ESPN Thematic Report on Inequalities in access to healthcare

Cyprus

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European Social Policy Network (ESPN)

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The European Social Policy Network (ESPN) was established in July 2014 on the initiative of the European Commission to provide high-quality and timely independent information, advice, analysis and expertise on social policy issues in the European Union and neighbouring countries.

The ESPN brings together into a single network the work that used to be carried out by the European Network of Independent Experts on Social Inclusion, the Network for the Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP) and the MISSOC (Mutual Information Systems on Social Protection) secretariat.

The ESPN is managed by the Luxembourg Institute of Socio-Economic Research (LISER) and APPLICA, together with the European Social Observatory(OSE).

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Contents

Summary / Highlights

Inequalities in access to healthcare in Cyprus are largely related to the lack of universal coverage as well as to the serious shortcomings and deficiencies of the current system. Today, more than 20% of the population have no access to the public health sector, which moreover suffers from inadequate infrastructure; lack of professional management; and shortages in medical and nursing personnel as well as in modern (usually high cost) medical technology. However, its biggest problem is long waiting lists, which pose serious barriers to access, thereby damaging the equity of the system. This situation has resulted in the development of a large private sector, approximately the size of the public sector, which works in a rather unregulated environment and is financed to a large extent by out-of-pocket payments.

In terms of financing, it should be noted that Cyprus allocates a relatively small fraction of its state budget to health, having at the same time a very high level of private health expenditure, which mostly consist of direct payments to the public and private sector. More specifically, in 2016 Cyprus allocated 6.8% of its GDP to health, of which 2.9% came out of the state budget (EU-15: 7.5%) and the other 3.9% from private payments (EU-15: 2.1%). The inadequate provision of public healthcare services contributes to the observed high levels of out-of-pocket payments as a large proportion of patients seek care in the private sector. As a result, out-of-pocket payments are the highest in the EU, and almost three times higher than the EU average. Such a system characterised by low total health expenditure, very low public funding and very high out-of-pocket payments, resembles the systems of less-developed countries.

The lack of universal coverage is the cause of a series of problems, since it creates conditions for different levels of insurance coverage. People on high incomes who do not benefit from public health insurance generally enjoy much better access to private sector health services. Further to that, the long waiting lists, and the lack of transparency in their management, leave room for manipulation and external interventions. Finally, some groups (mostly members of high-income households and third-country nationals) are excluded from the system, and if they want to make use of public sector services, they have to pay according to the price list in force for non-beneficiaries, thus exposing themselves to serious financial risk.

The current system is failing to respond to the health needs of the population; it suffers from serious problems of access and inequalities arising from different substitutive and complementary schemes of coverage, financial barriers and insufficient availability of healthcare services. Those most affected are the uninsured, immigrants (especially third-country nationals), the elderly, low-income households and other vulnerable groups as outlined in the report.

The financial turmoil of 2012-2015 has forced many Cypriots to turn to the public health sector as the most affordable option, causing higher levels of congestion in the already overloaded public system. The situation remains difficult even today, despite the gradual recovery of the economy. The financial crisis has also contributed to the growth of economic inequalities with the simultaneous widening of health inequalities including access to healthcare. Some measures which have been taken to address these problems, most importantly to reduce waiting times, have only managed to offer temporary relief, without effectively addressing the long-standing weaknesses of the system.

However, there is room for optimism. The new national health system (NHS) is expected to effectively address the issues of universal coverage and access, reduce inequalities and provide adequate and timely services to all. The new system will start its operation with the provision of primary care services in 2019, and is expected to be fully implemented by June 2020.

1 Description of the functioning of the country's healthcare system for access

The current healthcare system in Cyprus is comprised of a highly centralised public sector and a poorly regulated private sector. The two sectors are of a similar size and they operate in parallel.

Responsibility in the public sector regarding administration, organisation, planning, regulation and provision lies with the Ministry of Health (MoH), which also coordinates the activities of both public and private sectors, regulates healthcare standards, promotes the enactment of relevant legislation and generally formulates national health policy. The public healthcare system is exclusively financed by the state budget, with services provided through a network of hospitals and health centres that are directly controlled by the MoH (Republic of Cyprus, 2016). Health professionals are salaried employees and have the status of civil servants.

In contrast, the private sector, which works in a rather unregulated environment, is financed mostly by out-of-pocket payments (from both non-beneficiaries and beneficiaries of the public system, who attempt to avoid long waiting times), to some degree by voluntary health insurance (VHI), and to a much lesser extent by the budget of the MoH, while providers are generally remunerated on a fee-for-service basis. The private sector largely consists of independent providers[1] established in urban areas, working solo or in groups. Facilities are often physician-owned or managed by private companies with doctors usually as shareholders, while its overcapacity of expensive medical technology is underutilised. The private sector provides services to those who can afford to pay for their treatment either from their own resources or through private insurance providers.

The public healthcare sector, which currently covers about 80% of the population, is more akin to a hybrid system with an outdated structure and organisation; a lack of professional and effective management; and serious shortages in infrastructure, staffing and technological equipment. Because of these problems and shortcomings, the public system has been proven to be unable to meet the basic needs of beneficiaries in an efficient and timely manner. As a consequence, waiting lists have been endemic in the system for many years, forcing many patients to turn to the private sector and bear the full cost of their treatment.

1.1 Financing of healthcare

In 2016, Cyprus allocated 6.8% of its GDP to health, of which 2.9% was financed by the state budget (EU-15: 7.5% in 2016, EU-28: 6.2% in 2015) and the other 3.9% by private payments, mainly out-of-pocket payments but also VHI premiums (EU-15: 2.1% in 2016, EU-28: 2.19% in 2015). The total health spending per capita in 2015 was €1,592 (adjusted for differences in purchasing power). This figure is below the expenditure levels documented before the financial crisis and well below the EU average (OECD/European Observatory on Health Systems and Policies (2017)). From a cross-country perspective, it could be said that Cyprus allocates a low level of its state budget to health, exhibiting at the same time a very high rate of private health spending. In particular, out-of-pocket payments in Cyprus are the highest in the EU, at almost three times the EU average. These payments represent mostly direct payments to the private sector.

The economic crisis and the ensuing fiscal consolidation programme affected the financing structure of the system. In particular, in 2013 the government, based on the

[1] Around 1,700 doctors working in the private sector and 134 private healthcare group practice facilities (hospitals, polyclinics and clinics).

recommendations of the Economic Adjustment Programme, and in order to make the system more efficient and financially sustainable, implemented the following measures.

- Introduction of a compulsory healthcare contribution for civil servants and public sector pensioners of 1.5% of their gross salaries and pensions. This measure was envisaged as the first step towards a contributions-based system of universal coverage. Until this change, these two groups of beneficiaries had free access to public services.
- Introduction of flat-rate co-payments at the point of use for a specified range of outpatient services provided by the public system[2]. There is no annual ceiling, while certain vulnerable groups have been exempted from these payments.
- An increase of 30% in the charges for all medical services provided by public hospitals and health centres for non-beneficiaries.

1.2 Healthcare coverage

Despite the fact that the public system is financed through general taxation, it does not provide universal coverage to the entire population. To be eligible, beneficiaries need to satisfy several criteria (including income-related ones). In particular, access to public healthcare services is provided through the issuance of a medical card *(karta nosilias*). Registering with the scheme is not compulsory, but eligible recipients should meet the following conditions:

- they are either Cypriots or European citizens who reside permanently in Cyprus;
- they have paid insurance contributions for a minimum period of three years (assimilated insurance is counted);
- they have submitted a personal income tax declaration at the date of application;
- their annual income should not exceed €15,400 (single person);
- their annual income should not exceed €30,750, increased by €1,700 for each dependent child (couples with dependants).

Overall, it is estimated that 80% of the population is entitled to public healthcare services, while the rest are either uninsured or covered by private health insurance via individual or group contracts provided by their employer (Theodorou et al., 2012). People working in semi-governmental organisations (e.g. the Electricity Authority and Telecommunication Authority) and the broader public sector (e.g. employees of public universities) are entitled to choose between the public system and private health insurance, with the cost of the latter being partly covered by the employer's budget. Private sector employees, especially those working in large firms, usually take out collective VHI with or without the sponsorship of their employers. In many cases, employees are simultaneously covered by the public system and private insurance contracts.

Non-beneficiaries, mostly high-paid employees and self-employed people as well as third-country nationals, can still make use of public services if they are willing to pay for them on the basis of the prices set by the MoH for non-beneficiaries, which nevertheless are significantly lower than the corresponding ones in the private sector. In these cases, and only for inpatient care, there is an annual ceiling for out-of-pocket payments, which is calculated as a percentage of a patient's annual household income and the number of dependants. However, in practice, the overwhelming majority of non-beneficiaries opt for private health insurance, seeking health services in the private sector – except for

[2] €10 for a visit to an accident & emergency department, €3 for a visit to a general practitioner (GP) or dentist, €6 for a visit to a specialist and €0.50 for each prescribed pharmaceutical product and laboratory test, with a maximum charge of €10 per prescription. There is no annual cap on co-payments.

serious medical cases (e.g. patients with cancer, newborn babies in need of serious treatment) that require the use of expensive medical infrastructure only available in public hospitals.

1.3 Availability of healthcare

Physical and human resources are split between hospitals, health centres and sub-centres of the public sector[3] on the one hand, and hospitals, polyclinics, clinics and solo practices of the private sector on the other. The public system has an extended network of providers throughout the island and operates alongside the private sector, which is mostly located in urban areas and primarily provides ambulatory care. The number of hospital beds is slightly lower in the private sector, with very low occupancy rates compared with the public sector.

Data available for 2016 show that nurses, doctors and medical technology are poorly allocated between the two sectors (Statistical Service of Cyprus, 2018). The majority of nurses are employed in the public sector – 3,319 (72.7% of the total) vs 1,248 (27.3%) in the private sector, while there are more than twice as many physicians in the private sector as in the public sector – 2,283 (70.9%) vs 937 (29.1%). Similarly, the overwhelming majority of advanced diagnostic imaging systems and, specifically, magnetic resonance imaging (MRI) and computerised axial tomography (CT) devices are deployed in the private sector[4].

The services provided by the current public system include primary care, specialists' services, diagnostic tests, paramedical services, emergency services, hospital care, preventive dental care, mental care, pharmaceutical care, rehabilitation and home care. Furthermore, patients have access to treatment abroad for health problems that cannot be treated in Cyprus. In particular, for cases requiring specialised services and treatments that are not provided in Cyprus, the MoH has signed agreements with foreign medical centres located in Greece, Israel and the United Kingdom, to which the patients are dispatched, upon advice from a council of doctors. The new system will provide, in addition to what is currently provided, family doctor and family pediatric services as well as free access to private sector services.

However, due to capacity constraints, access to certain services, such as surgical procedures and examinations, is significantly restricted. Significant restrictions and barriers to access also exist in the provision of rehabilitation, palliative and long-term care, as well as in nursing care for the elderly, mainly due to inadequate infrastructure and the lack of trained personnel. These services are largely provided by NGOs and the charitable sector. Finally, public sector beneficiaries face difficulties in accessing new medicines and innovative treatments.

1.4 Affordability of health expenditure and depth of coverage

Cyprus is among the three countries with the highest percentage of households having either great or moderate difficulty in affording healthcare services (Eurostat, 2018). Additionally, in 2014 Cyprus was among the five countries with the highest percentage of the population reporting unmet medical needs, with the main barrier being the cost of health services (Eurostat, 2018). Although the level of reported unmet medical needs has decreased since then, the affordability issue still remains – as reflected in the statistics for private expenditure as a percentage of total health expenditure.

[3] Five district general hospitals, one special hospital for mothers and children, one oncology hospital, two small local hospitals, a mental health hospital, 35 health centres and 235 primary care sub-centres. The total of public hospital beds is about 1,500 (Statistical Service, 2016).

[4] 17 MRI and 24 CT scanning devices in the private sector, versus 1 MRI and 5 CT devices in the public sector (Kantaris et al., 2017).

According to Kontemeniotis and Theodorou (2015), out-of-pocket payments in Cyprus are heavily skewed towards the lowest-income group (the poorest 20% of the population)[5]. In addition, the proportion of households experiencing 'catastrophic' payments[6] was higher for those having only public coverage compared with households having other types of coverage (i.e. a combination of public and private coverage or only private).

The massive increase in the number of citizens using the public sector during the financial crisis is another indication of the magnitude of the affordability issue as the public sector is considered more affordable when compared with the private one, which operates unregulated, setting in many cases unjustifiably high prices for medical interventions and hospitalisation. A by-product of this shift is the increase in waiting times. The MoH responded to this problem with a scheme that enables the purchase of services from the private sector, thereby managing to temporarily suppress the problem.

Although the demand for public services increased, informal payments for gaining preferential or easier access to public services appear to be rather insignificant in Cyprus. From a recent Eurobarometer survey on corruption in the EU (European Commission, 2017), there were insignificant levels of informal payments in healthcare. About 97% of respondents in Cyprus stated that they had never given an extra payment or a valuable gift to a nurse or a doctor apart from the official fees, confirming the findings of a similar survey conducted in 2014 (European Commission, 2014).

Finally, in relation to depth of coverage, in principle all health services are included in the healthcare basket and should be provided to public system beneficiaries – with the exception of dental care, where there are certain limitations (i.e. orthodontics and fixed prosthetics are not provided).

1.5 The introduction of a new healthcare system

For nearly 30 years, the Cyprus healthcare sector has been under continuous consideration with a view to reform it into a new system with universal coverage. Although the legal foundation for the new national health system (NHS) was agreed by Parliament in 2001, and a Health Insurance Organisation tasked with administering the new system has been established since then, full implementation of the system has been continually delayed. However, since the eruption of the economic crisis there has been new momentum for reforming the system. Finally, in June 2017, the Parliament voted in favour of two key bills which establish the regulatory framework for the financial and administrative autonomy of public hospitals, as well as setting in place the contribution and co-payment rates for the new system.

This long-anticipated modern scheme will be an integrated NHS of universal coverage, mainly financed by state revenues and compulsory contributions levied on wages, incomes and pensions. According to the law N. 74(I)/2017, the contribution rates will be 2.65% (salaried employees, pensioners and rentiers), 2.9% (employers), and 4% (self-employed), with another 4.7% paid by the government. The income ceiling for the calculation and payment of the contributions was set at €180,000 per person. Further to the above sources, user charges will constitute an additional funding source of the system amounting to about 10% of the total expenditure, with an annual cap of €300 per patient and €75 for guaranteed minimum income recipients. All beneficiaries will be exempt from GP and inpatient care co-payments in the new system. The new system is expected to solve the deficiencies of the current one to a large extent, mostly by removing the barriers to access and significantly improving the quality of health services.

[5] The study refers to years 2003 and 2009. However, the results most probably still reflect accurately the current situation.

[6] These encompass impoverishing, or further impoverishing, out-of-pocket payments according to the new WHO European Region approach.

The new system will start operating with the provision of primary care services in 2019, and will be fully operational by 2020.

While this represents a major step forward, successful implementation of the new system will undoubtedly face further challenges. For example, the basic goal of the new NHS is to bring together the public and private sectors under a single and competitive market. However, to date, private sector data regarding providers' costs and performance are not available. This omission will make it difficult to develop contracts and monitor quality of care in an efficient way.

Another challenge for public hospitals is to be able to compete with the private sector in the new competitive environment on equal terms. In order for competition to work, it is not enough for public hospitals to have financial and administrative autonomy; in addition they need to be properly and adequately staffed and equipped, and of course to have professional management. The role of the MoH and the Health Insurance Organisation in guaranteeing that these prerequisites are met is going to be pivotal and very demanding.

2 Analysis of the challenges in inequalities in access to healthcare in the country and the way they are tackled

From the description in the previous chapter, it should have become clear that some inherent features of the current system either favour or generate various forms of inequalities in access. First, the lack of universal coverage creates the conditions for the existence of different levels of insurance coverage. Second, long waiting lists, and the lack of transparency in their management, leave room for manipulation and external interventions. Third, several population groups enjoy privileged terms of access and coverage. Finally, some population groups are excluded from the public scheme and do not have the right to utilise public healthcare services unless they pay according to the price list in force for non-beneficiaries. This chapter attempts to highlight some of the apparent and hidden inequalities in access to health services in Cyprus.

2.1 Inequalities due to different insurance coverage

The healthcare system in Cyprus could be described as a system of selective coverage: although financed by taxation, it excludes a significant share of the tax-paying population, mostly middle-class people working in the private sector (along with their dependants). This feature is an important source of inequality in access to healthcare, which was further exacerbated (following the fiscal consolidation measures taken in 2013) by the abolition of 'class B' beneficiaries[7], who lost access to public healthcare overnight. Moreover, the right for free access to public health services has been removed from families with three or more children, leaving them to choose between the public system and private insurance. If they choose the public system they have to pay a contribution of 1.5% of their gross annual income. Finally, the introduction, in 2013, of an additional requirement to have paid insurance contributions for a minimum period of three years, has excluded a few thousand citizens from the public system, especially those who can no longer be considered as dependants of an eligible beneficiary (e.g. young adults who enter the labour force). These three measures widened the disparities in coverage and marginalised the members of these groups, by removing the right to access public healthcare services, especially in times of economic crisis.

From a different perspective, there exists a variety of different coverage modes, which substitute or complement the public one, and in a broad sense constitute some form of

[7] This category included beneficiaries whose gross annual income was between €15,380 and €20,500 for individuals, or €30,750-€37,590 for two-member families, increased by €1,700 for each dependent child. This category of beneficiaries had the right to visit the public health services by paying reduced fees.

inequality, since different coverage leads to different access to healthcare services. Typical examples are the following: a) a relatively high share of the population, estimated at 15%, has supplementary ambulatory health service coverage, provided by the funds of the three workers' unions through their own networks and infrastructure; and b) employees of semi-governmental organisations, such as the Cyprus Telecommunications Authority and the Electricity Authority of Cyprus, enjoy group private health insurance schemes, sponsored by the employer. Another example is the employees of the three public universities, who have the option of private health insurance, although their funding comes almost entirely from the state budget. About two thirds of the insurance premiums are paid by the university and one third by the employee[8]. In those cases, where the income criteria allow it, employees of the public universities are also beneficiaries of the public healthcare system. All the above different health insurance schemes obviously lead to different modes and regimes of access, mostly benefiting highly paid employees.

There are also some people who are excluded from the public system due to non-income-related criteria, estimated to account between 5% and 6% of the population. These are listed below.

- Third-country nationals, who are legally residing in Cyprus; mostly low-paid unskilled workers, domestic helpers and college students. These three groups of immigrants are usually covered by private health insurance through a common contract, with many exceptions and limitations in coverage, which apparently does not cover their real health needs. That is why a large percentage of them (18.9%), reported unmet needs due to access barriers, as found by relevant surveys (Kantaris et al., 2014; Theodorou, 2011). Apart from unmet needs, third-country nationals report accessibility problems related to affordability, language problems in their communication with health professionals, and a lack of information about health-related issues (Pithara et al., 2012).
- Undocumented immigrants who are in Cyprus without a residence permit, and who theoretically 'do not exist' in the eyes of the Republic of Cyprus and the public system. In case of a serious health problem, they depend on private services and consequently bear the cost of their treatment themselves. In some cases, the employer, if any, assumes part of the cost. However, in emergency cases, they can visit the accident and emergency departments of public hospitals without the risk of being arrested and deported.

The roots of all these different substitutive and complementary schemes of coverage, as well as the exclusion cases, lie in the serious deficiencies and shortcomings of the current public system. In order to tackle such phenomena, major changes are needed, which are anticipated to come through the new NHS: this is expected to effectively address the issues of universal coverage and access, tackle inequalities and provide adequate and timely health services to all beneficiaries.

2.2 Inequalities arising from existing financial barriers

Despite the fact that out-of-pocket payments represent a sometimes unfair and most often unpopular financing mechanism, they exist across all healthcare systems and obviously can never be entirely eliminated. These payments should never exceed a level at which the equity of the system and the health of citizens are at stake. It has already been mentioned that out-of-pocket payments in Cyprus are almost three times higher than the EU average, which in combination with the very low share of public health spending makes the healthcare system of Cyprus one of the most 'privatised' in the EU and probably one of the most unequal. Such high rates of out-of-pocket payments are

[8] An additional form of inequality is that temporary employees in public universities pay the entire cost of the insurance premium without benefiting from the employer's contribution (as is the case for permanent staff).

more common in low-income countries, where high financial barriers to access result in increased impoverishment and worsening of health status. In the case of Cyprus, this is a consequence of capacity constraints, leading to deficits in the coverage and availability of healthcare services in the publicly funded sector.

Nonetheless, the high share of out-of-pocket payments in total health expenditure does not seem to adversely affect the health status of the population. Cypriots are in general in good health, enjoying high life expectancy in comparison with other EU countries, while mortality rates for common causes of death, such as cardiovascular diseases and cancers, are below the EU average (State of Health in the EU, 2017). Cypriots themselves assess their health positively. In a very recent Eurobarometer survey, 80% of respondents from Cyprus reported good health status (European Commission, 2018), while according to the results of the Eurostat 2016 survey of self-perceived health, Cyprus is ranked second in the EU, behind Ireland, in the share of people who perceived their health as *very good* or *good* (78.7%). The seeming paradox of good health outcomes and problematic provision of healthcare services can be explained by the high level of economic welfare (reflected in per capita income and other similar measures of economic well-being).

On the other hand, out-of-pocket payments in Cyprus are evidently leading to unmet health needs for several population groups. Findings for the years 2009 and 2013, reported by the Ministry of Finance (2016), on self-reported unmet needs due to cost, showed higher unmet needs in the lower-income quintiles and lower unmet needs in the higher-income quintiles. In particular, 7.7% of households in the lowest quintile reported unmet needs for a medical examination; a remarkable finding considering that people in this quintile should be covered by the publicly funded healthcare system. It could be said that this finding is likely to relate to the co-payment measures introduced, which could act as an additional financial hurdle to access for lower-income groups in society. This view seems to be reinforced by the findings of Theodorou (2014). Based on a sample of patient-beneficiaries of the public system, the study shows that low income is associated with increased tendency to judge the charges to be *high* or *very high*, and with an increase in the number of those who borrowed to pay the charges. In particular, co-payments were considered very low, low or moderate by 73.7% of the participants. However, 8.1% of the respondents, mostly low-income people, reported that they had to borrow money in order to pay these charges.

Besides unmet needs due to cost reasons, out-of-pocket payments are also exposing households to significant risk of catastrophic expenditures, especially for low-income households, despite the fact that they are entitled to use the public health system. A study by Kontemeniotis and Theodorou (2015), which measured financial protection from health events in Cyprus, found an increase between 2003 and 2009 in the absolute number of people affected by catastrophic out-of-pocket payments. Catastrophic and impoverishing out-of-pocket payments more often affected poorer and small-sized households, consisting mainly of very elderly people or households with at least one person over the age of 65. The study revealed that catastrophic and impoverishing out-of-pocket payments are largely driven by spending on over-the-counter prescription drugs, and inpatient and related diagnostic services. Moreover, households belonging to the lower-income group spent a higher fraction of out-of-pocket payments on medications whereas households of the higher-income group spent a higher fraction on inpatient services. In the midst of the financial crisis in 2014, 7.5% of the poorest quintile reported unmet health needs, specifically due to cost. This was the highest share since the pre-crisis era, and could be considered as a strong indication of the increased financial barriers during the crisis (OECD/European Observatory on Health Systems and Policies, 2017).

The predominant factor for high out-of-pocket payments is neither the co-payments introduced in 2013, nor over-the-counter prescription drugs payments, nor informal payments (which are insignificant in the health system of Cyprus). The most important and decisive factor is the limited access to public healthcare services due to long waiting

lists, which leads to catastrophic expenditures for a significant proportion of low-income households, simply because they are forced to seek health services in the private sector and thus bear the full cost of their treatment.

The successful implementation and efficient operation of the new system is expected to reduce out-of-pocket payments to a large extent, with the aim of bringing them closer to the EU average. This should significantly limit all related problems, such as unmet needs due to cost and the risk of catastrophic health-related expenditures for low-income households. The new system will continue to be partly funded by out-of-pocket payments, as they are never entirely eliminated in any healthcare system: according to actuarial studies, it is estimated that about 10% of the health budget will come from co-payments. However, for the protection of beneficiaries, the legislation provides for ceilings of €300 for the general population and €75 for low-income pensioners and recipients of the guaranteed minimum income.

2.3 Inequalities as a result of the insufficient availability of healthcare services

Inequalities and difficulties in healthcare access as a result of availability problems of services are often reflected in information related to unmet needs. Overall, the incidence of self-reported unmet needs for medical care in Cyprus has been falling since the second half of 2014. In 2016 it were about one quarter of the EU-28 average (0.6% and 2.5% respectively). The most important reason by far for self-reported unmet needs in Cyprus, according to Eurostat, was long waiting lists; followed by financial barriers, distance and transportation problems. The prevalence of unmet needs was higher among older persons. There was also a notably higher incidence of unmet needs among people having completed at most lower secondary education.

It has already been mentioned that waiting lists have been an endemic problem for many years due to the long-standing shortcomings of the public system. This issue should be singled out as the most serious problem affecting the system at present, and as responsible for widening inequalities in access to healthcare. The shift of patients from the private to the public sector as a result of the economic crisis, coupled with budget cuts and the shift of medical personnel from public hospitals to the private sector (due to salary cuts and increases in their workload), have aggravated further the queues at public hospitals and increased waiting lists (European Parliament, 2015). During the recession years, when even more people had been turning to the public sector, the problem worsened further, with waiting lists reaching 24 months for some surgical procedures and examinations. Long waiting lists are the primary cause of dissatisfaction among patients visiting public hospitals in Cyprus, and the elimination of waiting times has been identified as a top priority for the improvement of the system (Theodorou, 2014).

Unpublished data from MoH show that, in 2016, waiting times varied from one to 30 months for some surgical procedures and diagnostic tests. As examples that can be mentioned are knee and hip replacements delayed by 30 months[9]; cataract surgery by 15 months (with approximately 1,800 people in the waiting list); laparoscopic cholecystectomy by 12 months with 840 people in the waiting lists; cervical smears (Pap tests) by 24 months; and MRI exams by 8 months. The latest available data (April 2018) show that more than 50,000 patients were on waiting lists, including those for ultrasounds for abdomen, thyroid and breast (21,799 cases), Pap tests (9,269), mammographies (2,800), cataract eye surgery (2,235), total knee replacements (1,892),

[9] OECD data from 9 European countries and Israel (Denmark, Finland, Netherlands, Norway, Portugal, Spain, United Kingdom, Hungary and Poland) for which there are available data on waiting limes for 2015, show that the average waiting time for cataract surgery was 131 days (extreme values: Netherlands 37.2 vs Poland 464), for knee replacement 159 days (Netherlands 42 vs Poland 541) and for hip replacement 138 days (Netherlands 45.3 vs Poland 405): own calculations using OECD Health Statistics.

colonoscopies (1,759), MRI exams (1,580), tonsillectomies (736) and gastroscopies (450). These are the most pressing numbers with respect to waiting times in the public sector, with patients either risking a deterioration in their health condition or being forced to purchase private services.

In an attempt to alleviate the problem, the MoH announced in 2015 an agreement with private healthcare sector providers, whereby patients waiting for more than a year for certain surgical procedures and diagnostic exams (e.g. hernia, cataract, knee replacement, MRI, CT) are able to receive subsidised care from the private sector. According to this agreement, the MoH will cover part of the cost (based on the approved state price list) while patients will be responsible for the remainder. This initiative is now called the 'pilot programme for the reduction of waiting lists in public hospitals'. Through this programme, the MoH purchases services from the private sector by the method of optional co-payment (coupon)[10]. The programme includes the provision of services such as cataract treatment, MRI exams, Pap tests and colonoscopies. Further to that, the Ministry has announced the extension of the working hours of public hospitals and the carrying out of surgical interventions/examinations outside normal working hours in another attempt to combat increasing waiting lists. These two programmes continue, to the extent that the state budget, and in particular the budget of the MoH, allow.

However, there are some difficulties in keeping the various lists up-to-date in cases where patients decide to have their treatments and medical care in the private sector financed by out-of-pocket payments or when they pass away while waiting for treatment. There is also a lack of transparency in the overall management of waiting lists and it is likely that priority in many cases is manipulated in order to serve people with powerful connections and preferential social relations. Although there is no formal documentation, it is a well known and common practice that patients can easily skip the waiting list, not because they have been considered as emergency cases, but simply because a high-ranking official intervened to help them. Even though this is a frequent phenomenon, cases of informal payments associated with it have never been reported. In any case, this puts a large number of users in a disadvantageous position – particularly people living in rural areas outside the major urban centres, since they are less likely to have appropriate connections and acquaintances.

Finally, it should be mentioned that, in the publicly funded healthcare system, there is limited coverage for dental care, long-term care, rehabilitation and palliative care. In addition, vulnerable groups such as third-country nationals, undocumented migrants, refugees, and Cypriots living in the Turkish-occupied area often face difficulties accessing healthcare services.

3 Discussion of the measurement of inequalities in access to healthcare in the country

The assessment of inequalities in access to healthcare should be based on a comprehensive set of indicators (e.g. percentage of uninsured people, share of insured persons by insurance scheme, percentage share of out-of-pocket payments, incidence of informal payments, number of households exposed to the risk of catastrophic expenditures, proportion of persons with unmet needs) so as to capture the various dimensions of healthcare provision and how different socioeconomic groups are affected. However, some caution is needed in interpreting the results of cross-country comparisons as the organisation of healthcare systems differ substantially across countries. For example, self-reported unmet needs (a commonly used indicator) reflects respondents' subjective perceptions and may sometimes be expressed as a form of dissatisfaction with health services related to the use of services and not to access per se. Therefore,

[10] The voucher system provided by the MoH allows beneficiaries to buy services from the private sector.

attention should be given to the formulation of questions, including taking into account the different languages across the EU.

Furthermore, country-specific particularities call for additional ways of measuring inequalities. In the context of Cyprus, indicators should include the dimensions of waiting times and costs faced by patients, as they appear to be the two most significant factors affecting access to healthcare in the country. Additionally, in order to have a clear picture of inequalities, waiting times and costs should be related to patients' demographic and socioeconomic characteristics.

Since waiting lists are the most serious problem of the healthcare system in Cyprus, it is important to extract more information related to this problem, which usually has negative economic and social consequences for the patient as well as adverse effects on their health status. Greater information will give a better picture across all different aspects of the problem, allowing more appropriate and evidence-based measures. This certainly requires greater transparency in relation to waiting lists. Furthermore, the availability and open provision of data could also help resolve misconceptions that are sometimes aired in the public debate. For example, due to a relative lack of data, there is an impression in Cyprus that those shifting to the private sector belong to the higher socioeconomic strata and/or reside in high-income urban areas. However, as this report indicates, the opposite might also be true, with patients from lower socioeconomic strata also accessing the private sector as they are discouraged by waiting lists in the public sector.

Furthermore, there is a lack of data in regard to the provision of mental healthcare and long-term care (including the reasons for the corresponding unmet needs). Finally, data related to the unmet need for healthcare should be analysed in the context of longitudinal studies to examine the long-term impact of barriers to access on health outcomes.

References

European Commission, Special Eurobarometer 397: Corruption, 2014.

European Commission, Special Eurobarometer 470: Corruption, 2017.

European Commission, State of Health in the EU: Companion Report 2017.

European Commission, Commission Staff Working Document Country Report Cyprus 2018 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances, 2018, COM (2018) 120 final, European Commission.

European Commission, Special Eurobarometer 471: fairness, inequality and inter-generational mobility, 2018, European Commission.

European Parliament, The Impact of the Crisis on Fundamental Rights across Member States of the EU - Comparative Analysis, 2015, Study for the LIBE Committee of the European Parliament.

Kantaris, M., Theodorou, M., Galanis, P., and Kaitelidou, D., 'Access and utilisation of health services by domestic helpers in Cyprus', *International Journal of Health Planning and Management*, 29, 2014, pp. 383–393.

Kantaris, M., Theodorou, M., Angelopoulos, G., and Kaitelidou, D., 'CTs and MRIs in Cyprus: A market analysis', *Nursing Care & Research*, Issue 48, 2017, pp. 111-127.

Kontemeniotis, A., and Theodorou, M., Measuring financial protection in health: a new approach for the WHO European Region, 2015, World Health Organisation Regional Office Europe (unpublished report).

Ministry of Finance - Cyprus, Income distribution dynamics and health patterns amid Cyprus economic downturn, 2016.

OECD/European Observatory on Health Systems and Policies (2017), Cyprus: Country Health Profile 2017, State of Health in the EU, OECD Publishing, Paris/European Observatory on Health Systems and Policies, Brussels. http://dx.doi.org/10.1787/9789264283329-en.

Pithara C., Zembylas M., and Theodorou M., 'Access and effective use of healthcare services by temporary migrants in Cyprus', *International Journal of Migration, Health and Social Care*, Vol. 8, No 2, 2012, pp. 72-85.

Republic of Cyprus, Cyprus National Reform Programme, 2016, April 2016.

Statistical Service of Cyprus, Health and Hospital Statistics of 2016, 2018.

Statistical Service of Cyprus, Health Statistics 2014, Series I, report No. 35, March 2016.

Statistical Service of Cyprus, European Health Survey 2014, 2016, Republic of Cyprus. http://www.mof.gov.cy/mof/cystat/statistics.nsf/All/F9DC0B5EE972747EC22577DF0032A2D3/$file/EU_HEALTH_SURVEY_2014-EL-141116.pdf?OpenElement (in Greek)

Theodorou, M., Inequalities in access and utilisation of health services by immigrants in Cyprus: Findings report, 2011, Nicosia (in Greek).

Theodorou, M., Patient satisfaction from services provided by outpatient departments of public hospitals in Cyprus: findings report, 2009, Nicosia (in Greek).

Theodorou, M., 'Testing the Waters for GeSY: Patients' Opinion of Cost-sharing Arrangements in the Public Health Care System in Cyprus', *Cyprus Economic Policy Review*, Vol. 8, No. 2, 2014, pp. 37-59.

Theodorou, M., Charalambous C., Petrou C., and Cylus, J., Health system review, Health Systems in Transition, Vol. 14, No. 6, 2012, pp. 1–128.

Other Sources:
Eurostat
Ministry of Health
MISSOC - Mutual Information System on Social Protection
Social Scoreboard – European Commission
Statistical Service of Cyprus