Impact of information on patients’ choice within the context of the Directive 2011/24/EU of the European Parliament and of the Council on the application of patients’ rights in cross-border healthcare

*Final Report*

August 2014
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Executive summary

The Executive Agency for Consumers, Health and Food (CHAFEA), acting on behalf of the European Commission (DG SANCO) commissioned Ipsos and London Economics to undertake a study into the impact of information on patients’ choice in the context of Directive 2011/24/EU of the European Parliament and the Council on the application of patients’ rights in cross-border healthcare.

The study is divided into two phases: Phase I is based on a controlled online experiment and survey undertaken in eight Member States which investigated the impact of information on respondents’ choice to seek healthcare cross-border in the EU. Phase I also included a survey of payers. In Phase II a shortened version of the Phase I experiment was implemented along with a survey that asked respondents questions about their experience on the National Contact Point websites.

The eight Member states in which Phase I was conducted were¹:

- The Czech Republic
- Estonia
- Denmark
- Germany
- Italy
- Poland
- Spain
- Sweden

In Phase 2 the following National Contact Points from eight Member States participated in the study²:

- The Czech Republic
- Estonia
- Denmark
- Germany
- Italy
- Slovenia
- Hungary
- Finland

There were four separate components to Phase I:

¹ These Member States were selected based on published research on cross-border patient flows in Europe; and, to include a geographic mix of countries and both older and newer Member States.

² These Member States were selected to include as many countries as feasible from Phase I but also accounting for that ability for National Contact Points to participate in the study.
Executive summary

- A survey of citizens and doctors
- An online experiment, run in combination with the survey of citizens and doctors
- A desk based literature review of cross-border patient mobility with a particular focus on the eight Member States considered in Phase I
- A survey of payers

The key findings from Phase I were:

- The survey of citizens and doctors, in combination with the behavioural experiment, identified the key drivers of travelling to another Member State for a medical treatment. The most important drivers identified were:
  - The cost of the treatment in the other Member State relative to the cost of the treatment domestically. Cost is found to be the strongest determinant of deciding to select a cross-border provider of healthcare in our experiment.
  - The waiting time of the treatment in the target country relative to the waiting time in the home country is the second most important driver of selecting a cross-border provider of healthcare.
  - Trust in the healthcare system in the target country and in particular the difference in trust in the target country healthcare system and the domestic healthcare system is the third most important driver of opting for a cross-border treatment.
  - The experiment found no specific evidence that the format or design of the webpage had any impact on the likelihood of selecting a cross-border provider of healthcare or a domestic provider. There was also no evidence that respondents trust information provided by domestic NCP websites more or less than information provided by foreign NCP websites.
  - Respondent understanding of the information provided on the website was generally very good with 84% correctly answering an incentivised test question on the content included on the website. However, significantly fewer respondents could answer the question correctly when the information provided was very complex.
  - The majority of payers who responded to our survey agree that Directive 2011/24/EU is successful in facilitating cooperation between healthcare payers in EU Member States and that it effectively clarifies patient rights with regard to reimbursement of cross-border healthcare.
  - However, the payers who responded also agree that the information currently provided on cross-border healthcare is too complex for patients to understand. Yet at the same time, they also believe that patients currently do not have access to all the information required to make an informed decision about whether to go to another Member State for a medical treatment.
When asked what elements are the most important to include in a National Contact Point website, the payers were unanimous in their opinion that a **section on frequently asked questions is important** followed by **information on liability insurance of health professionals** (i.e., insurance which providers have in case of medical errors).

There were two key components to Phase 2:

- A survey of the users’ experience of the National Contact Point websites; and,
- A behavioural experiment to determine which factors influence the choice to exercise the right to seek healthcare abroad.

The key findings from phase II were:

- From the survey **the most common reason for the NCP visit was to find information about healthcare in a Member State other than their home country**. 46% of visitors that completed the survey indicated this as a reason for their visit. The least common reason for visiting a NCP was to find information on quality and safety standards of care (13%).
- Just under half of the respondents (49%) thought the information they were looking for was easy to find. Visitors to the German NCP were more likely to report the information was easy to find at just over 60%. Visitors to the Slovenian NCP were least likely to report information was easy to find at around 31%. Visitors to the Italian NCP site were the second least most likely to report information was easy to find at 43%.
- Respondents who thought that information was hard to find, were then asked to provide the reason for this. 40% reported that **the information they were looking for was not provided**, and 45% reported **that there was not enough detail**. On the other hand, 21% thought there was **too much information** and 8% thought **the information was too technical**. Visitors to the Italian NCP website reported that information was hard to find because there was not enough detail (21%) and the information they were looking for was not provided (29%). This was also the case for respondents in Slovenia, where 18% reported there was not enough detail and 16% said the information they were looking for was not provided.
- Just under 60% of respondents in total reported that the **information provided on the website was helpful**. Visitors to the Slovenian and Italian sites were least likely to report that the information was helpful. Visitors to the German website were most likely to report the information was helpful.
- There was a strong relationship between how easy information was to find and useful respondents found the information.
- The main reason respondents considered the information was not helpful was that they would have liked **more detailed information on providers**, followed by **reviews from previous patients from any country**.
- From the Phase II **behavioural experiment** we observe the same outcomes as in Phase I. That is:

  - **The cost of the treatment in the cross-border Member State** relative to the cost of the treatment domestically is most important driver for choice.
Executive summary

- The waiting time of the treatment in the target country relative to the waiting time in the home country is the second most important driver of selecting a cross-border provider of healthcare.
- Trust in the cross-border country healthcare system is also important in peoples’ choice to seek healthcare abroad.

Conclusions and recommendations

The experiments in both Phase I and II demonstrated that the key drivers of exercising one’s right to be treated by a healthcare provider in another Member State are the price of the treatment, and the waiting time.

The relative level of trust the patient has in the healthcare system in the target country as compared to the home country is also of importance.

In order to allow patients to make an informed decision about where to seek medical care, it is therefore important that relevant price and waiting time information is easily and quickly accessible on the NCP website.

Trust in another healthcare system on the other hand, or in the own healthcare system for that matter, is nothing that can easily be fostered with NCP sites. Nonetheless, transparent information about healthcare providers in other Member States as well as detailed reviews of these is likely to be helpful in building patients’ trust in other European healthcare systems.

The experiments did not find any evidence that the format of the website has a large impact on the likelihood of a citizen to select a cross-border provider of healthcare over a domestic provider. However, the Phase I experiment did find that understanding was significantly better when the information was less complex.

In Phase II there was a mix between respondents who reported that the information they were looking for was not provided or that there was not enough detail; and, respondents who thought there was too much information or the information was too technical. NCP websites could consider using dynamic pages and pop up boxes. The front pages could provide high level information. This would allow visitors seeking basic information to access this easily while those seeking more detailed information could expand additional information boxes or pages to find more detailed information on relevant topics.

The payer survey in Phase I showed that payers believe the information currently provided on cross-border healthcare is too complex for patients to understand. Further, payers believe that patients currently do not have access to all the information they need to make an informed decision about whether or not to go abroad for a medical treatment.

On the other hand, the majority of payers are confident that Directive 2011/24/EU effectively clarifies patients’ rights with regard to reimbursement of cross-border healthcare and that it facilitates cooperation between healthcare payers in the EU.
In regard to the establishment of National Contact Point websites, payers believe that the inclusion of a frequently asked question section is important, as is information on liability insurance of healthcare professionals.
1 Introduction

1.1 Objective

This document reports the findings for the study “Impact of information on patients' choice within the context of the Directive 2011/24/EU of the European Parliament and of the Council on the application of patients' rights in cross-border healthcare”.

Directive 2011/24/EU on the application of patients’ rights in cross-border healthcare requires Member States to designate at least one National Contact Point (NCP) to inform patients about various aspects of cross-border healthcare. The information provided on the NCPs should facilitate patients’ decisions as to 1) seeking or not healthcare dispensed by a provider in another EU Member State; 2) choosing a healthcare provider in another EU Member State.

The study is divided into two phases: Phase I is based on a controlled online experiment and survey undertaken in eight Member States which investigated the impact of information on respondents’ choice to seek healthcare cross-border in the EU. Phase I also included a survey of payers. In Phase II a shortened version of the phase I experiment was implemented along with a survey that asked respondents questions about their experience on the national Contact Point websites.

The eight Member states in which Phase I was conducted were:

- The Czech Republic
- Estonia
- Denmark
- Germany
- Italy
- Poland
- Spain
- Sweden

In Phase II the following National Contact Points from eight Member States participated in the study:

- The Czech Republic
- Estonia
- Denmark
- Germany
- Italy
- Slovenia

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3 These Member States were selected based on published research on cross-border patient flows in Europe; and, to include a geographic mix of countries and both older and newer Member States.

4 These Member States were selected to include as many countries as feasible from Phase I but also accounting for the development stage of the National Contact Points.
The study addresses the following questions:

- To what extent does the content and format of information provided by NCPs impact on patients’ choice to exercise their rights to be treated abroad?
- How to provide information on cross-border healthcare by the NCPs to patients in clear and understandable format to improve informed patient choice?
- What sources of information are the most trustful for patients (e.g. domestic NCP, or a NCP in the Member State of treatment)?
- What information were visitors to NCP websites looking for?
- How easy or hard was it for visitors to find the information they were looking for on the websites?
- How was helpful the information provided on the National Contact Point websites was for visitors?

1.2 Phase I method

Phase I

There are four separate elements to Phase I:

- A survey of citizens and doctors
- A survey of payers
- A literature review
- A behavioural experiment

Here we outline the methodology used for each of these components.

1.3 Survey of citizens and doctors

The citizen and doctor’s survey took place in eight Member States as outlined in Table 1 below.
The respondents to the citizens’ survey were recruited to be representative of the general population in each of these Member States with the exception of geographical region within the country. Citizens in border regions were oversampled in order to increase the likelihood that cross-border patients would be present in the sample. This was done so that those that had travelled cross-border for treatment could be asked about their experiences and motivations for doing so.

Given the focus of the study, care was also taken that enough patients (citizens who have received medical care at a hospital in the last 24 months) were included in the sample as well. As can be seen in the table above, a relatively large number of respondents in each country could be classified as ‘patients’ and this fallout occurred naturally and did not have to be targeted specifically.

The detailed survey of citizens and doctors can be found in Annex 1.

### 1.4 Payer survey

In addition to the survey of citizens and doctors, a survey of payers in the same countries was conducted. All payers of healthcare in the eight Member States which could be identified through a web search were invited to take part in a short online survey. The list of payers identified through the web search was complemented by payers included in the previous study “A best practice approach to national Contact Point websites: feasibility study”, SANCO 2011.

At the time of writing twelve payers have responded to our invitation and have completed the survey out of 201 who were contacted. Table 2 below breaks this down by Member State of the payers who responded.

In a first round, payers were invited to participate in the survey via email only. However, as the response rate was low, all payers were contacted over the phone in a second round. During our telephone conversations it emerged that many payers struggled to identify the correct person within their organisation to complete this survey as it requires knowledge of Directive 2011/24/EU.

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**Table 1: Sample size and survey participants**

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<th></th>
<th>General Population</th>
<th>Among which patients were</th>
<th>Doctors</th>
</tr>
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<tbody>
<tr>
<td>Czech Republic</td>
<td>803</td>
<td>440 (55%)</td>
<td>151</td>
</tr>
<tr>
<td>Denmark</td>
<td>501</td>
<td>199 (40%)</td>
<td>149</td>
</tr>
<tr>
<td>Estonia</td>
<td>510</td>
<td>216 (42%)</td>
<td>101</td>
</tr>
<tr>
<td>Germany</td>
<td>1000</td>
<td>419 (42%)</td>
<td>153</td>
</tr>
<tr>
<td>Italy</td>
<td>1000</td>
<td>564 (56%)</td>
<td>152</td>
</tr>
<tr>
<td>Poland</td>
<td>1001</td>
<td>300 (30%)</td>
<td>150</td>
</tr>
<tr>
<td>Spain</td>
<td>1000</td>
<td>437 (44%)</td>
<td>150</td>
</tr>
<tr>
<td>Sweden</td>
<td>800</td>
<td>309 (39%)</td>
<td>150</td>
</tr>
</tbody>
</table>

Note: A respondent is classified as a “patient” if they underwent a medical treatment at a hospital in the last two years.

*Source: London Economics*
and knowledge on what information should be provided on a website. Many organisations we contacted felt that they did not have a single person who could competently respond to questions pertaining to both these elements of the study. While it was possible for more than one person to answer the survey, this additional time and resource burden acted as a barrier to participation. Further, from our telephone conversations with payers, most do not have specialists that deal with cross-border healthcare and we were often directed to the medical specialist section (e.g. dentistry) because the section had experienced some cases of cross-border healthcare. These sections and specialists however, reported they did not have the knowledge to respond to the survey.

<table>
<thead>
<tr>
<th>Member State</th>
<th>Total</th>
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<td>Czech Republic</td>
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<td>Italy</td>
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<tr>
<td>Poland</td>
<td>1</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>12</strong></td>
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</tbody>
</table>

### 1.5 Literature review

The objective of the literature review was to provide a general overview of cross-border healthcare provision, barriers and rivers to cross-border healthcare choice, and to provide parameters for the behavioural experiment. For example, waiting times, prices, types of treatment included in the experiment.

The literature review includes published academic sources, policy papers and grey literature. It was based on a web search of relevant literature and evidence.

### 1.6 Behavioural experiment

The method used in this study is an online controlled economic experiment. Controlled experiments are simplified representations of the real world. It is necessary to simplify the real world so that the impact of the treatments on peoples’ choices can be isolated within the experiment environment.

#### 1.6.1 Experiment design

Participants were informed that they were taking part in an online experiment with the aim of understanding whether patients would be willing to travel abroad for medical treatments. For the duration of the experiment, respondents were asked to imagine that they required one of the following three clinical procedures (randomly allocated with each condition being equally likely and independent of any medical condition the respondent may have him or herself):
- Outpatient care: root canal dental treatment
- Inpatient care (non-vital): hip replacement
- Inpatient care (vital): heart bypass surgery

Participants were informed that they would see web pages which contain information which would make it easier for them to decide where to go for treatment. After having read these web pages, they were asked questions to test their understanding of the information contained in these pages. Answering these questions correctly was incentivised. Paying attention to the information provided was therefore rewarded.

Respondents were free to browse the two websites in a natural fashion. They could ‘click through’ the various web pages, leading them through the information in the domestic NCP website and to the cross-border NCP website. It was up to respondents to decide on which links to click and how long to spend on each of the web pages. In addition, the amount of time each respondent spent on each webpage was recorded.

Besides studying the importance of various socio-demographic and behavioural variables in the decisions to select a cross-border healthcare provider, the experiment also implemented five different framing/design treatments:

- A baseline treatment: the results of the other treatments were evaluated relative to the baseline.
- A language treatment: the language of the cross-border NCP was in the language of the target country (as opposed to the domestic/home country language of the respondent).
- An information complexity treatment: the information on medical conditions was more complex than in the baseline treatment.
- A source of information treatment: information about healthcare providers in the target country was provided on the domestic NCP page.
- A design treatment: the information about cross-border healthcare was worded more positively and encouragingly.

1.6.2 The mock up web pages used in the experiment

The extent of information that could be included in the web pages shown during the experiment was limited to a minimum. We included the following information in domestic and cross-border NCPs. This is the necessary information contained in the terms of reference for this study.

<table>
<thead>
<tr>
<th>Table 3: Information to be included in the experiment web pages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic NCP</strong></td>
</tr>
<tr>
<td>About page</td>
</tr>
<tr>
<td>Information on reimbursement and basket of benefits</td>
</tr>
<tr>
<td>Information on appeals procedures</td>
</tr>
<tr>
<td><strong>Cross-border NCP</strong></td>
</tr>
<tr>
<td>About page</td>
</tr>
<tr>
<td>Information on safety and quality standards</td>
</tr>
<tr>
<td>Information on providers</td>
</tr>
</tbody>
</table>
For each of these categories we developed text, based on the information we found on existing health-related websites. The text represents a combination of what we found on individual country websites targeted at patients and consumers as well as feedback from the expert panel members for this study.

It is important to bear in mind that the information presented in the experiment was a stark simplification of what will be available on the actual NCP websites. This is due to the fact that time was limited in the experiment and we needed to have clear control over what was shown to respondents.

The information shown here represents the baseline information. The format of these websites was based on the suggested pages from the SANCO 2011 study “A best practice approach to National Contact Point websites: feasibility study”.

---


6 The expert group included specialists in EU legislation on patient rights and experts in public health.
Welcome to the pages of the UK National Contact Point for healthcare.

A European cross-border healthcare Directive was passed in 2011. This Directive gives you the right to access healthcare services in another EU country and to be reimbursed for it as long as the treatment is medically necessary and is also available under your home insurance.

This website aims to provide residents of the UK with information on how to obtain healthcare in other Member States of the European Union, both planned and unplanned.

We also provide information for citizens of other European Member States on how to obtain healthcare in the UK and to be reimbursed for it.

Source: information adapted from the information available on the NHS website.
**Figure 2: Domestic NCP – Reimbursement page**

**About this NCP**
- Reimbursement and basket of benefits
- Information and appeals procedures

**External links:**
- Germany's NCP website

---

You will probably have to pay the cost of the treatment upfront, but this cost will be reimbursed to you up to the cost of the equivalent treatment at home. Reimbursement can take up to a maximum of two months time.

This means if the treatment abroad is more expensive than at home, you may have to pay the additional costs. If the treatment is cheaper than it would be at home, you cannot profit from it. Prior authorisation may be required in some cases. This will confirm whether you are entitled to the treatment and the level of reimbursement you can expect. It will also ensure that you are aware of all of the possible treatment options domestically, which may be more convenient to you than going abroad.

**Entitlement**

You are entitled to all curative and rehabilitative care which is medically necessary. This applies to both inpatient care (which involves staying in a hospital) and outpatient care (which does not involve a stay in a hospital).

**Examples of treatments you are entitled to are:**

1. **Root canal treatments**
   - The health insurance will pay up to £44 for dental care procedures. However, the cost is likely to be higher than this and you can expect to pay about £100 yourself. If you choose to go abroad, you will receive a maximum reimbursement of £44.

2. **Hip replacements**
   - The health insurance covers the cost of the basic procedure (usually around £5,000).
   - However, depending on the replacement, the hospital, the room, the doctors and other options you choose, you can expect additional expenses up to £1,000.
   - If you choose to go abroad, you will receive a maximum reimbursement of £5,000.

3. **Bypass surgery**
   - The health insurance covers the cost of the basic procedure (usually around £12,750).
   - However, depending on the hospital, the room, the doctors and other options you choose, you can expect additional expenses up to £5,000.
   - If you choose to go abroad, you will receive a maximum reimbursement of £12,750

Excluded from your basket of benefits are the following:

1. **Cosmetic surgery**
2. **Sterilisation without medical indication**

---

Note: The level of reimbursement was a design choice for the purpose of this experiment, based on data that could be found, and does not necessarily reflect actual reimbursement amounts.

*Source: Information adapted from the information available on the NHS website.*
Figure 3: Domestic NCP – information on appeals procedures

Seeking healthcare abroad?

Find a complete overview of how to receive healthcare in the European Union

What if there is a problem with the reimbursement?

Please contact your local healthcare contact point. You are entitled to reimbursements as long as the condition is medically necessary and up to the amount of the cost of the treatment at home.

What if there is a problem with the treatment I receive abroad?

The local healthcare contact point in the country of treatment will have systems in place to deal with any problems. They are required to give such requests serious consideration, taking into account your circumstances.

If you do not agree with the decision reached by the local healthcare contact point, please make a written appeal to the UK cross-border healthcare appeals council.

About this NCP

Reimbursement and basket of benefits

Information and appeals procedures

External links:

Germany’s NCP website
Figure 4: Cross-border NCP’s about page

Welcome to the pages of the German National Contact Point for healthcare.

A European cross-border healthcare Directive was passed in 2011. This Directive gives you the right to access healthcare services in another EU country and to be reimbursed for it as long as the treatment is medically necessary and is also available under your home insurance.

This website aims to provide residents of Germany with information on how to obtain healthcare in other Member States of the European Union, both planned and unplanned.

We also provide information for citizens of other European Member States on how to obtain healthcare in Germany and to be reimbursed for it.

About this NCP
Quality and Safety
Providers

External links:
The United Kingdom's NCP website:
Figure 5: Cross-border NCP Quality and Safety

Healthcare in Germany

Introduction

Healthcare providers in Germany follow strict standards and guidelines, set both at the national and at the EU-level.

All providers in Germany have to comply with these standards.

What are the national standards?
The national standards cover all aspects of care, including:

- treating people with dignity and respect.
- making sure food and drink meets people's needs.
- making sure the environment is clean and safe.
- managing and staffing services.

How are these standards maintained?
Nationally accredited inspectors visit health and adult social care services across Germany to check that they are meeting the standards. They make unannounced inspections of services on a regular basis and at any time in response to concerns.

When standards aren't being met, the inspectors have the powers to:

- issue fines or warnings.
- stop admissions into a care service.
- suspend or cancel a care service's registration.

What if something goes wrong?
In the unlikely event that you are not satisfied with the quality of a treatment you receive in Germany, please contact the National Redress Scheme. They give all requests serious considerations as they strive to ever improve the quality of healthcare in Germany.
1.6.3 The treatments

The benchmark treatment above was designed based on existing websites informing patients of their rights in regard to cross-border healthcare provision and the suggestions of the feasibility study (SANCO 2011). This section details the four treatments tested by outlining how the mock-up websites were altered.

The design treatment

The setting up of a website involves many design choices, several of which may alter the consumer’s perception of their options to undergo medical treatment in another Member State. Testing all of these features clearly lay beyond the scope of this study and as a result, we tested the design choices which are a priori most likely to have a behavioural effect.
One of the most important design choices is the wording of the text, more so than the background colour, the prominence of hyperlinks or the number of links available on a website. As outlined previously, the baseline text was selected based on what is currently written on websites informing patients of their rights in regard to cross-border healthcare provision. We then altered the text on reimbursements by actively including advantages to cross-border healthcare provision.

It is noteworthy that the text we found on websites for outgoing patients rarely included any advantages. In fact, the NHS website for example explicitly states that:

“If the treatment is more expensive, you’ll have to provide the additional costs. If the treatment was cheaper than under the NHS, you will not be able to profit from it and ask for the difference in return from the NHS.”

While this statement is correct for all treatments which are wholly covered by the NHS, it gives the impression that going abroad can in no instance be profitable from the point of view of the patient.

Therefore, we altered the text of the domestic NCP website on reimbursement to that shown in Figure 7 below and to test the effect of this on patients’ choice.

---

7 http://www.nhs.uk/NHSEngland/Healthcareabroad/plannedtreatment/Pages/Compareoptions.aspx
**Language treatment**

For the language treatment, the language of the cross-border NCP was translated into a language other than the native language of the respondent. The national language of the country of destination was selected.

**Information complexity treatment**

For the information complexity treatment we included additional information on the medical treatments to which citizens are entitled. The two figures below present the webpage used in this treatment.
Figure 8: Information complexity treatment - information on reimbursement and basket of benefits (part 1)

You will probably have to pay the cost of the treatment upfront, but this cost will be reimbursed to you up to the cost of the equivalent treatment at home. Reimbursement can take up to a maximum of two months time.

This means if the treatment abroad is more expensive than at home, you may have to pay the additional costs. If the treatment is cheaper than it would be at home, you cannot profit from it.

Prior authorisation may be required in some cases. This will confirm whether you are entitled to the treatment and the level of reimbursement you can expect. It will also ensure that you are aware of all of the possible treatment options domestically, which may be more convenient to you than going abroad.

Entitlement

You are entitled to all curative and rehabilitative care which is medically necessary. This applies to both inpatient care (which involves staying in a hospital) and outpatient care (which does not involve a stay at a hospital).

Examples of treatments you are entitled to are:

1. Endodontic therapy:
   This is a sequence of treatment for the pulp of a tooth which results in the elimination of infection and protection of the decontaminated tooth from future microbial invasion. This set of procedures is commonly referred to as a 'root canal'.
   Root canals and their associated pulp chamber are the physical hollows within a tooth that are naturally inhabited by nerve tissue, blood vessels and other cellular entities. Endodontic therapy involves the removal of these structures, the subsequent shaping, cleaning, and decontamination of the hollows with tiny files and irrigating solutions, and the obliteration (filling) of the decontaminated canals with an inert filling such as gutta percha and typically sealer-based cement. Epoxy resin, which may or may not contain Bisphenol A, is employed to bind gutta percha in some root canal procedures.

   The health insurance will pay up to €44 for dental care procedures. However, the cost is likely to be higher than this and you can expect to pay about €100 yourself.

   If you choose to go abroad, you will receive a maximum reimbursement of €44.

### Sources of information treatment

For the sources of information treatment, information on providers in the cross-border country was included in the domestic NCP website instead of the cross-border NCP website.
1.7 Design of choice experiment

1.7.1 Choice between domestic and cross-border healthcare provider

Once the respondents viewed the web pages they were asked to make a choice between two hypothetical healthcare providers. The healthcare providers and the choices offered depended on the medical condition to which the respondent had been allocated.

We researched likely waiting times and prices in the countries considered by the study and for the medical conditions under consideration. The parameters used in the choice experiment are summarised in Section 1.7.3 below.

1.7.2 Country pairs

The literature review and the comments received from the experts revealed the following target destinations of cross-border patients in the countries included in this study. These were the country pairings used in the experiment.
Table 4: Target countries of cross-border patients in the countries considered in the study
Phase I

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Target Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Germany</td>
</tr>
<tr>
<td>Estonia</td>
<td>Finland</td>
</tr>
<tr>
<td>Germany</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Italy</td>
<td>Austria</td>
</tr>
<tr>
<td>Poland</td>
<td>Germany</td>
</tr>
<tr>
<td>Spain</td>
<td>Germany</td>
</tr>
<tr>
<td>Sweden</td>
<td>Denmark</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Austria</td>
</tr>
</tbody>
</table>

1.7.3 Prices and waiting times

The desk-based research found that waiting times vary significantly across Member States, for example ranging from 18 days for a hip replacement in Germany to 270 in Italy. Prices for treatments also vary significantly, for example root canal treatment ranges from €95 in Poland to €305 in Denmark. Additionally, different healthcare systems throughout Europe offer different levels of reimbursement.

Due to these differences, and because information was not available for some countries, we decided against using such large differences in the experiment. Instead we used a base price and base waiting time for each medical treatment and this was the same for all countries. We then used time and price insteps relative to these base levels. The base levels are discussed further below.

The price of the domestic treatment option took on one of the following four levels:

(a) The same price  
(b) 25% higher  
(c) 50% higher and  
(d) 75% higher

---

http://www.treatmentinpoland.com/80-11-healthcare-providers.htm  
http://www.oecd.org/els/health-systems/waitingtimepolicies.htm

9 http://www.treatmentabroad.com/cost/surgery-abroad-cost/hip-replacement/  
http://dental.ee/hambaravi-tartu-kesklinnas
The waiting time of the domestic treatment option took on one of the following four levels:

(a) Same time (b) 25% longer (c) 50% longer and (d) 75% longer (for hip replacement and heart bypass surgery)

or

(a) Same time (b) 50% longer (c) 100% longer and (d) 150% longer (root canal dental treatment)

The actual number of days of waiting time was rounded based on these percentage increases. For example, a 50% increase of a seven day wait was set to be 11 days, despite this technically being a 57% increase in waiting time. The actual number of days waiting time used in the experiment is therefore shown in Table 5.

**Table 5: Domestic waiting time, by medical condition**

<table>
<thead>
<tr>
<th>Hip replacement</th>
<th>Heart bypass surgery</th>
<th>Root canal dental treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 days</td>
<td>25 days</td>
<td>7 days</td>
</tr>
<tr>
<td>125 days</td>
<td>30 days</td>
<td>11 days</td>
</tr>
<tr>
<td>150 days</td>
<td>37 days</td>
<td>14 days</td>
</tr>
<tr>
<td>175 days</td>
<td>43 days</td>
<td>18 days</td>
</tr>
</tbody>
</table>

The idea behind raising waiting times for the domestic option relative to the cross border option is to determine at what point respondents prefer to opt for the cross-border treatment.

The cross-border option is always cheaper or equally priced to the domestic option and the waiting time was always shorter or equal to the waiting time of the domestic option. By raising the cost and waiting times in small increments, we were able to observe at what point respondents start preferring to travel abroad for medical care.

Overall, there were ten different combinations of prices and waiting times. Each respondent was randomly shown three of these combinations.
Table 6: Combinations of price and waiting time

<table>
<thead>
<tr>
<th>Option 1 - domestic</th>
<th>Option 2 - cross border</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base price, base waiting time</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price + 25%, base waiting time</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price + 50%, base waiting time</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price + 75%, base waiting time + 25% (or 50%)</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price, base waiting time + 50% (or 100%)</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price, base waiting time + 75% (or 150%)</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price +25%, base waiting time + 25% (or 50%)</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price+50%, base waiting time + 50% (or 100%)</td>
<td>Base price, base waiting time</td>
</tr>
<tr>
<td>Base price+75%, base waiting time + 75% (or 150%)</td>
<td>Base price, base waiting time</td>
</tr>
</tbody>
</table>

Note: Waiting time increases in parentheses are for root canal dental treatment only.

Base waiting times and prices before healthcare cover were set to be the following:

- Hip replacement: 100 days, €6,000
- Bypass surgery: 25 days, €15,000
- Root canal treatment: 7 days, €170

The cost and waiting times for hip replacement and bypass surgery are simply average values for the numbers we were able to find in the desk based review of literature and evidence. For root canal treatment no information on waiting times was available, suggesting that waiting times are less of a concern for root canals.

However, these prices are before healthcare cover and the typical healthcare system in the EU covers these treatments at least to a large extent, if not fully. Nonetheless, depending on the exact form of the therapy chosen, the costs can quickly exceed what the healthcare system covers and the patient may have to pay the difference.

For the purposes of this experiment it was agreed that a typical healthcare system would reimburse (or cover directly) up to €53 for root canal dental treatment, €5,500 for hip replacements and €13,000 for heart bypass surgery. This leaves the participant in the experiment with the following base costs per treatment:

- Hip replacement: €500
- Bypass surgery: €2,000
- Root canal treatment: €117

It is important to note that these costs are only meant to be representative of what a hypothetical patient might have to pay for a cross-border medical treatment. Identifying the actual costs is neither feasible (due to large difference between Member States) nor necessary for the economic experiment to work. The objective of the experiment is to evaluate how much more a respondent is willing to pay to receive the same treatment domestically as opposed to cross-border. The base
price is therefore not very important as long as it is within the realm of what respondents perceive to be a realistic price.

1.8 Phase II method

Between April and July 2014 NCPs in Estonia, Denmark, Germany, Czech Republic, Slovenia, Hungary, Finland and Italy hosted a survey that invited people to complete a set of questions on their reasons for visiting the website, their experiences on the website and make a hypothetical choice about seeking healthcare domestically or abroad. The questionnaire and choice experiment are reproduced in Annex 2. The survey was always available in the domestic country language and English.

Upon entering the NCP website, visitors were immediately shown a window that invited them to participate in the survey. The invitation screen below is taken from the German NCP site. The invitation was implemented in the same way on all NCPs, except Finland and Italy. In Italy a ‘box’ was provided on the website that respondents could click to open the invitation; while in Finland the survey had its own webpage on Kela website. The invitation screens for all NCPs are shown in Annex 3.

The design of the experiment in Phase II was identical to Phase I described above. The country pairings were slightly different and was determined based on home country NCPs that were able
to participate in the study. The domestic and cross-border countries paired in the experiment are shown in Table 16.

<table>
<thead>
<tr>
<th>Domestic NCP</th>
<th>Cross-border NCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Germany</td>
</tr>
<tr>
<td>Estonia</td>
<td>Finland</td>
</tr>
<tr>
<td>Germany</td>
<td>Netherlands</td>
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<tr>
<td>Czech Republic</td>
<td>Austria</td>
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<tr>
<td>Slovenia</td>
<td>Italy</td>
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<tr>
<td>Hungary</td>
<td>Czech Republic</td>
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<tr>
<td>Finland</td>
<td>Estonia</td>
</tr>
<tr>
<td>Italy</td>
<td>Austria</td>
</tr>
</tbody>
</table>

In addition, due to the time constraints associated with a survey hosted on websites only one treatment was implemented. This was the complexity treatment. It was implemented in exactly the same way as in Phase I.
2 Literature review Phase I

The aim of the literature review was to provide a general overview of the state of cross-border healthcare provision with a particular focus on cross-border healthcare in the European Union. It was also instrumental in informing the parameters of the behavioural experiments introduced above.

2.1 Overview of cross-border healthcare provision

This section provides background information on cross-border provision of healthcare, both in general and in the EU in particular. It also reviews the existing evidence on the likely drivers of cross-border patient mobility in the European Union.

Cross-border patient mobility involves a patient who travels from the country where he has residence to another country to receive planned healthcare (Glinos et al 2010). Furthermore, for the purpose of Directive 2011/24/EU the scope is confined to the treatments covered by the statutory health insurance scheme of the patient and to patients seeking care abroad on their own initiative as well as emergency care.

However, it should be noted that very little is known on the size of patient mobility due to lack of data. Generally, data are incomplete, incomparable and unreliable. Most importantly the data available usually present information on specific forms of patient mobility only (e.g. based on cross-border formal arrangements or on compensation payments between EU Member States) or aggregate patient mobility for planned treatment and patient mobility for emergency care for people falling ill when abroad. Furthermore, some practices of patient mobility, in particular cross-border arrangements are limited in time and data is therefore quickly outdated. Data from commercial insurers and providers and about patients paying out of their pocket are almost never available (Van Ginneken and Busse, 2011).

2.1.1 Cross-border patient flows across the world

Since the early 1990s, the number of individuals choosing to travel across national borders or overseas to receive medical treatments has been on the rise.

This trend has been increasingly recognised in the United States and Asia, which has resulted in much of the existing literature focusing on these countries. Nonetheless, no authoritative data on the number and flow of medical tourists and cross-border patient care exist (OECD, 2011).

Reliability of data and indicators used remain uncertain not least because sources rarely are specified. When the business stakes are high, there might be an incentive to leave definitions vague (Glinos et al 2010). Some estimates on medical tourism between countries are made by consultancies in the process of assessing the potential of the medical tourism business. They range from estimates based on Deloitte’s 2008 report on medical tourism, quantifying the number of
people travelling abroad for healthcare at 30 and 50\(^{10}\) million each year (Keckley and Underwood, 2008, Keckley and Eselius, 2009) to a fairly conservative estimate by McKinsey, estimating the number at between 60,000 and 85,000 medical tourists per year (Ehrbeck et al., 2008).

However, this substantial difference may in fact be due to differing definitions of cross-border patient movement being used. Ehrbeck, authoring the McKinsey report, only includes those who have travelled for the purpose of elective surgery (excludes expatriates, those undergoing emergency unplanned surgery, and outpatients). He therefore specifically excludes a large bulk of medical services, for instance any type of dental care (Youngman, 2009). Further evidence that McKinsey’s number is likely to underestimate the scale of patient cross-border movement is provided by individual country patient inflow data. For instance, even the most conservative estimates of inward medical tourism to India place the number of people treated at 200,000 (Carabello, 2008, Crone, 2008), alongside figures of between 200,000 and 350,000 for Singapore (Huat, 2006b, Carabello, 2008), and 200,000 for Cuba (Crozier and Baylis, 2010).

Uncertainty does not only persist around the absolute number of people seeking medical services abroad. Differing views on what exactly constitutes cross-border medical services also explains differing reports of inflows of ‘medical tourists’ into some countries. An example of this is Thailand’s often cited one million foreign visitors (Carabello, 2008, Crozier and Baylis, 2010). This number is subject to debate as it also classifies wellness tourists visiting spas as receiving medical treatment.

2.1.2 Cross-border patient flows in the European Union

Much of the international medical service provision seems to occur at the initiative of private actors. Individual patients seek healthcare from private health care providers abroad and pay for it out of their pocket or through private health insurance. This kind of medical travel is often referred to as medical tourism. An exception to this rule is in the European Union where patient mobility is facilitated by legal frameworks which have been agreed between Member States; allowing patients, under certain conditions, to receive healthcare in another Member State at the expense of their domestic social insurance system. Regulation 883/2004 (formerly 1408/71) entitles citizens who are temporarily abroad to have access to statutory healthcare in the Member State of stay. This Regulation also allows citizens to be funded for treatment abroad for planned treatment, on the condition they received prior authorisation from their domestic social insurance body. More recently, a Directive on the Application of Patients’ Rights in Cross-Border Healthcare entered into force on 24 April 2011, and had to be transposed into national law by 25 October 2013. According to this Directive, EU citizens can be reimbursed by their social insurance system for planned healthcare obtained in another Member State. For ambulatory care, no prior authorisation is required, whereas for overnight stays and cost intensive procedures the domestic insurer can request prior authorisation.

\(^{10}\) Numbers are extrapolated, the report focuses on medical tourism of US citizens. Their number is used as a base to calculate global numbers.
Similar problems with data validity as outlined above apply to estimates for patient flows within the European Union. Sources agree that the number of people accessing medical services in another EU country is likely to be very low; yet, reliable and comparable data on this is nonetheless difficult to find. According to the European Commission (2008), cross-border healthcare represents around 1% of public expenditure on healthcare. Other, earlier studies estimated that treatment of foreign patients would account for around 0.1%-0.2% of total healthcare expenditure during the late 1980s and 1990s, including care for migrant workers, care during temporary stay abroad and pre-authorised planned treatment abroad (Hermesse et al. 1997; Palm et al. 2000). It is argued that the latter numbers are an underestimation, in particular because they do not include mobility between the Member States that have so-called waiver agreements, nor patients who pay out of their pocket (Bertinato et al, 2004). A 2003 survey by European Commission did not find higher numbers (Bertinato et al, 2004).

Cost estimates by Member State are available from Ginneken and Busse (2011) for healthcare delivered in other Member States under Regulation 1408/07 (now Regulation (EC) No 883/04). As a microstate, it is not surprising that Luxembourg has comparatively very high levels of spend, with its citizens obtaining some healthcare in, presumably, neighbouring countries. The other microstates in the EU are mostly newer Member States and their per capita spend is shown as zero.

It is important to note that the numbers presented are likely to underestimate the actual volume of medical services provided abroad for several reasons. For example, other data sources suggest that for Malta at least, the use of healthcare services in other Member States is not uncommon. One reason for this apparent contradiction may be that Malta has a cross-border waiver agreement with the United Kingdom (Bartolo, 2012), based on which these countries do not invoice each other for care provided based on Council Regulation 883/2004. A second point is that not all types of cross-border flows are captured by the data. Cross-border patient flows can be divided into:

- Temporary visitors abroad;
- People retiring in other countries;
- People in border regions;
- People sent abroad by their home systems (pre-authorized care);

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12 The most widely used data derive mainly from one study on the amounts and flows of financial transfers for cross-border care within the European Union (Hermesse et al. 1997), which has been updated to 1998 (Palm et al. 2000). According to these figures, the total amount for claims for reimbursement of cross-border healthcare rose from €461 million in 1989 to €1103 million in 1993, but then fell to €894 million in 1997 and €758 million in 1998. In relation to public spending on healthcare in the European Union, these values are between 0.1% and 0.2% of overall expenditure. The study examined the flow of the three most important forms for cross-border mobility: E106 (migrant workers), E111 (temporary stay, e.g. tourism and business travel) and E112 (pre-authorized care).

13 Regulation (EEC) No 1408/71 of the Council of 14 June 1971 on the application of social security schemes to employed persons and their families moving within the Community.
People going abroad on their own initiative. ¹⁴

Therefore, important groups seeking medical treatment abroad are not included in these calculations, for instance people seeking medical treatment abroad on their own initiative and expense which is particularly true of Western Europeans seeking outpatient treatment, such as dental services or cosmetic surgery, in Eastern Europe (Smith et al., 2011).

Figure 12: Cost estimates for healthcare delivered in other Member States under Council Regulation 1408/71, € per capita 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost Estimates (€ per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg*</td>
<td>10.73</td>
</tr>
<tr>
<td>Belgium</td>
<td>8.52</td>
</tr>
<tr>
<td>France</td>
<td>5.69</td>
</tr>
<tr>
<td>Greece</td>
<td>4.8</td>
</tr>
<tr>
<td>Portugal</td>
<td>4.54</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.58</td>
</tr>
<tr>
<td>Germany</td>
<td>2.96</td>
</tr>
<tr>
<td>Austria</td>
<td>2.72</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.7</td>
</tr>
<tr>
<td>Italy</td>
<td>2.59</td>
</tr>
<tr>
<td>EU27 Average</td>
<td>1.87</td>
</tr>
<tr>
<td>Finland</td>
<td>1.53</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.19</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.05</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.87</td>
</tr>
<tr>
<td>Spain</td>
<td>0.14</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.02</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.01</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.01</td>
</tr>
<tr>
<td>Poland**</td>
<td>0.01</td>
</tr>
<tr>
<td>Lithuania**</td>
<td>0.01</td>
</tr>
<tr>
<td>Latvia**</td>
<td>0.01</td>
</tr>
<tr>
<td>Hungary**</td>
<td>0.01</td>
</tr>
<tr>
<td>Estonia**</td>
<td>0.01</td>
</tr>
<tr>
<td>Malta</td>
<td>0</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0</td>
</tr>
</tbody>
</table>

€ per capita in 2004 Note: * Actual for Luxembourg is 161.62 ** Actual figures less than 0.01

Another way to estimate the volume of cross-border healthcare is by accounting for patient flows within the EU based on surveys. This has the advantage that it covers all categories of cross-border medical services, not limited to those reimbursed by the Member States. Some inference can be made from the Eurobarometer ‘Cross-border health services in the EU’ conducted in 2007. One of

the questions asked as part of this survey was ‘Have you, yourself, received any medical treatment in another EU Member State in the last 12 months?’ (Figure 13). On average between 2% and 4% of respondents indicated that they had received treatment in another Member State. This number presumably includes citizens having received healthcare when travelling abroad. This is generally in line with estimates from the European Commission, quoted in academic studies, estimating that up to 1% of all patients treated to be crossing national borders. Yet, in border regions this percentage is estimated to likely be around 7 to 9% of patients (Kostera, 2008).

A notable exception is Luxembourg, where 20% of respondents indicated they had sought medical treatment in another Member State over the past year, which is probably due to the relatively small size of the country (as is also the case with expenditure discussed above). Comparably high numbers are also found for Czech (8%), Slovak (7%), Danish and Belgian (both 6%) and Irish, Cypriot and German (5%) citizens.

Figure 13: Percentage of population that received medical treatment in another Member State

Source: Eurobarometer ‘Cross-border health services in the EU’

2.1.3 Drivers of cross-border provision of healthcare

In a study developing a general typology of cross-border patient mobility, Glinos et al., (2006) identify five key drivers behind the increases in demand for medical treatment abroad: familiarity, availability, cost, quality and bioethical legislation (relevant in case of international travel for abortion services, fertility treatment, and euthanasia services).

Within the European Union, willingness to travel for care varies widely among Member States (Eurobarometer 210, 2007) and patient mobility seems often to be motivated by dissatisfaction with healthcare provision in the home country and experiences involving deficiencies in the health system at home (Wismar et al, 2011). This is also supported by a large-scale qualitative study, the Europe for Patients project, which identified perceived quality of care as a driver for patient mobility. It found that patients would prefer to travel to another region or country to receive healthcare of a perceived better quality than that available in their country of residence. This demonstrates the link between dissatisfaction with the home healthcare system and the willingness to travel for treatment abroad. This seems particularly to be the case in the newer
Member States, in which perceived quality of healthcare is low (Legido-Quigley & McKee, 2010). Also Italians (mainly from the south of the country) and Greeks have been known to ‘escape’ their health systems especially in the 1980s and 1990s to go to France, the UK and Germany for specialised treatments (Glinos et al; 2010).

The 2007 ‘Cross-border healthcare services in the EU’ Eurobarometer explores the willingness of citizens to travel for care, including the main push and pull factors (European Commission, 2007). The survey found that, on average, 53% of respondents were open to being treated in another Member State. People most willing to travel were from Malta (88%) and Cyprus (82%). Least willing were respondents from Finland (26%), Estonia (29%) and Latvia (33%), France (37%) and Lithuania (38%). The high willingness found among Maltese and Cypriot respondents may be explained by the very small size of these countries and the relatively widespread practice of sending patients abroad for treatments not available in Malta or Cyprus itself. Low willingness found in the three Baltic States may be due to these countries only recently having joined the European Union when this survey was conducted. As for France and Finland, these citizens may feel that they already enjoy a fairly high standard of healthcare at home. Language barriers might also play a role.

Figure 14: Willingness to travel for medical care

Some evidence on the motivations of people can be gathered from another of the survey’s questions ‘for which of the following reasons would you travel to another EU country to receive medical treatment?’ The lack of availability of treatment at home; the better quality of treatment abroad; the provision of services by specialists; faster treatment and the affordability of care are identified as the key drivers motivating citizens of EU Member States to seek treatment outside their home country.
However, it is important to note that citizens’ motivations for seeking treatment in another Member State differ. This is most pronounced for the affordability of care, faster treatment and provision of service by a specialist. For lack of availability of treatment at home and the better quality of treatment abroad, the picture is more homogenous. This is illustrated by the five following figures below.

Respondents from different Member States almost unanimously agree that if a treatment was not available in their home country, they would opt for healthcare abroad (ranging from 98% in Ireland to 82% in Germany, with an average of 91%).

Better quality of healthcare is also an important factor for most EU citizens. Here, it is particularly interesting that higher percentages (on average by almost 10% higher) are found among
respondents from the newer Member States. This may be driven by East Europeans’ perception of lower quality of their respective healthcare systems, for which evidence is provided in a large-scale quantitative study by Legido-Quigley and McKee (2010), which formed part of the Europe for Patients project.

A special Eurobarometer on patient safety from 2010 asks respondents directly how they view quality of healthcare in their own Member State relative to the quality of healthcare in other Member States. The highest percentage of respondents who view domestic healthcare as better than cross-border healthcare can be found in Belgium (65%), Austria (64%), Finland (56%) and France (55%). Unsurprisingly, respondents from these countries are also among the least likely to travel to another Member State for better quality treatment according to the Eurobarometer on cross-border health services in the EU.

Respondents from Bulgaria, Hungary, Greece, Portugal and Romania are least likely to think that their own healthcare system is of higher quality than that in other Member States. Nonetheless, Hungarians are the third least likely to travel to another Member State to receive better quality healthcare.

Provision of service by a specialist seems to be important mainly to respondents from the older Member States, with the UK (88%), Ireland (84%) and Cyprus, being the three countries where this is most frequently reported to be an important factor. However, Finnish (34%), Dutch (36%) and Hungarian (43%) nationals seem to attach less importance to the level of specialisation of the medical staff treating them. Overall, although this is reported to be an important factor in a wide range of countries, this factor does not seem to be as important to respondents as ‘better quality of care’ and ‘unavailability of treatment’.
Cheaper treatment is another potential driver. Nevertheless, this is less frequently reported to be a factor in citizens’ decision to seek healthcare services abroad. Particularly in Eastern Europe, respondents do not feel that this is important. This may be partly due to the fact that incomes in this region are lower and in general cheaper healthcare services than those at home cannot be found abroad. Conversely, nationals from older Member States, which are higher income economies, more frequently report that the cost of the service matters to them.

The relevance of waiting times varies among survey respondents. Those reporting that this was not a factor in their decision whether to receive treatment abroad were mainly located in the newer Member States (i.e. Latvia, Hungary, Czech Republic, Slovakia, Bulgaria make up the bottom group). However, the speed of treatment was considered a driver by citizens in Portugal, the UK,
Ireland, Poland and Germany, albeit less so when compared to other drivers. For the UK this is confirmed by a survey conducted by consumer association ‘WHICH’ among 300 British citizens who had received treatment abroad. Cost was named as the number one reason people travelled for treatment (quoted on the NHS website).

2.2 Country-level evidence

This section reviews the literature focused on the countries considered in this study in order to inform the behavioural experiment and the design of the mock-up web pages. In particular, evidence of patient inflows and outflows and the determinants of cross border patient mobility in each of these Member States will be reviewed.

2.2.1 Patient Inflows

Detailed data on patient inflows into specific countries is available from a report by Busse et al (2006) which have been reproduced in Figure 22 for the countries on which this study focuses (Czech Republic, Denmark, Estonia, Germany, Italy, Poland, Spain and Sweden).

However, there are a number of problems in terms of the data’s validity and its suitability for comparison. Most countries collate data on cross-border patient flows, yet, huge differences exist with regard to what data is collected, as is evident from Figure 22 (for example, where patients come from is only reported for Germany). Comparable data therefore is not available owing to
different systems of data collection, specifically the inclusion or exclusion of lump-sum payments, waiver agreements and extended E112 procedures (now replaced by S2 forms)\(^\text{16}\), underreporting of actual utilisation, and different formats for data collection (total or separate numbers for E111/EHIC,\(^\text{17}\) E112, and so on, as well as expenditure figures or actual numbers of forms). Another limitation of the data is that it refers to 2004/05 mainly, which is only one year after the accession of Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia to the European Union.

Figure 22: Patient inflow from EU Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>Total of inpatient cases</th>
<th>2004 per million population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>3.272</td>
<td>4.499</td>
</tr>
<tr>
<td>Belgium</td>
<td>2.792</td>
<td>3.271</td>
</tr>
<tr>
<td>Cyprus</td>
<td>2.030</td>
<td>2.325</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.876</td>
<td>4.429</td>
</tr>
<tr>
<td>Denmark</td>
<td>3.698</td>
<td>3.656</td>
</tr>
<tr>
<td>Estonia</td>
<td>4.500</td>
<td>4.664</td>
</tr>
<tr>
<td>Finland</td>
<td>3.686</td>
<td>4.684</td>
</tr>
<tr>
<td>France</td>
<td>4.101</td>
<td>4.668</td>
</tr>
<tr>
<td>Greece</td>
<td>4.321</td>
<td>4.699</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.500</td>
<td>4.727</td>
</tr>
<tr>
<td>Ireland</td>
<td>3.056</td>
<td>4.684</td>
</tr>
<tr>
<td>Italy</td>
<td>2.629</td>
<td>3.128</td>
</tr>
<tr>
<td>Latvia</td>
<td>2.632</td>
<td>3.128</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2.241</td>
<td>3.128</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>3.244</td>
<td>3.128</td>
</tr>
<tr>
<td>Malta</td>
<td>2.715</td>
<td>3.128</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.223</td>
<td>3.128</td>
</tr>
<tr>
<td>Poland</td>
<td>3.323</td>
<td>3.128</td>
</tr>
<tr>
<td>Portugal</td>
<td>2.122</td>
<td>3.128</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3.323</td>
<td>3.128</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.323</td>
<td>3.128</td>
</tr>
</tbody>
</table>

\(^\text{16}\) The E112 corresponds to the S2 form allowing EU citizens to prove their entitlement to planned health treatment in another EU country, Iceland, Liechtenstein, Norway or Switzerland. It must be obtained from the respective health insurance institution before leaving and then submitted to the health insurance institution in the country where treatment is received. Treatment will be provided under the same conditions of care and payment as to nationals of that country.

\(^\text{17}\) The European Health Insurance Card is a portable document which proves EU citizens entitlement to necessary healthcare while on a temporary stay abroad, i.e. in another country than the one where you reside. Everybody covered by a statutory health insurance scheme in one of the EU countries, Norway, Liechtenstein, Iceland or Switzerland has right to an EHIC (European Commission, DG Employment, Social Affairs & Inclusion)
Germany provides the most comprehensive data on inpatient cases, listing them separately by country. The highest inflow was from citizens from neighbouring Western European countries (mainly from Austria, Belgium, France, Luxembourg, the Netherlands), less so from Eastern European neighbours, Poland and the Czech Republic.

Spain also provides some data on the origin of patients treated, however, only for E112 treatments which refer to treatments with prior authorisation from the home system health services, which were mainly provided for German, French and UK citizens.

Sweden does not quantify where patients are from, however, a large bulk of costs to the healthcare system was due to treatment of citizens from other Nordic countries (for which their health services do not have to reimburse Sweden). The only other information available is that Greek citizens most frequently seek planned treatment in Sweden.

Italy only provides some general data on patient inflow, based on E111, E112 and EHIC. The numbers decrease over the six years for which they are provided.

The data for Denmark, Poland, Czech Republic and Estonia are particularly sparse. In the case of the latter three, numbers may serve as a poor guide to actual patient flows as in the years for which the data is available (2004 and 2005) they had only just joined the European Union. In the
case of Denmark it is difficult to make assumptions about patient flows from all Member States as the country has agreed on waivers of reimbursement with many Member States.

### 2.2.2 Patient outflows

According to the Eurobarometer on cross-border healthcare services in the EU, on average between 2% and 4% of respondents indicated that they had received treatment in another Member State.

In the countries included in this study, the Czech Republic, Denmark, Estonia, Germany, Italy, Poland, Spain and Sweden, vary widely in terms of their citizens’ utilisation of cross-border health services and willingness to use these in the future.

![Figure 23: Patient mobility: Percentage of patients having received treatment abroad and readiness to do so](image)

Source: Eurobarometer ‘Cross-border health services in the EU’

Citizens from the Czech Republic are found to most frequently receive healthcare abroad (8%), followed by Estonia and Denmark (both 6%). Least use of health services in another EU Member State was made by Swedish citizens (2%) and Spanish and Italian respondents (both 3%). Swedes are therefore about 4 times less likely to receive treatment in another EU Member State than Czechs.

It is further noteworthy that Estonians have the lowest willingness to seek medical treatment in another EU Member State (29%), followed by Germans and the Czechs (40%). The highest willingness is observed among Danish nationals (78%), followed by Spanish (67%), Italian (63%) and Swedish (61%) citizens.
2.2.3 Potential Determinants of Patient Mobility

When considering the drivers for seeking medical services abroad in detail, the most interesting observation from the Eurobarometer in regard to the countries in this study is that for the Estonians and Czechs cost of treatment matters considerably less than to respondents from Germany, Poland and Sweden which may be related to healthcare services being cheaper in Eastern Europe than in Western Europe. In other studies it is often found that, on the contrary, citizens from the newer Member States, tend to access cross-border medical services for their perceived higher quality (Legido-Quigley & McKee, 2010).

![Figure 24: Drivers of patient mobility](source: Eurobarometer 'Cross-border health services in the EU')

We therefore may conclude from this that, generally speaking, one key difference between the countries in this study is that Western European citizens are considerably more motivated by potential cost savings, however, their Eastern neighbours are relatively more motivated by the expected quality aspect.

Below, the literature focusing on the individual countries in the study is summarised for each country separately. The findings of this section are summarised in Table 8. The table shows the main findings regarding destination countries, procedure categories, medical conditions and drivers to seek healthcare abroad.
Denmark

Danish patients, through special arrangements, have the option to access cross-border healthcare services in their two next-door-neighbours: Germany and Sweden. This is mainly motivated by the shortfall of service provision for certain types of healthcare in Denmark itself. Overall, some 1,000 patients were treated abroad in 2002-2004 against 40,000 in the Danish private sector (Glinos et al, 2010b). Other sources specify the figures as 344 patients in German/Swedish clinics from mid 2002 to the end of 2003, and 265 patients in Germany via PatientLink from mid 2002 until the start 2005 (Glinos et al, 2010b). Although more recent figures do not exist in 2009, six foreign hospitals or clinics are contracted in Germany, Sweden and Spain.18

In Southern Jutland, patients in need of radiation therapy have traditionally been referred to hospitals in other Danish counties. However, since 1998, cancer patients residing in Southern Jutland have been offered access to the Malteser Krankenhaus in Flensburg (Northern Germany) for radiation treatment. Treatment in Germany has two advantages for Danish patients: faster access to treatment (shorter waiting times) and quicker travel times. This has been extended to include other types of cancer treatments and to two further German hospitals providing surgery, neuro-surgery, emergency care and maternity-relevant health services (Glinos and Baeten, 2006). A study carried out in Southern Jutland finds that shorter waiting time in the German hospital (2 weeks compared to 6 weeks) is not the most decisive pull-factor, while the long distance to the next hospital on the Danish side (130km versus 50km) is a strong a push-factor (Frost, 2000). The number of Danish patients treated in Flensburg has steadily increased from 71 in 1999, 125 in 2002 and 168 in 2004 (Toftgaard, 2005), and now amounts to 300 patients a year.19

Estonia

Although Estonians are found to be least inclined to access cross-border care out of all the countries in the study, another more in-depth study finds that Estonians actually demonstrated a high level of willingness to be treated abroad if treatment could be at the same cost as domestic services (Jesse & Kruuda, 2006). However, the study also confirmed that Estonian experience with health services abroad is very limited – only 2% of those aged 17 to 74 have experienced health services in a foreign country over the past three years and an additional 2% have a family member who has done so. Most of those with experience abroad were young and educated, such as entrepreneurs or managers, and in most cases they either paid for the services themselves, or their company did (in a third of cases). Only in a quarter of cases did a private insurance company pay. Fewer than 50% of respondents considered the treatment provided was better than in Estonia, 21% found the quality of care similar and 17% were dissatisfied with the care provided (Praxis & Faktum, 2004). No problems with language, access to information, speed of assistance or payment for services were reported by patients accessing cross-border healthcare. This may be as most Estonians chose to go to Finland, which is linguistically and geographically close (34% of the total), followed by Germany, the Russian Federation and Sweden, with shares of approximately 15% each (Jesse & Kruuda, 2006).

19 http://www.regionsyddanmark.dk/wm382592
Reasons motivating Estonians to seek healthcare were for treatment that was not available in Estonia, to attend facilities abroad that were perceived to be better equipped than those in Estonia, and to obtain a second opinion from an independent institution or doctor (Jesse & Kuurda, 2006). When Estonians opt to seek healthcare abroad, they usually prefer the treatment to be carried out close to their home country. Finland and Sweden are the most popular destinations, Finland for its location and good connections and Sweden for both the high quality of its health services and its good connections to Estonia. With respect to other EU countries, the high quality of health services was the factor most often cited. However, in addition, cross-border collaboration occurs in the southern region on the Estonian/Latvian border at Valga-Valka, facilitating patient flows between Estonia and Latvia. Here, to increase efficiency in the provision of hospital services, cooperation is increased (Glinos and Baeten, 2006).

**Germany**

Germany operates a so-called “Bismarckian model” of healthcare provision, where sickness funds are the main agents in healthcare funding. One of these funds, the Techniker Krankenkasse (TK) undertook two detailed surveys (Techniker Krankenkasse, 2009; 2010) on cross-border healthcare.

These surveys were only addressed to members of the TK and their co-insured dependents of age; nonetheless, they offer a first insight into German patients who received treatment abroad. Out of the 13,276 returned questionnaires of affiliates with German residence who had received treatment in another EU country, 3,512 previously had received planned treatments in another Member State. As can be seen in Figure 25, the majority of these only underwent one treatment, although a number of respondents also went for two and some even for 10 or more cross-border treatments.

**Figure 25:** Number of EU cross-border treatments (out of 13,276 responses)

Source: Techniker Krankenkasse, 2010
Insight into why respondents sought treatment in another Member State can be found by studying what type of information respondents actively sought prior to the cross-border treatment. As shown in Figure 26, the most commonly sought piece of information related to the proportion of the cost that would be covered. This could indicate that respondents were wary of whether or not the costs of their treatment would be covered when opting for cross-border treatments.

The second most commonly sought information was regarding the cost savings associated with cross-border healthcare, indicating that this is one of the most important factors determining cross-border patient mobility in Germany. Nonetheless, this is directly followed by “Equipment of facility” and “Medical quality in EU Member States” which suggests that quality of treatment may be another driver of patient mobility in Germany.

Waiting times again appear to be of little importance appearing at the bottom of the list, along with respondents searching for rules for payment and risks of EU cross-border treatments.

Another noteworthy outcome of this survey was that respondents who received cross-border care were highly satisfied with their treatments. Nearly three quarters (74%) stated that they will “most certainly have treatment in another EU Member State again” and just less than one in four (23 %) stated that they would “tend to do so”. Only 4 % indicated that they would “rather not” or “most certainly would not” travel to another Member State for medical treatment again.
According to the study the Czech Republic emerged as the number one target country for planned EU cross-border treatments of German patients (27%) followed by Poland (20%), Italy (17%) and Hungary (12%).

In terms of outpatient care, the Polish city of Szczecin near the German border is experiencing an in-flow of German patients who come for dental care and plastic surgery as this is 50% cheaper compared with prices at home (Zoltowska, 2004). In general, a concentration of cross-border providers is found in western Poland (Cienski, 2005).

Italy

21,300 Italians requested prior authorisation to be treated abroad in 1999 (Glinos et al, 2006). No later figures are available. It is assumed that figures have declined since then (estimate for 2004:3547) (Van Ginneken et al, 2011).

Inter-hospital cooperation between French hospital in Menton and the Italian Riviera has taken place since 2000 in order to meet the needs of the population on both sides of a very fluid border-region with high activity levels and extensive exchanges (Glinos et al 2006). Information on patient mobility of Italian citizens is mainly available for Slovenia. A favourable geographical situation, historical experience and Slovenia’s accession to the European Union, all may facilitate cross-border cooperation in the field of healthcare. A rising share of out-of-pocket expenditure in Italy is driving people to look for cheaper healthcare in Slovenia. However, an important barrier to greater mobility is a lack of adequate, validated information for patients on their rights regarding cross-border care (Albreht, Brinovec and Stalc, 2006).

In terms of hospital care, injury was the most common reason for the majority of Italian patients to seek hospital care in Slovenia which is almost certainly the result of a temporary stay abroad rather than of planned treatment.

Making assumptions about outpatient care, however, is more difficult. Foreign patients were often not identified as a separate entity or providers were unable to separate medical and other healthcare services from tourist programmes, the paper also notes that providers in Slovenia, in particular dentists, where unwilling to provide information about the delivery of care to Italian patients (Albreht, Brinovec and Stalc, 2006). However, an older survey (from 2002) among 730 Slovenian dentists (of which 40% responded) showed that an estimated 7,000 Italians had received dental services in the years 2000-2002 (Albrecht, Pribakovic, et al. 2005).

Poland

Poland itself is more known as a destination for medical services, primarily for dental care and cosmetic surgery, which is facilitated through private companies. This development is a reflection of the Polish government’s desire to capture the potential of medical tourism and marked by the creation of the Polish Medical Tourism Chamber of Commerce (Reisman, 2010). Medical tourism was even included in the project “Promotion of the Polish economy on international markets” co-financed by European Regional Development Fund.
Information on Polish citizens’ utilization of health services in other EU countries is scarce. However, what we do know about cross-border healthcare services is that since late 2011 a cross-border framework agreement on emergency medical services exists between Poland and Germany. This agreement covers the cross-border areas of three Polish regions and aims to provide emergency medical services (Baeten, 2012).

In the border-region between Poland and Germany, reports suggest that hundreds of pregnant Polish women are going to German hospitals to deliver partly because they can decide on the birth method and because they believe care is better, and partly because they do not have to pay since they fall under Regulation 883/2004’s provision on access to care which becomes medically necessary while abroad. The Polish National Health Fund, which is supposed to reimburse the German hospitals, has started refusing to do so claiming that Polish women abuse the system (Rodkiewicz 2007; Glinos et al 2010).

Spain

Similarly to Poland and the Czech Republic, relatively little information is available on cross-border medical care of Spanish patients. Spain seems to be a receiver country. An important group are long-term residents (people retiring to Spain) who fall ill. For planned treatment, there is some mobility near the border with France (Pyrenees) and Portugal (Rosenmöller and Lluch, 2006). An interstate agreement on patient mobility exists between Spain and Portugal since 2004, however, this has mainly facilitated the mobility of Portuguese patients to Spain who faced longer waiting times and closure of infrastructure at home (Rosenmöller and Lluch, 2006). A similar agreement exists between Spain and Norwegian municipalities who send patients to southern Spain for rehabilitation, rheumatology and long-term care in facilities owned by Norwegian health organisations or by municipalities themselves (Glinos et al, 2010b). Anecdotal evidence shows British women, perhaps in their thousands, travelling for fertility treatment, in particular to Spain, to avoid NHS waiting times by paying out of pocket.  

Sweden

Since 2004 applications for reimbursement can be made after treatment abroad. In the year following this ruling, applications for reimbursement for care abroad rose dramatically and the overwhelming majority (945 out of 1101) were approved. Encouragement of cross-border mobility in Sweden takes place in the border regions with Denmark and Finland, which makes it likely that much of cross-border healthcare provision to Swedish citizens takes place in its two neighbouring countries – Denmark and Finland.

Cross-border patient mobility between Sweden and Denmark is part of wider regional integration efforts and until 2006 around 20 cooperation arrangements based on formal contracts and roughly

20 http://www.guardian.co.uk/lifeandstyle/2010/aug/22/spain-fertility-tourism
http://spainfertility.com/

OSE Paper Series, Research paper No. 3, July 2010, 30p
another 20 informal cooperation activities existed in this area (Glinos and Baeten, 2006). Only in few cases have projects led to patient mobility as the overall aim of initiatives has not been to tackle capacity problems.

Cooperation projects which do involve patient mobility have been set up to overcome acute problems of shortage in capacity or of beds to allow patients faster access to treatment. Cooperation has been reported between Copenhagen University Hospital, Malmo University Hospital and the Lund University Hospital in the field of intensive care, including neonatology.

Cross-border cooperation on healthcare also exists in the border region between Sweden and Finland, in particular in the sparsely populated Karesuando region which is inhabited by only 1,600 people. Citizens on both sides of the border experience the problem of unavailability of dental services, due to long distances to the next dentist, staff recruiting problems as well as low patient numbers, a pilot project has been set up in this region to facilitate the provision of dental services (Brand et al, 2006). This is in part possible as Swedish is widely spoken by Finns and therefore no linguistic barrier exists. This project is similar in form to the shared cross-border hospital services being developed along the Estonian-Latvia border outlined above, highlighting the potential provided by shared cross-border facilities.
<table>
<thead>
<tr>
<th>Source Country</th>
<th>Destination Country</th>
<th>Number of patients</th>
<th>Procedure Category</th>
<th>Condition</th>
<th>Driver</th>
<th>Study</th>
</tr>
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<tr>
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<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
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<tr>
<td>Denmark</td>
<td>Sweden</td>
<td>Not provided</td>
<td>In-patient: vital</td>
<td>Hospital care: intensive care (including neonatology);</td>
<td>Shortage of capacity, faster access to treatment</td>
<td>Glinos and Baeten, 2006</td>
</tr>
<tr>
<td></td>
<td>Germany</td>
<td>300 per year</td>
<td>In-patient: vital</td>
<td>Mainly radiation treatment; surgery, neuro-surgery, emergency care and maternity-relevant health services</td>
<td>Shorter waiting time, shorter travel distance</td>
<td>Glinos and Baeten, 2006; Frost, 2000; Toftgaard, 2005</td>
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<tr>
<td>Estonia</td>
<td>Finland</td>
<td>Between 12 and 20 patients per year</td>
<td>All categories potentially may apply</td>
<td>Generally treatment that was not available in Estonia</td>
<td>Unavailability of treatment</td>
<td>Jesse &amp; Kruuda, 2006</td>
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<tr>
<td></td>
<td>Germany</td>
<td>15%</td>
<td>In-patient: non-vital &amp; vital</td>
<td>Gynaecology, joint ambulance services (planned)</td>
<td>Efficiency in the provision of hospital services</td>
<td>Jesse &amp; Kruuda, 2006</td>
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<tr>
<td></td>
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<td>15%</td>
<td>shared facility across border</td>
<td></td>
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<td></td>
<td>Latvia</td>
<td>shared facility across border</td>
<td>In-patient: non-vital &amp; vital</td>
<td>Gynaecology, joint ambulance services (planned)</td>
<td>Efficiency in the provision of hospital services</td>
<td>Jesse &amp; Kruuda, 2006</td>
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<td>Contracts with providers (for temporary stay abroad not for planned care) in these countries exist, no information on patient flows</td>
<td>All categories potentially may apply</td>
<td>No information available; any condition that may emerge on temporary stay abroad</td>
<td>Problems with existing regulations (E111 system)</td>
<td>Nebling and Schemken, 2006</td>
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<td></td>
<td>Poland</td>
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<td>Outpatient</td>
<td>Dental care, plastic surgery</td>
<td>Cost savings</td>
<td>Zoltowska, 2004</td>
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<td>Country 2</td>
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<td>Dental care</td>
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<tr>
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<td>Injury</td>
<td>No information</td>
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<td></td>
<td>Cost savings</td>
<td>Albreht, Brinovec and Stalc, 2006</td>
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<td>In-patient: vital</td>
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<td>Emergency medical services</td>
<td>Synergy effects Quality of care</td>
<td></td>
<td></td>
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<td>Synergy effects Quality of care</td>
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<td>In-patient hospital care (surgery)</td>
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<td>Not provided</td>
<td>In-patient: vital</td>
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<td></td>
<td>Hospital care: intensive care (including neonatology); Cardiac conditions [now discontinued]</td>
<td>Shortage of capacity, faster access to treatment</td>
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<td>Delivery</td>
<td>Glinos and Baeten, 2006</td>
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<tr>
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<td></td>
<td>Shared facility (sparsely populated area)</td>
<td>Unavailability of service</td>
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<td></td>
<td></td>
<td>Outpatient</td>
<td>Dental care</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Cost savings</td>
<td>Jesse &amp; Kruuda, 2006</td>
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<td></td>
<td>Estimated 5-30% of all patients in dental practices in Tallinn and Paeruu</td>
<td>Cost savings</td>
<td></td>
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</table>
3  Payer survey Phase I

3.1 Directive 2011/24/EU and cross-border patient care

All twelve respondents who took part in the survey were aware of Directive 2011/24/EU on the application of patients’ rights in cross-border healthcare and the majority of respondents agree that the Directive:

- clarifies patients’ rights with regard to reimbursement of cross-border healthcare (only one respondent disagrees); and
- facilitates cooperation between healthcare payers in EU Member States (four respondents disagree)
- will lead to more cross-border healthcare treatments in the European Union (two respondents disagree)

Figure 27: Do you agree with the following statements regarding Directive 2011/24/EU? (Part 1)

Respondents who did not agree with statements were asked to elaborate why they feel the Directive does not achieve the respective objective.

The one respondent who disagreed that the Directive clarifies patients’ rights with regard to reimbursement of cross-border healthcare feels that it is too early to tell because patients’ opinions on this matter are not yet known.

The four respondents who disagree that the Directive ‘facilitates cooperation between healthcare payers in EU Member States’ give the following different explanations:
Patients still need to inform themselves of their rights and they have to research the cost and quality of the healthcare abroad. It is also the patients’ responsibility to be aware of the fact that they may not be reimbursed for everything.

A simpler interpretation of the Directive is needed.

The Directive does not envisage settlements between healthcare payers of Member States. It however “obligates the national payer to a greater scope of workload related to settling costs of cross-border healthcare than in the case of the coordination regulations”.

The last payer who disagreed has so far not had any experience with cooperation between payers from another EU Member State.

In addition to the questions about the Directive itself, the payer survey also included a number of general questions and questions on the status quo.

All respondents agreed (either completely or somewhat) that healthcare payers also benefit from having access to the information provided by the NCPs. The vast majority also agree with the statement that information currently provided on cross-border healthcare in the payer’s country of origin, either by the payers themselves of governmental or non-governmental institutions, is too complex for patients to understand. A number of payers also re-iterate this point later on throughout the survey when they are asked if they have any further comments. Finally, more than half of all respondents either completely or somewhat disagreed with the statement that patients have access to all the information required to make an informed decision about whether or not to go to another Member State for a medical treatment.

**Figure 28:** Do you agree with the following statements regarding general and status quo of cross-border healthcare? (Part 2)
3.2 The content of National Contact Point websites

The recommendation report “A best practice based approach to National Contact Point websites: feasibility study” gave a number of recommendations on what information should be included in an NCP website, beyond the information which is required to be included by the Directive.

The payer survey asked payers to rate these recommendations according to their importance on a scale from “1 – very important” to “5 – not very important”. Figure 29 below summarises the responses we received.

Payers are unanimous in their assessment that a section on frequently asked questions is either important or very important. The second most important point identified by the payers is ‘Information on liability insurance of health professionals, i.e. insurance which providers have in case of medical errors’.
Links to social media on the other hand received the fewest votes with more payers thinking that these are unimportant than those who think that they are important.

Respondents who indicated that links to other websites are important were asked to specify to which sites these links should be:

**Patient organisations:**
- The Ombudsman for Patient's Rights
- All patients organisations, particularly including those related to rare diseases
- Consumer advice centers

**Other national websites that provide information on national health systems and providers:**
- www.cmu.cz
- www.haigekassa.ee
- Statutory Health insurances and parent organizations of Health Care Providers
- http://www.dvka.de/oeffentlicheSeiten/DVKA.htm

**Links to other European websites that provide information on other European health systems and providers:**
- European Commission

Additionally, healthcare payers were also shown the reimbursement page which was created for the experiment in two versions: The complex version which was taken from the complexity treatment and the baseline version which was used in the baseline treatment of the experiment.

These two pages differ in their level of complexity they provide with regards to the medical conditions. (For details as well as screen shots, see section 1.6.3).

Seven respondents selected the simpler baseline website, while three selected the more complex site. However, one of the respondents who selected the complex version of the website noted in a comment that the clinical information of the procedure should be simplified. Presumably this respondent felt that the optimal level of complexity lies between the two website designs yet is closer to the more complex version.

Another respondent notes that it is not advisable to mention concrete sums of money because prices are subject to change.
4 Consumer and doctor survey Phase I

4.1 Previous experience of cross-border medical treatment

4.1.1 Citizens

Despite the fact that roughly half of all respondents underwent medical treatment in the last two years, only three percent of respondents indicated that they had travelled to another EU country to receive medical treatment in the last two years. The country with the highest proportion of respondents having had medical treatment in another Member State was Estonia (8%), whilst only one percent of Danes had done so.

Although the total average of 3% is roughly in line with the total average found in the 2007 Eurobarometer on ‘Cross-border health services in the EU’ (which found an average of 4% for the EU27 and EU15), some stark differences can also be observed. The percentage of Estonians travelling for medical care is more than twice as large as the 3% identified by the Eurobarometer. Italians are also twice as likely with 6% as opposed to 3% found in the Eurobarometer of 2007 having travelled for medical care. Germans, Czechs and Danes on the other hand are far less likely to travel for medical care than what the Eurobarometer identified (Germans two percentage points less, Danes five percentage points less and Czechs six percentage points less).

![Figure 30](image)

Note: Figure based on 6,615 responses

4.1.2 Doctors

A lower proportion of doctors (2%) are found to have travelled cross-border for medical treatment in the last two years than the general population. 5% of Swedish doctors surveyed were found to have travelled cross-border for medical treatment, whilst Denmark was once again found to have the lowest proportion of individuals travelling for medical care (0%).
Figure 31: Have you yourself travelled to another EU country to receive medical treatment in the last two years? (Doctors)

Note: Figure based on 1,156 responses.

4.2 Destination of previous cross-border travel for medical treatment

4.2.1 Citizens

The countries that were visited by the highest proportion of our citizen survey respondents were Germany, France, Austria, Spain and the United Kingdom.

20% of respondents who indicated that they had travelled cross-border for medical treatment in the last two years travelled to Germany for treatment. The majority of these individuals came from Italy, Czech Republic and Poland.22

The next most common destinations to receive medical treatment were France, Austria, Spain and the UK, with the majority of patients travelling to the first three of these countries residing in Italy. People travelling to the UK for medical treatment came mainly from Spain, Poland and Italy.

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22 11 individuals from Italy indicated this, along with 10 from the Czech Republic and 10 from Poland.
Table 9: To which of the following countries did you travel in the last two years to receive medical treatment? (Citizens)

<table>
<thead>
<tr>
<th>Destination country</th>
<th>Domestic country</th>
<th>Total</th>
<th>Czech Republic</th>
<th>Denmark</th>
<th>Estonia</th>
<th>Germany</th>
<th>Italy</th>
<th>Poland</th>
<th>Spain</th>
<th>Sweden</th>
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</tbody>
</table>

4.2.2 Doctors

Of the 21 doctors that indicated that they had travelled cross-border for medical treatment, 3 had travelled to Spain and 3 had travelled to the UK. The doctors that travelled to Spain resided in Germany, Poland and Sweden and those that travelled to the UK came from Germany (2) and Spain.

The only countries in which more than one doctor indicated they had travelled cross-border for medical treatment were Sweden (8), Poland (5) and Germany (3).
4.3 Reasons for travelling cross-border for medical treatment

Across the eight EU Member States surveyed, 31% of respondents that indicated that they had travelled to another Member State to receive a medical treatment had done so because that treatment was not available in their domestic country.

Fewer of those who had travelled cross-border for treatment did so to receive better quality treatment, to receive cheaper treatment, to receive a treatment from a renowned specialist (17%, 16% and 15% respectively).

Thirteen percent of those surveyed that had travelled cross-border for treatment did so to receive treatment more quickly. Twenty-eight percent indicated that they travelled cross-border for a reason other than those listed in the survey.
Cross-country comparisons of this were not possible due to the small number of respondents who have travelled cross-border in some of the countries (e.g. in Denmark only four respondents had travelled to another Member State to receive a medical treatment).

### 4.4 Potential reasons for travelling cross-border for medical treatment

Of those individuals surveyed that had not travelled cross-border to another EU Member State to receive medical treatment, 64% indicated that they would do so to receive a treatment not available in their domestic country.

Individuals were able to give more than one reason for travelling cross-border for medical treatment and the next most frequently given reasons were to receive better quality treatment and to receive quicker treatment (34% and 29% respectively).

Around a quarter of these individuals suggested that they would travel for medical treatment if it were cheaper or to receive treatment from a renowned specialist, with 3% suggesting they would do it for reasons other than those listed in the survey.

20% of individuals declared that they would not travel overseas for medical treatment. The country in which the highest proportion of individuals indicated that they would not travel cross-border for medical treatment was Estonia, 37%, followed by Sweden and Germany (27% and 26% respectively).
Figure 33: For which of the following reasons would you travel to another European Union Country to receive medical treatments?

- To receive a treatment that is not available in domestic country
- To receive better quality treatment than at home
- To receive treatment more quickly than at home
- To receive cheaper treatment than at home
- To receive a treatment from a renowned specialist
- I would not travel to another European Union country to receive medical treatments
- Other reason

Note: Figure based on 6,407 respondents.
4.5 Confidence in healthcare systems

Citizens and doctors were asked to rate the confidence they had in the healthcare systems of various EU Member States. This section first reviews the level of confidence respondents had in their own domestic healthcare system, then reviews the level of confidence in the healthcare system in the other Member States considered in this study and finally concludes by analysing which countries’ healthcare systems are the most and least trusted.

4.5.1 Confidence in domestic healthcare system

There is a large degree of variation in the opinions of citizens on their national healthcare system. In both Denmark and Germany over 80% of citizens are confident in their national healthcare system, whilst around 70% of citizens in Sweden, Spain and the Czech Republic feel similarly about their own national healthcare systems. Overall there is slightly less confidence in the Italian healthcare system, with 58% of respondents being confident.

Estonians and Poles are the least confident in their national healthcare systems, with 24% and 37% of respondents indicating that they were not confident in their national healthcare system.

Figure 34: Level of confidence in domestic healthcare system (Citizens)

![Figure 34](image)

Note: Figure based on 6,615 respondents.
Domestic healthcare systems are generally viewed with much more confidence by doctors than the general public. Over 70% of doctors from all countries surveyed, except Poland, are confident in their domestic health care system.

Sixteen percent of doctors in Poland indicated that they are not confident in their domestic healthcare system. Italy, Sweden and Spain were the only other countries in which more than 5% of doctors were not confident in their domestic healthcare systems.

**Figure 35: Level of confidence in domestic healthcare system (Doctors)**

<table>
<thead>
<tr>
<th>Member State</th>
<th>1 – Extremely confident</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 – Not at all confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>39%</td>
<td>44%</td>
<td>57%</td>
<td>56%</td>
<td>7%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Denmark</td>
<td>1%</td>
<td>7%</td>
<td>5%</td>
<td>35%</td>
<td>15%</td>
</tr>
<tr>
<td>Germany</td>
<td>1%</td>
<td>41%</td>
<td>41%</td>
<td>35%</td>
<td>7%</td>
</tr>
<tr>
<td>Italy</td>
<td>2%</td>
<td>13%</td>
<td>3%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Poland</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Spain</td>
<td>7%</td>
<td>7%</td>
<td>3%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Sweden</td>
<td>7%</td>
<td>7%</td>
<td>29%</td>
<td>27%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Note: Figure based on 1,156 responses.

### 4.5.1 Confidence in EU Member State healthcare systems

Respondents were asked to also state how confident they are in the healthcare systems of the eight Member States included in this study. Additionally, respondents from countries which in the experiment were asked to choose between a provider from a country not included in this study and a domestic provider were also asked to state how confident they are in the healthcare system in this particular country.

The literature review identified that Estonians travelled to Finland, Czechs and Italians travelled to Austria and German travelled to the Netherlands. Therefore these countries, Austria, Finland and the Netherlands, were included in the experiment as cross-border destinations for those countries that the literature review had identified as being destinations in reality.
As these countries were included as destination countries in the experiment for participants from certain countries, it was important to gauge these participants’ opinions on the national healthcare system in these countries. Therefore in the figure below only Estonians rated the Finnish healthcare system, only Czechs and Italians rated the Austrian healthcare system and only Germans rated the Dutch healthcare system.

The national healthcare systems in which non-residents were most confident in were Germany, Austria, Sweden and the Netherlands, with over 60% indicating that they were confident. Over 50% of individuals also viewed the Danish and Finnish healthcare systems with confidence.\(^{23}\)

The healthcare systems of Estonia, Poland and the Czech Republic are found to be viewed with less confidence by residents of other EU Member States, with over 50% indicating that they are not confident in these healthcare systems.

Opinions on the Italian and Spanish healthcare systems are more split with 46% and 44%, respectively, indicating that they are neither confident nor not confident in these healthcare systems.

\(^{23}\) Only Estonians rated the Finnish healthcare system, only Czechs and Italians rated the Austrian healthcare system and only Germans rated the Dutch healthcare system.
When considering the healthcare systems of other EU Member States, over 70% of doctors were confident in the healthcare systems of Finland, Germany, Sweden, the Netherlands, Austria and Denmark.

The healthcare systems in which doctors had the least faith were Estonia, Poland, the Czech Republic, Spain and Italy. Over 60% of doctors were not confident in the Estonian healthcare system, which is a higher percentage than was found in the survey of the general population.
Figure 37: On a scale from 1 to 5 where 1 means ‘extremely confident’ and 5 means ‘Not at all confident’, please rate how much confidence you have in today’s healthcare system in each of the following countries? (Doctors)

Note: Only Estonians rated the Finnish healthcare system, only Czechs and Italians rated the Austrian healthcare system and only Germans rated the Dutch healthcare system.

### 4.5.2 Most and least trusted healthcare systems

In summary, citizens from four\(^{24}\) of the eight countries surveyed had more confidence in their domestic healthcare system than any of the other seven Member State’s healthcare system. Similarly doctors from three Member states (Germany, Spain and Sweden) did. However, the remaining four countries all had more faith in the German healthcare system than in their domestic healthcare system with the exception of Czech doctors who had most faith in the Austrian healthcare system.

Estonia was rated as the least trusted healthcare system by citizens from six of the eight Member States surveyed. Only citizens from Estonia and Germany did not agree with this finding, deeming

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\(^{24}\) Denmark, Germany, Spain and Sweden.
Poland and the Czech Republic, respectively, to have the healthcare systems which they were least confident in. Similarly, doctors from all countries, except Estonia, have the least confidence in the Estonian healthcare system. Estonian doctors have the least faith in the Polish healthcare system.

<table>
<thead>
<tr>
<th>Table 11: Citizens’ confidence in EU national healthcare systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Czech Republic</strong></td>
</tr>
<tr>
<td><strong>Top rated</strong></td>
</tr>
<tr>
<td><strong>Lowest rated</strong></td>
</tr>
</tbody>
</table>

Note: See Annex 6 for more detailed table. Rating calculated as an average score given by patients for their confidence in the national healthcare systems.

<table>
<thead>
<tr>
<th>Table 12: Doctors’ confidence in EU national healthcare systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Czech Republic</strong></td>
</tr>
<tr>
<td><strong>Top ranked</strong></td>
</tr>
<tr>
<td><strong>Lowest ranked</strong></td>
</tr>
</tbody>
</table>

Note: See Annex 6 for more detailed table. Rating calculated as an average score given by patients for their confidence in the national healthcare systems.

### 4.6 Recommendations for cross-border travel

Fourteen percent of doctors surveyed indicated that they had advised patients to travel cross-border for medical treatment in the past two years. The countries in which the highest proportion of doctors had given such advice were Italy and Poland (24%). Only 5% of doctors in Spain and Estonia had recently advised patients to travel cross-border within the EU for medical treatment.
The destination country which was most frequently suggested by doctors was Germany, with 50% of doctors who advised cross-border treatment suggesting this country. France, the UK and Austria were the only other countries to which over 10% of these doctors had suggested travelling to for medical treatment.
Table 13: To which of the following countries did you advise patients to travel in the last two years to receive medical treatment?

<table>
<thead>
<tr>
<th>Domestic country</th>
<th>Average</th>
<th>Czech Republic</th>
<th>Denmark</th>
<th>Estonia</th>
<th>Germany</th>
<th>Italy</th>
<th>Poland</th>
<th>Spain</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>84</td>
<td>13</td>
<td>14</td>
<td>1</td>
<td>10</td>
<td>28</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>France</td>
<td>24</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>13</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>23</td>
<td></td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>17</td>
<td></td>
<td></td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>14</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>11</td>
<td></td>
<td>4</td>
<td>1</td>
<td>4</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>8</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>8</td>
<td></td>
<td>5</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Latvia</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>No. of responses</strong></td>
<td><strong>167</strong></td>
<td><strong>13</strong></td>
<td><strong>21</strong></td>
<td><strong>5</strong></td>
<td><strong>21</strong></td>
<td><strong>37</strong></td>
<td><strong>36</strong></td>
<td><strong>7</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

Amongst doctors who *did* recommend a patient in the last two years to receive a treatment in another Member State, the most frequently cited reason for doing so was that the treatment was not available in their home country (88 doctors). However, 47 doctors also indicated that they recommended a treatment abroad so that the patient could receive a better quality treatment or to receive the treatment more quickly than at home.
Also when asked in general, receiving a treatment which is not available in the home country is by far the most commonly cited reason for why doctors would recommend patients a treatment in another Member State.

This is once again followed by receiving better quality treatment than at home and receiving this treatment more quickly.
Figure 40: In general, for which of the following reasons would you advise patients to travel to another European Union country to receive medical treatment?

- To receive a treatment that is not available in my country
- To receive better quality treatment than at home
- To receive treatment more quickly than at home
- To receive a treatment from a renowned specialist
- I would not advise patients to receive medical treatments in another European Union country
- To receive cheaper treatment than at home
- Other reason
5 Drivers of cross-border patient choice Phase I

The behavioural experiment analysed which characteristics drive a respondent’s decision to opt for a cross-border or a domestic provider of a medical treatment. Throughout the experiment the quality of the medical treatment is held constant between the domestic and the cross-border provider, varying only the waiting time and the price to be paid.25

Besides studying the effects of the four experimental treatments, the importance of the following socio-economic and demographic variables will be considered:

- The relative price of the domestic treatment
- The relative waiting time of the domestic treatment
- The level of trust in a healthcare system
- Income
- Age
- Risk preference (risk aversion, loss aversion and ambiguity aversion)
- Previous experience with travelling cross-border for a medical treatment
- The geographical location of a respondent (living in a border region or not)

The following sections review each of these potential drivers in detail.

5.1 Price

In the survey 25% of respondents indicated that receiving a cheaper treatment would be a reason for them to travel to another Member State for healthcare and similarly price was identified as a major driver of travelling for medical care in the literature review.

The behavioural experiment finds strong support for this hypothesis, with a significantly higher proportion of respondents choosing the cross-border option as the price of domestic treatment is increased relative to the cross-border treatment (see Table 18 shown in Annex 5). Price is found to be the largest determinant of people’s choice of where to receive treatment with a coefficient of 0.43. This coefficient means that a doubling of the price of the domestic treatment is associated with a 43 percentage point increase in the probability that the cross-border provider will be selected.

Figure 41 below shows the proportion of respondents that chose the cross-border option at different price levels for each of the three medical conditions. There is a clear upward trend for all three medical conditions. In particular for dental care the proportion of respondents opting for cross-border treatment increases sharply from 17% choosing a cross-border provider when domestic and cross-border providers are equally priced, to 65% opting for the cross-border provider when the domestic provider is 75% more expensive than the cross-border provider.

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25 The experiment provides no information on quality to respondents. It simply names the different (hypothetical) medical treatments they are making choices about. Therefore, there will be unobservable pre-conceptions held by respondents which we cannot control in the experiment. However, this would be the case even if we explicitly told respondents quality was the same at home as abroad.
5.1.1 Willingness to pay analysis

Using the information on how much more respondents are willing to pay in order to stay in their home country, their willingness to pay to receive treatment domestically can be calculated. Willingness to pay analysis in this case calculates the amount of money that individuals would be willing to pay in order to receive the treatment from their domestic healthcare system rather than travel cross-border for treatment.

Figure 42 shows the average willingness to pay to receive medical treatment in domestic country rather than travel cross-border for the treatment, by medical treatment and country. Across all countries there is a higher average willingness to pay to stay at home for heart bypass surgery than hip replacement and root canal dental treatment.

The average willingness to pay for hip replacement surgery was €930 in Sweden, which is higher than in any of the other countries. In Poland the average willingness to pay was €224, lower than any other country.
For heart bypass surgery, the Germans were willing to pay the most to receive treatment from their domestic healthcare system rather than travel (€1,817). Once again it was the Polish who were willing to pay the lowest amount across all countries to receive treatment at home rather than abroad (€417).

Respondents were, on average, willing to pay the lowest amount to remain domestically for root canal dental treatment out of the three treatments. Denmark and Sweden had the respondents who were willing to pay the most for treatment from their domestic healthcare systems (€77 and €76). The lowest willingness to pay to receive treatment by their domestic healthcare system rather than travel cross-border for treatment again came from Poland.

In fact, on average, Polish people would have preferred to receive treatment abroad, as can be seen by the fact that they have a negative average willingness to pay, -€7, a result that was statistically significant. That is, Poles on average would be willing to pay money in order to receive the treatment abroad (in this case Germany) over receiving it at home.
5.2 Waiting time

With 34%, even more survey respondents indicated that reduced waiting times would be a reason for them to travel to another Member State to receive healthcare and once again, the behavioural experiment finds clear support of this preference. In fact, waiting time is found to be the second strongest determinant in the choice of where to receive medical treatment, controlling for all other factors (see Table 18 in Annex 5). The coefficient of 0.19 means that a doubling of the domestic waiting time is associated with a 19 percentage point increase in the probability that the cross-border provider will be selected.

Figure 43 shows graphically the proportion of respondents who selected the cross-border treatment as domestic waiting time varied, by the medical condition. The graphs show that as the

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domestic waiting time increases, above the cross-border waiting time, the proportion of respondents who choose cross-border medical treatment increases for all medical conditions.

Comparing Figure 41 and Figure 43, price and waiting time appear to have a similar effect on respondents’ choice for ‘hip replacements’ and ‘heart bypass surgery’ while for ‘root canal dental treatment’ the effect of having to wait longer appears to be smaller than the effect of an increase in price. However, it has to be noted that the waiting time for the dental treatment increased from a relatively small level (as opposed to the other two medical conditions) and the smaller effect is therefore likely due to the fact that even doubling the waiting time only amounts to a small number of extra days wait.

The experiment also elicited the impact of a change in both the domestic price and waiting time at the same time, whilst keeping the price and waiting time of cross-border treatment constant. The results confirm that as domestic price and waiting times are increased, keeping all else equal, the proportion of respondents that would choose to travel cross-border for treatment increases.

An interesting result which was found was that a simultaneous increase in the domestic price and domestic waiting time lead to an impact that was less than the sum of the individual impacts of
increasing just the domestic price or the domestic waiting time on the proportion of respondents that chose cross-border treatment.

It is possible that those individuals that are more open to the possibility of travelling cross-border for medical treatment will do so in response to either a shorter waiting time for treatment or a cheaper cost of treatment. Therefore increasing both of these variables will not have the same impact, in terms of the proportion of individuals choosing to travel cross-border, as the sum of impacts that were found by increasing only one of these variables at a time.

Figure 44: The effect of price and waiting time on the proportion of respondents who select a cross-border provider of healthcare

Note: Waiting times increased by slightly different percentages (see Section 5.2).

5.3 Trust

Trust is known to be an important factor in an individual’s decision of where, and from whom, to receive medical treatment (Pearson & Raeke, 200026; Hall, Dugan et al., 200127; Hall, Zheng et al.,


Therefore the survey elicited each respondent’s level of trust in the healthcare systems in all Member States which are included in this study, in order to study to what extent trust impacted an individual’s decision over where to choose to receive medical treatment.

Not only is trust itself important, but also trust in the source of information being given to individuals. For example, Hesse’s 2005 study finds that consumers trust their physician more than any online source.

5.3.1 Importance of trust in the healthcare systems

Confidence in healthcare systems was elicited from respondents on a scale of 1 (not at all confident) to 5 (extremely confident). From this information it was possible to analyse the decisions made over where to receive medical treatment with regard to respondents’ confidence in the healthcare system in the cross-border country.

Figure 45 shows the proportion of respondents that chose the cross-border treatment by confidence level in the healthcare system of the cross-border target country. There is an upward trend in the graphs suggesting that those respondents who had more faith in the cross-border healthcare system were more likely to choose cross-border medical treatment. However this trend does not appear to be very strong, particularly in the case of hip replacement treatment, where –if anything – the data appears to follow a U-shape.

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At first glance, this finding gives the impression that confidence in the target country healthcare system is not a particularly important driver of consumer behaviour. However, below we demonstrate that relative level of confidence in the target country healthcare system is one of the most important drivers of patients’ choice.

Respondents were also asked for their opinions on their domestic healthcare system. Combining respondents’ opinions on their domestic healthcare system and cross-border healthcare system it is possible to create a measure of the difference in trust between the two healthcare systems. The difference in a respondent’s confidence between domestic and cross-border healthcare ranges from -4 to 4. A rating of -4 indicates that the respondent has very little faith in their domestic healthcare system, giving a rating of 1, and regard the cross-border healthcare system very highly, giving a rating of 5. A rating of 4 shows that a respondent has a large amount of confidence in their domestic health care system and very little faith in the cross-border healthcare system.
The results (Figure 46) reveal that respondents who are relatively more confident in the healthcare system of the target country than in their own healthcare system are more likely to opt for a cross-border treatment than a domestic treatment.

Figure 46: The effect of a difference in trust between domestic and cross-border healthcare systems on the proportion of respondents who select a cross-border provider of healthcare.

The regression analysis confirms that this measure of relative trust is one of the most important drivers of respondents’ decision to opt for a cross-border treatment (Table 18). In fact, the effect is so large that over 80% of respondents who are not at all confident in their domestic healthcare systems and are extremely confident in the cross-border healthcare system, with a trust level of -4, choose the cross-border option for root canal dental treatment. The equivalent figures for hip replacement and heart bypass surgery are both also high, at 60% and 58% respectively.

Less than 30% of respondents with a relative trust level of 4, who are extremely confident in their domestic healthcare system and not at all confident in the cross-border healthcare system, chose cross-border treatment for each of the three medical conditions.
5.3.2 Importance of trust in sources of information

In the context of the current study, it was also tested if consumers trust information provided by foreign NCPs more or less than information provided by their own NCP. As a result, a treatment called ‘sources of information’ was implemented in which the information about healthcare providers in the cross-border country was included in the domestic NCP instead of the cross-border country NCP (the foreign NCP).

The experiment did not find a statistically significant difference in behaviour as a result of the source of information treatment compared to the baseline. Figure 47 shows that 38% of respondents from the general population chose the cross-border option from each of the treatments. However, a slightly higher proportion of doctors chose the cross-border option in the source of information treatment.

![Figure 47: The effect of source of information on the proportion of respondents selecting the cross-border option in the behavioural experiment](image)

5.4 Language

In the language treatment, the language of the cross-border country NCP was translated into the national language of the target country (as opposed to the domestic/home language of the respondent). The results of the economic experiment show that a smaller proportion of respondents chose the cross-border treatment if they experience the language treatment than the
baseline treatment. However this difference between the two treatments was very small and not found to be statistically significant.

Figure 48: The effect of language on the proportion of respondents selecting the cross-border option in the behavioural experiment

Note: Only respondents who speak the cross-border language at least ‘somewhat’ were allocated to the language treatment. As a result, only these respondents are considered in the comparison between baseline and language treatment.

A potential reason that a statistically significant difference between the treatments was not found is that only those individuals that could understand the cross-border language at least a little were faced with the language treatment.

Viewing information in a language that is not understood is likely to have significantly more adverse effects than seeing the information in a language which they do speak.

Additionally, those individuals that have the ability to speak the cross-border language are likely to be more willing to travel cross-border for treatment as can be seen by the fact that 42% of respondents in the baseline treatment who speak the cross-border language at least ‘somewhat’ are willing to travel cross-border relative to the 34% of all respondents in the baseline treatment. The ability to speak the language spoken in the cross-border country was also found to have a significant impact on a respondent’s choice of where to receive medical treatment in the regression analysis (see Table 18 shown in Annex 5).
It is likely that this is not simply a linguistic effect but that individuals that speak cross-border languages are more likely than others to have a close affinity with the cross-border country and therefore be more inclined to travel there for medical treatment. One of the five drivers of cross-border medical treatment identified by Glinos et al. (2006) was familiarity and these findings are in line with this theory.

Figure 49: The effect of speaking the cross-border language on the proportion of respondents who select a cross-border provider of healthcare
6 National Contact Point visitor questionnaire Phase II

Three hundred and sixty visitors to the National Contact Point websites took part in the survey. The number of participants varied between countries. Table 14 shows the break down by country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of visitors that completed the survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>50</td>
</tr>
<tr>
<td>Denmark</td>
<td>75</td>
</tr>
<tr>
<td>Slovenia</td>
<td>55</td>
</tr>
<tr>
<td>Italy</td>
<td>14</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>75</td>
</tr>
<tr>
<td>Estonia</td>
<td>7</td>
</tr>
<tr>
<td>Finland</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: London Economics

6.1 Reasons for visiting the National Contact Points

The most common reason respondents gave for visiting the NCP websites was to find information on healthcare in a country other than their home country: 46%, or 167 out of the 360 respondents, indicted this as a reason for their visit. 29% visited to find information on healthcare in their home country. 15% visited to find information on healthcare providers, and 13% were looking for information on quality and safety standards of care.

![Figure 50: Reason for visiting the NCP website](image)

Note: 360 respondents answered this question. Respondents could provide multiple answers.

If we consider responses at a country level, in Germany 66% of respondents reported that they visited the NCP website to find information on healthcare in a country other than their home country. This compares to only 19% of respondents in Finland. A smaller proportion reported that
they visited the NCP site to find information on healthcare providers. Italy had the largest proportion of respondents that visited the NCP site to find information on healthcare providers at 29%. This compares to Finland where 6% of respondents gave this answer. In Germany 26% of respondents answered that a reason for visiting the site was to find information on quality and safety standards of care, compared to Estonia where no respondents gave this reason.

Figure 51: Reason for visiting the NCP website, country level

![Graph showing the reasons for visiting the NCP website across different countries.]

Note: DE, DK, SI, IT, CZ, EE, HU, FI have base counts of 50, 75, 55, 14, 75, 7, 37 and 47 respectively. Participants could provide one or more reasons for their visit.

6.2 How easy it was to find information on the NCP websites

Respondents were asked to rate on a scale of 1 to 5 how easy it was for them to find the information on the website they had been seeking. Across all countries, over 49% of respondents reported the information they were looking for was easy to find (rating of 1 or 2). Visitors to the German NCP were more likely to report the information was easy to find at just over 60%. Visitors to the Slovenian NCP were least likely to report information was easy to find at around 31%.
Respondents who stated that information was hard to find, giving a score of 4 or 5 in the previous question, were then asked to provide the reason for this (Figure 53). 75 respondents to the survey reported that information was hard to find, of these 40% reported that the information they were looking for was not provided, and 45% reported that there was not enough detail. On the other hand, 21% thought there was too much information and 8% thought the information was too technical. This finding suggests that the use of dynamic pages and pop up boxes for further information may be useful for visitors to the NCP sites. This would allow visitors seeking basic information to access this easily while those seeking more detailed information could expand additional information boxes or pages to find more detailed information on relevant topics.
Visitors to the Italian NCP website reported that information was hard to find because there was not enough detail (21%) and the information they were looking for was not provided (29%). This was also the case for respondents in Slovenia, where 18% reported there was not enough detail and 16% said the information they were looking for was not provided.
We further investigated the relationship between the type of information respondents were seeking and ease of finding that information. We observe little difference across the information types. For all types of information approximately half of the respondents found the information easy to find (rating of 1 or 2).
We then considered the reasons why specific types of information were difficult to find. For visitors looking for information on healthcare in a country other than their home country, 39% reported there was not enough detail. When looking for information on healthcare providers, 35% reported that there was not enough detail. Visitors seeking information on health care in their home country, 34% considered there was not enough detail, and 16% reported that the information they were looking for was not provided. For information on quality and safety standards of care, 23% reported the information was too basic and 32% that there was not enough detail. These observations support the suggestion that websites could use dynamic pages and pop up boxes for more detailed information.
6.3 How helpful the information was

Respondents were also asked to consider how helpful the information provided on the NCP websites was to them. Just under 60% of respondents in total reported that the information provided on the website was helpful. Looking across the countries, overall respondents reported the information was helpful.
We also find that there is a strong relationship between the proportion of respondents that found the information they were looking for hard to find and the proportion that thought the information provided was unhelpful (correlation = 0.90)\textsuperscript{29}. Figure 58 shows this relationship. The 45 degree line indicates that respondents more frequently thought that the information they were looking for was hard to find than considering it not to be helpful. This is because all countries except for the Czech Republic are below the 45 degree line.

\textsuperscript{29} Estonia is not included as none of the 9 respondents in Estonia indicated the website was not helpful.
Figure 58: Relationship between difficulty in finding information and the helpfulness of information

In Figure 59 we present the inverse relationship. This shows the proportion of respondents that found information easy to find and helpful. Here we see that in countries where respondents reported that the information they were looking for was easy to find also tended to report that it was helpful (correlation co-efficient 0.7).
In addition we can consider the relationship between ease of finding information and unhelpfulness of information. Figure 60 presents this relationship (correlation -0.79). It confirms the observations in the previous figures that there is a relationship between ease of finding information and usefulness of information to respondents.
Figure 60: Relationship between ease of finding information and unhelpfulness of information

For those respondents who reported that the information was not helpful (rating 4 or 5), they were then asked why this was the case. Looking at responses across all countries, the main reason respondents considered the information was not helpful was that they would have liked more detailed information on providers, followed by reviews from previous patients.

This suggests that tools that allow patients to rate or comment on health providers in a country could be helpful to people considering healthcare in the country.
Figure 61: Why the information was not helpful

Note: Based on 52 respondents that rated the helpfulness of the information 4 or 5 (i.e. not helpful). Respondents could provide multiple answers to this question. The total number of people that chose either review option was 17 people, with four in overlap.

**Which language was chosen**

The questionnaire and experiment were available in the home NCP national language and English. Nearly all respondents chose to answer the questionnaire and economic experiment in the national language of the NCP website. English was chosen by 25 respondents out of the 360 that completed the questionnaire (or just under 7%) of the respondents.

In the choice experiment (reported in the next section), respondents who completed the questionnaire in English also tended to choose go cross-border more frequently (57% compared to 49%). However, this was not statistically different.
Figure 62: Proportion of respondents that completed the questionnaire in the national language or English

Note: CZ, SI, DE, IT, DK, HU, FI and EE are based on 75, 55, 50, 14, 75, 37, 47 and 7 respondents respectively.

Figure 63: Choice of treatment abroad

Note: The figure is based on 1005 choices by 335 participants in the National Language version and 75 choices by 25 participants in the English version. There was no statistical difference between participants that chose their national language or English in their choice to go abroad at the 95% confidence level (two-sided Wilcoxon ranksum test, z = 1.807, p = 0.0708).
7  Drivers of cross-border patient choice Phase II

As part of the questionnaire, respondents made three hypothetical choices within the experiment. Respondents were asked if they would choose to seek health care abroad or in the NCP home country. The choices were varied by price of the cross-border treatment relative to price in the NCP home country and waiting time. The treatment was root canal dental care.

As was the case in Phase 1, the online choice experiment, participants were informed that they would see web pages which contain information which would make it easier for them to decide where to go for treatment. Respondents were free to browse the two websites the home country NCP and the cross-border NCP in a natural fashion (the websites were set-up for the experiment and were not actual NCP sites\textsuperscript{30}). The websites included the information shown in Table 16. This was the same information as included in Phase I.

| Table 15: Information included in the experiment web pages |
|---------------------------------|---------------------------------|
| Domestic NCP | Cross-border NCP |
| About page | About page |
| Information on reimbursement and basket of benefits | Information on safety and quality standards |
| Information on appeals procedures | Information on providers |

Respondents could ‘click through’ the various web pages, leading them through the information in the domestic NCP website and to the cross-border NCP website. It was up to respondents to decide on which links to click.

The domestic and cross-border countries paired in the experiment are shown in Table 16. These country pairings were based on a background review of cross-border country flows, advice from the study expert panel and home country NCPs who were able to participate in the study.

\textsuperscript{30} For each of these categories we developed text, based on the information we found on existing health-related websites. The text represents a combination of what we found on individual country websites targeted at patients and consumers as well as feedback from the expert panel members for this study. It is important to bear in mind that the information presented in the experiment was a stark simplification of what will be available on the actual NCP websites. This is due to the fact that time was limited in the experiment and we needed to have clear control over what was shown to respondents.
Table 16: Domestic and cross border NCP for choice experiment

<table>
<thead>
<tr>
<th>Domestic NCP</th>
<th>Cross-border NCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Germany</td>
</tr>
<tr>
<td>Estonia</td>
<td>Finland</td>
</tr>
<tr>
<td>Germany</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Austria</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Italy</td>
</tr>
<tr>
<td>Hungary</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Finland</td>
<td>Estonia</td>
</tr>
<tr>
<td>Italy</td>
<td>Austria</td>
</tr>
</tbody>
</table>

7.1 The effect of price on choice of cross-border healthcare

The observations from the experiment conducted as part of the NCP survey indicate very similar results to that found in the online survey and experiment conducted as part of phase I. In phase I 17% of respondents chose cross-border care when the domestic and cross border price was equal (for dental treatment). In phase II, 15% of respondents chose to go cross-border when the domestic and cross-border price was the same (Figure 64).

The proportion of respondents that chose healthcare abroad increased rapidly in all cases as the price of domestic treatment increased relative to cross-border. When the domestic price was 50% more than the cross-border price 54% of respondents chose the cross-border option (in phase I this was 53% for dental treatment).

Figure 64: Impact of price on choice to go cross-border (domestic price relative to cross-border price)

Note: The number of choices made is 427 in total, with the base number of choices/observations for +0%, +25%, +50% and +75% being 106, 105, 108 and 108 respectively. The abroad price for the treatment was €117. Error bars indicate one standard error.
We also find that price is the main driver of cross-border choice in a regression analysis and that the effect of price is greater than waiting time. This was also the case in phase I.

7.2 The effect of waiting time on choice of cross-border healthcare

As with price, the observations for increases in domestic waiting time relative to cross-border waiting time are very similar between phase I and II. In phase I, for root canal dental treatment, when the domestic waiting time was equal to the cross-border waiting time 17% of respondents elected to go cross-border. In phase II when domestic and cross-border waiting time was the same 15% of respondents chose the cross-border option. When the waiting time for domestic treatment increased to 7 days, 42% of phase II respondents chose to go cross-border. In Phase I this figure was 35%. When the difference in waiting time was 11 days, 48% of respondents in both phase I and phase II chose to go abroad.

The respondents were told nothing about the relative quality of treatment in the different countries. This approach was taken in both Phase I and II. Therefore, respondents will have beliefs about the relative quality of care that are unobservable. In phase II we find that just under half of the respondents that chose to go abroad when domestic and cross-border prices and waiting times were the same, were from the Czech Republic who elected to seek treatment in Austria. While we did not ask why people chose to go cross-border, we can observe from Phase I, that respondents had a low level of confidence in the Czech Republic and Estonian healthcare systems and a high level of confidence in the Austrian system. Therefore, these private beliefs will be having an effect on the choice to go cross-border.
Figure 65: The effect of waiting time on the proportion of respondents who select a cross-border provider of healthcare

Note: The number of choices made is 430, with the base number for +0 days, +4 days, +7 days and +11 days being 106, 106, 106 and 112 respectively. The abroad waiting time was 7 days. Error bars indicate one standard error.

7.3 The effect of price and waiting time

The experiment also investigated the impact of a change in both the domestic price and waiting time at the same time, whilst keeping the price and waiting time of cross-border treatment constant. The results confirm that as domestic price and waiting times are increased, keeping all else equal, the proportion of respondents that would choose to travel cross-border for treatment increases.
Figure 66: The effect of price and waiting time on the proportion of respondents who select a cross-border provider of healthcare

Note: The number of choices made is 435, with the base number for the four columns being 106, 110, 111 and 108 respectively. Error bars indicate one standard error. The abroad price for the treatment was 117 €. The abroad waiting date was 7 days. Waiting time rounded to the nearest full day.

7.4 Effect of complexity of information framing on choice

Finally we explore how information framing may affect choice. On the one hand more information is beneficial to allow the consumer to make informed decisions; yet on the other hand this can lead to too much information and the consumer no longer being able to absorb any of it. As a result, there exists a clear trade-off between information provision which is too complex and scientific accuracy of information, which is often necessarily detailed.

In order to test this hypothesis, the experiment included a scenario called ‘complexity’ in which the medical information was described in a much more complicated, scientific manner. Comparing the choices made in this treatment to the choices made by respondents in the scenario where information was provided in less complex manner (the baseline) provides insights into whether information complexity affects patients’ choice.

As in phase I, the results of our economic experiment did not find a statistically significant difference in the proportion of people that chose the cross-border treatment option when faced with the baseline treatment or the complexity treatment. However, this result does not rule out that complexity of information can affect the behaviour of patients; it only implies that in the experiment we could find no evidence of a relationship between the two.
Similarly, we find that overall the majority of respondents answered correctly the understanding question in regard to reimbursements. On average 89.7% answered correctly the following question:

Imagine you want to receive a medical treatment in another Member State of the European Union. Your health insurance would cover for up to €100, but the treatment abroad costs €110. How much would you be reimbursed for?

*Please select one answer*

- Since the treatment abroad is more costly I would not be reimbursed for anything.
- I would be reimbursed the full €110.
- I would be reimbursed only €100 and I would need to pay for the difference myself

When comparing between the complexity and baseline scenarios, we find no difference in the proportion of respondents correctly answering the question.
8 Conclusions and recommendations

The objective of this study was to assess:

- To what extent does the content and format of information provided by NCPs impact on patients’ choice to exercise their rights to be treated abroad?
- How to provide information on cross-border healthcare by the NCPs to patients in clear and understandable format to improve informed patient choice?
- What sources of information are the most trustful for patients (e.g. domestic NCP, or a NCP in the Member State of treatment)?
- What information were visitors to NCP websites looking for?
- How easy or hard was it for visitors to find the information they were looking for on the websites?
- How helpful the information provided on the National Contact Point websites was for visitors?

The study was divided into two phases: Phase I was based on a controlled online experiment and survey undertaken in eight Member States which investigated the impact of information on respondents’ choice to seek healthcare cross-border in the EU. Phase I also included a survey of payers. In Phase II a shortened version of the phase I experiment was implemented along with a survey that asked respondents questions about their experience on the National Contact Point websites.

The experiments in Phase I and II demonstrated that the key drivers of exercising one’s right to be treated by a healthcare provider in another Member State are the price of the treatment, and the waiting time.

The relative level of trust the patient has in the healthcare system in the target country as compared to the home country is also of importance.

In order to allow patients to make an informed decision about where to seek medical care, it is therefore important that relevant price and waiting time information is easily and quickly accessible on the NCP website.

Trust in another healthcare system on the other hand, or in the own healthcare system for that matter, is nothing that can easily be fostered with NCP sites. Nonetheless, transparent information about healthcare providers in other Member States as well as detailed reviews of these is likely to be helpful in building patients’ trust in other European healthcare systems. An option maybe for a review system, similar to those used on travel and hotel websites where patients post reviews about their experiences with healthcare providers in different countries.

The experiments in both phases did not find any evidence that the format of the website has a large impact on the likelihood to select a cross-border provider of healthcare over a domestic provider. However, the Phase I experiment did find that understanding was significantly better.
when the information was less complex. Phase II found a strong relationship between how easy information was to find and useful respondents found the information.

In Phase II there was a mix between respondents who reported that the information they were looking for was not provided or that there was not enough detail; and, respondents who thought there was too much information or the information was too technical. **NCP websites could consider using dynamic pages and pop up boxes.** The front pages could provide high level information. This would allow visitors seeking basic information to access this easily while those seeking more detailed information could expand additional information boxes or pages to find more detailed information on relevant topics.

The **payer survey** in Phase I showed that payers believe the information currently provided on cross-border healthcare is **too complex for patients to understand.** Further, payers believe that patients currently do not have access to all the information they need to make an informed decision about whether or not to go abroad for a medical treatment.

On the other hand, the majority of payers are **confident that Directive 2011/24/EU effectively clarifies patients’ rights with regard to reimbursement of cross-border healthcare and that it facilitates cooperation between healthcare payers in the EU.**

In regard to the establishment of National Contact Point websites, payers believe that the **inclusion of a frequently asked question section is important,** as is **information on liability insurance of healthcare professionals.**
References


Toftgaard, C (2005) Straalebehandling i Tyskland (Radiation therapy in Germany).


Annex 1    Survey of citizens and doctors Phase I

STANDARD PANEL INTRO
Thank you for your participation in our Access Panels online surveys. Your opinions are very important to us.

It is very important that John Doe completes the survey. If that person is not you please do not answer the survey in his/her name.

NEXT SCREEN

Thank you for taking part in this important study for the European Commission. The survey is about cross-border healthcare in the European Union.

In 2011 the European Parliament and the Council passed a Directive on cross-border healthcare which gives citizens of the European Union the right to access healthcare services in another EU Member State for planned and unplanned medical care and to be reimbursed for it.

You will be asked some general questions about healthcare and we will ask your opinion on a website that provides citizens with information on cross-border healthcare. In addition, we will also ask you to complete a number of experiments in this survey. These experiments allow us to understand how you make choices in different situations. These experiments are fun to complete and you can also win some additional points if you get lucky!

In these experiments you will have a chance to win ‘Survey points’. At the end of the survey, your ‘Survey points’ will be redeemed for a voucher of a value that will depend on the number of points you would have won. The value of the voucher corresponds to the following number of points:

Qcountry:
1. Estonia
2. Czech Republic
3. Denmark
4. Germany
5. Italy
6. Poland
7. Spain
8. Sweden

Qlanguage:
1. Estonian
2. Czech
3. Danish
4. German
5. Italian
6. Polish
7. Spanish
8. Swedish

Qtarget:

<table>
<thead>
<tr>
<th>Country</th>
<th>Target Country</th>
<th>Target Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
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<td>German</td>
</tr>
<tr>
<td>Sweden</td>
<td>Denmark</td>
<td>Danish</td>
</tr>
</tbody>
</table>

PRG: QUESTIONS ASKED TO ALL UNLESS SPECIFIED
SCREENING/DEMOGRAPHIC QUESTIONS
Firstly please tell us a few details about yourself. This is to ensure we are including a wide range of people in this research.
D1. How old were you at your last birthday?
Please enter your age - PRG: NUMERIC QUESTION – RANGE 1 – 99- screen out if <18
RECODE INTO:
1. 18 - 24
2. 25 - 34
3. 35 - 44
4. 45 - 54
5. 55 - 64
6. 65+

D2. Are you a...
Please select one answer - PRG: SINGLE ANSWER
1. Man
2. Woman

D3. REGION
PRG: USE STANDARD MODULE OR EXCEL SPREADSHEET

D4. Which of the following best describes your current work status?
Please select one answer - PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>PRG: RECODE AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employed full-time</td>
</tr>
<tr>
<td>2. Employed part-time</td>
</tr>
<tr>
<td>3. Self-employed</td>
</tr>
<tr>
<td>1. ACTIVE</td>
</tr>
</tbody>
</table>

London Economics
### Annex 1 | Survey of citizens and doctors Phase I

<table>
<thead>
<tr>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. INACTIVE</td>
</tr>
<tr>
<td>4. Unemployed but looking for a job</td>
</tr>
<tr>
<td>5. Unemployed and not looking for a job / Long-term sick or disabled / Housewife / Househusband</td>
</tr>
<tr>
<td>6. Retired</td>
</tr>
<tr>
<td>7. Pupil / Student / In full time education</td>
</tr>
</tbody>
</table>

#### D5. What is the highest level of education you have achieved?

*Please select one answer - PRG: SINGLE ANSWER*

- 1. Low
- 2. Medium
- 3. High

#### D6. Which of the following statements best describes how you feel about your current level of household income?

*Please select one answer - PRG: SINGLE ANSWER*

- 1. Living comfortably on present income
- 2. Coping on present income
- 3. Finding it difficult on present income
- 4. Finding it very difficult on present income
- 5. No answer

#### D7. Can you read and understand [PRG: INSERT TARGET LANGUAGE FOR COUNTRY AT QTARGET]?

*Please select one answer - PRG: SINGLE ANSWER*

- 1. Yes
- 2. A little
- 3. No

PGR: ASK ALL

#### Q13. If you have €100 in a savings account and the interest rate is 2% per year, after 5 years, how much money will you have in the account?

*Please select one answer - PRG: SINGLE ANSWER*

- 1. More than €110
- 2. Exactly €110
- 3. Less than €110

Thank you. The following questions are about healthcare in general and then we will ask your opinion on a website that provides information about healthcare in a different European country.

Q1. Are you a doctor, nurse or other medical practitioner?

*Please select one answer - PRG: SINGLE ANSWER*

- 1. Yes -
- 2. No

PGR: ASK ALL
Q2. Have you yourself received any medical treatment at hospital in the last two years?  
*Please select one answer* - **PRG: SINGLE ANSWER**

1. Yes  
2. No  

PGR: ASK IF CODE 1 (YES) AT Q2

Q3. Did this medical treatment involve an overnight stay in a hospital?  
*Please select one answer* - **PRG: SINGLE ANSWER**

1. Yes  
2. No – GO TO Q5  

PGR: ASK IF CODE 1 (YES) AT Q3

Q4. Was this medical treatment for a condition that was life-threatening?  
*Please select one answer* - **PRG: SINGLE ANSWER**

1. Yes  
2. No

PGR: ASK ALL

Q5. Have you yourself travelled to another European Union Country to receive medical treatment in the last two years?  
*Please select one answer* - **PRG: SINGLE ANSWER**

1. Yes  
2. No GO TO Q7  

PRG: ASK IF CODE 1 (YES) AT Q5

Q5.b In which of the following country did you travel to in the last two years to receive medical treatment?  
*Please select all that apply* - **PRG: MULTICODE ANSWER**

1. Austria  
2. Belgium  
3. Bulgaria  
4. Cyprus  
5. Czech Republic  
6. Denmark  
7. Estonia  
8. Finland  
9. France  
10. Germany  
11. Greece  
12. Hungary  
13. Ireland  
14. Italy  
15. Latvia  
16. Lithuania  
17. Luxembourg
18. Malta
19. Netherlands
20. Poland
21. Portugal
22. Romania
23. Slovakia
24. Slovenia
25. Spain
26. Sweden
27. United Kingdom
28. None of these countries [PRG: CHANGE Q5 INTO code 2 (NO) AND DO NOT ASK Q6]

PGR: ASK IF CODE 1 (YES) AT Q5

Q6. For which of the following reasons did you travel to another European Union Country to receive medical treatment?

*Please select all that apply* - PRG: MULTICODE ANSWER

1. To receive a treatment that is not available in [PRG: COUNTRY]
2. To receive better quality treatments
3. To receive a treatment from a renowned specialist
4. To receive treatment more quickly than at home
5. To receive treatment more cheaply than at home
6. Other reason

PGR: ASK IF CODE 2 (NO) AT Q5

Q7. For which of the following reasons would you travel to another European Union Country to receive medical treatments?

*Please select all that apply* - PRG: MULTICODE ANSWER

1. To receive a treatment that is not available in [PRG: COUNTRY]
2. To receive better quality treatments
3. To receive a treatment from a renowned specialist
4. To receive treatment more quickly than at home
5. To receive treatment more cheaply than at home
6. I would not travel to another European Union country to receive medical treatments
7. Other reason

PGR: ASK ALL

Q8. On a scale from 1 to 5 where 1 means ‘extremely confident’ and 5 means ‘Not at all confident’, please rate how much confidence you have in today’s healthcare system in each of the following countries?

*Please select one answer per row* - PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Not at all confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely confident</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

London Economics
Q9. In the past 2 years, have you recommended to a patient that they travel to another European Union country for medical treatment?  

*Please select one answer* - **PRG: SINGLE ANSWER**  
1. Yes  
2. No

Q9B. To which of the following country did you advice patients to travel to in the last two years to receive medical treatment?  

**PRG: USE SAME LIST AT Q5b**

Q10. For which of the following reasons did you advise patients to receive medical treatment in another European Union country?  

*Please select all that apply* - **PRG: MULTICODE**  
1. To receive a treatment that is not available in [PRG: COUNTRY]  
2. To receive better quality treatments  
3. To receive a treatment from a renowned specialist  
4. To receive treatment more quickly than at home  
5. To receive treatment more cheaply than at home  
6. Other reason

Q11. In general, for which of the following reasons would you advise patients to travel to another European Union country to receive medical treatment?  

*Please select all that apply* - **PRG: MULTICODE**  
1. To receive a treatment that is not available in [PRG: COUNTRY]  
2. To receive better quality treatments  
3. To receive a treatment from a renowned specialist  
4. To receive treatment more quickly than at home  
5. To receive treatment more cheaply than at home  
6. I would not advise patients to receive medical treatments in another European Union country  
7. Other reason
Q12. How often do you have problems understanding the medical information included on leaflets in medicine packages?

*Please select one answer - PRG: SINGLE ANSWER*

1. Never
2. Occasionally
3. Sometimes
4. Often
5. Always

Q13. Has been moved at the start

**EXPERIMENT**

PGR: ASK ALL

You will now see web pages that provide information on how to obtain healthcare in another European Union country.

Please imagine that you require [PGR: INSERT MEDICAL CONDITION FROM TABLE BELOW] and that you are looking for information about being treated abroad.

PRG: A THIRD OF RESPONDENTS SHOULD BE ALLOCATED TO EACH OF FOLLOWING MEDICAL CONDITION

<table>
<thead>
<tr>
<th>Code</th>
<th>To show to respondents</th>
<th>Recode into</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>root canal dental treatment</td>
<td>Outpatient care</td>
</tr>
<tr>
<td>2</td>
<td>hip replacement</td>
<td>Inpatient care - non-vital</td>
</tr>
<tr>
<td>3</td>
<td>heart bypass surgery</td>
<td>Inpatient care - vital</td>
</tr>
</tbody>
</table>

Please browse through the web pages by clicking on the links on the left of the pages and read all the information carefully.

When you are done, just click next at the bottom of the screen. You will then be asked a question about the information you have just read about. If you answer correctly you will win 5 additional Survey points.

**PGR: SHOW HTML WEBSITE**

Website 1: baseline
Website 2: language
Website 3: complexity
Website 4: source of information
Website 5: design
PRG: THERE ARE 5 DIFFERENT VERSIONS OF THE WEBSITES – WE NEED THE SAME NUMBER OF RESPONDENTS FROM EACH MEDICAL CONDITION TO BE SHOWN EACH WEBSITE

PRG: WEBSITE 2 SHOULD ONLY BE SHOWN TO RESPONDENTS CODING 1 OR 2 AT D7

PRG: EACH WEBSITE HAS 6 PAGES. PLEASE RECORD
1. WHICH PAGES EACH RESPONDENT HAD LOOKED AT
2. HOW LONG EACH RESPONDENT HAS SPENT ON EACH PAGE.

Please browse the website by clicking on the links on the left of the pages. When you are done reading all the pages please click next.

Conjoint

After having browsed the web pages for all the available information on healthcare providers for [PRG: INSERT MEDICAL CONDITION FROM EXPERIMENT] in [PRG: COUNTRY] and in [PRG: INSERT TARGET COUNTRY FROM QTARGET], imagine that you have narrowed down your options to a small number of potential healthcare providers.

We are going to show you these healthcare providers in pairs of two. For each pair, please select the one you would choose for this particular treatment you need to undertake. The treatment is always exactly the same, but notice that the price and the waiting times are going to vary.

PRG: THERE WILL BE TEN DIFFERENT COMBINATIONS OF PRICE AND WAITING TIME FOR EACH MEDICAL CONDITION. EACH RESPONDENT WILL RANDOMLY BE SHOWN THREE OF THESE COMBINATIONS DEPENDING OF THEIR MEDICAL CONDITION.

PRG: THE FULL LIST OF COMBINATIONS CAN BE FOUND IN THE CONJOINT INFO EXCEL FILE.

Q14. Which of these two options would you be more likely to choose?

*Please select one answer - PRG: SINGLE ANSWER*

PRG: SHOW 3 COMBINATIONS RANDOMLY TO EACH RESPONDENT DEPENDING OF THEIR MEDICAL CONDITION

PRG: HAVE SAME NUMBER OF RESPONDENTS SEEING EACH COMBINATION

PRG: ROTATE COMBINATIONS ON LEFT AND RIGHT SIDE OF SCREEN

PRG: FOR THE PICTURE, PLEASE SHOW RANDOMLY A PICTURE AMONG THE 6 AVAILABLE. EACH RESPONDENT SHOULD ONLY SEE EACH PICTURE ONCE. PICTURES ARE NOT LINKED TO ANY
COMBINATION, OPTION, COUNTRY OR HOSPITAL NAME, THEY SHOULD BE SHOWN COMPLETELY RANDOMLY.
PRG: FOR NAME OF HOSPITAL PLEASE SHOW RANDOMLY AMONG THE 3 OPTIONS PER COUNTRY IN EXCEL FILE
EXAMPLE

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong> Marien Hospital</td>
<td><strong>Name:</strong> Medisch Centrum</td>
</tr>
<tr>
<td><strong>Country:</strong> Germany</td>
<td><strong>Country:</strong> The Netherlands</td>
</tr>
<tr>
<td><strong>Distance from you:</strong> ~100 Km</td>
<td><strong>Distance from you:</strong> ~100 Km</td>
</tr>
<tr>
<td><strong>Cost of treatment:</strong> €170</td>
<td><strong>Cost of treatment:</strong> €170</td>
</tr>
<tr>
<td><strong>The health insurance reimburses immediately:</strong> €50</td>
<td><strong>The health insurance reimburses within two months:</strong> €50</td>
</tr>
<tr>
<td><strong>You pay upfront:</strong> €120</td>
<td><strong>You pay upfront:</strong> €170</td>
</tr>
<tr>
<td><strong>Overall cost to you:</strong> €120</td>
<td><strong>Overall cost to you:</strong> €120</td>
</tr>
<tr>
<td><strong>Waiting time:</strong> two weeks</td>
<td><strong>Waiting time:</strong> two weeks</td>
</tr>
</tbody>
</table>

PGR: ASK ALL

Q15. Imagine you want to receive a medical treatment in another Member State of the European Union. Your health insurance would cover for up to €100, but the treatment abroad costs €110. How much would you be reimbursed for?

*Please select one answer - PRG: SINGLE ANSWER*

1. Since the treatment abroad is more costly I would not be reimbursed for anything.
2. I would be reimbursed the full €110.
3. I would be reimbursed only €100 and I would need to pay for the difference myself

PRG: IF CODE 3 AT Q15 PLEASE SHOWS: Your answer is correct, you have won 5 additional Survey points. [PGR: FOR CZECH REPUBLIC tickets.]

PRG: IF CODE 1 or 2 AT Q15 PLEASE SHOW: Your answer is not correct, you will not receive additional Survey points [PGR: FOR CZECH REPUBLIC USE tickets] for this question.
Q16. On a scale from 1 to 5 where 1 means ‘the information was easy to find’ and 5 means ‘the information was hard to find’, please rate how easy it was to find the necessary information on the website in order to make a choice between providers?

Please select one answer- PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>Information was easy to find</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Information was hard to find</th>
</tr>
</thead>
</table>

Q17. And why did you say the information was hard to find?

Please select all that apply- PRG: MULTICODE ANSWER

1. The information was too technical
2. The information was too basic
3. There was too much information
4. There was not enough detail
5. The information I was looking for was not provided
6. Other

Q18. On a scale from 1 to 5 where 1 means ‘the information was very helpful’ and 5 means ‘the information was not at all helpful’, please rate how helpful you found this kind of information.

Please select one answer- PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>Information was very helpful</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Information was not at all helpful</th>
</tr>
</thead>
</table>

Q19. And why did you say the information was not helpful?

Please select all that apply- PRG: MULTICODE ANSWER

1. I would have liked more detailed information on the providers
2. I would have liked reviews from previous patients (from any country)
3. I would have liked reviews from previous patients from my country
4. I would have liked more information on the language skills of the medical staff abroad
5. I would have liked more information about the quality and safety of the medical provider in the other country.
6. I would have liked more information on the qualifications of attending medical staff
7. Other

Thank you for your answers so far. You are now going to take part in three experiments. These experiments will allow us to understand how you make choices in different situations.
In these experiments you will have a chance to win additional survey points if you win. You cannot lose any of your initial Survey points for participating in the survey. You will receive your survey points for participating in the survey as usual after completing it. Any additional points you may win in the following experiments as well as the 5 points you may have won earlier, will be added to your account after the survey will close. It can take up to 8 weeks for you to receive your additional points.

Thank you for your answers so far. You are now going to take part in three experiments. These experiments will allow us to understand how you make choices in different situations. In the following experiments you will have a chance to win survey points that will be redeemed for a voucher at the end of the survey. It can take up to 8 weeks for you to receive your voucher.

**NEXT SCREEN**

Qexpintro. The following experiments involve luck. If you are not comfortable participating in experiments where you can win survey points based on chance, you can skip this section.

1. I want to participate in these experiments
2. I do not want to participate in these experiments

**Experiment 1**

*PGR: SHOW TO RESPONDENT*

Q20. Imagine you are flipping a coin and you are offered the following options. Which of these options would you like to play?

This experiment has real effects, any winnings will be added to the Survey points you earn during this survey. You cannot lose any Survey points.

*Please select one answer*  

**PGR: SINGLE ANSWER**

**PGR: SHOW AS TABLE**

<table>
<thead>
<tr>
<th>Coin comes up heads</th>
<th>Coin comes up tails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1 □</td>
<td>you win 28 points</td>
</tr>
<tr>
<td>Option 2 □</td>
<td>you win 24 points</td>
</tr>
<tr>
<td>Option 3 □</td>
<td>you win 20 points</td>
</tr>
<tr>
<td>Option 4 □</td>
<td>you win 16 points</td>
</tr>
<tr>
<td>Option 5 □</td>
<td>you win 12 points</td>
</tr>
<tr>
<td>Option 6 □</td>
<td>you win 2 points</td>
</tr>
</tbody>
</table>

**PGR: NEXT SCREEN**

**PGR: FOR EACH RESPONDENT CHOOSE RANDOMLY IF THE COIN IS HEAD OR TAIL. FOR EACH EXPERIMENT 50% SHOULD BE HEAD AND 50% SHOULD BE TAIL. SHOW POINTS ACCORDINGLY.**

1) **RESULT:** [PGR: INSERT HEAD OR TAIL]

2) You have won [PGR: INSERT SURVEY POINTS WON] Survey points in this experiment.
**Experiment 2** PGR: SHOW TO RESPONDENT

Q21. Now, imagine you are flipping a coin and you are offered two options.

- **Option A:**
  - You win 8 Survey points if the coin comes up heads,
  - You lose 5 Survey points if the coin comes up tails.

- **Option B:**
  - You play option A six times.

You can choose between either, both or neither of these options. Any winnings will be added to the Survey points you earn during this survey.

*Please select one answer* - PRG: SINGLE ANSWER

1. Neither option
2. Option A only
3. Option B only
4. Both Options
5. 

PGR: NEXT SCREEN
PGR: DON’T SHOW IF Q13=1
PRG: IF CODE 2 OPTION A, CHOOSE RANDOMLY IF THE COIN IS HEAD OR TAIL. 50% SHOULD BE HEAD AND 50% SHOULD BE TAIL. IF HEAD RESPONDENT WINS 8 POINTS. IF TAIL RESPONDENT WINS 5 POINTS.
PRG: IF CODE 3 OPTION B, CHOOSE RANDOMLY IF THE COIN IS HEAD OR TAIL 6 TIMES AND CALCULATE POINTS ACCORDINGLY.
PRG: IF CODE 4 OPTION, CHOOSE RANDOMLY IF THE COIN IS HEAD OR TAIL 7 TIMES AND CALCULATE POINTS ACCORDINGLY.

3) RESULT: [PRG: INSERT HEAD OR TAIL – FOR EXPERIMENT B SHOW THE 6 RESULTS]

4) [PRG: INSERT You have won OR You have lost DEPENDING IF HEAD OR TAIL AND INSERT SURVEY POINTS WON OR LOST] Survey point(s) in this experiment.

**Experiment 3** PGR: SHOW TO RESPONDENT
Q22. In this next experiment you are going to draw a ball out of a bag. If the ball you choose is the “right” colour, then you win 5 Survey points. You get to decide which bag to choose the ball from.

- **Bag 1**: In Bag 1 there are 4 RED balls and 6 YELLOW balls. You must pick a RED ball in order to win.

- **Bag 2**: In Bag 2 there are 10 balls. Some are RED and some are YELLOW. You first decide what colour ball wins. You must then pick this colour ball to win.

Which bag would you like to choose?

*Please select one answer - PRG: SINGLE ANSWER*
Bag 1

Choose red ball to win!

Bag 2

Some are red, some are yellow, which colour wins?

1. I choose bag 1  

I choose bag 2 and I want the winning colour to be:

2. Red  
3. Yellow

PGR: NEXT SCREEN

PRG: IF RESPONDENT CHOOSES BAG 1 (CODE 1) SELECT RANDOMLY IF THE BALL IS RED OR YELLOW. 40% SHOULD BE RED AND 60% SHOULD BE YELLOW. IF RED RESPONDENT WINS 5 POINTS.

PRG: IF RESPONDENT CHOOSES BAG 2 RED BALL (CODE 2) SELECT RANDOMLY IF THE BALL THAT WINS IS RED OR YELLOW. 50% SHOULD BE RED AND 50% SHOULD BE YELLOW. IF RED RESPONDENT WINS 5 POINTS.

PRG: IF RESPONDENT CHOOSES BAG 2 YELLOW BALL (CODE 3) SELECT RANDOMLY IF THE BALL THAT WINS IS RED OR YELLOW. 50% SHOULD BE RED AND 50% SHOULD BE YELLOW. IF YELLOW RESPONDENT WINS 5 POINTS.

5) RESULT: [PGR: INSERT RED BALL OR YELLOW BALL]

6) You have won [PGR: INSERT SURVEY POINTS WON] Survey point(s) in this experiment.
Annex 2  NCP Visitor questionnaire Phase II

Thank you for taking part in this important study for the European Commission. The survey is about cross-border healthcare in the European Union.

In 2011 the European Parliament and the Council passed a Directive on cross-border healthcare which gives citizens of the European Union the right to access healthcare services in another EU Member State for planned and unplanned medical care and to be reimbursed for it.

You will be asked some general questions about [PRG: Insert name of home country NCP].

We will also ask you to consider a hypothetical website and to make a hypothetical choice about whether to receive healthcare in your home country or in another country in the European Union. Please make this choice as if you were actually thinking about going to another country for healthcare.

By completing this survey and experiment you will go into a draw to win €50.

PGR: ASK ALL

1. What was your reason for visiting [PRG: insert name of home country NCP site] today? 
   Please select all that apply- PRG: MULTICODE ANSWER
   
   A. To find information on health care in [PRG: insert home country]
   B. To find information on health care in a country other than my home country
   C. To find information on healthcare providers
   D. To find information on quality and safety standards of care
   E. Other reason

PGR: ASK ALL

2. On a scale from 1 to 5 where 1 means ‘the information was easy to find’ and 5 means ‘the information was hard to find’, please rate how easy it was to find the information on the website you were looking for?

   Information was easy to find
   □ 1  □ 2  □ 3  □ 4  □ 5  □  Information was hard to find

PRG: IF CODE 4 or 5 ask Q3

3. And why did you say the information was hard to find? 
   Please select all that apply- PRG: MULTICODE ANSWER
7. The information was too technical
8. The information was too basic
9. There was too much information
10. There was not enough detail
11. The information I was looking for was not provided
12. Other

PGR: ASK ALL
4. On a scale from 1 to 5 where 1 means ‘the information was very helpful’ and 5 means ‘the information was not at all helpful’, please rate how helpful you found this kind of information.

Please select one answer- PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>Information was very helpful</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Information was not at all helpful</th>
</tr>
</thead>
</table>

PRG: IF CODE 4 or 5 at Q4
5. And why did you say the information was not helpful?

Please select all that apply- PRG: MULTICODE ANSWER

1. I would have liked more detailed information on the providers
2. I would have liked reviews from previous patients (from any country)
3. I would have liked reviews from previous patients from my country
4. I would have liked more information on the language skills of the medical staff abroad
5. I would have liked more information about the quality and safety of the medical provider in the other country.
6. I would have liked more information on the qualifications of attending medical staff
7. other
Experiment

You will now see web pages that provide information on how to obtain healthcare in another European Union country.

Please imagine that you require ROOT CANAL DENTAL TREATMENT and that you are looking for information about being treated abroad.

Please browse through the web pages by clicking on the links on the left of the pages and read all the information carefully.

When you are done, just click next at the bottom of the screen. You will then be asked a question about the information you have just read about.

PGR: SHOW HTML WEBSITE
Website 1: baseline
Website 2: complexity

PRG: THERE ARE 2 DIFFERENT VERSIONS OF THE WEBSITES – WE NEED THE SAME NUMBER OF RESPONDENTS TO BE SHOWN EACH WEBSITE

PRG: EACH WEBSITE HAS 6 PAGES. PLEASE RECORD
1. WHICH PAGES EACH RESPONDENT HAD LOOKED AT
2. HOW LONG EACH RESPONDENT HAS SPENT ON EACH PAGE.

Please browse the website by clicking on the links on the left of the pages. When you are done reading all the pages please click next.
Conjoint

After having browsed the web pages for all the available information on healthcare providers for root canal dental treatment in [PRG: COUNTRY] and in [PRG: INSERT TARGET COUNTRY FROM QTARGET], imagine that you have narrowed down your options to a small number of potential healthcare providers.

We are going to show you these healthcare providers in pairs of two. For each pair, please select the one you would choose for this particular treatment you need to undertake. The treatment is always exactly the same, but notice that the price and the waiting times are going to vary.

**PRG:** THERE WILL BE TEN DIFFERENT COMBINATIONS OF PRICE AND WAITING TIME. EACH RESPONDENT WILL RANDOMLY BE SHOWN THREE OF THESE COMBINATIONS DEPENDING OF THEIR MEDICAL CONDITION.

**PRG:** THE FULL LIST OF COMBINATIONS CAN BE FOUND IN THE CONJOINT INFO EXCEL FILE.

Q23. Which of these two options would you be more likely to choose?

*Please select one answer: PRG: SINGLE ANSWER*

**PRG:** SHOW 3 COMBINATIONS RANDOMLY TO EACH RESPONDENT

**PRG:** HAVE SAME NUMBER OF RESPONDENTS SEEING EACH COMBINATION

**PRG:** ROTATE COMBINATIONS ON LEFT AND RIGHT SIDE OF SCREEN

**PRG:** FOR THE PICTURE, PLEASE SHOW RANDOMLY A PICTURE AMONG THE 6 AVAILABLE. EACH RESPONDENT SHOULD ONLY SEE EACH PICTURE ONCE. PICTURES ARE NOT LINKED TO ANY COMBINATION, OPTION, COUNTRY OR HOSPITAL NAME, THEY SHOULD BE SHOWN COMPLETELY RANDOMLY.

**PRG:** FOR NAME OF HOSPITAL PLEASE SHOW RANDOMLY AMONG THE 3 OPTIONS PER COUNTRY IN EXCEL FILE
**EXAMPLE**

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong> Marien Hospital</td>
<td><strong>Name:</strong> Medisch Centrum</td>
</tr>
<tr>
<td><strong>Country:</strong> Germany</td>
<td><strong>Country:</strong> The Netherlands</td>
</tr>
<tr>
<td><strong>Distance from you:</strong> ~100 Km</td>
<td><strong>Distance from you:</strong> ~100 Km</td>
</tr>
<tr>
<td><strong>Cost of treatment:</strong> €170</td>
<td><strong>Cost of treatment:</strong> €170</td>
</tr>
<tr>
<td>The health insurance reimburses immediately:</td>
<td>The health insurance reimburses within two months:</td>
</tr>
<tr>
<td></td>
<td>€50</td>
</tr>
<tr>
<td><strong>You pay upfront:</strong> €120</td>
<td><strong>You pay upfront:</strong> €170</td>
</tr>
<tr>
<td><strong>Overall cost to you:</strong> €120</td>
<td><strong>Overall cost to you:</strong> €120</td>
</tr>
<tr>
<td>Waiting time: two weeks</td>
<td>Waiting time: two weeks</td>
</tr>
</tbody>
</table>

**Q24.** Imagine you want to receive a medical treatment in another Member State of the European Union. Your health insurance would cover for up to €100, but the treatment abroad costs €110. How much would you be reimbursed for?

*Please select one answer* - **PRG: SINGLE ANSWER**

- 4. Since the treatment abroad is more costly I would not be reimbursed for anything.
- 5. I would be reimbursed the full €110.
- 6. I would be reimbursed only €100 and I would need to pay for the difference myself.

**D1.** How old were you at your last birthday?

*Please enter your age* - **PRG: NUMERIC QUESTION – RANGE 1 – 99- screen out if <18**

**RECODE INTO:**

- 7. 18 - 24
- 8. 25 - 34
9. 35 - 44
10. 45 - 54
11. 55 - 64
12. 65+

D2. Are you a...

*Please select one answer - PRG: SINGLE ANSWER*

3. Man
4. Woman

D2-bis. In which of the following countries do you currently live?

*Please select one answer - PRG: SINGLE ANSWER*

1. Austria
2. Belgium
3. Bulgaria
4. Croatia
5. Cyprus
6. Czech Republic
7. Denmark
8. Estonia
9. Finland
10. France
11. Germany
12. Greece
13. Hungary
14. Iceland
15. Ireland
16. Italy
17. Latvia
18. Lithuania
19. Luxembourg
20. Malta
21. Norway
22. Poland
23. Portugal
24. Romania
25. Slovakia
26. Slovenia
27. Spain
28. Sweden
29. The Netherlands
30. UK
31. Other
D3. REGION

PRG: USE STANDARD MODULE OR EXCEL SPREADSHEET

D4. Which of the following best describes your current work status?
*Please select one answer* - PRG: SINGLE ANSWER

<table>
<thead>
<tr>
<th>PRG: RECODE AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employed full-time</td>
</tr>
<tr>
<td>2. Employed part-time</td>
</tr>
<tr>
<td>3. Self-employed</td>
</tr>
<tr>
<td>4. Unemployed but looking for a job</td>
</tr>
<tr>
<td>5. Unemployed and not looking for a job / Long-term sick or disabled / Housewife / Househusband</td>
</tr>
<tr>
<td>6. Retired</td>
</tr>
<tr>
<td>7. Pupil / Student / In full time education</td>
</tr>
<tr>
<td>1. ACTIVE</td>
</tr>
<tr>
<td>2. INACTIVE</td>
</tr>
</tbody>
</table>

D5. What is the highest level of education you have achieved?
*Please select one answer* - PRG: SINGLE ANSWER

PRG: INSERT LIST PER COUNTRY – BASED ON THE EXCEL FILE PROVIDED ALL COUNTRIES RECODED INTO

4. Low
5. Medium
6. High
Annex 3 | Invitation screens NCP visitor questionnaire Phase II

Estonia: http://kontaktpunkt.sm.ee

Figure 68: Estonia invitation window
Denmark: https://www.patientombuddet.dk/da/Klage-og_sagstyper/International_Sygesikring.aspx

Figure 69: Denmark invitation window
Figure 70: Czech Republic invitation window
Slovenia: http://www.nkt-z.si/wps/portal/nktz/home

Figure 71: Slovenia invitation window
Hungary: www.eubetegjog.hu

Figure 72: Hungary invitation window

Figure 73: Finland invitation screen
Italy: http://www.salute.gov.it/portale/temi/p2_4.jsp?lingua=italiano&tema=SanitaInternazionale&area=cureUnioneEuropea

Figure 74: Italy invitation screen
### Annex 4  Regression results Phase I and II

Table 18: Logit regression results for choice to seek cross-border healthcare (marginal effects) Phase I

<table>
<thead>
<tr>
<th></th>
<th>Cross-border choice (1)</th>
<th>Cross-border choice (2)</th>
<th>Cross-border choice (3)</th>
<th>Cross-border choice (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language treatment</td>
<td>0.009</td>
<td>0.009</td>
<td>-0.002</td>
<td>0.010</td>
</tr>
<tr>
<td>Complexity treatment</td>
<td>-0.001 (0.013)</td>
<td>0.001 (0.014)</td>
<td>-0.003 (0.014)</td>
<td>0.015 (0.016)</td>
</tr>
<tr>
<td>Sources of information treatment</td>
<td>-0.003 (0.013)</td>
<td>0.003 (0.014)</td>
<td>0.001 (0.014)</td>
<td>0.006 (0.015)</td>
</tr>
<tr>
<td>Design treatment</td>
<td>0.003 (0.013)</td>
<td>0.009 (0.014)</td>
<td>0.002 (0.014)</td>
<td>0.007 (0.016)</td>
</tr>
<tr>
<td>Male (dummy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.059*** (0.009)</td>
<td>0.047*** (0.009)</td>
<td>0.041*** (0.010)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.029*** (0.004)</td>
<td>-0.028*** (0.004)</td>
<td>-0.028*** (0.004)</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic waiting time</td>
<td>0.186*** (0.008)</td>
<td>0.195*** (0.008)</td>
<td>0.204*** (0.009)</td>
<td></td>
</tr>
<tr>
<td>Domestic price</td>
<td>0.426*** (0.012)</td>
<td>0.439*** (0.012)</td>
<td>0.448*** (0.013)</td>
<td></td>
</tr>
<tr>
<td>Difference in confidence between domestic and cross-border healthcare systems</td>
<td></td>
<td></td>
<td></td>
<td>-0.084*** (0.004)</td>
</tr>
<tr>
<td>Speak cross border language (dummy)</td>
<td>0.054*** (0.010)</td>
<td>0.067*** (0.011)</td>
<td>0.053*** (0.011)</td>
<td>0.051*** (0.012)</td>
</tr>
<tr>
<td>Recently travelled for medical treatment (dummy)</td>
<td></td>
<td></td>
<td></td>
<td>0.107*** (0.030)</td>
</tr>
<tr>
<td>Risk aversion</td>
<td></td>
<td></td>
<td></td>
<td>-0.012*** (0.003)</td>
</tr>
<tr>
<td>Loss aversion</td>
<td></td>
<td></td>
<td></td>
<td>-0.005 (0.007)</td>
</tr>
<tr>
<td>Ambiguity aversion</td>
<td></td>
<td></td>
<td></td>
<td>-0.005 (0.010)</td>
</tr>
</tbody>
</table>
### Table 18: Logit regression results for choice to seek cross-border healthcare (marginal effects) Phase I

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border region</td>
<td>0.029***</td>
<td>(0.010)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>0.009</td>
<td>0.009</td>
<td>-0.002</td>
</tr>
</tbody>
</table>

Note: Standard errors clustered at the subject level in parentheses. *** denotes significance at the 1% level, ** at the 5% level and * at the 10% level.

### Table 17: Logit regressions estimates on choice to seek healthcare cross-border (marginal effects) Phase II

<table>
<thead>
<tr>
<th>Characteristics of the choice</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>-0.0165***</td>
<td>0.0034</td>
<td>0 to 75</td>
</tr>
<tr>
<td>Waiting time</td>
<td>-0.0092***</td>
<td>0.0019</td>
<td>0 to 150</td>
</tr>
<tr>
<td>Price * Waiting time</td>
<td>0.0004***</td>
<td>0.0001</td>
<td>0 to 11,250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics of the person</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in abroad healthcare system</td>
<td>0.0153***</td>
<td>0.0037</td>
<td>12.5 to 70.7</td>
</tr>
<tr>
<td>Gender (1= Female)</td>
<td>-0.19</td>
<td>0.18</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Age</td>
<td>-0.011</td>
<td>0.006</td>
<td>18 to 79</td>
</tr>
<tr>
<td>Employment (1 = Full-time employed)</td>
<td>-0.595***</td>
<td>0.169</td>
<td>0 or 1</td>
</tr>
<tr>
<td>_cons</td>
<td>-0.669</td>
<td>0.382</td>
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</tr>
</tbody>
</table>

Note: ***, **, and * indicate the 99.9%, 99% and 95% confidence levels
## Annex 5  
Confidence in national healthcare systems Phase I

### Table 19: Confidence in national healthcare systems (General population)

<table>
<thead>
<tr>
<th>Rating country</th>
<th>Total General Population</th>
<th>Czech Republic</th>
<th>Denmark</th>
<th>Estonia</th>
<th>Germany</th>
<th>Italy</th>
<th>Poland</th>
<th>Spain</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>3.70</td>
<td>3.76</td>
<td>3.86</td>
<td>2.74</td>
<td>3.74</td>
<td>3.92</td>
<td>3.80</td>
<td>3.79</td>
<td>3.61</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.41</td>
<td>2.13</td>
<td>3.77</td>
<td>3.01</td>
<td>3.77</td>
<td>3.83</td>
<td>3.35</td>
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<td>3.52</td>
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<tr>
<td>Denmark</td>
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<td>2.47</td>
<td>1.80</td>
<td>2.55</td>
<td>2.46</td>
<td>2.54</td>
<td>2.72</td>
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<td>1.89</td>
<td>2.38</td>
<td>1.85</td>
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<td>2.26</td>
<td>2.30</td>
<td>2.30</td>
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<tr>
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<td>3.06</td>
<td>3.21</td>
<td>2.98</td>
<td>3.37</td>
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<td>3.08</td>
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<td>Poland</td>
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<td>3.67</td>
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<td>3.18</td>
<td>3.52</td>
<td>3.55</td>
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<tr>
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<td>3.27</td>
<td>3.09</td>
<td>3.46</td>
<td>3.05</td>
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<td>2.09</td>
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<tr>
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<td>2.47</td>
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</tr>
</tbody>
</table>

Note: Average rating given by respondents from respective countries (1 = Extremely confident and 5= Not at all confident)

**Source:**

### Table 20: Confidence in national healthcare systems (Doctors)

<table>
<thead>
<tr>
<th>Rating country</th>
<th>Total General Population</th>
<th>Czech Republic</th>
<th>Denmark</th>
<th>Estonia</th>
<th>Germany</th>
<th>Italy</th>
<th>Poland</th>
<th>Spain</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
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<td>3.92</td>
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</tr>
</tbody>
</table>

Note: Average rating given by respondents from respective countries (1 = Extremely confident and 5= Not at all confident)

**Source:**