heroin (67.2%) than in the methadone group (40.0%) and the heroin group showed a significantly greater response on both primary outcome measures (health and illicit drug use). However, more serious adverse events were

found in the heroin group, and were mainly associated with intravenous use. The main effect of heroin-assisted treatment on each primary outcome measure was seen within the first few months of treatment, and became more pronounced over the following months, thus indicating the necessity of long-term treatment to increase health benefits. The use of two structured psychosocial interventions in each treatment condition suggests that the observed differences between the methadone and heroin groups were not the result of differences in psychosocial treatment. The response rates in the methadone group also remains high, indicating that a well-structured treatment with trained therapists using standardised and clinically relevant psychosocial interventions can lead to positive outcomes even in a group that has previously responded poorly to methadone treatment. Ferri et al. (2007) conducted in 2005 the most recent Cochrane review to assess the efficacy and acceptability of heroin maintenance versus methadone or other substitution treatments for opioid dependence (Ferri et al., 2007). A total of four studies including 577 patients were found, but nevertheless a general conclusion about the effectiveness of heroin treatment could not be drawn, due to the non-comparability of the included studies (Ferri et al., 2007). With regard to the primary outcome measures retention in treatment and relapse to illicit heroin use, opposite findings were found.

### ***Codeine/dihydrocodeine as maintenance agent***

One RCT from a EU Member State and one review from outside of Europe are included in this chapter.

#### *Introduction*

The analgesic agent codeine/dihydrocodeine is approved for maintenance treatment in some European countries like Austria.

#### *Summarised results*

More research on the efficacy of codeine for the maintenance treatment of opioid dependents is needed, especially with regard to the safety profile and cost-effectiveness of codeine maintenance due to the probably more intensive treatment supervision. Provided that the good treatment retention in the study by Robertson et al. (2006) will

be replicated in other treatment settings including the analysis of urine samples to confirm the reduction of illicit opioid use, codeine could be an additional option for the maintenance treatment of opioid dependents (Hall & Mattick, 2007).

*Fact sheet 12 - Codeine/dihydrocodeine as maintenance agent*

<i>Key points</i>	<i>Strength of evidence</i>
Dihydrocodeine (DHC) is to be superior to placebo and lead to equal retention rates than methadone in the maintenance treatment of opioid dependent patients	**
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

*Detailed results*

Robertson et al. (2006) indicated that dihydrocodeine (DHC) seems to be superior to placebo in the maintenance treatment of opioid dependent patients (Robertson et al., 2006). Their recent pragmatic open-label randomized controlled study investigated the efficacy of dihydrocodeine as an alternative to methadone in the maintenance treatment of opiate dependence over a period of up to 42 months after recruitment (Robertson et al., 2006). Two hundred and thirty-five participants suitable for opiate maintenance treatment were randomized to treatment either with methadone (1 mg/ml) or with a lower (30 mg), respectively higher dose (60 mg) of dihydrocodeine tablets. The primary outcome measure (retention in treatment) and eight secondary outcomes (including illicit opiate use measured by self-reports) were compared over a period of 42 months. Although participants treated with dihydrocodeine were more likely to switch treatments, no group differences in treatment retention were found at follow-up and over the observation time. The authors concluded that dihydrocodeine is a viable alternative to methadone for the maintenance treatment of opiate dependence. However, due to the shorter bioavailability, codeine maintenance treatment will probably only play a marginal role in the treatment of opioid dependence and may require closer monitoring, and patients might be more difficult to stabilise (Hall & Mattick, 2007). On

the other hand, the short-acting effect of codeine could be an advantage for opioid dependents who avoid methadone treatment options due the long acting and stronger sedative effect.

### ***Slow-release oral morphine as maintenance agent***

At all six studies are included in this chapter, five from EU Member States: Three RCTs and three other studies (one of them from outside of Europe)

#### *Introduction*

Slow release oral morphine (SROM) acts as an agonist on the  $\mu$ -receptor and the long duration of action permits to administer a once-a-day preparation. SROM has been authorized for maintenance treatment of opioid dependence in a few European countries, namely Austria, Slovenia and Bulgaria.

#### *Summarised results*

SROM might be a promising compound for maintenance treatment. Patients treated with SROM showed improvements including decreased heroin consumption, improved functioning and a decrease in delinquency. Slow-release morphine might represent a future treatment option that will improve long-term outcomes for opioid dependents.

#### *Fact sheet 13 - Slow-release oral morphine as maintenance agent*

<b><i>Key points</i></b>	<b><i>Strength of evidence</i></b>
Slow-release morphines lead to equal retention rates than methadone in the maintenance treatment of opioid dependent patients	**
SROM shown positive results of with respect to reduction of heroin use and/or quality of life	**

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

### *Detailed results*

Two recent RCTs compare the effectiveness, safety and accessibility of slow release oral morphine to methadone or buprenorphine, another one investigated the safety and withdrawal discomfort of the transitioning of opioid dependent pregnant women from short-acting morphine to buprenorphine or methadone (Eder et al., 2005; Giacomuzzi et al., 2006; Jones et al., 2005). Eder et al. found slow-release morphine to be as effective as methadone in the treatment of opioid dependency. Sixty-four opioid dependent participants were administered daily under supervised conditions oral slow-release morphine or methadone during two study periods, each consisting of a 1-week titration<sup>14</sup> and a 6-week fixed-dose treatment phase. The retention in treatment was high and no significant group differences in treatment retention or use of illicit drug use were found, irrespective of treatment group or medication. Patients treated with oral slow-release morphine showed fewer psychiatric scores in depression and anxiety, so these findings suggest a comparable safety and tolerability of oral slow-release morphine versus methadone in equal doses. Giacomuzzi et al. used a randomized study design to compare SROM to methadone and buprenorphine treatment with respect to quality of life (QOL) and physical symptoms in patients entering treatment compared to patients treated in an outpatient setting over a period of 6 months. Patients treated with SROM showed lower quality of life values, despite equal effectiveness in the reduction of illicit drug use compared to methadone and buprenorphine treatment (Giacomuzzi et al., 2006). However, other smaller and mostly open-label studies have shown positive results of SROM with respect to retention, reduction of heroin use and/or quality of life (Eder et al., 2005; Kraigher et al., 2005; Mitchell et al., 2004; Vasilev et al., 2006). Furthermore, as with buprenorphine, there is criticism concerning the potential diversion of prescribed SROM towards illicit drug use. Of special concern is the fact that SROM has been found in most fatal intoxications in Austria in 2004, despite the fact that most of these cases were not in maintenance treatment (ÖBIG, 2006). Further studies will have to confirm these results in order to be able to evaluate the added value of this substance for the treatment of heroin dependence. Jones et al. (2005) showed in their recent randomised trial the feasibility and safety of switching opioid-dependent

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<sup>14</sup> = Process of gradually adjusting the dose of a medication until the desired effect is achieved

regnant women from short-acting morphine to buprenorphine or methadone during the second trimester<sup>15</sup> of pregnancy (Jones et al., 2005).

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<sup>15</sup> Month four through six of the pregnancy

#### **9.1.1.4 Pharmacotherapy for relapse prevention**

In most European countries relapse prevention programs are offered, though the duration and setting differ from country to country. While some countries limited relapse prevention to long-term inpatient treatments intended to last at least nine months and often using the therapeutic community format, others provided shorter inpatient treatments generally lasting less than six weeks. The positive effects of both long-term and short-term programs are, however, rather limited. In a three-month follow-up of 242 opioid dependent patients in residential treatment in the National Treatment Outcome Research Study (NTORS), 34% of the patients relapsed to heroin use within three days, 45% within seven days, 50% within 14 days, and 60% within 90 days. According to the authors, the results of this study highlight the need to provide aftercare services to help patients maintain the benefits achieved during treatment and to avoid the high risk of relapse at this time (Gossop et al., 2002). However, relapse prevention is also important to reduce the spread of infectious diseases like HIV or HCV and should therefore be widely available. Naltrexone, a long acting opioid antagonist, is used as a maintenance pharmacotherapy for persons who detoxified completely from heroin.

##### ***Naltrexone for relapse prevention***

From twenty included studies in this chapter, thirteen are from outside of Europe: two systematic reviews (one of them from a EU Member State), twelve RCTs (three from EU Member States, two from European countries), three other studies and three reviews (one from a EU Member State)

##### ***Introduction***

The opiate antagonist naltrexone is indicated for prescription for those who have achieved abstinence.

##### ***Summarised results***

The effectiveness of antagonist maintenance with oral naltrexone for opioid dependence has been limited by high dropout rates. Based on a systematic review of the available evidence, according to the Cochrane reviewers no benefit was shown in terms of

retention in treatment, side effects or relapse results even compared to placebo (Minozzi et al., 2006). This conclusion is corroborated by the findings of the National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD) in Australia, which showed that only 4% of the patients in naltrexone maintenance treatment were still in treatment after six months (NDARC, 2001). Furthermore, patients preferred relapse prevention treatment with buprenorphine or methadone (Digiusto et al., 2005). On the other hand, Krupitsky et al. (2004) found oral naltrexone for heroin dependence treatment to be significant superior to placebo with regard to treatment retention and relapse over a period of 6 months (Krupitsky et al., 2004). However, these results were found in a RCT with a small sample size. In summary, naltrexone maintenance seems not to be effective as a stand-alone treatment and should be, therefore, part of a broader treatment programme or should be reserved only for highly motivated patients living in a stable life situation. Nevertheless, a promising strategy to improve treatment retention in broader range could be the combination of long-acting implantable naltrexone formulations and behavioural methods.

*Fact sheet 14 - Naltrexone for relapse prevention*

<i>Key points</i>	<i>Strength of evidence</i>
Naltrexone showed to be effective to block the effects of short acting opioids, but lead to high drop-out rates	***
The combination of oral naltrexone maintenance treatment and psychosocial interventions increase the treatment retention compared to the administration of oral naltrexone alone	***
Sustained-release depot formulation of naltrexone improve the retention rates compared to the administration of oral naltrexone	**
Naltrexone treatment may increase the risk of heroin overdose due to reduced opiate tolerance	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

### *Detailed results*

In a human laboratory setting, naltrexone showed to be effective to block the effects of short acting opioids such as heroin (Kleber et al., 2006). Therefore, naltrexone seems to be helpful to speed up the withdrawal treatment and to prevent relapses (Gossop, 2006). Low doses of naltrexone had no discernible advantage, and participants preferred 50 mg per day. Despite the preference of patients for blocking doses of oral naltrexone (like 50 mg per day), the effectiveness of naltrexone appeared not to be dose related (Rea et al., 2004). Due to the prevention of the euphoria effect of opiates, outpatient double-blind placebo controlled trials with long-acting opiate antagonist are very uncommon. Placebo-controlled trials showed extremely high dropout rates, which implicates that the general acceptability of the participants is low (Gossop, 2006; Kleber et al., 2006). On the other hand, the high drop out rates lead to highly selective patient samples in most of the naltrexone maintenance studies and it could not be precluded that these groups of patients have a high level of motivation (Kleber et al., 2006). Indeed, the retention in treatment was found to be the most important predictor for the effect of naltrexone in treating opioid dependence, and authors therefore propose to add counselling to naltrexone maintenance treatment (Ritter, 2002). Another strategy to improve treatment adherence includes the combination of naltrexone with voucher-based contingency management (CM), which implies also increased treatment retention rates and less illicit opiate use (Gossop, 2006; Johansson et al., 2006; Kleber et al., 2006). The additional effect of CM was independent of other support measures and not related to the magnitude of the vouchers. A most recent multi-centre study suggested high abstinence rates in patients maintained with oral naltrexone in combination with a community reinforcement approach (De Jong et al., 2007). In conclusion, O'Brien et al. (2005) suggested in their meta-analytic review that medications for relapse prevention are most effective in the context of counselling, therapeutic and behavioural techniques (O'Brien, 2005). However, Nunes et al. (2006) concluded in their recent randomised control trial that there may be a limit on the extent to which behavioural therapy can overcome poor adherence to oral naltrexone (Nunes et al., 2006): The authors investigated the effectiveness of Behavioural Naltrexone Therapy (BNT) including voucher incentives, motivational and cognitive behavioural therapies. Sixty-nine patients were randomly administrated to the admission of BNT or to a standard treatment control including

compliance enhancement. In both groups, treatment retention after six months was low (22% BNT vs. 9%), whereas most patients remaining in treatment after three months achieved abstinence from opioids (Nunes et al., 2006). Tucker et al. (2004) found no reasonable effects, although the provision of an additional 12-week manualised group-counselling program including a cognitive-behavioural relapse prevention approach provides additional benefit to naltrexone treatment (Tucker et al., 2004).

An alternative strategy to improve the retention rates is the administration of sustained-release depot formulation of naltrexone instead of oral naltrexone in treating opioid dependence. A recent randomised controlled trial found promising results (Comer et al., 2006): Sixty heroin-dependent males and females were randomly allocated to placebo or 192 or 384 mg of depot naltrexone, including twice weekly relapse prevention therapy for all participants. The sustained-release depot formulation of naltrexone was well tolerated. After two months, 60-68% of patients in the 192 mg of naltrexone and 384 mg of naltrexone groups, respectively, remained in treatment compared to 39% of the placebo group. The mean dropout time was dose related, varying between 27 days for the placebo group and 48 days for the 384 mg of naltrexone group. However, the study sample was small and no direct comparison with oral naltrexone was provided, so that the potential advantages should be regarded as promising but not proven. The former assumption that the combination of naltrexone with a Selective Serotonin Re-uptake Inhibitor (SSRI)<sup>16</sup> is more effective than naltrexone alone, could not be confirmed in recent randomised, placebo-controlled trials (Farren & O'Malley, 2002) (Krupitsky et al., 2006). A recent primarily double-blind, placebo controlled RCT with a small number of patients suggests that the additional administration of lofexidine to oral naltrexone leads to higher opioid abstinence rates and improved relapse outcomes as compared to the combination of placebo and naltrexone (Sinha et al., 2007). However, these promising results have to be proven in larger sample sizes.

Naltrexone is considered to be a safe medication with few side effects; only high doses can lead to transaminase elevations in liver function tests (Gossop, 2006; Kleber et al., 2006). However, Stella et al. (2005) found high incidences of insomnia, panic attack,

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<sup>16</sup> SSRI = a class of antidepressants used in the treatment of depression, anxiety disorders etc.

anxiety and hyperexcitability<sup>17</sup> in patients treated with oral naltrexone (Stella et al., 2005). In the same study the additional administration of the benzodiazepine prazepam to oral naltrexone maintenance was found to be effective in the reduction of this side effects and to lead, in comparison to oral naltrexone alone, to higher abstinence rates from illicit opioid use (Stella et al., 2005). Two other issues related to the prescription of naltrexone deserve special attention: the potential induction of depression by naltrexone, and the overdose risk following discontinuation of a naltrexone treatment. A systematic review of the available literature found no evidence for a relationship between naltrexone and depression or anhedonia, but found that reduced opiate tolerance following naltrexone treatment may indeed increase the risk of heroin overdose (Dean et al., 2006; Ritter, 2002). Therefore, a clear warning to patients treated with oral naltrexone regarding the risk of heroin overdose is warranted. One possibility to avoid this risk is the administration of long acting sustained release naltrexone implants. Hulse et al. (2005) showed a reduced number of opioid overdoses observed in the 6-12 months post-implant treatment (Hulse et al., 2005). However, a most recent case report indicates, that patients can die from an opioid overdose with a naltrexone implant and blood naltrexone levels higher than reported blockade levels (Gibson et al., 2007).

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<sup>17</sup> = generalised term: cover a spectrum of disorders that exhibit the symptoms of continuous muscle fiber activity

### ***9.1.2 Pharmacotherapy for the treatment of stimulant-related disorders***

Of all seventy-four studies included in this chapter, only ten are from EU Member States, sixty-four from outside of Europe, mainly the United States and Australia.

#### *Introduction*

The stimulants cocaine and amphetamine influence separate mechanisms of action. Cocaine is a dopamine transport blocker that competitively inhibits dopamine uptake to increase the lifetime of dopamine and augments an overabundance of dopamine (an increase of up to 150%) within the parameters of the dopamine neurotransmitters. Like cocaine, amphetamines increase the concentration of dopamine in the synaptic gap, but by a different mechanism. Amphetamines are similar in structure to dopamine, and so can enter the terminal button of the presynaptic neuron via its dopamine transporters as well as by diffusing through the neural membrane directly. A cocaine vaccine has been developed; using cocaine specific antibodies produced in animals, which are injected and then can sequester cocaine molecules in the bloodstream, converting cocaine into inactive metabolites, which are then excreted.

#### *Summarised results*

None of the proofed medication has been found yet that can be considered a standard for treating stimulant dependence effectively, although a number of different medications has been tried (EMCDDA, 2007; Kleber et al., 2006). The treatment of cocaine dependence frequently still includes the use of antidepressants, especially SSRIs, despite the low evidence level for their efficacy. Some typical and atypical psychotic agents such as haloperidol, olanzepine and risperidone, were found to be effective in the treatment of patients with co-occurring schizophrenia and cocaine dependence. Also promising results are expected from topiramate and other antiepileptic drugs, and much hope is being placed in the development of the cocaine vaccine.

<i>Key points</i>	<i>Strength of evidence</i>
No medication has shown clear efficacy in treating cocaine dependence	***
Typical and atypical psychotic agents were found to be effective in the treatment of patients with co-occurring schizophrenia and cocaine dependence	***
Immunisation and vaccination are effective pharmacological strategies for the treatment of psychostimulant related-disorders	**

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

### 9.1.2.1 Detoxification treatment for stimulant-related disorders

Four studies are included in this chapter, one from a EU Member State: Two systematic reviews (one from a EU Member State), one RCT and one review.

#### *Detailed results*

Symptoms of intoxication are treated in different ways. Labetalol, an alpha-1 and beta adrenergic blocker used to treat high blood pressure, has been used for treating symptoms of cocaine intoxication, but the little clinical research shows that the use of adrenergic blockers and dopaminergic antagonists should be used carefully in acute cocaine intoxication (Kleber et al., 2006). Benzodiazepines (such as Oxazepam, Alprazolam) are given those cocaine users with acute intoxication who are very agitated (Kleber et al., 2006).

Table 12: Substances proofed for detoxification treatment of stimulant dependence

Substance	Classification & Mode of action	
Bromocriptine	Dopamine receptor agonist	- similar action to dopamine, a neurotransmitter that occurs naturally in the brain
Amantadine	Dopamine reuptake inhibitor	- inhibit the reuptake of extracellular dopamine back into the presynaptic cell
Labetalol Propranolol	$\beta$ -adrenergic antagonist	- inhibit normal epinephrine-mediated sympathetic action
Amineptine Mirtazapine	Antidepressants	- effects on neurotransmitter
Oxazepam Alprazolam	Benzodiazepine	- effects from depressing to stimulating the CNS

One way of treating withdrawal symptoms during detoxification, such as sleep difficulties, symptoms of depression, anxiety, anhedonia is to give dopamine agonists (e.g. amantadine), but research findings have been ambiguous, with two studies finding positive effects and two others with no significant effect (Kleber et al., 2006). The same is true for bromocriptine, that acts as a dopamine agonist. Bromocriptine has potential use in treating cocaine addiction, since the addictive effects of cocaine are caused by it blocking dopamine reuptake. First studies seemed to be promising, until a double-blind RCT found a higher rate of negative urine-samples but higher dropout rate with bromocriptine than amantadine, an antiviral drug, releasing dopamine from the nerve endings of the brain cells (Kleber et al., 2006). Another double-blind RCT found no significant differences between bromocriptine and placebo concerning reduction of cocaine use (Kleber et al., 2006). One uncontrolled inpatient study found no reduction of craving with bromocriptine (Kleber et al., 2006). Therefore, the UNODC report (UNODC, 2002) comes to the conclusion that there is no significant effect of both bromocriptine and amantadine.

Propranolol (a non-selective beta blocker mainly used in the treatment of hypertension) can moderate withdrawal symptoms but evidence is weak (Rigter et al., 2004). For those patients with relatively severe withdrawal symptoms, propranolol has showed some effect (Kleber et al., 2006).

Antipsychotic medication has been prescribed and reported to be somewhat effective in treating cocaine-related delusions, but most patients recover from delusions without medication after a few hours (Kleber et al., 2006). No evidence has been found that anticonvulsants reduce cocaine-induced seizures (Kleber et al., 2006). Gillman et al. (2006) found reduced cocaine withdrawal symptoms in cocaine dependents treated with psychotropic analgesic nitrous oxide (PAN), a titrated mixture of oxygen and nitrous oxide (Gillman et al., 2006).

For treating withdrawal symptoms in amphetamine dependence, amineptine (atypical tricyclic antidepressant that selectively inhibits the reuptake of dopamine) has been tested in two RCTs: it did not have an effect on withdrawal symptoms or craving, but improved the general well-being of those who stop (Rigter et al., 2004). A recent placebo-controlled pilot study investigated the safety and efficacy of mirtazapine, an antidepressant used for the treatment of moderate to severe depression, in amphetamine detoxification (Kongsakon et al., 2005). Twenty amphetamine dependents were randomly allocated to either mirtazapine treatment (9 patients) or placebo (11 patients), of which seven patients in the mirtazapine and nine in the placebo group completed the study. Patients in the mirtazapine group showed significant improvements in the total Amphetamine Withdrawal Questionnaire (AWQ)<sup>18</sup> score versus placebo at days 3 and day 14. Despite reported mild adverse events like headache etc. and the small sample size the authors suggested, that mirtazapine may be an option for amphetamine detoxification treatment (Kongsakon et al., 2005).

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<sup>18</sup> Standard questionnaire; provided patient's aggregate score on amphetamine withdrawal

### 9.1.2.2 Substitution treatment for stimulant-related disorders

From fifteen included studies in this chapter, twelve are from outside of Europe: Two systematic reviews (1 of them from a EU Member State), seven RCTs (1 from EU Member States), five other studies and one review from a EU Member State

#### *Detailed results*

Different approaches have been considered for replacement therapy in the treatment of cocaine dependence.

*Table 13: Substances used for substitution treatment of stimulant dependence*

<b>Substance</b>	<b>Classification</b>	<b>Mode of action</b>
Risperidone	Dopamine antagonist / antipsychotic	- modulation of the dopamine neurotransmitter system
Baclofen Gabapentin	GABA-ergic compounds / Antiepileptics / Anticonvulsants	- inhibit the metabolism of GABA
Buprenorphine	Opioid agonist / opioid antagonist	- bind to specific opioid receptors in the central nervous system
Dextroamphetamine	Psychostimulant	- affects the dynamics neurotransmitter systems
Methylphenidate	Prescription stimulant	- binding affinity for both the dopamine transporter and norepinephrine transporter
Diethylpropion	Sympathomimetic stimulant	- effect on the hormone adrenaline and noradrenaline
Memantine	Uncompetitive antagonist at glutamatergic NMDA receptor	- inhibit the prolonged influx of Ca <sup>2+</sup> ions which forms the basis of neuronal excitotoxicity

There was one RCT for dextroamphetamine (a psychostimulant which produces increased wakefulness, energy and self-confidence in association with decreased fatigue and appetite) and methylphenidate (a prescription stimulant commonly used to treat Attention-deficit disorder (ADD) and Attention-deficit hyperactivity disorder, or ADHD) each, the first showing that patients with 15-30 mg stayed longer in treatment than placebo groups and those with higher doses, while methylphenidate did not show effects (Rigter et al., 2004). Other replacement therapies with methylphenidate or sustained-released amphetamine showed better patient retention and greater reduction in

cocaine use compared to placebo, but further studies are needed (Kleber et al., 2006).

Diethylpropion, act by blocking and reversing norepinephrine transporter (NET) activity, also did not show any effect on cocaine craving<sup>19</sup> (Rigter et al., 2004). Buprenorphine has been tried with those patients with double dependence (opiate and cocaine) and showed some effect on cocaine use in open trials but not in double-blind studies (Kleber et al., 2006). Montoya et al. (2004) showed reducing concomitant opiate and cocaine use under the provision of 16 mg daily doses of sublingual buprenorphine solution (Montoya et al., 2004). Schottenfeld et al. (2005) found significantly longer treatment retention rates, longer periods of sustained abstinence and a greater proportion drug-free tests in co-occurring cocaine and opioid dependents maintained with methadone than patients assigned to receive buprenorphine (Schottenfeld et al., 2005).

Sometimes amphetamines are given on prescription, usually dexamphetamine, with good results in reducing street amphetamine and other injecting drugs (Rigter et al., 2004). Prescribing amphetamines is done in the UK for maintenance (Gossop, 2006). Compared to a control group, amphetamine prescription increased treatment contact and retention (Gossop, 2006), whereas Stoops et al. (2007) recently indicated, that acute d-amphetamine pre-treatment does not increase stimulant self-administration (Stoops et al., 2007). Another study found good results for dexamphetamine regarding retention and compliance - patients attended more often counselling (Gossop, 2006).

Grabowski et al. (2004) conducted two studies to investigate efficacy of sustained release d-amphetamine as well as risperidone (an atypical antipsychotic medication for cocaine dependence), each in combination with methadone in 240 (120/study) cocaine and heroin co-dependents, which randomly allocated to one trial medication or placebo (Grabowski et al., 2004). All patients underwent a methadone induction, were stabilized at 1.1mg/kg and received one behavioural therapy session per week. The combination of the methadone and d-amphetamine was found to be significantly more effective than methadone and placebo, and also better than methadone and risperidone for treatment of concurrent cocaine and opioid dependents (Grabowski et al., 2004).

Methylphenidate (MPH), a prescription stimulant commonly used to treat attention-

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<sup>19</sup> = strong desire for the substance causing the dependence

deficit hyperactivity disorder (ADHD), was recently found to be effective for reducing intravenous drug use in patients with severe amphetamine dependence respectively cocaine use in patients with cocaine dependence (Levin et al., 2007; Tiihonen et al., 2007). Furthermore, methylphenidate can be safely provided in an outpatient setting with active cocaine users (Winhusen et al., 2006).

Recently, Collins et al. (2006) found that the provision of up to 20mg memantine, a non-competitive N-methyl-d-aspartate (NMDA) antagonist, did not alter the subjective or reinforcing effects of cocaine in methadone-maintained cocaine smokers (Collins et al., 2006). Also, the maintenance treatment with gabapentin, a medication originally developed for the treatment of epilepsy, did not alter the choice to self-administer cocaine by treatment-seeking cocaine-dependent individuals and was found not to be clinically useful for the treatment of cocaine and methamphetamine dependence (Haney et al., 2005; Hart et al., 2007; Hart et al., 2007a; Hart et al., 2004; Heinzerling et al., 2006).

Also, baclofen, a GABA-ergic compound, was found to be ineffective at suppressing self-administration, especially in more intensive cocaine users and seems to have only a small therapeutic effect for the treatment of methamphetamine dependence compared to placebo (Heinzerling et al., 2006).

### **9.1.2.3 Abstinence maintenance for stimulant-related disorders**

From fifty-five included studies in this chapter, forty-nine are from outside of Europe: Three systematic reviews (2 of them from EU Member States), thirty-one RCTs (1 from a EU Member State), sixteen other studies (3 from EU Member States) and five reviews

#### *Detailed results*

No medication has shown clear efficacy in treating cocaine dependence (Kleber et al., 2006), and no antagonists have been found yet to be effective (UNODC, 2002). However, patients with severe forms of dependence and severe withdrawal symptoms or those not responding to psychosocial treatment may find medication to be useful for them (Kleber et al., 2006).

Table 14: Substances used for abstinence maintenance of stimulant related disorders

Substance	Classification	Mode of action
Pergolide Cabergoline	Dopamine receptor agonists	- similar action to dopamine, a neurotransmitter that occurs naturally in the brain
Aripiprazole	Dopamine partial receptor agonist	- bind to the dopamine receptor with high affinity but low intrinsic activity
Amantadine Mazindol	Dopamine reuptake inhibitors	- inhibit the reuptake of extracellular dopamine back into the presynaptic cell
Selegiline Disulfiram	Dopamine metabolism inhibitors	- blocking the metabolism of dopamine into norepinephrine
Haloperidol, Risperidone, Olanzapine	Dopamine antagonists / Antipsychotics	- modulation of the dopamine neurotransmitter system
Baclofen, Gabapentin, Tiagabine, Lamotrigine, Carbamazepine, Valproate, Topiramate, Divalproex	GABA-ergic compounds / Antiepileptics / Anticonvulsants	- inhibit the metabolism of GABA
Naltrexone	Opioid antagonist	- bind to specific opioid receptors in the central nervous system
Amlodipine	Calcium channel blocker	- selective inhibition of calcium influx through cell membranes
Desipramine, Fluoxetine, Venlaxaxine, Bupropion, Nefazodone, Paroxetine, Sertraline, Reboxetine	Antidepressants	- effects on neurotransmitter
Modafinil	Eugeroics stimulant	- mild action on central nervous system
Progesterone, Dehydroepiandrosterone	Neurosteroid prohormone /	- affect synaptic functioning
Tryptophan	Amino acid	- biochemical precursor for serotonin

No medication has been found yet to help on amphetamine or methamphetamine dependence (Rigter et al., 2004). Four different antidepressants have been tested in four RCTs with no influence on the amphetamine use (Rigter et al., 2004). Shoptaw et al. (2006) indicated that the antidepressant sertraline is contraindicated for the treatment methamphetamine dependence due to significant more adverse events compared to placebo conditions (Shoptaw et al., 2006). Newton et al. (2006) suggested, that the antidepressant bupropion has some effectiveness in reducing methamphetamine-induced subjective effects and cue-induced craving (Newton et al., 2006). Newton et al. (2006)

found reduced acute methamphetamine-induced subjective effects and reduced cue-induced craving under the administration of bupropion, an atypical antidepressant that acts as a norepinephrine and dopamine reuptake inhibitor, and nicotinic antagonist (Newton et al., 2006). Furthermore bupropion was found to be well-tolerated by patients and seems to alleviate the cardiovascular effects of experimentally administered methamphetamine (Newton et al., 2005).

On antidepressant medication 21 RCTs were found, with no effects on cocaine dependence (Rigter et al., 2004). The selective serotonin reuptake inhibitor fluoxetine and the dopamine reuptake inhibitor bupropion had some benefit in small studies but not in larger trials (Kleber et al., 2006). The tricyclic antidepressant desipramine has been studied with inconsistent findings, some studies showing positive effects, others not. One study compared desipramine with placebo and found a short term effect of 6 weeks but not at 12 weeks or longer (Kleber et al., 2006). Several recent clinical trials confirmed, that the use of antidepressants such as paroxetine, reboxetine, nefazodone, sertraline, and venlafaxine do not support the treatment of cocaine dependence (Ciraulo et al., 2005; Ciraulo et al., 2005a; Passos et al., 2005; Winhusen et al., 2005), whereas Szerman et al. (2005), on the contrary, suggested that reboxetine might be an effective and safe therapeutic option for cocaine dependence disorder including marked decreases in psychometric measures during treatment (Szerman et al., 2005). Desipramine, a tricyclic antidepressant (TCA) that inhibits the reuptake of norepinephrine, is associated with depression improvements and therefore with improvements in cocaine use in treatment of cocaine-dependents with depression in an outpatient setting (McDowell et al., 2005). However, the administration with desipramine lead to higher dropout rates due to side effects and medical adverse events (McDowell et al., 2005).

After some initial promising results, the anticonvulsant carbamazepine had no effects in later double-blind placebo-controlled studies (Kleber et al., 2006). The TRIMBOS report also found no effect for anticonvulsives (e.g. carbamazepine) according to six RCTs (Rigter et al., 2004). In recent clinical trials the anticonvulsants valproate, lamotrigine, and gabapentin were found to be not more effective than placebo in treating cocaine dependence (Berger et al., 2005; Bisaga et al., 2006; Gonzalez et al., 2007; Reid, Casadonte et al., 2005). For the utility of divalproex (an anticonvulsant and mood-stabilizing drug) in patients with bipolar disorder and primary cocaine dependence

further high quality experimental, placebo-controlled studies are warranted to confirm the promising results of a first pilot study (Salloum et al., 2007). Tiagabine, an anti-convulsive medication, has been shown to lead to reduced positive urine samples in patients treated for cocaine dependence compared to placebo and may merit further study, although the patients of a recent trial showed difficulties in tolerating low dose of tiagabine (Gonzalez et al., 2007; Winhusen et al., 2005). Topiramate, an anticonvulsant drug, showed recently some promising results in one double-blind study (Kleber et al., 2006) and Kampman et al. (2004) demonstrated that topiramate-treated patients were more likely to be abstinent from cocaine compared to placebo-treated (Kampman et al., 2004).

The GABA agonist baclofen has shown some minor effect (Heinzerling et al., 2006), and one double-blind clinical trial with tiagabine showed more effect than placebo in reducing cocaine use (Kleber et al., 2006). The narcoleptic medication modafinil has shown some effects, but needs further studies (Kleber et al., 2006). Modafinil blocked the euphoric effects of cocaine, significantly decreased systemic exposure to cocaine during the first 180 minutes following intravenous cocaine administration and improves clinical outcome when combined with psychosocial treatment for cocaine dependence (Dackis et al., 2005; Donovan et al., 2005; Ginsberg, 2005). Malcolm et al. (2006) found in their recent phase I clinical trial<sup>20</sup> no significant hemodynamical interactions between modafinil and cocaine, but further outpatient trials appeared to be warranted (Malcolm et al., 2006). Rigter found 12 RCTs on dopamine agonists and other substances which imitate dopamine, but no effects were found concerning a reduction of quantity or frequency of cocaine use (Rigter et al., 2004). Also Berglund et al. found no effect differences between dopamine agonists and placebo (Berglund et al., 2003). The systematic review by the APA describes mixed results on dopamine agonists: amantadine, an antiviral drug, has been best studied but with no overall benefit, only in some studies (Kleber et al., 2006). Kampman et al. (2006) used a double-blind, placebo-controlled design to evaluate the efficacy of amantadine, propranolol, a non-selective beta blocker mainly used in the treatment of hypertension, and their combination in one hundred and ninety-nine cocaine dependent patients with severe cocaine withdrawal symptoms (Kampman et al., 2006). Neither propranolol nor amantadine or their

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<sup>20</sup> Phase I of clinical trials: First stage of testing a drug/agent/medication in human subjects

combination was found to be significantly more effective than placebo in promoting abstinence from cocaine in these extremely difficult-to-treat patients, whereas highly adherent patients to study medication showed better treatment retention and higher rates of cocaine abstinence under the provision of propranolol compared to placebo (Kampman et al., 2006).

Typical and atypical antipsychotics were not superior to placebo in treatment of cocaine dependents except for patients with co-occurring psychotic disorders. Compared to placebo, patients treated with the atypical antipsychotic medication aripiprazole were found to have significantly more amphetamine-positive urine samples (Tiihonen et al., 2007). Reid et al. (2005) found no effectiveness of the atypical antipsychotic agent olanzapine for the treatment of cocaine dependence with regard to cocaine use, as measured by urine Benzoyllecgonine (BE)<sup>21</sup> levels and self-report (Reid et al., 2005) and risperidone, another atypical antipsychotic medication, were found to be insufficient in reducing cocaine craving in cocaine dependents (Smellson et al. (2004). The partial dopamine agonist aripiprazole have shown promising results in a small clinical trial regarding subject-related and cardiovascular effects, but further research is needed to confirm the effectiveness (Lile et al., 2005). However, typical and atypical psychotic agents such as haloperidol, olanzapine and risperidone, were found to be effective in the treatment of patients with co-occurring schizophrenia and cocaine dependence (Albanese & Suh, 2006; Rubio et al., 2006; Sayers et al., 2005; Smelson et al., 2006). Stoops (2006) indicated that the aripiprazole, an atypical antipsychotic medication approved for the treatment of schizophrenia and acute manic and mixed episodes associated with bipolar disorders, may have clinical utility in treating stimulant dependence, but large-scale clinical trials are needed to confirm the efficacy (Stoops, 2006). Otherwise, mazindol, a catecholamine reuptake inhibitor and antipsychotic agent, was found to be ineffective in reducing cocaine consumption, cocaine craving, and psychiatric symptoms in patients diagnosed with comorbid schizophrenia and cocaine abuse or dependence (Perry et al., 2004).

Dopamine agonists like selegiline, l-dopa/carbidopa, pergolide had inconclusive or negative findings and altogether no superiority to placebo (Kleber et al., 2006) and also recent findings did not confirm the support for the efficacy of dopamine agonists for

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<sup>21</sup> Benzoyllecgonine is the major metabolite of cocaine

the treatment of cocaine dependence (Ciraulo et al., 2005; Focchi et al., 2005; Gorelick & Wilkins, 2006). However, Shoptaw et al. (2005) found good results for cabergoline, a potent dopamine receptor agonist, regarding improvements in addiction severity and negative urine samples for cocaine metabolites and provided empirical support for conducting a larger study of the medication (Shoptaw et al., 2005).

The opiate antagonist naltrexone has not been found useful for treatment of cocaine dependence (Kleber et al., 2006; Rigter et al., 2004; Schmitz et al., 2004). Schmitz et al. (2004) found, that 50 mg/day of naltrexone failed to reduce either cocaine or alcohol use in co-occurring cocaine and alcohol abusers, whereas psychotherapy significantly reduced cocaine use during the first 4 weeks of treatment (Schmitz et al., 2004). Otherwise, Jayaram-Lindstrom et al. (2005) demonstrated reduced consumption of amphetamine during treatment compared to pre-treatment in amphetamine-dependent patients receiving 12 weeks of treatment comprised of naltrexone (50 mg) combined with relapse prevention therapy (Jayaram-Lindstrom et al., 2005). The provision of disulfiram, an aversive drug producing an acute sensitivity to alcohol, appeared to be more effective than naltrexone in the provision of negative urine samples for cocaine and cocaethylene (Grassi et al., 2007). Baker et al. (2007) found that the administration of disulfiram reduced cocaine-associated subjective effects ('high' and 'rush') (Baker et al., 2007). Carroll et al. (2004) showed that the provision of disulfiram alone and in combination with cognitive behaviour therapy (CBT) is effective in reducing cocaine use in cocaine-dependent outpatients (Carroll et al., 2004), whereas Grassi et al. (2007) suggested that disulfiram does not add to the capability of CBT to retain cocaine dependents in treatment (Grassi et al., 2007).

Several further medications were recently investigated with regard to their efficacy for treatment of cocaine dependence. Progesterone, a steroid hormone, attenuated some of the physiological and subjective effects of cocaine, but further studies are warranted to assess the efficacy (Sofuoglu et al., 2004). High doses of dehydroepiandrosterone, a natural steroid prohormone, seems to be contraindicated as a pharmacotherapy for cocaine dependence due to increasing cocaine use compared with placebo (Shoptaw et al., 2004). Tryptophan, an essential amino acid, did not significantly prevent relapse to cocaine use or attenuate cocaine use after relapse (Jones et al., 2004). Levodopa (L-dopa), an intermediate in dopamine biosynthesis, and amlodipine, a calcium channel

blocker, were found to be not superior to placebo in reducing cocaine use (Malcom et al., 2005; Mooney et al., 2007). Also selegiline, a drug used for the treatment of Parkinson's disease, does not support the treatment of cocaine dependence (Elkashef et al., 2006), as well as celecoxib, a non-steroidal anti-inflammatory drug (Reid et al., 2005).

Immunisation and vaccination are two strategies with a long tradition and very little empirical proof of effectiveness (Kantak, 2003). In (passive) immunisation, catalytic antibodies are injected that bind cocaine and subsequently hydrolyse cocaine into the inactive products ecognine methyl ester and benzoic acid. A cocaine vaccine has also been proposed; this would attempt to block the effects of cocaine using cocaine antibodies (Bagasra et al., 1992; Garcia Sevilla, 1997; Navarro & Rodriguez De Fonseca, 2000). This unique approach to the pharmacotherapy of cocaine addiction was initiated by immunisation experiments that demonstrated specific cocaine antibody production in animals (Carrera et al., 1995; Carrera et al., 2000; Fox, 1997; Fox et al., 1996). Cocaine-specific antibodies can sequester cocaine molecules in the bloodstream, thereby allowing naturally occurring enzymes (cholinesterases) to convert cocaine into inactive metabolites, which are then excreted. As the antibodies cannot cross the blood-brain barrier, the vaccine is not expected to have any direct psychoactive effect. As the antibodies prevent cocaine from having an effect, the reinforcing effect of continued cocaine use would be dampened. Furthermore, the vaccine persists for months, so there is no need for daily administration of medication. A randomised, double-blind, placebo-controlled clinical trial involving 34 former cocaine users was carried out to assess the safety and immunogenicity of the therapeutic cocaine vaccine TA-CD (Kosten & Biegel, 2002). The results of this trial showed that the vaccine induced cocaine antibodies in a time- and dose-dependent manner and that it was well tolerated with no serious adverse events during 12 months of follow-up. This trial was then followed up by an open-label, 14-week, dose escalation study evaluating the safety, immunogenicity and clinical efficacy of the cocaine vaccine (Martell et al., 2005). Ten cocaine-dependent subjects received a total dose of 400 µg of vaccine in four injections over the course of 8 weeks and eight cocaine-dependent subjects received a total dose of 2 000 µg of vaccine in five injections over the course of 12 weeks. The results showed a high completion rate, no serious adverse events, good tolerance and a significantly higher

likelihood of cocaine-free urine in the high-dose group at 6 months. The results are most encouraging when compared with other pharmacological strategies, but will have to be replicated in further studies.

### ***9.1.3 Pharmacotherapy for the treatment of cannabis related disorders***

From seven included studies in this chapter, six are from outside of Europe: Two systematic reviews (1 of them from a EU Member State), one RCT, three other studies and one review

#### *Introduction*

Neurobiological trials on cannabis withdrawal demonstrate the importance of the development of further pharmacological options for the treatment of cannabis dependence. Different published studies have employed laboratory animals to evaluate medication effects on cannabinoid withdrawal symptoms. Nevertheless clinical trials of human participants are rare and none of the included effectiveness reports found clinical trials supporting a medication for the pharmacotherapy of cannabis dependence (Kleber, 2003; Rigter et al., 2004; UNODC, 2002).

#### *Summarised results*

Different agents, such as bupropion, divalproex, naltrexone, and nefazodone were investigated for the treatment of cannabis dependence and for the prevention of cannabis reinstatement after abstinence, but each medication missing broader effectiveness (Kleber, 2003; UNODC, 2002). Oral delta-9-tetrahydrocannabinol (THC) might be helpful in suppressing cannabis withdrawal.

*Fact sheet 16 - Pharmacological treatment for cannabis related-disorders*

<i>Key points</i>	<i>Strength of evidence</i>
Oral delta-9-tetrahydrocannabinol (THC) might be effective in suppressing cannabis withdrawal	**
Bupropion, divalproex, naltrexone, and nefazodone missing a broader effectiveness in pharmacological treatment for cannabis related-disorders	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

*Detailed results*

Compared to placebo, nefazone (an antidepressant drug) decreased a subset of withdrawal symptoms like anxiety and muscle pain, while bupropion worsened mood during cannabis withdrawal. Rimonabant acts as an antagonist on the cb-receptor and is supposed to reduce the pleasures of users of cannabis. Nevertheless, a non-randomised clinical trial supports this assumption (Rigter et al., 2004). Some findings suggest that oral delta-9-tetrahydrocannabinol (THC) might be helpful in suppressing cannabis withdrawal (Budney et al., 2007). In a recent clinical trial eight daily cannabis-using adults were randomly allocated to placebo or lower dose of THC (30 mg) or higher doses of THC (90 mg) during three 5-days periods of abstinence from cannabis. A lower daily dose of THC reduced withdrawal discomfort, where as higher daily doses showed a greater effect in suppressing withdrawal symptoms (Budney et al., 2007). These results replicated the findings of another clinical trial that demonstrated that THC administration beginning on the first day of marijuana abstinence lead to decreased symptoms of cannabis withdrawal, like anxiety, misery, chills or self-reported sleep disturbance, relative to placebo (Haney et al., 2004). Oral THC also decreased marijuana craving during abstinence compared to placebo. The same study investigate the effect of the mood stabilizer divalproex to attenuate a broader range of cannabis withdrawal symptoms, compared to antidepressants, such as nefazodone and bupropion (Haney et al., 2004). As like bupropion, maintenance with divalproex prior to and

during marijuana abstinence also markedly worsened mood such as irritability, edginess, anxiety and sleepiness (Haney et al., 2004). Another double-blind placebo-controlled study focused on the effectiveness of the anticonvulsant drug gabapentin in suppressing cannabis use and cannabis withdrawal symptoms (Escher et al., 2005). In several studies gabapentin was found to be effective and safe in treatment of depression, anxiety, insomnia, aggression, and alcohol withdrawal. Twenty-one non treatment-seeking volunteers with concurrent DSM IV<sup>22</sup> cannabis and alcohol abuse or dependence were randomly treated with gabapentin (1200 mg/d) or placebo. Gabapentin administration decreased a subset of marijuana withdrawal symptoms compared to placebo as measured by the Marijuana Withdrawal Checklist (MWC). Patients reported less sleep disturbance and enhanced sleep quality. Gabapentin was also associated with diminished urge to use cannabis and alcohol (Escher et al., 2005).

Quetiapine, an atypical antipsychotic medication, seems to decrease cravings for cannabis in patients with co-occurred psychotic and substance use disorders (Potvin et al., 2006). Nevertheless, these findings were only shown in an open label trial and a final conclusion could only be made after verification in a randomised, placebo-controlled trial design. Furthermore, a conceivable approach could be the blockade of alpha7 nicotinic receptors, which reverses abuse-related behavioural in rats (Solinas et al., 2007).

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<sup>22</sup> DSM = Diagnostic and Statistical Manual of Mental Disorders; list of categories of mental disorder and the criteria for diagnosing them

## ***9.2 Psychosocial interventions for the treatment of drug dependency***

A wide range of psychosocial interventions is available for the treatment of drug dependence. As many different study designs were used to explore psychosocial treatment, it is difficult to compare the individual direct outcomes. Different approaches are compared and different names used for similar forms of intervention. Different kinds of treatment have showed different levels of effectiveness, but in general it is clear that any psychosocial treatment is better than none (e.g. Amato et al., 2007), and the quality of treatment also depends on the training and ability of staff (EMCDDA, 2007).

As there is no effective pharmacological therapy for cocaine and amphetamine dependence, a variety of psychosocial interventions has been conducted in this field, whereas in the field of opiate dependence psychosocial interventions are most often combined with pharmacological treatment, namely substitution maintenance treatment. This combination leads to significant improvements (Berglund et al., 2003).

The optimal duration of treatment might be a key point but has hardly been studied. The review of Gowing et al. found limited strength of evidence that best outcomes are associated with treatment duration of at least three months with at least weekly sessions (Gowing et al., 2001). The intensity of treatment has been investigated in a few studies. Comparing a once-weekly with a thrice-weekly counselling for buprenorphine-naloxone maintenance treatment, Fiellin et al. did not find significant differences between the groups (Fiellin et al., 2006). Highly structured relapse prevention seems to be more effective than less structured interventions, with regard to cocaine users with co-morbid depression (UNODC, 2002, p.14).

Treatment should match the patient (EMCDDA, 2007) and should be relevant to the individual (Gowing et al., 2001). Some form of treatment may be more useful for women than for men, others might be better for cocaine users than cannabis users (Haro et al., 2006), so it is important to carefully choose and provide the optimal treatment setting for the individual.

Often different approaches and methods are combined or compared. Combining different treatment approaches can lead to improved results. One small American study compared motivational enhancement plus CBT plus vouchers with motivational enhancement only or with CBT. The latter two groups showed on average 7 days of abstinence in the month prior to the last measurement, the three-way group had 13 days on average (Rigter et al., 2004).

In general, treatment outcomes may differ if treatment is coerced: one study on methamphetamine users compared those with legal and/or other agencies' treatment referrals to those who entered treatment voluntarily. Treatment outcomes did not differ; however, those with legal pressure had more relapses within 6 months (Brecht et al., 2005).

One study on adolescent cannabis users (12-18 years) with 600 participants compared five different interventions: Motivational enhancement followed by a short CBT for 6 weeks, 8-10 additional CBT sessions on top of the motivational enhancement and short CBT for 12 weeks, family support network additionally to the extensive CBT, Adolescent Community Reinforcement Approach (ACRA) and multidimensional family therapy. (Dennis et al., 2004). All of these interventions reduced the number of problems connected with cannabis use and the number of days of use was reduced. There was no difference between the more intensive and less intensive interventions. A critical point of this study mentioned by Rigter et al. is the fact, that not all the users were dependent and did not seek help themselves but were referred to, as cannabis use in the USA is considered more of a problem than in Europe (Rigter et al., 2004, 46).

Psychosocial treatment usually improves substitution maintenance treatment outcomes for opiate dependent patients (Montoya et al., 2005). For opiate dependence psychosocial interventions have been investigated in addition to pharmacological treatment (detoxification with methadone or buprenorphine) in a Cochrane overview, with four different psychosocial approaches (behavioural, counselling, family therapy, CM). Any of those treatments were effective in terms of treatment completion, compliance and follow-up results (Amato et al., 2007).

*Fact sheet 17 - Psychosocial interventions in general*

<i>Key points</i>	<i>Strength of evidence</i>
Higher intensity of treatment does not necessarily lead to better outcome	**
Psychosocial interventions in addition to pharmacological treatment improve treatment outcomes in opiate detoxification	****
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

## **9.2.1 Cognitive-Behavioural Therapy (CBT)**

### *Introduction*

Cognitive-Behavioural Therapy as a structured psychosocial intervention aims at modifying cognition, behaviour, beliefs. Usually some kind of skills training and practice to deal with craving is involved, as well as monitoring high-risk situations for relapse. There can also be the focus on relapse prevention, by training the drug users to develop skills on avoiding high-risk situations and to cope with such situations. Some kind of cognitive-behavioural interventions are used in many therapy settings in Europe. They might be modified and used in different approaches.

Except for the review by Rigter et al. (2004) there are no studies from the EU on evidence of the effectiveness of CBT included in this report, so all research in this chapter comes from the USA and Australia.

### *Summarised results*

CBT has especially good outcomes in the long-term view and for different patient groups and especially for those with more severe dependence symptoms or co-morbid mental illness. It has been conducted for cocaine dependence in a number of studies with good results, and also for other substances.

### *Detailed results*

CBT is of the most common and best evaluated methods for treating cocaine dependence in the USA (UNODC, 2002). CBT also seems to have long-term effects with respect to decrease of cocaine use after leaving treatment (Kleber et al., 2006). Compared with no treatment in the control group, CBT showed better outcomes (UNODC, 2002). CBT appears to be especially effective in patients with more severe dependence or co-morbid mental illness (Kleber et al., 2006). CBT seems to be more effective on long-term abstinence than most others psychosocial interventions (Gowing et al., 2001). CBT shows some usefulness, especially for moderation of use, but research outcomes are inconclusive (Rigter et al., 2004). Homework compliance within the CBT programme for cocaine dependence was significantly linked with better retention and reduction of use, also in quantity and quality of coping skills (Carroll et al., 2005; Gonzalez et al., 2006). Four RCTs compared CBT with the twelve steps or similar programmes and considered CBT superior especially concerning moderation of use (Rigter et al., 2004). In one Australian study on CBT with amphetamine users, the authors reported improvements in somatic symptoms, anxiety, depression and in amphetamine refusal self-efficacy (Feeney et al., 2006). Concerning the intensity of CBT, one trial found no difference: outcomes of CBT were similar with the intervention given once or twice a week or every fortnight (Rigter et al., 2004), while another RCT on brief cognitive behavioural interventions for amphetamine users found that the number of treatment sessions had a significant effect on the level of depression, and also abstinence rates were better in those attending at least twice (Baker et al., 2005). CBT has greater benefits than less intensive approaches under controlled conditions (Kleber et al., 2006), and seems to be at least as effective as manual-guided disease-model approaches. One RCT on cannabis dependent users, who were not in treatment before, compared one session of CBT with six sessions of CBT and a control group with no treatment. The group with six sessions had higher abstinence rates than those with one session (15% compared to 5%), both had less severe symptoms of dependence than the control group after 7-8 months (on average) and those with 6 sessions had the greatest reduction on the daily dose consumed compared with the other two groups (Rigter et al., 2004). CBT has been compared to group sessions for cannabis users, and there was no difference between the two groups after one year, concerning abstinence and reduction

of use: 17% abstinent and 19% had reduced the use of cannabis (Rigter et al., 2004). Another RCT on cannabis compared 14 CBT sessions with two sessions of Motivational enhancement and had a control group with no treatment. After four months the two treatment groups had better outcomes than the control group concerning moderation of use and symptoms of dependency. Also after 16 months the two treatment groups were equally effective with 25% being abstinent (Kleber et al., 2006; Rigter et al., 2004). In order to increase treatment adherence in heroin dependent patients in naltrexone treatment a Behavioural Naltrexone Therapy was conducted in one RCT. It was more successful than a control group in standard treatment, but still had substantial drop-out and rather poor retention at 6 months (Nunes et al., 2006). Other variables like crime, health and social functioning did not differ between the treatment and control group, reduction in amphetamine use was found in both groups (Baker et al., 2005).

One RCT on substance use disorders with psychotic disorders compared standard treatment with MI/CBT intervention for psychotic patients with alcohol, cannabis and/or amphetamine problematic use (Baker et al., 2006). There were no differences in substance use at 12-month except for a small one in amphetamine use, but there was a short-term improvement in depression and also in cannabis use and effects on general functioning for the MI/CBT group (Baker et al., 2006). According to one study among mostly homeless and mentally disordered crack smokers, CBT had better outcomes than a 12-step programme and CA participation, but overall there was a high dropout rate (Rigter et al., 2004; UNODC, 2002).

One special form of behavioural treatment especially for those with severe mental comorbidity was studied in a randomized trial on drug dependent (cocaine, heroin or cannabis) and mentally ill patients. The Behavioural Treatment for Substance Abuse in Severe and Persistent Mental Illness (BTSAS) was compared with Supportive Treatment for Addiction Recovery (STAR) as a control condition; both were conducted twice a week for six months. The BTSAS programme was significantly more effective in clean urine samples, attendance, treatment retention rate and attendance at sessions (Bellack et al., 2006).

One RCT investigated the so-called Matrix Model, a manualized behavioural approach,

in the treatment of methamphetamine dependence, and found it to be efficacious although over time the effects did not differ anymore from the control group (Rawson et al., 2004).

Brief skills interventions led to shorter and less severe relapses than “attention placebo”, both conditions having been combined with 12-step-principles and social learning principles (UNODC, 2002).

Four studies on CBT did not find success in relapse prevention for cocaine use (Rigter et al., 2004). A comparison between CBT and interpersonal psychotherapy showed that CBT had more treatment completers and longer abstinence after treatment (UNODC, 2002), these results being especially significant with severe cocaine users (UNODC, 2002).

A manual-guided Spiritual Self Scheme therapy, a form of behavioural treatment, was studied in a Stage I study for drug dependence. This integrates a cognitive model of self with a Buddhist framework suitable for all faith backgrounds (Avants et al., 2005). There was evidence for a shift in self-scheme, and this shift (from ‘addict self’ to ‘spiritual self’) was correlated with change in drug use (Avants et al., 2005).

*Fact sheet 18 - Cognitive-Behavioural Therapies*

<i>Key points</i>	<i>Strength of evidence</i>
Cognitive-behavioural therapy (CBT) is more effective at moderating cocaine use than 12-step approaches	****
Homework compliance in a CBT treatment improves outcomes	**
The effects of cognitive-behavioural interventions for cocaine dependence may be more durable than other psychotherapies	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

**9.2.2 Motivational Interviewing (MI)**

### *Introduction*

This intervention is based on cognitive-behavioural principles and was developed by Miller and Rollnick (1991). MI does focus on enhancing motivation to change problematic behaviour and uses methods like developing a feeling for discrepancies, expressing empathy, support self-efficacy. It is often used as a brief intervention.

Eightteen studies were included in this chapter. Apart from the basic reports, this leaves the following picture of research: Four RCTs from UK, one RCT from Spain, the rest comes from outside Europe.

### *Summarised results*

In substance-unspecific treatment, “motivational enhancement“ has been examined in a number of research studies. In general good results were found with respect to reinforcing the willingness to undergo and continue interventions (Carroll, Ball et al., 2006) and the willingness for abstinence or moderate use (Rigter et al., 2004). Motivational enhancement has especially good outcomes for patients with lower initial motivation than for those with higher initial motivation (Rohsenow et al., 2004) and at early stages of treatment (Gossop, 2006). Also for cannabis use positive results for MI have been found, i.e. greater reduction in use and use-related problems (Gossop, 2006; UNODC, 2002).

MI seems to be effective for improving retention in heroin users in a drug-free treatment programme (Secades-Villa et al., 2004). A comparison between standard assessment and enhanced assessment plus MI for drug users found the latter group to be more likely to attend further treatment (Gossop, 2006).

A controlled study from Australia on heroin users in methadone maintenance treatment showed Motivational Interviewing to lead to less drug use, later relapse, longer stay in treatment (UNODC, 2002).

A US “Marijuana Treatment Project” compared two groups: The first had two motivational enhancement sessions, the second had nine sessions consisting of motivational enhancement, CBT and case management. A control group consisted of a no treatment group: those on the waiting lists. Both treatment groups reduced the days

of use, and nine sessions had better results than two sessions. Also the number of symptoms of cannabis dependence and the number of problems with cannabis were reduced (Rigter et al., 2004), but the second group did not do better regarding coping-skills as it was expected (Litt et al., 2005).

Even a one-session MI intervention has some beneficial effects on drug use among young people, mainly on moderation of use and not cessation after three months (McCambridge et al., 2004), but effects wore off at 12-month follow-up (McCambridge & Strang, 2005). A brief motivational intervention for cocaine and heroin users tested abstinence at 3- and 6-month follow-up, and found better results for the treatment group, for both cocaine and heroin use (Bernstein et al., 2005). A pilot trial on a single MI session for reducing crack cocaine use in MMT patients found some impact on the crack use and significant reduction of heroin use in the sample (Mitcheson et al., 2007). A brief MI intervention for young methamphetamine dependent patients was more successful than the psychoeducation control group although MA use decreased in both groups only on the short-term scale (Srisurapanont et al., 2007). A multi-site study with 450 cannabis-dependent patients compared a delayed treatment control with a two-session motivational approach and with a nine-session combined motivational and coping skills approach. The two latter interventions had greater reductions in cannabis use than the delayed treatment, both at 4 month and 15 month follow-up (Kleber et al., 2006, 159). The combination of brief MI intervention with psychophysiological personalized feedback was effective in one pilot RCT (Stotts et al., 2007). Brief Motivational Psycho-educational Therapy (BMPT) improved motivation to undergo treatment, especially for women (Haro et al., 2006).

As a low-threshold intervention in a group setting it can be helpful to start and maintain participation in treatment, especially for patients with more severe dependence (Rosenblum et al., 2005). A randomized study found greater reduction in use and greater likeliness of abstinence for amphetamine dependence than for the control group with a self-help booklet (Gossop, 2006). Drug users, who were court-ordered to undergo treatment, were more likely to attend and complete treatment with MI than without (Gossop, 2006). Also for special subgroups like comorbid patients MI showed effectiveness. A two-session MI and the control group with standard psychiatric

interview for comorbid patients (psychosis and drug use disorders) did find improved treatment outcomes for both groups; differences were significant when looking at different kind of drugs used: for cocaine users the MI intervention had better treatment outcomes, but for the cannabis users the SI (standard psychiatric interview) group had better outcomes (Martino et al., 2006). A study on depressive cocaine users found fewer post-treatment psychiatric problems and more patients remaining in treatment for MI intervention compared to “treatment as usual” (Gossop, 2006).

But not all research was in favour of MI interventions. One study did not find any effects of a brief MI intervention, which was applied in addition to standard treatment (Gossop, 2006). And another randomized trial also did not find differences in abstinence of a brief motivational intervention for young stimulant and alcohol users compared to a control group who received written health risk information (Marsden et al., 2006).

### *Fact Sheet 19 - Motivational Interviewing*

<i>Key points</i>	<i>Strength of evidence</i>
Motivational Interviewing (MI) is effective to enhance motivation, retention rate, and reduction of use	***
MI can be helpful even as a single-session intervention	**
****	Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
***	Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
**	Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
*	Expert opinion
?	Insufficient evidence/unclear/unable to assess

### **9.2.3 Community Reinforcement approach (CRA)**

#### *Introduction*

The Community Reinforcement Approach (CRA) uses a range of methods and is based mainly on cognitive-behavioural principles. Its concept includes that environmental contingencies (like family, peers, work, leisure time involvement) can play a helpful role in encouraging or discouraging drug use. CRA is often combined with Contingency Management or similar incentive programmes.

Of the four studies included in this chapter, one was from outside Europe.

#### *Summarised results*

A meta-analysis on CRA found strong evidence that CRA with incentives is more effective than usual care or CRA without incentives for the treatment of cocaine dependence. The same found limited evidence that CRA with incentives is more effective in an opioid detoxification programme and more effective than a methadone maintenance programme (Centre for Reviews and Dissemination, 2007b). For cocaine treatment the TRIMBOS report found reasonable indications of evidence for “a change of lifestyle with CRA“ (Rigter et al., 2004). Two RCTs showed better outcomes for CRA than for customary care (Rigter et al., 2004). Two other RCTs found better outcome for CRA with compared to without rewards (vouchers) (Rigter et al., 2004). Another RCT compared the impact of different values of the vouchers during a CRA treatment; the high-value group (maximal value \$1995/12 weeks) had greater and longer abstinence than the low-value group (maximal \$499/12 weeks), but this relationship weakened over time (Higgins et al., 2007).

First reports on CRAFT (CRA Family Training) are promising for drug users in general, without substance-specific effects (Rigter et al., 2004). One study on Adolescent Community Reinforcement Approach (ACRA) compared the intervention as an aftercare programme with normal aftercare, and found reduced days of use and a higher rate of abstinence after one year in the ACRA group (Rigter et al., 2004).

One study compared CBT, rewards, and the combination of both, where all three seemed to be successful in reducing the use, but without significant differences (Rigter

et al., 2004).

Some studies compared CRA with standard drug counselling with referral to AA, randomized and controlled, and found better outcomes regarding abstinence, duration of abstinence, personal functioning improvements and staying in treatment, finding that the different components of the CRA contribute to the overall outcomes (UNODC, 2002).

### *Fact sheet 20 - Community Reinforcement Approach*

<i>Key point</i>	<i>Strength of evidence</i>
Community Reinforcement Approach (CRA) in combination with vouchers as positive reinforcers can reduce cocaine use	***
****	Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
***	Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
**	Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
*	Expert opinion
?	Insufficient evidence/unclear/unable to assess

## **9.2.4 Contingency management (CM)**

### *Introduction*

Contingency management is another form of behavioural approach. The principle of this approach is that “rewards” are given to those who have negative urine samples to reinforce abstinent behaviour. Those incentives can be implemented in the form of vouchers or prizes, and also privileges in the treatment setting. CM is usually embedded in a treatment like CRA or structured drug counselling.

Thirtyone studies were included for this chapter, four of them were conducted by European researchers, two of them reviews and two RCTs.

### *Summarised results*

As Contingency Management is hardly conducted in Europe, research on the effectiveness comes almost exclusively from the USA. CM was found to be effective in

reducing drug use and treatment retention, but these results tend to be short-term only.

### *Detailed results*

A meta-analysis found CM to be effective in reducing drug use in methadone treatment (Centre for Reviews and Dissemination, 2007a). Generally CM results in good treatment outcomes like retention and abstinence, but results tend to be short-lived compared to CBT interventions (Rigter et al., 2004). Not all research found positive outcomes of voucher-based interventions (Gowing et al., 2001).

It has been found to be effective in a number of studies, in different samples and settings: cocaine users in methadone maintenance, pregnant women, homeless people, freebase using people (Kleber et al., 2006).

The motivation to change substance use was studied in one randomized trial, where patients were randomized to either standard treatment or standard treatment plus CM, and motivation was measured with the stages of change model URICA 3 months later. The CM group had longer duration of abstinence, but the groups did not differ concerning their motivation to change substance use (Ledgerwood et al., 2006).

Apart from longer duration of abstinence CM also seems to improve Quality of life, measured with the Quality of Life Inventory (QOLI) in cocaine users (Petry et al., 2007). For methamphetamine users CM also had good results (Roll, Petry et al., 2006). Contingency reinforcement therapy showed promising results in abstinent cocaine users; compared to interpersonal problem-solving a treatment package combined with voucher payments had better outcomes in the one study, when vouchers were delivered immediately after negative urine samples, than in a second study where vouchers were delivered weekly with a small value in the beginning (UNODC, 2002). In the first study, half of the respondents completed treatment and achieved one-month abstinence in their cocaine use, whereas in the second study nobody achieved this goal (UNODC, 2002). Reinforcement treatment is more successful when the reinforcements have increasing magnitude for consecutive abstinence and reset after positive urinalysis (Roll et al., 2006). In order to link opioid dependent patients from hospital treatment to further drug treatment vouchers for free methadone were compared with case management. Both interventions had higher percentage of enrolled patients at three months and at six months, and are therefore more helpful than standard treatment in

linking drug dependents to treatment system (Sorensen et al., 2005).

The effects of CM have been investigated for methadone maintenance patients in a number of studies. CM attendance resulted in longer periods of abstinence than a performance feedback control group, but this difference disappeared at the end of the 24-weeks intervention (Schottenfeld et al., 2005). CM condition in connection with standard outpatient treatment resulted in more and longer abstinence among cocaine and amphetamine users, and also retention was better than in the control group (Petry et al., 2005). Concerning the possible amount of prizes, for more severe dependent patients the outcomes on abstinence were magnitude-dependent, whereas with those patients who started treatment already with negative urine samples, the level of prizes did not effect abstinence during treatment and was here the same as in the control group (Petry et al., 2004). Combined with group therapy in methadone clinic, the prize-based CM patients had more cocaine-negative urine samples and attended more group sessions than the control group with standard treatment (Petry et al., 2005). Brief voucher-based reinforcement for cocaine users in a methadone maintenance patient sample was effective in the short-term (Sigmon et al., 2004). On the other hand, a long-term reinforcement for cocaine use in methadone patients was investigated as well in a 52-weeks intervention, and vouchers were highly effective in decreasing cocaine use (Silverman et al., 2004).

CM showed better treatment retention and drug-free urine in cannabis users and even more so in combination with Motivational Enhancement and CBT, while CBT in combination with Motivational Enhancement (MET) had continued reduction in use through a six-month follow-up (Carroll et al., 2006).

Directly compared with CBT, CM treatment resulted in better retention rates and lower stimulant use during treatment whereas CBT had longer-term outcomes, and no additive effect for the combination of both interventions was found (Rawson et al., 2006). This was shown as well for cocaine using methadone patients (Rowan-Szal et al., 2005). For homeless cocaine users in a shelter a CM intervention was effective on reducing cocaine use (Tracy et al., 2007). A clinical trial on adult cannabis dependent persons found vouchers to maintain abstinence during treatment, whereas CBT enhanced the post-treatment abstinence maintenance (Budney et al., 2006).

A comparison of contingent voucher treatment with a motivated stepped care (MSC)

found similar outcome on negative urine samples for both groups, both significantly higher than Standard Care, and a still higher proportion for the combined therapy of vouchers and MSC. Regarding retention the voucher group was superior while the stepped-based care had better adherence to counselling sessions (Brooner et al., 2007). Different approaches and deliveries of contingencies are compared in a number of studies. The effectiveness of prize-based incentives in stimulant dependent patients was studied, and different treatment histories and experiences were taken into account. The effectiveness of incentives did not differ between the experienced and inexperienced patients (Killeen et al., 2007). Alessi et al. conducted a two-phase crossover design study on prize-based contingency management, where standard treatment was compared with CM condition, which consisted of a 12-week standard treatment plus the possibility of winning prizes for negative urine samples and treatment attendance (Alessi et al., 2007). Outcome was measured in weeks retained in treatment and duration of abstinence (at 6 and 9 month follow-up). Weeks retained did not differ between groups but the longest duration of sustained abstinence (LDA) was significantly higher in the CM condition (Alessi et al., 2007). Another form of CM is to reinforce goal-related activities instead of reinforcing abstinence by negative urinalysis, but the latter group had better outcomes (Petry et al., 2006). On the other hand both vouchers and prizes as a contingent treatment have similar outcomes on treatment (Petry et al., 2005).

Also housing has been used as contingencies for homeless substance users: An intensive behavioural treatment for homeless cocaine-dependent people with three groups: treatment only, treatment plus housing for six months and treatment plus housing as a contingency for drug abstinence. The two housing groups had better outcomes concerning stable housing and employment (Kertesz et al., 2007). Another study on contingent housing and work also found more abstinent patients who also stayed abstinent for a longer time and had fewer relapses than the control group (Milby et al., 2004).

A comparison between voucher and buprenorphine contingency and standard treatment without contingencies for heroin-dependent patients with cocaine use showed no difference in the retention rate between the groups, but the buprenorphine group had more weeks of continued abstinence from heroin and cocaine (Gross et al., 2006).

Another study found that combining CM with bupropion had better outcome on cocaine use in methadone patients than bupropion alone (Poling et al., 2006).

Guidelines for voucher purchases did not seem to be a critical aspect of voucher programmes, as no differences in the kind of purchases were found (Pantalon, et al., 2004).

Those patients who participate in family activities during their CM treatment remained longer in treatment, were abstinent for more weeks and reported greater reduction in family conflicts than those who did not participate in family activities (Lewis et al., 2005).

Concerning cocaine users with schizophrenia in a small-scale study CM reduced cocaine use in all three individuals (Roll et al., 2004).

*Fact sheet 21 - Contingency Management*

<b>Key points</b>	<b>Strength of evidence</b>
Vouchers and prizes as reinforcers show effectiveness on the short-term to reduce cocaine use	***
The magnitude and immediacy of reinforcement may be critical to the efficacy of vouchers	?
Contingency management in conjunction with pharmacotherapy may increase treatment retention and compliance for opiate dependence	***

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

### **9.2.5 Cue exposure therapy (CET)**

#### *Introduction*

Cue exposure is based on learning theory principles. It consists of repeated exposure to stimuli or cues associated with drug use (e.g. sight of a syringe for intravenous drug users) and aims at controlling or changing responses to these cues.

One RCT and two reviews included in this chapter were from EU countries, and two RCTs from outside the EU.

#### *Results*

Until now this intervention has been mainly done in laboratories. The little research is not considered to be promising (EMCDDA, 2007; Rigter et al., 2004). One RCT from the Netherlands on cue exposure therapy in an inpatient setting for opiate dependence even found significantly higher dropout and relapse rates for the treatment group (Marissen et al., 2007), so it does not seem to be an intervention that can be advisable presently. There were no gender differences on the outcomes of cue-exposure for treatment retention and cocaine use, although males were more successful at establishing control (Sterling et al., 2004).

Aversion therapy also works with cues, and one experimental controlled comparative study on crack cocaine craving compared three different aversion therapies: chemical, covert sensitization and faradic; results indicate the usefulness of aversion therapy in order to reduce craving (Bordnick et al., 2004).

*Fact sheet 22 - Cue exposure*

<i>Key point</i>	<i>Strength of evidence</i>
Cue exposure for methadone maintenance treatment leads to higher drop-out and relapse	**

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

## 9.2.6 Psychodynamic and interpersonal therapies

### *Introduction*

Psychodynamic interventions originate in the psychoanalytical approach and work on unconscious conflicts, relationships and problematic situation. The therapist-patient interaction and relationship is an important feature in this approach. Other Interpersonal therapies focus on interpersonal relationships and issues as well, and aim at resolving interpersonal problems.

Apart from the review by Rigter et al. (2004), the other four studies come from outside the EU.

### *Results*

No RCTs have been conducted for treatment using psychodynamic or interpersonal therapy, but a case series on individual psychodynamic psychotherapy and some reports on group psychodynamic therapy showed some efficacy. One clinical study on the comparison between interpersonal psychotherapy (IPT) and CBT found CBT to be superior (Kleber et al., 2006). Supportive-expressive therapy, a type of psychodynamic therapy, was one of four interventions studied in the NIDA collaborative cocaine treatment study, but seemed to be less effective than individual plus group drug counselling in decreasing cocaine use (Kleber et al., 2006).

The TRIMBOS report stated that the little existing research on psychoanalytical treatment showed no evidence for an effect in treating cocaine dependence (Rigter et al., 2004). A comparison of Relational Psychotherapy Mothers' Group (RPMG) with Recovery Training for substance dependent mothers in a methadone clinic found better outcomes for the first group concerning child maltreatment, cocaine use, and greater improvement for the children of those mothers. But at six months follow-up these differences between the two groups were not present any longer (Luthar et al., 2007).

A Dual Focus Schema Therapy (DFST) was conducted for personality disordered opioid dependent persons in methadone maintenance treatment. Compared to the 12-step control group the treatment group had more rapid decreases in the frequency of use, on the other hand the control group had better reductions of dysphoric affect. There were

no group differences for retention, utilization, reduction in psychiatric symptoms and other severity indicators (Ball, 2007).

Ketamine-assisted psychotherapy was tested as a single-session intervention and as a three-session intervention for heroin dependence and showed a higher rate of abstinence for the second group while both groups had better outcomes than the control group with standard treatment (Krupitsky et al., 2007).

### *Fact sheet 23 - Psychoanalysis*

<i>Key point</i>	<i>Strength of evidence</i>
Psychoanalysis seems not to be effective in treating cocaine dependency	*
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

## **9.2.7 Counselling**

### *Introduction*

Counselling can be defined as a client-centred intervention to help the individual to overcome problems (EMCDDA, 2007). In the US standard treatment is often based on the 12-step principle, both for individual and group counselling. However, in Europe counselling is not necessarily based on the 12-step principle.

Of the nine studies included for this chapter, three reviews originate in the EU.

### *Results*

Counselling seems to be useful for the moderation of use, as one RCT stated (Rigter et al., 2004, 67). One study found less frequent cocaine use after regular abstinence-oriented counselling (UNODC, 2002), another study compared intensive counselling in a structured day programme with four-weeks inpatient treatment of cocaine users, and found improvements for both groups (UNODC, 2002).

For the treatment of cannabis dependence counselling approaches seem to be beneficial according to a Cochrane systematic Review, as well as CBT and CM approaches, yet with low abstinence rates for all of them, so the overall conclusion of this review is inconclusive and highlights the fact that treatment of cannabis dependence seems difficult (Denis et al., 2007).

An Australian RCT studied the effect of a postnatal home visit programme for drug-using (heroin, amphetamine, cannabis, benzodiazepines) mothers. Concerning drug use there was no difference between the treatment group and the control group (no visits), both reduced the drug use during pregnancy but drug use increased again by six-month post-partum (Bartu et al., 2006).

A brief counselling approach – Medical Management – was conducted as a preliminary study in methadone maintenance treatment and showed effects on drug use, as well as drug counselling (Pantaloni et al., 2004).

A further study showed that the frequency of attendance is positively related to lower risk of relapse in a six-month follow-up (UNODC, 2002). Also counselling and psycho-education with respect to reducing the risk of HIV and other infections has shown effectiveness (Rigter et al., 2004).

Telephone-based continuing care following outpatient treatment for cocaine and/or alcohol users produced the same abstinence-related outcomes than the control groups with either face-to-face relapse prevention or standard 12-step group counselling (McKay et al., 2004), but seemed to be somehow effective as an step-down treatment for most patients (McKay et al., 2005).

The effect of either 12-step facilitation or Acceptance and Commitment Therapy (a behavioural oriented, spiritual approach) was investigated for patients in methadone maintenance treatment and compared to no psychosocial treatment in addition to the methadone treatment. Both conditions had better outcome than the methadone only control group concerning drug use (Hayes et al., 2004).

### **9.2.8 Group counselling**

Two of the for studies in this chapter come from EU countries.

One large study by the NIDA on cocaine dependence compared four treatment settings:

group counselling alone, group counselling with individual counselling, group counselling with cognitive psychotherapy, group counselling with supportive expressive psychotherapy (UNODC, 2002). Concerning reductions of use, the group and individual counselling together was the most successful, the other three groups were similar in outcome (UNODC, 2002). None of these treatments reduced the craving for cocaine, and the Trimbos research group sees it as problematic that there was a high dropout rate and also that not all the care providers were very experienced (Rigter et al., 2004). One RCT on a manualized group intervention for comorbid (psychosis) drug users found substance reduction in the treatment condition (James et al., 2004).

Also professional treatment uses 12-step principles in group and individual drug counselling. Intensive sessions (36 individual and 24 group sessions over 24 weeks) have shown significant effects in reducing cocaine use, the greatest effects for 12-step based individual drug counselling plus group drug counselling, compared to supportive-expressive therapy, cognitive therapy and drug counselling alone (Kleber et al., 2006). 12-step-oriented standard group counselling seems to be similarly effective than relapse prevention aftercare (Kleber et al., 2006). One study of adolescents mild cannabis dependence focused on a manual-guided, group-based treatment and found reduced use at 6 months and also sustained at 12 months (Kleber et al., 2006).

*Fact sheet 24 - Counselling*

<i>Key points</i>	<i>Strength of evidence</i>
Structured counselling can lead to moderation of cannabis and cocaine use	**
Counselling can be effective in different settings and combinations in reducing drug use and enhance treatment retention	*

- \*\*\*\* Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias
- \*\*\* Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias
- \*\* Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding
- \* Expert opinion
- ? Insufficient evidence/unclear/unable to assess

## 9.2.9 Twelve-step and other self-help

### *Introduction*

The 12-step approach is based on the principles of Alcohol Anonymous and has been adapted for other groups as well. 12-step interventions are one of the most common approaches in the USA, and also rather common in Europe in different. Of the three studies included, one was a report from The EU (UNODC 2002), the other two were from outside Europe.

### *Results*

Participation in 12-step oriented self-help groups seems to reduce cocaine use, the higher the frequency of participation, the greater the effect (Kleber et al., 2006). Also active participation in self-help groups predicted less cocaine use and seems more important than attendance alone (Weiss et al., 2005).

TSF (twelve-step fellowship) showed significantly greater effects in alcohol and cocaine users than clinical management for reducing cocaine use, comparable to the effects of CBT (Kleber et al., 2006).

A post-treatment participation in 12-step self-help had better outcome in a group of cocaine- or alcohol-dependent patients in a day hospital rehabilitation programme (UNODC, 2002).

### *Fact sheet 25 - Twelve-step*

<i>Key point</i>	<i>Strength of evidence</i>
Twelve-step groups can be effective in maintaining abstinence	*
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

## 9.2.10 Therapeutic Communities (TC) and other inpatient treatment

### *Introduction*

Therapeutic communities (TC) have an inpatient treatment approach originated in the USA. They are based on democratic and de-institutionalised principles and aim at abstinence, often also at smoking cessation. Two systematic reviews were included, one of them from the EU.

### *Results*

A Cochrane systematic review on therapeutic communities included seven RCT's. There is only limited evidence that TC is significantly superior to other inpatient treatment; compared to community residence no differences were found concerning treatment completion, compared to day TC the residential group was significantly better in attrition and abstinence rates, and two of the RCTs investigated TCs in prison (see WP 4) (Smith et al., 2007).

The systematic review by Berglund et al. did not find significant differences between inpatient and structured outpatient care (Berglund et al., 2003).

### *Fact sheet 26 - Therapeutic Communities*

<i>Key point</i>	<i>Strength of evidence</i>
TC are effective in maintaining abstinence, but not more than other inpatient treatment approaches.	**
**** Strong evidence: High quality meta-analyses, systematic reviews including one or more RCT with a very low risk of bias, more than one RCT a very low risk of bias	
*** Moderate evidence: Limited systematic reviews, one RCT with a low risk of bias or more RCTs with a high risk of bias	
** Some evidence: one RCT limited by research factors or more case-control or cohort studies with a high risk of confounding	
* Expert opinion	
? Insufficient evidence/unclear/unable to assess	

### **9.2.11 Other group and family therapies**

One RCT and two reports come from EU countries, three RCTs from the US.

For opiate dependent patients in methadone maintenance treatment a group psychotherapy showed less drug use than the MMT group only, therefore additional psychotherapy is recommended for methadone maintenance treatment to improve treatment outcomes (Scherbaum et al., 2005).

Five RCTs on multidimensional family therapy (MDFT) with young cannabis users who often had other problems as well found favourable results on frequency of use and family functioning, compared to CBT and other control interventions (Rigter et al., 2004, 47-48).

A rather special form of treatment has been tried in a small initial randomized pilot study: Mindfulness meditation plus standard treatment was compared with standard treatment only on substance-abusing patients (Alterman et al., 2004). There were no differences found in urine results or psychological health, but the ASI composite scores indicated greater improvement in medical problems for the meditation group (Alterman et al., 2004). One preliminary study on spiritually-focused group therapy plus acupuncture found longer abstinence from heroin and cocaine than in the acupuncture only group (Margolin et al., 2005).

The JEWEL project (Jewellery Education for Women Empowering their Lives) was an economic empowerment and HIV prevention intervention for illicit drug using women with prostitution involvement. Compared to pre-treatment there were reductions in daily drug use and number of sex partners (Sherman et al., 2006).

One study found better outcomes regarding cocaine use for an aftercare programme with a combination of group therapy and structured relapse prevention than for group therapy alone (after intensive outpatient treatment for both groups) (UNODC, 2002, 12).

## **10. Cost-effectiveness of different drug treatment types represented in Europe**

### *Introduction*

The following gives a short overview of cost-effectiveness of different types of treatment for illegal drugs represented in Europe. It started out as an overview of different drug treatment types in Europe, but it some became evident, that there is a scarcity of such studies in Europe, and that there are no a priori reasons to restrict oneself to Europe. Thus, we extended the search of studies to all established market economies. The implications of this decision are discussed below.

As indicated above, there is a scarcity of studies on economic costs and outcomes of drug treatment in Europe (e.g. Prieto, 2007). Considering only studies with high scientific quality, this scarcity becomes even more salient (e.g. studies with good quality from Europe in the Belenko et al., 2005 overview). Studies on cost-effectiveness (CE) make no exception to this rule. Given the data scarcity described, this fact sheet restricts itself to the evaluation of cost-effectiveness for therapies which are practiced in Europe, but based on reviews of all studies, no matter, where they originated (see Busch et al., 2007, who pursued a similar strategy when evaluating studies of effectiveness and CE of maintenance for implications for Germany). Given this definition of the objective, there are a number of extensive reviews of the field, in part building on each other, which served as basis for our review. These reviews are listed in the following: Belenko et al., 2005; Busch et al., 2007; Connock et al., 2007; Harwood et al., 2002; Stevens et al., 2006. The review of Belenko et al. (2007) is the most recent comprehensive review, and thus has served as the main part of departure. This review builds on, but extends the work of Harwood et al. (2002). Given that this review is fairly recent and quite comprehensive, rather than re-iterating its details, we will only report the main conclusions, but supplement these with specific European studies, and reviews of more recent date (especially the Connock et al., 2007 review).

Most of the reviews listed have a wider scope in the sense, that they include other types of economic analysis as well, such as cost studies, cost-utility or cost-benefit studies. For the purpose of this review, we included the parts on cost-effectiveness only, however (for potential limitations of this strategy see Sindelair et al., 2004).

### *Summarised results and conclusion*

Overall, maintenance therapy for opioid dependence, and in this category especially MMT received most empirical support as for cost-effectiveness using various outcomes (Belenko et al., 2005; Connock et al., 2007; Harwood et al., 2002; Stevens et al., 2006). In addition, MMT as drug treatment has found to be cost-effective compared to different other health care interventions (Chisholm et al., 2006; Jamison et al., 2006; Stevens et al., 2006). Finally, most sorts of drug treatment interventions showed higher monetary benefits than costs in economic cost-benefit analyses, mainly by reducing criminal behaviour (see Belenko et al., 2005; Godfrey et al., 2004, for one of the rare European studies; Harwood et al., 2002; Stevens et al., 2006). Thus, drug treatments, and especially maintenance treatments for opioid dependence, seem to be not only effective, but also make economic sense. More studies and data are needed, however, especially data taking into account the European context, and data on treatment options other than maintenance therapy.

### *Fact sheet 26 - Cost-effectiveness of drug treatment types represented in Europe*

<b>Key point</b>	<b>Evidence</b>
Drug treatments, especially maintenance treatments for opioid dependence, is cost-effective	Reviews

### *Detailed results*

The following highlights emerge from the above stated search and extraction strategy. As indicated above, the most comprehensive overview of Belenko et al. (2005)<sup>23</sup> served as the point of departure here:

- Across 99 programs, the costs per abstinent case (\$6,300/€5,072) and per reduced drug use case (\$2,400/€1,932) were lowest for outpatient clients, and highest for residential (\$14,900/€11,995 and \$6,700/€5,394) and inpatient (\$15,600/€12,558 and \$6,100/€4,911) clients (Mojtabai & Zivin, 2003).

<sup>23</sup> Belenko et al., 2005 expressed all figures (after inflation) in 2004 US \$. However, Euros (€) are inserted beside US \$, using a conversion rate of 0.805 for 2004

Outpatient programs examined included drug free outpatient programs and outpatient methadone and/or detox clients, with outpatient drug-free programs being the most cost-effective. No separation between use of methadone as maintenance agent or as pharmaceutical for detoxification was made.

- Enhanced outpatient services, which provide additional services or counseling hours and are more expensive, were more cost effective than standard services. In other words, the extra cost of enhanced services yielded a lower cost per unit improvement in outcomes (Jofre-Bonet & Sindelar, 2004; Sindelar et al., 2004; Zarkin et al., 2001a).
- In a randomized trial, the incremental cost effectiveness of methadone maintenance versus 180-day methadone detoxification was \$15,967/€12,853 per quality adjusted life-year of survival gained (Masson et al., 2004), well within the standard accepted threshold of \$50,000/€40,250 per life-year gained.
- A recent review (Connock et al., 2007) found that both flexible-dose methadone maintenance therapy (MMT) and buprenorphine maintenance therapy (BMT) are more clinically effective and more cost-effective than no drug therapy in dependent opiate users. In direct comparison, a flexible dosing strategy with MMT was found to be somewhat more effective in maintaining individuals in treatment than flexible-dose BMT and therefore associated with a slightly higher health gain and lower costs. However, this needs to be balanced by the possible risk of higher mortality of MMT and individual opiate-dependent users' preferences.
- Even though disulfiram increases slightly the cost of methadone treatment, its increase in effectiveness may be important enough to warrant its addition for treating cocaine dependence in methadone-maintained opiate addicts (Jofre-Bonet et al., 2004).
- Co-prescription of heroin is cost effective compared with treatment with methadone alone for chronic, treatment resistant heroin addicts. Co-prescription of heroin was associated with 0.058 more quality-adjusted life years (QALYs) per patient per year (95% confidence interval 0.016 to 0.099) and a mean saving of €12 793 (£8793, \$16 122) (€1083 to €25 229) per patient per year. The higher programme costs (€16 222; lower 95% confidence limit €15 084) were

compensated for by lower costs of law enforcement (- €4129; upper 95% confidence limit - €486) and damage to victims of crime (- €25 374; upper 95% confidence limit - €16 625). The results were robust. Completion of treatment was found to be essential; having participated in any abstinence treatment in the past was not.

- Several CEA studies of correctional treatment concluded that residential prison treatment was cost effective only if aftercare services were completed (Griffith et al., 1999; McCollister et al., 2003a, b; 2004). Griffith et al. (1999) found that cost effectiveness was greater for high-risk inmates who receive prison treatment plus aftercare.

## 11. Conclusion

Two of three included studies were conducted outside of Europe, mainly in the United States of America, but also in Australia.

1. Especially in the pharmacotherapy of psychostimulant- and cannabis-related disorders and crisis intervention and relapse prevention for opiate related disorders, as well in several psychosocial interventions like cognitive behavioural treatment, Motivational Interviewing and Contingency management, research from outside of Europe is predominant.
2. In other areas the contribution of research activities from European Union Member States is stronger, such as research on new agents for maintenance treatment for opiate related disorders.

Despite the heterogeneity of research data and varying evidence, several interventions for the treatment of opiate-, psychostimulants- and cannabis-dependence were found to be effective. For withdrawal and maintenance treatment of opiate dependence different pharmacological agents are available including full  $\mu$ -agonists (e.g. methadone), combined partial  $\mu$ -agonists /  $\kappa$ - antagonists (e.g. buprenorphine) and opioid antagonists (e.g. naloxone).

3. Methadone is an effective pharmacotherapeutic agent for opiate detoxification, but compared to the effectiveness of methadone in maintenance treatment, the efficacy of methadone using tapered doses for detoxification treatment is limited and especially the attrition rate in methadone detoxification treatment remains high, particularly in an outpatient setting.
4. There are some indications, that Buprenorphine as well as the combination of buprenorphine and naloxone have similar efficacy as tapering doses of methadone for the treatment of opioid detoxification with comparable effectiveness in improving withdrawal symptoms and in completing detoxification treatment and provides at least more effectiveness in withdrawal management compared to clonidine including fewer adverse effects.

5. The replacement of heroin by buprenorphine in tapered doses followed by the prescription of  $\alpha$ 2-adrenergic agonist (e.g. clonidine or lofexidine) to reduce withdrawal symptoms proved to be an effective strategy for detoxification of opioid addicts. Adrenergic agonists (clonidine and lofexidine) could be considered as an effective detoxification option especially for patients, who prefer non-opioid treatment for detoxification, but leads to more side effects and therefore to higher drop-out rates especially at an earlier stage of treatment. Lofexidine showed fewer side effects with similar clinical effectiveness in comparison to clonidine.
6. A recent RCT provides only little evidence to support dihydrocodeine (DHC) as a first line agent for opiate detoxification, and larger, well designed RCTs are needed to assess the efficacy of DHC for detoxification.
7. Methadone is the best-studied and most effective opioid agonist for maintenance treatment so far. Treatment outcome in methadone maintenance has been shown to improve substantially with increased dosages of methadone, whereas higher doses are associated with better treatment retention rates and lower rates of illicit opioid use. Daily methadone doses of 60mg/day or more were found to be most effective in methadone maintenance treatment. Adequate dosing is an important issue and avoids on the one hand unpleasant withdrawal symptoms, especially in the latter half of each inter-dosing interval, and on the other hand significant adverse effects. The combination with psychosocial treatment leads to a broader effectiveness, but even methadone maintenance treatment without adequate psychosocial care has shown to reduce heroin use and delinquency.
8. Maintenance treatment with buprenorphine alone or in combination with naloxone provides some advantages for the treatment of opioid dependence in comparison to methadone, e.g. a better safety profile at high doses, a lower abuse potential, the possibility of a less-than-daily administration and lower impairment in psychomotor and cognitive functioning. Similar to methadone, the efficacy of buprenorphine in maintenance treatment is dose related and higher doses of buprenorphine improve the treatment outcomes. Provided equal effective doses, buprenorphine appears to be at least as effective as methadone with regard to reduction of illicit opioid use and treatment retention, whereas

methadone maintenance in high doses is associated with higher rates of retention in treatment and better suppression of withdrawal symptoms than buprenorphine maintenance treatment.

9. Current findings shown, that heroin-assisted treatment is a valuable addition to the treatment repertoire, especially effective for people with opioid dependence who continue intravenous heroin use while on maintenance or who are not enrolled in treatment.
10. Codeine and slow-release morphines could also be additional options for the maintenance treatment of opioid dependents, provided that the first results will be confirmed in larger well designed RCTs.
11. There is some evidence, that naltrexone maintenance for relapse prevention is not be effective as a stand-alone treatment. Nevertheless, a promising strategy to improve treatment retention in broader range could be the combination of long-acting implantable naltrexone formulations and behavioural methods.
12. The pharmacological treatment of cocaine dependence frequently still includes the use of antidepressants, especially SSRIs, despite the low evidence level for their efficacy. More promising results are expected from topiramate and other antiepileptic drugs, and much hope is being placed in the development of the cocaine vaccine.
13. Similarly, different agents such as antidepressants, anticonvulsants, and antipsychotics were investigated for the treatment of cannabis dependence and for the prevention of cannabis reinstatement after abstinence, but each medication missing broader effectiveness. Recent findings suggest that the administration oral delta-9-tetrahydrocannabinol (THC) might be helpful in suppressing cannabis withdrawal, but further research is necessary.

Psychosocial interventions play an important role in the treatment of the different types of drug dependency. There is a wide range of different forms of interventions and not all of them have shown sufficient evidence of their effectiveness. New approaches are tried out and implemented, and others are used in modified versions, which makes it all together rather difficult to directly compare different interventions. The high drop-out rate can be problematic in some studies.

14. In the field of maintenance treatment, the addition of psychosocial interventions, especially behavioural approaches, are effective in terms of retention in treatment and reduction of illicit drug use.
15. For stimulant-dependency psychosocial treatment is especially important, as no effective pharmacological treatment approaches exist. Therefore a great number of psychosocial intervention studies are available especially on cocaine dependence. But most research in this field comes from the US and is not always transferable one to one to other countries, as the social context and also health system might be different. Psychosocial interventions for cannabis dependence have only rarely been investigated and concentrate mainly on young and adolescent users, often involving a family therapy type of intervention. Generally speaking, most psychosocial interventions are helpful in reduction of use, retention in treatment and social health development.
16. Voucher-based interventions are especially helpful on short-term outcomes, whereas behavioural approaches like CBT tend to be more long-lasting.
17. Methods of Motivational Interviewing (MI) have shown effectiveness particularly for those with initial low motivation and less severe dependency.
18. And cue exposure therapy seems to have contrary effects according to one RCT, where drop-out and relapse was higher for the cue exposure group.
19. There is some evidence for different types of counselling and 12-step approaches, especially when they are integrated in a structured programme. Altogether there is rather little research on special subgroups, particularly poly-drug users, as well as women, adolescents or those with co-morbid psychiatric disorders.

Due to a lack of studies on economic costs and outcomes of drug treatment in Europe, the results in the cost-effectiveness chapter are based mainly on reviews of all economic studies, no matter where they originated (mainly outside of Europe).

20. Most types of drug treatment interventions showed higher monetary benefits

than costs in economic cost-benefit analyses, mainly by reducing criminal behaviour.

21. Drug treatments, and especially maintenance treatment for opioid dependence, seem to be not only effective, but also make economic sense: Maintenance therapy in flexible doses with methadone or buprenorphine is more cost-effective than no drug therapy in dependent opiate users.
22. More studies and data are needed, however, especially data taking into account the European context, and data on treatment options other than maintenance therapy.

## **12. Recommendations and future research needs**

As the main research in drug treatment was carried out outside from Europe (mainly in United States and Australia), more studies are needed taking into account the European context, especially in the psychosocial interventions.

Methadone and buprenorphine (also in combination with naltrexone) are effective in detoxification and substitution treatment and should be therefore widely available for patients with opiate related disorders. As adequate dosing is a prerequisite for an effective treatment approach, further research is needed on the effectiveness and safety of high doses of methadone (> 100 mg) and buprenorphine (>16 mg). Future research should also focus the transition from methadone to buprenorphine, on withdrawal symptoms following cessation of buprenorphine in tapered doses and the optimum approach to withdrawal following long-term buprenorphine substitution treatment.

As adrenergic agonists lead to more side effects and higher drop-out rates compared to detoxification treatment with methadone and buprenorphine, clonidine and lofexidine should be considered mainly for patients, who prefer non-opioid treatment for detoxification. Due to the more frequent hypotensive side effects of the clonidine, lofexidine should be preferred in outpatient settings. Heroin-assisted treatment is a valuable addition to the existing treatment options, but should be, due to a higher risk of serious adverse events, applied under medical supervision. With regard to relapse prevention, some studies indicated, that naltrexone maintenance is not effective as a stand-alone treatment and should be, therefore, part of a broader treatment programme or should be reserved only for highly motivated patients living in a stable life situation. With regard to the pharmacological treatment of cannabis dependence, further research is needed on the effectiveness of the administration oral delta-9-tetrahydrocannabinol (THC) in suppressing cannabis withdrawal.

Research on the effectiveness of psychosocial interventions is especially scarce in the EU Member States. As psychosocial interventions in particular are not easily transferable one to one from other countries, research on the effectiveness needs to be tailored to the respective setting, country or situation. Therefore European research on the different psychosocial treatment interventions needs to be intensified.

A great variety of psychosocial interventions play an important role in the treatment of drug dependence, in some areas like stimulant-dependency they are the only effective type of interventions to date. Also in combination with pharmacological treatment the different psychosocial interventions are effective, but need to be evaluated in structured procedures.

There is a scarcity of economic studies on costs and outcomes of drug treatment in Europe and alike on drug treatment more studies are needed taking into account the European context.

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## Annex I: Search strategies

Table A1: Systematic search strategy for opiate- related disorders

<i>Search step</i>	<i>Items / Combinations</i>
1	(opiate\$ or opioid\$ or heroin or methadone or buprenorphine or morphin\$ or diamorphin).mp. [mp=title, original title, abstract, name of substance word, subject heading word]
2	(abuse\$ or depend\$ or addict\$).mp. or exp opioid-related disorders/ or exp substance-related disorders/ or exp substance abuse, intravenous/ or exp heroin dependence/ or withdrawal syndrome/
3	1 and 2
4	exp opioid-related disorders/dt or exp substance-related disorders/dt or exp substance abuse, intravenous/dt or exp heroin dependence/dt
5	exp drug therapy/
6	pharmacothera\$.mp. or *Heroin/tu or *Heroin Dependence/rh or *Heroin/ur or *diamorphin/tu or diamorphin/ad or morphin\$/tu or morphin/ad or *Methadone/tu or *Methadone/ad or *Buprenorphine/ad or *Buprenorphine/tu or *Adrenergic alpha-Agonists/ad or *Adrenergic alpha-Agonists/tu or *Analgesics, Opioid/tu or *Analgesics, Opioid/ad or *Narcotics/tu or *Narcotics/ad or *Narcotic Antagonists/tu or *Narcotic Antagonists/ad or *Clonidine/tu or *Clonidine/ad or *lofexidine/tu or *lofexidine/ad or *Naloxone/ad or *Naloxone/tu or *naltrexone/tu or *naltrexone/ad
7	4 or 5 or 6
8	3 and 7
9	exp psychothera\$/ or exp behavioural theras/ or exp behavioural treatment/ or exp aversive therap\$/ or exp therapeutic communit\$/ or exp cognitive therap\$/ or exp counselling/ or exp psychosocial treatment/ or exp motivational interviewing/ or exp relapse prevention/ or exp contingency management/ or exp voucher/ or exp 12-step/ or exp cue exposure treatment/ or exp rehabilitation/ or intervention.mp.
10	3 and 9

11	8 or 10
12	exp alcohol-related disorders/
13	exp tobacco-related disorders/
14	12 and 13
15	11 not 14

*Table A2: Systematic search strategy for cocaine- and amphetamine- related disorders*

<b>Search step</b>	<b>Items / Combinations</b>
1	(cocaine or crack or amphetamine\$ or methamphetamine\$).mp. [mp=title, original title, abstract, name of substance word, subject heading word]
2	(abuse\$ or depend\$ or addict\$ or cocaine-related disorder\$ or substance-related disorder\$ or substance abuse or cocaine dependence or amphetamine dependence or withdrawal).mp.
3	1 and 2
4	exp drug therapy/
5	(pharmacotherap\$ or labetalol or benzodiazepine\$ or dopamine agonist\$ or amantadine or bromocriptine or propranolol or anticonvulsant\$ or dextroamphetamine or methylphenidate or amphetamine or diethylpropion or buprenorphine or carbamazepine or topiramate or baclofen or tiagabine or modafinil or selegiline or pergolide or dopa or carbidopa or naltrexone or fluoxetine or bupropion or desipramine or disulfiram or mazindol or vaccination or guanfacine or terguride or haloperidol or flufenazine or ritanserine or valproate or ondansetron or cyclazone or dexamethasone or metyrapone or nimopidine or isradipine or gepirone or venlavaxine).mp.
6	4 or 5
7	3 and 6
8	(psychotherap\$ or behavioural treatment or aversive therap\$ or therapeutic communit\$ or cognitive therap\$ or counselling or psychosocial treatment or motivational interviewing or relapse prevention or contingency management or voucher or 12-step or cue exposure or rehabilitation or intervention).mp.
9	3 and 8
10	7 or 9
11	limit 10 to (humans and english language and abstracts and "therapy (optimized)" and "all adult (19 plus years)" and yr="2004 - 2007" and

(clinical trial, all or clinical trial or comparative study or controlled clinical trial or meta analysis or randomized controlled trial))

*Table A3: Systematic search strategy for cannabis- related disorders*

<b>Search step</b>	<b>Items / Combinations</b>
1	(cannab\$ or marijuana or THC or Tetrahydrocannabinol or Dronabinol).mp. [mp=title, original title, abstract, name of substance word, subject heading word]
2	(abuse\$ or depend\$ or addict\$ or cannabis-related disorder\$ or substance related disorder\$ or substance abuse or cannabis dependence or cannabis abuse or cannabis withdrawal or marijuana-related disorder\$ or marijuana dependence or marijuana abuse or marijuana withdrawal).mp.
3	1 and 2
4	exp cannabis-related disorders/dt or exp substance-related disorders/dt or exp substance abuse/dt or exp cannabis dependence/dt or exp cannabis abuse/dt or exp cannabis withdrawal/dt or exp marijuana-related disorder\$/dt or exp marijuana dependence/dt or exp marijuana abuse/dt or exp marijuana withdrawal/dt
5	exp drug therapy/
6	(Pharmacotherap\$ or bupropion or divaleproex or natrexone or nefazodone or Rimonabant).mp.
7	4 or 5 or 6
8	3 and 7
9	exp psychotherap\$/ or exp behavioural therap\$/ or exp behavioural treatment/ or exp aversive therap\$/ or exp therapeutic communit\$/ or exp cognitive therap\$/ or exp counselling/ or exp psychosocial treatment/ or exp motivational interviewing/ or exp relapse prevention/ or exp contingency management/ or exp voucher/ or exp 12-step/ or exp cue exposure/ or exp rehabilitation/ or intervention.mp.
10	3 and 9
11	8 or 10
12	exp alcohol-related disorders/
13	exp tobacco-related disorders/
14	12 and 13
15	11 not 14

Table A4: Adapted selection criteria to particular electronic databases <sup>24</sup>

<i>Database</i>	<i>Item</i>	<i>Specific criteria</i>
<b>MEDLINE</b>	Clinical queries	Therapy (optimised specificity and sensitivity) Clinical trials (all) Controlled clinical trial
	Publication Type	Randomised controlled (clinical) trial Meta-analysis Systematic reviews
<b>EMBASE</b>	Clinical queries	Treatment (1 term min difference specificity and sensitivity)
<b>PSYCHINFO</b>	Clinical queries	Treatment (1 term min difference specificity and sensitivity)
	Classification code	Substance abuse & Addiction Clinical case studies
	Methodology	Meta-analysis Systematic reviews Randomised controlled (clinical) trials

<sup>24</sup> An adaptation was not necessary for the Cochrane databases and Database of Abstracts of Reviews of Effects (DARE)

## Annex II: Glossary

**12-step** - set of guiding principles for recovery from addictive, compulsive, or other behavioural problems, originally developed by the fellowship of Alcoholics Anonymous (AA) to guide recovery from alcoholism

**Abstinence** - voluntary restraint from indulging a desire or appetite for certain bodily activities that are widely experienced as giving pleasure. Most frequently, the term refers to abstention from sexual intercourse, alcohol or food

**Adrenergic** - drugs or chemicals with a similar effect to adrenaline

**Agonist** - drug that binds to a receptor cell, triggering a response

**Alprazolam** - short-acting drug in the benzodiazepine class

**Amantadine** - antiviral drug used both as an antiviral and an antiparkinsonic

**Methylphenidate (MPH)** - prescription stimulant commonly used to treat Attention-deficit hyperactivity disorder, or ADHD. It is also one of the primary drugs used to treat the daytime drowsiness symptoms of narcolepsy and chronic fatigue syndrome

**Amlodipine** - long-acting calcium channel blocker (dihydropyridine) used as an anti-hypertensive and in the treatment of angina pectoris

**Antagonist** - A drug that binds to a receptor cell and inhibits the normal physiological reaction of a receptor cell

**Aripiprazole** - acts like a dopamine agonist and is used as an atypical antipsychotic medication for the treatment of schizophrenia and for treatment of acute manic and mixed episodes associated with bipolar disorder

**Baclofen** - derivative of gamma-aminobutyric acid, and is an agonist specific to mammalian but not fruit fly (*Drosophila*) GABAB receptors

**Benzoyllecgonine** - cocaine metabolite used as an urine parameter for the detection of cocaine use

**Buprenorphine** - opioid drug with partial agonist and antagonist actions

**Bupropion** - atypical antidepressant that acts as a norepinephrine and dopamine reuptake inhibitor and nicotinic antagonist

**Cabergoline** - lysergic acid amide derivative, is a potent dopamine receptor agonist on D2 receptors

**Carnitine** - also known as L-carnitine is a quaternary ammonium compound synthesized from the amino acids lysine and methionine primarily in the liver and kidney

**Cognitive Behavioural Therapy (CBT)** - psychotherapy based on modifying cognitions, assumptions, beliefs and behaviours, with the aim of influencing disturbed emotions. The general approach developed out of behaviour modification, Cognitive Therapy and Rational Emotive Behaviour Therapy, and has become widely used to treat neurosis psychopathology, including mood disorders and anxiety disorders

**Celecoxib** - non-steroidal anti-inflammatory drug (NSAID) used in the treatment of osteoarthritis, rheumatoid arthritis, acute pain

**Clonidine** - direct-acting adrenergic agonist prescribed historically as an anti-hypertensive agent. It has found new uses, including treatment of some types of neuropathic pain, opioid detoxification, sleep hyperhydrosis, and, off-label, to counter the side effects of stimulant medications such as methylphenidate or amphetamine

**Community maintenance** - treatment which stabilises clients on a substitute drug for as long as it is necessary to help them avoid returning to previous patterns of drug use. A longer term aim can be to gradually reduce the quantity prescribed until the client does not experience withdrawal symptoms and is drug free. Community maintenance generally consists of drug administration, and the provision of psychosocial treatment and motivational interventions

**Contingency management (CM)** - relates to the offer of incentives (for instance, take-home incentives or vouchers) contingent on certain behaviours by clients, such as the delivery of drug-free urine specimens or compliance with treatment

**Cost-benefit analysis** - weighing the total expected costs against the total expected benefits of one or more actions in order to choose the best or most profitable option

**Cost-consequences analysis** - refers to an economic evaluation where benefits are measured by multiple outcomes in natural units, such as abstinence from opiate use, reduction in illicit opiate use, withdrawal severity, length of stay, and retention in treatment

**Cost-effectiveness analysis** - the cost-effectiveness of a therapeutic or preventive intervention is the ratio of the cost of the intervention to a relevant measure of its effect. Cost refers to the resource expended for the intervention, usually measured in monetary terms

**Cost-utility analysis** - form of economic analysis used to guide procurement decisions. The most common and well-known application of this analysis is in pharmacoeconomics, especially health technology assessment (HTA)

**Community Reinforcement Approach (CRA)** - comprehensive behavioural program for treating substance-abuse problems. It is based on the belief that environmental

contingencies can play a powerful role in encouraging or discouraging drinking or drug use

**Cue exposure** - relatively new treatment technique that considers tolerance, withdrawal and cravings for drugs/alcohol as conditioned states that are amenable to change or extinction. The general approach is to expose drug or alcohol users to cues for using while concurrently addressing and attempting to lessen the desire to use

**Dehydroepiandrosterone (DHEA)** - natural steroid prohormone produced from cholesterol by the adrenal glands

**Desipramine** - tricyclic antidepressant (TCA) that inhibits the reuptake of norepinephrine. It is used to treat depression, but not considered a first line treatment since the introduction of SSRI antidepressants. Desipramine is an active metabolite of imipramine

**Diagnostic and Statistical manual (DSM)** - One scale to measure a client's severity of drug dependence

**Disulfiram** - Aversive drug used to support the treatment of chronic alcoholism by producing an acute sensitivity to alcohol

**Donepezil** - centrally acting reversible acetyl cholinesterase inhibitor

**Drug misuse** - illegal and illicit drug taking which leads a person to experience social, psychological, physical or legal problems related to intoxication, regular consumption, or dependence

**Dysphoria** - emotional state characterised by anxiety, depression or unease

**Fluoxetine hydrochloride** - antidepressant of the selective serotonin reuptake inhibitor (SSRI) class

**Gabapentin** - medication originally developed for the treatment of epilepsy, but has also been used in the treatment of bipolar disorder. Gabapentin acts as a mood stabilizer and was used in the treatment of anxiety disorders such as social anxiety disorder and obsessive-compulsive disorder, in treatment-resistant depression, and for insomnia

**Group Counselling** - provides members with the opportunity to explore and develop personal goals, and to promote positive changes in an atmosphere of honest sharing and listening. Experiential activities are used to facilitate exploration and learning

**Haloperidol** - antipsychotic drug with pharmacological effects similar to the phenothiazines

**Heroin** - opiate processed directly from the extracts of the opium poppy

**Counselling** - provides a regular time and space for people to talk about their troubles and explore difficult feelings, in an environment that is dependable, free from intrusion and confidential

**Isradipine** - calcium channel blocker of the dihydropyridine class

**Levomethadyl acetate** - also known as levo- $\alpha$ -acetylmethadol (LAAM) synthetic opioid similar in structure to methadone

**Lamotrigine** - anticonvulsant drug used in the treatment of epilepsy and bipolar disorder

**Levodopa-carbidopa** - medication used for the treatment of Parkinson's disease in order to inhibit peripheral metabolism of levodopa

**Lofexidine** - alpha2-adrenergic receptor agonist mostly used to help with relief from symptoms of heroin or opiate withdrawal in opiate dependency

**Mazindol** - sympathomimetic amine and a central nervous system stimulant

**Meta analysis** - combines the results of a number of surveys to investigate the underlying processes

**Methadone** - synthetic opioid, used medically as an analgesic and in the treatment of narcotic addiction

**Metyrapone** - blocks cortisol synthesis by inhibiting steroid 11-beta-hydroxylase

**Motivational interviewing (MI)** - refers to a counselling approach and it recognizes and accepts the fact that clients who need to make changes in their lives approach counselling at different levels of readiness to change their behaviour

**Mirtazapine** - antidepressant used for the treatment of moderate to severe depression

**Modafinil** - eugeroic drug generally prescribed to treat narcolepsy and has shown to inhibit the reuptake of dopamine and, more potently, norepinephrine

**Nalbuphine hydrochloride** - synthetic opioid used as an analgesic

**Naloxone** - drug used to counter the effects of opioid overdose, for example heroin or morphine overdose

**Naltrexone** - opioid receptor antagonist used primarily in the management of alcohol dependence and opioid dependence

**Nefazodone hydrochloride** - antidepressant drug

**Olanzapine** - atypical antipsychotic

**Ondansetron** - serotonin 5-HT<sub>3</sub> receptor antagonist used mainly to treat nausea and vomiting following chemotherapy

**Opiates** - narcotic alkaloids found in opium

**Opiate dependence** - medical diagnosis characterized by an individual's inability to stop using opioids

**Opioid** - group of synthetic drugs with similar effects to opiates. Examples are methadone and buprenorphine

**Oxazepam** - benzodiazepine derivative that possesses anxiolytic, anticonvulsant, sedative and skeletal muscle relaxant properties

**Paroxetine or paroxetine hydrochloride** - selective serotonin reuptake inhibitor (SSRI), antidepressant and used due to its apparent efficacy in treating depression as well as a spectrum of anxiety disorders ranging from panic attacks to phobias

**Pentoxifylline** - xanthine derivative

**Pharmacotherapy** - treatment of a disease with drugs

**Pramipexole** - classified as a non-ergoline dopamine agonist

**Progesterone** - C-21 steroid hormone

**Propranolol** - acts like an adrenergic blocker and is a non-selective beta blocker mainly used in the treatment of hypertension

**Psychosocial treatment** - techniques based on psychological and social principles and functioning

**Psychopathology** - Manifestation of behaviours that may be indicative of mental illness or psychological impairment

**Quetiapine** - neuroleptic known as "atypical antipsychotics"

**Reboxetine** - is an antidepressant drug used in the treatment of clinical depression, panic disorder and ADD/ADHD

**Reserpine** - acts like a dopaminergic antagonist and is an antipsychotic and antihypertensive drug that has been used for the control of high blood pressure and for the relief of psychotic behaviors

**Residential rehabilitation** - purpose of services to provide individuals who have specific functional deficits with safe and stable living environments so they can develop recovery skills

**Riluzole** - acts as a sodium channel blockade, calcium channel blockade and glutamate receptor antagonism

**Risperidone** - acts like a dopaminergic antagonist and is an atypical antipsychotic medication for the treatment of schizophrenia

**Selegiline** - used for the treatment of early-stage Parkinson's disease and senile dementia

**Sertraline hydrochloride** - antidepressant of the selective serotonin reuptake inhibitor (SSRI) class

**Substitute prescribing** - the use of a drug substitute for a drug of dependence (for instance, substituting methadone for illicit heroin). The substitute will be legal, safer, and easier to manage clinically in treatment than the drug of dependence

**Therapeutic community** - applied to a participative, group-based approach to long-term mental illness that includes group psychotherapy as well as practical activities, and which may or may not be residential with the clients and therapists living together

**Tiagabine** - anti-convulsive medication

**Topiramate** - anticonvulsant that is used to treat epilepsy in both children and adults

**Tryptophan** - essential amino acid involved in human nutrition

**Valproic acid (VPA)** - chemical compound that has found clinical use as an anticonvulsant and mood-stabilizing drug, primarily in the treatment of epilepsy and bipolar disorder

**Valproate semisodium or divalproex sodium** - Anticonvulsant, consists of a compound of sodium valproate and valproic acid in a 1:1 molar relationship in an enteric coated form

**Venlafaxine hydrochloride (Effexor)** - antidepressant of the serotonin-norepinephrine reuptake inhibitor (SNRI) class

**Withdrawal** - refers to the characteristic signs and symptoms that appear when a drug that causes physical dependence is regularly used for a long time and then suddenly discontinued or decreased in dosage. The term can also, less formally, refer to symptoms that appear after discontinuing a drug or other substance (unable to cause true physical dependence) that one has become psychologically dependent upon

**Zuclopenthixol** - typical antipsychotic neuroleptic drug



Drug policy and harm reduction

DG SANCO/2006/C4/02

## **Report on WP 2**

# **Overview of types, characteristics, level of provision and utilisation of drug treatment services in the European Member States and Norway**

February 2008



University of Hamburg



Centre for Interdisciplinary Addiction Research (CIAR)

**The content of this report does not necessarily reflect the opinion of the European Commission. Neither the Commission nor anyone acting on its behalf shall be liable for any use made of the information in this publication.**



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## 1 Introduction

This report is part of the European project on “Drug policy and harm reduction” funded by the SANCO department of the European Commission. Within this project one working group focuses on “drug treatment and exchange of good practice” by conducting three different activities, namely:

- Review of the literature and scientific data on drug treatments and their efficacy
- Overview of types, characteristics, level of provision and utilisation of drug treatment services
- Identification of target groups with regard to transfer of treatment evidence and good practice

The task to provide an overview of types, characteristics, level of provision and utilisation of drug treatment services in European Member States and Norway is the topic of this report. On basis of a country-wise inventory of drug treatment types and their utilisation, treatment profiles have been developed which describe policy, organisation, availability of drug treatment and clients making use of treatment. These treatment profiles cover 27 Member States and Norway.

The country profiles compiled in this report benefited much from the continuous support of Alessandro Pirona and Dagmar Hedrich from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) who provided the required data and was always available for the exchange of expertise.

In addition, the country profiles have been checked and updated by many National Focal Points<sup>25</sup> (NFPs). Accordingly the characterisation of the national drug treatment system has been revised for the following countries: Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Luxembourg, Malta, The Netherlands, Norway, Portugal, Spain, and United Kingdom. The national Focal Point of Lithuania reported not to have any remarks on the written characterisation.

Thus, the systematic characterisation of the national drug treatment system bases upon the most recent national information and data.

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<sup>25</sup> National Focal Points exist in all European Union Member States, Norway and in candidate states. They collect and exchange data and information on the national drug policy and provision of drug treatment. The data and information are collected with specific tools and provided to the EMCDDA.

## 2 Study design

The main objective was to carry out an inventory of the available different drug treatment services and their utilisation in the Member States and in Norway. The inventory results in a characterisation and classification of drug treatment types. The classification was basically done by the collection of information of available drug treatment types and by the collection of data on the utilisation of drug treatment. The findings have been compiled to an overview and are presented in this report in a systematic and structured way for each of the countries.

### 2.1 Objectives and methods

The main task was to provide an overview of the available different drug treatment services and their utilisation in the Member States and Norway. For this purpose a country-wise inventory of the available treatment types, their characteristics and their utilisation has to be developed.

The starting point for the inventory was to develop a procedure on how to cover and investigate adequately the different treatment reality in all European Member States and Norway. Accordingly, the most important task in the beginning was to clarify and determine the main indicators for a proper description of the drug treatment system in the European Member States and Norway.

In general, the most important indicator to characterise the provision of drug treatment is the “treatment coverage”. To achieve valid information on the treatment coverage requires dealing with different obstacles. First of all, it is necessary to clarify the following indicators

- Prevalence of problem drug users, and
- Number of drug users reached by the drug services.

To be able to count drug users that have been reached by available treatment services, the national drug treatment system has to be part of the investigation. Thus, further indicators for the characterisation of the national drug treatment are:

- Number of available drug treatment interventions
- Utilisation of different treatment interventions – which refers to the number of treatment episodes or the number of individual clients per year
- Availability of specific services for specific target groups

Treatment for drug users is delivered within an institutional framework, namely policy, responsibilities, organisation and financing of treatment, and the quality system. This framework also needs to be described in order to know how the respective indicators have to be understood.

The basic sources for achieving information on drug treatment provided are the national reports of the Member States including Norway and the treatment data collection tools (Structured Questionnaire 27 “Treatment programmes” (SQ27) and the Standard table 24 “Treatment availability” (ST24) collected by the EMCDDA. In view of these resources the problem of comparability occurred. In fact, it was experienced as rather difficult to develop a comparable and unique description of the national drug treatment system which is mainly due to the difficulty to achieve valid information for classifying the national drug treatment services. The information submitted by the countries revealed that there is a lack of a common understanding of the term “treatment” and of the main types of “interventions”. The lack of uniform definitions results in further inconsistencies as concerns the reports of the countries. For instance, it remains unclear, if information should be given to slots or places, interventions or episodes, facilities or units and their offers, treatment episodes or clients etc. Thus, in case of many countries there are limitations as regards reliable information on the number of clients in treatment and the number of available treatment units.

While analysing the existing data on treatment collected with the ST24 and SQ27 (which collected data on availability and utilisation of treatment according to ‘drug-free’ treatment and ‘medically-assisted’ treatment), it appeared that for instance some National Focal Points reported on “drug-free” treatment according to their national understanding of the term. This was then interpreted as a treatment objective rather than as a type of treatment and, for the purpose of this report, “drug-free” treatment has been – when possible – translated into “psychosocial” treatment. Psychosocial treatment refers to all kinds of structured non-medical treatment.

Similar difficulties appeared as regards the NFPs’ reporting on data on “medically-assisted treatment”. This term does not provide any differentiated information on detoxification, maintenance treatment and other medical treatment as it covers all of these treatment types. If more specific information has been reported in the national reports, data on detoxification and maintenance treatment are documented separately in the country profiles. However, in cases where the available information did not allow a clear interpretation of “drug-free” and “medically-assisted”, the same terms the countries used themselves to describe their treatment system have been used. In other words, a consistent characterisation of the available drug treatment by referring to defined types of treatment was not always possible.

Against the background of inconsistent information, a first step for the investigation was to give a definition of drug treatment and to operationalise the (main) treatment types. This operationalisation is also the basis for the terms used to characterise the treatment availability in the country profiles – if possible.

## 1. Step: Definition of drug treatment

In this report drug treatment is defined as

- all structured interventions provided in the community,
- with specific pharmacological and/or psychosocial techniques, and
- aiming at reducing or abstaining from the use of illegal drugs.

This definition of drug treatment excluded a number of interventions such as harm reduction (syringe exchange, information and advice), interventions in prison, and self help (telephone help lines).

According to the “Classifications of drug treatment and social reintegration and their availability in EU Member States plus Norway” (EMCDDA 2002) only interventions provided in community are considered. In future it has to be determined more precisely that treatment can be provided „either in the community or in prison“. With respect to the country profiles below interventions in prison are not displayed especially.

However, the definition above is the basis for defining types of drug treatment interventions. A major task for the definition of intervention types was that they have to all possible combinations of psychosocial and pharmacological interventions which are reality in European Member States and Norway. In detail, it has to be taken into account that interventions

- are combined instead of being offered in separate units or facilities,
- are delivered in out- or inpatient settings, in general or specialised hospitals, health centres, community based social services or drug units, medical offices or in rehabilitation centres, and are
- offered by different professionals as social workers, medical doctors, psychologists.

Consequently a pragmatic definition of four intervention types is proposed to develop an overview on treatment coverage in European Member States and Norway. This pragmatic definition differentiates between the following interventions

### 1. Outpatient psychosocial interventions

This covers interventions from counselling, motivational enhancement, brief interventions, case management to day care and aftercare.

### 2. Inpatient psychosocial interventions

This covers interventions from residential treatment to therapeutic communities, where clients spend the night.

### 3. Substitution/maintenance treatment

This covers pharmacological interventions with (usually) some psychosocial care/support in the same or another unit.

### 4. Detoxification

This covers interventions for detoxification usually provided in specialised medical centres, where clients spend the night in a medical facility.

On basis of definitions a further step consisted in the development of a questionnaire to National Focal Points which includes recommendations for the potential revision of standard questionnaires SQ27 and ST24.

## 2. Step: Data collection and analysis

The definition of drug treatment and the specification of the intervention types have built the basis for the developed questionnaire and the recommendations for revision of standard questionnaires.

The questionnaire was basically done to collect the missing data regarding the utilisation of drug treatment types in European Member States and Norway. In general, the questionnaire restructured those questions of the ST24 and SQ27 which appeared to be most problematic and which provided limited information. The aim of the questionnaire was to fill existing information gaps by achieving required information on treatment availability and treatment utilisation. However, only few countries filled in the questionnaire, and thus the characterisation of drug treatment had mainly to be done on basis of existing material and data sources. Furthermore, comprehensive data collection on the availability and utilisation of treatment in the Member States and Norway is also hindered by the limitations of the national monitoring systems which, in most cases, do not cover all treatment providers and thereby, all clients in treatment in a given year. For instance, data from general practitioners, which in some countries provide treatment to a significant number of drug users, is not systematically collected in all Member States.

Therefore, in close cooperation with the scientific staff of the EMCDDA, a strategy has been developed to produce within the methodological limitations outlined above, a comprehensive and structured overview of available treatment types and their utilisation (number of treatment services, the number of offered treatment places, and the number of clients) in all Member States and Norway. Main source for the data collection were the national reports on the drug situation provided yearly by the National Focal Points of the REITOX-Network, and the databases of the EMCDDA. The existing data has been analysed and gaps have been identified. The analyses of the gaps resulted in recommendations for a revision of the current monitoring system, and the recommendations had been presented on meetings with the EMCDDA.

## 3. Step: Recommendations for the inventory of drug treatment services in European Member States and Norway

To carry out the inventory of drug treatment services for each Member State, topics with according indicators or criteria have been defined. Each characterisation of the drug treatment system in the single Member States and Norway is based upon a systematic and comparable inventory which follows the determined criteria and

indicators (see the table 1). The systematic inventory is an approach to come, within the shortcomings of the available data, to a comprehensive and systematic characterisation of drug treatment provision and treatment coverage in European Member States and Norway.

As regards the treatment coverage, the available data only allow a limited approach to coverage in terms of the relation between treatment availability, treatment utilisation and the number of problem drug users (PDU) in a country. To give a clear picture of the treatment coverage is somehow impossible as a) not all countries define PDUs according to the definition of the EMCDDA<sup>26</sup>, b) the reported groups of problem drug users do not always reflect the population in need of treatment (e.g. problem cannabis users are not included in the definition of the EMCDDA), c) according to the aim of a specific national PDU study for instance only opiate users are captured and reported while other problem drug users are not included (e.g. cocaine or amphetamine users) and d) the data on treatment utilisation depends on the quality of documentation and monitoring coverage at national level of all treatment providers, and thereby is not complete in all countries.

As regards the criteria for quality assurance, these are not completely included in the country profiles as the results on the quality assessment are part of the report “Inventory of status quo and models of transfer of drug treatment know-how and good practices” (workpackage 3).

The structure of the country profiles, described in the table below can also be regarded as a recommendation and platform for future data collection which is necessary to achieve a comprehensive description of treatment provision and coverage in a country.

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<sup>26</sup> “Problem drug use” is defined by the EMCDDA as “injecting drug use or long duration or regular use of opioids, cocaine and/or amphetamines”

Table 1: Structure for the characterisation of drug treatment in European Member States and Norway

Topics	Check list / criteria
<p>Institutional framework</p> <ul style="list-style-type: none"> <li>- Policy</li> <li>- Organisation</li> <li>- Financing</li> </ul>	<p>National drug treatment policy, action plan and its objectives, conception of drug treatment provision</p> <p>Coordination of drug treatment</p> <ul style="list-style-type: none"> <li>- national/federal/local</li> </ul> <p>Responsibility for drug treatment</p> <ul style="list-style-type: none"> <li>- national/regional/local, public health system</li> </ul> <p>Provision of drug treatment</p> <p>Funding resources in general</p> <p>Who provides funding for different kinds of drug treatment?</p> <p>Main funding bodies due to highest amount of money</p>
<p>Availability of drug treatment</p> <ul style="list-style-type: none"> <li>- Introduction</li> <li>- Types of treatment</li> <li>- Target group specific services</li> </ul>	<p>Development of the national drug treatment system and its specialities (including recent changes such as introduction of new services or increase of the number of services)</p> <p>Availability of different types of treatment and – if reported – the number of different treatment types being available in the country according to</p> <ul style="list-style-type: none"> <li>• outpatient psychosocial treatment</li> <li>• inpatient psychosocial treatment</li> <li>• maintenance treatment</li> <li>• detoxification treatment</li> </ul> <p>Availability and accessibility of services specifically for defined groups (e.g. migrants, adolescents) or drugs (e.g. cocaine, cannabis)</p>

Topics	Check list / criteria
<ul style="list-style-type: none"> <li>- Utilisation of treatment</li> </ul>	<p>Number of clients per year in            Outpatient psychosocial treatment            Inpatient psychosocial treatment            Substitution maintenance treatment            Detoxification</p> <p>Number of clients in substitution treatment that receive in addition psychosocial care</p>
<p>Coverage</p> <ul style="list-style-type: none"> <li>- Prevalence</li> <li>- Clients in treatment per year</li> </ul>	<p>National prevalence of problem drug use as defined by the EMCDDA and- if available- differentiated for the main substances</p> <p>Number of drug users being reached by drug services per year (including new clients)            Total number of clients in substitution treatment</p>
<p>Quality</p> <ul style="list-style-type: none"> <li>- Registry</li> <li>- Monitoring</li> <li>- Guidelines</li> </ul>	<p>Implemented registry of clients in different treatment areas</p> <p>Implemented monitoring documentation on treatment clients            Mainly for purpose to report to commissioners, regional and national authorities and the EMCDDA</p> <p>Either in terms of recommendations or in terms of obligations for providing drug treatment.            Sources of guidelines (from experience to systematic research)</p>

### 3 Country profiles

All country profiles base upon

- the information provided in the last country report submitted to the EMCDDA,
- the data from SQ27, the “structured questionnaire 27 on treatment programmes”,
- the data from ST24, the “standard table on drug-related treatment (1) availability, and
- the treatment demand indicator (TDI) for data on new treatment entries.

The treatment demand indicator (TDI) provides information on all clients entering treatment during the reported year and on new clients entering treatment for the first time during the reported period. Thus, the TDI does not cover all people in drug treatment, as no data are collected on clients continuing treatment from the year(s) before the reporting year.

In general, the most recent available information and data are used; these derive from 2006 and refer to the year 2005. If any information on drug treatment will be used which refers to former country reports or data, this is explicitly mentioned.

As already described in the methodology there are limitations concerning available data to produce the country profiles which are related to the existing methods, tools and national monitoring systems in place to collect treatment data. This is especially the case for the figures on treatment provision and utilisation. While the countries report on treatment in terms of “drug-free” and “medically-assisted treatment”, in the present report types of treatment are defined as “psychosocial”, substitution maintenance treatment and detoxification. All kinds of outpatient structured interventions (counselling, day care, psychosocial support etc) labelled as “drug-free” are reported as “outpatient psychosocial treatment”. Treatment such as residential rehabilitation, therapeutic communities is reported as “inpatient psychosocial treatment”. In cases where such a conversion could not been made in a reliable way, the naming of the treatment types was taken as reported by the countries.

For interpretation reasons it has also to be mentioned, that in the figures on treatment utilisation there is a possible overlap between the clients reported under psychosocial treatment and those in substitution treatment or detoxification. There is probably also an overlap between clients attending residential treatment and outpatient psychosocial treatment and detoxification.

## **Austria**

### **1 Institutional framework**

#### *1.1 Policy*

The Narcotic Substances Act (SMG), which has been in force since 1998, constitutes the main framework of Austria's drug policy. The SMG defines a range of "health-related measures" (medical supervision and treatment, including detoxification and substitution treatment; clinical psychological counselling and care; psychotherapy; social therapeutic counselling and care) available for treatment and care of drug addicts especially in the context of "therapy instead of punishment". The Narcotic Substances Act states that the Ministry of Health and Women has to announce drug services which are in line with the requirements defined by the law.

Austria has currently no national (federal) drug strategy or action plan, however the procedures for drafting and adopting a national strategy are currently underway. At the regional level, all nine provinces have adopted drug strategies, which include specific strategies or action plans for drug treatment and prevention.

The provincial drugs plans available all underline that drug policy require the balanced use of health policy measures aimed at reducing the demand for drugs and penal measures at reducing the supply of drugs. They all agree on the decriminalisation of drug users and drug-dependent patients and thus focus more on health care and social policy than on law enforcement which is dealt with by the federal competencies.

#### *1.2 Organisation*

At the federal level the central actors in the field of drug policy include the Federal Drug Coordination and the Federal Drug Forum, which serves as a coordinating body with the provinces. Due to the federal structure of Austria's health and social care system, the provinces play important roles with regard to the adoption and implementation of drug policy measures, including treatment-related policies. All nine Austrian provinces have drawn up drug strategies and nominated Drug Coordinators which are, but not exclusively, responsible for coordinating drug treatment at a regional level. One drug coordinator is appointed for accreditation and monitoring of treatment at national level under the Ministry of Health and Women. Inter-regional coordination of the provincial drug policies, and thereby treatment policies, is performed by the

Provincial Conference of Drug Coordinators, which draws up joint position and statements.

Drug treatment is financed primarily by the Provincial Governments, the social insurance funds and the Federal Government. NGOs and the public sector at regional level are the major actors in the delivery of drug-related treatment. Furthermore, office-based medical Doctors also play a major role in treatment delivery as they are highly involved in substitution treatment provision.

## **2 Availability of drug treatment**

In Austria, it is estimated that there are 25,000 to 32,000 problem drug users who primary are problematic opiate users. The estimation bases upon an updated prevalence estimate of available 2004 data from opiate related police charges and substitution treatment. Compared to an estimate for 2001 undertaken according to a similar methodological procedure, this is a rise by around 10,000 persons.

### *2.1 Introduction*

In Austria, drug-specific counselling, care and treatment services are provided both by specialised centres and in the context of the general health care system (e.g., psychiatric hospitals, psychosocial services, established physicians).

Established primarily in the outpatient sector but increasingly in the inpatient sector, counselling and drug-related treatment in Austria include measures oriented towards drug-free treatment as well as substitution treatment. Most centres also provide a variety of preparatory and aftercare measures as well as recreational and reintegration services and also measures for specific target groups (e.g. young people or persons with psychiatric comorbidity).

The treatment settings/interventions in Austria are classified using the following terms:

- Inpatient facilities for long-term treatment (*'Stationäre Einrichtungen für Langzeittherapie'*)
- Inpatient facilities for short-term treatment (*'Stationäre Einrichtungen für Kurzzeittherapie'*)
- Inpatient detoxification (*'Stationäre Einrichtungen für körperlichen Entzug'*)
- Outpatient drug facilities and wards (*'Drogenambulanzen und -ambulatorien'*)
- Counselling centres (*'Beratungsstellen'*)
- Outpatient counselling centres (*'Ambulantes Beratungsangebot'*)

These different treatment services exist almost nationwide.

According to the general aim to establish a comprehensive care network, Austria further developed diversified treatment options. In the past decade, inpatient drug facilities changed from long-term to more short term treatment, and generally to more flexibility.

In fact, inpatient treatment is very often organised in modules which means that patients can finish one module (normally of the duration of a few weeks) and then have a break or to continue with the next module.

The trend towards diversification is also reflected in the field of substitution treatment, where a number of different substitution substances may be prescribed. In quantitative terms, substitution treatment has become the most important type of drug therapy in Austria.

### Recent changes

In general existing services were both expanded and more specifically oriented towards the specific target groups such as adolescent drug users. For instance, lower Austria has completed the expansion of seven drug centres in each district or for every city of 50,000 inhabitants. As a new service acupuncture has been introduced, especially for drug users who want to undergo withdrawal treatment.

To integrate gender mainstreaming in drug-related work, in February 2006 the preparation of guidelines for genderspecific drug work was launched. For example, the service provider 'Dialog' introduced a men's group which addresses male substitution patients aged 20 or older.

## *2.2 Types and number of available drug treatment*

The majority of drug treatment is delivered in outpatient centres with a majority of them being counselling centres. While counselling centres (Suchtberatungsstellen) address both users of licit and illicit drugs, there are several specialised treatment and reintegration facilities being available almost exclusively for addicts of illicit drugs. Outpatient psychosocial interventions cover a range of different services such as counselling, outreach work, and psychotherapy, aftercare and reintegration programmes. As regards social reintegration, a high number of general services are available for drug users. In addition, specialised programmes have also been set up, mainly focussing on housing and employment and typically provided by NGOs. Housing projects provide halfway-houses for former drug addicts and temporary sleeping facilities for current drug addicts. In sum, in Austria there are 61 specific outpatient facilities and 78 generic outpatient facilities.

Inpatient psychosocial interventions are provided in specific as well as in generic facilities offering long-term and short-term treatment, often together with inpatient detoxification. In Austria, 12 specific inpatient facilities with 163 beds and 15 generic inpatient facilities with 266 beds exist.

Detoxification treatment is primarily carried out in inpatient facilities, but increasingly often also in outpatient settings. No information is available on the number of facilities delivering detoxification.

In Austria substitution treatment is widely available covering all types of substitution substances. Recently the share of first treatment patients who are prescribed methadone

has increased to 42%, while prescriptions of slow-release morphine (i.e. Substitol) have declined to 23%. The number of patients treated with buprenorphine and codeine remained more or less the same (33% and 2%, respectively). A rising number of substitution patients contact counselling centres within the context of accompanying psycho-social measures.

Substitution maintenance treatment is predominately provided by office-based medical doctors. In 2006, 83 office-based general practitioners reported to have provided first substitution treatment to approximately 280 new clients. According to the Oral Substitution Further Training Decree since 2005 general practitioners need to attend training in order to be qualified and authorised to deliver substitution treatment. The qualification licence will be valid for three years.

Apart from office-based MDs substitution treatment is also provided in 11 specialised outpatient centres, in 15 prisons, 7 public health authorities, and in 10 hospitals.

### 2.3 *Diversification – special groups, special drugs*

In Austria, substance-specific treatment services are limited as most interventions focus on addictive behaviour and not on specific substances. In the last years a few specific treatment interventions for cocaine users were established, and similarly, a few services report specific treatment interventions for - esp. young - problem users of primarily cannabis.

Austria provides a variety of specific treatment interventions for children and youth such as "youth house" in therapeutic community with strong involvement of social network (parents, peers etc.) and networking between drug facilities, youth psychiatry, and youth services etc.

Gender-specific treatment interventions focus mainly on specific needs of women. There are specific interventions for pregnant women (esp. substitution treatment) as well as specific offers for women in therapeutic communities (like "women house", women groups, and special opening hours for women).

Finally, co-operations between treatment and psychiatric services and special programmes in therapeutic community exist for dual-diagnosed clients.

## **3 Utilisation of drug treatment**

The data on clients utilising any drug treatment refer to the year 2005. The reported number of clients base upon registers such as the substitution register and the online-register of addiction services. The data of the online register is not complete because the participation in the online register is voluntarily and not all treatment units report to the register. In addition, not all participating units completed all data entries in the online register. Consequently more clients than reported made use of drug treatment.

With regard to substitution treatment, the reported number of clients refers only to those clients who started substitution treatment in 2005 for the first time in their life.

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions		
In specialised outpatient units	5,447	61
In generic outpatient units	1,885	78
Inpatient psychosocial interventions		
In specialised inpatient units	163	12
In generic inpatient units	266	15
Substitution maintenance*		
In medical practices	281	83
In specific outpatient treatment centres	217	11
In other settings (prisons, clinics)	324	32
Detoxification	No information available	No information available

\* The data on clients in substitution maintenance treatment refers to those clients who started this treatment for the first time in their life.

Total number of clients in psychosocial treatment in 2005 in Austria:

- 7,332 in 166 drug facilities

Total number of clients in substitution treatment in 2005 in Austria:

- 7,554 in 126 medical practices or treatment units

### 3.1 *New treatment entries*

As regards new treatment entries, only the number of new clients entering treatment for opiate use problems is available. The estimated proportion of reporting treatment centres was 25% of the overall number of available treatment centres. The double counting control was 25%.

According to the limited data available in the year 2005 altogether 873 started with their first substitution maintenance treatment in one of the 126 reporting facilities.

Number of <b>new</b> clients entering treatment	2005	873
- New clients entering treatment (% <b>opioids</b> )*		100
- New clients entering treatment (% <b>cocaine</b> )		0.0
- New clients entering treatment (% <b>cannabis</b> )		0.0
Number of <b>all</b> clients entering treatment*	2005	7,554
- All clients entering treatment (% opioids)		100

\* Data refer to clients in substitution treatment only; figures for opioids (include heroin, methadone and other opioids (e.g. Buprenorphine) as main drug and injecting use are 100%.

#### 4 Quality system

The Federal Ministry of Health, Family and Youth (BMGFJ) is in charge of accrediting and monitoring of treatment in Austria. The routine implementation of the new nationwide treatment documentation system of clients of drug help centres in Austria – DOKLI – started in January 2006. All drug clients of about 180 participating drug services are now recorded in a standardised way. Once a year the data collected at local level will be transmitted to the ÖBIG which is in charge of data processing and analysis as well as provision of an annual report on the results. DOKLI is based on the Treatment Demand Indicator (TDI). Since March 2007, medical doctors who provide substitution treatment are legally obliged to report to a national register of substitution treatment, which is also based at the BMGFJ.

## Belgium

### 1 Institutional framework

#### 1.1 Policy

As part of the National Drug Strategy, the Federal Drug Policy Note (2001) specifies that the treatment offer should be based on a multidisciplinary approach adapted to the complex bio-psychosocial problem of drug dependence. It is also mentioned that a global and integrated offer should be created by means of regional networks and treatment circuit.

#### 1.2 Organisation

The Drug Unit of the Federal Administration of Public Health follows the Belgian Drug Policy, but has no specific coordination role for drug-related treatment. Due to the Belgian federal structure, different types of statutory regulations and financial rules co-exist. There is a large diversity among sources of financing drug treatment. Drug programmes are subsidised by Social Affairs, Public Health, Interior Affairs, and the Executive. As several authorities are involved at the same time this sometimes leads to a lack of clarity in terms of the division of competencies. Drug treatment is not coordinated at national level, but a federal group (*'Cellule drogues'*) participates to its organisation.

Since 1st December 2001, the Drugs Unit of the Ministry of Public Health finances a pilot project entitled "Implementation of care coordinators in dialogue mental health platforms as regards treatments for substance abusers". The main objectives of this project is to set up care circuits and networks at regional level which identify needs and increase the communication between the different actors in order to develop a consistent personalised care and continuity of treatment. 9 provinces (out of 10) participate in this project and each assign a "care coordinator" whose duty is to improve the dialogue between the different care providers involved in drug treatment and enhance a maximum participation of different actors. The pilot project of care coordinators continued in 2005; their task is to further stimulate the different services to make official collaboration agreements and to complete the shared vision and commission declarations.

The Flemish treatment system is organised around care circuits which base upon modules and form the complete offer of care for a certain target group in a certain

region. These modules represent the necessary care routes for that specific target group and guarantee the continuity in care and care adapted to the specific needs of the client. In mental health care and youth care, as in the treatment for drug users, it becomes more common that individualised care, continuity of care, and collaboration are central concepts. A similar concept of network has been introduced by a decree of the Walloon Region.

## **2 Availability of drug treatment**

There is no information available on the estimated number of problem drug users.

### *2.1 Introduction*

In Belgium, a large diversity of treatment settings exists, also with regard to the specific methods of treatment used. In general there are three main actors involved in the provision of drug treatment:

- Specialised substance misuse treatment centres

A number of these treatment centres have gradually entered into a so-called ‘revalidation agreement’ with the National Institute for Invalidity and Health Insurance and consequently fall under the authority of the federal policy level and funding (*‘Specialised substance misuse treatment centres with RIZIV/INAMI convention’*).

- Psychiatric hospitals and psychiatric units in general hospitals

All of these treatment providers follow the same general regulations as other hospitals and are therefore mostly subject to federal legislation and funding. Communities have however certain competencies on the matter (e.g. quality assurance).

- Centres for Mental Health Care (CMHC)

Similar to the psychiatric hospitals and psychiatric units in general hospitals, emphasis is put on the psychological or psychiatric problems with some of those CMHC having developed a certain specialisation in the treatment of drug problems. The Communities of Belgium are responsible for the CMHC but due to historical and pragmatic reasons, in the French-speaking part of Belgium, the responsibility has been transferred from the French Community to the Walloon Region (COCOF for the Brussels Region). CMHC are funded by the federal and regional health budgets.

Apart from these three main groups, further treatment providers exist in Belgium, i.e. office-based medical doctors, self-employed psychologists or psychiatrists, non-subsidised initiatives, therapeutic communities, etc.

## 2.2 *Types and number of available drug treatment*

In Belgium the three groups of treatment centres – as described above – can be considered to take up a large part of drug users attending treatment.

Specialised drug treatment centres are exclusively oriented towards people with illegal drug problems. However, some of them are allowed to treat people with primary alcohol problems. In Belgium 28 specific outpatient treatment exist with 15 of them located in the Flemish region. Furthermore there are 14 specific inpatient treatment centres with 11 of them being also located in the Flemish region.

Drug treatment is also offered in psychiatric hospitals and in psychiatric units in general hospitals. Overall, these treatment centres are not exclusively oriented towards people with illegal drug problems. Moreover, a variety of psychiatric problems are treated, and some psychiatric hospitals or psychiatric units in general hospitals have created a specialised substance abuse unit. Similar to the hospitals drug treatment is available in the Centres for Mental Health Care (CMHC). A large number of psychological or psychiatric problems are treated in these centres. Some of those CMHC have however developed a certain specialisation in the treatment of drug problems. In the Flemish and French community drug-related treatment is provided in 18 generic outpatient centres or units (16 of them in the Flemish region). In addition 16 generic inpatient centres or units are available in the Flemish community.

Concerning substitution treatment, in the Flemish region most methadone maintenance programmes are provided by low threshold drug services. However, in smaller towns and rural areas methadone may also be prescribed by GPs under the supervision of drug services. In the French Community, a broad range of agencies (low threshold facilities, GPs, outpatient specialised units, mental health facilities) offer access to methadone, but GPs still play the most important role. According to the results of a recent survey (Casselmann et al. 2003<sup>27</sup>) about 10% of the GP's in the Flemish community, but 45% of the GP's in the French community deliver substitution treatment. For the year 2005 it is reported that 1500 GP's and 250 specialists provide substitution treatment in Belgium. Due to the Royal Decree (2004) general practitioners and specialists have to attend a permanent training in order to be qualified for initiating substitution treatment. Apart from the GP's and specialists, substitution treatment is offered in 27 specialised outpatient centres, in 70 hospitals and 15 prisons.

No detailed information on detoxification services is available.

## 2.3 *Diversification – special groups, special drugs*

In Belgium, treatment of drug dependence puts a lot of emphasis on co-morbid problems and therefore the availability and accessibility of such services is relatively

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<sup>27</sup> Casselman, J. et al. (2003): Les prises en charge par traitements de substitution en Belgique: développement d'un modèle d'évaluation des diverses filières de soins et des patients. Politique Scientifique Fédérale, Bruxelles.

good. Similarly, treatment services for parents with young children, children of problematic drug users and prison inmates are also reported to be reasonably available and accessible in Belgium. Other reported target-specific services exist for cannabis users, ethnic groups such as Moroccans, adolescents and gender-specific services. However, these services are reported to be limited.

### 3 Utilisation of drug treatment

The available data on utilisation of drug treatment is limited. In the Flemish region questionnaires were sent to 149 treatment centres in Flanders, covering all in- and outpatients centres, both specialised and generic. 57 treatment centres returned their questionnaire which is a response rate of 38%. In the French community data were collected from 23 out of 36 subsidised drug related treatment services. Consequently the results represent an underestimation. The data on clients in substitution treatment bases on the national registry for substitution treatment. However, taking the limitations into consideration the following number of clients made use of the existing drug treatment services in the year 2005:

Intervention	Number of clients	Number of facilities / units (Flemish + French community)
Outpatient psychosocial interventions		
In specialised outpatient units	5,325	15 + 13
In generic outpatient units	3,600	16 + 2
Inpatient psychosocial interventions		
In specialised inpatient units	624	11 + 3
In generic inpatient units	867	16 (only Flemish region)
Substitution maintenance		
In medical practices*	9,000 – 10,000	1750
In specific outpatient treatment centres	1,000 – 1,500	35
In other settings (prisons, clinics)	1,300	75
Detoxification	No information available	No information available

\* 750 doctors deliver substitution treatment to 8.000 to 9.000 patients in their private practice.

Total number of clients in psychosocial treatment in 2005 in Belgium: 12,611

Total number of clients in substitution treatment in 2005 in Belgium: 12,300

### 3.1 *New treatment entries*

As regards new treatment entries, there is now data on the number of new clients entering treatment available.

## **4 Quality system**

A national monitoring system for clients in medically assisted treatment is not in place yet, but foreseen under the Royal Decree of 19/3/2004 on substitution treatments and in a testing phase. Regarding clients in drug-free treatment, harmonisation of registration at national level started in the framework of TDI.

A new Decree of the Walloon Government (promulgated in 2004) specifies the list of information and the anonymous epidemiological data to be collected by the Mental Health Services and to be provided to the Administration of the Walloon Region. Data collection for the Government is now obligatory for subsidy.

In some treatment institutions evaluation is conceived as a philosophy of work directed towards the improvement of treatment processes. For this reason evaluation and assessment tools have been implemented, and some of the institutions cooperate with external evaluators.

## **Bulgaria**

### **1 Institutional framework**

#### *1.1 Policy*

In Bulgaria the first National Drug Strategy (2003-2008) gives the drug problem a permanent priority which puts emphasis on the development of strategic coordination and evaluation of both the risks associated with supply and use of drugs and efficient actions for fight against drugs. The National Drug Strategy attributes an equal significance to drug demand reduction and drug supply reduction.

In 2001, the National Programme for Prevention, Treatment and Rehabilitation of Drug Addictions in the Republic of Bulgaria (2001-2005) was approved. One of the main aims of this programme is to 'stop the increase of drug use through the provision of effective treatment and prevention. Regional and local treatment-related strategies have also been drawn up.

#### *1.2 Organisation*

Established in 2001, the National Drug Council (NDC) is responsible for the coordination, accreditation, monitoring and evaluation of treatment at national level. The NDC is chaired by the Minister of Health and includes concerned ministries and departments. The secretariat of the NDC also coordinates the activities of the regional drug councils (RDC) who are responsible for the planning, implementation and the coordination of services at the local level. Furthermore, the RDCs include representatives of all institutions and organisations involved in the drug field, including drug treatment, at the municipal/regional level. The secretary of the RDC is an unofficial regional drug coordinator.

Drug-related treatment is mainly delivered by the public institutions, followed by private institutions. Prevention and information centres are functional units which monitor and coordinate the local drug strategies and report to the RDC.

Outpatient psychosocial treatment is predominately financed by the National Programme for Prevention, Treatment, and Rehabilitation of Drug Addictions. Medically assisted treatment is funded by the National Health Insurance Fund (NHIF). The financing of residential psychiatric treatment is the responsibility of the government through the Ministry of Health and through municipal budgets.

## 2 Availability of drug treatment

In 2005, between 20,000 and 30,000 individuals are estimated to be problem heroin users in Bulgaria. The estimation for Sofia is that there are 15,748 problem drug users (range 9,548 and 26,924), and 11,993 problem heroin users. The estimation of the number of problem drug / heroin user is based on results from the year 2005 which were obtained through the Multiplier Method Using Treatment Data and a study using the Capture-recapture method.

### 2.1 Introduction

In Bulgaria, drug treatment is carried out mainly in facilities specialised in psychiatric care. One of the most common forms of drug treatment is detoxification provided in inpatient and outpatient settings. The outpatient treatment of the abstinent syndrome is implemented in facilities for outpatient psychiatric help and in regional clinics for mental disorders (RDMD). The inpatient detoxification is predominately provided in State Psychiatric Hospitals, psychiatric wards of Multi-Profiled Hospitals for Active Treatment (MPAT) and the Military Medical Institute. The detoxification is carried out with slow-release morphine (Substitol), methadone and codeine (DHC).

A second major treatment available provided in Bulgaria is substitution treatment with methadone followed by slow-release morphine (Substitol). Methadone was officially introduced in 1996, but only started to be developed as part of the treatment system in 2003. At the end of 2005, Naltrexone was registered as substitution agent and in some of the RDMD's maintenance treatment with Naltrexone is offered. Buprenorphine is currently not registered in Bulgaria and is therefore not in used in substitution treatment. Methadone is provided through specialised drug treatment facilities and an increase in the number of these specialised facilities has been observed. Office-based medical doctors are rarely involved in the provision of drug treatment.

Apart from detoxification and substitution treatment there are inpatient and outpatient psychosocial interventions offered to drug addicts. In general these interventions follow the detoxification treatment. Outpatient psychosocial interventions are primarily provided in community day care centres operated by the RDMD. Specialised day centres function in Sofia, Varna, and Plovdiv.

- Day Centre of the State Psychiatric Hospital for Treatment of Drugs and Alcohol Addictions (SPTDAA)

The day centre of SPTDAA is the last stage of the model programme for successful treatment and re-socialisation of patients that passed through inpatient detoxification and medial-term inpatient rehabilitation programme. The number of places is 15.

- Day centre "Solidarity"

This day centre works under the supervision of the therapeutic community "Trampoline" and bases upon an intensive therapy. The number of places is 15.

- Day centre of the “Ambulatory Group Practice for Specialised Medical Help – Centre for Mental Health – Varna – LTD

This day centre in Varna provides different types services for drug addicted clients in the stage of emotional-behavioural stabilisation. The number of places is 15.

- “Protected house”

The “protected house” is for patients of the State Psychiatric Hospital for Treatment of Drugs and Alcohol Addictions who successfully passed the residential programmes for addiction treatment.

Inpatient psychosocial treatment for problem drug users is almost exclusively provided in generic settings that are also for problem alcohol users. In 2005, there was only one licensed non-governmental therapeutic community in Bulgaria – “Phoenix” House. The therapeutic community “Phoenix” is an intensive rehabilitation programme with about 30 beds for treatment of drug and alcohol addictions.

## 2.2 *Types and number of available drug treatment*

As mentioned above, the treatment of drug users mainly takes place in psychiatric clinics. This is the case for detoxification and outpatient as well as inpatient psychosocial treatment.

In Bulgaria, drug treatment is provided in

- 11 State Psychiatric Hospitals
- 12 Psychiatric Dispensaries (RDMD),
- 11 Psychiatric Wards to Multi-Profiled Hospitals for Active Treatment (MPAT), and
- 4 Psychiatric Clinics to University Hospitals.

The total number of beds is 5439, of which 201 are available for addicted patients.

Detoxification is provided in 7 out of 11 MPAT units and in 8 out of 12 RDMD units.

In 2005, six specialised programmes provided substitution treatment; 4 of them are located in Sofia, one is in Varna and another one in Plovdiv.

With regard to inpatient psychosocial interventions in Bulgaria 19 generic facilities provide this kind of treatment. In addition there is one specialised residential therapeutic community (*Phoenix*)

## 2.3 *Diversification – special groups, special drugs*

Even though in Bulgaria almost all drug treatment takes place in psychiatric hospitals, it is reported that in 2004 only limited treatment interventions are offered to co-morbid patients. Treatment for any other special groups or special drugs is not available.

## 3 **Utilisation of drug treatment**

According to the register for Substitution Treatment Programmes 920 clients attended substitution treatment in 2005 in six specialised programmes. About 1,400 clients made

use of residential psychosocial treatment in 19 existing generic facilities. No specific information is available on the number of clients who made use of outpatient psychosocial and detoxification treatment.

In 2005 the monitoring system of treatment demand covered 1,443 persons, starting drug treatment in 8 inpatient and 12 outpatient units and centres. The data was collected through a questionnaire filled in by medical doctors, nurses, psychologists, social workers. The number of clients covered refers to individual clients without double counting

Total number of clients in substitution treatment in 2005 in Bulgaria: 920

Total number of clients in psychosocial treatment in 2005 in Bulgaria: 1,443

### 3.1 *New treatment entries*

The TDI in Bulgaria covers 75% of the overall number of drug treatment centres. The double-counting control is 91.7%.

In 2005 altogether 388 new clients entered treatment; the vast majority of 87,1% of clients for heroin use, and the remaining clients for problems with use of cocaine, stimulants and sedatives.

Number of new clients entering treatment	2005	388
- New clients entering treatment (% opioids)*		87.1
- New clients entering treatment (% cocaine)		0.8
- New clients entering treatment (% cannabis)		9.3
Number of all clients entering treatment*	2005	1,443
- All clients entering treatment (% opioids)		94.8
- All clients entering treatment (% cocaine)		0.4

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

In 2006 the effectiveness and the activities of the substitution maintenance programmes was monitored in fulfilment of the National Programme for Prevention, Treatment, and Rehabilitation of Drug Addictions.

At the moment there is no national register for clients in treatment, but a new integrated system is being developed which will be based at the National Centre for Addictions in 2007.

# Cyprus

## 1 Institutional framework

### 1.1 Policy

In Cyprus, the first National Drug Strategy covers the 2004-2008 periods. Along with the drug strategy action plans for demand and supply reduction had been put into practice. Drug treatment strategies are included in the National Drug Strategy and the overall objective is to guarantee specialised treatment and universal access to treatment. Furthermore there are three specific targets mentioned:

- The design of an integrated and global system of treatment at the three levels of intervention.
- The mapping and assessment of the existing situation and the promotion of new centers if necessary.
- The design of the accreditation, evaluation and monitoring procedure of therapeutic centers and programmes.

### 1.2 Organisation

In 2000 the “Law on the Prevention of the Use and Dissemination of Narcotic Drugs and Other Addictive Substances” was enacted, which provided for the establishment of the Cyprus Anti-Drugs Council (CAC). The CAC, which lies under the jurisdiction of the Ministry of Health, is the supreme national organisation responsible for the implementation, coordination, control of the Cyprus Drug Strategy. In this function the CAC is also responsible for the coordination of governmental as well as non-governmental addiction services.

Drug treatment is mainly delivered by non-governmental organisations which are independent but need the allowance of the CAC to operate. In addition, there are six governmental drug services, coordinated and monitored by the Mental Health Services (MHS). The main task of the Mental Health Services, an organisation of the Ministry of Health, is to offer effective care relating to treatment, rehabilitation and prevention of mental disorders. Furthermore private profit-making organisations are involved in the delivery of drug treatment, but only to a low extent.

As regards funding for drug treatment, most of the available drug services are financed by public budget. Also NGOs depend partly on public funding as the CAC has a small budget to support NGO projects. However, a number of outpatient and inpatient drug

services are additionally also financed by private foundations or sponsors and these private organisations contribute the biggest amount of money for these types of treatment.

## **2 Availability of drug treatment**

For the estimation of problem drug use in Cyprus the Truncated Poisson method was applied as only treatment data are available. For the year 2005 the number of problem heroin users was estimated at 692 (range from 548-909). By applying the same method, the number of heroin injectors was estimated at 543 (range from 426-727)

### *2.1 Introduction*

In Cyprus the development of drug treatment services started in the 1990s. In this time the two public outpatient services Perseas (Nicosia) and Promitheas (Limassol), and the inpatient TC “Ayia Skepi” run by a NGO have been established. However, many of the available drug treatment services have readjusted their concept and target group since opening while others have been implemented recently during the last three to five years. In 2007, there are 19 specialised treatment units located mainly in the capital Nicosia but also in Limassol, Larnaka and Pafos. The vast majority of the drug treatment services consist in drug-free therapy, and with exception of Perseas and Promitheas all of them address adult drug users. Important services are provided by “Anosi” (governmental) and “Veresies” Clinic (private) for detoxification treatment and by “Agia Skepi” (NGO) and “Pyxida” (governmental) for psychological rehabilitation and social reintegration. All other treatment units offer outpatient psychosocial intervention. In Cyprus, the first participation in drug treatment requires to contact one of the counselling centres which exist in all major towns. The main function of the eight existing counselling centres is to prepare drug users for further treatment by for instance means of motivation enhancement, and then to refer them to detoxification and /or residential drug treatment. However, most of the counselling centres also provide outpatient abstinence-oriented drug therapy.

The public drug service “Pixida” in Nicosia provides outpatient and inpatient psychosocial interventions. As regards the outpatient programmes, one is directed to the preparation for intake in the inpatient therapeutic community, the other one addresses drug users who are in need for outpatient psychosocial interventions. Currently there are two inpatient treatment units available; one is the therapeutic community “Ayia Skepi” which provides long-term residential drug treatment to adult drug addicts of age 18 to 40. The other one is the therapeutic community “Pixida” which is designed as a short-term drug treatment with duration of five months.

Since 2004, inpatient detoxification treatment is available at the most recent established public facility Anosis (Limassol). In addition, the private clinic “Veresies” (Larnaka)

recently started with outpatient and inpatient buprenorphine treatment for detoxification.

#### Recent changes

Cyprus as the last Member State recently started to provide substitution maintenance treatment in one clinic in the capital. The Ministry of Health has set the introduction of substitution treatment in motion, and the programme is fully functional since October 2007. In addition the Ministry of Health is oriented towards the introduction of an intensive day-care programme for addicted adolescents. The programme is to operate on a daily basis without overnight stays and weekends and will be intended for adolescents addicted to heroin.

#### *2.2 Types and number of available drug treatment*

In 2006 the following drug treatment services are available in Cyprus:

- 9 outpatient facilities providing psychosocial interventions, although 2 inpatient facilities also provide psychosocial interventions in an outpatient basis.
- 2 specialised inpatient facilities with 62 beds providing residential psychosocial treatment
- 2 detoxification treatment units; one public treatment unit with 10 beds specifically designed for inpatient withdrawal treatment of adult opiates addicts, and one private clinic providing both inpatient and outpatient detoxification with buprenorphine
- One outpatient substitution maintenance clinic in Nicosia that recently started (2007)

#### *2.3 Diversification – special groups, special drugs*

Specific treatment for children and adolescents below the age of 18 is reasonably available and accessible in Cyprus. Two outpatient drug services specifically address adolescents with primary cannabis use. One service is located in Nicosia and provides treatment for drug addicted adolescents. The other service in Limassol focuses on primary prevention and treatment for adolescents at risk since restructuring their concept in the mid 2007. Beside there are no further treatment options for specific drugs or groups.

### **3 Utilisation of drug treatment**

During the year 2006, altogether 560 individual drug users requested drug treatment. Of those the following number of clients made use of the different drug services:

Intervention	Number of clients	Number of facilities / units
Specialised outpatient treatment	369	9
Specialised inpatient psychosocial treatment	80	2
Detoxification	111	2
Substitution maintenance treatment	Not available	1

### 3.1 *New treatment entries*

In 2005 there were 209 clients entering treatment for the first time. During the period of 2001 to 2005 the profile of new treatment clients changed much. The number of new clients with primary use of cannabis increased from about 30% in 2001 to about 40.2% in 2005. An even stronger increase is to be found in new clients with primary use of cocaine as this proportion nearly tripled within six years (from 5.6% to 14.3%). At the same time there is an important decrease of opiate users demanding for treatment the first time. Their proportion decreased from almost 53% in 2001 to 42.1% in 2006.

Number of new clients entering treatment	2005	209
- New clients entering treatment (% opioids)*		42.1
- New clients entering treatment (% cocaine)		12.9
- New clients entering treatment (% cannabis)		40.2
Number of all clients entering treatment*	2005	432
- All clients entering treatment (% opioids)		62.8
- All clients entering treatment (% cocaine)		10.6
- All clients entering treatment (% cannabis)		24.1

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

The establishment of quality standards and evaluation of drug treatment is determined in the National drug Strategy as one objective although not implemented yet. In Cyprus, the TDI is considered as a national registry for drug treatment since there is a 100% coverage.

## **Czech Republic**

### **1 Institutional framework**

#### *1.1 Policy*

One of the objectives of the Czech National Drug Policy Strategy (2005-2009) is to “increase quality of life of users, their parents and other close persons by assuring the availability of quality treatment and reintegration services”. Furthermore, specific targets of this strategy are:

- To increase the availability of substitution treatment
- To create the methodology for the analysis of network of aftercare services (needs assessment, quality assurance, availability)
- To provide good quality and effective treatment
- To increase availability of aftercare and reintegration services

12 out of 14 regions have drawn up regional drug strategies/action plans which refer to and are largely inspired by the national one.

#### *1.2 Organisation*

The Council of the Government for Drug Policy Coordination (CGDPC), an inter-ministerial advisory body of the government, is the main coordinating and initiating body on drug-related issues. Activities of the national drug Council (including committees and working groups) are organised and controlled by the Secretariat of the CGDPC, which is a structural component of the Office of the Government.

The Secretariat organises the distribution of subsidies to service providers (along with all regions and some Ministries) in the sphere of drug prevention, treatment of drug addiction and reintegration and its director is the national drug coordinator. The Secretariat is also responsible for accreditation, monitoring, evaluation and delivery of drug treatment. It also established and manages a “vertical coordination” working group consisting of the regional drug coordinators. Since 1994 this group has the status of an advisory committee.

Each Czech region has, by law, to establish a regional drug coordinator who is responsible for regional drug policies in general (incl. treatment). In 2005, 13 out of the 14 regions appointed regional drug coordinators.

In the Czech Republic drug treatment is primarily delivered by public organisations at national and regional level. NGOs are also involved in the delivery of drug treatment and, to a lesser extent, also private institutions and office-based Medical Doctors.

While substitution maintenance treatment, detoxification and inpatient psychosocial drug treatment is mainly financed through health insurances, outpatient psychosocial treatment is primarily funded by public budget at national level. For instance, in 2005 the CGDPC provided funding to 173 local programmes; especially low-threshold services of NGOs but also outpatient treatment, therapeutic communities, reintegration, and aftercare programmes were supported. Next to CGDPC, which administrates the subsidies in the biggest financial volume, the Ministries of Health, Social Affairs and Education as well as all regions provide subsidies to drug services.

## **2 Availability of drug treatment**

Estimation of the number of problem drug user is based upon treatment multiplier method and includes methamphetamine and opiate users. According to these data sources, referring to the year 2005, it is estimated that in Czech Republic there are 28,600-35,700 problem drug users.

### *2.1 Introduction*

In the Czech Republic, the treatment of dependence to psychoactive substances is understood as professional, focused, and structured work with a client with the objective of achieving abstinence or reduction of drug use, reduction of the frequency and severity of relapses, and the involvement of clients in productive life in the family, work, and society, thus improving the quality of their life to a maximum.

A wide spectrum of interdisciplinary services provides treatment and social reintegration in the Czech Republic. By type, the following types of treatment are recognised:

- **Outpatient programmes**

Outpatient programmes cover drug treatment delivered by outpatient health care facilities, (specialised outpatient psychiatric clinic for treatment of addictions), outpatient counselling centres, day-care programmes and structured aftercare programmes.

- **Inpatient programmes**

Inpatient drug treatment is provided in therapeutic communities, specialised psychiatric departments in general hospitals, specialised departments for vulnerable children and youth (e. g. for children at risk of drug addiction), and in specialised psychiatric hospitals for treatment of addictions.

- **Substitution treatment**

Methadone prepared from an imported generic substance has been used for opiate substitution in the Czech Republic since 2000, and it has only been administered in

specialised substitution centres. The substitution agent buprenorphine (Subutex) has been registered since 2000, and it can be prescribed by every physician, regardless of his/her specialisation. However, buprenorphine substitution is provided in outpatient clinics. Substitution agents in the Czech Republic are administered exclusively orally.

In addition there is a number of detoxification units available with one being implemented in prison.

Treatment in Czech Republic is also divided into short-term (4–8 weeks), medium-term (3–6 months), and long-term treatment (7 months and more).

### Recent changes

In recent years outreach work with drug users has been developed. As well aftercare programmes including sheltered housing and work programmes has been increased. The number of specialised substitution centres is increasing, and new methadone programmes were opened in the Southern Bohemia and in Karlovy Vary regions. In addition, a pilot methadone treatment programme has started in two prisons in 2006.

### 2.2 *Types and number of available drug treatment*

The 2006 report of the National Focal Point provides the following details of the types and number of available drug treatment in Czech Republic.

Programme type	Number	Capacity (places, beds)
Sobering-up stations	16	
Outpatient health care psychiatric clinics	401	
Day-care centres	2	10
Substitution (methadone) centres	10	
Buprenorphine substitution in outpatient clinics		
Detoxification units - in prison	19 1	
Psychiatric hospitals	17	9,538
Psychiatric departments of hospitals	32	1,439
Psychiatric hospitals for children	3	320
Therapeutic communities	15	193
Aftercare programmes - with sheltered housing	20 12	385 118
Inpatient departments which are specialised in treatment of children at risk of drug addiction	5	66

In general most of the drug-related treatment is provided in facilities or units that also treat addiction to legal substances. In fact, detoxification and buprenorphine treatment is offered in this kind of generic clinics (including GPs), while methadone substitution is provided in specialised centres. Similarly, outpatient psychosocial interventions are available in 401 psychiatric facilities; the number of specialised (so called AT) clinics among them is not known exactly. Additional approx. 20 specific outpatient facilities addressing exclusively users of illicit drugs are operated by NGOs subsidised by the state. Inpatient psychosocial interventions are provided in 60 psychiatric facilities and in 17 therapeutic communities that have a capacity of approx. 200 beds.

### 2.3 *Diversification – special groups, special drugs*

In the Czech Republic, specific treatment services are largely available for adolescents and young children, while treatment for drug dependent women and co-morbid problems are reasonably available. In addition there are few treatment options for prisoners.

## **3 Utilisation of drug treatment**

Data on drug users who made use of drug treatment base upon the nationwide Health Statistics of the Institute of Health Information and Statistics of the Czech Republic – Psychiatric Care. The number of clients in methadone substitution is from the Substitution Treatment Register. In addition a crude estimation of buprenorphine clients is provided which has been done on basis of the distributed quantity of buprenorphine and the results of the survey among clients of Prague low-threshold facilities.

According to these data, the following number of clients made use of drug treatment in the year 2005:

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions		
In specialised outpatient units (NGOs)	1,800	20
In generic psychiatric outpatient units	16,855	401
Inpatient psychosocial interventions		
In specialised inpatient units	486	15
In generic psychiatric inpatient units	4,744	60
Substitution maintenance		
In medical practices	1,000 – 2,500	Not available
In specialised outpatient treatment centres	758	10
Detoxification*	172*	20

\* The number of clients in detoxification treatment refers only to detoxification units in prisons.

Of those clients in substitution treatment 20% were treated with methadone and 80% with buprenorphine.

Total number of clients in substitution treatment in 2005 in Czech Republic: 758 on methadone and about 1.000–2.500 on buprenorphine

Total number of clients in psychosocial treatment in 2005 in Czech Republic: 23,864

### 3.1 *New treatment entries*

The available data on new treatment entries covers 75% of the existing centres and treatment units; the coverage of substitution treatment units is rather limited. The double-counting control is 100%.

4,372 drug users entered treatment for the first time in their life in 2005. About 60% of them demanded for the first time treatment in relation to the use of stimulants, especially of pervitin.

Number of new clients entering treatment	2005	4,372
- New clients entering treatment (% opioids)*		16.1
- New clients entering treatment (% cocaine)		0.1
- New clients entering treatment (% cannabis)		20.5
Number of all clients entering treatment*	2005	8,041
- All clients entering treatment (% opioids)		23.9
- All clients entering treatment (% cocaine)		0.2
-All clients entering treatment (% cannabis)		14.5

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In 2005, a procedure for the certification of professional competency and quality of drug services was implemented. By the end of May 2006 altogether 94 different treatment programmes received the certification. After 2007 only certified programmes run by NGOs should be funded by the state budget.

In Czech Republic there is a well developed system of client registration and monitoring in place, covering substitution and drug-free treatment. The Institute for Health Information and Statistics collects data from health facilities, and the treatment demand register, run by the national Hygiene Service, collects data from all agencies that provide specialised treatment services to drug users.

## **Denmark**

### **1 Institutional framework**

#### *1.1 Policy*

Central coordination of drug affairs lies with the Ministry of Interior and Health while until recently the “Association of County Councils in Denmark” was coordinating drug treatment between the counties. However, since 1.1.2007, the responsibility for medical and psychosocial drug treatment has been assigned to the municipalities through the “National Organisation of Danish Municipalities”. While the 98 municipalities are responsible for drug treatment, the five regions are responsible for psychiatric care, primary and public health care (hospitals, general practitioners and private practicing specialists).

In Denmark, policy duties are shared by the state, the regions and the municipalities. It is a national responsibility to regulate and coordinate the decentralised providers of drug treatment in the community. To provide treatment within the criminal system is also a national responsibility. As regards drug treatment the respective legislation is adopted, guidelines are defined, and control is performed at national level.

Specific drug treatment strategies/action plans in Denmark exist at regional and municipal level but not at national level.

#### *1.2 Organisation*

As mentioned above the responsibility for providing psychosocial and pharmacological drug treatment has been placed to the municipalities since the beginning of 2007. At local level the municipalities are also responsible for prevention programmes. Central authorities assist the municipalities in terms of monitoring, guidelines, documentation, sharing of knowledge, etc.

Most treatment services are delivered by the municipalities, followed to a lesser extent by NGOs (mainly residential treatment centres through private funds) and private institutions.

Besides there are also a number of drug-free inpatient treatment centres which are primarily privately run and owned. In Denmark, there is a quite clear distinction between substitution treatment and drug-free treatment.

Drug treatment is mainly funded by local or regional budget. Residential treatment is financed by the municipality as well by paying a basic rate.

## 2 Availability of drug treatment

In Denmark, the most recent estimation on the number of drug addicts is from 2006. According to the estimation there are 27,000 drug addicts in Denmark, of which more than 7,000 are exclusively cannabis users. The data only includes individuals with a regular or dependent drug use, and drug addicts in substitution treatment.

### 2.1 Introduction

Since January the 1<sup>st</sup> 2003, drug users aged at least 18 years have been guaranteed that they receive drug treatment no later than 14 days after contacting the municipality. In addition, the drug user is allowed to choose between treatment programmes provided either by public or private institutions. On October the 1<sup>st</sup> 2005 a law authorised by the Minister for Social Affairs (now the Minister of Welfare) came into force which also guarantees drug treatment within 14 days for drug users under age of 18 years. In relation to the treatment guarantee, as ministerial order was issued together with guidelines for quality standards for social treatment of drug addiction.

The municipalities refer all drug users requesting for treatment to all kinds of drug treatment – outpatient and inpatient treatment, psychosocial treatment, substitution and withdrawal treatment. The referrals include clients to be placed either in treatment of the public municipal institutions or in private institutions.

In Denmark, treatment is usually provided as outpatient treatment, which may be supplemented by inpatient treatment if there is a need for a change of environment and/or more structured intervention. Treatment is predominately medically assisted and is supposed to be always accompanied by psychosocial counselling. Care and community-orientated intervention, which is targeted at those with the most serious drug addiction problems in particular, takes place more and more via drop-in centres.

- Outpatient psychosocial (drug-free) treatment

Outpatient psychosocial treatment is provided by TCs, collectives, etc. There are three different approaches in outpatient psychosocial treatment: 1) This treatment is considered as drug-free post treatment for drug addicts that have been admitted to inpatient treatment. 2) Outpatient psychosocial treatment which is targeted at less addicted and slightly younger drug users. 3) A combination of outpatient psychosocial treatment and a special local flat-sharing scheme is offered to a small group attending the same psychosocial treatment programme.

Apart from outpatient psychosocial interventions, the following services are available:

- Slow withdrawal (“*Afgiftning/nedtraping*”)

Slow withdrawal is provided in an outpatient setting by municipal centres for treatment of drug addiction. The slow reduction of substitution doses takes place according to an individual time schedule. Detoxification is also provided by general and psychiatric hospitals in an inpatient setting. Per year about 1,000 persons are admitted to inpatient detoxification in order to become abstinent. Detoxification is usually linked to the drug

treatment system for further treatment of drug addiction. Thus, slow withdrawal may be combined with an inpatient rehabilitation programme, where the goal is to become drug-free.

- Residential treatment (“*Døgnbehandling*“)

These institutional stays may be in private institutions, but the expenses are paid by the state if referral has been made through a public addiction centre. Inpatient treatment takes place in “24-hours treatment centres” which are mainly operated by social workers and drug counsellors, and with part-time medical supervision on a consulting basis. The vast majority of inpatient programmes provided to drug users are intended to deal with drug dependence associated with social problems.

- Substitution treatment

Almost all substitution treatment takes place at specialised outpatient treatment units operated by the counties. Methadone, which has been made available since 1970, is the predominant substance and until 1998 was the only substitute substance offered. Since then also buprenorphine and LAAM is used for substitution treatment. On 8 June 2007, the National Board of Health published revised guidelines for substitution treatment. The guideline includes recommendations for the prescription of methadone, injectable methadone, and buprenorphine. It is recommended that buprenorphine should be prescribed in the first place, and that as many opiate addicts as possible should be treated with this substance. There is no limitation in terms of duration for substitution treatment.

According to the legal framework (“*Vejledning om ordination af afhængighedsskabende lægemidler og om substitutionsbehandling af opioid afhængige*”) of June, 8<sup>th</sup> 2007 office-based Medical Doctors are allowed to carry out substitution treatment under certain conditions. Law based guidelines from the National Board of Health specifies that doctors must be exercised for providing substitution treatment to drug addicts. A new medical guideline will be published in the beginning of 2008. Due to the guideline only doctors in the municipality and in the criminal system are allowed to carry out long-term substitution treatment. Since 2007 these doctors have to register patients in long-term buprenorphine treatment.

### Recent changes

Municipalities, counties, voluntary social organisations and associations, as well as private operators have been allocated for the period 2006-2008 DKK 70 million from the fund for improving social measures for treating drug users. The projects being supported are wide and varied. The purpose of a number of projects is to improve the work of drop-in centres so that they can focus, for example, on people doing exercise, taking part in sport and promoting healthier eating habits. Drug users receiving long-term methadone treatment may, in some of the projects, receive enhanced support in the form of a case manager. Furthermore there are projects which develop new methods for

treating cannabis and cocaine addiction, as well as projects which focus particularly on the treatment needs which female drug users may have.

The Prison and Probation Service has allocated resources for implementing two new treatment units, a follow-up treatment unit in selected prisons, and a number of outreach initiatives addressing drug using prisoners. For drug using offenders facing a minimum of a three month penalty and being motivated for treatment the Prison and Probation Service was given a treatment guarantee on the 1<sup>st</sup> January 2007.

## *2.2 Types and number of available drug treatment*

In Denmark, the so-called treatment guarantee ensures that substance misuses are offered treatment within 14 days. Even though medically assisted treatment is not part of the guarantee, this kind of treatment is usually also available within two weeks. The prescription of methadone or buprenorphine is typically combined with some kind of psychosocial treatment such as counselling sessions.

With few exceptions outpatient psychosocial drug treatment is rare in Denmark. As regards inpatient treatment options, in 2005 there were 49 institutions offering residential drug treatment. No further information on number of treatment organisations is available.

## *2.3 Diversification – special groups, special drugs*

The most common specific target group in Denmark are drug users younger than 25-26 years old who have developed a problematic use of cannabis and stimulants (including amphetamines and cocaine). The availability of these services is reasonable and about 75% of the municipalities are offering specific interventions to this group. Furthermore, municipalities report that they pay specific attention to drug using ethnic minorities and immigrants and some counties offer interpreters if needed. But so far no organised treatment programme is offered to ethnic groups. Also, 40-50% of the counties and the municipalities report to have specific treatment services offered to drug-using women. Some counties also developed treatment programmes for drug-using parents and pregnant women. For instance, a specialised outpatient drug treatment programme for pregnant drug users is available in the capital. Regarding psychiatric co-morbidity, there are few specific outpatient treatment programmes which have a low capacity for drug users with psychiatric problems. Most of these clients are treated in psychiatric hospitals; in 2006, a total of 3,849 persons with drug-related co-morbidity were admitted to psychiatric hospitals in Denmark. Since 2006, an outreach psychosis team has been established in Copenhagen with capacity of 100 drug addicts with psychiatric disorders. This treatment programme intends to cooperate closely with the district psychiatric service and with drug use treatment services.

### 3 Utilisation of drug treatment

Data on clients in treatment is drawn from the National Registry of Drug Users Undergoing Treatment. The Registry provides information of people receiving drug treatment through their county. Treatment utilised in prison and hospitals is excluded.

According to the Registry in 2005 4,453 clients were treated in specialised outpatient units providing psychosocial interventions. 717 clients made use of inpatient psychosocial drug treatment in specialised residential treatment units. 6,289 clients received substitution treatment of with more than 5,500 being treated with methadone.

No information is available on the number of clients treated for detoxification.

Total number of clients in psychosocial treatment in Denmark in 2005: 5,170

Total number of clients in substitution treatment in Denmark in 2005: 6,289

As the National Registry excludes treatment in hospitals and prison the total number of drugs users who received treatment in 2005 was 13,316.

In 2006, a total of 13,441 individuals have been admitted to drug treatment. Compared to 2005 this number represents no more than 1% increase. Since 1995 the number of drug users in substitution maintenance has doubled. Out of the 13,441 persons 6,300 have been in substitution treatment: 5,700 received methadone, 600 buphrenorphine.

#### 3.1 *New treatment entries*

In 2005 altogether 1,578 clients entered the treatment for the first time. The request for new treatment ever was in 52.6 % of the clients related to their cannabis use, in 18.5% of the clients to their opioid use (of which 11% because of heroin), in 11.2% to the use of stimulants, and in 9.3% to the use of cocaine.

Number of new clients entering treatment	2005	1,578
- New clients entering treatment (% opioids)*		18.5
- New clients entering treatment (% cocaine)		9.3
- New clients entering treatment (% cannabis)		52.6
Number of all clients entering treatment*	2005	5,228
- All clients entering treatment (% opioids)		40.8
- All clients entering treatment (% cocaine)		5.3
-All clients entering treatment (% cannabis)		28.8

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

A ministerial order was issued together with guidelines on quality standards for social treatment of drug addiction. By the end of 2004, all county councils and municipal boards in the delegation municipalities had drawn up quality standards for the treatment of drug addiction provided by the county.

Clients in public and private residential treatment are monitored by the Danish Registration and Information System (DanRIS). This system has been developed in 2000, and it is based at the Centre for Alcohol and Drug Research at Aarhus University, which is also in charge of evaluation studies at national level. Clients in drug-free outpatient treatment and those in substitution treatment are monitored and registered by the National Board of Health since 1985. According to the “Act of Authorisation of Health Personnel” doctors prescribing substitution agents within long-term substitution treatment are obliged to register their patients monthly to the National Board of Health. The results of the mandatory monitoring of clients in substitution maintenance treatment are published every year.

## **Estonia**

### **1 Institutional framework**

#### *1.1 Policy*

In April 2004 the Estonian government approved the National Strategy on the Prevention on Drug Dependency (NSPDD) 2004-2012 which includes an action plan for four years (2004-2008).

The Estonian drug strategy provides an integrated approach to both demand and drug supply. The NSPDD includes six fields of activity - prevention, treatment-rehabilitation, harm reduction, supply reduction, drugs in prison, and monitoring of drug situation and evaluation. The development of professional and effective treatment for drug dependent users, expansion of drug-related treatment services across the country and improvement of the quality of services is one of the six main objectives. In general, the national drug strategy sets out to develop the professional capacities among staff, and to improve the availability and quality of treatment services.

Almost all regions have separate drug strategies which are not formally linked with the national strategy.

#### *1.2 Organisation*

The Ministry of Social Affairs is responsible for the overall administration and coordination of the NSPDD (including drug treatment). The National Institute for Health Development (NIHD) is responsible for the implementation and funding of drug treatment. The NIHD also funds training for the improvement of the quality of drug treatment in Estonia.

The Global Fund (GF) Programme to Fight Malaria, Tuberculosis and AIDS is the major provider of funds for medically assisted treatment in Estonia. It should be noted that large parts of the national budget dedicated to treatment is allocated to the setting up of new treatment centres. Funds from the Estonian Health Insurance Fund and from local authorities are also allocated to drug treatment. However, it is impossible to identify the source of the funding for each type of treatment as most agencies (outpatient/residential) receive funding from various sources.

## 2 Availability of drug treatment

The first prevalence estimation in Estonia was done in 2005 and based on routine data sources using capture-recapture methodology. According to the estimation the number of IDUs is 13,801 (range 8,132 – 34,443).

### 2.1 *Introduction*

Traditionally, drug treatment in Estonia is for the most part provided through 13 hospitals, which obtain a license for psychiatric services in order to provide inpatient and outpatient treatment for dependent drug users. According to the Mental Health Act (RT1 I 1997, 16, 260) only psychiatrists can provide drug treatment, although they are not required to be specialised in that area. Medical doctors in Estonia are also involved in the provision of drug treatment but the extent of their involvement is unknown.

In recent years, treatment provision is gradually being taken over by specialised drug agencies. Thus an increased availability of outpatient treatment as well as of counselling and treatment options outside the psychiatric hospitals was noted. Also drug service provision by NGOs has recently shown an increase.

Methadone detoxification has been present in Estonia since 1998. Methadone maintenance treatment was officially introduced in 2001 but it has only become used on a significant scale since 2003 when the first specialised centre for substitution treatment (West Tallinn Central Hospital) was opened in Tallinn in 2003 by the Tallinn City Government. Up to now the Tallinn centre is still the biggest specialised substitution treatment centre in Estonia.

With the support by the Global Fund Programme to Fight Malaria, Tuberculosis and AIDS, the number of clients receiving detoxification and maintenance treatment has strongly increased to 600. Treatment capacities however still seem not to meet the growing number of treatment demands in recent years.

#### Recent changes

In 2005, 6 new treatment/rehabilitation centres have been established: a rehabilitation centre for patients with dual diagnoses, a low threshold centre, two treatment centres and a rehabilitation centre in North-Eastern Estonia, and an advisory centre in Central Estonia.

### 2.2 *Types and number of available drug treatment*

Only very limited information on the types and number of available drug treatment is available.

As mentioned earlier only psychiatrists can provide drug treatment. Thus, theoretically there are 226 psychiatrists in Estonia providing drug treatment. However, not all of them offer drug treatment, and their real number remains unclear.

According to the NIHD there were 57 drug treatment and rehabilitation providers in 2005, but there is no information on the type of treatment these institutions provided. Methadone treatment is delivered within the framework of the Global Funds programme in Tallinn, Narva, Jõhvi and Kiviõli. In 2005, methadone treatment is provided by 5 institutions.

### *2.3 Diversification – special groups, special drugs*

In 2004, the Tallinn City Government supported provision of gender specific assistance and initiated the implementation of a specialised treatment programme targeting female drug users. A new treatment centre for minors was opened in August 2004 at Jõhvi Hospital in Ida -Viru County to provide (drug-free) treatment for children and young people aged 19 and younger.

## **3 Utilisation of drug treatment**

The only available information on treatment utilisation refers to the number of clients that made use of medically assisted treatment in 2005. According to the data did 1.339 persons receive medically assisted treatment (includes detoxification and substitution maintenance) in 19 medical institutions in 2005. Out of them 332 persons received inpatient treatment and 1.007 received outpatient drug treatment.

Total number of clients in substitution treatment in Estonia: 500

### *3.1 New treatment entries*

According to the 2006 report 511 persons received medically assisted treatment for the first time in their life in 2005. No other information has been submitted on new treatment entries.

## **4 Quality system**

Data on clients on substitution treatment are collected in the framework of the Global Funds programme. No further information on are provided as regards the treatment quality system.

## **Finland**

### **1 Institutional framework**

#### *1.1 Policy*

The national drug strategy, “Government Resolution on a Drug Policy Action Programme in Finland” (2004 – 2007), aims at strengthening the coordination of drug policy at the national level. Among the 14 basic targets of the national drug action programme there are four treatment related objectives which include: 1. cooperation with other authorities in referring drug abusers to treatment, 2. access to appropriate treatment services for drug abuse is secured, 3. use of treatment in the context of penal sanctions is increases, and 4. staff skills related to prevention and treatment of drug problems are improved.

Substitution and maintenance treatment of opiate addicts is regulated by a Decree (289/2002).

Beside the national drug strategy there exist municipal strategies for drug treatment and prevention in 139 municipalities. Out of these 29 strategies are targeted specifically at drugs, while other strategies are more targeted at all substances that may be abused.

#### *1.2 Organisation*

In Finland, municipalities are accountable for providing substance abuse services based on the needs for drug treatment (Act on Welfare for Substance Abusers, 41/1986). They are also accountable for providing substance abuse prevention. National recommendations for quality in drug treatment (2002) and national quality criteria for substance abuse prevention (2005) have been formulated by a broadly based expert working groups. These groups have been appointed by the National Research and Development Centre for Welfare and Health “STAKES”. In cooperation with State Provincial Offices, STAKES coordinate the contact person network in preventing substance abuse that comprises 407 municipal contact persons and 17 provincial contact persons. The tasks of a contact person includes the promotion of multiprofessional cooperation with municipal or regional substance abuse prevention programmes, and the coordination of municipal or regional substance abuse strategies.

The provision of drug treatment is in the responsibility of the regions and municipalities. More than half of the drug treatment is delivered by NGOs, purchased by public services of the municipalities. As regards medically-assisted treatment

(detoxification and substitution maintenance treatment), mostly regionally operating treatment agencies are providing this kind of treatment. However, long-term substitution treatment is meant to be delivered by the local treatment services. Drug treatment is mainly funded by public budget of the communities.

## **2 Availability of drug treatment**

Statistical estimates on the prevalence of problem drug use, based on the statistical capture-recapture method, are made nationally since 1997. According to these estimates, there were 14,500 – 19,000 amphetamine and opiate problem users in the in Finland in 2005.

### *2.1 Introduction*

According to the “Act on Welfare for Substance Abusers” (41/1986), municipalities have to provide substance abuse services in accordance with the needs of the municipalities as regards their content and coverage. Treatment facilities are directed at all kinds of substance abuse that is alcohol, substitutes, pharmaceuticals and illicit drugs. This is because in Finland the main group of substance abusers are polydrug users with alcohol abuse.

The social and health care sector must provide services that are intended specifically for substance abusers. Units providing specialised services include

- Outpatient clinics (A-Clinics, youth centres),
- Short-term inpatient care (detoxification units),
- Long-term rehabilitation units
- Aftercare outpatient units (day centres),
- Substitution maintenance treatment.

Outpatient treatment covers outpatient treatment for all kind of addictions, youth outpatient services, and outpatient services for drug abusers. For instance, the “Avokisko” unit of Kalliola Clinics provides community treatment for drug addicts who have a long and extensive history of substance abuse, and who have passed through an intensive inpatient rehabilitation treatment. The Children and Adolescents' Substance Abuse Outpatient Clinic in Turku offers a structured individual brief intervention programme that consists of an evaluation visit as well as 12 further visits.

Short-term inpatient care refers to inpatient detoxification treatment which is usually arranged in rehabilitation units, detoxification units or specialised health care services. The duration of the detoxification periods varies in the units from 24 hours to four weeks. In the medical treatment for opiate addiction buprenorphine is most common with 86% of all cases, followed by methadone (both substances had been introduced in 1997).

In Finland the term rehabilitation includes residential psychosocial treatment for drug abusers, residential services for youth, and psychiatric services for substance abusers. Aftercare outpatient services include rehabilitative day care centres.

Substitution treatment is provided in in- and outpatient settings. According to the “Act of Medical Treatment for Opiate Addicts” clients can enter substitution treatment if diagnosed as opiate dependent and if detoxification treatment has not been successful. This Act also determines that substitution treatment is not allowed by private physicians but in the Addiction hospital, university central hospital, general hospital and in a substance abuse treatment centres or other treatment units with adequate capabilities. For instance substitution treatment can also be provided by primary health care units. In addition, there must be a responsible physician, an individual treatment plan and psychosocial treatment. In municipalities that provide substitution treatment, opiate addicts have to wait on average two weeks to be admitted to substitution and maintenance treatment. However, in some municipalities in Southern Finland this can take up to a year.

## *2.2 Types and number of available drug treatment*

According to the information given in the developed questionnaire in 2006 there are 92 treatment centres providing outpatient psychosocial treatment. 48 treatment centres with a total of 555 beds deliver inpatient detoxification treatment. The same number is available for inpatient psychosocial treatment. The Finnish statistics count inpatient detoxification and rehabilitation as one service. Two out of three municipalities provide detoxification services, and inpatient treatment for opiate addicts is reported to be available in 28% of the municipalities without delay, and in 36% of the municipalities with a delay of less than a week. Furthermore there are 8 specialised substitution clinics providing maintenance treatment. In general substitution treatment for opiate addicts is reported to be available in 63% of 400 municipalities.

## *2.3 Diversification – special groups, special drugs*

In Finland, there are many youth clinics available for clients below age of 18 and treatment for this group is based on the Child Welfare Act. There are also specific services available for Romanians, Russians and Somalis, but limited. Furthermore few programmes exist especially for female substance users as there are some treatment units only for female patients. Similarly, few psychiatric units in the university central hospitals are specialised in treating comorbid patients.

## **3 Utilisation of drug treatment**

The data on treatment utilisation is based upon the drug treatment information system which is offered to drug treatment units on voluntary basis, and therefore the coverage

is assessed by the NFP as to be rather poor. According to limited data available, in 2006 the following number of clients had been in treatment in Finland.

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial treatment	3,103	92
Inpatient psychosocial treatment	Same as detoxification	
Inpatient detoxification	644	48
Substitution maintenance treatment	1,000	8

### 3.1 *New treatment entries*

Only limited data on new treatment entries are available (see previous chapter). In the year 2005 altogether 631 clients entered treatment for the first time; of these 25% demanded treatment related to opioid use (of which only 0.5% for heroin use), 34% requested treatment for cannabis use and 26.3% for stimulant use.

Number of new clients entering treatment	2005	631
- New clients entering treatment (% opioids)*		25.0
- New clients entering treatment (% cocaine)		n.a.
- New clients entering treatment (% cannabis)		34.0
Number of all clients entering treatment*	2005	2,935
- All clients entering treatment (% opioids)		43.0
- All clients entering treatment (% cocaine)		0.0
- All clients entering treatment (% cannabis)		18.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

As a part of national drug treatment information system (TDI) there exists information from clients in medically-assisted (including substitution treatment) and in psychosocial treatment. The data base is voluntary, not comprehensive, and anonymous.

In Finland, recommendations concerning the quality of services for substance abusers had been published in a handbook of the Ministry of Social Affairs and Health in 2002. These recommendations are targeted at all substance abusers and all treatment options.

## France

### 1 Institutional framework

#### 1.1 Policy

In France, there is a National Drug strategy, which comprises all official documents approved by the government, and identifies general principles and objectives to be achieved. Part of this is the “Plan Gouvernemental de Lutte contre les Drogues Illicites, le Tabac et l’Alcool” (2004-2008), which includes the topics prevention, care, repression, and research at national and international level. Main objectives are

- to identify abuse or dependence as soon as possible,
- to develop, organise and optimise treatment in order to improve accessibility and quality, and
- to improve the quality and variety of therapeutic responses.

There are also regional and local strategies for drug-related treatment in some parts of the country. A five-year public health policy plan (2004-2008) was adopted in the beginning of 2004. The following objectives were defined in the field of drug dependence: “to maintain the drop in the incidence of HIV seroconversions among drug users and to initiate a drop in the incidence of HVC”, and “to continue the improvement in treatment of opiate-dependent users and polydrug users”. The plan involves strategies for diversification and optimisation of the treatment available, which include the development of programmes without substitution, continuing risk reduction programmes, encourage methadone supply by GP’s and the diversification the development of substitution drugs, and also to experiment with innovative treatment methods for crack users.

#### 1.2 Organisation

The institution “Interdepartmental Mission for the Fight against Drugs and Drug Addiction” (MILDT) is responsible for defining, setting up, and coordinating drug-related policy on illicit and licit drugs. Three systems are concerned with drug treatment:

1. The specialised addiction care system with medico-social establishments.
2. The general care system with hospitals and GPs,
3. The risk reduction system.

The implementation of drug-related treatment is mainly the responsibility on the regional and local level. In some regions there are co-ordinators but the level of coordination varies. Drug treatment is financed by social insurance companies since 2003, until then it was financed by the state.

## **2 Availability of drug treatment**

The most recent estimations on the prevalence of drug users range is from 1999 when a national assessment of the prevalence of problem heroin and cocaine use was made. Depending on the method, the number of problem users of opioids and cocaine is estimated at 150,000 to 180,000 among the population aged 15-54.

### *2.1 Introduction*

According to the aim of providing a wide range of treatment services almost all of the hundred sub regional administrative areas (departments) in France have at least one specialised care centre for drug addicts (CSST). These centres may have several units and the number of all units is estimated at 450 to 500). The drug treatment system is characterised by Drug Addiction Treatment Centre offering the following types of services:

- Centres for outpatient care
- Inpatient centres
- Treatment centres providing care to people in jail

Medically-assisted and drug-free treatment is provided in the same Drug Treatment Centres, there is no distinction regarding the kind of treatment. Substitution treatment is either carried out in Drug Addiction Treatment Centres or by GPs. Since 2002, methadone can be prescribed by every doctor practising in a health establishment, and buprenorphine can be prescribed by every GP since 1996. The only admission criteria to enter substitution treatment are a minimum age and opiate dependency.

Psychosocial therapy is also carried out in the Drug Treatment Centres. Therapeutic communities are not a well-established type of treatment yet, but the National Drug Strategy recommends the further implementation. In a number of hospitals there are so-called active liaison teams to train and assist the hospital care teams of the different medical units, lead activities for prevention, information and awareness concerning drugs and dependence.

### *2.2 Types and number of available drug treatment*

In 2003 the following numbers of drug treatment services were available in France:

- 210 Centres for outpatient care,
- 41 inpatient centres, and

- 16 centres specialised in providing care in prison. Some of the outpatient centres also provide care for prisoners.

Substitution treatment is carried out in all outpatient care centres as well as in practices of GPs. About 35% of the GPs did prescribe substitution treatment in 2002. Of all buprenorphine prescribing 93.2% were done by office-based doctors. As drug-free treatment is not a concept used in France, there are no numbers available on that topic. Withdrawal treatment has become less frequent due to rising numbers of substitution treatment, and in 2005 the number of patients in withdrawal treatment was approx. 9,000. Psychosocial interventions are available in all Drug Treatment Centres, and Case management is carried out in medically-assisted treatment as well as in drug-free interventions.

### 2.3 *Diversification – special groups, special drugs*

The government Drug Strategy 2004-2008 introduced a new service aiming at counselling, reception, and support of young drug users (mainly cannabis users) and their families. Two further inpatient centres exist for young drug users under age of 25. In addition, special units for mothers and their children do exist. Treatment for cocaine or amphetamine users or for dually diagnosed drug users do not exist as specialised programmes, but there are specific therapeutic responses for these groups. No specialised treatment interventions are available for ethnic groups, immigrants or gender issues.

## **3 Utilisation of drug treatment**

The majority of opiate-dependent patients are treated in medically-assisted treatment. In 2006 between 14,300 and 15,400 patients received methadone from their GPs, and between 76,100 and 89,100 received buprenorphine. The average number of patients in substitution treatment in a Drug Treatment Centre was 79 for methadone and 50 for buprenorphine in 2005. Both numbers increased since 1998, from 35 and 41 respectively.

The number of patients undergoing detoxification treatment was estimated by the Treatment Centres at 9,000 in 2005. Detoxification was carried out on average with 7,500 patients in 2004.

Intervention	Number of clients	Number of facilities / units
Specialised outpatient treatment	90,000	approx. 210
Inpatient Therapeutic Communities	No information available	
Detoxification in outpatient centres	9,000	approx. 210
Substitution maintenance treatment in specialised treatment centres	26,000	210

The total of patients in substitution treatment in 2005 is estimated at 104,500.

### 3.1 *New treatment entries*

Data from the French National Monitoring System (RECAP) show, that about 21,000 patients started treatment in an outpatient drug treatment centre in 2005, a third of them started with treatment for their first time. As these data were only filled in by less than half of the Treatment Centres, numbers have to be considered carefully. According to available data, two big groups can be differentiated; mainly older opiate users and mainly young cannabis users.

Number of new clients entering treatment	2005	4,167
- New clients entering treatment (% opioids)*		20.2
- New clients entering treatment (% cocaine)		3.9
- New clients entering treatment (% cannabis)		67.3
Number of all clients entering treatment*	2005	20,989
- All clients entering treatment (% opioids)		39.8
- All clients entering treatment (% cocaine)		5.7
-All clients entering treatment (% cannabis)		48.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

No special quality standards are in place for treatment of drug users, but some expert recommendations exist in terms of a consensus conference on opiates withdrawal (April 1998) and on treatment strategies for opiate addicts (June 2004).

In France, there is a national monitoring system (RECAP) in specialised centres and hospitals for drug-free and medically-assisted treatment in order to indicate drug-

treatment demand. Another monitoring system (OPPIDUM) does mainly focus on the consumed substances and is implemented in a number of specialised centre, several GPs and harm reduction facilities.

# Germany

## 1 Institutional framework

### 1.1 Policy

In Germany, drug policy is formulated in the “Action Plan Drugs and Addiction“ (2003-2008) and follows the following four principles:

- Prevention of drug use
- Counselling and treatment of drug users
- Survival aid and harm reduction
- Repression and supply reduction.

Main intention of the Action Plan is to create a balance between measures to reduce both demand and supply. The Federal Government’s addiction policy comprises legal psychotropic substances and associated risks and takes European developments into account.

Drug-related treatment is based on the concept that addiction is a complex illness associated with psychological, somatic and social disorders requiring treatment. Measures to combat drug use and addiction are to be made available as early and as comprehensively as possible. In the German addiction policy the prevention of addiction plays an important role aiming at the prevention or at least the significant reduction of risky and harmful substance use and substance dependence.

Since December 2005, the drug policy of the actual Federal Government has shifted the attention to the increasing prevalence of cannabis use, and thus supports appropriate programmes. A further focus is directed to the reduction of tobacco and alcohol use, and to restrain misuse of medication.

### 1.2 Organisation

Since 1998, addiction policy is coordinated by the Federal Drug Commissioner who is assigned to the Federal Ministry for Health. However, there is no national organisation responsible for the coordination of drug-related treatment. In the Federal States drug commissioners coordinate treatment and the drug policy.

In Germany, health care and social work in particular base on the principle of subsidiarity. The implementation of drug treatment is in the responsibility of the Federal States and municipalities.

Psychosocial care for drug users is delivered mainly by NGOs and private charity organisations, and these treatment providers receive public funding according to certain criteria from national budget, from budget of the Federal States and municipalities. Only in few cases (e.g. counselling facilities run by public health offices or psychiatric clinics), the Federal or regional Governments itself provides special treatment services for persons with addiction problems. Outpatient medical care is delivered by accredited doctors (i.e. general practitioners) according to the associations of Statutory Health Insurance (SHI).

In Germany, many actors provide funding for treatment facilities: the Federal States, the German Pension and Health Insurance Bodies, municipalities, communities, charities, private institutions and companies. Outpatient psychosocial interventions are predominately financed by public funds from the Federal States and the municipalities. However, institutions providing outpatient interventions have no legal claim to these funds. Medically-assisted treatment including detoxification is funded by health insurance. Rehabilitation of drug users, which is in most cases similar to inpatient treatment, is funded by the pension insurance. This funding is meant to be for medical rehabilitation in order to restore the earning capacity of the client. Accordingly the pension insurance institutions decide on the type, extent and duration of the therapy.

## **2 Availability of drug treatment**

Based on the data from the treatment monitoring system, in 2006 the number of problematic heroin users is estimated to range between 136,000 and 161,000 (Reitox National Report Germany 2007).

### *2.1 Introduction*

In Germany, treatment planning is carried out by the Federal States and the municipalities. Consequently there are considerable regional differences in how substance-related disorders are addressed. In general, the treatment system can be characterised as a mixture of psychosocial and medically-assisted treatment and thus, a differentiation between these two types of treatment is not very useful to describe the national treatment system.

Treatment is offered by the primary health care system as regards mainly substitution treatment, and by specialised centres for addiction problems which provide psychosocial care and psychotherapy. Today most forms of treatment are offered, through the centres themselves or in collaboration with others (e.g. general practitioners). Most of the treatment centres address addiction in general, but there are also specific treatment units only for users of illicit drugs.

Central elements of drug treatment are provided by counselling facilities, which may also distribute substitution drugs. In many cases however, substitution treatment takes place outside the counselling facilities, and a large part of medically-assisted treatment

is delivered by GPs. Medically-assisted treatment is available to a large number of drug addicts. Since 2001, substitution treatment has been regulated in detail by the Narcotic Drugs Act. In 2002, the Federal Medical Council passed guidelines define the state of the art, and in 2003 the national health insurance acknowledged substitution treatment as a SHI-accredited care service without any restrictions of accepting the costs for the treatment of the insured. The majority of patients in substitution treatment are treated by office-based doctors or in specialised outpatient facilities. Doctors carrying out maintenance treatment require being qualified in addiction-medicine.

## 2.2 *Types and number of available drug treatment*

- Outpatient psychosocial interventions

There are about 934 specialised drug counselling facilities treating patients mainly for problems with drugs or other psychotropic substances. Outpatient counselling facilities offer contact, motivation and outpatient care as well as referral to medically-assisted treatment and psychosocial care for patients in substitution treatment of GP's.

- Inpatient psychosocial interventions

Inpatient psychosocial interventions are mainly provided as rehabilitation aiming to long-term withdrawal and abstinence as a precondition for restoring the working capacity of the client. Rehabilitation can take place in special departments of hospitals, specialised clinics or therapeutic communities. In general, rehabilitation is carried out in an inpatient setting, but increasingly also in an outpatient setting. There are about 160 specialised drug-free inpatient treatment units for drug users with about 5,260 places.

- Substitution, maintenance treatment

2,706 doctors licensed to carry out substitution did actively work in substitution treatment in 2006<sup>28</sup>. In addition there are a number of substitution clinics available.

- Detoxification

Withdrawal treatment or detoxification is mainly provided in general hospitals but also in specialised clinics. Countrywide, there are 2,078 treatment slots available for inpatient detoxification.

## 2.3 *Diversification – special groups, special drugs*

Limited treatment services for problem cocaine users, cannabis users and co-morbid drug users are reported to be available and accessible. For instance, the Federal Centre for Health Education initiated the internet-based portal “drugcom.de” which offers support to people with cannabis-related disorders. In addition gender-specific and ethnic-specific treatment services for problem drug users are reported to be reasonably available and accessible.

Specific services for children and youth under 18 are reported to be low but reasonably well accessible. At regional level there are initiatives for the expansion of the

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<sup>28</sup> BMG (Bundesministerium für Gesundheit) (2007). Drogen- und Suchtbericht 2007

counselling for teenagers and young adults at risk of developing addiction. Target groups are young drug users on the verge of problematic consumption, their parents, teachers and other addiction specialists in their environment.

### 3 Utilisation of drug treatment

Information on the utilisation of substitution treatment is from the national substitution register and refers to 2006. Double-counting is not totally excluded. Data on the utilisation of psychosocial treatment is compiled from the reports of the Federal States. The data on outpatient psychosocial interventions refer to new treatment entries in 2006 and also include alcohol as primary drug. Primary use of alcohol accounts for less than 50%.

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions	131,464*	934
Inpatient psychosocial interventions (Rehabilitation)	5,260	160
Substitution maintenance In medical practices	64,500** 64,1% methadone, 17,2% levomethadone 18% buprenorphine	2,703**
Detoxification	No information available	244***

\* The number includes users of alcohol (74,319), opiates (28,029), cannabis (17,200), sedatives/hypnotics (1,216), cocaine (3,887), stimulants (3,497), hallucinogens (107), tobacco (1,899) volatile inhalants (21), other psychotropic substances (1,289)<sup>29</sup>.

\*\* Depending on the period under review, there are different estimates of the number of clients in substitution treatment. In the same year 56,000 cases were reported for a set day, 59,000 for a set month and 95,000 cases for the whole year (Reitox National Report Germany 2007). All data referring to substitution treatment are taken from the "Drogen- und Suchtbericht 2007" of the Federal Ministry of Health.

\*\*\* According to the data from 2004, the specialised inpatient units for detoxification include 141 units specialised for drug addicts. In addition there are 45 specialised outpatient centres and 34 day-/night-clinics etc. (including 13 specialised units for drug addicts). The given number refers to specialised centres only and does not include physical detoxification in general hospitals.

Total number of registered clients in substitution treatment in 2006 in Germany: 64,500

<sup>29</sup> Sonntag, D., Bauer, C. and Hellwig, A.K. (2007): Deutsche Suchthilfestatistik 2006 für ambulante Einrichtungen. Sucht 53 (Sonderheft 1), 7-41. See also: Reitox National Report Germany 2007.

Total number of clients attending psychosocial treatment for problems with illicit drugs in 2006 in Germany: 55,225

### 3.1 *New treatment entries*

Data on new treatment entries are provided by Sonntag et al. (2007) and by the REITOX National Report Germany 2007). Accordingly in 2006 there had been 55,246 new admissions to drug related outpatient treatment (excluding alcohol and tobacco as primary substance). Out of the new clients, almost 51% entered treatment for opioids and almost 31% for cannabis.

Number of new clients entering treatment	2006	13,859
- New clients entering treatment (% opioids)*		21,8
- New clients entering treatment (% cocaine)		7,6
- New clients entering treatment (% cannabis)		57,1
Number of all clients entering treatment*	2006	55,246
- All clients entering treatment (% opioids)		50,7
- All clients entering treatment (% cocaine)		7,0
-All clients entering treatment (% cannabis)		31,1

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

Quality standards for drug treatment are defined through law, insurances, professional associations of medical doctors and professional and umbrella organisations of addiction experts and treatment facilities. Due to the federal structure and the principle of subsidiary there are different guidelines and rules for drug and addiction programmes in the Federal States. However, the Federal States have agreed on a profile for outpatient regional facilities of addiction care.

In Germany, there is a national monitoring for drug treatment and a national register for medically-assisted treatment. Since July 2002, information on substitution treatment is recorded by the substitution register with the purpose to avoid double prescriptions of substitution drugs and to monitor the implementation of specific quality standards in therapy.

## Greece

### 1 Institutional framework

#### 1.1 Policy

The Greek National Drug Strategy and Action Plan were adopted in 2006 by the Ministry for Health and Social Solidarity. One of its main points includes strengthening the cooperation between the national health system and public provider OKANA (Organisation Against Drugs) regarding the Greek substitution programme. A further target is to shorten the waiting list, establishment of drug-specialised services in areas where there is no coverage as yet, and to put emphasis on low threshold services. Emphasis is also given to training and evaluation.

In Greece, there are no regional or local strategies for drug-related treatment.

#### 1.2 Organisation

By law the public Organisation Against Drugs (OKANA) has the function of a national coordinator which reports to the Ministry of Health and Social Solidarity. At the same time OKANA is one of the biggest public provider of prevention, treatment and reintegration programmes in Greece. This organisation is also the only one who has the permission granted by law to establish and operate substitution treatment programmes. Accordingly the monitoring of substitution treatment in Greece is also performed by OKANA.

As regards the role as national coordinator, OKANA shall: a) plan, promote, coordinate and implement a national policy on prevention, treatment and rehabilitation of drug addicts, b) address the drug problem at a national level, provide valid and documented information, and raise public awareness, and c) establish and effectively manage prevention centres, treatment units and social and professional reintegration centres.

Almost all drug treatment programmes are funded by the government with exception of one treatment programme which is financed by local authorities.

### 2 Availability of drug treatment

For the year 2005, the total number of users aged 15-64 whose primary drug is heroin is estimated to be 19,151 (range from 17,335 – 21,209). The estimation was done by applying the multiple records or capture-recapture method to annual TDI data.

## 2.1 Introduction

As far as the availability of drug treatment services is concerned, in Greece there has been a trend towards stepping up the establishment of new programmes in general and an effort to strike a balance between the types of treatment available, most notably in recent years. For instance, it was reported that the capacity of drug-free treatment units increased by 13% from 2004 to 2005.

In Greece, the following officially recognised drug treatment providers exist:

- KENTHEA, the biggest non-governmental treatment provider

KENTHEA (The Centre of Therapy for Dependent Individuals) offers a broad network of services which covers various areas of the country. For instance the organisation provides a special programme for drug dependent mothers since 2000 in Thessaloniki. This programme carried out a change of the setting from inpatient to open multiphase programme. It also broadened its target population and now also admits fathers of young children to the treatment programme. In 2005/2005 a Counselling Centre for Adolescents was established in Heraklion, Crete. Furthermore the Transitional Centre MOSAIC was started in Athens which provides psychosocial support for drug dependent individuals from vulnerable groups, including refugees and migrants.

- 18 ANO Dependence Treatment Unit at Attica State Psychiatric Hospital

This institution operates a number of different treatment programmes such as early intervention for adolescents, psychosocial support for prisoners, rehabilitation programmes, hostels etc. In 2004 two residential treatment units have been established in Athens. In May 2006 an inpatient programme for dependent mothers and their children started which has a nursery school and can accommodate 22 mothers and 8 children. The programme is structured in phases: awareness-raising, joining a psychotherapy group, and a 7-month residential phase of psychological dependence treatment.

- IASON programme (Hellenic Centre for Mental Health and Research)

In the past this programme mainly provided counselling services to drug and alcohol dependent individuals. In 2005 a Day Care Centre was launched with a capacity of 10 places. In the main treatment phase psychological assistance to individuals and their families is provided.

- Substitution treatment provided by OKANA

Substitution treatment has seen a systematic expansion and decentralisation since late 2002. In 2004 and 2005, six new units started operating within the remit of OKANA. Pharmaceutical substances used in substitution treatment are methadone (introduced in 1993) and buprenorphine (introduced in 2002). Methadone is prescribed in the majority of cases, given that according to 2005 data around 70% patient in substitution treatment attended methadone substitution programmes.

The majority of both inpatient and outpatient drug-free treatment programmes follow a multistage therapeutic procedure consisting in counselling, detoxification, treatment,

rehabilitation and family services, as well as halfway houses and hostels. As for the substitution units, they follow a non-residential working hour programme adapted to the needs of the clients.

## *2.2 Types and number of available drug treatment*

In 2005 the number of officially recognised treatment programmes was reported to be 54 and these run under the auspices of governmental and non-governmental organisations. In addition there are 3 low threshold units and 4 drug-free outpatient programmes - 2 for adults and 2 for adolescents -, which mostly delivered counselling during 2005.

The aforementioned 54 programmes are divided into the following categories:

- 33 drug-free treatment units; 9 of them are residential drug treatment facilities for adults with 356 beds. Furthermore 13 facilities provide outpatient psychosocial treatment for adults and 11 facilities provide outpatient psychosocial treatment for adolescents.
- 17 substitution treatment units, of which 7 are methadone substitution units and 10 are buprenorphine substitution units.

No information is available on the number of facilities delivering detoxification.

## *2.3 Diversification – special groups, special drugs*

A number of specific treatment interventions exist for adolescent drug users which are targeted towards adolescent cannabis users. These programmes provide several services including early intervention, counselling and treatment to both drug users and their families. In addition, 12 treatment programmes (7 substitution and 5 drug-free programmes) out of the 40 fully developed programmes in 2004 delivered tailored services for drug dependent individuals with psychiatric disorders. However, currently only 2 programmes are specifically targeted at dually diagnosed drug users. One of them is 18 ANO Dual Diagnosis Programme at Attica State Psychiatric Hospital, the other one is the Dual Diagnosis Unit at Thessaloniki State Psychiatric Hospital.

In Greece, there are only three specialised units for drug addicted women, one for women in general and two for mothers. While the first specific programme is in Athens, the two other programmes both are in Thessaloniki. There are also 3 programmes - two in Athens and one in Thessaloniki- which especially address drug users released from prison. Furthermore two specialised programmes are provided by KETHEA which deliver specialised services to groups with diverse ethnic and/or cultural backgrounds (the Cross-cultural Treatment Programme).

### 3 Utilisation of drug treatment

The data provided for clients in treatment base upon an adjusted version of the Treatment Unit Form (TUF A). The data only considers officially recognised treatment units that were fully developed in 2005 and that provide main treatment services. Thus counselling and social reintegration phases are excluded.

Out of the 21 specialised drug-free outpatient units operating in 2005, 18 were fully developed. Out of the 7 generic drug-free outpatient units, 6 were fully developed. The number of clients in these 22 outpatient treatment units corresponds to the total of patients already being in treatment in 2005 plus the total admissions in the reporting year. Readmissions within the year in the same unit are excluded. This is the same for the number of clients in substitution treatment. The data on clients may include double counting.

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions		
In specialised outpatient units	1,019	18
In generic outpatient units	246	6
Inpatient psychosocial interventions		
In specialised inpatient units	888	9
Substitution maintenance		
In specific outpatient treatment centres	3,596	17 (with 10 for buprenorphine substitution)
Detoxification	No information available	No information available

Total number of clients in substitution treatment in Greece: 3,596  
 2,420 clients were treated with methadone and 1,176 with buprenorphine.  
 Total number of clients in psychosocial treatment in Greece: 2,153

#### 3.1 *New treatment entries*

The data on new treatment entries covers 75% of all available treatment centres. The double-counting control is 100%. 2,225 clients entered treatment for the first time in the year 2005. The vast majority of them requested treatment related to the use of opioids

(84.7%). 2.9% of new clients demanded treatment due to the use of cocaine and about 10% for cannabis.

Number of new clients entering treatment	2005	2,225
- New clients entering treatment (% opioids)*		84.7
- New clients entering treatment (% cocaine)		2.9
- New clients entering treatment (% cannabis)		10.1
Number of all clients entering treatment*	2005	4,248
- All clients entering treatment (% opioids)		88.1
- All clients entering treatment (% cocaine)		2.4
-All clients entering treatment (% cannabis)		7.4

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In 2005 it was reported that a national register for clients in treatment still does not exist. Nonetheless, the Greek Focal Point implemented the Treatment Demand Indicator, covering specialised drug treatment centres and low-threshold services in Greece, and systematically collects detailed data on treatment programmes. As far as medically assisted treatment is concerned monitoring is also performed by public organisation OKANA.

The External Evaluation Committee of the treatment centre KETHEA conducts continuous evaluation of its services by supervision and by the evaluation of services by their clients.

# Hungary

## 1 Institutional framework

### 1.1 Policy

In Hungary, regulations of drug-related treatment are part of the National Strategy for Combating Drug Problems (2000-2010). The four main objectives of the national drug strategy are:

- Local communities should improve their problem solving capacities in approaching the drug problem for instance by cooperation of community services.
- Children and adolescents must be enabled to reject drugs by prevention programmes
- Assistance is to be provided to individuals and families struggling with drug problems by offering social work, drug therapy and rehabilitation.
- Opportunities to access drugs must be reduced by supply reduction actions.

Few municipalities have also a local strategy for drug-related treatment.

### 1.2 Organisation

In Hungary, the Coordination Committee on Drug Affairs is the key organisation for the coordination of drug treatment at national level. Major tasks of the Coordination Committee on Drug Affairs are to monitor the implementation of the National Drug Strategy and to co-ordinate the actions of the Ministries and the public treatment institutions. The Committee also has to evaluate of the implementation of the National Drug Strategy annually. The Committee has been operating as a separate department within the structure of the Ministry of Social Affairs and Labour, but it was restructured in 2006.

The restructure has been done basis of the recommendations resulting from the evaluation carried out by the Trimbos Institute of the Netherlands. One of the main reasons for the restructuring is that the Coordination Committee on Drug Affairs is more a body preparing policies than coordinating them because the committee is not entitled to make decisions, which is inevitable for coordinating.

A ministerial commissioners, appointed by the Minister of Social Affairs and Labour, is responsible for coordinating drug issues and carries out the tasks of the national drug coordinator. The coordinator is the operational leader of the coordination process, and represents Hungary as regards international drug policy. The Ministry of Social Affairs and Labour organises the Coordination Committee on Drug Affairs (CCDA) as a body

that gives recommendations to the government. The Minister of Social Affairs and Labour and the Minister of Health are the presidents of the CCDA which has 29 members with different status and rights.

However, it is reported that the implementation of drug treatment is predominately an issue in the responsibility at local/regional level. Most of the treatment services are provided by public organisations at regional level. This is followed by non-governmental drug service providers. In Hungary all types of drug treatment are financed by the National Health Insurance Fund (OEP) – with the following exception; about 10% of the total number of in- and outpatient institutions (453) are financed by the Church or other organisations (e.g. foundations). There is a so-called output volume restriction (TVK) which means that health care costs exceeding the subsidies allocated to a treatment centre in the preceding year are increasingly less financed by the National Health Insurance Fund.

## **2 Availability of drug treatment**

In Hungary the number of problem drug users is estimated to be 24,204 (range from 19,333 – 29,075). The estimation bases upon capture-recapture method of the 2005 data from police records and health-care records. In the health-care records 82% of all treatment cases were documented.

### *2.1 Introduction*

Drug-related treatment is implemented and delivered by public agencies and NGO facilities a regional basis. Even though public and private organisations differ much in equipment and professional staff, minimum conditions of providing health care services are declared by the regulation 60/2003 (X. 20.) of the Ministry of Health, Family and Social Affairs.

Specialised outpatient centres delivering psychosocial interventions for users of illicit drugs became a growing importance in Hungary; these centres provide drug-related treatment for the majority of clients. Specialised outpatient treatment centres can operate within an inpatient department, independent specialised clinics, psychiatric or addiction-treatment centres. In 2006 there were 21 outpatient treatment centres operating in Hungary.

Inpatient treatment is provided by psychiatric departments, addiction-treatment wards of psychiatric departments and, to a lesser extent, by independent addiction-treatment departments. As some of the slots in addiction-treatment are financed as slots allotted to psychiatric patients, it is impossible to figure out the capacity for drug treatment. However, availability of slots in inpatient addiction-treatment decreased in 2005 from 13% to 10%. Inpatient psychiatric and addiction-treatment centres are in charge of providing treatment for withdrawal symptoms and co-morbid psychiatric symptoms.

In Hungary, medically assisted treatment is provided in both inpatient and outpatient centres. Detoxification and maintenance treatment are primarily done with methadone. However, medically-assisted treatment largely applies also anti-depressants and pain-killers for withdrawal symptoms.

Short-term detoxification is available to a limited number of clients in one hospital department in Budapest and in two further departments in the countryside. In addition long-term withdrawal treatment is available in specialised outpatient centres.

Methadone maintenance treatment is provided in specialised outpatient centres. In 2006 there was an increase in the number of clients entering methadone maintenance treatment. Of the 853 clients in MMT 78% were treated in Budapest. However, it is reported that drug users have to wait 2-3 months to enter methadone maintenance treatment in Hungary. Occasionally naltrexone is applied as substitution agent in specialised outpatient centres. At the end of 2007 the registration process of Suboxone was started.

For drug addicts also transitory homes, day-care centres and rehabilitation centres are available. These treatment options are not specifically for users of illicit drugs and thus their proportion is quite low; 33% in day-care centres, 25% in rehabilitation centres and only 9% in transitory homes. In 2005 the first private psychiatric and addiction-treatment health centre opened providing rehabilitation in Western Hungary. About 40% of the clients were drug users with most of them being heroin and cocaine users.

In conclusion, the availability of drug treatment in Hungary has not fully improved as in certain regions treatment can only be accessed after travelling long distances.

## 2.2 *Types and number of available drug treatment*

According to the latest EMCDDA survey filled out in 2007, in Hungary there are 21 specialised outpatient centres providing psychosocial drug treatment. Furthermore psychosocial interventions are available in 314 facilities that are not specifically for drug users. A study in 2005 found that for drug addicts transitory homes, day-care centres and rehabilitation centres are also available. As these treatment options are not specifically for users of illicit drugs, their proportion is quite low: 33% in day-care centres, 25% in rehabilitation centres and 9% in transitory homes. Rehabilitation centres accept clients from all over the country. Their distribution is very uneven, in 2006 there had been 13 rehabilitation centres.

Inpatient psychosocial interventions are delivered in 17 residential treatment facilities providing 370 beds. Out of the 17 centres 10 offer treatment specifically to patients with drug related problems. Inpatient psychosocial interventions are also provided in 125 generic inpatient facilities.

Methadone maintenance is provided in 8 specialised outpatient treatment centres with 3 of them operating in the capital. Medical practices are not involved in the provision of substitution maintenance treatment. According to the reported information there is only one specialised inpatient centre for detoxification treatment with 28 beds.

### 2.3 *Diversification – special groups, special drugs*

Apart from few opportunities for treatment of co-morbidity problems there is no diversification of treatment in Hungary. However, the development of specific offers for women, adolescents, cocaine users, cannabis users etc. is regarded as a future need.

### 3 **Utilisation of drug treatment**

In 2006, the following number of clients entered treatment in Hungary:

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions	10,509	329
Inpatient psychosocial interventions		
In specialised inpatient units	Not available	13
In generic inpatient units	4,971	124
Substitution maintenance		
In specific outpatient treatment centres	853	8
Detoxification		
In specialised inpatient units	592	1

Total number of clients in substitution treatment in 2005 in Hungary: 853

Total number of clients in psychosocial treatment in 2005 in Hungary: 15,480

#### 3.1 *New treatment entries*

According to the report No 1211 of the Ministry of Health 5,673 clients entered drug treatment in 2006 for the first time. The majority of them – 2,856 clients – made use of specialised outpatient treatment centres. This is followed by 1,247 new clients entering outpatient Addiction Treatment centres. Furthermore new 1,304 clients requested for inpatient treatment in psychiatric and addiction-treatment departments. More than half of new treatment demands ever were due to cannabis (54.1%).

Number of new clients entering treatment	2006	5,673
- New clients entering treatment (% opioids)*		7.4
- New clients entering treatment (% cocaine)		1.1
- New clients entering treatment (% cannabis)		54.1
Number of all clients entering treatment*	2006	15,480
- All clients entering treatment (% opioids)		15.0
- All clients entering treatment (% cocaine)		1.0
-All clients entering treatment (% cannabis)		37.9

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

On May 9th 2006, TDI-based data collection at treatment centres was officially introduced through Regulation 20/2006 (V.9) of the Ministry of Health. Since then, treatment centres with a high client turnover can make use of specific offline software to record clients' data (and later transmit them electronically via the internet to the National Institute for Addiction), while centres with a lower number of client visits can do so directly online. This data collection system is applied not only in treatment centres in the field of health care, but also at low-threshold agencies and treatment units in prisons. From January 2007 onwards, the Hungarian TDI system is fully compatible with EMCDDA reporting standards.

## **Ireland**

### **1 Institutional framework**

#### *1.1 Policy*

Treatment is one of the pillars of the Irish National Drug Strategy covering the period 2001-2008. The objectives of the Irish treatment strategy are to obtain 100% of adult and under 18 problem drug users accessing treatment within one month of assessment. In addition, harm reduction facilities shall be available in every local health office and area that provide needle exchange where necessary and are open during the day, at evenings and weekends according to needs. A further objective is to stabilise the incidence of HIV in drug users.

In Ireland there are 14 local drugs task force areas and 10 regional drugs task force areas which cover the complete geographical area of Ireland. Each of these have or are developing action plans to implement the national drug strategy.

#### *1.2 Organisation*

In Ireland there are a number of co-ordinating groups responsible for implementing the national drugs strategy and thereby coordinating drug treatment. The Inter-Departmental Group is a group of Ministers of state from each of the government departments with responsibility for implementing the five pillars of the national drugs strategy. The Department of Health and Children is responsible for developing and reviewing drug treatment policy and strategy and the Health Service Executive (HSE) is responsible for implementing this treatment strategy. Health care (including drug treatment) is provided through four HSE regions and 32 local health offices. The local health offices are based on the geographical boundaries of the existing community care areas. There are 10 addiction service directors and three clinical directors to plan, support and monitor the treatment of clients with problem drug use at local level, and a national drug strategy manager in the HSE.

Drug treatment is funded by the Irish Government. All methadone treatment is provided free of charge. For those without medical cards (means tested), all other treatments must be paid for by the client or their health insurance company.

## 2 Availability of drug treatment

In Ireland 14,452 individuals are estimated to be problem opiate users (range from 13,405 – 15,819). The estimation refers to the year 2001 and was done on basis of CR methods of clients in the Central (Methadone) Treatment List, hospital discharges, police database, and individuals known by the police to be opiate users<sup>30</sup>.

Opiate use was still predominately a Dublin phenomenon in 2001, which was reflected in the finding that the rate of opiate use in Dublin in 2001 was 15.9 per 1,000 population aged 15–64 years and outside Dublin the rate was just under 1.2 per 1,000 population aged 15–64 years.

### 2.1 Introduction

Treatment in Ireland is provided through a network of statutory and non-statutory agencies. The Health Services Executive provides outpatient treatment (both medical and counselling services) through a network of outpatient statutory services. Specifically trained general practitioners are contracted by the Health Service Executive to provide methadone treatment at their private practice. The Health Service Executive funds some non-governmental services to provide outpatient counselling services. Both statutory and non statutory services provide inpatient detoxification services. In general, residential medication-free therapy is provided through non-statutory agencies.

There are two broad philosophies through which treatment services are provided, namely: psychosocial therapy (including medication free therapy) and medically-assisted treatment. There is a degree of overlap between the two.

Medication-free therapy uses models such as therapeutic communities and the Minnesota Model though some services have adapted these models to suit their particular clients' needs. In general, residential medication-free therapy is provided through non-statutory agencies.

Pharmacological-assisted treatment includes opiate detoxification and substitution therapies, alcohol and benzodiazepine detoxification, and psychiatric treatment. Three inpatient units and a number of outpatient treatment centres provide detoxification for problem opiate users. Methadone, introduced in 1992, is the most commonly-used drug for opiate detoxification. Buprenorphine (since 2002) and lofexidine are also prescribed to detoxify opiate users. In February 2007 the combination drug, Suboxone, was launched in Ireland. The Department of Health and Children has established an expert group to consider the implications of the introduction of this drug and its use as a treatment for opiate dependency. In order for this drug to be prescribed, a system similar to that existing for methadone, including a protocol and a central register, will be required.

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<sup>30</sup> Kelly, A., Carvalho, M., Teljeur, C. (2003): A 3-Source Capture Recapture Study of the Prevalence of Opiate Use in Ireland 2000-2001. Key Findings Summary Tables. National Advisory Committee on Drugs, Dublin. Report available online at [www.nacd.ie](http://www.nacd.ie)

In Ireland, methadone is the opiate substitute of choice for maintenance therapy. Treatment centres, satellite clinics and GPs provide substitution treatment. General practitioners provide methadone to large number of stable patients in their private practices. The number of individuals carried forward increased by 46%, from 4,963 in 2001 to 7,269 in 2006 (see table in chapter 3). Just over 2,300 methadone places have been created since the beginning of the National Drug Strategy.

The total number of drug treatment services available in Ireland showed a strong increase between 1998 and 2003 with the largest expansion in the outpatient sector including private general practitioners.

## 2.2 *Types and number of available drug treatment*

Two national registers record drug treatment in Ireland: the first system is an epidemiological database that records demand for treatment for problem alcohol and drug use (known as the National Drug Treatment Reporting System - NDTRS) and the second is an administrative database to regulate the dispensing of methadone treatment (known as the Central Treatment List - CTL). The table below presents the number of different treatment types available in Ireland in 2006.

Intervention	Number of facilities / units
Outpatient psychosocial interventions	65*
Inpatient drug services	23**
Medically-assisted treatment delivered	
in specialised outpatient treatment	81
by general practitioners	230
in prison	8

\* The number did not include 81 outpatient treatment units which provide methadone and counselling.

\*\* The number includes 2 opiate detoxification units.

## 2.3 *Diversification – special groups, special drugs*

Pregnant female opiate users and their partners are entitled to immediate access to treatment. There are also specific initiatives available for drug users less than 18 years old. These include psychiatric therapy, family therapy, specially adapted medication free therapy and guidelines around the use of medication. In line with the results of the general population survey, the total number of cases entering treatment who reported cocaine as their main problem drug increased considerably (581%) from 81 in 2001 to 552 in 2006. Unlike opiate cases, the number of cocaine cases are evenly spread throughout the cities and major towns in Ireland. The 2007 National Advisory

Committee on Drugs overview of cocaine use in Ireland identified a need to develop specific treatment options for stimulant users (including crack cocaine) in Dublin. Although limited, specific services for dually diagnosed problem drug users also exist in Ireland.

### 3 Utilisation of drug treatment

The number of clients that attended drug treatment in 2006 was compiled by staff working on the National Drug Treatment Reporting System (NDTRS) and the Central Treatment List (CTL), and is presented in the table below.

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions	2,284 cases*	65
Inpatient interventions	932 cases*	23
Medically assisted treatment		
in specialised outpatient treatment	6,634 individuals	81
by general practitioners	2,794 individuals	230
in prison	1,295 (2004 data)	8
Detoxification	Is covered by medically-assisted treatment and inpatient treatment. No specific information on detoxification treatment is available.	

\* Control for double counting within treatment centres.

Total number of clients in outpatient psychosocial treatment in 2006 in Ireland: 2,284  
 Total number receiving detoxification or medication free therapy in 2006: 932  
 Total number of clients in medically-assisted treatment in 2006: 9,428  
 (excluding prisoners):

#### 3.1 *New treatment entries*

Information on new treatment entries covers about 25% of the overall number of treatment centres. The double-counting control amounts to 75%. According to these data 2,227 new clients entered treatment in 2006. Over one third (36%) of new clients requesting treatment for the first time reported opiate as their main problem drug, 31% reported cannabis and 13.4% cocaine.

Year	2005	2006
Number of new clients entering treatment	2,005	2,277
- New clients entering treatment (% opioids)*	36.6	36.0
- New clients entering treatment (% cocaine)	13.9	13.4
- New clients entering treatment (% cannabis)	40.2	31.0
Number of all clients entering treatment*	4,671	4,671
- All clients entering treatment (% opioids)	61.6	63.8%
- All clients entering treatment (% cocaine)	10.0	10.8%
-All clients entering treatment (% cannabis)	22.4	20.5%

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

At present there are two national registers recording drug treatment in Ireland. The National Drug Treatment Reporting System (NDTRS) is an epidemiological database on treated problem drug use, set up in 1990 and managed by staff at the Alcohol and Drugs Unit of the Health Research Board. The Central Treatment List is a complete register of all persons treated with methadone and is used to regulate methadone use and pay general practitioners for their services. Beside a photograph of each client, the variables collected through this system are name, address, date of birth, place where treated, type of methadone treatment, date started this treatment episode, date exited last treatment episode and reason for exit. This list is administered by the Drug Treatment Centre Board on behalf of the Health Service Executive.

## **Italy**

### **1 Institutional framework**

#### *1.1 Policy*

Italy has a National Drugs Plan (2004-2008) with specific objectives regarding drug treatment. In summary, these objectives aim to guarantee a) collaboration between public and private organisations, b) qualified staff in the public and the private sector, c) treatment for 'dual diagnosed' clients, d) the right of drug dependent prisoners to access treatment as an alternative to continued detention. Various pharmacological treatments (including substitution treatment) adequate for different clinical needs are only to be provided where strictly necessary. At the same time the number of people successfully placed in treatment is to be increased.

Each Italian region elaborates a three-years Regional Health Plan (Triennial) which defines priorities, organises health services, and provides financial support.

#### *1.2 Organisation*

The coordination of drug-related treatments is at the Regional level. Heads of the local drug departments or drug services coordinate drug-related treatment. Regions provide health services at the local level. The Regional Health Council establishes the treatment delivery services, accreditation of private community treatment centres, number of treatment centres, number of professionals working in these services, etc.

Public and private (mostly non-profit making NGOs) sectors provide treatment and both are funded through the Regional Health Fund. Funds are yearly allocated to the Regions by the Government.

### **2 Availability of drug treatment**

In Italy, an average of 307,336 individuals are estimated to be problem drug users (range from 287,721 – 322,998). The estimation bases upon four different methods - drug-related deaths multiplier, multivariate indicator, capture/recapture, demographic indicator. Sources of information were the 2005 data acquired from various institutional data flows on care and rehabilitation and police.

## 2.1 Introduction

The Italian drug treatment system can be described as a systematic arrangement with two parallel sub-systems. One of these sub-systems are the so-called SerT's' ("*Servizio Tossicodipendenze*") which run public, mainly outpatient, drug treatment units and are part of the national health system (NHS). The second one are so-called Reintegration structures ("*Strutture riabilitative*") or often also Therapeutic Communities. These services are provided by mostly non-profit organisations.

- SerT's

As mentioned above the public treatment units of SerT's mainly provide outpatient treatment. This organisation is also the main provider of substitution treatment.

- Rehabilitation services, Therapeutic Communities

The private rehabilitation services mainly carry out residential drug treatment although there are also semi-residential and outpatient services. However, these private and mostly non-governmental centres predominantly provide Therapeutic Communities.

The settings in the private treatment services are sub-divided into:

- In-patient ("*Residenziale*"), semi-residential, and outpatient ("*Ambulatorio*")

These private centres need regional accreditation and they must be registered in a regional official list.

Historically, those seeking treatment for a drug problem are admitted for treatment by SerT. They may subsequently receive treatment in either a public or a private treatment service but technically remain a client of the public treatment service and their treatment is paid for by the national health system. For instance, referral to Therapeutic Communities is made by the SerT's which thereby 'authorise' the Local NHS Unit to pay the fees for the duration of the client's stay in the Therapeutic Community.

The largest number of drug services is located in the northern regions of Italy, which also have the largest number of problematic drug users. The interventions carried out in both the public and private services include psychosocial support, case management, psychotherapy and social service interventions but also detoxification (in residential settings) and vocational training (in semi-residential settings). Withdrawal treatment is also carried out by hospitals. However the number of drug users in hospital settings is believed to be low. Accordingly the vast majority of drug treatment options is provided in specific facilities designed for drug users.

## 2.2 Types and number of available drug treatment

In 2005, Italy's Health Ministry counted 535 specialised public services (SerT's) involved in treating and rehabilitating drug addicts. These services offer all kinds of treatment such as psychosocial, substitution treatment and other pharmacological treatment. Socio-rehabilitative facilities registered with the Ministry of the Interior in 2005 are divided into 766 residential facilities, 217 semi-residential facilities, and 229 outpatient facilities.

Substitution treatment is mainly provided by SerT's and the most widely used substitute for medical treatment in Italy is methadone (available since 1975). Methadone treatments represent 84% of all medically-assisted drug treatments, but buprenorphine has been increasing since its introduction in 1999 and constituted in 2005 around 10% of all substitution cases. Treatment of withdrawal using clonidine has progressively declined to 1% of drug treatments. Also treatment with naltrexone has dropped in 2005 to about 2% of all medical treatments provided at the SerT's. Approximately 29% of all clients in medically-assisted treatments did not receive any additional support by psycho-social or rehabilitative treatments in 2005.

General Practitioners have been allowed to prescribe substitution substances for the last few years, but GPs' involvement is apparently still very low.

### 2.3 *Diversification – special groups, special drugs*

In Italy, specific treatment for dual-diagnosed clients is reported to be reasonably good available and accessible. Specific treatment for cocaine and cannabis problem users is reported to be limited as well as treatment for drug-using adolescents. Experts also report specific treatment services for drug-using women with toddlers and young children within inpatient structures.

## 3 **Utilisation of drug treatment**

In Italy 981 specialised treatment units provide outpatient psychosocial as well as medically-assisted drug treatment. Residential drug treatment is offered in 766 specialised facilities.

According to the national survey conducted by the National Research Council - SIMI@Italia Project, the following number of clients made use of treatment in 2005.

- 71,045 clients have been in outpatient psychosocial treatment units
- 96,972 clients have attended outpatient medically-assisted treatment; 76,400 received methadone and 16,808 buprenorphine
- 11,880 have been in inpatient psychosocial treatment units

The data from national sampling of clients refers to 14% of all facilities/units.

Data from the Health Ministry show that 46,554 clients exclusively made use of counselling, psychotherapy and/or social services in 2005.

No information is available on the number of clients treated in detoxification centres and in medical practices.

Total number of clients in substitution treatment in 2005 in Italy: 96,972

Total number of clients in psychosocial treatment in 2005 in Italy: 82,925

### 3.1 *New treatment entries*

The TDI in Italy covers 75% overall number of treatment centres. The double-counting control is 100%. 35,175 clients entered drug treatment in 2005 for the first time. Nearly half (46.4%) requested treatment for the first time for the use of opioids. 26.5% demanded treatment for the first time for the use of cocaine, followed by cannabis (24.1%).

Number of new clients entering treatment	2005	35,175
- New clients entering treatment (% opioids)*		46.4
- New clients entering treatment (% cocaine)		26.5
- New clients entering treatment (% cannabis)		24.1
Number of all clients entering treatment*	2005	48,734
- All clients entering treatment (% opioids)		55.6
- All clients entering treatment (% cocaine)		21.1
- All clients entering treatment (% cannabis)		20.7

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

## 4 **Quality system**

There is a monitoring system for all types of drug related treatment delivered by public and private drug services which is compatible with TDI. There is no national register of people in treatment.

## **Latvia**

### **1 Institutional framework**

#### *1.1 Policy*

In Latvia, the national drug strategy “State Program on Drug Control and Drug Addiction Restriction” (2005 - 2008) was adopted in 2005. As part of the State Programme strategies for drug-related treatment are defined, mentioning the overall objective to promote the reduction of drug demand and supply, health related problems, drug related death cases and crime. In addition, specific objectives for drug treatment are defined:

- To provide an effective coordination and international collaboration among involved institutions.
- To improve rehabilitation programmes and accessibility of these programmes (also in prisons), and to develop different alternatives to reduce drug related social and biological consequences.
- To develop a plan for trainings of involved drug treatment specialists, to develop evaluation criteria and to committ this evaluation of every action, factor and consequence.

For medically-assisted treatment in October 2005 the amendment “The Procedure of the Treatment of Addicts of Alcohol, Narcotic, Psychotropic and Toxic Substances” was enacted which regulates in detail methadone maintenance treatment and buprenorphine substitution treatment.

#### *1.2 Organisation*

The “Drug Control and Drug Addiction Restriction Coordination Council” was set up in 2004 in order to raise drug and addiction problems at political level. The Coordination Council is an inter-ministerial institution of seven Ministers and several national experts (such as chief of staff of National Armed Forces, director of the Pharmacy Department of the Ministry of Health, director of the State Addiction Agency, responsible officer of the State Police etc.), and chaired by the Prime Minister. Main functions of the Council are to determine action priorities in order to promote drug prevention and combating, to coordinate action of state institutions, municipal institutions and NGO’s, and give

suggestions on budget application for implementation of different activities related to drug field.

The national coordination body for drug treatment is the "State Addiction Agency" (SAA) which is responsible for delivery, accreditation, monitoring and evaluation of drug treatment. The SAA functions also as the Latvian National Focal Point.

In Latvia, drug treatment is mainly delivered by public agencies such as the State Addiction Agency and hospitals which run under the supervision of the Ministry of health and are funded by state budget of the Health Compulsory Insurance State Agency. However, funding is based on the days clients stay in treatment (~ 0.66 EUR per day). Second most often is drug treatment delivered by private profit-making organisations. In addition there are several NGOs involved in outpatient and inpatient psychosocial treatment but most of these organisations more active in drug prevention than in drug treatment.

## **2 Availability of drug treatment**

Due to limited data availability the estimation of the number of problem drug users is only based on multiplier methods applied for a small snowball sample of 64 drug users in Riga in 2003. Accordingly the local prevalence of problem opiate users is 4,108 to 4,786.

### *2.1 Introduction*

In Latvia, drug treatment services are available in outpatient and inpatient clinics, and in addiction units at general medical treatment institutions which are either public or privately funded. Different private organisations increasingly provide drug treatment services (both outpatient and inpatient).

The State Addiction Agency is not only one of the main political bodies in drug field, but also the leading treatment institution for addicted persons in country. The agency provides outpatient services for alcohol, drug gambling or tobacco addiction, and treatment for children, adolescents and adults. It also provides inpatient detoxification for drug and alcohol addicts and residential psychosocial treatment. In addition the agency runs the only available methadone maintenance programme.

It is rather difficult to classify drug treatment in Latvia as existing treatment provider often deliver different types of services such as outpatient, inpatient and detoxification treatment. In addition, nearly all existing services do not specifically address users of illicit drugs, but also alcohol addicts, gamblers, tobacco addicts, and "co-addicted" family members.

- **Outpatient treatment**

Outpatient drug treatment is offered by the outpatient unit of the State Addiction Agency, outpatient units at hospitals, addiction units at municipal medical treatment institutions, privately practicing addiction specialists, and other institutions employing

addiction specialists. Outpatient drug services include also medically-assisted treatment such as buprenorphine and methadone substitution treatment. The objective of these programmes is to decrease the prevalence of HIV, hepatitis B and C, to promote the social inclusion of the patients, and to reduce crime.

- Inpatient treatment

By the end of 2005, general inpatient addiction treatment services were available at 13 institutions over the country. Four specialised addiction clinics and rehabilitation institutions provide inpatient treatment; the State Addiction Agency, the Straupe Addiction Hospital for adults and adolescents, the Riga Rehabilitation Centre for Addicts, and the Rindzele Rehabilitation Centre for Addicts. Furthermore inpatient treatment is available in four addiction departments in general hospitals; the hospital „Gintermuiza”, the Liepaja Central Municipal Hospital, the Daugava hospital, and the Rezekne hospital. In addition there are five other institutions providing inpatient addiction treatment; „Akrona” in Riga, where the basic programme includes an inpatient treatment course of 28 days; the medical company „ARS”, the private and certified medical „Līdzjūtība” in Riga which provides paid medical services at the patient’s home and at the inpatient department; the state NGO “Narcological and Psychoneurological Recovery Centre” (“Ķemeri”), and the Republican Hospital of the Prison Department.

Furthermore there is a social rehabilitation programme “Dzives enerģija” in Jaunpiebalga for children addicted to psychoactive substances.

- Medically-assisted treatment

Detoxification treatment for clients with drug and alcohol dependence is available at all specialised outpatient treatment units. These units always provide both psychosocial and substitution treatment.

Medically-assisted treatment in Latvia is provided by methadone maintenance therapy (MMT) and buprenorphine substitution treatment (BST). The rules for entry into these programmes are rather strict as inclusion criteria for instance require a minimum age of 21, a minimal duration of drug (opiate) use of 5 years, and 2 unsuccessful treatments in the past. Consequently the number of clients in substitution programmes is rather small. Methadone maintenance treatment was introduced in Latvia in 1996. Up to now the only available MMT programme is provided by the State Addiction Agency in Riga, Methadone is handed out by a nurse and medical doctor consults patients two times a week. Buprenorphine (Subutex) is used in Latvia since July 2003, and it has to be paid by the patients undergoing treatment.

General practitioners need a licence of the public authority (including a specific education and scientific degree) to be allowed to provide medically-assisted treatment.

## 2.2 *Types and number of available drug treatment*

In Latvia, there are 30 regional and municipal outpatient treatment units /clinics where addiction specialists, nurses and sometimes psychologists are employed. Detoxification treatment is delivered by 10 clinics with a total of 278 beds.

For inpatient treatment there are

- 4 specialised addiction clinics (Riga, Jelgava, Straupe, Daugavpils) with a total of 205 beds
- 4 specific divisions in general hospitals (Liepaja, Rezekne Gintermuiza, Daugava) with a total of 131 beds
- 4 rehabilitation centres (2 for children and adolescents) for drug addicts with 57 beds

In addition, there are about 10 private outpatient practices (who do not report to the treatment system).

About 100 addiction specialists (psychiatrists with additional education in the field of addiction) provide addiction treatment either in large hospitals with out- and inpatient services or at small regional outpatient settings.

## 2.3 *Diversification – special groups, special drugs*

In Latvia, the only available specific treatment is for children and adolescents. However, these specific programmes are highly available and accessible.

# 3 **Utilisation of drug treatment**

Data are only collected on clients undergoing treatment in the State Addiction Agency, thus there is no information on treatment utilisation covering all outpatient treatment centres. According to the data from the State Register of drug addicts, 3,766 clients have been in treatment by the end of 2005. Inpatient treatment was attended by 497 clients. 53 patients had been in methadone maintenance treatment and 119 patients were treated in buprenorphine maintenance programmes.

## 3.1 *New treatment entries*

In Latvia, the number of first treatment demands has gradually decreased since its peak in 2000 with 1,114 new clients in outpatient and 931 clients in inpatient treatment. In 2005, 401 clients have requested treatment for the first time; most of them (261 clients) asked for inpatient treatment. While first treatment demands for opiate use have decreased, demand for treatment due to polydrug use and the use of stimulants has increased from 5% to 41% and from 4% to 13% respectively. About half of the clients are under the age of 20.

Number of new clients entering treatment	2005	401
- New clients entering treatment (% opioids)*		33.6
- New clients entering treatment (% cocaine)		0.5
- New clients entering treatment (% cannabis)		17.0
Number of all clients entering treatment*	2005	401
- All clients entering treatment (% opioids)		33.6
- All clients entering treatment (% cocaine)		0.5
-All clients entering treatment (% cannabis)		17.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Latvia, there is a national monitoring system and a register for clients in medically-assisted treatment. Information about drug users in public funded outpatient clinics and inpatient institutions is submitted to the State Addiction Service database. Since October 2004 the State Addiction Agency in Riga started to establish an electronic data recording of all outpatient treatment.

## **Lithuania**

### **1 Institutional framework**

#### *1.1 Policy*

For drug treatment the Lithuanian Minister of Health approved the “Programme of addictive diseases” (2005-2008) in order to improve the implementation of mental health care for addiction disorders. Main objectives of the programme are to provide early diagnosis and guarantee treatment children with addictive disorders (specialist consultations, urine screening, infectious disease diagnosis, individual and group therapy, family therapy). A further aim is to provide treatment services to drug dependent adults and to diagnose infectious diseases (HIV/AIDS, HVB, HCV and TB) among drug dependents.

According to the 2005 report the programme has been implemented by 5 regional centres for addictive disorder.

#### *1.2 Organisation*

In Lithuania the National Health Council is the responsible institution for the coordination of health policy, alcohol, tobacco and drug control policy, public health care policy, disease prevention and control policy. The Council analyses the health policy formulation and implementation process and has to report to the Parliament.

Drug treatment is provided mostly by public agencies followed by private and NGOs. Co-ordination, implementation and provision of drug treatment in Lithuania is conducted at local level. The main funding bodies of the different treatment services are the National Health Insurance, county budgets and Vilnius municipality. Four regional counties and one municipality finance specialised treatment centres at regional level.

### **2 Availability of drug treatment**

Estimations on the prevalence of problem drug users are not available up to now.

#### *2.1 Introduction*

In 2006 altogether 268 institutions had got the Accreditation of Health Care Activities under the Ministry of Health to provide individual health care activities including

services of psychiatry, dependence disorders' psychiatry, psychotherapy, and juvenile psychiatry.

In Lithuania, outpatient drug treatment is provided by 64 public community Mental Health Centres or by psychiatric clinics and private Centres. Besides, outpatient drug treatment is also provided in units of Centres for Addictive Disorders. There are 5 regional public specialised Centres for Addictive Disorders which are located in Vilnius, Kaunas, Klaipeda, Siauliai and Panevezys. These centres offer treatment of one to three months by group psychotherapy, acupuncture and counselling. They also provide methadone treatment. Furthermore inpatient treatment such as withdrawal treatment and residential treatment is delivered by the specialised Centres for Addictive Disorders. Inpatient treatment includes short-term treatment lasting for 4-6 weeks, and medium- to long-term treatment lasting up to 14 months at a rehabilitation centre. In addition to public drug services about 15 NGOs provide approximately 170 beds in therapeutic communities.

Substitution treatment with methadone was introduced in Lithuania in 1995 and treatment started up in three cities in 1996. By the end of 2004, substitution treatment with methadone was available in five cities with 436 patients in treatment at the beginning of 2005. Buprenorphine treatment is available since late 2002 throughout the specialised mental healthcare institutions. Naltrexone tablets (REVIA) was registered in Lithuania for the treatment of opiate addiction in 2000. Naltrexone may be acquired by patients in drugstores with a doctor's prescription.

Public services and private profit-making treatment centres provide inpatient withdrawal treatment and outpatient care in bigger cities. Withdrawal treatment usually is carried out shortly for up to 7 days or longer for up to 28 days.

## *2.2 Types and number of available drug treatment*

As already mentioned above in Lithuania there are 5 specialised public Centres for Addictive Disorders which provide outpatient as well as inpatient psychosocial and medically-assisted treatment. Therapeutic communities are also delivered by 15 NGOs. Methadone maintenance treatment is provided in 8 Mental Health Care Centres.

In addition, inpatient treatment due the use of psychoactive substance was provided in 2005 by 76 psychiatrists, 30 psychologists, 88 medical nurses and 51 social workers.

No information is available on the number of facilities delivering detoxification

## *2.3 Diversification – special groups, special drugs*

In Lithuania, specific treatment interventions are available addressing the Roma community. Thus, a mobile methadone treatment dispensing programme with some abscess care in the Roma community operated since the end of 2004 on funding from the municipality of Vilnius. In 2004 and beginning of 2005 it reached 17 clients. In

October 2005 the program was renewed through funding provided by the Ministry of Social Affairs and Labour.

Apart from the Roma programme there are reasonably available services for adolescent drug users. In major cities day care centres of specialists provide counselling and naltrexone treatment for this specific group. Since 2001 the Vilnius Centre for Addictive Disorders offers 10 beds for teenagers suffering from drug addiction. Further 6 beds for detoxification and rehabilitation of adolescent drug users are offered since 2004 by the Klaipeda Centre for Addictive Disorders.

### 3 Utilisation of drug treatment

In 2005, the healthcare institutions registered 68,701 individuals with mental or behavioural disorders caused by the use of psychoactive substances. In the same year 887 clients have been methadone treatment in Lithuania. In 2004 633 clients received inpatient treatment for drug addiction.

No further information on the utilisation of drug treatment is available.

#### 3.1 New treatment entries

In 2005, the health care institutions registered 349 new treatment entries due to mental or behavioural disorders caused by the use of psychotropic substances. Most of the new treatment entries are related to the use of opioids.

Number of new clients entering treatment	2005	349
- New clients entering treatment (% opioids)*		77.4%
- New clients entering treatment (% cocaine)		0.3%
- New clients entering treatment (% cannabis)		0.3%
Number of all clients entering treatment*	2005	5,371
- All clients entering treatment (% opioids)		80.3%
- All clients entering treatment (% cocaine)		0.1%
-All clients entering treatment (% cannabis)		0.5%

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

### 4 Quality system

In 2002 the Minister of Health approved standards for treatment and rehabilitation. Specialised centres for addictive disorders have to meet the standards in order to receive the health care practice licence.

Data on clients are collected from 74 treatments centres out of 268 which have a licence to provide treatment to drug addicts, and report to the State Mental Health Centre. The Centre for Addictive Disorders in Vilnius runs since 1995 a national database which contains the names of clients in methadone maintenance treatment.

## **Luxembourg**

### **1 Institutional framework**

#### *1.1 Policy*

In Luxembourg the Governmental Council has endorsed the national drugs strategy and action plan covering the period of 2005-2009. The national strategy and drugs action plan includes supply reduction and demand reduction. The national plan contains separate actions associated to a clear definition of tasks, involved management actors, financial requirements and deadlines. It reflects the following priorities set by the government: primary prevention (4 projects), treatment and care (6 projects), socio-professional reintegration (5 projects), reduction of risks and damages (5 projects), research, evaluation and information (8 projects), supply reduction (7 projects), and coordination and international relations (8 projects). Special focus is placed on primary prevention, accommodation and housing, socio-professional reinsertion measures and therapeutic offers.

#### *1.2 Organisation*

Drug treatment in Luxembourg is coordinated and implemented by the Government. There is a national drug coordinator who is also the head of the national delegation within the Horizontal Drugs Group. Treatment offers are decentralised and most commonly provided by state accredited NGOs. All treatment providers are specialised with the exception of regional general hospitals which provide detoxification treatment. All institutions work in close collaboration and have to be viewed as an interdependent therapeutic chain even though there are no formal agreements between them.

The overall management of the referred agencies is ensured by a 'co-ordination platform' that includes 3 members of the concerned institution and at least one representative from the competent ministry. All major decisions have to be approved by the co-ordination platform. In addition, the national drug coordinator meets monthly with the NGOs involved on a bilateral basis or in plenary.

Drug-related interventions are in general funded at state level. Governmental drug treatment departments directly rely on the state budget, while specialised drug treatment services, general hospitals excluded, are relying on state financing and on ministerial control and quality insurance mechanisms. Counselling and outpatient treatment is funded mainly by the Ministry of Health through financial and quality control

agreement called ‘convention de collaboration’ signed with the NGOs providing these services. Substitution treatment, inpatient rehabilitation and long term psychosocial drug treatment is mainly funded through health insurances.

## **2 Availability of drug treatment**

Data on problem drug users originate from the national drug monitoring system RELIS which includes specialised drug agencies with 100% coverage, psychiatric departments of a series of general hospitals, law enforcement agencies and national prisons. According to recent indicators, the prevalence of problem drug users in Luxembourg is between 2,500 and 2,800.

### *2.1 Introduction*

In Luxembourg drug treatment is delivered on a regional level and – with exception of regional general hospitals providing detoxification treatment services - are services are specialised. However, a high concentration and diversity of drug treatment is available within the area of Luxembourg City. With exception of detoxification department all treatment units or agencies accept any drug using client independently of the type of substance(s) involved.

Psychosocial treatment through NGOs and inpatient treatment is provided by a former state owned hospital that is currently privatised (“Centre Hospitalier Neuro-Psychiatrique” - CHNP). NGOs involved in drug treatment fall under the obligation of the so-called 'ASFT' law (8 /09 /98) and the subsequent decree of December 1998, both regulating the relation between government and NGOs providing psychosocial, medically and therapeutic care.

There are a six outpatient treatment units for drug addicts in Luxembourg. The most relevant national outpatient treatment facility is the JDH Foundation (“Fondation Jugend- an Drogenh ellef”) financed by the Ministry of Health. The Foundation has regional units in Luxembourg City, in the South and North. Rarely further agencies provide drug specific treatment.

There is one residential Therapeutic Community (“CHNP-Syrdallschlass”) situated in the East of Luxembourg. The therapeutic programme is divided into three progressive phases and the duration of the treatment varies from 3 months up to one year. The national drug action plan had foreseen the extension of TC offers for specific groups as for instance pregnant women, drug addicted couples etc. However, as the national availability of inpatient psychosocial treatment is limited, patients are referred to specialised institutions abroad. Related costs are covered by the national social security schemes.

Detoxification treatment is provided in psychiatric units of five hospitals. The duration of the detoxification programme is usually 1-2 weeks.

Substitution treatment is mainly delivered through office-based medical Doctors. In addition there still exists a structured substitution treatment programme of the JDH Foundation. Specialised agencies of the JDH mainly provide liquid oral methadone. Until the beginning of 2001, there was no legal framework regulating substitution treatment. In 2002, a law was approved which regulates substitution treatment by granting substitution treatment licences to office-based Medical Doctors and specialised agencies. The new legal framework allows methadone, buprenorphine and morphine-based medications for substitution treatment. It also allows the prescription of heroin in the framework of a pilot project managed by the Directorate of Health.

### Recent changes

A new specialised residential centre for young problem drug users has opened in the beginning of 2007 in the North of the country under the management of “Centre Hospitalier Neuro-Psychiatrique” (CHNP) to fill a gap in the care system for minors.

### *2.2 Types and number of available drug treatment*

In Luxembourg there are six specialised outpatient treatment units for drug addicts. The most relevant national outpatient treatment facility is the JDH Foundation financed by the Ministry of Health. The Foundation has regional treatment units in Luxembourg City, in the South and North.

Since 2007 there was only one therapeutic community called “Syrdallschlass” provided by “Centre Thérapeutique de Manternach” and situated in the east of Luxembourg. Now there is a further residential centre specialised for young problem drug users.

Drug detoxification in Luxembourg is provided by psychiatric units within five general hospitals:

- Clinique St. Louis in Ettelbrück (North) with 15 psychiatric beds
- Centre Hospitalier Emile Mayrisch in HVEA (South) – 33 psychiatric beds
- Centre Hospitalier de Luxembourg (Centre) with 45 psychiatric beds
- Clinique Ste. Thérèse (Centre) with 12 psychiatric beds.
- Hôpital du Kirchberg

### *2.3 Diversification – special groups, special drugs*

Although limited, gender-specific services, as well as interventions for adolescent problem drug users are reasonably well accessible in Luxembourg. Treatment for cannabis users are reported to be reasonably well available and accessible. No further treatment is provided specially for specific groups or drugs.

### 3 Utilisation of drug treatment

In recent years demand for outpatient (including substitution treatment) and inpatient drug treatment has been slightly increased. Detoxification units show a significant increase in the number of patients from 382 patients in 2004 to 568 patients in 2005.

In the year 2005 the following number of clients made use of drug treatment:

Intervention	Number of clients	Number of facilities / units
Specialised outpatient psychosocial interventions	1,157	8
Inpatient psychosocial interventions		
In specialised inpatient units	162	2
In generic inpatient units	240	5
Substitution maintenance		
In medical practices	970	163
In specific outpatient treatment centres	114	2
Detoxification	568	5
Drug treatment abroad	121	Not available

Total number of clients in substitution treatment in 2005 in Luxembourg: 1,084

Total number of clients in psychosocial treatment in 2005 in Luxembourg: 1,559

#### 3.1 *New treatment entries*

In Luxembourg, first treatment demands tend to decrease in 2005 as regards new clients in outpatient treatment and in inpatient detoxification.

Data on first treatments were not reported in 2005 as the figures were too small.

Number of all clients entering treatment*	2005	383
- All clients entering treatment (% opioids)		70.0
- All clients entering treatment (% cocaine)		17.0
-All clients entering treatment (% cannabis)		7.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### **4 Quality system**

In Luxembourg, RELIS has been established as a comprehensive register and monitoring system for all clients in addiction treatment and persons in contact with law enforcement authorities for drug use offences.

The decree of January 2002 replaces the former ‘Methadone Commission’ by the ‘Surveillance commission on substitution treatment’ mandated to control all aspects of substitution treatment at the national level. The commission, the national drug coordinator and specialised treatment centres involved established a central substitution register in the beginning of 2007.

## **Malta**

### **1 Institutional framework**

#### *1.1 Policy*

Malta does not possess at present a drug treatment strategy, neither at national nor at regional level. However, the policy development unit within the Ministry of the Family and Social Solidarity (MFSS) in consultation with the National Commission for Drugs Alcohol and other Dependencies has drawn up a draft Policy for illicit drug use, misuse and abuse which was published in June 2007 for consultation purposes amongst all stakeholders. Feedback has now been received and some of which has been incorporated into the National Drug Policy that will be launched in the first quarter of 2008.

#### *1.2 Organisation*

The government operates a national prevention and treatment agency, “Sedqa National Drug Agency”, which is also responsible for delivery of treatment for problem drug users. Besides the National Drug Agency there are two other NGOs who offer drug prevention and treatment: “Caritas” in Malta and “Oasi Foundation” on the sister Island of Gozo. These NGO’s are also in part funded by the Maltese Government.

### **2 Availability of drug treatment**

In Malta the estimation of the number of problem opiate users refers to daily heroin users. The estimation for 2005 is based on the treatment data files emerging from the main drug treatment providers Sedqa, Caritas, Oasi, DDU and SATU. Accordingly the central estimate is 1,727 daily heroin users (range from 1,625-1,874) which equates to 6 cases (range 5.8-6.7) per 1000 inhabitants aged 15-64 years old.

#### *2.1 Introduction*

The first drug treatment centre in Malta was initiated by Caritas Malta in 1985 with the opening of a rehabilitation day programme. This was followed in 1987 by a detox unit set up within the ground of the Government Hospital, St. Luke’s. In June 1989 Caritas started the first long-term rehabilitation centre “San Blas”. Now both non-governmental and public organisations are the main treatment providers in Malta. There are five most

important treatment providers - Caritas, Sedqa, OASI (Foundation Prevention Division in Gozo), SATU (Substance Abuse Therapeutic Unit), CCF (Corradino Correctional Facility's) and the Dual Diagnosis Unit (DDU) at Mount Carmel Hospital.

These agencies deliver different types of treatment which can be classified as follows:

- Outpatient Community Services

Caritas, Sedqa and Oasi offer community-based outpatient psychosocial drug services. Short-term as well as long-term support is provided by counselling, group therapy and psychological interventions. Community services also prepare clients for long-term rehabilitation. Sedqa's community services include a programme called 'Stima' which supports clients following a naltrexone programme. Oasi offers an AA-based day programmes, lasting 5-8 months, for clients with good family support and stable life styles.

- Rehabilitation / residential programmes

The Caritas San Blas 2-year programme and the Sedqa Santa Maria 18-month programme are both long-term residential Therapeutic Communities offering a holistic treatment approach to individuals with severe and complex drug-related problems. The San Blas facility is the only residential programme that accepts clients who are still in detoxification process and provides semi-residential and after care. In 2004 the San Blas Programme opened a specially monitored section where residents' children can spend weekends at the T.C.

In Gozo, the Oasi foundation provides a 2-4 month short residential programme followed by Continued Care Sessions. Other residential programmes are the Dual Diagnosis Unit (DDU) within Mount Carmel Psychiatric Hospital and the prison inmates' programmes such as the Substance Abuse Therapeutic Unit (SATU), Caritas Prison Inmates Programme (P.I.P) and SEDQA Prison Inmates Programme within the St. Marija Therapeutic Community. The prison programmes offer pre-release programmes to inmates who are serving a sentence between six months and two years.

- Detoxification treatment

In Malta, detoxification can take place both on an outpatient basis through the Substance Misuse Outpatient Unit (SMOPU), and on an inpatient basis through the Substance Misuse Inpatient Unit. Inpatient detoxification is provided by SEDQA and Mt. Carmel which is a psychiatric hospital. Detoxification is done with methadone, dihydrocodeine, naltrexone/naloxone and clonidine. All clients attending detoxification treatment are referred by SEDQA's community services or through an external agency.

- Substitution maintenance treatment

The Substance Misuse Outpatient Unit (SMOPU) is the centralised methadone treatment unit in Malta. The Craig Hospital in Gozo also offers methadone treatment, however all clients receiving methadone from Gozo are registered at SMOPU first. Methadone maintenance treatment was introduced in 1987. In 2005 take home of methadone prescriptions was introduced and in 2006 treatment with buprenorphine started in addition to methadone. Buprenorphine is given as 'take home' doses, has to

be paid for and is available by prescription from either SMOPU or a general practitioner. Only few GP's offer medically-assisted drug treatment in Malta.

## 2.2 *Types and number of available drug treatment*

Together with the prison inmates programmes there are 7 specialised facilities providing residential drug treatment. Five specialised organisations offer outpatient psychosocial interventions. Two hospitals also provide outpatient psychosocial drug treatment. There are three treatment units available for detoxification treatment, and two specific treatment centres offer substitution maintenance treatment.

## 2.3 *Diversification – special groups, special drugs*

Gender-specific services, as well as interventions for dually diagnosed and adolescent problem drug users are reasonably well available and accessible in Malta. In addition, since 2004 there is one shelter with 7 beds for homeless drug users.

## 3 **Utilisation of drug treatment**

Information on the number of clients entering treatment is provided in for the year 2005. The data on clients include those cases utilising different services at the same time. Thus, the following information on clients is provided in the national report:

Intervention	Number of clients	Number of facilities / units
Outpatient psychosocial interventions	777	7
Inpatient psychosocial interventions	220	7
Substitution maintenance	Data not available	Data not available
Detoxification (SMOPU)	969	2

According to the 2006 yearly report, 1,714 individual clients received drug treatment in 2005. No information is available on the number of client in substitution maintenance treatment.

### 3.1 *New treatment entries*

In 2005 there were 312 new admissions of clients seeking treatment for the first time; 62% entered treatment for opioids, 11% for cocaine, 18% for cannabis and 9% for all others.

Number of new clients entering treatment	2005	312
- New clients entering treatment (% opioids)*		62.0
- New clients entering treatment (% cocaine)		11.0
- New clients entering treatment (% cannabis)		18.0
Number of all clients entering treatment*	2005	511
- All clients entering treatment (% opioids)		84.0
- All clients entering treatment (% cocaine)		5.0
-All clients entering treatment (% cannabis)		7.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

With respect to the treatment quality system it is reported that the National Focal Point collects and monitors the data of psychosocial treatment and medically-assisted treatment. In Malta there are no quality standards for any type of treatment.

## Netherlands

### 1 Institutional framework

#### 1.1 Policy

In the Netherlands there is no national drug strategy or action plan on drugs. However, there is a national drug policy which has four major objectives:

- To prevent drug use and to treat and rehabilitate drug users
- To reduce harm to users
- To diminish public nuisance by drug users (the disturbance of public order and safety in the neighbourhood)
- To combat the production and trafficking of drugs.

The Dutch policy was first formulated 1995 in the white paper “The Dutch Policy: Continuity and Change (Ministry of Foreign Affairs et al., 1995). The implementation of this policy was monitored and updated by four progress reports. Since then, Dutch drug policy has developed drug strategies for specific drugs and different initiatives to diminish public nuisance. Ecstasy and cocaine strategies have a strong focus on law enforcement, while the cannabis strategy touches upon all aspects of the phenomenon.

- Ecstasy: the white paper “A combined effort to combat ecstasy” (2001) announced intensified law enforcement in the battle against the production and trafficking of ecstasy (T.K.23760/14). In May 2007, the government decided to continue this policy on a regular basis (T.K.23760/20).
- Cocaine: “plan to combat drug trafficking at Schiphol Airport” (2002) is directed against the trafficking at this airport (T.K.28192/1).
- Cannabis: The “Cannabis Policy Document” (2004) tightened Dutch policy on cannabis (T.K.24077/125).
- Heroin: a scientific experiment to treat chronic and treatment-resistant opiate addicts by means of medically prescribed heroin (first announcement in 1995).

There are several laws and policies to diminish drug related nuisance with at least the possibility to sentence (addicted) frequent offenders for at most two years in a special unit. The new government intends to offer these offenders a qualitative better compulsory drug treatment (T.K.31110/1).

In 2006, The Netherlands Organisation for Health Research and Development (ZonMW) started a new research programme on “risk behaviour and dependence”, covering four issues:

- Factors affecting the initiation of risk behaviour and dependence
- Factors affecting progression and chronicity of risk behaviour and dependence
- Nature, magnitude and extent of problems associated with drug use and dependence
- Effectiveness of interventions

The programme embraces the full innovation cycle, linking knowledge development, synthesis, translation, dissemination, implementation and evaluation.

A further characteristic of the Dutch policy is that many diverse treatment options are actually offered, their implementation is mainly left to regional and local authorities and to the drug care organisations themselves.

### *1.2 Organisation*

In the Netherlands, there is no explicit organisation responsible for the national coordination of drug treatment. Due to the decentralised structure, organisation, implementation and coordination of addiction care is in the responsibility of regional and local authorities or treatment provider. During the past five years addiction treatment organisations have in most cases merged with mental health organisations. This resulted in regional organisations offering both care for mental health and addiction problems. These mergers have been initiated for economical reasons but also for facilitating combined or integrated treatment for dual diagnosis patients.

All kinds of drug treatment are mainly delivered by non-governmental addiction care facilities on a regional level, followed by private organisations including physicians and hospitals. Drug treatment is also provided in regional public hospitals. There is a complex funding system for drug treatment as funding is mainly provided by public budget at national and local level. In addition, detoxification and residential treatment is also funded by health insurance. In the Netherlands, the Health Insurance Act is now transferred to a specific legal arrangement (WMO) that directs budget for (addiction) care to the municipalities. Second, there are the private health insurance companies that play a major role in health care nowadays. Last but not least, there are special project funds targeting experimental treatments.

## **2 Availability of drug treatment**

The most recent estimation on the number of problem hard drug users is from 2001 and based on registrations of hard drug users who have been in contact with the police or the addiction care. For the 2001 estimate, the multivariate social indicator method (MIM), the multiple imputation method, and the treatment multiplier (TM) have been used. These methods yielded a national estimate of about 33,500 problem drug users.

More recent estimations at local level suggested that in 2005 Amsterdam had an estimated number of opiate addicts of 3,728. In Rotterdam it was estimated that in 2003 there were 5,051 problem hard drug users.

## *2.1 Introduction*

In the Netherlands, most substance addiction treatment is not sub-divided into units that are specialised in either drug treatment or alcohol treatment. The addiction care system in the Netherlands is hardly to classify or even to describe in terms of outpatient, inpatient and medically-assisted treatment. Psychosocial interventions (drug-free treatment) are often provided to clients who are not seriously addicted, while serious drug addicts often are treated in the first place with medically-assisted treatment. Nowadays drug-free treatment is more frequently provided to complement medically-assisted treatment in order to attain longer term effectiveness and reduce relapses. There are no specific admission criteria for drug-free treatment. Types of drug-free treatment in addiction care centres include motivational interviewing, relapse prevention techniques, cognitive-behavioural therapies and family therapies.

Methadone programmes are offered in almost all outpatient addiction care institutions and by one municipal health service (Amsterdam). For substitution treatment predominately methadone (since 1968), and second heroin (introduced in 1997) and buprenorphine (introduced in 1999) is used. Buprenorphine is used on a regular basis in only organisation of addiction care. Methadone distribution is done in outpatient addiction units, methadone posts and in some cases buses. In Amsterdam, the Municipal Health Service and a number of general practitioners are also involved in methadone distribution.

Since September 2003, physicians can prescribe cannabis for medical reasons, and pharmacies are allowed to supply this drug. The governmental agency “Office of Medicinal Cannabis” (OMC) regulates the whole process of production, delivery and quality control of medicinal cannabis. These possibilities are not focused on clients with addiction problems.

Traditionally, there is a network of institutes for addiction care that covers the whole country. Main regular institutes for addiction care exist in all twelve provinces. Due to mergers, the number of organisations of addiction care, funded by public money, has decreased from 32 to 18 during the past six years.

During the past ten years Dutch addiction care has put more emphasis on psychiatric comorbidity and to gradually introduce evidence-based addiction care.

### Recent changes

In June 2004, the government decided to expand the treatment capacity for medical prescription of heroin from 300 to 1,000 chronic opiate addicts. This special treatment will be available for a limited group in specialised addiction care.

Due to an increased demand treatment modalities are developed for cocaine and cannabis users. For instance, an experiment for cocaine users has investigated in 2006 the applicability and effectiveness of the Community Reinforcement Approach combined with voucher-incentives.

## *2.2 Types and number of available drug treatment*

In the Netherlands there are 18 major organisations of addiction care being most important for providing drug treatment. The quantity of treatment provision hardly changed during the past years. As part of these organisations there more than 200 locations of addiction care organisations. Substitution maintenance treatment is delivered on 130 spots under supervision of substitution clinics, and also in many medical practices.

## *2.3 Diversification – special groups, special drugs*

Apart from specific treatment services for amphetamine users, in the Netherlands there are intervention packages and possibilities for a number of specific groups such as for cocaine and cannabis users, for women, adolescents, ethnic groups, and for drug users with psychiatric problems. In 12 out of 18 addiction treatment organisations, specific treatment is offered to dual diagnosis patients. Gender-specific treatment is offered in almost half of these organisations, and three to five organisations offer treatment specially meant for adolescents. In addition there has been a programme for North-African refugees. Still there are programmes for Moluccan, Caribbean, Moroccan and Turkish addicts. However, these services are reported to be rare but available where mostly needed.

# **3 Utilisation of drug treatment**

In 2005, 32,500 individual clients made use of drug treatment. Among them did 1,500 clients did enter general hospitals due to their drug dependence. Substitution maintenance treatment was at least attended by 12,564 drug users. In 95% of these cases the clients have been on methadone, 2% received buprenorphine. About 800 clients have been treated with heroin.

## *3.1 New treatment entries*

Among the first treatments in 2005, the proportion of clients seeking treatment for the first time for opioids was about 10% compared to almost 35% for cocaine clients and almost 42% for cannabis. The proportion of first treatments related to stimulants was 9.1%.

Number of new clients entering treatment	2005	4,299
- New clients entering treatment (% opioids)*		9.6
- New clients entering treatment (% cocaine)		34.5
- New clients entering treatment (% cannabis)		41.8
Number of all clients entering treatment*	2005	9,411
- All clients entering treatment (% opioids)		28.4
- All clients entering treatment (% cocaine)		35.3
-All clients entering treatment (% cannabis)		26.9

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

The „National Alcohol and Drugs Information System“ (LADIS) already exists for more than fifteen years. LADIS registers and monitors clients in outpatient addiction care, including clients in methadone maintenance programmes and probation services. It also registers treatment entries in inpatient care. LADIS has a national coverage. For complete coverage of all specialised addiction treatment the new registration system of the DBC's (Diagnosis Treatment Combinations) is planned to be fully operational from 2006 on. Private addiction clinics are not reporting to this system.

The 18 main regular institutes are member of the „Netherlands Mental Health Organisation“ (GGZ Nederland). This organisation initiated in 1999 the long-term policy programme Scoring results (“Resultaten Scoren“). This programme has produced many documents for treatment, prevention, and harm reduction, e.g. systematic reviews on effectiveness of interventions, guidelines and protocols. Apart from monitoring, drug treatment in the Netherlands has been intensively subject of scientific evaluation during the past decade, resulting in improvement of the quality of care.

## Norway

### 1 Institutional framework

#### 1.1 Policy

Norway developed in 2004 a specific drug treatment strategy - "Bedre behandlingstilbud til rusmiddelmissbrukere. Perspektiver og strategier" – which main objectives are to strengthen health services for substance abusers by developing treatment as an interdisciplinary specialist health service. Treatment in health services shall focus on holistic and individual-based approaches and improve treatment for persons with dual diagnoses.

Norway also has an "action plan to combat drug and alcohol-related problems (2003-2005). This action plan has been followed up under the chief responsibility of the relevant individual ministries, and under the coordination of the Ministry of Health and the Care Services. A new Escalation Plan for the drugs and alcohol field is under preparation by the Government. The plan is meant to be applied until 2010. The aim of the plan will be a policy with a clear public health perspective. Overriding goals will be to raise professional standards through research and strengthening competence and quality. The Plan will address the need for cooperation between different bodies and administrative levels. The perspective of the substance users will also be a central element.

#### 1.2 Organisation

The Directorate of Health and Social Affairs is responsible for coordinating the national strategy for prevention, and for maintaining contact with the competence centres, the municipalities and the voluntary organisations. There are seven drug and alcohol competence centres which play an important role in implementing drugs and alcohol policy at the regional and local levels. Each of the centres has its own national area of expertise, and they are connected through the "Norway Net", which ensures the sharing of expertise between the centres. The centres collaborate with the municipalities in their region, and provide education, advice and guidance for personnel and promote the development of preventive measures.

In January 2004, Norway implemented the "Administrative alcohol and drug treatment reform" in order to improve the treatment options for problem drug and alcohol users by improving cooperation between the specialist health services. The reform transferred the

responsibility for the treatment of problem alcohol and drug users from the county councils to the regional health authorities (RHAs) on behalf of the state. The regional health authorities' new responsibility is defined as "interdisciplinary, specialised treatment of drug and alcohol abuse". Through this reform, 74 treatment units/institutions (inpatient as well as outpatient treatment units, and regional centres for medically-assisted rehabilitation) were transferred to the state and represented by the RHAs. 42 of them were privately owned and run, while the other 32 were public.

In Norway all treatment options are directed to problem users of alcohol, medicines and drugs. Treatment is mainly financed by public funds. In addition, the Ministry of Labour and Social Inclusion, the Ministry of Health and the Care Services have extraordinary funds at their disposal for the development of special high priority efforts in the areas of epidemiology, research, prevention and treatment. In 2005, the Directorate for Health and Social Affairs allocated a total of 7.5 million Euro to the seven drug and alcohol competence centres. The allocations are intended to cover normal running expenses and the development of interventions.

## **2 Availability of drug treatment**

Based upon the Mortality Multiplier method, in Norway the number of injecting drug users is estimated at 8,400 to 11,700.

### *2.1 Introduction*

The Norwegian treatment predominately is targeted at alcohol and drug abuse ("Rusmiddelmissbruk"), and accordingly only few interventions exclusively address illicit drug abuse. The general approach to substance abuse implies the lack specific drug treatment.

Before describing the classification and conception of substance treatment in Norway, a number of clients' legal rights have to be mentioned. First of all, the amendments (September 2004) to the administrative reform gave the patient the right to choose a treatment centre ("Patient rights and amendments to the Act relating to Specialist Health Services" ([Rundskriv I-8/2004](#))). Furthermore the amendment set a time limit of 30 working days for the assessment of problem drug and alcohol users and their referral to health care or treatment. If the problem user is given the status as a so called "patient with rights", an individual time limit is set for the latest start of treatment.

In December 2005, the Minister of Health and Care Services appointed a working group to consider the possibility of establishing a guarantee for quick access to health care for young people suffering from substance addiction or mental illness. The working group delivered its recommendations in June 2006, and the respective report has been circulated for public comment.

In Norway, the social services in the municipalities have the overall responsibility for the provision and coordination of treatment for problem drug and alcohol users. The

social services make referrals to the specialist health service and cooperate with the health service during the whole treatment process. Similarly, GPs have an important responsibility to prevent, identify and treat the abuse of drugs and alcohol.

Drug-free treatment for drug and alcohol use is still considered to be the most important treatment approach in Norway. The treatment concept varies from psychotherapeutic methods to more ideologically-based approaches such as for example treatment according to fundamental Christian or Lutheran principles.

Drug and alcohol treatment in Norway is difficult to classify, however currently the following “types” of treatment can be differentiated:

- Psychiatric youth teams (*'psykiatriske ungdomsteam'*)
- Inpatient treatment centres (*'institusjoner med døgntilbud'*)
- Fraternity houses (*'Kollektiver'*)
- Emergency units (*'akuttinstitusjoner'*)
- Psychiatric institutions (*'sosialmedisinske/psykiatriske institusjoner'*)

In 2004 the different interventions in interdisciplinary specialist treatment for problem drug and alcohol use were divided into four levels:

- **Level 1:** Outpatient functions and assessment units, covering psychiatric youth teams, psychiatric institutions and day centres
- **Level 2:** Detoxification and other services/abstinence treatment (inpatient services)
- **Level 3:** Inpatient treatment of less than 6 months (mainly health-related, covering emergency units)
- **Level 4:** Inpatient treatment of more than 6 months (social and health-related measures, include fraternity houses)

The following is an attempt to classify treatment.

### **Outpatient treatment**

Outpatient psychiatric treatment is offered by psychiatric clinics for children and adolescents below age of 18 and with all types of mental disorders and problems. In addition, outpatient treatment is provided in open social medicine clinics and by psychiatric youth teams (PYT). The psychiatric youth teams work especially with adolescents and young adults 15 to 30 years old who have both drug and mental health problems. There is a number of care programmes for addicts with little potential for rehabilitation, who are offered supervision and care in a drug-free environment. Outpatient treatment is also provided in halfway houses which support the residents' ability to manage a “normal life”.

### **Inpatient treatment**

In general, inpatient institutions delivering treatment primarily to alcoholics offer a far shorter treatment programme than inpatient institutions offering treatment primarily to drug users. However, the requirement to make a treatment plan for clients with

extensive and multiple treatment needs is a central aspect of the new drugs and alcohol reform. At present there are efforts to achieve greater flexibility between specialist health care treatment and the municipal housing and care facilities, with follow-up by both the specialist health services, and the municipal health and social services.

### **Medically-assisted treatment**

Medically-assisted treatment is delivered by the “LAR” centres which are part of the specialist health service for problem drug and alcohol use. Substitution treatment is carried out under the auspices of or by regional centres. However, the municipal health and social services are responsible for the application and follow-up of substitution treatment.

Since methadone maintenance treatment became available nationwide in 1998, there has been a steady annual increase in the number of patients. Buprenorphine substitution treatment was introduced in 2001 as outpatient treatment for heavy drug users. Buprenorphine and the antagonist naloxone are available on a registration-exemption basis, but are so far not extensively used. The medication is taken daily under supervision until the patient is regarded as to be stable. Permission for take-home use can then be granted to an increasing degree, and depends on the results of supervised urine samples.

### *2.2 Types and number of available drug treatment*

As mentioned above, in Norway there are no specific treatment options for drug users. Most treatment services address also other substance users.

In 2003, approximately 70 psychiatric outpatient clinics for children and adolescents, and approximately 100 psychiatric outpatient clinics for adults were available across the country. Some clinics for adults employ staff dedicated to working with drug and alcohol abusers suffering from mental disorders. In addition, Norway had 34 psychiatric youth teams (PYT) which are often incorporated in larger outpatient clinics with a general substance treatment approach. Most inpatient units also address both alcohol and drug users, even though there are some residential therapeutic communities which focus almost solely on illegal drug users.

In 2005, 86 outpatient units were available which provide psychosocial treatment to substance abusers. Furthermore 223 inpatient units provided residential psychosocial treatment. 149 inpatient units offer a total of 3.670 beds. Finally there are 14 units with a permission to provide medically-assisted treatment.

### *2.3 Diversification – special groups, special drugs*

In Norway’s treatment facilities gender-specific treatment groups as well as treatment for adolescent problem drug users are reported to be reasonably good available. Furthermore, multi-disciplinary psychiatric youth teams provide outpatient treatment to

co-morbid problem drug users. The availability of inpatient treatment for co-morbidity is low. One important aim of the administrative alcohol and drug treatment reform is, however, to increase the availability and the accessibility to treatment for drug users with dual diagnosis.

### **3 Utilisation of drug treatment**

On the utilisation of drug treatment only limited information is available. For the year 2004 it is reported that 24,485 admissions were registered in treatment. The admissions include both alcohol and drugs abusers and data are aggregated. As regards the utilisation of maintenance treatment, all clients in substitution therapy (LAR centre) are registered; this includes also patients with substitution prescription from a general practitioner. In 2005, there had been 3,987 clients in medically-assisted treatment in 11 regional centres. Out of the clients 2,791 received methadone and 1,196 clients received buprenorphine.

#### *3.1 New treatment entries*

No information on new treatment entries is available.

### **4 Quality system**

The Directorate for Health and Social Affairs appointed a working group, which has drawn up a strategy for quality improvement in the social and health services for drug and alcohol users. For quality improvement scientific knowledge-based practice and efforts are combined to achieve a more holistic approach and to create good quality services.

In cooperation with the Bergen Clinics Foundation, „SIRUS“ (The National Research Centre on Alcohol and Drugs) operates a nationwide client registration system in Norway. The registered institutions/services submit voluntary reports to SIRUS and thus the data is not always complete. In cooperation with Norwegian Patient Register, the Directorate for Health and Social Affairs prepared a system for waiting list registration during 2005 that will deliver data from 2006 on.

## **Poland**

### **1 Institutional framework**

#### *1.1 Policy*

In 2006 the Council of Ministers adopted the current “National Program for Counteracting Drug Addiction” (2006 -2010) which is the national drug strategy with related action plans. This national programme (NPCDA) takes modern prevention strategies into account by focussing on a balanced approach. Accordingly the national programme shall be implemented in the 5 key areas prevention, treatment, supply reduction, research and monitoring, and international cooperation.

As regards drug-related treatment, the following objectives are defined:

- Improving health and social functioning of drug addicts and users
- Raising the quality of health services providing treatment and rehabilitation to substance users
- Increasing the availability of health services

In October 2006 a new “Act of Law on counteracting drug addiction” came into force. This act introduced the obligation that the provincial council and the commune council have to adopt a “Provincial and Communal Programmes for Counteracting Drug Addiction”. The executive bodies of the provincial and communal government are responsible for developing adequate drafts and their implementation.

#### *1.2 Organisation*

In Poland, the responsible organisation for coordinating activities in the field of drug addiction is the “Council for Counteracting Drug Addiction”. Due to the new act competences and power of the Council have been expanded and opportunities of effective coordination have been considerably strengthened because now the Council can advise the Prime Minister. The advisory role shall be implemented through expert teams appointed by the Chairman of the Council.

The “National Bureau for Drug Prevention” (NBDP) is responsible for drafting the National Programme for Counteracting Drug Addiction and monitoring its implementation in cooperation with other relevant entities.

Implementation of drug treatment is in responsibility of communities and provinces while the delivery of drug treatment is ensured by different providers. Outpatient and

inpatient psychosocial drug treatment is mainly delivered by NGOs, followed by public services. Detoxification treatment and substitution maintenance treatment is mainly provided by public services, followed by NGOs and lately by private clinics and physicians. Funding for drug treatment is primarily ensured by health insurance but also by public budget of communities. However, some private organisations or sponsors are also involved in financial support of drug treatment. If patients have no health insurance, the Ministry of Health finances drug treatment.

## **2 Availability of drug treatment**

The latest estimate of the number of drug addicts in Poland included persons not covered by the reporting treatment system, and is based on the results of the study conducted in 2002. According to this estimate the number of problem drug users ranges from 35,000 to 75,000. A more recent estimation of the number of problem drug users is available for Warsaw. In 2005 regressive methods were applied for the estimation, and according to the results 2,767 individuals are estimated to be problem opiate users in Warsaw (range from 2,250 – 3,458).

### *2.1 Introduction*

Drug treatment, rehabilitation and reintegration services are provided free of charge for drug addicts regardless of their place of residence in Poland. Health services for drug addicts are provided through the network of outpatient and residential health care centres, detoxification wards, day care centres, drug treatment wards in hospitals, mid-term and long-term drug rehabilitation facilities and drug wards in prisons. In general, these services provide diagnosis, counselling, psycho-education, pharmacological therapy, substitution treatment, individual and group psychotherapy, and Therapeutic Communities.

In line with the public health perspective of drug treatment, the treatment system in Poland can be differentiated as follows:

- **Outpatient treatment**

“Ambulatory clinics” function as an “entrance gate” to residential treatment programmes. Outpatient interventions to users of illicit psychoactive substances is provided through drug counselling centres, mental health counselling centres and day care centres especially located in large cities. The most popular provider of outpatient treatment are the “Prevention and Treatment Counselling Centres” (Poradnie Profilaktyki i Leczenia UzaleŜnień). During the period from 1998 to 2004 the number of counselling centres doubled from 34 to 73, and the number of patients increased from 4,991 to 30,601.

- **Residential treatment**

Health care for drug addicts is still dominated by long-term and mid-term residential treatment lasting more than one year. However, due to limited funding there is the trend

of shortening the treatment duration. Residential treatment facilities are located outside urban areas and perform treatment and rehabilitation based on a therapeutic community model. 26 out of all residential treatment facilities admit underage patients.

- Detoxification treatment

Detoxification treatment is provided in detoxification wards, and available to a limited extent. General Practitioners are not allowed to deliver medically-assisted treatment. At hospital detoxification usually lasts 8-21 days. For pharmaceutical treatment of withdrawal symptoms painkillers, tranquilizers, antiemetics, methadone (introduced 1993), and causal treatment with clonidine are administered. In Poland, buprenorphine treatment is not yet introduced.

- Substitution maintenance

The Polish drug treatment system allows outpatient substitution treatment to opiate addicts at least 18 years old in case that other treatment failed. Clients in substitution treatment programmes are provided with psychological and social assistance. However, substitution treatment, for formal reasons run so far by public health care units, is still an exception. In 2005 and 2006 two new methadone maintenance programmes were launched; one in Łódź (Methadone Maintenance Centre by Detoxification Ward) and another one in Świecie. The new Act of Law of 2005 on „Counteracting drug addiction“ made it possible that in future also non-public health care facilities may provide substitution maintenance.

## 2.2 *Types and number of available drug treatment*

In 2005 the following number of different treatment types was available in Poland:

Intervention	Number of facilities / units
Outpatient psychosocial interventions	73
Inpatient psychosocial interventions	52 with 2.330 beds
Inpatient detoxification	40
Substitution maintenance treatment in substitution clinics	13

## 2.3 *Diversification – special groups, special drugs*

In Poland, specific treatment options are provided to a number of special groups. In fact, there are specific services for cannabis users (mainly psycho-education), women drug users (two programmes with one in prison), children and adolescents (special in- and outpatient programmes for children with focus on sport, art, hobbies), and co-morbid patients (3 stationary centres for double diagnosis), but the availability of these services

is reported to be low. This is unlike for amphetamine users as the availability of specific treatment offers for this group is said to be appropriate.

### 3 Utilisation of drug treatment

Data available on treatment utilisation in 2005 indicate the following numbers of clients in treatment.

Intervention	Number of clients	Number of facilities / units
Specialised outpatient psychosocial interventions	25,263	73
Specialised inpatient psychosocial interventions	12,836	52
Substitution maintenance treatment in specialised clinics	969	13
Inpatient detoxification	Not available	40

#### 3.1 *New treatment entries*

In 2005, altogether 12,836 drug users have been in residential treatment and out of this group 6,947 clients made use of treatment the first time. In 2004 there had been 30,601 clients registered in outpatient treatment. 13,214 clients have been in outpatient treatment for the first time.

Number of new clients entering treatment	2004	6,940
- New clients entering treatment (% opioids)*	2003	19.8
- New clients entering treatment (% cocaine)	2003	1.2
- New clients entering treatment (% cannabis)	2003	4.4
Number of all clients entering treatment*	2004	12,818
- All clients entering treatment (% opioids)	2003	23.3
- All clients entering treatment (% cocaine)	2003	0.9
- All clients entering treatment (% cannabis)	2003	3.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Poland, there is no national monitoring for clients in treatment. Data from methadone programmes and residential treatment facilities are collected by the Institute of Psychiatry and Neurology in Warsaw (IPiN) but mainly for statistical purposes.

National quality standards for drug-free treatment are being developed by an expert group appointed by the Minister of Health. The standards will not be obligatory.

## **Portugal**

### **1 Institutional framework**

#### *1.1 Policy*

Portugal established a National Plan against Drugs and Drug Addiction for the 2005-2012 period which updates the priorities of the National Strategy and the National Action Plan of the 2005-2008 period. The National Plan was approved by the Inter-ministerial Technical Commission on Drugs and Drug Addiction and by the National Council on Drugs and Drug Addiction (consultation body).

To implement this National Plan, it was approved the Action Plan Against Drugs and Drug Addictions – Horizon 2008, which focuses interventions on specific priority areas, according to a logic of integrated approaches and responses. The Action Plan sets the following priorities in the field of drug treatment:

- To guarantee the necessary resources for the treatment of drug addicts and to ensure just-in-time access to integrated therapeutic responses to all those who request treatment (including prisoners)
- To make different treatment and care programmes available, encompassing a wide range of psycho-social and pharmacological possibilities, based on ethical guidelines and science based practices
- To implement a continuous process for improving quality for all therapeutic programmes and interventions.

The metropolitan areas of Lisbon and Porto established local drug treatment strategies focussing on the provision of low-threshold treatment and referral to treatment units.

The Action Plan will be evaluated in 2008 and a new Action Plan will be drafted for the remaining period (2009-2012).

#### *1.2 Organisation*

The Institute on Drugs and Drug Addiction (IDT) at the Ministry of Health is the national governmental institution responsible for the coordination of policy in the field of drugs and alcohol. The core task of IDT is to promote the reduction of the use of licit and illicit substances and the decrease of addictions. The Institute ensures the planning, conception, management, monitoring and evaluation of drug prevention, drug treatment

and rehabilitation. The IDT has 5 regional delegations which are responsible for the same tasks at regional level.

The Chairman of the Management Board of the Institute also has a role of the National Coordinator on Drugs. He reports directly to the Minister of Health and is responsible for the implementation of the National Strategy on Drugs. The National Coordinator also promotes the cooperation amongst local, regional and national administration bodies in a common effort to fight against drug addiction.

Funding for drug treatment is provided by the government. The Portuguese state finances both the public national treatment network (IDT) and accredited private organisations.

## **2 Availability of drug treatment**

The most recent estimation on the prevalence of problem drug users is from 2002. According to the Ministry of Health data on clients attending public outpatient drug treatment services 41,720 to 48,673 people are estimated to be problem users of opiates, cocaine and/or amphetamines in Portugal.

A new prevalence estimate is foreseen for the year 2008.

### *2.1 Introduction*

Portugal is divided into 18 districts and outpatient drug treatment is available across the country. Treatment is mainly delivered by the public organisations, followed by NGOs and to a lesser extent by Mental Health Services and generic substances abuse services. Commercial bodies are rarely involved in the delivery of treatment in Portugal. While outpatient treatment centres are exclusively publicly run, residential drug treatment - Therapeutic Communities - are mainly provided by NGOs or private organisations.

Drug treatment in Portugal can be classified as follows.

- Outpatient drug treatment centres (“Centros de Atendimento a Toxicodependentes – CAT”)
- Day care centres
- Detoxification units
- Therapeutic Communities

In addition to outpatient treatment centres decentralised consultation units (locais de consulta) exist in Health Centres. All centres provide both psychosocial and medically-assisted treatment. Until 1998 methadone maintenance treatment, introduced in 1977, was provided exclusively through the public outpatient treatment services of IDT. In 1998 provision of methadone in pharmacies started for clients of the public outpatient treatment network (CAT) and involved up to 391 pharmacies. The provision of buprenorphine in pharmacies started in 2004. The availability of substitution programmes continues to increase and also NGOs deliver substitution treatment. Since

introduction of buprenorphine substitution in 1999 the number of clients in this treatment has increased steadily.

Day centres offering outpatient care are provided by public and non-governmental services. Withdrawal treatment is available in public and private detoxification units. Inpatient psychosocial treatment mostly consists in Therapeutic Communities and is mainly available in private services. There is short- and long-term residential psychosocial drug treatment available. Since 2002 the number of residential treatment units is decreasing partly due to funding problems.

## *2.2 Types and number of available drug treatment*

In 2005 Portugal provided 77 public specialised outpatient treatment centres (45 CATs, 11 extensions and 21 decentralised consultation units) which offer outpatient psychosocial drug treatment. Among the specialised public treatment centres there are 21 decentralised consultation units (locais de consulta).

Inpatient psychosocial treatment mainly consists in Therapeutic Communities. In 2005 there were 72 therapeutic communities with 70 of them being delivered by private treatment units. Only two residential treatment units are run by public services.

As regards withdrawal treatment in Portugal there are 14 detoxification units available. 9 of them are provided by private organisations and 5 are provided by public treatment centres.

Substitution treatment is widely available in Portugal, mainly through public services such as specialised treatment centres, health centres, and hospitals. In addition substitution treatment is available in pharmacies and NGO services. In 2005, the number of clients in substitution and maintenance programmes represented 66% of all clients in the public outpatient treatment network.

## *2.3 Diversification – special groups, special drugs*

In Portugal, treatment of drug dependence puts a lot of emphasis on co-morbid problems and therefore the availability and accessibility of such services is reported to be very good. Similarly, treatment services for parents with young children and pregnant women are also reported to be largely available and accessible. Other reported specific services exist for drug-using adolescents, cannabis, and cocaine and amphetamine users with reasonably good to limited availability and accessibility.

## **3 Utilisation of drug treatment**

The number of clients in treatment refers to clients which are registered in treatment and at least one treatment episode during the year 2005. While the number of registered clients in residential treatment decreased in comparison to previous years, the number of clients attending substitution treatment increased by 9% compared to 2004. Of all

clients in substitution treatment at 31<sup>st</sup> December 2005, 69% received methadone at the public services of CAT's and 19% got their methadone in Health Centres.

The table below presents the number of clients in 2005 according to the type of intervention.

Intervention	Number of clients	Number of facilities / units
Specialised outpatient psychosocial interventions	31,822	77
Inpatient psychosocial interventions		
In specialised public inpatient units	68	2
In specialised private inpatient units	4,093	70
Substitution maintenance		
In specific outpatient treatment centres	21,045	55
In prisons and outreach programmes	1,900	2
Detoxification	3,237	14
Day care centres	634	Not available

Total number of clients in substitution treatment in 2005 in Portugal: 21,045

71% of the clients received methadone and 29% buprenorphine.

Total number of clients in psychosocial treatment in 2005 in Portugal: 35,983

### 3.1 *New treatment entries*

Of 31.822 clients in outpatient psychosocial treatment, 4,844 clients requested treatment for the first time in 2005. 21 054 clients were registered in substitution and maintenance programmes, 4,206 cases were new admissions to substitution treatment. Most of all new treatment entries were related to the use of opioids, followed by cannabis, and cocaine.

Number of new clients entering treatment	2005	4,844
- New clients entering treatment (% opioids)*		77.3
- New clients entering treatment (% cocaine)		8.1
- New clients entering treatment (% cannabis)		11.4
Number of all clients entering treatment*	2005	n.a
- All clients entering treatment (% opioids)		n.a
- All clients entering treatment (% cocaine)		n.a.
-All clients entering treatment (% cannabis)		n.a

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Portugal there is a national information system for psychosocial as well as medically-assisted treatment. However, this information system is not yet implemented in all regions. Public authorities issued quality standards for drug treatment mainly in order to decide on funding for drug services.

## **Romania**

### **1 Institutional framework**

#### *1.1 Policy*

In Romania, the drug treatment strategy is part of the recent National Strategy on Drugs (2005 - 2012), which is accompanied by the action plan for the 2005 to 2008 period. The main general objectives of the national drug strategy are to ensure adequate medical assistance for the drug addicts as part of the public health services system, including for those being in penitentiaries, to establish a health network compliant with the present needs, and to support the introduction of risk-reducing strategies. In line with these general objectives, a number of specific targets have been formulated. The most important targets relating to drug treatment are:

- Guarantee an universal, public, free, professional and specialised medical and psychosocial assistance for drug addicts.
- Set up a widespread, diversified and professional network in order to offer adequate assistance and treatment.
- Coordinate and cooperate with other medical centers/services which handle treatment of the associated disorders.
- Encourage and support the social and work reintegration
- Asserting outpatient treatment programmes for methadone addicts as a national priority in the action plan.

The action plan for 2005 to 2008 is aimed on maintaining the low level of drug use within the general population and in the second stage, to diminish the number of new drug users, while reducing drug-related organised criminality. The Great Romanian Alliance against Drugs Program was formulated in order to support the activities laid out in the Action Plan.

#### *1.2 Organisation*

In Romania, there is no national organisation responsible for the coordination and delivery of drug treatment. However, the “General Health Care and Programme Department” within the Ministry of Health coordinates and manages health care in the treatment of drug addicts as well as the national health programmes regarding the therapeutic and social reintegration components.

Furthermore the “Agentia Nationala Antidrog” (ANA), developed in 2005 as part of the Global Fund Project to Fight against HIV/AIDS, Tuberculosis and Malaria, coordinates the activities in the drugs field at both national and local level. The ANA is a specialised body with juridical personality subordinated to and coordinated by the Ministry of Administration and Interior. The agency drafts the national drug strategy and its action plan and monitors and controls its implementation.

At the local level, the 47 Drug Prevention, Evaluation and Counselling Centres (6 in Bucharest and 41 in the territory) are responsible for the implementation of the drug strategy, as decentralised structures subordinated to the ANA.

Drug treatment is predominately delivered in public medical units, which are financed from public budget and are operated under the coordination of the Ministry of Health. In addition, there are NGOs providing drug treatment such as counselling. In general, drug treatment in Romania is mainly funded either by the National Health Programmes through the specific sub programme for drug treatment, or by the National health Insurance House.

## **2 Availability of drug treatment**

Two rapid assessments regarding the number of problematic drug users in Bucharest were undertaken in 2003 and in 2004. The estimations used the capture-recapture method and were based on three databases. The estimated number of injecting heroin users in Bucharest in 2004 was 23,949 (range from 15,774 – 32,124).

### *2.1 Introduction*

The drug treatment system in Romania is distinguished in three levels of assistance and care. The first level is the “main access path to integrated drug users care”, and provides treatment in primary medical assistance units, emergency rooms, and general social services delivered by public, private and non-governmental organisations. The second level is called the “integrated care services, referral centres”, which is delivered exclusively by public treatment services and provided in psychiatric units for primary or specialised care or for mental health treatment. The third level is for “highly specialised care” and consists in inpatient detoxification treatment and residential Therapeutic Communities.

Apart from psychiatric departments of Counties Hospitals and emergency rooms of Counties Hospitals, medical services are available in the following treatment centres:

- Two methadone maintenance centres, only available in Bucharest
- “Non-substitutive centres” which are in fact detoxification centres. A few detoxifications centres exist in Bucharest, and also in Iasi and Timis. According to the law, detoxification treatment cannot extend more than 30 days. However, the average period of treatment is 8 days.

- After care (in Bucharest and Iasi) is poorly developed and basically deals with alcohol addiction. There are only two public aftercare centres and two community centres (Vurpar and Sura Mare) which are managed by religious groups. The latter centres were small ones with about 8 places.

In 2005 Substitution treatment is still not well developed in Romania. The only substance in use is methadone, introduced in 1998, which is available only as pills. The two treatment centres were to be found only in Bucharest. The legal procedures for entering in substitution treatment were under revision in 2005, in order to simplify access to treatment. Overall, the coverage rate for maintenance treatment was estimated as weak, with around 600 users in treatment each year.

## 2.2 *Types and number of available drug treatment*

In general, Romania does not provide specialised treatment to drug users beside the two methadone maintenance treatment centres in Bucharest. The vast majority of drug treatment is provided in general medical treatment units such as in psychiatry.

In 2005, at national level, 20 medical units reported to the Ministry of Public Health cases of admission to drug treatment, including for medicine, alcohol and tobacco abuse. No further information is available.

## 2.3 *Diversification – special groups, special drugs*

In Romania, there are almost no specific treatment services available for special groups or special drugs. However, in 2005 the Foundation for Community Care implemented the project “Be sure you can”, with funds from the Ministry of Labour, Social Solidarity and Family and BIRD. As part of a pilot day care centre the project aimed to develop a model of medical, social and psychological integrated services for drug exposed or addicted young people.

# 3 **Utilisation of drug treatment**

In 2005, 43% of the total admissions to substance treatment were recorded in Bucharest, 17% in Botosani County (most of them related with alcohol use), 14% in Iasi County and 15% in Cluj County. An overall number of 1.539 admissions to treatment were reported in 2005.

## 3.1 *New treatment entries*

Among the first treatments in 2005, the proportion of clients seeking treatment for the first time for opioids was about 53.6%, cannabis clients constituted about 4.3% and cocaine clients 0.6%. The proportion of first treatments related to stimulants was 1.8%.

Number of new clients entering treatment	2005	653
- New clients entering treatment (% opioids)*		53.6
- New clients entering treatment (% cocaine)		0.6
- New clients entering treatment (% cannabis)		4.3
Number of all clients entering treatment*	2005	1,538
- All clients entering treatment (% opioids)		48.0
- All clients entering treatment (% cocaine)		0.3
-All clients entering treatment (% cannabis)		2.3

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### **4 Quality system**

By the end of 2007, all EMCDDA epidemiological key indicators will be implemented.

## **Slovakia**

### **1 Institutional framework**

#### *1.1 Policy*

The establishment and implementation of the drug policy is the responsibility of the Government of the Slovak Republic. It approves the national strategy, defines its objectives and principles. In 2005, the present drug strategy, which is part of the National Programme for the Fight against Drugs (NPF) 2004-2008, was further developed into Action Plans. The main pillars of the Slovak Republic's drug policy are: prevention with emphasis on children and youth, treatment, social reintegration, and law enforcement. As part of their National Drug Strategy, a specific drug treatment strategy was developed. The main objectives related to treatment are to improve coverage, quality and accessibility of the treatment services. In addition attention to treatment in prison is intended.

In the framework of the National Drug Strategy the Slovak Republic Government Office issued instructions which determine the activities of regional authorities in the field of drugs and unifies the procedure for establishment of regional coordination commissions for drug issues.

#### *1.2 Organisation*

The implementation of drug treatment is the responsibility of the Slovakian Government, in particular within the competence of the Ministry of Health. Treatment is also administered in health care facilities of other Ministries, such as the Ministry of Justice for voluntary and court-ordered treatment, the Ministry of Defence and the Ministry of Interior which conduct treatment in their respective medical facilities. The Ministry of Labour, Social Affairs and Family supports social reintegration facilities for drug addicts.

The executive body of the Committee of Ministers for Drug Addiction and Drug Control (CM DADC) – the General Secretariat – coordinates, methodologically guides, and controls the implementation of the drug policy on central and regional levels. In Slovakia, drug treatment is coordinated at regional level by regional authorities (RA) appointed by the Ministry of Health. In each of the 8 regions the position of a coordinator was created since 1 January 2004. The Methodological Instruction of the Slovak Republic Government from 13 December 2005 unifies the procedure for

establishment of regional drug coordination commissions, and the RA's developed regional drug strategies.

Treatment is mainly delivered through public specialised Centres for Treatment and Drug Dependencies (in- and outpatient treatment), psychiatric hospitals and psychiatric wards at the university hospitals and general hospitals. Furthermore is drug treatment provided by private agencies which run mainly specialised outpatient clinics, and NGOs. In Slovakia drug treatment is funded by public health insurance companies.

## **2 Availability of drug treatment**

In Slovakia it is estimated that 18,398 individuals are problem drug users (range from 13,565 – 32,182). There is a separate prevalence estimation for Bratislava which says the number of problem drug users being 3,773 (range from 3,183 – 4,073).

The prevalence estimation is reported by the National Monitoring Centre for Drugs (NMCD) in 2006 and has been carried out by means of the multiplication method. For the estimation information on the number of clients in contact with low-threshold agencies has been used.

### *2.1 Introduction*

Before 1989, no facilities specifically providing drug treatment existed in Slovakia. Since then, specialised health services tailored to the emerging needs for drug treatment were established. In addition, during the second half of the 1990s private facilities began to operate.

In the course of 2005, individual Centres for the Treatment of Drug Dependencies (CTDD) were submitting projects with the intention of transforming from public into non-profit organisations. In the course of the year two CTDD did not exist anymore, namely in Nitra and Humenné. Now several dozens of non-governmental organisations operate on the national, regional, and local level. They are focused on drug prevention, social field work, education and training, social reintegration of drug addicts, treatment support, counselling. However, the public CTDD services still are the main provider of all types of drug treatment.

Drug treatment can be divided into four phases:

- Preclinical treatment through counselling, reduction of health damage, motivation to treatment
- Detoxification treatment
- Drug-free treatment, maintenance/substitution treatment, and follow-up care programmes
- Social reintegration, rehabilitation

Specialised outpatient drug treatment is provided in Centres for the Treatment of Drug Dependencies (CTDD), at specialised Addiction Treatment (AT) departments of

psychiatric hospitals, and in offices of psychiatrists or psychiatrists specialised in drug addiction treatment from AT. Outpatient treatment as a systematic therapeutic care is provided by physicians and psychologists, nurses with appropriate professional education and training for the field of drug addictions, by special pedagogues and psychotherapists.

Residential drug treatment is delivered in inpatient departments of CTDD, at specialised Addiction Treatment (AT) departments of psychiatric hospitals, and in specialised psychiatric institutes.

Detoxification treatment is available in outpatient and inpatient treatment centres and mainly provided by general psychiatric services. For the medical treatment of opiate addiction buprenorphine (introduced in 2000) but also methadone (introduced 1997), codeine and slow-release morphine is administered. Sometimes detoxification is performed even with using benzodiazepines or neuroleptics.

Substitution maintenance treatment is provided by specialised drug addiction treatment offices (CTDD). Methadone maintenance treatment is available only in two Slovakian cities; in Bratislava since 1997 and in Banská Bystrica since 2005. Since October 2005 the naltrexone has been officially registered. Buprenorphine is used for substitution treatment particularly outside of Bratislava, however its prescription is not widespread due to its high price. Buprenorphine may be prescribed by psychiatrists with an additional licence for treatment of drug addictions or by psychiatrists working at a CTDD. General practitioners are not authorised to prescribe buprenorphine. General practitioner may become involved in drug treatment only on the first contact level or in the framework of a follow-up treatment.

The follow-up treatment takes place in social reintegration programmes outside the health care sector. Follow-up treatment is attended either in residential programmes in reintegration establishments or in NA type groups in outpatient programmes.

## *2.2 Types and number of available drug treatment*

In 2005 the number of all health care facilities and treatment centres authorised for providing drug related treatment was 335 units. Of them 82 units provided outpatient treatment with 63 delivered by psychiatrist offices and 15 delivered at offices of CTDD's. Furthermore there were 54 inpatient health care facilities; among them were 33 psychiatric inpatient department with 3.780 beds and 20 Alcoholism and other drug addiction treatment departments (CTDD) with 449 beds. Drug treatment was also provided by 18 prison health care units of the Ministry of Justice.

## *2.3 Diversification – special groups, special drugs*

In Slovakia, specific services for amphetamine users and gender-specific services are reasonably good available. On the other hand specific cannabis treatment services exist

but are limited, and also treatment for adolescent problem drug users is only available in non-specialised agencies.

### 3 Utilisation of drug treatment

From Slovakia it was reported that 2.078 clients made use of drug treatment in the year 2005. According to the most recent available data, the number of patients on methadone treatment was 490 in 2004. Data on the number of clients in different types of treatment is provided in the national report and refers to the year 2005.

Intervention	Number of clients	Number of facilities / units
Outpatient treatment	954	
In offices at CTDD's	687	15
In psychiatric offices	243	63
other	24	4
Inpatient treatment	769	
In specialised inpatient departments of CTDD	20	284
In psychiatric inpatient department	33	481
other	1	4
Treatment in prison	355	18

#### 3.1 *New treatment entries*

The number of first treatment demands due to primary use of opioids was 265 in 2005. However, the greatest number of first treatment demands was related to problems with pervitin (stimulants) (288) and cannabis (277).

Number of new clients entering treatment	2005	963
- New clients entering treatment (% opioids)*		27.5
- New clients entering treatment (% cocaine)		0.5
- New clients entering treatment (% cannabis)		28.8
Number of all clients entering treatment*	2005	2,078
- All clients entering treatment (% opioids)		34.4
- All clients entering treatment (% cocaine)		0.5
-All clients entering treatment (% cannabis)		19.2

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Slovakia there is neither a monitoring system, nor a register for clients in treatment. There are also no quality standards for drug treatment.

## **Slovenia**

### **1 Institutional framework**

#### *1.1 Policy*

The Slovenian National Drug plan named 'Resolution on the National programme in the field of Drugs (2004-2009) does not specifically define objectives related to drug treatment. There are some general objectives linked to health care treatment (mostly relating to methadone maintenance programmes and other types of treatments) and social rehabilitation programmes and harm reduction. No action plan has been adopted so far to specifically define the relevant objectives.

#### *1.2 Organisation*

The Slovenian government is responsible for the implementation of treatment on the formal legal basis of the Health Care and Health Insurance Act Official Gazette 9/92 and the Prevention of the Use of Illicit Drugs and Dealing with Consumers of Illicit Drugs Act (ZPUPD). The Office of Drugs (OD) under the Ministry of Health is the coordinator of the inter-departmental preparation of the national programme, and responsible for budgetary proposals and decisions on priorities. In addition, the OD provides some of the funding for the activities of NGOs.

Drug related treatment in Slovenia is coordinated on a national level by the "Centres for the Prevention and Treatment of Illicit Drug Addiction" (CPTDA) which is appointed by the Minister of Health. This public health care coordination centre is also responsible for monitoring, implementation of outpatient treatment and delivering of drug treatment. The public "Centre for the Treatment of Drug Addicts at the Psychiatric Clinic Ljubljana" (CTDA) is responsible for the realisation of hospital and specialised outpatient clinic treatment. These treatment units are coordinated by representatives of the units, the Ministry of Health and the CTDA.

Drug treatment is mainly delivered through public agencies such as the CPTDA and the CTDA, and both agencies are also mainly involved in the delivery of especially medically assisted treatment. Drug-related treatment is also delivered by some NGOs. While public services are funded by the National Health Insurance, NGOs are mostly financed by public budgets of the Ministry of Labour, Family and Social Affairs and the Ministry of Health.

## 2 Availability of drug treatment

Last most recent estimation on the number of problem drug users is from 2001 and bases upon the CR method. According to the data 7,399 individuals are estimated to be problem drug users in Slovenia.

### 2.1 Introduction

Since 1995, Slovenia has established a countrywide network of 19 specialised 'Centres for Prevention and Treatment of Drug Addiction (CPTDAs)'. These centres provide free-of-charge substitution treatment and a broad spectrum of other services such as counselling, individual, group and family therapy, somatic care, etc. The Association of NGOs was formally established in June 2000. It involves 16 organisations that provide social rehabilitation, harm reduction and some psychosocial treatment programmes. The first therapeutic community for drug addicts was established in Slovenia in 2004 by an NGO.

The treatment system in Slovenia can be classified as follows:

- Outpatient treatment

Outpatient treatment include psychosocial interventions provided by public health services (CPTDAs, CTDA) and NGOs, medically-assisted treatment provided by CPTDAs, individual or group counselling and socio or psychotherapy (CPTDA, NGOs, Centres for Social Work).

- Inpatient treatment

Inpatient drug treatment is usually performed by the new Centre for Treatment of Illegal Drug Addiction at the Psychiatric Clinic of Ljubljana (CTDA) which opened in January 2003. Inpatient drug treatment is also provided by the drug treatment departments of other psychiatric hospitals. In this case, the drug user usually has a mental disorder in addition. Even though inpatient treatment consists in most of the cases in psychosocial interventions, treatment may also be medically assisted in terms of withdrawal treatment.

- Withdrawal treatment / detoxification

Detoxification treatment may take place in inpatient (CTDA) or outpatient (CPTDA) settings. For the pharmacological management of withdrawal mainly methadone (introduced in 1990) is used. Inpatient detoxification treatment lasts 6 to 8 weeks. Since 2005 outpatient detoxification may also be done with buprenorphine and slow-release morphine. In Slovenia, medication should be always linked with psychological support.

- Substitution maintenance treatment

Substitution treatment with methadone is provided either by the doctors employed in outpatient clinics or by General Practitioners, who practice at the CPTDAs. More than one third of the estimated number of problem drug users is in substitution treatment. Maintenance treatment with slow-release morphine is available in more than half of the CPTDAs. Treatment with naltrexone is possible in the framework of the CPTDA

network or the CTDA. The prescription of this medication is only allowed for psychiatrists who work in the CPTDA network and who are authorised by the Health Insurance Institute of the Republic of Slovenia.

## *2.2 Types and number of available drug treatment*

In the 2005, outpatient psychosocial interventions are provided in 18 units within the primary health care centres CPTDA's, 12 NGOs and 55 Local Addiction Groups. Inpatient psychosocial treatment is available in one specialised drug treatment centre. Outpatient detoxification treatment and substitution maintenance is also provided by the 18 units of the CPTDA. Inpatient detoxification is provided by the drug treatment unit within psychiatric clinic Ljubljana.

## *2.3 Diversification – special groups, special drugs*

In Slovenia, specific treatment interventions are reasonably good available and accessible to dually diagnosed drug problem users and for adolescent problem drug. Treatment for pregnant women is also available in Slovenia.

# **3 Utilisation of drug treatment**

As regards the utilisation of drug treatment in Slovenia, only limited information is available.

According to the information 2,783 clients have been in substitution treatment in CPTDA's and in prison in 2005. 2,633 of these clients have been treated with methadone.

In 2003, outpatient detoxification was utilised by 264 clients, 72 clients have been in inpatient detoxification treatment. 497 clients made use of long-term psychosocial treatment and counselling.

## *3.1 New treatment entries*

The available data on new treatment entries shows that 526 clients were first-time treatment clients who used one of the 18 CPTDA centres in 2004. The vast majority sought treatment for the first time due to opioids (77.6%), followed by cannabis (19.6%).

Number of new clients entering treatment	2004	526
- New clients entering treatment (% opioids)*		77.6
- New clients entering treatment (% cocaine)		1.1
- New clients entering treatment (% cannabis)		19.6
Number of all clients entering treatment*	2004	2,902
- All clients entering treatment (% opioids)	2004	91.1
- All clients entering treatment (% cocaine)	2004	1.3
-All clients entering treatment (% cannabis)	2004	7.0

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Slovenia there is a national monitoring in accordance with Article 2 of the "Regulation on Performing Supervision in the Centres for prevention and treatment of illegal drug addiction". In 2003 the Minister of Health nominated members of the Supervisory Commission to examine and analyse the situation in CPTDAs.

As regards medically-assisted treatment there is no national register. However, there is an information data collection and network system of the Centres for prevention and treatment of illegal drug addiction which are obliged by law to report data on clients to the national Institute of Public Health through the questionnaire "Drug Users Treatment Evidence" protected by special SOUNDEX code.

# Spain

## 1 Institutional framework

### 1.1 Policy

In 1999, Spain adopted a National Plan on Drugs (GDNPD) covering the 2000-2008 period. The response-related objective refers to various aspects of treatment provision in the community and in prisons, including quality assurance, coordination of various treatment providers, setting up specialised outpatient agencies in local areas, reintegration and treatment for target groups.

In 2005, an Action Plan (2005-2008) was adopted as a consequence of the evaluation of the National Strategy on Drugs. The Action Plan includes six different subjects. One of these subjects is focussed on comprehensive care which includes the following five targets:

- Early detection of risk factors
- Early treatment programmes
- Specialised and comprehensive treatment
- Harm reduction and prevention
- Social and labour integration

### 1.2 Organisation

Spain is a decentralised country with autonomous regions. Drug treatment at national level is coordinated by the “Government Delegation for the National Plan on Drugs within the Ministry of Health and Consumers Affairs” which is responsible for promotion, monitoring and evaluation of drug treatment. Due to the centralisation autonomous cities and communities (and municipal authorities, in some cases) also have established specific drug treatment strategies/action plans and thereby appoint regional drug treatment coordinators. According to the respective regional plan on drugs, autonomous communities are required to provide the necessary programmes and resources for rehabilitating drug addicts, and for reducing drug-related harms.

The public sector is mostly involved in the delivery of treatment, followed by NGOs and private organisations. In Spain, funding of drug treatment is provided mostly by the public budget of the state and autonomous regions. For instance two thirds of drug-free inpatient treatment are privately owned but are dependent on public funding. Similarly most of funding of NGOs also comes from the public sector.

## 2 Availability of drug treatment

Estimations of the prevalence of problem drug users are provided for the use of opiates and cocaine. The estimation bases upon demographic and processing multiplier method and refers to the period 1999 to 2002. According to the reported prevalence, in Spain 71,964 – 102,822 individuals are estimated to be problem opiate users. The estimation for people with problem cocaine use is 124,964 – 166,926. The estimation for problem opiate users is reported to be treated with caution as this may represent an underestimation.

### 2.1 Introduction

Spain has an extensive network of services for treating drug-related problems. The majority of drug treatment is provided through outpatient treatment centres which are publicly owned and carry out drug-free programmes and maintenance programmes with different substitutes to minimise harmful effects of drug use. There are also many inpatient centres, organised as Therapeutic Communities, and a smaller number of short-term inpatient treatment units for withdrawal treatment in hospitals. As mentioned above, the public sector is mostly involved in the delivery of treatment, followed by NGOs.

The drug treatment system in Spain can be described according to following types:

Drug-free treatment:

- Outpatient treatment centres (*'Centros ambulatorios de asistencia'*) and day therapy centres (*'Centros de día terapeutico'*)
- Detoxification hospital units (*'Unidades hospitalarias de desintoxicación'*)
- Therapeutic Communities (*'Comunidades terapéuticas'*)

Substitution treatment delivered in

- Specialised drug treatment centres such as health centres (*'Centros de salud'*), mental health centres (*'Centros de salud mental'*), Specialised drug centres (*'Centros de tratamiento específico de drogodependencias'*), general hospitals (*'Hospital General'*)
- Pharmacies (*'Oficinas de Farmacia'*)

Outpatient assistance centres offer outpatient psychosocial interventions and detoxification and withdrawal of drug addicts. These centres may work to achieve total abstinence or other intermediary objectives through various strategies and intervention methods, carried out by the multidisciplinary teams of professionals.

Therapeutic Communities provide residential psychosocial treatment but offer also inpatient withdrawal treatment. Detoxification hospital units provide hospital-style detoxification treatment on an inpatient basis.

In Spain, most drug users are treated with methadone maintenance programmes (MMT) provided at many centres such as the outpatient assistance centres, specialised drug centres or at other health centres and general hospitals. MMT programmes have experienced a tremendous increasing rate of admissions in recent years. In 2005 more than 83,000 drug users received MMT from 2,229 drug treatment centres. Methadone has been introduced in Spain in 1990 and buprenorphine substitution in 1996. Currently there are 3 buprenorphine programmes operated in Madrid and Aragon. In 2003, two clinical trials for heroin-assisted treatment with diacetylmorphine started in Catalonia and in Andalusia. The Spanish Agency of Medicine and Health Products of the Ministry of Health and Consumer Affairs authorised the Public Health and Social Security Department to begin two trials for heroin and morphine treatments administered to those patients who did not succeed in the methadone maintenance programmes. In case of Catalonia two clinical trials have been carried out in order to assess the efficacy of oral doses of heroin and morphine. The Regional Government of Andalusia has completed the clinical trial in 2005. The trial was carried out in two treatment centres in Granada and La Línea (Cadiz) and included diacetylmorphine (DAM) administered intravenously.

## 2.2 *Types and number of available drug treatment*

In 2005 the following number of different treatment types was available in Spain:

- 530 outpatient treatment centres
- 124 inpatient Therapeutic Communities
- 50 inpatient detoxification units
- 2,229 centres providing substitution maintenance treatment
- 3 buprenorphine treatment programmes
- 2 clinical trials – in Catalonia and Andalusia – providing diacetylmorphine (heroin). Both trials are finished at present.

## 2.3 *Diversification – special groups, special drugs*

In Spain, the availability and accessibility of services for cocaine, amphetamines and cannabis users is reasonably good. Similarly, treatment services for psychiatric co-morbid drug users, children and under 18 year old drug users and gender-specific treatment are also reported to be reasonably available and accessible in Spain. Target-specific services exist for ethnic minorities and immigrants but are reported to be limited.

## 3 **Utilisation of drug treatment**

The profile of clients in treatment is rapidly changing, with a continued decrease in treatment requests for heroin and an increase of treatment for first cocaine and second

cannabis. In fact, the number of patients admitted to treatment for heroin declined since 1998 (when it peaked) from 30,756 clients in 1998 to 16,448 in 2004.

On basis of information from 19 autonomous communities and cities, the following number of clients made use of drug treatment in 2005.

Intervention	Number of clients	Number of facilities / units
Specialised outpatient treatment	79,809	530
Inpatient Therapeutic Communities	6,047	124
Inpatient detoxification	3,750	50
Substitution maintenance treatment in specialised treatment centres	83,469	2229

In 2005, substitution maintenance treatment included to prescription of methadone to 83.374 clients. 24 clients received buprenorphine and 71 patients received heroin within the clinical trial.

### 3.1 *New treatment entries*

The number of first-time admissions for treatment for heroin decreased between 1992 (year with the highest number) and 2004 from 20,017 to 3,821 admissions. In the same period the number of clients entering treatment for cocaine use increased from 6.3% to 53.9%.

Number of new clients entering treatment	2005	25,064
- New clients entering treatment (% opioids)*		15.9
- New clients entering treatment (% cocaine)		62.1
- New clients entering treatment (% cannabis)		18.0
Number of all clients entering treatment*	2005	50,630
- All clients entering treatment (% opioids)		39.3
- All clients entering treatment (% cocaine)		46.9
-All clients entering treatment (% cannabis)		10.9

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Spain, there is the Spanish Monitoring Centre for Drugs and Drugs Addiction for monitoring drug treatment provision on a national level. Furthermore there is an annual national register covering all admissions to treatment through information provided by all autonomous communities. Quality standards for drug treatment have been implemented regionally by the autonomous communities. In fact, some of them have an electronic and centralised register of clients admitted to treatment.

## Sweden

### 1 Institutional framework

#### 1.1 Policy

The previous first “Swedish National Action Plan on Drugs” (2002-2005) declared as overall aim “a drug-free society” (Regeringens proposition 2001/02:91). This aim was to be seen as a vision reflecting the attitude to narcotic drugs and as an indication of the direction of the policy. Political efforts in the area were to be directed towards supply and demand with the purpose of a) reducing the number of new drug abusers, b) getting more dependent users into treatment, and c) reducing the supply of drugs. These objectives are not combined with specific strategies for drug-related treatment.

A second action plan on drugs (2006 – 2010) was adopted by the parliament in April 2006. The plan is a straight forward continuation of the previous one.

In 2005, the Swedish government initiated a proposal for a drug treatment agreement between the state and the municipalities. According to the investigation treatment should be provided to persons with problematic abuse with additional social problems and somatic and/or psychiatric illness. Efficient treatment with high quality should evidence-based, focus on the individual and base upon coordinated actions from all involved agencies.

#### 1.2 Organisation

The National Drug Policy Coordinator (NDPCo) was given a prolonged mandate until 2008 with major responsibility for the implementation of the action plan.

During the first national drug action plan the NDPCo initiated the project “Model Municipality Project” (MMP) in order to support the development of a treatment chain and the cooperation between the different institutions and authorities responsible for the different steps in the rehabilitation. The MMP was evaluated with the intention to investigate how the NDPCo stimulates a) the development of a treatment chain perspective in the work, b) cooperation, and c) the implementation of standardised instruments for assessment of the clients. The evaluators conclude that models for the local project plans and the use of the standardised instruments have been applied while models for the organisation of cooperation and treatment chains are lacking.

In Sweden, the social legislation determines that social services in the local community are responsible for the implementation of treatment of problem drug (or alcohol) use.

Treatment is mainly delivered by public institutions, followed by private and non-governmental organisations.

Funding of substance treatment, including treatment delivered by NGOs, is provided by public budget of the municipalities which are also subsidised with state funds. This special funding is part of the project “A contract for life”, and aims at stimulating the local authorities to develop and strengthen the treatment for abusers of illegal drugs. In case of NGOs public funding is handled by the National Board of Health and Welfare (NBHW) and base on applications from the NGOs.

## **2 Availability of drug treatment**

In Sweden, 25,745 individuals are estimated to be problem drug users. This most recent estimate bases on 2003 data of the hospital discharge register for hospitalisation of drug abuse and applied the Truncated Poisson regression method.

### *2.1 Introduction*

In Sweden, treatment for drug abuse is mostly provided by social services in the municipalities. Social services carry the overriding responsibility for rehabilitation even in cases that require qualified medical treatment in hospitals. Physicians take responsibility for what happens within their wards, but the social service has the overall responsibility. However, nearly all treatment delivered by social services is drug-free. Treatment of social services can be arranged at ordinary services or at specialised units such as outpatient clinics. Most treatment for drug abuse is organised as specialised outpatient treatment directed to alcohol- and drug abusers. Specialised treatment has different roles in different phases of the drug career; early intervention, treatment of drug addicts and after-care to long-term residential treatment. Many specialised outpatient clinics have been closed down, now they are only available in bigger towns. Counties administer medical services in hospitals and some outpatient clinics. Medical services of the counties provide detoxification and substitution treatment, psychosocial treatment, structured outpatient treatment and residential treatment. In addition, treatment for hepatitis, HIV, and psychiatric complications is provided. In severe cases drug dependent users might be committed to compulsory treatment which is arranged by the National Board of Institutional Care.

The drug treatment system in Sweden is difficult to classify in terms of psychosocial and medically-assisted treatment. A rough differentiation appears as follows:

- Psychosocial treatment

Facilities for psychosocial treatment are mostly accessible for both alcohol and drug abusers. While medical treatment is per definition expected to imply pharmaceutical treatment, also in psychosocial treatment pharmaceuticals can be used. In Sweden, “drug-free” refers to all types of treatment except detoxification treatment and substitution with methadone and buprenorphine. The difference between drug-free and

medically-assisted treatment concerns the length of the period during which the abuser is supposed to take his medication.

- Residential treatment

Residential homes are often delivered by private enterprises that sell bed places to responsible authorities. Consequently the social service in a certain town cannot place all its clients there. Due to financial shortcomings residential treatment has decreased for several target groups in recent years and time spent in inpatient treatment has been considerably shortened.

- Detoxification treatment

Withdrawal treatment traditionally is arranged in specialised wards within regional hospitals (usually in psychiatric clinics), but also in outpatient treatment. Withdrawal treatment is either a preparation for residential treatment or the first phase in substitution treatment with methadone. The number of detoxification units has been substantially reduced during the last decade. In response, some therapeutic communities now integrate withdrawal treatment in their programme.

- Substitution treatment

Methadone (since 1966) and buprenorphine (since 1999) are the only officially recognized pharmaceuticals the Medical Products Agency allows for substitution treatment. In Sweden, there are five treatment units at hospitals for substitution treatment; in Uppsala (opened in 1966), Stockholm, Lund, Malmö and Helsingborg. Substitution treatment with methadone has always been surrounded with strict regulations. Since the new guidelines for substitution treatment came into force in 1 January 2005 (see: [http://www.sos.se/sosfs/2004\\_8/2004\\_8.htm](http://www.sos.se/sosfs/2004_8/2004_8.htm)), provision of medically-assisted treatment has increased. General practitioners are not allowed to provide substitution treatment.

## 2.2 *Types and number of available drug treatment*

In general treatment is reported to be less available nowadays compared with the nationwide massive expansion (“the Offensive”) of treatment facilities due to the HIV epidemic the situation 10–15 years ago. However, 20 out of 21 counties provide one or more specialised units for drug treatment. Specialised units can be found in community social services, hospitals, therapeutic communities, and prisons. In 2003, the National Board of Health and Welfare (NBHW) has counted 611 specialised units for treatment of alcohol and drug problems. In all but one county specialised withdrawal treatment units in hospital wards or outpatient clinics exist.

In 2005, 66 specialised outpatient units for medically-assisted treatment with methadone and/or buprenorphine were available; thus substitution treatment with these two substances is provided in half of the Swedish towns. In addition there are 287 generic outpatient units and 219 generic inpatient units with 4470 beds providing psychosocial treatment.

### 2.3 *Diversification – special groups, special drugs*

Gender-specific treatment and treatment for young drug users, as well as for cannabis problem users is reported to be reasonably available and accessible. Availability and accessibility of specific treatment for dual diagnosed problem drug users and ethnic groups is reported to be limited in Sweden.

## 3 **Utilisation of drug treatment**

On the utilisation of drug treatment only limited and general data is provided. According to a semi-annually study from 2003 there were a total of 23,482 clients in 572 treatment units on a certain day. Of these 82% underwent outpatient treatment, 12% residential treatment (24 hour-care), 4% various programmes in prison, and 2% inpatient treatment in hospitals. 22% of the clients received treatment for drug misuse only and 33% for both alcohol and drug misuse.

The National Board of Health and Welfare (NBHW) 611 specialised treatment units for alcohol and drug problems in 2006 which treated a total of 23,500 clients. 22% of the clients attended treatment for illicit drugs and 33% for both alcohol and drug problems.

In 2005 there were 66 specialised outpatient treatment units delivering substitution treatment. 2,700 clients were in substitution treatment between July 2005 and June 2006 with 1,500 clients having received buprenorphine.

### 3.1 *New treatment entries*

1,357 clients entered treatment for the first time in the year 2005. A large number requested treatment for the first time due to cannabis (31.6%).

Number of new clients entering treatment	2005	1,337
- New clients entering treatment (% opioids)*		19.0
- New clients entering treatment (% cocaine)		3.7
- New clients entering treatment (% cannabis)		31.6
Number of all clients entering treatment*	2005	6,750
- All clients entering treatment (% opioids)		23.8
- All clients entering treatment (% cocaine)		2.6
-All clients entering treatment (% cannabis)		17.4

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

#### 4 Quality system

In Sweden, there is no monitoring and official registry for medical drug treatment, and no registry for psychosocial treatment. To fill this gap, the National Board of Health and Welfare (NBHW) presented in January 2006 a concept for statistical coverage of all types of specialised treatment for alcohol and drug abuse. According to the proposal all treatment provider had to report to the NBHW covering among other things the manual for the Treatment Demand Indicator (KIM). So far KIM has been collected by the NBHW on voluntary basis. The new concept for statistical coverage implies legal changes accepted by the Parliament.

# United Kingdom

## 1 Institutional framework

The United Kingdom comprises four countries, namely England, Wales, Scotland and Northern Ireland. England is the largest country, with 84% of the population. In 1999, some powers were devolved from the United Kingdom Parliament to Wales, Scotland and Northern Ireland. Devolution is however asymmetric, in that there are different levels of devolved responsibilities to each country. Only in Scotland is primary legislation possible, though only in some areas, elsewhere such legislation remains in the responsibility of the United Kingdom Parliament.<sup>31</sup>

### 1.1 Policy

A United Kingdom Drug Strategy was launched in 1998, setting four principal aims:

- prevention of drug use amongst young people (through education and prevention),
- safeguarding communities,
- providing expanded treatment, and
- reducing availability (through legal sanctions and expansion of legal opportunities).<sup>32</sup>

Following devolution, each administration produced its own strategy, reflecting the UK drug strategy but tailored to its individual circumstances and deciding upon policy in areas where responsibility has been devolved; including health, education and social care. In Scotland, the responsibility covers also policing and the criminal justice system (including all areas of offender management).<sup>33</sup> The work of the Serious Organised Crime Agency and HM Revenue and Customs in addressing drug supply covers the whole of the United Kingdom. The 1998 strategy was updated in 2002 with an

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<sup>31</sup> See: <http://www.publications.parliament.uk/cgi-bin/search.pl>

<sup>32</sup> UKADCU (United Kingdom Anti-Drugs Co-ordination Unit) (1998). Tackling drugs to build a better Britain. The Stationery Office, London.

Available: <http://www.archive.official-documents.co.uk/document/cm39/3945/3945.htm>

<sup>33</sup> NIO (Northern Ireland Office) (1999). Drug strategy for Northern Ireland. Northern Ireland Office, Belfast. Scottish Office (1999). Tackling drugs in Scotland: Action in partnership. The Scottish Office, Edinburgh.

<http://www.scotland.gov.uk/library/documents-w7/tdis-00.htm>.

National Assembly for Wales (2000). Tackling substance misuse in Wales: a partnership approach. National Assembly for Wales, Cardiff.

Available: <http://wales.gov.uk/about/strategy/strategypublications/strategypubs/935796/?lang=en>

increased emphasis on Class A drugs (opiates, cocaine, ecstasy, LSD, injectable amphetamine, methamphetamine, magic mushrooms) and problem drug users.<sup>34</sup>

Northern Ireland updated its strategy in 2006, combining drug misuse with alcohol. A new United Kingdom Drug Strategy is currently 2008 being developed, the formulation of which will reflect the devolution of powers to Northern Ireland, Scotland and Wales. The aim of the new strategy will be to make further progress on reducing the harms associated with drug use. The Welsh Assembly Government and the Scottish Government will also publish new strategies in 2008, reflecting their priorities.

## 1.2 Organisation

The “Crime and Drug strategy Directorate” (CDS) situated in the Home Office and established in 2006 takes overall responsibility for the United Kingdom strategy in areas where power is reserved, which includes all policy in England. In all four administrations, delivery of drug treatment is through local multi-agency partnerships, representing health criminal justice agencies and social care services.

## 2 Availability of drug treatment

Latest estimates of problem drug use in the United Kingdom are for 2004/05, suggesting 398,845 problem drug users. This corresponds to a rate 10.15 per 1,000 population.<sup>35</sup> There are an estimated 164,036 injecting drug users. The main problem drug is heroin, but crack cocaine is also increasing reported.

In England, recent PDU estimates for 2005/6 suggests that there were 332,090 problem drug users, that is those using opiates (286,556) and/or crack (197,568).<sup>36</sup> Data from the National Drug Treatment Monitoring System (NDTMS) shows that during this time period 136,228 of those in treatment could be described as problem drug users using opiates and/or crack; 128,630 as opiate users and 39,832 as crack users. Based on this it can be assumed that treatment services in England were treating 41% of problem drug users, 45% of opiate users and 21% of crack users.

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<sup>34</sup> HM (Her Majesty's) Government (2007a). Drugs: Our Community, Your Say. A Consultation Paper. Home Office, London.

Available: <http://drugs.homeoffice.gov.uk/publication-search/drug-strategy/drug-strategy-consultation.pdf?view=Binary>

<sup>35</sup> UK Focal Point (2007): United Kingdom Drug Situation 2007. Department of Health, London.

<sup>36</sup> Hay, G., Gannon, M., MacDougall, J., Millar, T., Eastwood, C. and McKeganey, N. (2007). National and regional estimates of the prevalence of opiate use and/or crack cocaine use 2005/06: a summary of key findings. Home Office On-line Report 21/07. Drugs Analysis and Research, Home Office. London. Available: <http://www.homeoffice.gov.uk/rds/pdfs07/rdsolr2107.pdf>

## 2.1 *Introduction*

In most parts of the United Kingdom, particularly in England, there is a four tier system of treatment providing a conceptual framework for provision. Tier 1 refers to generic interventions such as information and advice, screening and referral to more specialist services. Tier 2 refers to open-access interventions (such as drop-in services) providing advice, information and some harm reduction services such as syringe exchange. Tier 3 services are specialist community services and include prescribing services, structured day programmes and structured psychosocial interventions (counselling, therapy etc.), and community based detoxification. Tier 4 services are inpatient services, including detoxification and residential rehabilitation. The majority of structured treatment is delivered at Tier 3, predominately through community based specialist drug treatment services, but also general practitioners.

The voluntary sector may deliver services both in the community and in residential settings. All drug treatment is delivered free of charge, except for a very small private sector.

## 2.2 *Types and number of available drug treatment*

For opiate users the main drug treatment is substitute prescribing and it is estimated that around half cent all treatments involve prescribing, predominately of oral methadone, but also of buprenorphine. In addition injecting methadone and injectable diamorphine is offered, though the latter is rare (for approximately 400 drug addicts).

According to the information of the National Treatment Agency, in the United Kingdom more than 160,000 drug users receive at present a prescription annually<sup>37</sup>. Prescribed treatment is offered in combination with some form of support and care planning, with the addition of specific psychosocial interventions if required. 2007 data from Northern Ireland show that among those clients receiving substitute drugs 77% received counselling, 68% were in some form of education programme and 19% provided with family support.

Detoxification is available, either in inpatient settings or in the community. In England there are an estimated 154 inpatient services<sup>38</sup>, with 95 services providing

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<sup>37</sup> See also: SACDM (Scottish Advisory Committee On Drug Misuse) (2007a). Reducing harm and promoting recovery: A report on methadone treatment for substance misuse in Scotland. SACDM Methadone Project Group. Scottish Advisory Committee On Drug Misuse, Edinburgh

<sup>38</sup> Day, E., Ison, J., Keaney, F., Buntal, N. and Strang, J. (2005). A national survey of inpatient services in England. Research Briefing 12 National Treatment Agency for Substance Misuse, London. Available: [http://www.nta.nhs.uk/publications/docs/RB12\\_national\\_survey\\_of\\_inpatient\\_drug\\_services\\_in\\_England.pdf](http://www.nta.nhs.uk/publications/docs/RB12_national_survey_of_inpatient_drug_services_in_England.pdf)

detoxification<sup>39</sup>. In 2003/4 there were known 10,771 admissions beds purchased for drug detoxification in English services<sup>40</sup>.

The majority of treatment is offered through specialised community based services; there are about 451 community based specialist drug treatment services in England. Numbers elsewhere are not available. There are no specific slots for drug users treated in the community but with large investment in treatment in recent years waiting times are short. General practitioners are increasingly involved in providing treatment for drug users. Such treatment is often provided in shared care arrangements with specialised services.

Inpatient treatment is mostly concerned with detoxification and stabilisation, with residential rehabilitation providing abstinence-based treatment. These account for approximately 4% of all available treatments. NGOs most commonly provide rehabilitation and their treatment approaches can be divided in sub-categories in terms of facilities with Christian philosophy, General house with group and individual support, Minnesota model (including the 12 step model / Narcotics Anonymous) and Therapeutic Communities. As regards residential drug treatment in England there are around 5,600 admissions a year. In Scotland, latest evidence from 2007 is that there are 352 beds available for drug treatment, situated across 22 services. Of the 22 residential facilities, 7 provide both detoxification and residential rehabilitation, 8 offer only detoxification and 7 only rehabilitation. Thirty-one beds are dedicated for use by drug addicts only; most are for drugs and / or alcohol addicts. In Northern-Ireland there are 64 beds for inpatient drug treatment available.

It is acknowledged that there is a shortage of inpatient and residential facilities. In 2007 the Department of Health announced that €79.7 million was to be made available for capital funding of inpatient and residential rehabilitation (Tier 4) in England over the next two years.

#### Recent changes:

It is increasingly expected that drug users will be provided with help to access a range of other services, including housing, education and employment. The latter formalised for drug users involved in the criminal justice system in England and Wales through the Drugs Interventions Programme. The Drug Interventions Programme was initiated in 2003 and focuses on areas with high levels of drug-related crime, using the criminal justice system as a route for getting drug misusers into treatment. Arrestees found to be drug users through testing on arrest are encouraged to enter treatment. As part of the programme, Criminal Justice Intervention Teams in each area manage the continuity of

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<sup>39</sup> Meier, P. (2005). A national survey of retention in residential rehabilitation services. NTA, London. Available: [http://www.nta.nhs.uk/publications/docs/rb10\\_final.pdf](http://www.nta.nhs.uk/publications/docs/rb10_final.pdf)

<sup>40</sup> Day, E., Ison, J., Keaney, F., Buntal, N. and Strang, J. (2005). A national survey of inpatient services in England. Research Briefing 12 National Treatment Agency for Substance Misuse, London. Available: [http://www.nta.nhs.uk/publications/docs/RB12\\_national\\_survey\\_of\\_inpatient\\_drug\\_services\\_in\\_England.pdf](http://www.nta.nhs.uk/publications/docs/RB12_national_survey_of_inpatient_drug_services_in_England.pdf)

care provided to a drug misuser from the point of arrest through to sentence and beyond, including help with housing and education and training.

### *2.3 Diversification – special groups, special drugs*

Specific treatment options are reported to be reasonable available and accessible for women and for children and adolescents under 18 years. Gender-specific treatment varies across UK and available services often address specific groups such as pregnant women and those involved in sex work. Specific services for adolescents are good available in England, while in Northern Ireland only non-statutory based counselling services exist for those under 18 years old. For gender-specific treatment guidelines are available, and there is also a guidance on providing treatment for children and adolescents under 18 years.

Furthermore, in England and Scotland there are specific Drug Interventions Programme aiming at offenders to get them into treatment. Criminal Justice Intervention Teams in are currently engaging more than 1,900 drug-misusing offenders for treatment each month. The objective is to direct around 1,000 offenders each week.

In addition it is reported that there are a few services for amphetamine users (primarily in England), cocaine users. Drug treatment of these groups tend to be either counselling or brief intervention.

Last not least there is a low availability of specific services for ethnic groups and immigrants. The levels of these are variable across the UK, for example in Scotland, the availability and accessibility of such services would be rated as reasonable. There are no specific interventions in Northern Ireland, however, these have been identified as a potential target group for the forthcoming new strategic direction.

## **3 Utilisation of drug treatment**

It is not appropriate to refer to a number of dedicated slots available for treatment in the UK as available treatment is not structured in this way. Instead, there has been a rapid expansion in treatment available to ensure that drug users have timely access to treatment.

### *England*

Monitoring of all those receiving treatment (e.g. inpatient, outpatient, GP, daycare) is carried out in England through the National Drug Treatment Monitoring System (NDTMS). Based on the NDTMS database for 2006/07 195,464 individuals were recorded as in contact with structured drug treatment services.

For the year 2004/2005 drug treatment utilised in England is exemplified. Approximately 124,000 clients were treated substitution treatment (mainly with methadone), including community services (outpatients), residential rehabilitation and detoxification services.

Intervention	Number of clients
Outpatient psychosocial interventions	
- Structured counselling	52,796
- Structured day care	18,069
Inpatient psychosocial interventions	
Residential rehabilitation	5,620
Substitution maintenance	
- Specialist prescribing	88,450
- GP prescribing	35,409
Inpatient detoxification	5,464
<b>Total</b>	<b>205,808</b>

### 3.1 *New treatment entries*

42,923 clients entered treatment for the first time in the period from April 2005 to March 2006. Data from the Treatment Demand Indicator (from 2005/6), show that for first ever treatments, opiates represent the highest proportion among the first ever treatments. This is followed by primary use of cannabis and cocaine and/or crack.

Number of new clients entering treatment, UK	2005/6	42,923
- New clients entering treatment (% opioids)*		49,7
- New clients entering treatment (% cocaine)		15,8
- New clients entering treatment (% cannabis)		21.9
Number of all clients entering treatment*	2005/6	128,446
- All clients entering treatment (% opioids)		65,1
- All clients entering treatment (% cocaine)		11,6
-All clients entering treatment (% cannabis)		24,8

\* Opioids include heroin, methadone and other opioids (e.g. Buprenorphine)

The data on the number of clients refer to the period from 1<sup>st</sup> April 2005 to 31<sup>st</sup> March 2006 for UK.

#### 4 Quality system

At present there is no monitoring system for clients in medically assisted treatment nor for clients in drug-free treatments which covers the whole of the UK. However, England uses the National Drug Treatment Monitoring System (NDTMS), which includes data on medically-assisted treatment and on structured treatments, and delivers data on the numbers of individuals in treatment, the type of intervention, completions and discharge, etc. In Northern Ireland, monitoring and evaluation data are submitted regularly, whereas Scotland does not have such a system.

As drug treatment should conform to quality processes, there is a range of initiatives to measure and improve and the quality of drug treatment in the UK<sup>41</sup>. This also includes the definition of targets,<sup>42</sup> and the guidelines<sup>43</sup>. Furthermore the Drugs and Alcohol National Occupational Standards (DANOS) guidance gives clear descriptions of the standards of performance required of people in the drugs and alcohol field. In addition, in England local delivery of National Health Service priorities, of which drug treatment is one, is ensured via a local delivery plan process. Delivery is monitored through information systems in each country.

<sup>41</sup> See: NTA (National Treatment Agency for Substance Misuse), DH (Department of Health) and Home Office. (2006). Models of care for treatment of adult drug misusers: update 2006. National Treatment Agency for Substance Misuse, London. Available:

[http://www.nta.nhs.uk/programme/national/docs/MoCDM\\_update\\_2005.pdf](http://www.nta.nhs.uk/programme/national/docs/MoCDM_update_2005.pdf)

<sup>42</sup> WAG (Welsh Assembly Government) (2006). Key Performance Indicators for substance misuse treatment in Wales. Welsh Assembly Government, Cardiff. Available: <http://new.wales.gov.uk/topics/housingandcommunity/safety/substancemisuse/pmf/kpi?lang=en>

<sup>43</sup> Scottish Government (2007). [National Quality Standards for Substance Misuse Services: Good Practice Guide to Service User Involvement](http://www.drugmisuse.isdscotland.org/publications/abstracts/nqs_goodpracticeguide_07.htm). Scottish Government, Edinburgh. Available: [http://www.drugmisuse.isdscotland.org/publications/abstracts/nqs\\_goodpracticeguide\\_07.htm](http://www.drugmisuse.isdscotland.org/publications/abstracts/nqs_goodpracticeguide_07.htm)

## Recommendations

The major aim of this report was to characterise the national treatment situation as regards treatment provision and treatment utilisation. Furthermore it was intended to determine the treatment coverage in the European member States and Norway by calculating the relation between the number of clients in treatment and the estimated number of problem drug users. To meet these objectives first of all information on drug treatment provided by the national reports of Member States and Norway and the standard tables of EMCDDA have been collected and analysed for the inventory. Secondly indicators have been determined to characterise the national provision of drug treatment in a comparable way.

With respect to the two objectives several difficulties became apparent. These difficulties are mainly related to

- the lack of a common definition of drug treatment and types of intervention, and
- limitations in the data sources as regards validity and completeness of the available data.

The lack of a common definition on drug treatment results in considerable limitations concerning the knowledge on treatment provision and treatment utilisation. For instance, the National Focal Points report on “medically-assisted treatment” which does not provide any differentiated information on detoxification, substitution maintenance treatment and other medical treatment. Thus the number of available units for these kinds of treatment often remains unclear. The same is the case for the number of clients that made use of any of these drug treatment services. In addition there is the problem of double counting of the clients which is that drug users starting more than one treatment during the year may be counted more than once.

The quality of data sources depends on the monitoring system implemented in a country. In many countries the data on clients and treatment units is not complete as for instance the participation in the monitoring is voluntary. In addition not all treatment units participating in the data collection completed all requested data. Consequently in a number of countries the available data may represent an underreporting.

In view of the mentioned shortcomings it can be concluded that the highest validity and completeness of information is given for substitution maintenance treatment as most of the countries have a national substitution registry or a drug treatment information system. Quite good information is also available as regards provision and utilisation of outpatient psychosocial interventions. On the other hand there is not much information on the number of clients in detoxification treatment and in inpatient drug treatment. Thus it is not possible to give any statement on the coverage of detoxification and inpatient drug treatment.

The most important indicators to approach the “treatment coverage” are the prevalence of problem drug users (PDU), and the number of drug users reached by the drug services. As mentioned above, currently the best available data on treatment utilisation are those on clients in substitution maintenance treatment. Accordingly only the data on substitution maintenance treatment allows to draw first conclusions on the “treatment coverage”.

As not all countries provide both data on PDUs and the number of drug users in substitution, a preliminary statement on the treatment coverage can only consider countries where both data are available. In this respect data from 11 Member States Norway can be used. The analyse shows that the coverage of substitution treatment varies considerably between 2.5% in Romania and about 50% in Italy and the UK.

In order to improve the quality of data on provision and utilisation of treatment services it is recommended to revise the standard tools applied by the EMCDDA to collect data from the member States and Norway. To improve the monitoring system it is in particular suggested to develop a more precise and common definition of drug treatment and to revise the questions on the number of treatment units and the respective number of clients. The latter requires a more structured and detailed collection of data in terms of questions which differentiate between the main types of interventions; these are outpatient psychosocial treatment, inpatient psychosocial treatment, substitution maintenance treatment and detoxification. It is recommended to collect information on the number of available treatment units and on the number of clients in treatment according to these four main types of interventions.

In terms of the revision of the standard tools a respective questionnaire has been developed and distributed among the Member States and Norway. This questionnaire can be regarded as a pre-test of a restructured monitoring tool. Nine countries filled in the questionnaires and gave their comment on it. So far the feedback on the attempt to collect treatment data in a more detailed way shows a positive tendency. However, the revision of the treatment related standard tools is still in process.

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Drug policy and harm reduction

DG SANCO/2006/C4/02

## **Report on WP 3**

# **Inventory of status quo and models of transfer of drug treatment know-how and good practices**

February 2008



University of Hamburg



Centre for Interdisciplinary Addiction Research (CIAR)

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## Summary

Based on the investigation of the “quality system” and transfer of drug treatment know-how in Member States and Norway, it is summarised that quality assurance systems has been developed in the majority of the Member States. However, up to now the main components for knowledge transfer and best practice transfer are only partly implemented in the Member States. This counts especially for evaluation and research, reviews/evidence reports, implementation of a systematic procedure for producing and controlling new protocols, consensus process for development of guidelines. This means in general: the area of evidence-based development of guidelines and transfer of good practice is at an initial stage compared to other areas of the health system and referring to tasks of the EU drug action plan.

Based on ongoing and politically forced developments in the area of identification, preparation and transfer of drug treatment know-how in Member States and Norway, the following next steps are recommended:

A. Support in establishing evidence-based cultures und qualifications of knowledge infrastructure in drug treatment at the level of Member States. There are different areas, where the Member States can benefit from advice and support from the EU.

Main issues are the implementation of authorised institutions/platforms for the coordination and dissemination, as well as for quality assurance and development. A further issue is the coordination with existing research (Drug Research, Health Care, Clinical Excellence).

B. At EU level in addition to existing activities and the developments within the Pompidou Group and the science-based platform of the EMCDDA a self-contained network is required in the field of drug treatment, prevention and policy action complementary to and in close cooperation with EUnetHTA. The organisational frame should be a net of national/regional official agencies, public bodies, MoHs, research institutions, international organisations (Cochrane Collaboration).

This net should have the similar urgent tasks (as the HTA Net):

- Procedures (defined and standardised elements of guidance for obtaining evidence and best practice);
- Priority areas for issues of evidence reviews, research, identification and preparation of good practice
- A workplan to realise the objectives in responsibility of national institutes of the Member States.

Additionally, a more detailed inventory of the situation in the Member States concerning the knowledge-based infrastructure in the field of drug related responses and an investigation of the research infrastructure should be encouraged in order to support precise concepts for the improvement of the dissemination of high-quality information and best practice in Member States and Norway in the coming years.

## 1. Preface

The objective of this report is an inventory of the status quo of knowledge transfer in the area of drug treatment in order to obtain more precise answers concerning the demands and next steps required in knowledge production and transfer.

The procedure of this report is the following:

- Inventory of status quo of knowledge transfer and models of transfer of drug treatment know-how and good practice
- Identify examples of exchange (in other health areas as well as drug treatment)
- Recommendations for improvement of the dissemination of good practice in Europe.

The following inventory refers to the action plan on drugs as the political background. In particular objective 7 of the EU Action Plan on Drugs 2005-2008<sup>44</sup> states the need to improve coverage of, access to, quality and evaluation of drug demand reduction programmes and to ensure effective dissemination of evaluated best practices.

Accordingly, the provision of information on best practices in the Member States and the facilitation of exchange of such practices are mentioned as tasks of the EMCDDA in article 2 of the recast of the EMCDDA regulation, which was adopted by the European Parliament and the Council of the European Union in December 2006<sup>45</sup>.

The development and implementation of a knowledge base in the main areas of the drug problem – supply and demand reduction – and the corresponding circle of “quality assurance” have been developed to a different extent in all Member States over the last decades. That means that in some Member States a corresponding programme or system is completely in place, while in others it is at an initial stage.

To define the next step in knowledge transfer it is important to understand the current situation for the area of production of guidelines, implementation in drug treatment, evaluation and improvement at European level. This includes an overview/survey of existing multipliers that play an important role in the development, collection, dissemination and transfer of good practice in each country (but also at the European level).

## 2. Procedure and methods

This report refers to such a model of quality development in health care in the Member States and other countries as it has stepwise emerged and been implemented in different ways over the last decades. Knowledge exchange and dissemination of evaluated best

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<sup>44</sup> The EU drugs action plan (2005-2008), [www.emcdda.europa.eu/index.cfm?nNodeID=10360](http://www.emcdda.europa.eu/index.cfm?nNodeID=10360)

<sup>45</sup> „While reaffirming the EMCDDA's main purpose as to provide EU Member States with 'factual, objective, reliable and comparable information at European level concerning drugs and drug addiction and their consequences', the new regulation broadens the scope of the Centre's tasks.“ [www.emcdda.europa.eu/html.cfm/index27868EN.html](http://www.emcdda.europa.eu/html.cfm/index27868EN.html)

practices are a central part of this system. Part 3 starts with a short presentation of quality development and knowledge transfer and good practice exchange as a cycle.

The following overview concerning the current situation in the Member States (part 4 and 5) and in Norway is related to a model of knowledge transfer in the framework of quality assurance in the area of drug treatment. This part describes the current situation of quality in drug treatment and the corresponding procedures.

#### *Method for the survey in the Member States*

The consortium developed, in cooperation with the EMCDDA, a structured questionnaire for “Quality Assurance, Evaluation and Good Practice” to get more precise information on these issues (see the questionnaire attached in annex). The questionnaire is based on the corresponding chapter of the “Standard Questionnaire 27” and should contribute to the revision and specification of this instrument. The questionnaire has been sent to all REITOX units in the Member States.

The instrument for the inventory of existing resources and exchange mechanism of good practice in drug treatment investigates the following central dimensions of quality assurance (see part 3): concept/structure, financing and supporting organisations, sources of presented models, consensus process for improvement, quality assurance and standards for presented models, level of utilisation, dissemination, effectiveness, coverage concerning target groups.

Against the background of this concept the instrument is

- Directed to quality assurance with the issues:  
guidelines, contents (structure, processes), based on: monitoring, evaluation, responsible institution, availability, exchange, usage, areas of standards, postgraduate studies, trainings;
- Differentiated for the main treatment interventions:  
Outpatient psychosocial interventions  
Inpatient psychosocial interventions  
Substitution/maintenance treatment  
Detoxification and
- Differentiated for target groups of guidelines (providers, professionals, users)

Concerning the project question related to the identification of target groups of an exchange system, the quality questionnaire asked whether existing platforms for dissemination are directed to target audiences such as:

- Drug treatment policy makers/commissioners
- Providers of drug treatment services
- Professionals (the different professions of staff in drug treatment)
- Substance users (as consumers of services).

The additional dimensions as to target groups are then

- The utilisation of this platform(s) by different groups of professionals and

- The presentation of occupational standards for professions working in drug treatment.

Based on this information the concepts and reality of exchange platforms in the Member States are assessable.

*Identification of examples for knowledge base and quality improvement in health care*

For the assessment of the situation in the field of drug related interventions the identification of examples in other areas of health care and the description of some programmes for knowledge exchange in the drug field is undertaken (part 6).

Some models of good practice exchange in treatment in general and in relation to drug treatment are introduced. This serves as background for the presentation of variations in the exchange of good practice and the assessment of their pros and cons.

### **3. A knowledge transfer system in drug treatment**

In this report knowledge transfer is understood as part of the knowledge base and the knowledge infrastructure in the area of drug related interventions. The transfer is an important aspect of efforts for evidence-based interventions and policy.

Over the last decades different systems have developed that enable development and dissemination of knowledge-based interventions in the areas of health services and care related interventions in the Member States and Norway. This process started first for medical interventions, but has expanded to health care in general and also to interventions related to drug problems, to prevention and treatment including the different areas of pharmacological and psychosocial interventions, and also to policy action.

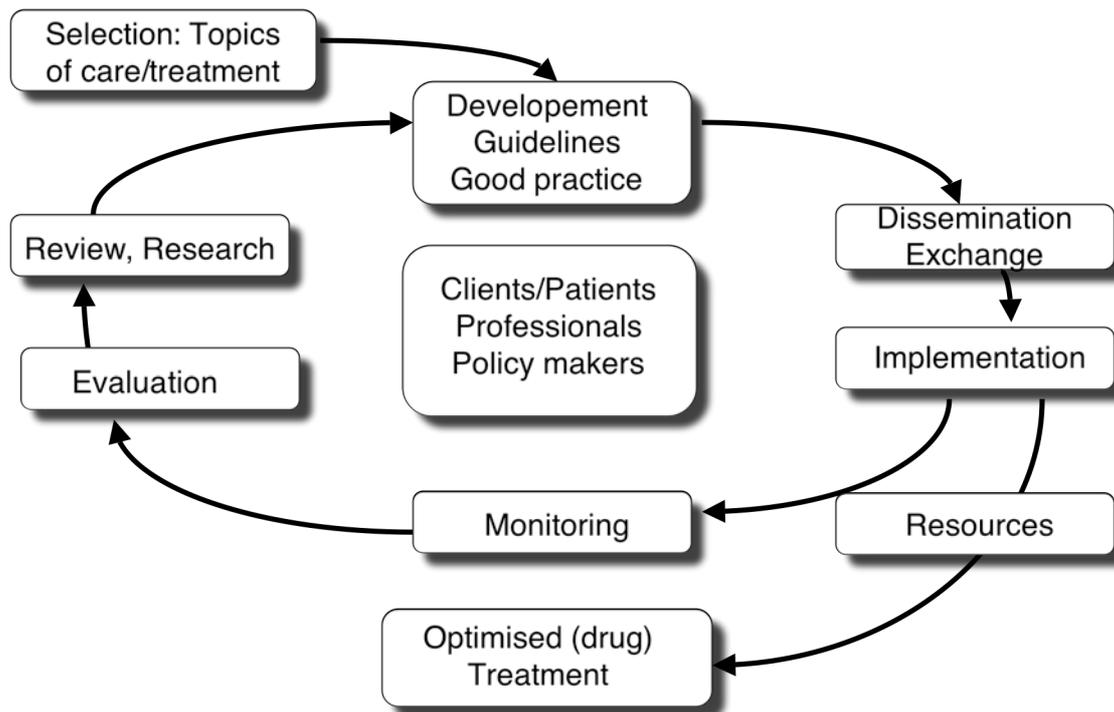
The question of knowledge transfer is handled as a central dimension of the movement to evidence-based interventions in health care in general and drug treatment as a specific area.

When looking at the current situation we have to keep in mind that drug treatment systems, and health systems in general, developed at different speeds and with differing degrees of complexity over the last 40 years, reflecting the emerging drug problem and the diverse political and social conditions in each country.

That has to be considered also for the situation of quality development and assurance system in each country.

Knowledge transfer is a part of the quality assurance and improvement circle (see graph 1). This is a system that systematically links research, policy and practice to develop the quality of response to tackle the drug problem.

In this cycle policy, decision-making, implementation, interventions, monitoring/evaluation, research, reviews, recommendations/guidelines are linked.



Graph 1:  
The circle of systematic guideline/good practice production, implementation and exchange

*Knowledge transfer or “Getting Evidence into Practice” – an European Protocol*

The European project “Getting Evidence into Practice”<sup>46</sup> summarised the process of the development of the infrastructure of knowledge towards systematisation and clarification for health promotion and care. In this project the overall question is discussed in the context of the international development of evidence-based practice in different areas of health and social care (see below). The review protocol gives an overview of the systematic cycle and some advice on the transfer of evidence into practice. The process of implementation must continue in order to make the evidence collected through the reviewing process accessible and usable.

For the dissemination of good practice, it is recommended to use members of the respective advisory group (especially practitioners, policy makers and lay people) to plan the dissemination of results to the end-users (different groups of decision makers).

<sup>46</sup> „European Project Getting Evidence into Practice“, <http://subsites.nigz.nl/systeem3/site2/index.cfm>. „This project represents collaboration among key national agencies and international networks for health promotion in the form of a European Evidence Consortium. The project Getting Evidence into Practice (running period February 2004-July 2005) has been focussing on health promotion, public health and prevention interventions.“ This project was co-funded by the Commission (DG SANCO-Health Information Strand). For final report, manuals and publications look at: [http://ec.europa.eu/health/ph\\_projects/2003/action1/action1\\_2003\\_15\\_en.htm](http://ec.europa.eu/health/ph_projects/2003/action1/action1_2003_15_en.htm).

Dissemination may be undertaken by national and regional organisations, but implementation cannot be accomplished without local involvement in activities designed to get research and other information translated into practice.

The reviewers of evidence can contribute to the implementation of the results but it may be feasible to leave the main responsibility to the people with skills and expertise in communication who preferably cooperate with the health promotion and public health practitioners. The process of transferring evidence into the practice is often slow.

Main principles for dissemination are – with reference to the protocol:

- Development of an evidence-based plan for dissemination
- Targeting three key groups (public, practice, policy)
- Development of a systematic framework for each target group
- Further evaluation

The respective “Health Development Agency” on the different levels suggests using the following model when getting evidence into practice:

- Dissemination – planned efforts at raising awareness and encouraging adoption
- Adoption – making a commitment to initiate
- Implementation – interventions to assist in delivering the programme according to its original design
- Maintenance – encouragement to continue using evidence.

When thinking about the transfer of research evidence from reviews into practice, reviewers as well as the advisory group and policy makers should keep in mind that it is a complex process and that its research base is incomplete. In addition, it is good to make clear (for the end-users) that the review is not the same as health promotion and public health recommendation: *Reviews synthesise the body of evidence of a certain topic and evidence is continuously formed and updated in a cyclic process of research, evaluation, feeding with information from different sources, good practice, policy implications and exchange with end-users.*

From the review of evidence two types of information will become available. The protocol aims mainly at evidence to answer the question posed and to help policy and practice in certain area. It is important to notice that interventions described in the reviews need to be evaluated using agreed principles. Such principals are also proposed in another area of the “Getting Evidence into Practice” project (see the “European Reviews Protocol” of this project<sup>47</sup>).

*A system of collecting and disseminating evidence – The “Health Technology Assessment” (HTA) programme*

In the framework of knowledge transfer in health care the identification of evidence and working up for dissemination and exchange have become independent areas of research

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<sup>47</sup> For download of the protocol:

<http://subsites.nigz.nl/systeem3/site2/index.cfm?fuseaction=Pages.showPages&code=120&code2=28>

and action in the framework of “Health technology assessment (HTA)”. HTA has been defined as “a form of policy research that systematically examines the short- and long-term consequences, in terms of health and resource use, of the application of a health technology, a set of related technologies or a technology related issue” (Henshall et al. 1997).

HTA is concerned with the medical, organisational, economic and societal consequences of implementing health technologies or interventions within the health system. By its nature, HTA is a multidisciplinary activity, which systematically evaluates the effects of a technology on health, on the availability and distribution of resources and on other aspects of health system performance such as equity and responsiveness.

Its aim is to inform the formulation of safe, effective health policies that are patient focused and seek to achieve best value. Despite its policy goals, HTA must always be firmly rooted in research and the scientific method.

Areas of Health Technology are diagnostics and treatment methods, pharmaceuticals, rehabilitation and prevention methods and also organisational and supportive systems within which health care is provided. That means in principle that all different aspects of the problems of drug treatment interventions are issues of HTA.

Thus, in a broader sense, the policy- or decision-maker oriented HTA process contains knowledge transfer und exchange. The declared purpose of HTA is to support the process of decision-making in health care at policy level by providing reliable information. In this respect, HTA has been compared to a bridge between the world of research and the world of decision-making (Battista 1996). *This bridge is intended to allow the transfer of knowledge produced by scientific research to the decision-making process.* In order to achieve this, HTA is committed to the work of collecting and analysing evidence from research in a systematic and reproducible way and to make it accessible and usable for decision-making purposes, in particular by means of assessment reports.

*HTA shares these principles with evidence-based medicine (EBM) and clinical practice guidelines (CPG) and, together with them, builds a body of best practice initiatives (Perleth et al. 2001).*

However, in contrast to HTA, which is more policy-oriented, EBM and CPG aim to support decision-making at individual clinical level (for providers and professional groups) and patient group level, respectively. For the investigation of the current situation of the knowledge base in drug treatment in the Member States the perspective must be broadened beyond HTA.

Analysing the status quo of the “knowledge transfer and exchange system of ‘good practice’” means assessing the main components of the “Quality Systems” in Member

States as (quality) indicators: What aspects of these indicators and to what extent are they in place in the member states?

#### **4. Quality system and knowledge transfer in drug treatment in the Member States**

The following part reports on the status quo of quality assurance, knowledge transfer, sharing of experiences and good practice in the drug treatment area in the Member States and Norway<sup>48</sup>.

Are there resources and models of scientific evidence/know-how and good practice exchange on drug treatment in place and what is known about their utilisation and effectiveness?

Following factors are considered as main indicators of the existence and of the level of quality assurance in drug treatment:

- Guidelines – existence, relevance, commitment, contents, funding, guidance for guidelines?
- Guidelines – sources: based on best practice, evidence reports, consensus building process?
- Monitoring – different stages of reporting
- Evaluation – existence and level (systematic, connection to research?)
- Research – outcome studies in drug treatment, clinical research, reviews, evidence reports?

First we present an overview of the situation in each Member State (part 4) followed by a summary (part 5).

The following results are based on two sources:

- the National Reports 2006 of the different Member States<sup>49</sup>
- the questionnaire on “Quality Assurance, Evaluation and Good practice” (see Annex)

All information refer to this sources otherwise they are named.

##### *Overview of the current situation per state*

Reporting as to the situation in the Member States, Candidates and Norway is based

- On the questionnaire – answered by the National Focal Points and the
- National Reports 2006 of all Member States.

The questionnaire has been answered by the following states:

- Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Ireland, Latvia, Malta, Netherlands, Poland, Portugal, Sweden, United Kingdom, and Norway and Croatia (as a candidate)<sup>50</sup>,

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<sup>48</sup> Croatia is integrated as a candidate state, because it answered the questionnaire send by EMCDDA to National Focal Points of Member States, Candidates and Norway.

<sup>49</sup> All National Reports of the Member States for 2006 and back are available:  
<http://www.emcdda.europa.eu/?nNodeID=435>

Information from 21 states is available (including Norway and Croatia as a candidate).

## ***Belgium***

### *Treatment guidelines*

In Belgium, guidelines are available for all areas of drug treatment interventions. These guidelines are issued by public authorities. They contain general aspects of implementation but are not mandatory for the authorisation or funding. A process of guideline development based upon continued evaluation of services is not provided.

### *Treatment registries and monitoring*

Regarding clients in drug-free treatment, a harmonization of registration of treatment entries at national level is started in the framework of the Treatment Demand Index (TDI).

A national monitoring system for clients in medically assisted treatment is not yet fully implemented, but intended under the Royal Decree of 2004 on substitution treatments and is currently in a test phase.

### *Evaluation and research*

Some institutions seek to improve the processes of work by implementing evaluation and assessment tools. Some of them work with external evaluators. A “research platform substance abuse” was created by the "Association for Alcohol and other Drug problems" (VAD), which aims at bringing research and practice in the Flemish alcohol and drug field closer together. A research programme for evaluation and improvement of treatment has been established.

### *Training and (postgraduate studies)*

A special training has been established for all professional groups in drug treatment. There is a training realised in European cooperation – "European Companionship in Education, training by travel (ECEtt)". A European network of skills and knowledge exchange between specialized educators has been developed and implemented since 2004.

### *Quality system*

A regional or national net responsible for developing guidelines and good practice based on scientific evidence has not yet been established, but on the regional level

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<sup>50</sup> Croatia is integrated only in the overview based on the questionnaire, as there is no reporting to EMCDDA up to 2006

exchange platforms such as the "Association for Alcohol and other Drug problems" (VAD) are working.

## ***Bulgaria***

### *Treatment guidelines*

The development of methodological documents and implementation of best practice in treatment and rehabilitation has been accomplished and published. Thematic series "Rehabilitation of Addictions" were developed and published, including "Consensus Statement Regarding Advisable Approach for Rehabilitation of Addictions". This document presents the principles for successful rehabilitation of addictions, phases of rehabilitation, and general forms of rehabilitation programmes.

Experts from the National Centre for Addictions developed protocols for inpatient and outpatient detoxification of dependent patients.

The preparation of guidelines and rules for good practice in implementation of maintenance treatment has started for the period 2006 – 2007.

### *Treatment registries and monitoring*

In 2005 the treatment demand monitoring system in Bulgaria covered inpatient and outpatient units; centres have been implemented in ten of the most significant (from the viewpoint of the treatment possibilities) Bulgarian cities.

A new integrated system of a national registration has been developed and will be based at the National Centre for Addictions in 2007.

### *Evaluation and research*

The evaluation is based on the thorough reports of the structures and on the expert evaluation on location by specialists from the National Centre for Addictions.

### *Training*

Courses and conferences are organised to increase the capacity and knowledge of the persons involved in prevention, treatment and rehabilitation of drug addictions. Courses e.g. on group therapy and pharmacological treatment are carried out on a regular basis.

### *Quality system*

The National Centre for Addiction has been established as responsible institution for developing guidelines and good practice based on scientific evidence.

## *Czech Republic*

### *Treatment guidelines*

Guidelines based on scientific evidence and expert consensus exist for all areas of drug treatment. The system for the certification of professional competency of services for drug users started operation in 2005. It is meant to assure the quality of services in all areas of drug treatment. Only certified programmes run by NGOs will be subsidised from the state budget after 2007.

The Substitution Treatment Standards (Ministerstvo zdravotnictví ČR) define the methodology for substitution treatment in the Czech Republic, including the criteria for admission to treatment.

### *Treatment registries and monitoring*

The Substitution Treatment Register has been introduced in the Czech Republic. Treatment in all health centres, not only in specialised substitution centres, has to be registered since 2006. Nationwide reporting from clinics other than the specialised centres has not been introduced yet.

### *Evaluation and research*

Outcome is evaluated sporadically in the different areas of drug treatment. The Czech Republic does not promote a national research programme for evaluation, but the Council of the Government for Drug Policy Coordination support some projects on evaluation (e. g. evaluation of drug free treatment in therapeutic communities).

### *Training*

There are no postgraduate study courses for professionals in drug treatment, with the exception of physicians. Training opportunities and a national system for continued education and training exist for the different professionals.

### *Quality system*

There is an authorised institution responsible for developing guidelines for “good practice” in drug treatment and for quality assurance.

## *Denmark*

### *Treatment guidelines*

Guidance has been implemented for all areas of drug treatment. The National Board of Health produced a professional handbook for the medical treatment of drug addicts in substitution treatment to ensure an acceptable professional quality when reporting and treating abuse and addiction, as well as the key somatic and psychiatric disorders seen with drug addiction. The handbook (October 2007) also contains guidelines for diagnosis and screen programmes, counselling, as well as guidelines for the treatment of infectious diseases. The methadone circular (a governmental circular from the National Board of Health) is a guideline for all substitution treatment and medical treatment of drug abusers including guidelines for slow withdrawal from drugs.

Additional guidelines, formulated by the “Consolidated Social Services“ for the interpretation of the Treatment Guarantee, exclusively focus on the overall structure of the treatment, not on the quality of the treatment.

Guidelines are mostly based on expert consensus, but additionally evidence based in the area of substitution. They are, apart from inpatient psychosocial treatment (residential treatment), not mandatory and precondition for implementing or running drug treatment services.

### *Treatment registries and monitoring*

Clients in public and private drug-free residential treatment are monitored by the Danish Registration and Information System (DanRIS). Clients in drug-free outpatient treatment and those in substitution treatment are monitored by the database of the National Board of Health, to which the 14 counties and six municipalities deliver data. The use of the substitution drugs methadone and buprenorphine is registered for each case. Both databases fulfil the purpose of both a monitoring system and a national register.

### *Evaluation and research*

Starting in January 2008, regular national evaluation of outpatient and inpatient treatment programmes can be linked to different national register systems (SIB, Danris-Residential and Danris-Municipality and the Service-Portal).

The programming/evaluation tool envisaged for development is based on the “concurrent recovery monitoring” principle. The main purpose of the activities will be to explore the treatment and cost effectiveness of therapies.

The Centre for Alcohol and Drug Research at Aarhus University is in charge of evaluation studies at national level.

### *Training*

There are specific training opportunities for the different professional groups in drug treatment, but a system of continued education for these groups is missing so far.

### *Quality system*

A systematic quality assurance process for outpatient treatment activities has been implemented. The programme specifies objectives, results targets with relevant performances as indicators, as well as measurement methods for the whole treatment system for drug addicts.

A portal for all social services, including drug treatment ([www.sst.dk](http://www.sst.dk)) is offered to providers, professionals and drug abusers in Denmark.

## **Germany**

### *Treatment guidelines*

Guidelines are available for all areas of drug treatment interventions in Germany. Various professional societies and experts have worked together in the last years to develop these guidelines. The presented results are a summary of the current state of knowledge and provide practical guidance for carrying out treatments. Meanwhile, guidelines have been published for the acute treatment of opioid related disorders, the post-acute treatment of opiate addicts, patients with cannabis related disorders and for misuse of stimulants (National Report Germany 2006).

A special manual (ASTO Manual) has been developed for quality assurance in outpatient substitution treatment of opiate addicts. This is so far a regional project in Westfalen.

As a rule, existing guidelines should be followed, but exceptions are possible. They are stricter for rehabilitation, i.e. inpatient treatment, which is funded by pension insurances. Most medication assisted treatment is delivered by general practioners funded by health insurances. Mainly in these cases, a specific training of the treating general practioners is needed. Adherence to guidelines, which cover all structural and process aspects of facilities and interventions, is, to a certain extent, a precondition for funding.

### *Treatment registries and monitoring*

A common reporting standard has been defined for clients in all addiction treatment facilities: the German Core item set (Deutscher Kerndatensatz). On an annual basis, the data are reported to a central agency (Deutsche Suchthilfestatistik).

Since 2002, every physician who prescribes substitution drugs for opiate addicts is bound to report the prescription, the substitution drug and the client (code) to the

substitution register of the Federal Centre for Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte – BfArM).

### *Evaluation and research*

As part of the documentation set a follow-up module provides outpatient facilities with the possibility to evaluate results at the end of treatment. Evaluation takes place on a regular basis, but is mostly internal.

Since 2001, several research networks for drug treatment, which investigate various aspects of addiction and substance abuse, have been funded. These networks concern treatment and other aspects but none of them has a complete national focus or coverage. Additionally, individual projects address more specific aspects of treatment, e.g. a “Modular Therapy of Cannabis-related Disorders“ (CANDIS), a collaborative multi-stage epidemiological study (COBRA) to obtain a comprehensive picture of substitution treatment practice in Germany, and the Randomised Controlled Study on diamorphine-based therapy for opiate addicts.

### *Training*

Postgraduate study courses and continued education training are available for the different professions. Courses of studies are currently restructured according to European standards. In the restructuring process, postgraduate training for social workers, psychologists and physicians play a particularly important role for addiction services. The relevance of the current introduction of bachelor and master study programmes at German universities is under discussion.

Work specifications for therapeutic staff in addiction services have to be newly developed and defined. Several systems for continued medical education run at regional level (federal states) but there is no central national institution.

### *Quality system*

Different institutions and associations offer guidelines and are involved in quality assurance, but up to now there is no authorised national institution responsible for developing guidelines and good practice based on scientific evidence.

Quality management at regional (Federal States) level also comprises regular data collections to assess the problem status as well as documentation of interventions. In some Federal States this is meanwhile done systematically and regularly.

## ***Estonia***

### *Treatment guidelines*

The current National Strategy for Prevention of Drug Abuse strengthens the drug addiction treatment and rehabilitation system and improves the quality of the services offered. Guidelines are available for all main drug treatment interventions issued by the corresponding professional associations (in case of drug treatment they were approved by the Psychiatric Association but are not binding). They are based on evidence and expert consensus.

The National Institute for Health Development (NIHD) has drafted short guidelines – mainly directed to structural aspects – for providers of substitution treatment as contractual partners. These guidelines are treated as part of the contract to ensure the quality of the treatment provided in the framework of drug strategy implemented by the NIHD.

### *Treatment registries and monitoring*

Since January 2006, data on clients in substitution treatment have been collected in the framework of the programme “The Drug Treatment Registry” funded by Global Fund.

### *Evaluation and research*

Services are evaluated sporadically. A research programme has not been implemented so far.

### *Training*

Specific training as well as continued education is available in the field of drug treatment for the different professions involved.

### *Quality system*

The National Institute for Health Development (NIHD) is in principle the appropriate agency, but an exchange system between research and authorities has been implemented and is in its early stages.

## ***Ireland***

### *Treatment guidelines*

No guidelines exist for psychosocial (in- and outpatient) interventions. For medical interventions a revised version of the Methadone Treatment Protocol with a number of

recommendations was presented, most of which had been completely implemented by the end of 2005. The Irish College of General Practitioners developed guidelines for the work with opiate users in community based primary care.

The guidelines for medical interventions are evidence based and issued by public authorities and professional associations.

#### *Treatment registries and monitoring*

At present there are two national registers recording drug treatment in Ireland. The National Drug Treatment Reporting System (NDTRS) is an epidemiological database on treated problem drug use set up in 1990 and managed by the staff at the Drug Misuse Research Division of the Health Research Board. This reporting system complies with the requirements of the treatment demand index (TDI) protocol.

The Central Treatment List is a complete register of all persons treated with methadone and is used to regulate methadone use and pay general practitioners for their services. The most relevant treatment variables are collected through this system that is administered by the Drug Treatment Centre Board on behalf of the Health Service Executive.

#### *Evaluation and research*

Treatment interventions are evaluated sporadically. There is no National Research Programme promoted, but research is funded in single projects. The Research Outcomes Study in Ireland on behalf of the National Advisory Committee on Drugs (NACD) reported on outcomes of adult opiate users at one year following entry to treatment.

A collaborative piece of action research involving different responsible institutions has sought to identify and address issues that drug users face in relation to Irish health services (National Report Ireland 2006).

#### *Training*

There are postgraduate study courses in place for professionals in drug treatment. Specific continued education and training is only implemented for physicians.

#### *Quality system*

So far, no authorised national institution has been established that is responsible for developing guidelines and good practice for the range of drug treatment interventions based on scientific evidence.

## *Greece*

### *Treatment guidelines*

Guidelines are available only in the area of medically assisted treatments (maintenance treatment, detoxification). Guidelines for substitution treatment are issued by law. Existing guidelines cover mainly structural aspects. For psychosocial interventions there are no mandatory guidelines.

### *Treatment registries and monitoring*

A national register for clients in treatment does not exist, but the Treatment Demand Indicator is implemented; it collects individual and anonymous data about each person approaching specialized drug treatment centres (and low-threshold services) in Greece. Moreover, the Greek Focal Point systematically collects detailed data on treatment programmes that are structural and functional features of structured treatment units. As far as medically assisted treatment is concerned monitoring is performed by OKANA as the only agent who has the permission to operate substitution treatment programmes.

### *Evaluation and research*

There is a sporadic evaluation of different facilities, but a homogenous scheme at national level has not been implemented yet in the country. The current National Drug Strategy envisages the immediate development of evaluation procedures for therapeutic units in order “to ensure the efficient diffusion of best practices”, and the majority of programmes report having recently performed an internal evaluation of the therapeutic procedure and/or treatment outcome.

### *Training*

The education of specialised professionals working in the drugs field should be intensified (National Drug Strategy) by integrating the subject of addiction into the curriculum of university and postgraduate studies of health professionals and social scientists. Currently almost all treatment programmes provide (continuous) education and training and ensure that part of the staff attends formal training courses or lectures delivered by third parties.

### *Quality system*

Many specialised therapeutic agencies developed their own principles and standards to ensure and enhance the quality of their services. But so far no authorised national institution is responsible for developing an evidence-based system for quality assurance and development.

## ***Spain***

### *Treatment guidelines*

For Spain detailed information as to the quality system based on the structured questionnaire is not available so far.

Quality standards for drug treatment have been implemented regionally by the autonomous communities.

### *Treatment registries and monitoring*

Monitoring systems for clients in maintenance treatment exist at the level of the Autonomous Communities, and data are reported to the Government Delegation for the National Plan on Drugs.

Additionally there is the Spanish Monitoring Centre for Drugs and Drugs Addiction for monitoring drug treatment provision on a national level

### *Evaluation and research*

Two clinical trials on diacetylmorphine (heroin) prescribing were carried out in Catalonia and Andalusia in 2005. Patients participating in these trials received medical, psychological and social assistance.

## ***France***

### *Treatment guidelines*

In France, guidelines are available for all areas of treatment interventions. These guidelines are issued by public authorities. They are not mandatory for authorisation and no precondition for funding. Available guidelines refer to structural aspects and do not cover treatment processes.

### *Treatment registries and monitoring*

Specialised treatment centres implement RECAP, the monitoring system that is compatible with the Treatment Demand Index (TDI). Harm reduction facilities have a special monitoring system sharing many items with RECAP but investigating only short periods (not permanent). The OPPIDUM survey (month of October) is implemented with a focus on monitoring consumption patterns and trends in a panel of specialised centres, harm reduction facilities and selected GP practises. While a national register of clients in maintenance treatment is not possible in France, this system can distinguish between data collected from clients in maintenance treatment and from other clients. The national health insurance Fund (CNAMTS, *caisse nationale d'assurance maladie*)

has data on clients who buy their medical drugs in "office pharmacies" (and ask for reimbursement). Nearly all buprenorphine and about half of the methadone prescriptions are dispensed through these "office pharmacies".

#### *Evaluation and research*

Outcome in the different areas of interventions are not evaluated, except in the case of new, experimental treatment. No national research programme for evaluation and improvement of treatment interventions is available.

#### *Training*

In France, postgraduate study courses, specific training opportunities and continued education in drug treatment are available for the different professions involved.

#### *Quality system*

In principle, the Haute Autorité de Santé (HAS) is the appropriate organisation and platform for good practice and knowledge exchange regarding drug treatment as this institute assesses medicines, medical devices, health-related procedures and health technologies.

But up to now HAS is only marginally involved in drug treatment.

#### *Italy*

For Italy are detailed information as to the quality system based on the structured questionnaire not available so far.

#### *Treatment registries and monitoring*

There is a monitoring system for all types of drug related treatment delivered by public and private drug services which is compatible with TDI. There is no national register of people in treatment.

#### *Cyprus*

##### *Treatment guidelines*

No guidelines are available for treatment interventions in Cyprus but are an objective of the National drug strategy.

### *Treatment registries and monitoring*

There is one general monitoring system for inpatient treatment (therapeutic communities or detoxification), based on the Treatment Demand Index (TDI) indicator and operated by the Cyprus National Focal Point, but there are no separate monitoring systems for medically assisted or drug free treatments.

### *Evaluation and research*

Different facilities are evaluated sporadically. The evaluation activities have been either conducted recently or are ongoing. A corresponding national research programme is running.

### *Training*

Training opportunities are available for all professional groups involved in addiction treatment. Continued education is realised in international cooperation (especially with Greece) planned by providers and the Cyprus Antidrug Council (CAC).

### *Quality system*

A quality system is not yet implemented but planned for the next period of the Drug Action Plan.

## ***Latvia***

### *Treatment guidelines*

There are guidelines available in all areas of treatment interventions in Latvia. These guidelines are based on expert consensus and are issued by public authorities and professional associations. The guidelines do not cover all structural and process aspects, but all treatment facilities need to meet certain criteria regarding physical, structural and process issues mentioned in the Law on Treatment.

### *Treatment registries and monitoring*

Individual client records from inpatient and outpatient treatment facilities are traditionally kept by the State Addiction Agency (SAA). Treatment agencies are required by law to provide client data in the standardised format of patient registration cards to this centralised national register where they are entered and processed. Private sector facilities provide their records in aggregated form.

### *Evaluation and research*

Outcome evaluation was not common so far, but, in 2006, a cohort study for outcome evaluation started in several cities in Latvia. A national research programme for continuous evaluation does not exist.

### *Training*

No postgraduate study and continued education for professionals in drug treatment services are available yet.

### *Quality system*

Up to now there is no authorised national institution responsible for developing evidence-based guidelines and good practice. But in principle, the infrastructure of responsible organisations is established with the Public Health Agency and the State Addiction Agency (SAA).

### ***Lithuania***

For Lithuania detailed information as to the quality system based on the structured questionnaire is not available so far.

### *Treatment guidelines*

In 2002 the Minister of Health approved standards for treatment and rehabilitation. Specialised centres for addictive disorders have to meet the standards in order to receive the health care practice licence.

### *Treatment registries and monitoring*

Client data are collected from 74 out of 268 treatments centres, which have a licence to provide treatment to drug addicts, and are reported to the State Mental Health Centre. The Centre for Addictive Disorders in Vilnius has been running a national registry since 1995, which covers clients in methadone substitution treatment.

### *Evaluation and research*

In the frame of the WHO project “The Practices and Context of Pharmacotherapy of Opioid Dependence in Central and Eastern Europe”, the survey in Lithuania realised an assessment of advantages and disadvantages and the effectiveness of existing and new methadone maintenance treatment programmes.

## ***Luxembourg***

For Luxembourg detailed information as to the quality system based on the structured questionnaire is not available so far.

### *Treatment guidelines*

The governmental quality standard certification represents the main tool towards a standardised quality control and is the basis for guidance in drug treatment.

The grand ducal decree of 2002 regulates the practical modalities of substitution as well as the application of training requirements for prescribing doctors.

### *Treatment registries and monitoring*

There is a comprehensive register and monitoring system for all clients in addiction treatment and persons in contact with law enforcement authorities for drug use offences (RELIS). This relies on a multi-sectorial data network including specialised in- and outpatient treatment centres, counselling centres, a number of general hospitals as well as law enforcement agencies and national prisons.

The decree of 30 January 2002 replaces the former “Methadone Commission” by the “Surveillance commission on substitution treatment” mandated to control all aspects of substitution treatment at the national level. Established in 2002, it is composed of delegates from involved NGOs, the Directorate of Health, the AST, two pharmacists and two GPs affiliated to the programme, and is in charge of admissions, releases and exclusions of substitution treatment demanders or patients.

This commission, the national drug coordinator and the specialised treatment centres established a central substitution register operating since 2007.

### *Evaluation and research*

Funding is not directly related to clearly defined evaluation/standard requirements.

The quality standard certification commissions NGOs to undertake necessary evaluation measures of their activities by means they deem adequate. Drug treatment agencies developed appropriate evaluation strategies mostly in collaboration with external evaluators.

The database on problem drug users (RELIS) provides relevant data for evaluation purposes. These data are used to assess impact and performance of specific treatment approaches and to draw conclusions for the conceptualisation of the national drug action plan.

A first scientific evaluation of the structured substitution programme occurred in the 1990ies. A recent evaluation (2003) occurred by an external expert based on data provided by the evaluation software.

## ***Hungary***

### *Treatment guidelines*

Guidelines are available in all areas of treatment interventions. These guidelines are based on evidence and expert consensus and issued by public authorities.

Basically there are two types of quality criteria for drug treatment services in Hungary. The *minimum-criteria* or minimum conditions are structural-type measures and define the required physical and staff-related (qualifications, numbers in FTE) criteria for the conditions to be fulfilled by treatment units. These minimum-criteria are preconditions for starting the operation of units providing health care. Minimum-criteria are related to the type of care-providing facility, e.g. addiction dispensary care unit, drug outpatient care unit, active inpatient care unit etc. The presence of minimum-criteria are checked by the Public Health Authority prior to issuing the official permission for the operation of a treatment unit and checked occasionally later on.

*Professional protocols* and *guidelines* are process-oriented documents based on the available scientific knowledge and provide operational recommendations for professionals. The protocols and guidelines are related to disease groups, such as opiate dependency or specific treatment modality like methadone treatment (detoxification or maintenance).

### *Treatment registries and monitoring*

TDI based data collection at treatment centres was officially introduced through Regulation of the Ministry of Health in 2006. Since then, treatment centres with a high client turnover can make use of specific offline software to record clients' data (and later transmit them electronically via the internet to the National Institute for Addiction), while centres with a lower number of client visits can do so directly online. This data collection system is applied not only at treatment centres in the field of health care, but also at low-threshold agencies and treatment units in prisons. However, data about addiction treatment carried out by GPs are currently not collected.

### *Evaluation and research*

Evaluation of medical interventions is only sporadic. There is no research programme for the evaluation and improvement of drug treatment interventions at national level; however, certain research projects from research-funding sources aim at this field (such as National Scientific Research Fund).

### *Training*

Postgraduate formalised study courses as well as training activities for the different professions are implemented.

### *Quality system*

There is an authorised institution in Hungary responsible for developing guidelines for good practice. Compliance with professional protocols is checked every two years and compliance with guidelines every three years by a specific department/institute of the Public Health Authority.

## ***Malta***

### *Treatment guidelines*

In Malta, guidelines are available for all areas of drug treatment interventions. They are based on scientific evidence and expert consensus and issued by public authorities. Guidelines cover all relevant structural and process aspects and are mandatory for services and precondition for their funding.

### *Treatment registries and monitoring*

The Maltese National Focal Point at the Ministry of Family and Social Solidarity collects the data on drug users in treatment. All Maltese treatment centres are covered by TDI.

### *Evaluation and research*

Evaluation occurs sporadically. There is no national research programme in place.

### *Training*

No study courses, training opportunities or continued education for professionals in drug treatment are established.

### *Quality system*

Although guidelines adherence is mandatory, there does not yet exist a quality assurance system and corresponding responsible institution.

## ***Netherlands***

### *Treatment guidelines*

In the Netherlands, there are guidelines and protocols; guidelines are of a more general content and are meant to give some guidance to professional activities in different institutional contexts. They are available and issued by professional associations and public authorities especially for medical interventions. Protocols are developed in all

areas of interventions (28 protocols in connection with the project “Resultaten Scoren”). They are, for example, a tool for drug consumption rooms, a module for treatment indication and routing, a description of short-term clinical crisis intervention, a self-help literature study, a guideline for maintenance treatment, and a home-party scenario. New protocols and guidelines will be published in 2006-2007.

#### *Treatment registries and monitoring*

The Dutch Alcohol and Drug Information System (LADIS) has been operating since the 1980ies and covers nearly all alcohol and drug treatment outpatient services in the Netherlands. From 1994 it has been operating as a population based register in which contact episodes of individual clients can be linked over time with a unique code made anonymous by encryption methods. The acceptance of the welfare law in 1998 secured the flow of various categories of data (diagnostic, demographic, treatment and evaluation) and the continuity of LADIS. A National Centre for Substance Registration (LCMR) is in formation and delivers data on clients in pharmacologically assisted treatment since 2006.

#### *Evaluation and research*

During the past years attention was also addressed to the evaluation of the effectiveness of the process of initiating quality assurance in addiction care. Especially in the framework of the five-year policy programme “Scoring Results”, interventions were evaluated and led to revised guidelines and protocols.

#### *Training*

The increased need for special education courses in addiction medicine and addiction care has been empirically confirmed by a national survey at universities and higher vocational education institutions. At present, these special courses or modules are scarce or hardly exist in higher education. A committee (*Raad voor Bekwaamheids Ontwikkeling in de verslavingszorg*) has been initiated to enhance (regional) education networks and likewise activities in higher education in order to meet the needs for quality assurance measures in addiction care.

There are specific training opportunities, and professional education in addiction care is now starting in higher vocational education and medical science at university.

#### *Quality system*

Quality assurance of health care in general (including addiction care) was settled by law in 1996. Important parts of this law focus on the necessity of evidence-based care, specified care policy, quality assurance systems and an annual quality report. Dutch Health Research and Development Council (ZonMw) launched a national action

programme Quality Mental Health Care and Addiction Care (*Kwaliteit GGZ en Verslavingszorg*) with the objective to accelerate activities of quality improvement (ZonMw, 2006).

A National Steering Group is concerned with the development of Multidisciplinary Guidelines.

## ***Austria***

### *Treatment guidelines*

In Austria, guidelines are available in the areas of treatment interventions. These guidelines are based on expert consensus and issued mainly by public authorities and, in the area of pharmacological interventions, also by professional associations. They are mandatory for the authorisation of services, and adherence to guidelines is precondition for funding outpatient as well as inpatient facilities.

Available guidelines refer to structural aspects and to some aspects of treatment processes.

### *Treatment registries and monitoring*

The Federal Ministry of Health and Women is in charge of the accreditation and monitoring of all treatment interventions in Austria. The routine implementation of a new national monitoring system – DOKLI – started in January 2006. All drug clients of the 179 participating drug services will be recorded in a standardised way. The collected data will be transmitted yearly to the „Österreichisches Bundesinstitut für Gesundheitswesen“ (Federal Institute for Public Health in Austria – ÖBIG) which is in charge of data processing and analysis as well as the provision of an annual report on the results.

### *Evaluation and research*

Evaluation of treatment interventions has so far been sporadic. In the context of the 2005 Quality Assurance Initiative, some facilities such as the therapy department Carina (Vorarlberg) started implementing a standardised clinical and psychological admission diagnosing system, which systematically records the quality of the results of treatments concluded as planned and which collects discharge diagnoses and catamnestic data on treatments concluded as planned in a standardised way.

No national research programme is promoted. Research is carried out on a single basis. For instance, a recent study on quasi-compulsory treatment carried out in Vienna showed that the treatment was successful both among voluntary patients and persons who had undergone treatment in the context of the therapy-instead-of-punishment approach (National Report Austria 2006).

### *Training*

There are systems for continued education and training in different regions, but not at national level. National initiatives will check the qualification of prescribing doctors and the conformity with the Decree of indications and treatment decisions in the future. The Oral Substitution Further Training Decree provides that in future only physicians with special qualifications will be authorised to practice in substitution treatment programmes. The required further training – basic training module and additional further training – is to be ensured by the Austrian Medical Association, in cooperation with medical universities and other organisations.

### *Quality system*

No authorised national institution has so far been responsible for the development of guidelines and good practice based on scientific evidence. But in principle, the infrastructure has been established with the Federal Institute for Public Health in Austria (ÖBIG), which is involved in the European „Health Technology Assessment“ (HTA) Networks, and as well with the recently (July 2007) founded Federal Institute for Quality in Health Care (BIQG).

## ***Poland***

### *Treatment guidelines*

National quality standards for drug-free treatment are being developed by an expert group appointed by the Minister of Health. The standards will not be obligatory.

### *Treatment registries and monitoring*

There is no national monitoring system for clients in medically assisted or drug-free treatment, but some facilities monitor the clients' situation at entry and after concluding drug treatment. The National Focal Point collects data on clients in residential (drug free) treatment for basic statistical purposes.

### *Evaluation and research*

In the area of psychosocial interventions and maintenance treatment, evaluation of outcome is carried out sporadically. A national research programme for evaluation and improvement of drug treatment does not exist.

### *Training*

Some specific training opportunities and a system of continued education in the field of drug treatment are available for the different professions. Postgraduate study courses are not implemented yet.

### *Quality system*

There are professional associations – especially in the area of psychology and psychiatry – that develop standards for interventions in addiction treatment. An authorised national institution responsible for developing guidelines and good practice based on scientific evidence does not exist.

## ***Portugal***

### *Treatment guidelines*

Guidelines are available in all areas of treatment interventions. The background is a policy of guaranteeing quality standards for service providers in the area of treatment through a binding licensing and monitoring system. The implemented guidelines are based on expert consensus only and issued by public authorities (Institute on Drug and Drug Addiction – IDT). They are in general mandatory for the authorisation of services and precondition for funding. They are accessible at the web and refer to structural aspects and to nearly all aspects of treatment processes.

### *Treatment registries and monitoring*

A national treatment monitoring system is being developed but has not yet been implemented in all regions. National routine statistics from outpatient centres on substitution clients are available (for clients in methadone and buprenorphine programmes).

### *Evaluation and research*

So far, outcome evaluation is only sporadic and on an internal basis. Reinforcement and the support and development of research projects are planned, but a national research programme for evaluation and improvement of drug treatment has not started.

### *Training*

In the last years all professional groups in drug treatment participated in training activities. Training activities are evaluated through a system of quality and accomplishment indicators by the Institute on Drug and Drug Addiction.

### *Quality system*

The Institute on Drugs and Drug Addiction (Ministry of Health) is responsible at the national governmental level for the coordination of policy in the field of drugs; it is an authorised national institution responsible for developing guidelines and good practice based on scientific evidence. The Institute ensures the conception, monitoring and evaluation of treatment and rehabilitation in the field of drugs, aiming at improving the coordination and implementation of the established policies and strategies.

## **Romania**

### *Treatment guidelines*

Implemented standards reflect the professional consensus regarding the assistance for drug users and are the result of a long-term consulting process in which participated representatives of: National Anti-drug Agency, Ministry of Public Health, Ministry of Labor, Social Solidarity and Family, Ministry of Education and Research, UNAIDS Romania, civil society etc.

The standards intend to develop a model for organizing the drug addiction care services so that the services respond to the needs of the beneficiaries, enable structured and systematic approaches that can be evaluated based on objective parameters and allow further implementation of minimum quality standards and good practices.

### *Treatment registries and monitoring*

Beginning in 2005, the Romanian Monitoring Centre for Drugs and Drug Addiction implemented a project aimed at improving its data collection network. The treatment centres collect data computer based in an anonymous manner and in individual form. These data are collected by the Romanian Monitoring Centre for Drugs and Drug Addiction. Collection started for Bucharest in 2005 and at a national level in 2006. The data collection fiche is fully compatible with the EU protocol.

### *Evaluation and research*

Evaluation is planned. A national research programme does not exist.

## **Slovenia**

For Slovenia detailed information as to the quality system based on the structured questionnaire is not available so far.

### *Treatment registries and monitoring*

In Slovenia there is a national monitoring in accordance with Article 2 of the “Regulation on Performing Supervision in the Centres for prevention and treatment of illegal drug addiction”. In 2003 the Minister of Health nominated members of the Supervisory Commission to examine and analyse the situation in CPTDAs.

As regards medically-assisted treatment there is no national register. However, there is an information data collection and network system of the Centres for prevention and treatment of illegal drug addiction which are obliged by law to report data on clients to the national Institute of Public Health through the questionnaire "Drug Users Treatment Evidence" protected by special SOUNDEX code.

### *Quality system*

The public health institute and the Centre for the Treatment of Drug Addicts at the Psychiatric Clinic Ljubljana are responsible institutions for quality assurance.

### ***Slovakia***

For Slovakia detailed information as to the quality system based on the structured questionnaire is not available so far.

### *Treatment registries and monitoring*

All the health care facilities in Slovakia including out- and inpatient treatment services and treatment in prison are obligated (by law) to report the treatment of drug addicts according to TDI protocol (100% coverage). However, this protocol does not distinguish between medically assisted or drug free treatment. Therefore, there is no special register for clients in medically assisted, drug free or substitution treatment.

### ***Finland***

#### *Treatment guidelines*

Guidelines are available for all areas of drug treatment interventions. They are issued by public authorities – except for maintenance treatment where professional associations are additionally involved and are mandatory for authorisation of services. Available guidelines refer to structural and process aspects of services.

Current Care guidelines and evidence summaries for drug treatment are freely accessible via the Internet. This allows linking guidelines with locally developed implementation programmes or shared care models.

### *Treatment registries and monitoring*

As part of the national drug treatment information system at STAKES, client data are collected on a voluntary and anonymous basis by the centres for prevention and treatment of illegal drug addiction. There is no other monitoring system or register of clients in treatment.

### *Evaluation and research*

Quality of the drug abuse treatment providers is evaluated sporadically. The Ministry of Social Affairs and Health has drawn up a recommendation for the organisation, evaluation and dimensioning of substance-abuse treatment services.

There are publicly and as well NGO financed research programmes for evaluation and improvement of drug treatment at national and regional level.

Maintenance treatment has been recently evaluated in terms of opiate use, retention and social integration. Another project (OHJAT) investigated factors supporting psychosocial rehabilitation of clients in substitution treatment. (National Report Finland 2006).

Finland initiated a research programme on substance use and addictions for the years 2006-2010. Research themes for the programme are e.g. drug use and harm, drug policy, research of treatment and recovery processes.

### *Training*

Based on the guidelines, various study and teaching materials are produced and published for the benefit of healthcare professionals and students. Education is promoted especially for professionals in the drug field.

After the assessment of the present situation in education for the prevention and care of problems relating to substance abuse, the Ministry of Education and the Ministry of Social Affairs and Health proposed a training programme for the prevention and care of substance abuse, and a programme of continuing professional education.

These proposals consider the minimum content and the quality of training, the learning materials used in training, networking of professionals, knowledge about substance use included in qualification and degree studies (vocational qualifications, polytechnic and university degrees), further and continuing training, and structures for developing training.

### *Quality system*

The evidence-based Finnish Current Care guidelines have been produced since 1994. The field of drug treatment also has a long tradition of development of guidance and quality assurance and a great number of institutions are responsible for medicine, development of school programmes and treatment programmes.

## *Sweden*

### *Treatment guidelines*

National guidelines for treatment of alcohol and drug abuse are introduced in all areas of drug treatment in the course of 2007. Based on a thorough literature review, the National Board of Health and Welfare developed treatment guidelines based on evidence and expert consensus. The draft guidelines were circulated for comments mid 2006 and are published on the website of the Swedish National Board of Health and Welfare; introductory lectures and seminars were arranged all over the country in 2007.

### *Treatment registries and monitoring*

A general monitoring of the Swedish alcohol and drug treatment system is carried out by the National Board of Health and Welfare in the form of a survey of all the known treatment units every second year on a reference day. There are more than 700 treatment units. The response rate is about 80%; information is collected on types of units, services provided, treatment methods used and the number and categories of clients in active treatment.

### *Evaluation and research*

There is no national research programme for the evaluation and improvement of treatment. Outcome of interventions is evaluated sporadically. The “Model Municipality Project”, based on the participation of four different municipalities, is evaluated with the intention to investigate how the support given by the national drugs policy coordinator stimulates the development of care from the perspective of continuity of care, cooperation and implementation of standardised evaluation instruments (National Report Sweden 2006).

### *Training*

Postgraduate study courses for drug treatment are implemented for social workers, nursing staff and physicians. Training opportunities and continued education are available for all groups.

### *Quality system*

An authorised institution is responsible for the preparation and implementation of “good practice”. The National Board of Health and Welfare started establishing a quality register for the treatment of alcohol and drug dependence. This register develops, follows up and supports quality within the treatment sector.

## ***United Kingdom***

### *Treatment guidelines*

Clinical management guidelines are available for all areas of drug treatment. They will be updated over the coming year, incorporating reference to the conclusions of the NICE technology appraisals on methadone, buprenorphine and naltrexone, and the NICE guidelines on opiate detoxification and psychosocial interventions. Guidance has been published on commissioning of in-patient treatment and residential rehabilitation interventions.

England's Models of care for treatment of adult drug misusers, updated 2006, provide the basic framework for drug treatment, offering guidance concerning the structure and range of services to be commissioned in each area, as well as guidelines for clinical practice (National Report United Kingdom 2006).

### *Treatment registries and monitoring*

There is no monitoring system covering the whole of the UK. However, England uses the National Drug Treatment Monitoring System (NDTMS), which delivers data on the numbers of individuals in treatment as well as on treatment settings. However, it does not provide information on whether treatment is medically assisted by general practitioners or not. Scotland does not have a treatment information system. Monitoring and evaluation data from Northern Ireland are regularly available. A Welsh standardised data collection and reporting system has been developed to underpin a performance management framework for drug treatment services.

### *Evaluation and research*

Outcome of interventions is evaluated sporadically. Research initiatives are funded centrally to help improve the effectiveness of treatment.

In December 2005 the Department of Health completed the commissioning of a number of pieces of research as part of the second phase of the Drug Misuse Research Initiative (DMRI). The research is in areas related to drug treatment, with the aim of providing evidence to support the development and delivery of effective services and interventions in the field of drug misuse. The focus of this phase is on understanding the experience of treatment and service provision. Most of the research will be completed within one to two years.

### *Training*

The Occupational Map of the drug and alcohol sector provides an overview of drug (and alcohol) services, describing the range of employers and key stakeholders, and

their roles and responsibilities, opportunities for career progression, typical career routes and qualifications.

A target is set to expand the adult treatment workforce from 9,000 to 11,000 workers in the drug treatment sector by 2008 (HO and NTA 2006).

### *Quality system*

There are authorised national institutions (National Treatment Agency – NTA; National Institute for Health and Clinical Excellence – NICE) that are responsible for developing guidelines and good practice based on scientific evidence. They practice a system of continued improvement of guidelines and standards based on evaluation and evidence for drug treatment.

## *Norway*

### *Treatment guidelines*

The Directorate for Health and Social Affairs worked out new professional guidelines for drug treatment services, which come into force in Norway in 2007. Guidelines are available for all areas of treatment interventions and refer to structural and process aspects. These guidelines are issued by public authorities and are mandatory for the authorisation of services; adherence to guidelines is precondition for funding for all treatment facilities.

### *Treatment registries and monitoring*

The national Focal Point SIRUS in cooperation with the Bergen Clinics Foundation operate a nationwide client registration system that covers all kinds of treatment centres for substance abuse both drug free and MAT. It contains only aggregated data, which makes it impossible to extract information about the number of persons making a new treatment request or to separate the clients with primarily drug-related problems from those who seek treatment for their alcohol misuse. The Unit of Addiction Medicine at the University of Oslo is in charge of monitoring clients in medically assisted treatment nationwide.

### *Evaluation and research*

An overall evaluation of Maintenance Treatment has been realised in Norway. As a result different recommendations for the further development of treatment are presented. A national Research Programme on Alcohol and Drug Research will start for four years beginning 2007.

### *Training*

Postgraduate study courses and specific training opportunities are available for the different professionals working in drug treatment.

### *Quality system*

In connection with the National Strategy for Quality Improvement in Health and Social Services an authorised national institution responsible for developing guidelines and good practice based on scientific evidence is implemented. Up to now the issues of drug treatment are not tackled but the programme runs until 2015.

## **5. Quality system and knowledge transfer – an overview**

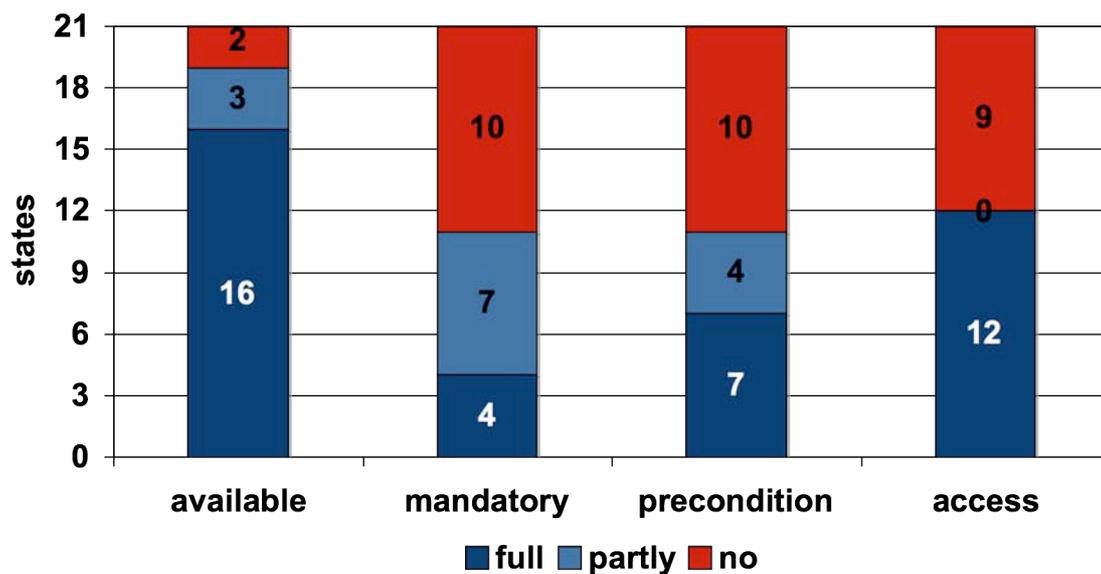
As stated in this part the questionnaire looked for graduated indicators e.g. of the existence of guidelines, their quality and background. This part gives a summarising overview of the situation in the 21 answering states (19 EU Member States, Norway and Croatia as a candidate)

The first indicator is the availability of guideline in the Member States. On this stage "Quality guidelines" are defined in the broadest way: from initial guidelines as general recommendations for quality of services up to mandatory guidelines in the framework of authorisation of services. The contents of guidelines and their sources are following questions to characterise the scope of guidelines.

The question as to availability was differentiated for the main areas of drug treatment interventions as are in- or outpatient treatment interventions and pharmacological interventions (differentiated in maintenance and detoxification).

The availability among the reporting states is three-quarter (76% – 16 out of 21 states). The commitment to defined quality guidelines are measured with the question if they are mandatory for operating a treatment service and a precondition for funding. In this manner there is no binding to guidelines for about half of the states. (see graph 2)

The easy and defined access to guidelines is another indicator measured on basis of the availability of an URL's for guidelines. For a relevant group of states this kind of access isn't known yet.



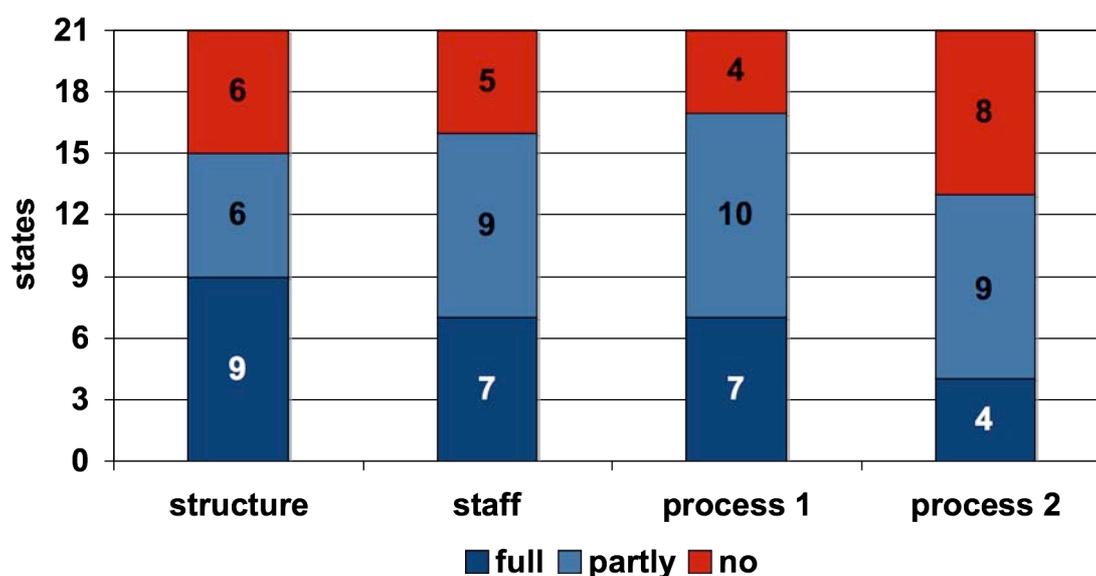
Available – Guidelines for the main areas of treatment are available  
Mandatory – Guidelines are mandatory for authorisation  
Precondition – Guidelines are precondition for funding  
Access – Access to guidelines is specified

Graph 2: Guidelines availability, binding, and access

Contents of guidelines for different services indicate the scope. Is the scope limited to structural aspects or are process aspects partly or full involved? So the related questions are directed to the main structural and process aspects of quality assurance:

- “Structural aspects” as physical environment – that cover e.g. size, sanity/hygienic installations, accessibility, safety;
- “Staff components” – that cover e.g. staff/client ratio, professional background/qualification of staff;
- “Treatment processes” (processes 1) refer to e.g. guidance for binding levels of assessment, individual treatment planning, informed consent, pathways of care, referrals;
- “Documentation and evaluation” (processes 2) refer to e.g. binding documentation (entry/discharge), retention, supervision, evaluation of client satisfaction, staff satisfaction, outcome.

The question was asked for all treatment interventions. As a guideline for an intervention (or for implementing a accordant service) normally should cover all structural and process areas (if this is not the case for a single guideline than this task is applied to a set of guidelines) the results show considerable weaknesses as “full” consideration of contents report in all areas under half of the states (graph 3). Possibly the understanding of guidelines differs – but this indicates also need for clarification.



- Structure – Basic structural aspects; size, installations, accessibility
- Staff – Staff/client ratio, professional background
- Process 1 – Guidance for treatment, assessment, planning, referrals
- Process 2 – Accompanying processes for treatment, documentation, evaluation

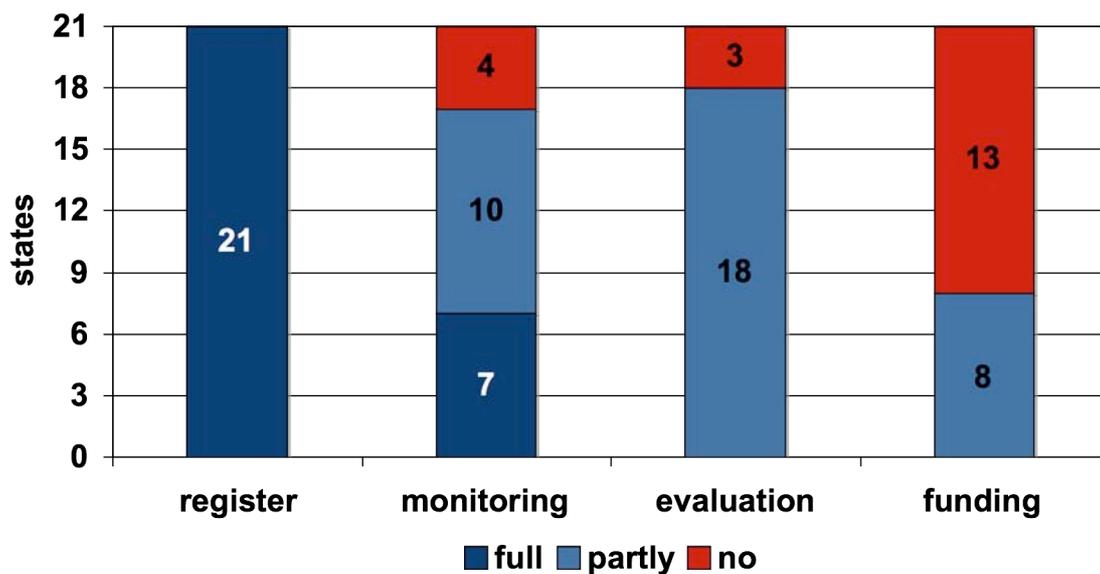
Graph 3: Guideline contents – structural and process aspects

The investigation of monitoring, evaluation and research is a stepwise approach to measure the implementation of a quality circle. Different levels of documentation and evaluation are essential for improvement of drug treatment and building of best practice. First level is the question of registration of drug treatment entries. This refers to the documentation of treatment entries. This kind of registration is full implemented in all states. If the question is broadened to documentation of clients at entry and at finishing drug treatment – with core information of the clients’ situation at entering and quitting treatment as a first step to look at outcomes – the situation differentiated. Four states (20%) do not report monitoring and on the other hand in seven states (33%) this kind of documentation is fully implemented.

### 3). Is the drug treatment outcome evaluated?

Evaluation as a systematic internal and/or external investigation of treatment episodes with respect to outcome/effects is existent in more than 80% of the reporting states – but in all states not on a regular but “sporadically” level (see graph 4). This result as to “regular” evaluation may be caused by its definition as evaluation of all treatment services in regular intervals.

The dissatisfying situation concerning research for evaluation and improvement of drug treatment shows the question of a national research programme and the corresponding funding situation. Eight countries (38%) have a funded research programme in the area of drug treatment. In a longer perspective it is impossible to implement knowledge development, transfer and implementation of “good practice” without continuous research in this area.

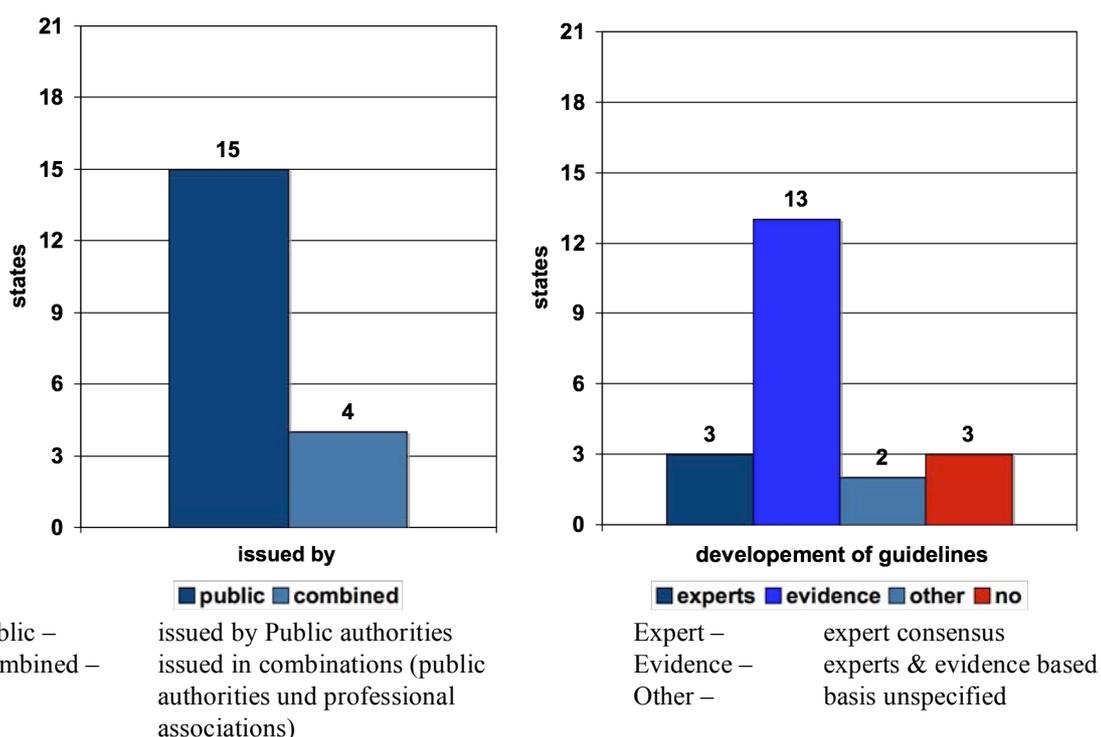


- Register – Documentation of treatment entries and reporting
- Monitoring – Documentation of information at entry and finishing and reporting
- Evaluation – Evaluation (in or external) of treatment episodes with respect to outcome
- Funding – National funding for evaluation and improvement of treatment interventions

Graph 4: Monitoring, evaluation and research

The question concerning the institutional background (who issues guidelines?) shows that public authorities are the main responsible institutions. The combination or complement in delivering guidelines with professional associations only in four states (less than 20%) is rare up to now (Graph 5).

Basis for the development of guidelines is “*expert consensus*” as consensus building processes between professionals or the systematic foundation of this consensus on “*evidence*” that means a development according to scientific evaluation. This combination is the main background (60%) of the development of guidelines in the reporting states.



Graph 5: Institutional background and sources for guidelines

The last indicators refer to the institutionalisation of knowledge development and transfer. One question asks for an authorised institution which is responsible for developing guidelines and a complimentary question asks for a national internet platform (portal) available for information and transfer of good practice protocols for drug treatment interventions (overview on institutions and platforms see table 1). Not all of the listed URL's are platforms for knowledge transfer up to now.

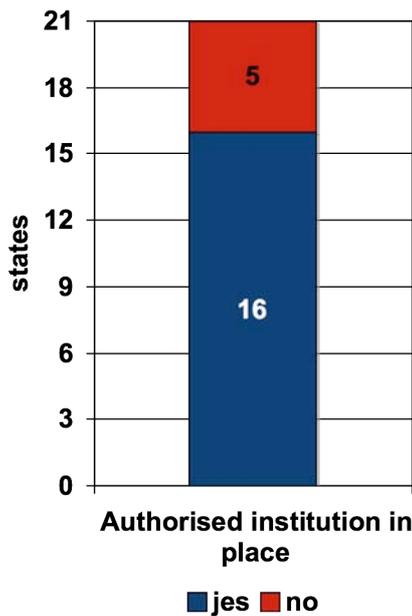
Table 1

List of URLs provided by Member States, Candidates and Norway on national institutions

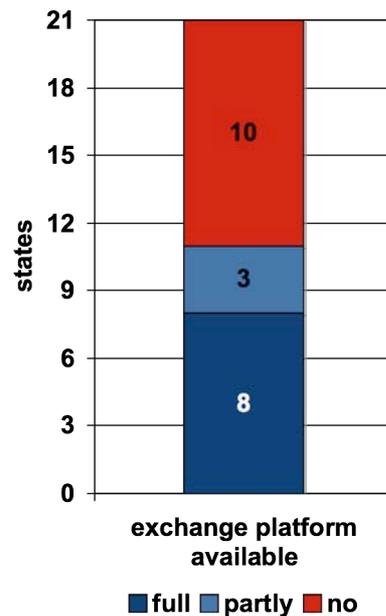
Country	URLs
Belgium	<a href="https://portal.health.fgov.be">https://portal.health.fgov.be</a>
Bulgaria	<a href="http://www.nfp-drugs.bg">www.nfp-drugs.bg</a>
Czech Republic	<a href="http://www.cekas.cz/php/certifikace.php">www.cekas.cz/php/certifikace.php</a> <a href="http://www.drogy-info.cz">www.drogy-info.cz</a>
Denmark	<a href="http://www.sst.dk">www.sst.dk</a> <a href="http://www.servicestyrelsen.dk">www.servicestyrelsen.dk</a>
Germany	<a href="http://www.awmf.org/">www.awmf.org/</a> <a href="http://www.dhs-intern.de">www.dhs-intern.de</a> <a href="http://www.deutsche-rentenversicherung-bund.de">www.deutsche-rentenversicherung-bund.de</a>
Estonia	<a href="http://www.tai.ee/">www.tai.ee/</a>
Ireland	<a href="http://www.hrb.ie">www.hrb.ie</a> <a href="http://www.publichealth.ie">www.publichealth.ie</a>

Country	URLs
Greece	www.ektepn.gr
Spain	www.drogy-info.cz
France	www.has-sante.fr
Italy	www.iss.it
Cyprus	www.ask.org.cy
Latvia	www.sva.lv
Lithuania	www.vplc.lt
Luxembourg	www.relis.lu
Hungary	<a href="http://www.eum.hu">www.eum.hu</a> www.alkohologia.fw.hu
Malta	www.sedqa.gov.mt
Netherlands	www.ggzkennisnet.nl
Austria	www.bmgfj.at
Poland	www.kbpn.gov.pl
Portugal	www.idt.pt
Romania	Not available
Slovenia	www.ivz.si
Slovakia	www.drogy.sk
Finland	<a href="http://www.kaypahoito.fi">www.kaypahoito.fi</a> <a href="http://www.huuko.fi">www.huuko.fi</a> <a href="http://neuvoa-antavat.stakes.fi">http://neuvoa-antavat.stakes.fi</a>
Sweden	http://www.socialstyrelsen.se/
UK	www.nice.org.uk www.nta.nhs.uk
Croatia	www.uredzadroge.hr
Norway	www.shdir.no/

The results show that three-quarter (76%) of the states have an authorised institution for provision of guidelines in place. As an exchange platform for best practice and knowledge transfer functions this institution for about have of the reporting states (graph 6).



Authorised institution is present in the state



Exchange platform (internet based) for guidelines, protocols is in place

Graph 6: Infrastructure for knowledge transfer

Summarising the current situation as to the „quality system“ in Member States that is involved in development, dissemination, and transfer of good practice displays the following main issues:

Quality assurance system has been developed in the majority of the Member States But up to now the main components for knowledge transfer and best practice transfer are only partly implemented in the Member States. This counts especially for:

- Evaluation and research – the former is realised sporadically and research is inadequately developed
- Reviews, evidence reports – this is (with few exceptions) not standard in the Member States; most likely it is implemented in the medical areas (substitution and detoxification)
- a systematic procedure for producing and controlling new protocols (as standard for getting best practice) – such a procedure is not implemented
- consensus process for development of guidelines – up to now there are at most expert panels in place

This means in general; the area of evidence based development of guidelines and transfer of good practice is at an initial stage

- compared to other areas of the health system
- compared to standards – that are required in the area of “evidence based” interventions
- referring to tasks of the drug action plan and
- with regard to demands in drug treatment.

The gaps are most evident in the realisation of a knowledge infrastructure concerning an exchange system for “Good Practice” and knowledge transfer.

*Target groups for knowledge transfer*

The target groups with regard to transfer and dissemination of good practice in drug treatment in Europe.

The starting point is a basic understanding of the target groups of knowledge infrastructure: These are in principle all the “decision-makers” in the area of drug related actions.

The policy orientation (in a broader sense: the “decision maker” orientation as to different areas of drug related policy and action) of “quality assurance” or “Health Technology Assessment” has several implications. Assessments are conducted in response to, or anticipation of, a need for reliable information to support a decision.

The types of decisions about which a knowledge infrastructure (quality assurance, HTA) can provide information are multiple and may be located at different levels of the health system and involve different actors (politicians, hospital managers, providers, health civil servants, social workers, nurses, psychologist, physicians, users etc.).

The information needs are in accordance with the type of decision and the level of decision-making; they also vary depending on the actors involved. All these contextual factors determine the scope of the assessment, that is, which aspects of the technology or intervention are to be assessed, as well as the methodology to be applied, not least because of the financial or time constraints that may be imposed (Busse et al. 2002).

For the purposes of HTA, the decision-maker’s need for information is known as the „policy“ question (dimensions are illustrated in table 2). Corresponding to the questions there a different target groups for assessment and knowledge transfer.

Table 2:

Contextual aspects of the “policy question” and main target groups (Busse et al. 2002)

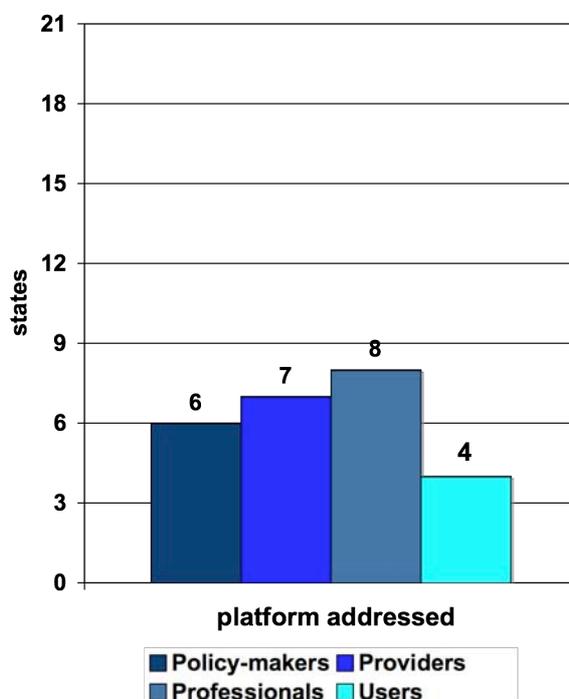
Who initiated the assessment? Who commissioned it?	Health policy-makers Providers Health care managers, administrators Third-party payers Patients’ advocate HTA institution
Who represents the primary target audience for the report?	Political decision-makers Third-party payers Hospital managers/administrators Professional groups in (drug) treatment Civil servants

Most important target groups of knowledge transfer in the field of drug related actions:

- policy makers, commissioners (depending on national specific responsibilities and organisation of drug treatment)
- providers, managers of facilities (in different areas of treatment – psychosocial and medical area) and corresponding associations
- Professionals (different professions in drug treatment: social workers, nurses, psychologists, physicians and also professional associations, study courses, training centres)
- Research institutes (public health, care research, drug research)
- Drug users

Corresponding to the availability of a national internet platform (portal) for information and download of good practice protocols for drug treatment interventions the question for the provision of specific information for different target audience is asked.

This question has been answered by the majority of states (see graph 7). Currently involved target groups in EU and candidate countries with regard to transfer of drug treatment know-how as the results of the questionnaire on quality reveals are mainly professionals and the other decision makers. The real usage of the platform by the different target groups isn't known.



Graph 7: Addressed target groups in platforms for knowledge transfer

## **6. Best practice development and exchange in other treatment areas in Member States and on European and international transfer platforms in drug treatment**

In this part a short overview concerning best practice development and exchange in Europe are presented. Complementarily the US situation is highlighted as an important example.

The task is to report on different network models of good practice development and exchange/transfer in treatment in general. In principle, all platforms have connections to drug treatment interventions though with great differences in practice.

This is an overview of ongoing developments and existing platforms as to knowledge based guidelines development and knowledge transfer/exchange of good practice. It is started with general health networks in Europe and at the WHO level. Subsequently two exemplary national platforms for best practice dissemination on substance misuse from England and the USA are introduced. Following the actual European concepts (Pompidou group and EMCDDA) for knowledge transfer in the area of drug treatment are presented.

The presented exchange platforms, HTA programmes, quality assurance systems are

- Evaluating Health – the development of Health platforms in Europe
- European network for Health Technology Assessment - EUnetHTA
- World Health Organization has launched the Health Evidence Network (HEN)
- The “National Treatment Agency” (NTA) for substance misuse in England
- Treatment Improvement Protocols“ (TIP) and „Treatment improvement exchange“ (TIE) of the Centre for Substance Abuse Treatment (CSAT) in USA
- Pompidou group and their role in knowledge transfer
- EMCDDA Online portal about best practices – concept of the EMCDDA

In the overview the following aspects/criteria are of special interest:

- Process of the production of guidelines – connection to research, evaluation, evidence reports
- Criteria for quality, selection process, consensus building
- Knowledge transfer/exchange mechanism

### *Evaluating Health – the development of Health platforms in Europe*

In Europe, the first institutions dedicated to the evaluation of health care technologies were established in the 1980s, initially at regional/local level in France and Spain.

The first national agency for Health Technology Assessment (HTA) was established in Sweden in 1987. The late 1980s and the 1990s can be described as the era of institutionalization of HTA in Europe. Since then, in almost all countries of the European Union, programmes for HTA have been established through either the

foundation of new agencies or institutes, or the establishment of HTA departments or units in universities or in other existing governmental and non-governmental bodies. (Velasco-Garrido & Busse 2005)

Several reviews of the development and institutionalization of HTA in Europe have been conducted, each with different focuses and levels of comprehensiveness (see Velasco-Garrido & Busse 2005). The result is a varied picture. The heterogeneity of HTA institutions in Europe reflects the variety of traditions and socioeconomic contexts of European health care systems. There are agencies for HTA with national mandates and those with regional ones. There are HTA institutions conceived to support decisions only at the level of investment in equipment for hospitals and those expected to give advice about policies concerning the organization of the whole health care system. HTA might be directly committed and funded by governments (national or regional) or by non-governmental organizations spending publicly collected money. The bodies performing HTAs are mainly funded by resources from the health care system or from the national research and development budget.

Since the beginning of HTA activities, efforts have been made at international level to share experiences. The first meeting of the International Society for Technology Assessment in Health Care (ISTAHC, today called HTAi: [www.htai.org](http://www.htai.org)) in 1985 marks the beginning of international networking in the field of HTA.

At European level three projects have been conducted which have contributed to the development of cooperation in HTA and to the establishment of a culture of evidence-based decision-making in European Member States. These projects were all funded by the European Commission.

The results of the EUR-ASSESS project was the first step towards standardization of methods for priority-setting concerning the technologies to be evaluated, and standardization of the methods for undertaking HTAs. Furthermore, the project highlighted methods to disseminate findings from HTA research.

The EUR-ASSESS network was prolonged to provide an overview of the implementation of HTA in the European Union, as well as an inventory of the institutions involved in HTA and results of their work. In the third project the European Collaboration for Health Technology Assessment (ECHTA) explored the possibilities of institutionalizing HTA at European level and sharing efforts in ongoing assessments. The formulation of best practice guidelines for undertaking and reporting HTAs (Busse et al. 2002) is one of the most important outputs of this project.

As a result, HTA has been recognized by the EU's health ministers to be an area of importance for EU-wide cooperation (see EUnetHTA below).

Networking in the field of HTA, however, is not limited to Europe. The International Network of Agencies for Health Technology Assessment (INAHTA), which was established in 1993, currently comprises 42 HTA organizations from 21 countries ([www.inahta.org](http://www.inahta.org)), and provides access to a database of HTA reports and ongoing

assessments which dates back to 1988. Furthermore, INAHTA has facilitated joint assessments, including one on PSA-screening for prostate cancer, in which several HTA agencies have shared the work on the assessment of a technology.

INAHTA's mission is to provide a forum for the identification and pursuit of interests common to health technology assessment agencies. The Network aims to:

- Accelerate exchange and collaboration among agencies
- Promote information sharing and comparison
- Prevent unnecessary duplication of activities.

INAHTA's key communication form and platform for dissemination activities is the Internet. The INAHTA website and Members-only section include information about on-going activities.

#### *European network for Health Technology Assessment - EUnetHTA<sup>51</sup>*

As a consequence of the above reported development in 2004 the European Commission and Council of Ministers targeted Health Technology Assessment (HTA) as “a political priority”, recognising “...an urgent need for establishing a sustainable European network on HTA”. A Commission call was answered in 2005 by a group of 35 organisations throughout Europe, led by the Danish Centre for Evaluation and HTA (DACEHTA) in Copenhagen.

European network for Health Technology Assessment, EUnetHTA, coordinates the efforts of 27 European countries including 24 Member States of the European Union in evaluating health technology in Europe.

The general strategic objective of the Network: to connect public national/regional HTA agencies, research institutions and health ministries, enabling an effective exchange of information and support to policy decisions by the Member States.

During the first 3 years of existence (2006-2008) EUnetHTA aims at developing an organisational framework for a sustainable European network for HTA along with practical tools to fill into this framework to ensure timely and effective production, dissemination and transfer of HTA results.

Initially, the EUnetHTA project is being co-financed by the European Commission (DG Sanco) and contributions from network members.

Specific objectives of EUnetHTA are

- To establish the organisational and structural framework for the Network with a supporting secretariat
- To develop and implement generic tools for adapting assessments made for one country to new contexts
- To develop and implement effective tools to transfer HTA results into applicable health policy advice in the Member States and EU – including systems for

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<sup>51</sup> The European network for health Technology Assessment – <http://www.eunethta.net/>

identification and prioritisation of topics for HTAs and assessment of impact of HTA advice

- To effectively disseminate and handle HTA results, information sharing and coordination of HTA activities through the development and implementation of elaborate communication strategies and clearinghouse activities
- Effective monitoring of emerging health technologies to identify those that will have greatest impact on health systems and patients. (<http://www.eunetha.net/>)
- To establish a support system to countries without institutionalised HTA activity

EuNetHTA as a relevant Network is also concerned with the assessment of evidence in the area of drug related action.

#### *World Health Organization – the Health Evidence Network (HEN)<sup>52</sup>*

The Regional Office for Europe of the World Health Organization has launched the Health Evidence Network (HEN), an Internet-based resource, whose aim is to provide evidence-based answers for questions posed by decision-makers ([www.euro.who.int/HEN](http://www.euro.who.int/HEN)).

The HEN provides concise and standardized reports on available evidence on topics currently under discussion in the countries of the European region, such as reduction of hospital beds or the implementation of disease management programmes.

HEN is an information service primarily for public health and health care policy-makers in the European Region.

The rationale of HEN is the growing need for timely and relevant information for decision-making. HEN makes it easier for policy-makers and other interested parties to get rapid access to much of this information in one place.

Services of HEN are the provision of summarized information from a wide range of existing sources: web sites, databases, documents, national and international organizations and institutions.

HEN also replies to specific questions that public health and health care policy-makers may have. The methodological proceeding of HEN after receiving a request are, to mobilize a team of specialists, including members of HEN, who search for existing evidence in the area and use it to develop a synthesis report. When the evidence is contradictory, the report outlines the context and level of the debate. Each report goes through three reviews:

- an initial review by the HEN team;
- an internal and external peer review; and
- quality control by the HEN team.

A steering committee advises HEN on its aims, objectives, strategies and approaches.

As regards evidence, the WHO/Europe has, with the advice and help from the high-level European Advisory Committee on Health Research, WHO/Europe, adopted a

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<sup>52</sup> World Health Organization – the Health Evidence Network (HEN) – <http://www.euro.who.int/HEN>

broad definition of evidence that includes research findings and context-related information from other types of knowledge. Evidence is defined as "findings from research and other knowledge that may serve as a useful basis for decision-making in public health and health care". (European Advisory Committee on Health Research, 2003)

Working together, HEN and the European Observatory on Health Systems and Policies have launched a new series of joint policy briefs to address questions related to health system policy in Europe.

- The objective is to produce high-quality, accessible material that is of immediate interest to national policy- and decision-makers seeking key messages based on solid foundations, that can be used by researchers and experts as brief but authoritative reviews.
- In addition to a rigorous peer review process – comprising two external reviews and one internal review – a knowledge-transfer review will be an integral element in the new series. The aim is to ensure that each brief highlights the link between research/evidence and health policy.
- Joint policy briefs will be generated in consultation with Member States stakeholders and reviewed by an international advisory board, as well as the editorial team.

In principle, the HEN platform is open for questions and evidence assessment for drug related actions, especially drug treatment interventions and policy actions. But up to now this platform contains no drug related reports.

#### *The “National Treatment Agency” (NTA) for substance misuse in England*

The National Treatment Agency (NTA)<sup>53</sup> is a special health authority, created by the Government in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England. In other words, to ensure that there is more treatment, better treatment and fairer treatment available to all those who need it. This organisation has been established to oversee the development of drug treatment services at a national level. Parallel structures have been established with the Scottish Executive and the Welsh and Northern Ireland Assemblies.

The NTA (with its own words):

- Exists to serve the needs of drug treatment service users, their unpaid carers and the communities in which they live
- Will seek to work in partnership with service providers, commissioners of treatment services and communities to improve the quality and effectiveness of treatment
- Will be open, accessible and responsive to the needs of all the diverse communities living in England
- Will be independent, rigorous and fair

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<sup>53</sup> National Treatment Agency (NTA) – <http://www.nta.nhs.uk/>

- Will operate according to the best available evidence
- Will apply expectations of continuous improvement to their own operations
- Will communicate in a clear and timely way with stakeholders.

In order to improve treatment for drug misuse in England, the NTA concentrates on:

- Ensuring that tax payers' money is spent on expanding and running effective, well-managed and appropriate treatment. That means improving of knowledge of each area's need for drug treatment and how to plan and pay for services that meet that need.
- Promoting best practice in drug treatment. That means giving drug workers information and guidance on what approaches to treatment are most effective.
- Improving the performance and availability of drug treatment workers. That means developing training, career development and recruitment opportunities for existing and potential employees.
- Improving the commissioning of drug treatment services. The aim is to ensure that the National Pooled Treatment Budget is spent to best effect, on treatment that really works and that meets the needs of local people.

#### Promoting best practice in drug treatment

Treatment should be based on evidence. Therefore the institution summarises existing research, carries out their own studies and tests new approaches to treatment in order to identify what works, and then publishes the findings and recommendations. In order to ensure equally high standards of treatment across the country, the NTA has developed a set of basic national standards that all drug treatment services should meet. Models of Care for the Treatment of Adult Drug Misusers set out a national framework for the commissioning of adult substance misuse treatment.

For improving the performance of treatment services and staff the NTA is working with key organisations and colleges to improve training for new and existing staff.

NTA works in a network with other parts of the health service, including public health and social services, as well as criminal justice agencies including the probation and prison services. Additionally NTA works in partnership with those organisations that also strive to tackle the harms associated with addiction.

The important national and regional partners for NTA to develop standards and disseminate good practice are:

- Home Office: The Drug Strategy Directorate within the Home Office is responsible for the Government's drugs strategy. Close cooperation exists with other departments within the Home Office, including the key criminal justice agencies - probation, police, prison services and youth justice board, to develop policies and approaches to improving treatment, particularly for offenders.
- Healthcare Commission: NTA is working with the Healthcare Commission to develop standards and inspection procedures for drug treatment services

- Royal colleges and training organisations: Cooperation exists with the royal colleges of GPs and psychiatrists, and the British Psychological Society to increase the level of training on drug misuse available in their courses.
- Academic institutions and researchers: NTA works with universities and researchers to identify best practice in drug treatment. In some instances, this involves paying researchers to carry out work on their behalf.
- Government office drug teams: Based in the nine government offices for the regions, these teams are responsible for implementing the national drugs strategy at regional level.
- Drug action teams (DATs): The local consortia responsible for planning and commissioning activities to tackle drug misuse, including drug treatment.
- Drug treatment providers: Drug treatment is provided by NHS organisations (e.g. at hospitals, special clinics and at GP surgeries) and by voluntary organisations and charities. NTA regional managers work closely with the staff of these services in order to improve treatment and share knowledge of what works.
- Service user and carer groups: Drug treatment service users and their carers have developed their own support networks in many areas, and are also represented on many DAT discussion groups. NTA regional managers encourage this involvement, and actively support and consult these groups.

The National Treatment Agency for Substance Misuse (NTA) on behalf of the Department of Health and devolved administrations published an updated version of Drug Misuse and Dependence – UK Guidelines on Clinical Management (28/9/07). The new Clinical Guidelines build on the previous evidence-based and well-established Clinical Guidelines but reflect some of the considerable changes that have occurred in drug treatment over the past eight years. The latest Clinical Guidelines also reflect the recent suite of guidance from the National Institute for Health and Clinical Excellence (NICE).

#### Examples – NTA

We are looking for „Clinical Guidance“ for „Prescribing“ as an example:

Under the website of the NTA – “work areas” – the link to „Clinical Guidance“ is available: [http://www.nta.nhs.uk/areas/clinical\\_guidance/default.aspx](http://www.nta.nhs.uk/areas/clinical_guidance/default.aspx)

This site offers „pharmaceutical guidance“ and „prescribing“ with downloads for

- „Best practice guidance for commissioners and providers of pharmaceutical services for drug users“ and
- „Prescribing services for drug misuse“ containing the key findings and recommendations of the NTA’s expert prescribing group on: „The evidence base for the pharmacological treatment of drug misuse, recommended guiding principles of an effective prescribing regime and recommended components of an effective prescribing service“.

Additionally in this area further links to clinical guidelines and evidence report are available. Especially the link to the „National Institute for Health and Clinical Excellence (NICE)“. From this centre „technology appraisals“ have been produced on:

- “Methadone and buprenorphine for managing opioid dependence”
- “Naltrexone for the management of opioid dependence”.

So for the issue of „substitution treatment“ all levels of knowledge for areas of planning, guidance, and guidelines are available. Also corresponding link to research and evidence reports are presented.

The NTA-platform for drug treatment shows an exemplary answer to basic questions of “information dissemination on treatment know how (scientific evidence) and on good practice”:

- Delivery of guidance, standards, guidelines for all areas of drug treatment and settings of interventions
- Preparation of material for different levels of the decision process on treatment planning and carrying out
- The systematic link to different areas of research: monitoring, epidemiology, evaluation, evidence reports, systematic reviews.

*„Treatment Improvement Protocols“ (TIP) and „Treatment improvement exchange“ (TIE) of the Centre for Substance Abuse Treatment (CSAT) in USA*

The programmes named in the heading are carried out by the Centre for Substance Abuse Treatment (CSAT)<sup>54</sup>. CSAT is a department in the Substance Abuse and Mental Health Services Administration (SAMHSA) as the leading Federal agency addressing substance abuse and mental health services in the United States. SAMHSA was established as a services agency in 1992. Its resources and programmes are designed to promote service capacity expansion and service and infrastructure improvements to address these prevention and treatment gaps.

One main goal is the improvement of service quality by improving outcomes in programmes, as measured by SAMHSA National Outcome Measures (NOMs); and by contributing to the documentation of effective practices through the *National Registry for Effective Programmes and Practices* (see below).

The Effectiveness goal is also supported by *Best Practices Planning and Implementation programmes* and *Science to Services programmes*. Success in Science to Services requires adequate documentation and dissemination of potential service improvements to the field, and transfer of information about practices needing further study to services researchers.

For the question of “Best Practice Development and Exchange” the following linked processes are of particular importance.

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<sup>54</sup> Centre for Substance Abuse Treatment (CSAT) – <http://csat.samhsa.gov/>

### “Treatment improvement protocol” (TIP) and the TIP development process

The Treatment Improvement Protocols (TIPs) are best practice guidelines for the treatment of substance abuse. CSAT's Office of Evaluation, Scientific Analysis, and Synthesis draw on the experience and knowledge of clinical, research and administrative experts to produce the TIPs, which are distributed to facilities and individuals across the country.

The TIPs Development Process includes an Editorial Advisory Board. This is a distinguished group of substance abuse experts and professionals in such related fields as primary care, mental health, and social services, and the State Alcohol and Other Drug Abuse Directors generate topics for the TIPs based on the field's current needs for information and guidance.

After selecting a topic, CSAT invites staff from pertinent Federal agencies and national organizations to a Resource Panel that recommends specific areas of focus as well as resources that should be considered in developing the content for the TIP. Soon after that a consensus panel is held: non-Federal experts who are familiar with the topic and are nominated by their peers participate in panel discussions over five days. The information and recommendations on which they reach consensus form the foundation of the TIP. The members of each Consensus Panel represent substance abuse treatment programs, hospitals, community health centres, counselling programmes, criminal justice and child welfare agencies, and private practitioners. A panel chair ensures that the guidelines mirror the results of the group's collaboration.

As an example the link to “Treatment improvement Protocols” ([www.tie.samhsa.gov/Externals/tips.html](http://www.tie.samhsa.gov/Externals/tips.html)) is presented under the heading of „Treatment Improvement Exchange“ (TIE) (see next part). Up to now (December 2007) 45 TIPs are presented for different areas of drug treatment interventions. Newer TIP are revisions of older ones and replaces them against the background of new evidence. Exemplarily the last five protocols are listed:

- TIP 45: Detoxification and Substance Abuse Treatment – This TIP provides clinicians with the latest information on detoxification: the physiology of withdrawal, pharmacologic advances in the management of withdrawal, patient placement procedures and managing detoxification services within comprehensive systems of care.
- TIP 44: Substance Abuse Treatment for Adults in the Criminal Justice System – This TIP presents clinical guidelines to help substance abuse treatment counsellors address issues that arise from their clients' status in the criminal justice system. In addition, it will aid personnel in the criminal justice system in understanding and addressing the challenges of working with offenders with substance use disorders.
- TIP 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs – this TIP provides treatment providers, physicians and other medical personnel with the latest information on medication-assisted treatment for people addicted to opiates, largely prescription narcotics or heroin. The TIP emphasizes the

importance of supportive services such as counselling, mental health and other medical services, and vocational rehabilitation in facilitating recovery for patients receiving medication-assisted treatment.

- TIP 42: Substance Abuse Treatment for Persons With Co-Occurring Disorders – the TIP provides information about new developments in the rapidly growing field of co-occurring substance use and mental disorders and captures the state of the art in the treatment of people with co-occurring disorders.
- TIP 41: Substance Abuse Treatment: Group Therapy – this TIP contains detailed information about group therapy modalities.

In practice the TIPs are combinations of what in Europe is on the one hand known as “quality standards<sup>55</sup>” for the implementation of a drug treatment service and “guidelines<sup>56</sup>” for assisting decisions of professionals in the treatment process.

They are living documents on “good practice” that are periodically revised in a consensus process based on new knowledge and experience.

#### Organising Treatment exchange

The Treatment Improvement Exchange (TIE) is a resource sponsored by the Division of State and Community Assistance of the Centre for Substance Abuse Treatment to provide information exchange between CSAT staff and State and local alcohol and substance abuse agencies.

#### Register of “Evidence based Programmes and Practice”

The National Registry of Evidence-based Programmes and Practices (NREPP) is a searchable online registry of mental health and substance abuse interventions that have been reviewed and rated by independent reviewers. The purpose of this registry is to assist the public in identifying approaches to preventing and treating mental and/or substance use disorders that have been scientifically tested and that can be readily disseminated to the field. NREPP is one way that SAMHSA is working to improve access to information on tested interventions and thereby reduce the lag time between the creation of scientific knowledge and its practical application in the field.

NREPP is a voluntary, self-nominating system in which intervention developers elect to participate.

As the “Best Practice Portal” is also a task of the EMCDDA the provided information and the review process are a matter of interest. NREPP publishes a report called an intervention summary on this Web site for every intervention it reviews. Each intervention summary includes:

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<sup>55</sup> Quality standards as generally accepted principles or set of rules for the best/most appropriate way to implement an interventions. Frequently they refer to structural (formal) aspects of quality assurance such as environment and staff composition. However they may also refer to process aspects such as adequacy of content, process of the intervention or evaluation processes.

<sup>56</sup> Guidelines are systematically developed statements to assist practitioners and patient decisions about appropriate interventions for specific circumstances.

- Descriptive information about the intervention and its targeted outcomes
- Quality of Research and Readiness for Dissemination ratings
- A list of studies and materials submitted for review
- Contact information for the intervention developer

Before an intervention will be considered for review, documentation must be provided that shows it meets the following minimum requirements:

1. The intervention demonstrates one or more positive outcomes ( $p \leq .05$ ) in mental health and/or substance use behaviour among individuals, communities, or populations.
2. Intervention results have been published in a peer-reviewed publication or documented in a comprehensive evaluation report.
3. Documentation (e.g. manuals, process guides, tools, training materials) of the intervention and its proper implementation is available to the public to facilitate dissemination.

An intervention's reported results are evaluated independently by different reviewers according to the Criteria for Rating Quality of Research using a defined number of criteria.

An important target of SAMHSA National Registry for Evidence-Based Programs and Practices is to increase the number of candidate programmes applying by 12 (6 each year) from a 2005 baseline of 18.

In addition to these processes the CSAT is linked to a “Co-Occurring Centre for Excellence” and Technical Assistance Publications (TAPs). TAPs are publications, manuals, and guides developed by CSAT to offer practical responses to emerging issues and concerns in the field of substance abuse treatment.

As an example policy makers, providers or professionals can find under the link (<http://www.nrepp.samhsa.gov/find.asp>) the intervention for „substance abuse treatment“, for „adults“ in an urban setting an evaluated intervention. In this case for example: „Brief Marijuana Dependence Counselling“, (May 2007) with the „Outcomes: 1. Marijuana use, 2. Marijuana-related problems, 3. Complete marijuana abstinence, 4. Marijuana dependence and abuse symptoms“. The abstract gives a short description: „Brief Marijuana Dependence Counselling (BMDC) is a 12-week intervention designed to treat adults with a diagnosis of cannabis dependence. Using a client-centered approach, BMDC targets a reduction in the frequency of marijuana use, thereby reducing marijuana-related problems and symptoms. BMDC is based on the research protocol used by counselors in the Center for Substance Abuse Treatment's Marijuana Treatment Project conducted in the late 1990s.“ A treatment manual provides guidelines for counsellors can be downloaded directly.

Additionally the CSAT platform delivers assistance to other decisions as to “Peer-to-Peer” support or an “locator” for services:

- “Recovery Community Services Program” (RCSP); Peer-to-peer recovery support services help people initiate and sustain recovery from alcohol and drug use

disorders. Some RCSP grant projects also offer support to family members of people needing, seeking, or in recovery.

- “Substance Abuse Treatment Facility Locator” – This searchable directory of drug and alcohol treatment programs shows the location of facilities around the country that treat alcoholism, alcohol abuse and drug abuse problems. The Locator includes more than 11,000 addiction treatment programs, including residential treatment centres, outpatient treatment programs, and hospital inpatient programs for drug addiction and alcoholism. Listings include treatment programs for marijuana, cocaine, and heroin addiction, as well as drug and alcohol treatment programs for adolescents, and adults.

All in all the different platforms under the head of the “Centre for Substance Abuse Treatment” (CSAT) and their systematic links to different areas of research, preparation, dissemination and implementation of “good practice” deliver essential hints for improvement in the Member States and at European level.

#### *Pompidou Group and their role in knowledge transfer*

The Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs (Pompidou Group) is an inter-governmental body formed in 1971. The cooperation between European countries was subsequently extended to include new countries and at present the Pompidou Group comprises 35 states.

As to knowledge transfer and exchange of “good practice” the core mission of the Pompidou Group is to contribute to the development of multidisciplinary, innovative, effective and evidence-based drug policies in its involved states. It seeks to link Policy, Practice and Science and focuses especially on the realities of local implementation of drug programmes.

The shifting, dynamic nature of the drug phenomenon required the Group to adapt its role in order to deal with emerging problems and changes in the drug situation.

Against an international background characterized by the presence of many European and international bodies working in the field of drugs, the Pompidou Group provides a multidisciplinary forum at the wider European level where it is possible for policy-makers, professionals and researchers to discuss and exchange information and ideas on the whole range of drug misuse and trafficking problems. In order to carry out this mission, it adopts a multidisciplinary, integrated approach to all drug problems and employs a variety of working methods.

Because of its links with the Council of Europe the Pompidou Group also ensures that policy recommendations are consistent with public policy as elaborated in other fields of Council work, such as public health, social cohesion and penal policy, with particular emphasis on ethical issues.

The Pompidou Group’s new mandate to link Policy, Practice and Science is at the core of the activities carried out by the Research platform which supersedes the group of

experts in epidemiology active between 1982 and 2004. There has been a change of function from developing data collection and monitoring methodologies to assessing the impact of research on policy.

The Research Platform's prime role is to better support the utilisation of research evidence in policy and practice thus facilitating the development of evidence-based policy. Moreover, it signals the latest issues that arise from drug research in the social and biomedical fields and promotes interaction between research disciplines such as these and psychological drug research.

To improve the exchange of knowledge, identified as a major gap during the Strategic Conference on linking research, policy and practice – (“Lessons learned, challenges ahead”) - the online register has been devised in collaboration with the EMCDDA and in accordance with recommendations of the EU Horizontal Drug Group.

Up to now this comprehensive approach as to knowledge and best practice dissemination and exchange is at an initial stage.

#### *Online portal about best practices – the coming concept of the EMCDDA*

Based on the initially mentioned political background of the ongoing EU Action Plan that stated the need to improve the provision of information on best practices in the Member States the task of the facilitation of exchange of such practices is mentioned in the EMCDDA regulation.

The promotion of information dissemination on science-based practices was then included in the EMCDDA 3-year work 2007-2009 programme's objectives. The Centre recognises that an important but currently under-developed area of work of the EMCDDA is to place the descriptive data in the context of identifying and sharing information on best practices.

Main objectives of the best practice portal are to provide an overview of the latest evidence on the effectiveness of different interventions. It will also present tools and standards aimed at improving the quality of interventions, as well as highlighting best practice examples from the field. It is primarily aimed at professionals, policy-makers and researchers in the drugs field.

#### *Areas covered in the portal*

*(A) Latest available evidence on the efficacy/effectiveness of interventions (summary of knowledge base on latest reviews)*

The overall objective is to provide an online overview on:

- Summary of the conclusions/main findings based on the latest reviews<sup>57</sup> (published since 2000) of universal school-based prevention programmes<sup>58</sup>.

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<sup>57</sup> These reviews aim at assessing the available evidence for the efficacy of measures for the prevention of substance use drawing on systematic reviews, unsystematic reviews, meta-analyses and individual studies (mainly randomised controlled trials).

<sup>58</sup> This is the first area we will focus on.

- Overview of applied methodology used in each of the reviews (i.e. criteria for inclusion of studies, review procedure, rating system applied to assess the strength of evidence).

Additional information is provided for the reviews:

- Reference of all studies, systematic reviews, meta-analysis and their abstracts that were taken into consideration in the presented reviews.
- Glossary (all technical terms will be defined, i.e. meta-analysis, randomised controlled trials)
- Summary of content of selected publication on how to assess the quality of systematic reviews and meta-analysis.
- Acknowledgement of limitations of the overview. I.e. the EMCDDA acknowledges that literature reviews on the effectiveness of interventions pose problems because e.g. they have not taken into account all relevant published or unpublished systematic, unsystematic reviews or meta-analyses or individual studies. In addition they are subject to reviewer bias, often biased towards English language publications as well as limited to the provision of evidence of what works under controlled research conditions rather than in real-life conditions. Another source that provides useful information on what works in the drug demand reduction field are the views of practitioners who have experience in the implementation of interventions as well as opinions of persons who are recognised as experts in particular fields of interventions.

*(b) Tools to evaluate practices*

This area will compile existing EMCDDA information on how to evaluate demand reduction activities such as PERK (Prevention Evaluation Resource Kit), EMCDDA guidelines on evaluation of treatment services, workbooks on the evaluation of psychoactive substance abuse treatment, as well as the Evaluation Instrument database (EIB) which provides tools that can be used for the evaluation of processes and outcomes. Additional material will be added to this section if regarded as relevant and scientifically sound.

*(c) Standards, guidelines for the implementation of practices*

This area will focus in a first phase on the description of existing quality standards for interventions in Member States as well as existing national guidelines for the implementation of practices (i.e. national guidelines on clinical management of substitution treatment).

*Quality standards*

Quality standards - treatment

Quality standards or minimum standards belong to the most traditional aspect of quality assurance in service delivery. They specify what agencies should attain in meeting the needs of their clientele. These standards set out criteria for the structure of various aspects of service delivery, including the agency organisation and management, patient assessment, treatment delivery (but not content), patient rights, evaluation and staff

training and development. Existing models of standards for intervention content (i.e. treatment content) beyond basic procedural aspects of operations will also be described.

#### *Guidelines*

A first step will be the collection of national drug use and dependence guidelines on clinical management from Member States. These may refer to guidelines generally concerned with the clinical management of drug misuse and dependence as well as those that focus on specific areas of interventions such as substitution treatment or target groups (i.e. guidelines on clinical management of drug dependence for GPs).

#### *(D) Data base on evaluated Drug Demand Reduction projects in MS, including best practices*

Established in 1996, EDDRA provides details on a wide range of evaluated prevention, treatment and harm reduction programmes in the EU, while promoting the exchange of professional expertise and hands-on experience. EDDRA is designed to help professionals and policy-makers plan and implement interventions in response to drugs. Currently EDDRA contains more than 600 entries.

In 2007, EDDRA is being reviewed and reclassified by the EMCDDA and its national EDDRA managers in a move to improve the system's content and layout. To better identify best practice in evaluation, projects will be structured according to a 'logic model' and classified according to type of intervention and level of quality. This reclassification takes place in the context of the EU drugs action plan (2005–2008) which calls for the 'effective dissemination of evaluated best practices' and the EMCDDA's new mission statement which prioritises the provision of such information. The new-look EDDRA will be migrated to a new technical environment allowing for an improved online presentation of its projects. It will also be integrated into the online portal

#### *Procedure for the classification of revised projects according to level of quality*

Currently all projects that undergo a revision are being classified by two independent project managers according to three basic levels of quality criteria.

Level 3 is the most important level (=model projects in EDDRA) and demands:

#### Content

A theory base that is clearly related to the objectives, the initial situation and the indicators.

#### Type of design chosen

Research design – Control group (CT/RCT Logic model plausible? Can the main elements of the programme be described in a Logical Graphical Model (i.e. flow chart)?  
Measures – the operational relevance and psychometric quality of measures used in the evaluation.

#### Dissemination - Provision of all programme material as well as evaluation tools

This platform will be in place in the year 2008 and will start the collection and transfer in the field of prevention in the first phase.

## **7. The situation of knowledge transfer of drug treatment know-how in the EU and the Member States – trends and policy options**

### *A. The current situation of dissemination of treatment know-how in the EU and Member States*

In the European countries, different mechanisms rule the identification and dissemination of treatment know-how. These mechanisms also differ with respect to the implementation of an evidence-based culture in the respective national drug treatment systems.

Regarding the implementation of guidelines and standards in the treatment system, the situation in the Member States can be described according to following basic categories.

- In the first group of states, the dissemination of guidance mainly occurs through policy makers and institutions authorised by them.

In this category, public authorities are responsible for the identification and dissemination of defined guidelines and standards for providers.

This is an important part of a developing quality system. The dissemination of know-how is mainly based on the experience of different decision-makers – such as policy makers, providers and professionals – and on expert consensus.

The guidelines are mainly limited to general structural aspects of treatment services or interventions.

This kind of development and dissemination of guidelines has only a loose connection to drug research; existing research is not regularly involved in the evaluation. There is no regular adaptation/improvement of guidelines based on evaluation, research or evidence reports.

- In the second group the development of standards and guidelines is influenced to a greater extent by professional associations.

The transferred guidelines are based on experience in combination with evaluation of treatment interventions and research. Professional associations and public authorities are responsible for the dissemination.

Dissemination is carried out through professional and scientific channels. These are e.g. publications in national scientific journals, newsletters of involved associations, manuals for interventions, workshops and congresses.

This is the traditional structure of quality assurance and a transition to evidence-based identification and dissemination of knowledge is ongoing.

- The third group represents a fully developed knowledge infrastructure as background for knowledge transfer.

Dissemination of treatment know-how is based on continuous data collection and evaluation of existing services. The process of identification, preparation and transfer of „Good practice“ is concentrated in a commissioned institution acting at national level.

This agency can be organised in very different ways. The institutionalisation of a knowledge infrastructure for optimal response is influenced by very different traditions in the individual European Member States.

Depending on the national tradition, there exist very different forms of relations to research. Research can be directly integrated (e.g. if the responsible institution emerged from public health or drug research) or the connexion is assured by relations of cooperation (institutes for quality assurance, institutes for clinical excellence, public health and drug research units).

Depending on the constituting role played by the associations of providers in drug treatment, the professional associations of different professional groups involved in drug treatment, public health or drug research units, or university hospitals involved in treatment and research, the “national agencies” are either directly attached to the health ministries or operate as relatively independent networks.

The individual Member States can be assigned to one of these categories. E.g. the United Kingdom and the Netherlands belong to the group of countries with a fully developed system. The Scandinavian countries are in the process of implementing an evidence-based culture of identification and dissemination of know-how in drug treatment. As reported in the country profiles the “good practice” transfer system is only partly implemented and on an initial stage.

At European level, networks for the identification and dissemination of drug treatment know-how have been firmly established.

Most of these networks, e.g. EUnetHTA, Cochrane Collaboration or WHO-HEN, focus on general health topics. The EMCDDA and the Pompidou Group are mainly involved in the issue of drug treatment or general response to the drug problem and the corresponding compilation and processing of know-how. Both organisations are currently in a phase of reorganisation concerning the definition of their tasks and therefore in an initialising phase.

#### *B. Ongoing developments and trends and their limitations*

The described situation of identification and transfer of know-how in the drug field is not static. There are ongoing developments and dynamics as the results of drug action plans in the last years in the EU and the Member States, which focused on the topic of knowledge base in drug policy and drug treatment, and quality development and quality assurance.

The trends are enhanced by the results of the research policy in the Member States and the implementation of the programme of Community action in the field of public health (2003-2008).

Following ongoing developments have to be considered when planning next steps:

- At the level of the Member States, the establishment of a “culture of best practice in drug treatment” will be ongoing against the background of the above described different baseline situations.

The most important processes will consist in a greater integration of research (in particular regarding the evaluation of interventions) and a systematic appraisal of available evidence. This is the basis for the national development of guidelines for various interventions in the drug field and for appropriate systems of quality development and assurance. In some countries the development is extended to more education and training opportunities for professional groups.

This process is the responsibility of the Member States as part of different national action plans. The implementation of knowledge infrastructure is primarily a political decision, the corresponding concept and the provision of resources. This process has started but is in general at an initial stage (as shown above).

- At European level, integration and networking as consolidation of the knowledge infrastructure for health care in general and drug treatment in particular developed as a consequence of the programmes initiated by the European Commission.

They are concerned with collecting evidence, collecting best practice interventions (based on quality control mechanisms), development of guidance, guidelines based on evidence, consensus building and knowledge transfer.

Different platforms/networks (also corresponding national institutions) work to this end. This is especially the case for the above reported HTA process and the cooperation with health care research in the systematic effort to transfer evidence into practice.

The described predictable developments are a desired progress, initiated and promoted by the EU and the Member States. Following are the baseline problems and limitations for EU options and action.

- Without coordination, there will be duplications of „clinical studies“ for the evaluation of interventions; necessary studies on interventions and their outcomes as well as evidence reports will be redundant.
- The required coordinated investigation concerning the transferability to different European conditions of effective psychosocial and pharmacological interventions and the evaluation of novel interventions in the field of drug treatment will be delayed as well as the reinforcements/adaptations of interventions.
- Potential synergy effects for the improvement of drug treatment are wasted.
- (Internationally accepted) “clinical excellence” is more difficult to organise at EU level.
- The currently initiated HTA process refers first of all to the central health topics of medical care; issues concerning psychosocial interventions and, among, them drug treatment (appraisal of available evidence, formulation of consequences for “good practice” and its transfer) are not of first priority in these networks and therefore delayed.

- An evidence-based culture in the field of drug related responses is established more slowly than required.

### *C. Policy options and recommendations*

In the area of identification, preparation and transfer of drug treatment know-how, i.e. in the area of implementation of a knowledge infrastructure in Member States and the EU, the following next steps are recommended:

Support in establishing evidence-based cultures und qualifications of knowledge infrastructure in drug treatment at the level of Member States. There are different areas, where the Member States can benefit from advice and support from the EU.

Main issues are political decisions for the implementation of authorised institutions/platforms for the coordination and dissemination, as well as for quality assurance and development. A further issue is the coordination with existing research (Drug Research, Health Care, Clinical Excellence).

The general scope is the enhancement of the evidence-based culture with respect to all drug related actions and national coordination (within the existing traditions) in the Member States, as well as the corresponding evaluation and research.

A broader appreciation of knowledge infrastructure should be promoted. This should go beyond guidelines for implementation and should include guidance for education of the professionals, for study courses in addiction, for occupational training and should also be directed towards the users/clients.

At EU level, the promotion and development of existing activities and the developments within the Pompidou Group and the science-based platform of the EMCDDA are in the focus of attention.

In addition, a self-contained network is required in the field of drug treatment, prevention and policy action complementary to and in close cooperation with EUnetHTA. This has to be weighted against the principal possibility of a European Institution in the area of drug response. Presumably, there is no political intention to create a central European institution for quality improvement in drug treatment, and there are no developments in other areas of health care that could serve as models.

Therefore, the favoured model is:

A sustainable network as to “HTA” for drug treatment – within (or complementary to) the “European Network for Health Technology Assessment” EUnetHTA ([www.eunetha.eu](http://www.eunetha.eu)).

The organisational frame should be a net of national/regional official agencies, public bodies, MoHs, research institutions, international organisations (Cochrane Collaboration).

This net should have the similar urgent tasks (as the HTA Net):

- Procedures (defined and standardised elements of guidance for obtaining evidence and best practice);
- Priority areas for issues of evidence reviews, research, identification and preparation of good practice
- A work plan to realise the objectives in responsibility of national institutes of the Member States.

Additionally, a more detailed inventory of the situation in the Member States concerning the knowledge-based infrastructure in the field of drug related responses and an investigation of the research infrastructure are advised in order to be able to formulate more precise plans for the improvement of the dissemination of high-quality information and best practice in Europe and the EU in the coming years.

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## Annex

### *Questionnaire to National Focal Points: Quality Assurance, Evaluation and Good practice*

July, 20<sup>th</sup>, 2007

## **SQ27 – part: Quality Assurance, Evaluation and Good practice**

### **Questionnaire to the National Focal Point**

This questionnaire is directed to the quality assurance part of SQ27 (question 35ff) and has two main aims:

First, the questionnaire intends a revision of the quality sector of SQ27 in order to contribute to the quality assessment of the two instruments SQ27 and ST 24 initiated by the EMCDDA. For purpose of a potential revision of these two reporting tools the National Focal Points have already received in June a short questionnaire, which has restructured some questions of the ST24 and SQ27. The present questionnaire is supplemented to the first one and focuses on the quality part of SQ27.

The second aim of this questionnaire is to get more precise information on quality assurance, evaluation and good practices within the context of the EU drugs action plan (2005–2008). The action plan calls for the “effective dissemination of evaluated best practices” and the improved “coverage of access to and effectiveness of drug demand reduction measures”.

Against the background of this task the EMCDDA’s new mission statement has prioritised the provision of information on best practice in the EU Member States and the exchange of such practice between them.

Data on quality assurance and standards will become part of best practice internet portal of the EMCDDA which is currently being developed. This portal will specifically include a module on standards and guidelines developed by MS for the implementation of practices. In this context some of the information collected on quality assurance via SQ27 is an important contribution to the overview on the use of quality assurance tools and evaluation practices implemented in MS.

We kindly ask you to fill in the questionnaire before the end of August. Mainly this should be possible by using the last data (SQ 27 in 2005) reported to the EMCDDA. Below each part of the questionnaire you can give your comments and assess if the questions are adequate and could be answered properly. We plan to present an overview on the results on the next Reitox Academy on best practices.

Thank you very much for your cooperation and support.

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## A: Quality Assurance

### 1). Are there national quality guidelines for the implementation of drug treatment available?

Please answer this question differentiated for the main areas of drug treatment.

Structured drug-specific treatment is classified into the following approaches:

#### *Structured psychosocial interventions*

1. **Outpatient** services refer to facilities which deliver **psychosocial interventions** such as structured counselling, motivational enhancement, brief interventions, case management, care-coordination, psychotherapy, day care, relapse prevention, and after care.

2. **Inpatient** services cover all **psychosocial interventions** where clients spend the night in a facility such as residential treatment units or rehabilitation centres.

#### *Medically-assisted treatment*

3. **Maintenance treatment** covers substitution treatment and other pharmacotherapy which is delivered in specialised outpatient facilities or in medical practices (including GP's).

4. **Detoxification** (inpatient, outpatient)

"**Quality guidelines**" on this stage are defined in the broadest way: from initial guidelines as general recommendations for quality of services up to mandatory guidelines in the framework of authorisation of services.

#### *Guidelines are available*

	Yes	No	Un-known
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***If you always answered "NO", please continue with section B.***

## 2). By whom are guidelines issued?

*Guidelines are issued by*

	Public author- ities	Professi onal asso- ciations	Researc h institute s	Others
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If others, please name institution

Please notice the most relevant URL's for guidelines:

\_\_\_\_\_

\_\_\_\_\_

## 3). Is the commitment to defined quality guidelines mandatory for obtaining an authorisation for operating a treatment service?

"Mandatory for authorisation" means, that without a formal certification it is not possible to operate a treatment service.

*Guidelines are mandatory for authorisation*

	Yes	No	Un- known
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 4). Are guidelines a precondition for funding?

"Precondition for funding" means that services are not financed without proven compliance to guidelines.

Guidelines are precondition for funding

		Always	Sporadically	No precondition	Unknown
Outpatient psychosocial interventions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5). Do guidelines include the following aspects?**

The related questions (a to d) are directed to the main **structural** and **process** aspects of quality assurance.

**a) Structural aspects 1 (physical environment)**

“Physical environment” covers e.g. size, sanity/hygienic installations, accessibility, safety.

*Structural aspects/criteria of physical environment are included in guidelines*

	Yes, mostly	Yes, partly	No	Unknown
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**b) Structural aspects 2 (staff components)**

“Staff components” cover e.g. staff/client ratio, professional background/qualification of staff.

*Structural aspects/criteria of staff components are included in guidelines*

	Yes, mostly	Yes, partly	No	Unknown
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**c) Processes 1 (treatment)**

“Treatment processes” refer to e.g. guidance for binding levels of assessment, individual treatment planning, informed consent, pathways of care, referrals.

*Process aspects/criteria of treatment are included in guidelines*

	<b>Yes, mostly</b>	<b>Yes, partly</b>	<b>No</b>	<b>Unknown</b>
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**d) Processes 2 (evaluation)**

Here processes refer to e.g. binding documentation (entry/discharge), retention, supervision, evaluation of client satisfaction, staff satisfaction, outcome.

*Process aspects/criteria of treatment are included*

	<b>Yes, mostly</b>	<b>Yes, partly</b>	<b>No</b>	<b>Unknown</b>
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**6). What is the basis for the development of the existing guidelines?**

*Expert consensus* means that the development of guidelines (mainly) based on consensus building processes between professionals.

*Evidence based* means that guidelines are developed according to scientific evaluation.

*Guidelines for treatment are based on*

	<b>Expert consensus</b>	<b>Expert consensus + Evidence based</b>	<b>None of this</b>	<b>Unknown</b>
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If others, please name source:

Your assessment: Is this the right question and can it be answered properly?

**B: Monitoring and Evaluation**

**1). Are drug treatment entries registered?**

“Register” refers to the documentation of treatment entries either of individual clients (no double-counting) or of treatment cases (could include double counting).

*Entries (or running care) are registered*

	Yes, by individu al clients	Yes, by treatme nt cases	No	Unknow n
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2). Is the situation of clients monitored at entry and at finishing drug treatment?**

“Monitoring” is based on data resulting from the documentation of core information of the clients’ situation at entering and quitting of drug treatment.

*Monitoring systems are implemented*

	Yes, mostly	Yes, partly	No	Unknow n
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3). Is the drug treatment outcome evaluated?**

“Evaluation” is a systematic internal and/or external investigation of treatment episodes with respect to outcome/effects (e.g. in the frame of quality assurance, improvement of services).

“Regular” evaluation means that all treatment services are evaluated in regular intervals;

“sporadic” refers to an evaluation of single services only and/or in irregular intervals.

*Outcome of interventions is evaluated*

	Yes, regularly	Yes, sporadically	No	Unknown
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4). Does your country promote a national research programme for evaluation and improvement of drug treatment interventions?**

- Yes  
 No  
 No information

If yes, please specify the amount per year (round about in thousand Euro)

\_\_\_\_\_ €

If yes, please name link (URL) to programme and results:

\_\_\_\_\_

Your assessment: Is this the right question and can it be answered properly?

**C: Preparing, Delivering and Training of “Good Practice”**

**1). Is there an authorised institution in your country which is responsible for developing guidelines for good practice in drug treatment on a basis of scientific evidence?**

- Yes  
 No

No information

If yes, please notice the URL's:

\_\_\_\_\_

**2). Is a national internet platform (portal) available for information and download of good practice protocols and/or guidelines for drug treatment interventions?**

*Protocols/guidelines are available for*

	Yes	No	Un- known
Outpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient psychosocial interventions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substitution / maintenance treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detoxification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If yes, please notice the URL's:

\_\_\_\_\_

*If yes, does the platform provide specific information **directed** to the following target audience*

	Yes	No	Un- known
Drug Treatment Commissioners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providers of drug treatment services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professionals (staff in drug treatment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substance users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*If yes, is the platform **used** by*

	Yes, regularl y	Yes, casually	No	Unknow n
Drug Treatment Commissioners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providers of drug treatment services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professionals (staff in drug treatment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substance users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3). Is there a platform (portal) available providing occupational standards (knowledge, understanding, skills) for the following professions working in drug treatment?**

*Occupational standards for drug treatment are available for*

	Yes	No	Un- known
Social Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If yes, please notice the URL's:

\_\_\_\_\_

**4). Are there postgraduated study courses implemented for drug treatment?**

*Postgraduate study is implemented for*

	Yes	No	Un- known
Social Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5). How many percent of the staff working in treatment services has received such a postgraduate course (estimated)?**

*Postgraduate courses have*

	>25%	10 to 25%	<10%	Unknow n
Social Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**6). Are there specific training opportunities in the field of drug treatment for the different professions?**

*Further training opportunities are available for*

	<b>Yes</b>	<b>No</b>	<b>Un- known</b>
Social Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7). Is there a national system for continued education and training in drug treatment available for the different professions?**

*A national system is available for*

	<b>Yes</b>	<b>No</b>	<b>Un- known</b>
Social Workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Your assessment: Is this the right question and can it be answered properly?

Thank you very much for your cooperation!