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IMPROVING ACCESS TO HEALTHCARE THROUGH MORE POWERFUL MEASUREMENT TOOLS

An overview of current approaches and opportunities for improvement

Report by the Expert Group on Health System Performance Assessment

Health and Food Safety

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The full lists of Members of the Expert Group and participants to the thematic Policy Focus Group are presented in Annex I.

Comments on this publication are welcome and should be sent to SANTE-HSPA@ec.europa.eu.

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Abstract

The commitment to ensure access to healthcare, expressed in Principle 16 of the European Pillar of Social Rights, is getting a new momentum in the context of the pandemic. Though the work on improving accessibility of health systems can never be completed, reversing negative consequences of the crisis on accessibility of healthcare, along reduction of pre-existing barriers in access to healthcare, should remain an important element of signposting in the way forward. Better tools of measuring accessibility can support this work. This report provides a wealth of knowledge and experience and should support European health policy makers in their quest to identify more refined tools and methods to assess accessibility of health systems and to complement the existing indicators.

The first chapter puts this piece of work in the policy context showing how accessibility of healthcare is challenged by the pandemic and deepening socio-economic divides. It explains shortcomings of existing tools and presents options of new tools or tools, which have not been used to their fullest potential. If further developed and put to work, they could provide more powerful policy feedback, because their application could complement knowledge gained through existing indicators and foster more targeted solutions to problems in access to healthcare. They can also help ensure that social protection policies offer restitution to most vulnerable groups, who bear the heaviest burden of shocks like the current pandemic. The chapter explores tools to measures accessibility, which take into account heterogeneity of the population according to various factors. It also shows possible ways of measuring fairness in distribution of health benefits. Finally, it argues for a policy change to address better health inequity-related problems in access to healthcare. It provides elements of a more comprehensive approach to this challenge and examples of tools with hugely untapped potential, given the status of the population and concentration of avoidable risk factors among more vulnerable groups.

The second chapter presents methods of measuring access to healthcare, based on experience from countries, that participated in the structured survey. The analysis of the results of this survey shows the policy impact of currently used tools, their completeness in terms of capturing the magnitude of challenges and opportunities to exploit available data. To illustrate how these different methods could work in practice, the report presents good practices from three countries with a focus on multi-factorial analysis, linking various data sources or designing approaches tailored to the needs of patients with particular health issues.

The third chapter presents preliminary results of the pilot of the innovative tool to capture the patient's perspective in accessing healthcare: the patient vignette. The pilot, carried out by the European Observatory on Health Systems and Policies, allowed confronting theory with practice. The chapter also draws from conclusions of the discussion organised in the framework of the Policy Focus Group on 1 February 2021 attended by HSPA Group members and some external stakeholders, which was an opportunity to discuss how this tool could be improved.

The conclusions of the report summarise main lessons learnt throughout the work of the HSPA Group. They emphasise opportunities which lie in targeted efforts to further develop tools of measuring access to healthcare at European and national level. They stress how more focus on effectiveness of healthcare coverage can multiply effects, improving health outcomes and contributing to more resilient health systems. They also emphasise how to accelerate progress in reaching those furthest left behind.

Putting into practice additional tools of capturing problems with accessibility of healthcare is an opportunity. They can support healthcare systems in improving health outcomes overall and delivering better for the most vulnerable groups. Health systems, which fail this commitment risk remaining fragile, especially while facing the situation of unexpected shocks.

Introduction

Following the adoption of conclusions “Towards modern, responsive and sustainable health systems” by the Council of the European Union (2011), the Council Working Party on Public Health at Senior Level (WPPHSL) invited Member States and the Commission to set up an Expert Group on Health Systems Performance Assessment (HSPA) to (i) provide participating Member States with a forum for exchange of experiences on the use of HSPA at national level, (ii) support national policymakers by identifying tools and methodologies for developing HSPA, (iii) define criteria and procedures for selecting priority areas for HSPA at national level, as well as for selecting priority areas that could be assessed EU- wide to illustrate and better understand variations in the performance of national health systems; and (iv) intensify EU cooperation with international organizations, in particular the Organization for Economic Co-operation and Development (OECD) and the World Health Organization (WHO).

In the autumn of 2014, the Expert Group on HSPA was established. Its membership is comprised of representatives from the EU Member States, Norway, the European Commission, the OECD, the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies. The Expert Group is co-chaired by a Member State periodically elected by other Member States’ representatives, and the European Commission’s Directorate-General for Health and Food Safety (DG SANTE).

The Expert Group on HSPA organizes its work around a set of priority topics. The activities of the Expert Group are synthesized in an annual thematic report that examines the latest tools and methods policymakers have at their disposal to measure and assess selected dimensions of health systems performance. In 2020, one of the focus areas of the work of the Expert Group was refining tools and methods to assess health system accessibility.

No single indicator would help get a grip of the magnitude of challenges with accessibility. There are many indications that there remain gaps in healthcare coverage and access to healthcare across Europe, for example long waiting times, unmet medical needs, high cost-sharing requirements. The variation in avoidable mortality rates shows also that health coverage may be suboptimal or inadequate to the health needs. Health profiles and evolving needs for healthcare have to become more central in ways of assessing health coverage and accessibility of health systems. The more the healthcare coverage is aligned with the needs of the population, the better the chances are that it will drive better health outcomes. Providing new data and information should bring more transparency and foster policy attention and engagement of relevant stakeholders in more targeted policies to address persisting difficulties faced in particular by certain groups.

The work of the Expert Group on this topic comes at a time when the COVID-19 pandemic has put national health systems across Europe under enormous stress. The most recent data do not capture new realities with problems in access to healthcare becoming exacerbated due to the pandemic crisis. The resources of health systems are further strained, there is a backlog of medical consultations, diagnostic procedures, treatments, surgeries. Consequently, waiting times for healthcare will grow and people’s health will inevitably be affected. Furthermore, reduction of financial resources due to the economic slowdown may have an impact on the completeness of the healthcare coverage, including its three integral dimensions: coverage of population, services included in healthcare baskets and extent of cost-sharing requirements. Systems relying on employment-based entitlements may experience in particular decreasing revenues due to growing unemployment and incapacity of many self-employed to contribute to health insurance schemes, adding to pressure of ageing on health systems revenues. The decreasing trend of unmet medical needs is likely to be reversed, showing the sign of the usual damage caused by the economic crises. The crisis has caused deepening social divides, stressing the relevance of a stronger policy focus on the issue of more equitable distribution of health benefits and its untapped potential in preventing and red ucing poverty. The full magnitude of the negative impact in terms of access to healthcare and health outcomes, including mental health, for the general population and in particular for people with chronic conditions, older people and vulnerable groups will be only revealed in a few years from now.

Turning the commitment expressed in Principle 16 on access to healthcare of the European Pillar of Social Rights into action requires more policy attention to inequalities in access to healthcare. Health systems in EU countries differ in the degree of coverage for different health goods and services, sometimes excluding or limiting access to health services, which could be essential for some parts of the population. Indicators fall short of shedding light on the coverage of services essential to those left furthest behind. Furthermore, health systems sometimes fail to provide adequate financial protection and people cannot afford health care or meet other basic needs. This can reduce access to health care, impact negatively on health status, cause or deepen poverty and exacerbate health and socio-economic inequalities. On average across EU Member States, around a fifth of all spending on health care comes directly from patients through out-of-pocket payments and between 1% and 15% of households experience catastrophic spending on health. Poor households and those who have to pay for long-term treatment such as medicines for chronic illness are at high risk of experiencing financial hardship as a result of having to pay out of pocket (WHO Regional Office for Europe, 2019).

The crisis may further deepen health inequities. This will have a particular impact on already socially disadvantaged groups and people who will face socio-economic consequences because of the crisis. The crisis may also deepen regional disparities in access to healthcare, further weakening areas with pre-existing limited access to healthcare. Finally, the risk of sudden loss of revenue can have short and long-term health consequences, which are difficult to assess at the outset of the crisis. Against this background, more targeted policy solutions should call for a common set of universal measures to be accompanied by specific measures targeting those who are most deprived. This report explores tools, which could help assess whether actions though universal, are allocated proportionally to the population needs. More proportionality is a precondition to accelerate the rate of improvement for the most disadvantaged individuals, along improving the health of all. The report also shows ways of putting sharper lenses to differences in covered services and medical goods with a degree of granularity capturing problems as experienced by the individual. Finally, it provides examples of approaches, which fit best the subnational level.

This report moves ahead the thinking on the ways of measuring effectiveness of healthcare coverage, taking into account persisting health inequalities. It scrutinises the potential benefit of more refined approaches to measure accessibility, also from the perspective of assessing whether health systems provide services aligned with countries' health profiles and evolving needs for healthcare. These approaches give more insight into adequacy of health coverage, finding a more central role for patients with their various characteristics.

The report shows some tools. One of them are models to assess if health benefits are allocated according to needs, and not capacity to pay. Cushioning the impact of the pandemic on socio-economic resilience calls for a closer look at core reasons of inequalities and more fair distribution of social benefits. While the impact of monetary social transfers is under the radar of policies and tends to be assessed, the assessment of the social impact of in-kind benefits is not a common practice. Problems of inequitable relative distribution of wealth, including health benefits, may therefore remain obscure, even in countries with high absolute levels of affluence. The report provides ideas on how tools to assess if the use of healthcare is decoupled from individual income and contributions towards costs of services could be developed. The second tool presented in this report is a patient vignette. It can be used in many ways, identifying gaps in access to healthcare in cross-country or intra-country perspective. It holds a lot of potential to identify areas where access to high value care shows persisting deficits. Furthermore, countries provide more examples of tools, that can be used in the subnational context. The survey with the Group's Members helped identify some good practices in the use of existing data and approaches to respond better to needs of specific patient groups. The report builds also on examples of indicators with hugely untapped potential: indicators of access to health promotion and health risk prevention services, which can particularly provide powerful policy feedback on how health systems can redress quicker health inequalities.

The conclusions of the report emphasise possible ways forward, identifying building blocks of more robust assessment of accessibility of health systems. Two avenues can be explored: develop targeted tools, which are described at length in the report and/or make strategic use of existing data to guide decision-making.

Accessibility is one of the foundations of the resilient health systems. Refining ways of capturing gaps in access to healthcare would help define more targeted responses in the post pandemic era.

CHAPTER 1

MORE POWERFUL TOOLS OF MEASURING ACCESSIBILITY OF HEALTH SYSTEMS

1.1 Introduction

While the principle that everyone has the right to timely access to affordable, preventive and curative health care of good quality has been included in the *European Pillar of Social Rights*, gaps in access to health care are still very much a reality in the EU and they risk to be exacerbated in the follow-up to the pandemic crisis. The *Communication on building a strong social Europe for just transition,* paving the way towards the Action Plan of Implementation of the European Social Rights, is an opportunity to renew the commitment and work towards ensuring that nobody is left behind.

The 2019 State of Health in the EU Companion Report showed that poor data quality risks complacency about health system accessibility, while evidence points to many challenges when trying to ensure universal health coverage and finding the right care at the right time and in the right place. There is a need for better understanding what drives gaps in access to healthcare and clearer signposting to the policies and approaches that may produce better health outcomes and health equity through more targeted measures. *The Companion Report* argues in particular that both the clinical and socioeconomic characteristics of patients need to be accounted for when measuring access to health care as clinical and social vulnerability often coincide and trigger each other.

This chapter presents some tools, which could be developed at European and national level to support decisions aiming at the adjustment of healthcare coverage to respond to foregone needs for healthcare. Foregone needs come across three dimensions of healthcare coverage: depth (the range of available services), height (the proportion of the total cost covered by insurance) and breadth (the proportion of the population that is covered). Currently available cross-EU statistics fail to capture access problems from this comprehensive perspective, rarely showing the inequity disaggregation and hurdles experienced by the most vulnerable groups left behind. The SDGs monitoring framework for health coverage is not fully relevant to capture such challenges either. Unmet medical needs can be disaggregated by socio-economic status. Financial protection indicators were designed to be equity sensitive. Tools explored in this report can complement the knowledge gained through these existing indicators.

The adjustment of healthcare coverage requires choices to strike the right balance between the needs of the population, financial viability and cost-effectiveness. These choices should be routed in the socio-economic changes. They should also take into account health inequity. Tools presented in this chapter can support decisions on aligning the distribution of healthcare benefits according to needs and taking into account heterogeneity of the population. The chapter also shows that such tools could make an impact on a broader policy context, mitigating consequences of accumulated social, economic and health disadvantage.

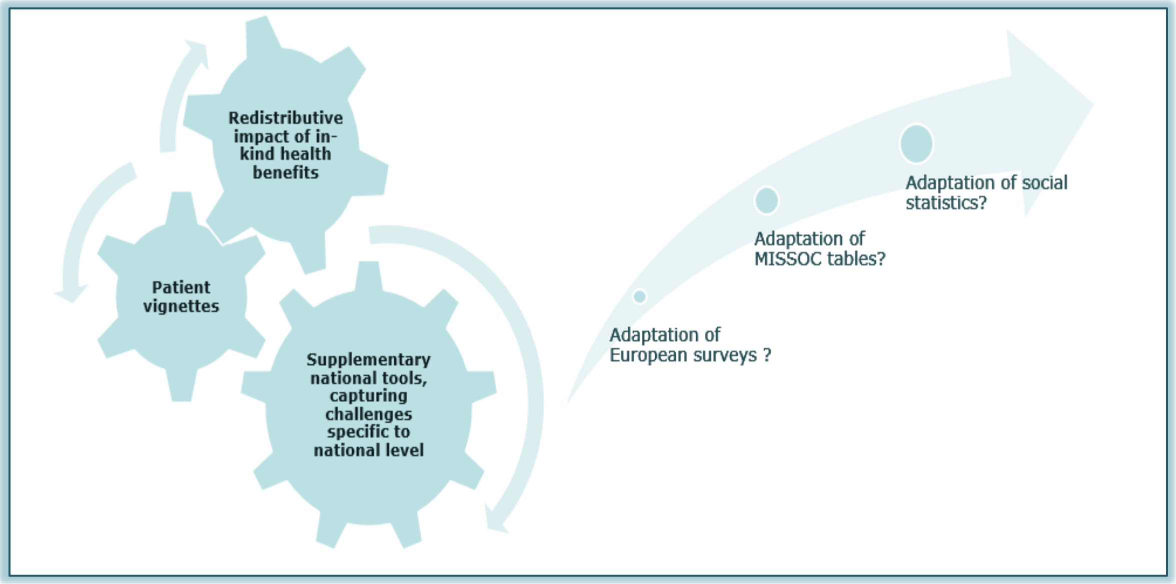
The pandemic put strain on healthcare systems' capacity to ensure access to healthcare. Furthermore, the economic slowdown may have an impact on the revenue base of health budgets, adding to the revenue challenge posed already by ageing. Systems relying on employment-based entitlements may experience in particular decreasing revenues due to growing unemployment and incapacity of many self-employed to contribute to health insurance schemes. Without compensation mechanisms, decreasing resources may have an impact on the completeness of the healthcare coverage, including its three integral dimensions: coverage of population, services included in healthcare baskets and extent of cost-sharing requirements. This may further impact on inequalities in access to healthcare and health inequity, affecting in particular already socially disadvantaged groups and people who will face socio-economic consequences of the crisis. The crisis may also deepen regional disparities in access to healthcare, weakening even more areas with pre-existing limited access to healthcare.

Furthermore, the pandemic crisis puts into focus the importance of modernisation of social protection systems and accentuates strong interrelations between various branches of social protection. There is a risk of deepening the vicious cycle between income insecurity, worsening health and insufficient guarantees of access to healthcare. The problem of underinsurance or non-insurance for health risks of certain groups may also be exacerbated, resulting in deterring care. This in the end will bear additional costs for healthcare and other branches of social protection, in particular: unemployment or sickness schemes.

1.2 More effective tools of capturing gaps in access to healthcare

The more holistic approach to measuring access to healthcare takes into account both the cost-effectiveness of the system (showing where certain outcomes require greater or fewer services and treatments) and the patient perspective (capturing experiences and outcomes relevant to the patient). This can be achieved through analysing differences in covered services and medical goods with a higher degree of granularity. Tools such as the analysis of redistributive impact of in-kind health benefits, patient vignettes and more tailored tools adapted to the national context may help achieve this objective.

Figure 1.1 More effective tools of measuring accessibility



1.2.1 Understanding the redistributive impact of in-kind health benefits[1]

International comparisons of inequality based on measures of disposable income may not be accurate if they do not take into account the size and incidence of publicly-provided in-kind benefits. Ways of financing health benefits matter too, having a different impact on reduction of inequalities in accessing health services. We do not know enough on the impact of non-cash income components, including healthcare benefits, on poverty.

In-kind benefits in Europe are quite substantial

In-kind benefits in Europe have an important share in social benefits. In 2018 they accounted for over one third of the total expenditure on social protection benefits in the EU (Figure 1.2). The vast majority of in-kind benefits consisted of non means-tested benefits (almost 90 percent of in-kind benefits). The level of expenditure on non means-tested benefits in-kind was systematically higher than the level of expenditure on means-tested benefits in-kind in each of the EU Member States. This suggests that allocation of in-kind benefits overall risks not be decoupled from the income status of beneficiaries.

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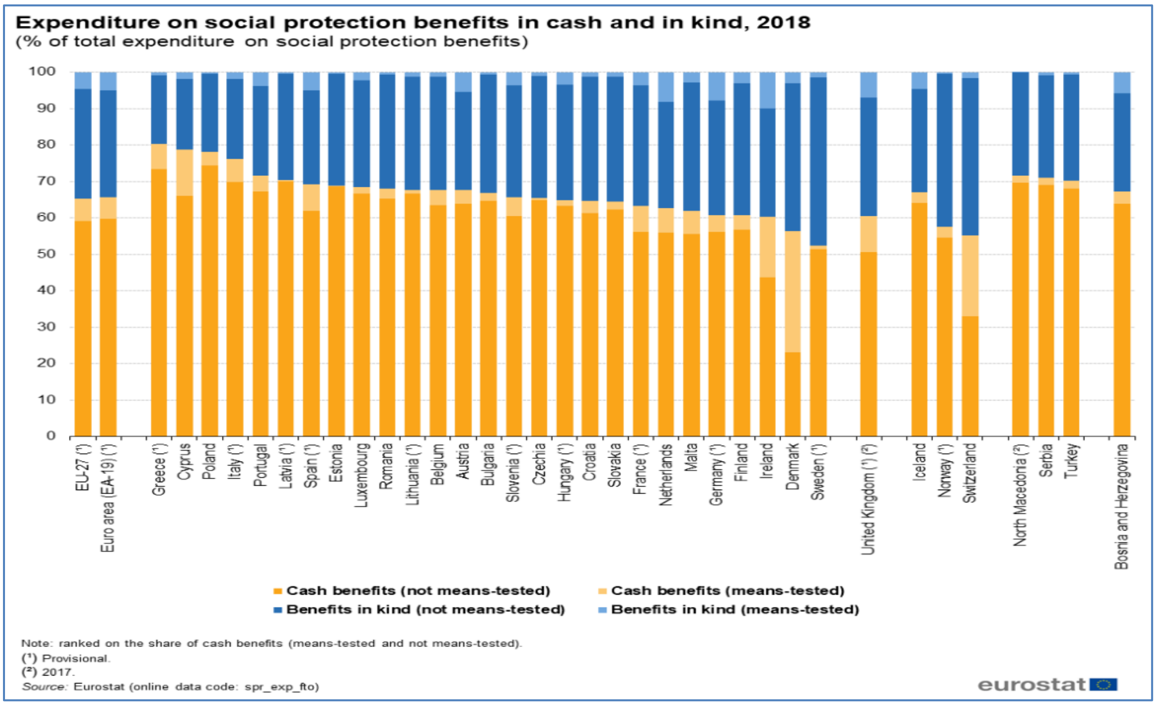
[1] Non-monetary benefits related to healthcare coverage.

Figure 1.2 Expenditure on social benefits



Expenditure on social protection benefits in cash and in kind, 2018
(% of total expenditure on social protection benefits)

Note: ranked on the share of cash benefits (means-tested and not means-tested).
(¹) Provisional.
(²) 2017.
Source: Eurostat (online data code: spr_exp_fto)

Source: Eurostat, social protection statistics ESSOC, November 2020

The distributional impacts of health benefits, with some exceptions referred to in this chapter, are largely overlooked in policy analysis and decisions. The sound methodology, which could provide policy feedback on the impact of health benefits on poverty, should help assess if the use of healthcare is proportionate to needs and decoupled from individual income and contributions to the system. Changes in the healthcare sector, vulnerability to shocks, which can result in the increased reliance on user contributions whether in the form of taxes, insurance or fees for services – but especially in the form of user charges at the point of use – may have regressive consequences on the distribution of healthcare benefits. The only way not to overlook it is to measure it.

Disparities in health matter in distribution of health benefits

Disparities in health have a strong socio-economic component. Differences in health outcomes by the level of income may be due to a range of factors, among others: behavioural aspects, exposure to risk factors, quality of housing, quality of employment, higher exposure to stress and environmental pollutants. Higher prevalence of ill health in groups with lower socio-economic status may also to some extent and in some cases be explained by problems in access to healthcare and inadequate use of healthcare services. Low-income individuals, due to social gradient in health, are more likely to need various health and social services. Low income is one of the predisposing factors for higher needs for healthcare services. The other, very often intersecting factors include: age, information, health literacy, beliefs, level of education, specific health problems, limitations in daily activity, etc.

> Measuring the redistributive impact of in-kind health benefits may demonstrate to what extent the accessibility parameters take into account the socio-economic disparities in health.

Equitable distribution of health benefits contributes to social resilience and resilience of health systems

Social resilience and resilience of health systems are closely interconnected. The covid-19 pandemic and the economic downturn may be at the origin of growing disparities in wealth and growing poverty, especially in socio-economic fragile settings. This can critically affect the health status and can reinforce a vicious cycle between poverty and ill health for a long time, creating even generational gaps. More than ever, it is important to mobilise the redistributive potential of health benefits. The gain would be twofold. It would enhance social resilience, as better redistribution of health benefits can cushion the effect of income inequalities with a possible impact on poverty reduction and health status. Another gain is for health systems: reducing poverty reduces the chances of poor health, relieving the health systems from the additional burden and contributing to their resilience.

Measuring the redistributive impact of in-kind health benefits is a powerful tool to reduce inequalities in access to healthcare linked to the level of affluence of patients. Its use can benefit the resilience of health systems, enhancing their potential to improve health outcomes through better aligning services to needs. It can also make a difference for social resilience, as it can help articulate the health-related significance of poverty and ultimately -mitigate the health effects of poverty.

Financing arrangements of health systems matter a great deal for equity

Financing arrangements involve a mix of various sources of revenue. General taxes, social security contributions, private insurance and user fees, all have different impact across the income distribution. Universal health coverage based on progressive income taxation or social insurance schemes have less regressive effect than systems with predominantly private financing (Savedoff, 2004). This is associated with the fact of paying lower income taxes and contributions to social insurance by less affluent people, which does not limit their chances to use healthcare according to needs (which due to worse health status, may be bigger than for the rest of the population). If therefore, less affluent people do not face disproportionally more barriers in accessing services than the better off, such ways of financing healthcare would favour more redistribution of health benefits from healthy to ill and from affluent to poor.

Various ways of financing healthcare produce different levels of progressivity. The principal feature that makes a healthcare financing system progressive is decoupling of individual contributions from individual's needs for healthcare services. This is a feature of systems where access to healthcare is not constrained by income, employment status, type of job or health status.

Systems that are predominantly financed through the government budget have advantages over other systems in two ways: first, they mobilise contributions from all, regardless of health status, occupation or income; and second, the government budget offers a broad revenue base and may contribute to progressivity of public spending through collecting funds from for example profits, capital gains, rents. Health systems that rely heavily on social insurance contributions often link entitlement to payment of contributions, which limits access. They also rely on salaries of workers, which may be a less progressive solution, because they do not account for differences in wealth related to accumulated capital (Savedoff, 2004). Furthermore, resources of such systems may be subject to particular fluctuations and shrink with ageing, the economic downturn, growing unemployment or precarious work or the impact of changing work arrangements (phenomena, where employers evade payroll taxes through converting contracts of their workers to forms of self-employment without changing the nature of working relationship).

Progressivity created by any system of pre-payment can however be offset by co-payments, especially where there are no exemptions from co-payments for low-income people. Co-payments and other gaps in coverage lead to out-of-pocket payments. Out-of-pocket payments that are high in relation to people's capacity to pay for health care can push people into poverty, deepen poverty and cause catastrophic health spending (WHO Regional Office for Europe, 2019). The evaluation of the redistributive effect of health systems should therefore take into account the incidence, degree and distribution of out-of-pocket payments.

Voluntary health insurance generally exacerbates inequalities in access to health care and financial protection and the costs of voluntary health insurance premiums can represent a significant share of people's income (Sagan & Thomson, 2016; Thomson, Sagan & Mossialos, 2020).

The challenge of the fair distribution of health benefits is how to account for needs

Needs for healthcare vary across the population. People with lower socioeconomic status live shorter lives so their accumulated benefits in the life cycle perspective may not necessarily exceed the services consumed by those who are better off and live longer lives. The evidence on the actual use of healthcare also shows that more deprived populations use more emergency care and consult more general practitioners and use less specialist care and preventive services than more affluent parts of the population (Van Doorslaer et al; 2000). Taking proper account of differences in needs for health care across population would require

Measuring of redistributive effects of in-kind health benefits should reveal if the distribution is equitable, taking into account income, higher care intensity towards the end of life or higher needs associated with the worse health status of more socially disadvantaged groups.

designing relevant equivalence scales correcting for various factors affecting the volumes and type of consumed services.

It is possible to build on some tested approaches to develop the tool

There are three possible approaches to develop a tool assessing the redistributive impact of in-kind health benefits:

- the actual consumption approach, which involves using data on the use of healthcare services by individuals but it does not correct for the greater needs for healthcare of ill people;
- the insurance value approach, which evaluates the distribution of health benefits based on specific characteristics (age, gender, income) with the insurance value understood as the amount, which the insured persons would have to pay (insurance premium would be the same for those sharing the same characteristics) to have all the claims covered by an insurer (whether government, private insurer, employer); but this method does not correct for differences in healthcare needs between individuals;
- using equivalence scales to take account of health care needs: this method builds on the insurance value approach and takes into account differences in needs for healthcare between individuals according to equivalence scales; the challenge is to design the appropriate equivalence scales and while some empirical studies propose a focus on certain population groups, it seems challenging to have a scale which would cover the entire population and all the redistributive effects which may overlap (vertical redistribution: from rich to less affluent, horizontal distribution: based on needs, other types of distribution: from healthy to ill, according to household types, redistribution across life cycle).

Figure 1.3 Approaches to measure redistributive impact of in-kind health benefits

actual consumption approach	insurance value approach	insurance value apporach with equivalence scales
takes into account data on the effective use of healthcare services by individuals but it ignores the greater needs for healthcare of ill people and can be difficult to apply if data on actual consumption is not available or systematic	evaluates the distribution of health benefits based on specific characteristics (age, gender, income) with the same insurance value for those sharing the same characteristics, but this method does not correct for differences in healthcare needs between individuals	method which builds on the insurance value approach and takes into account differences in needs for healthcare between individuals according to equivalence scales, which correct for vertical redistribution: from rich to less affluent, horizontal distribution: based on needs, other types of distribution: from healthy to ill, according to household types, redistribution across life cycle

Examples of methodologies used to assess the redistributive impact of health benefits

A. The Finish Institute for Health and Welfare made an analysis based on the actual consumption approach with the focus on older people: '**Use of public health and social care services among the elderly in Finland: An under-examined mechanism of redistribution**' (Vaalavuo, 2019). The objective of the analysis was to assess the distribution of public spending on services across income groups and burden of costs co-shared by beneficiaries of services. The value of in-kind health benefits was assessed based on unit costs, taking into account user fees, data on reimbursements by social insurance and out-of-pocket payments for medicines, costs of private services and travel costs. In-kind benefits were estimated as annual amounts by type of service per each individual.

The analysis of the actual use of public health and social care services was possible because of the population register data (covering total population, data for 2015), which provides information on types of services used (in/out-patient care in hospital, primary health care, elderly care, home care, etc.), date of benefit, diagnosis (ICD-10 codes), real costs of each service, use of prescribed medicines, out-of-pocket costs of medicines and the date of purchase of medicines, user fees based on legislation according to the type of services and characteristics of individuals, health-related travel and private health services (when reimbursed by the Social Insurance Institute).

The results showed that in-kind health benefits in Finland have a redistributive impact with elderly people in the two bottom income quintiles benefiting most. In the lowest income quintile, in-kind health benefits represent almost 60% of the disposable income, as opposed to less than 10% in the top quintile, which demonstrates that health benefits narrow the income gap. This is to some extent related to the fact that the oldest people belong to the bottom income quintile more often and have poorer health and greater need for care.

The analysis showed that there is some variation in redistributive effects when it comes to the type of services. Spending on primary and specialist health care is the most equally distributed across income groups, while a strong pro-poor distribution is noted for home care and social care and to a large extent - in-patient care. The study also concluded that user fees for services and out-of-pocket payments for medicines have a regressive impact, representing a larger share of disposable income for the bottom income group. The estimation of the share of disposable income going to health and social care provides information, which can be useful to assess adequacy of cash benefits such as pensions for elderly people and of income inequalities.

The case confirms that comprehensive strategies of redistribution should take into account effects of the whole spectrum of social benefits, including in-kind health benefits. Health and social care policies can have an important impact on income distribution. The analysis emphasised the importance of looking at both the role of public spending as well as financing of services through user fees to capture adequately the redistributive impact of health benefits.

The advantage of this method is that it puts into perspective simultaneously the publicly driven cost of services and the direct costs, which arise to services-users. However, the findings cannot be simply extrapolated to other countries due to incomparability of financing solutions and differences in organisation of the health and social care sector. At the same time, a similar analysis could not be carried out in many other countries, as they do not have such complete registers of data as Finland has. Furthermore, some caution with application of this methodology is required, because simply adding the value of services to disposable income may lead to certain inconsistencies in interpretation of the results. This may namely lead to the re-ranking of individuals based on their final income, and show the increased income inequality between service-users and non-users. This conclusion would not be pertinent for assessing the redistribution through services.

B. Another example of the methodology, described in the discussion paper '**The Distributional Impact of In Kind Public Benefits in European Countries**' *(*Paulus et al; 2009*)*, follows a different approach - risk-related insurance value approach. This method is built on the assumption that each individual receives a public benefit equal to the average spending on his/her age group, irrespective of whether the use of public health services was actually made.

Expenditures per capita for each age group were estimated using the OECD Social Expenditure database. The analysis of short-term distributional effects was made by allocating benefits and expenditure to individuals and households based on the income survey in five countries included in the study: Belgium, Germany, Greece, Italy and the UK. The effects of in-kind health benefits were compared with effects of cash benefits, taking into account income inequality and poverty. The analysis also explored a question of using different sets of equivalence scales to correct for actual needs for healthcare services.

The analysis shows that in-kind health benefits contributed proportionally more to the incomes of the two bottom quintile groups than to the incomes of the entire population. The redistributive effect was slightly positive on the third income quintile and negative on the two top quintiles. As spending per capita was considerably higher for older people, the distributional impact of health care spending was determined to a huge degree by the location of the elderly in the income distribution.

The method allowed country comparisons, showing that the in-kind health benefits seemed to play a stronger redistributive role in Belgium than in other countries included in the study. The in-kind benefits appeared to contribute to reduce inequality and relative poverty (the Gini coefficient, and the Atkinson index). The proportional reduction in inequality was largest in Belgium and smallest in Greece, and was generally correlated with the relative sizes of the non-cash transfers and cash income. In the case of the UK, the inequality reduction was higher than the size of the transfers alone, which may be explained by the assumption that non-cash transfers in the UK were better targeted to the less affluent people. The analysis also showed that the redistributive effect is more pronounced in households with elderly persons. Since they are the main beneficiaries of public care services and they are disproportionately located in the lower half of the income distribution, such transfers reduce inequality.

As far as the impact of in-kind health benefits on aggregated poverty rate is concerned, adding the public non-cash transfers to the disposable income does not lead to the statistically significant re-ranking of the countries. However, such re-ranking happens for the poverty risk of the elderly.

Another conclusion of the study is that the analysis from the welfare perspective should correct results for needs for healthcare. Needs vary according to many factors: gender, age. Patterns in use of services also vary with a tendency to underuse services by people who choose less complete insurance options, or groups systematically overusing the services, or people with chronic illness whose needs are likely to be higher than the rest of the population.

The interpretation of the results should take into account the limited comparability across countries due to differences in the organisation of publicly provided health care. Furthermore, micro-data from income surveys may not provide enough or complete information about the use of private alternatives to public services or co-payments and their importance may vary a lot among countries and within the countries. Finally, the available comparable data on spending by sub-groups (e.g. healthcare by gender) may be insufficient to capture differences in levels of spending that may be important in some countries but not in others.

C. The paper '**Social transfers for education and health –imputation into EU SILC data**' (Grundiza, 2019) provides the analysis of redistributive effects of health in-kind benefits based on insurance approach. The value of in-kind health benefits is estimated on the basis of data on health expenditure by age and sex (data collected for Aging Working Group Report). The main purpose of the analysis was to assess the distribution of health benefits across the population and assess their impact on poverty.

The results of the analysis showed that the value of in-kind health benefits represented on average 9% of adjusted disposable income, with the smallest shares for Cyprus (3%), Latvia (6%) and Greece (6%) and the largest shares in Norway (13%), Denmark (13%), the Netherlands (12%), Czech Republic (12%) and Ireland (12%). On average, health benefits were equally distributed across income quintiles with the second income quintile receiving slightly more and third and fourth income quintiles -slightly less. The income distribution does not change a lot when estimated health benefits are added to the disposable income. The redistribution of income when health in-kind benefits are added shows a slightly larger effect in the first two quintiles and a smaller effect in the fifth income quintile, suggesting that health benefits reduce income inequalities. This conclusion was also confirmed by the analysis of the inequality in terms of GINI coefficient. The Gini coefficient was smaller for almost all countries when health benefits were combined with income as compared to income only (except for Hungary and minor changes for the Czech Republic). The largest differences were noted for the United Kingdom, Lithuania and Belgium.

The methodology applied in this study could be further refined with the aim to be able to compare the risk of poverty rate in scenarios with and without public healthcare, adjusting both for transfers in taxes and benefits. Mark-ups to correct for variation of needs for healthcare could be also considered, taking into account accumulation of costs towards the end of life and higher intensity of healthcare for people with chronic conditions. A broader issue of generational equity should be reflected more in-depth to assess whether healthcare expenditures from a public payer perspective should be modelled as a PAYGO model (Pay as you go) or also account for hidden liabilities in current healthcare funding in view of demographic ageing.

Added value of a tool to assess the redistributive impact of healthcare benefits

The already unequal distribution of social benefits threatens to deteriorate in the aftermath of the pandemic. One of the headline targets of the European Pillar of Social Rights is to reduce poverty. Capturing the impact of health benefits on poverty would therefore be highly pertinent. While the impact of cash benefits on poverty reduction is measured, there is a comparative gap when it comes to monitoring the effectiveness of social policies at EU level for healthcare benefits. This, possibly leads to the sub-optimal allocation of public resources when it comes to poverty mitigating policies (with in-kind benefits basically presenting a blind spot). The tool would have a huge potential in minimising the impact on poverty especially when new policy measures are introduced and / or when budget cuts are required, helping design more progressive solutions.

Widening inequalities call for revisiting ways we measure equitable distribution of health benefits. The data on in-kind health benefits is not currently used in the EU tax-benefit microsimulation model – EUROMOD. Yet it would give a more comprehensive picture of the redistributive effects of public policies by showing whether supplementing in-kind benefits to cash benefits increases the redistributive impact of social benefits.

The income distribution augmented with in-kind benefits could be used twofold: to evaluate the distributional effects of changes in cash benefits, but also to assess the redistributive role of changes of health coverage policies through introducing, increasing or decreasing co-payments, introducing ceilings for costs, etc.

The issue is how to estimate the value of in-kind benefits, which could be input in EUROMOD. Methodologies explored in this chapter show that there are some critical issues to consider:

- estimation of in-kind health benefits should take into account both publicly-driven costs of healthcare services and costs covered by individuals in the form of co-payments and other out-of-pocket payments, in particular in systems relying heavily on out-of-pocket payments, which can become catastrophic or impoverishing over a certain level of spending in relation to household capacity to pay for health care (WHO Regional Office for Europe, 2019);
- the redistributive impact of various financing solutions should be taken into account, considering differences in volumes and various forms of sources of public financing of healthcare (taxes, type of taxes and their redistributive capacity, social insurance contributions);
- it would be necessary to explore different sets of equivalence scales to correct for actual needs for healthcare services, taking into account social determinants of health corresponding with patterns of use of healthcare services (e.g. more disadvantaged persons have worse health status with more chronical conditions and may have more needs at earlier stages of their life; moreover more disadvantaged persons tend to deter looking for care and in the end need more expensive services and / or live shorter lives), life course perspective and related higher intensity of the use of health towards the end of life, life course perspective and shift towards higher income levels (income is partially explained by age);
- ideally the methodology should reflect price inflation (next to volume effects due to demographic ageing) as the effects of price inflation in the healthcare sector may be different for age groups (high cost inflation in oncology for instance).

1.2.1 Patient vignette

Indicators fall short of shedding light on the access to specific services and on how certain socio-economic characteristics affect access to benefits. The solution to this shortcoming could be the qualitative research with some elements of quantitative analysis based on the patient vignette approach.

Patient vignettes capture what commonly used indicators may obscure

A patient vignette is a tool allowing exploring gaps in coverage in terms of groups and areas when access to healthcare is suboptimal. It helps understand similarities and differences of patient characteristics and use of care, informing more targeted measures to improve access to healthcare, taking into account leading causes of disease and equity disaggregation. This tool compensates for the limitations of existing indicators, which may indicate the broad types of health care that result in unmet need or catastrophic health spending (for example, medical consultations, dental care or medicines) but do not provide more granular information on specific interventions or treatment of particular conditions.. However, the added value of the tool will depend on its design.

Patient vignette can be used to compare specific aspects of health baskets for specific groups within and across countries

Patient vignettes can provide ground for the analysis going beyond the perspective of equity between patient groups in a given system (inequity by disease in a given country). It can facilitate comparison of performance of healthcare systems in safeguarding access to high-value care, allowing the analysis of inequities across Europe. The current indicators fail to capture this aspect.

The Health Basket project (European Health Management Association, 2008) compared available health services, the way they are defined, their actual costs and prices in nine European countries: Denmark, France, Germany, Hungary, Italy, Poland, Spain, United Kingdom and the Netherlands. It identified which data are required in order to provide for meaningful international comparisons of healthcare baskets, using a selection of 10 "case-vignettes"[2] representing needs for care in both inpatient and out-patient settings. The project explored the possibilities of building a European taxonomy of benefits based on relevant classifications to have a common framework for the comparison of benefits and costs.

The patient vignette approach can be used to complement existing accessibility metrics used for cross-country and within the country comparisons of access to healthcare.
This is a good method to demonstrate differences in health baskets for selected conditions, types of health care and groups of people and exclude reasons for variations such as preferences, traditions, values, differences in providers.

The case vignette methodology developed in this project proved the usefulness of its potential use for both cross-European analyses and for within-country comparisons of selected conditions and groups of people. There is some ground for such comparisons, because the analysis showed a trend towards a more explicit definition of healthcare benefits (with some variation in approaches, including the mixture of differently defined lists: entitlements, payment, guidelines). Comparing by the category of benefits, the analysis concluded that there are minor variations between the countries and similar services tend to be excluded e.g. cosmetic surgery, non-conventional treatments. Comparisons by specific services showed bigger differences because there is some ambiguity on whether entitled services are actually the same in systems, which vary in terms of organisation of services. The project concluded also that if the case vignettes are further explored, they should put focus on trans-sectoral episodes of care (e.g. acute care and rehabilitation), episodes of chronic care (such as in Disease Management Programmes), mental illnesses.

In its conclusions, the project recommended the adoption of common standards to determine inclusion of benefits in the baskets of the EU countries and possibly establishment of a uniform European benefit basket. On this basis, it would be possible to carry out a thorough and regular analysis of health goods and services, which are available (and under what conditions, including access hurdles, and at what costs) and of criteria used to define baskets. Such an analysis should give a basis for comparisons, policy dialogue and monitoring of accessibility. The study also showed that in most of the countries, despite the requirement of clear criteria for the inclusion or exclusion of benefits in the health baskets, the decision-making process and the ultimate reasons underlying decisions on the health basket are not transparently and systematically documented.

The patient vignette can make criteria for inclusion / exclusion of benefits from the healthcare baskets more transparent.

Patient vignettes can show variation in use of resources and in costs of specific services with their impact on accessibility

Input indicators, such as a number of health professionals, number of hospital beds are often used in analyses of accessibility. Unless demonstrating substantial shortages of resources, such indicators do not allow unequivocal conclusions on the impact of volume of resources on accessibility. The Health Basket project demonstrated that the vignette could be used to assess variation in resource consumption (human resources, goods, capital etc.) and actual costs of these resources for individual health services between and within countries. The variation in intensity of used resources gives better indication of the impact of the volume of resources used on accessibility (showing e.g. that the delivery of the same volume of specific services involves very different volumes of resources).

Wasteful spending on healthcare is at the expense of accessibility. The patient vignette is a tool to put the costs/price considerations in the centre of the discussion on accessibility. This tool can help detect abnormal levels of costs/ prices through cross-country and within the country comparisons.

Furthermore, the Health Basket project demonstrated how critical the costs/price relation aspects are in the discussion on accessibility of healthcare. The proper monitoring should be in place to capture anomalies in the level of prices and costs. The

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[2] Vignette 1 appendectomy; male aged 14-25; Vignette 2 normal delivery; female aged 25-34; Vignette 3 hip replacement; female aged 65-75; Vignette 4 cataract; male aged 70-75; Vignette 5 stroke; female aged 60-70; Vignette 6 acute myocardial infarction; male aged 50-60; Vignette 7 cough; male aged ~2; Vignette 8 colonoscopy; male aged 55-70; Vignette 9 tooth filling; child aged ~12; Vignette 10 physiotherapy; male aged 25-35.

analysis showed that prices and costs might match quite closely, but there might be disparities that are more difficult to explain. The vignette can contribute to the discussion on the variation of prices across countries, pointing at abnormal levels of costs or prices.

Conclusions also showed that while differences in average costs for healthcare services were significant between the countries, they were also substantial and in some cases bigger within countries. The reasons for these differences included: differences in prices per input unit, differences in practices, different accounting standards, shifting of costs to patients, differences in recording of data.

Opportunities of putting in place the approach based on the patient vignette

- The patient vignettes could provide the important input to the discussion on the expansion / adjustment of healthcare baskets, making them more responsive to changing needs for healthcare.
- This tool could allow stronger consideration of patients' perspective in definition of the service coverage and ensure more transparency in the decisions on what services and goods are included / excluded from healthcare baskets.
- It could provide input to the discussion on how to design policies to prioritise the coverage of high value care: tool to verify how coverage restrictions and conditionality can play a role in limiting the use of low value care.
- The vignette is a good tool to capture inequities by health condition within the countries. People with certain clinical characteristics might be disproportionately exposed to catastrophic spending. Research shows that among older patients, people suffering from diabetes mellitus and cardiovascular diseases face a much higher likelihood of catastrophic spending than cancer patients (Arsenijevic J. at al, 2016). Consequently, it is possible that some inequities by disease exist that are currently invisible to most data collections. In effect, there is a risk that people with comparable levels of need but with a different diagnosis receive different levels of care.
- The patient vignette could provide ground for the analysis going beyond the perspective of equity between patient groups in a given system and facilitate comparison of performance of healthcare systems in safeguarding access to high-value care (inequities across Europe).
- This tool may build better understanding in case of exclusion from the statutory coverage or hurdles experienced by certain groups (e.g. irregular residents and asylum seekers, but also other possible groups), and if any other coverage arrangements or special schemes are more adequate for these groups, as barriers they experience are very specific (for example language, culture, fear of deportation, workers with multiple employers, etc.).
- This tool may bring better understanding of how the status of employment matters, going beyond employment/unemployment status and exploring access to healthcare for people in various types of employment (self-employed, short-term contracts, seasonal work, platform work, workers with variable income, etc.) in both mandatory and voluntary (with opt in and opt out) insurance schemes options.
- It could contribute to the discussion on how elements of the new approach fit into the existing data collection methods at European level, in particular MISSOC tables and EU SILC. It could show how these tools could be adapted to give more insight into whether financial barriers are caused mostly by gaps in population coverage or high cost-sharing requirements or whether unmet needs are for high value or low-value care.

1.2.2 Tools to capture within the country inequalities in access to healthcare

Data at national level show that people in lower socio-economic groups have more forgone medical needs, but may obscure specific problems faced by particular groups in the given national or local context. Indicators fall short of shedding light on the coverage of services essential to the populations that are left furthest behind. Such information would be useful, because though healthcare system in general cover the overall population with exceptions which are well known, they may still fail to cover services essential to certain marginalised populations[3]. Services, which are essential to these groups, may however not be essential for the general population (Healthy, prosperous lives for all: the European Health Equity Status Report, WHO, 2019).

Healthcare systems marginalising some parts of the population, while hit by shocks such as pandemic, may deepen further inequalities in access to healthcare, with a particular impact on already more vulnerable groups. The risk of deepening social divides, related among others to a sudden loss of revenue can have short and long-term health consequences, which are difficult to assess at the outset

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[3] These groups differ from country to country and may include ethnic minorities, disabled persons, people living in depopulated areas or less affluent groups, etc.

of the crisis.

The COVID-19 crisis has also put a strain on the capacity of some healthcare systems to ensure access to healthcare for persons with disabilities and older people in residential care settings. They were particularly exposed during the crisis. Their continued access to the medical and social care, including emergency and intensive care services, appeared in many cases problematic, stressing challenges in providing the integrated care.

The crisis such as the recent pandemic may also deepen regional disparities in access to healthcare, as mitigating the spread of the virus required deploying resources according to variation in timing and intensity of the disease across the territories, which further weakened areas with pre-existing limited access to healthcare. There is a need to capture better risks related to disparities in access to healthcare at territorial level.

Abandoning efforts of addressing health inequalities would weaken healthcare systems. They can only be strong if they produce more sustainable health gains, so they should in particular take account of needs of the most vulnerable groups.

Accessibility indicators need to be contextualised

These information gaps cannot be easily compensated by data collected at European level. The way European level data are collected is likely to leave behind the most vulnerable populations, for example, household surveys leave out homeless, undocumented migrants and refugees, people who are not registered in administrative systems. Unfortunately, in general across Europe, there is very little data disaggregated beyond income groups. Unmet need data collected through EU SILC can in addition be disaggregated by age, gender, education and labour status. The analysis of financial protection using household budget survey data can also be disaggregated by many factors. For example, in addition to income or consumption, the country reports on financial protection produced by the WHO Barcelona Office for Health Systems Financing disaggregate by age of the head of the household, household structure (single person, number of children etc.), labour market status, social beneficiary status, area of residence, gender (where relevant), VHI status (where relevant) etc.

Healthcare systems may fail to cover or provide services, which are essential for those left furthest beyond. Indicators fall short of shedding light on problems experienced by these groups, which may be determined by the local context and specificities. A one-size-fits all solution to identify challenges faced by these groups may not be possible.

Appropriate policy choices in terms of adjusting the scope of healthcare baskets would require more information, but gathering it at European level is not feasible. The Expert Panel in its *Opinion on Benchmarking Access to healthcare in European Union* (Report of the Expert Panel on effective ways of investing in Health, 2018) recommends that Member States should undertake the qualitative assessments of unmet medical need, to identify the nature of disadvantage in each country and the distribution of unmet need within a population. This requires systems of data collection, coupled with a detailed understanding of the cultural issues involved in health-seeking behaviour. Such solutions are already in place in some countries, for example Slovenia to better understand unmet need, carries out extensive qualitative survey on barriers for access to primary care and preventive services for vulnerable individuals; the UK runs an annual GP Patient Survey to understand how people feel about their GP practice.

Opportunities for new indicators capturing better realities on the ground

Persisting problems with accessibility for the overall population may further marginalise the more vulnerable groups and individuals. Problems may vary across and within countries and affect one or several dimensions of accessibility. The table below shows the magnitude of limitations in capturing fully realities, based on conclusions of both *Experts Panel opinion on access to healthcare* (Report of the Expert Panel on effective ways of investing in Health, 2016) and the *Pilot project: towards a more effective measurement framework on access to healthcare* (ICF Consulting Services Limited, 2018). The table can orientate efforts in developing indicators fit for national context to support measures addressing persisting problems with accessibility. They concern many areas, from financing health systems, through affordability, appropriateness of services, equipment, healthcare workforce and access to affordable medical products.

Table 1.1 Indicators, which could be developed to capture better realities on the ground

What accessibility indicators could be developed to capture better realities on the ground?
Financial resources linked to health need
➢ Measures showing if financial resources are aligned to needs, incl. at subnational level. ➢ Measures showing how financial resources are distributed.
Services are affordable for everyone
➢ Indicators on HTA use. ➢ Clear evidence on informal payments. ➢ Qualitative assessment of health coverage to identify affordability issues (population entitlement, benefit package, user charges).
Services are relevant, appropriate and cost-effective
➢ Evidence on non-cost-effective use of services to inform the decisions on improving access to healthcare according to the needs of the population (e.g. measures of overuse of healthcare among groups more exposed to overuse of care). ➢ Collection of patient-reported outcomes (PARIS initiative in progress). ➢ Measures of needs defined by epidemiology. ➢ Measures of inequity by disease. ➢ Measures of accessibility of prevention services. ➢ Measure of continuity and integration of care. ➢ Data on health literacy helping to assess access to information. ➢ Measuring access based on severity of health condition. ➢ Measure of intersecting aspects of problems in access for more vulnerable persons (multiplicity of characteristics of individuals). ➢ Measures of ethical standards.
Everyone can use services when they need them
➢ Data on availability at time that suit the population (availability of out-of-hours services, home visits or mobile phone contact with providers). ➢ Data on availability of secure website-based consultations.
Services are acceptable to everyone
➢ Data on overall user experience of the health system (communication with provider, involvement in care decisions, discrimination on various grounds, etc.). ➢ Data on experience of informal carers.
Well-equipped facilities within easy reach
➢ Data on supply of services below NUTS 2 level and data on NUTS 2 level. ➢ Measures of impact of differences in access to facilities per disease or service helping to design networks of dispersed facilities reflecting local, national perspective. ➢ Measure of the optimal distribution of resources within a territory. ➢ Measures of facilitation of transport of patients to health facilities of or healthcare workers to patients.
Health workers, with the right skills in the right place
➢ Data on professional groups, such as specialist therapists, laboratory workers and health promotion or public health specialists. ➢ Measures of quality of health workforce and relevance of skills. ➢ Measures of working conditions of health workers.
Quality medicines and devises available at fair prices
➢ Data on the use, costs and prices of medicines and medical devices to demonstrate substantial variation in use at EU national, subnational level. ➢ Data on availability of non-big-ticket equipment. ➢ Data on costs of products providing grounds for assessing affordability, fairness in pricing, equity in access, etc.

Source: own compilation

There is a need to understand better links between accessibility and health inequity

The epidemic crisis may deepen further health inequalities. If healthcare provision is not rethought to meet needs of vulnerable groups, the consequences of similar shocks may be even more devastating in the future. A one-size-fits-all solution is not possible. It is necessary to continually assess at level of each country which populations are vulnerable, what needs for healthcare remain foregone and how the services should be better designed or targeted to meet the needs.

More contextualised data and information can show how to review systems and ways of provision of essential health services, with a focus at local level. It would also possibly point at how to mobilise and strengthen capacities of service providers to meet needs of the populations, which tend to be marginalised. Better data can also motivate decisions on improving the adequacy of healthcare coverage, ensuring more equal opportunities for health across the life cycle through the full spectrum of care from promotion, prevention, treatment, rehabilitation, end-of life care.

Lessons learnt from the pandemic should contribute to the change of the quite common perception that health inequity is too complex to address and that it is unclear what actions to take and which policies and approaches would be effective (European Health Equity Status Report, WHO, 2019). It is necessary to continually assess at level of each country which populations are vulnerable and need targeted support. Relevant tools can support identification of problems in accessibility of healthcare related to health inequalities.

The epidemic stressed that there is a need for healthcare systems to accelerate progress in reaching those being left behind because of poor health and also preventing others from falling behind. The more disadvantaged groups suffer from worse health condition and may be more exposed to mortality during pandemic due to pre-existing illnesses or unhealthy behaviours, which are largely preventable (high blood pressure, diabetes, heart and respiratory diseases, obesity, smoking). Consequences of the crisis may exacerbate their mental health problems, especially that they may be more fragile already at the outset. There is a need for more decisive actions to address high levels of chronic diseases. Good monitoring and indicator systems, capturing a social gradient in prevalence of inequities in non-communicable diseases, access to health promotion and health risk prevention measures, may help with increasing the focus on these issues.

Given that unhealthy behaviours tend to cluster in socially disadvantaged groups, better monitoring systems and indicators can provide more powerful policy feedback and help determine more decisive reorientation of healthcare system towards health promotion and health risks prevention with a view of decreasing chronic diseases and health inequalities. Currently, information systems do not collect many indicators in this field. Stronger actions to promote health and prevent bad health would relieve pressure on health systems in the long-term.

Indicators capturing accessibility of prevention and health promotion services are scarcely used

The accessibility measurement framework could be more sensitive to detect the risk of subsequent ill health in order to identify both needs and interventions to be delivered sufficiently early in the casual disease pathway. Yet indicators capturing access to health services providing health risk prevention, except for vaccination rates, are very scarcely used in European countries. The table below shows examples of indicators and a variety of approaches to measure the accessibility to services and care to decrease unhealthy behaviours and chronic conditions. The examples of indicators developed in Finland draw attention to the fact that monitoring of access to health promotion goes beyond the boundaries of health systems. While some services can be provided by the health systems, others should be provided by schools, local authorities, being part of comprehensive approaches to better prevent risk factors and promote health.

Table 1.2 Examples of indicators to assess access to measures with a view of decreasing chronic diseases and health inequalities

Examples of indicators to assess access to measures with a view of decreasing chronic diseases and health inequalities

Australia

- People with asthma who have a written asthma action plan, by age
- People with mental illness who have a GP treatment plan
- Proportion of people not following guidelines for physical activity
- Proportion of people not following dietary recommendations
- Proportion of people effectively managing type 2 diabetes

Michigan Patient Experience of Care Initiative

- Did the health provider talk with you about your specific health goals and whether there are things making it hard to take care of your own health?
- Thinking about the past 6 months, did your health care professional(s) help you set specific goals to improve your diet?
- Thinking about the past 6 months, did your health care professional(s) help you set specific goals for exercise?
- Thinking about the past 6 months, did your health care professional(s) teach you how to monitor your condition(s) so you could tell how you are doing?

QUALICOPC (quality and costs of primary care in Europe)

- Patient Experience with Patient Activation in Primary Care (Patient Activation: people’s ability to engage

in health behaviours that will maintain or improve their health status)
RKI and Destatis, Germany • Primary prevention according to the individual approach: persons participating in activities for individual health promotion in cooperation with the Statutory Health Insurance. Classification: years, age, sex, activity
Finland • Goals to reduce welfare and health inequalities in the municipality's action and finance plan, score • Health promotion capacity building in primary health care, score • Health promotion capacity building in services for older people, score • Health Promotion in Comprehensive Schools, score • Health Promotion in Municipal Management • Health Promotion in Upper Secondary Schools, score • Health Promotion in Vocational Schools, score

Source: own compilation

Comprehensive approach to capture health inequity–related problems in access to healthcare

Addressing gaps in access to healthcare, which are related to health inequity, requires a comprehensive approach. Efforts at national and subnational level could consider the following:

- **Identification of groups vulnerable in the national or subnational context**: this can be achieved through collecting disaggregated data. Routine data collection, surveys and other data sources should ideally include disaggregation by: sex, income, employment status, disability, ethnicity, age, migratory status, territorial location, sexual orientation and possibly other features relevant in national context.
- **Identification of needs for healthcare**: needs of vulnerable groups may differ from the needs of the general population. To understand better needs for healthcare services and utilisation patterns, it can be useful to use data from various sources, in particular general population registers, databases including data on reimbursement claims. If possible, getting data from private providers would be useful as such data would give the complete picture and would help understand which services excluded from public coverage or limited in coverage, are particularly needed. Chapter 2 provides some insights on these issues on the basis of the survey made in the framework of the work on this report.
- **Identification of problems in getting access to healthcare specific for vulnerable groups**: while some problems may relate to legal, administrative barriers, other challenges may be invisible at the outset. Problems faced by more vulnerable groups demonstrate clearly that availability does not always translate into access and use of services. Even if facilities are physically accessible, barriers related to language, literacy, culture, employment status and various special needs can impair access. In this context, it may be relevant and necessary to develop the qualitative sources of data. The examples of such sources of data described in Chapter 2, show that they are powerful to understand reasons behind differences in exposure to risk factors, access and health outcomes, problems with living circumstances, factors such as culture, values, stigma, discrimination, which in different combinations or alone, can have an impact on patterns of looking for healthcare, using services, experiencing particular barriers etc. The involvement of individuals representing vulnerable groups may be of utmost importance to reach the disadvantaged groups and to get a clear understanding of problems faced by such groups. Indicators in the table below include examples of tools measuring accessibility with more focus of vulnerable groups.

Table 1.3 Examples of indicators to measure how healthcare systems respond to problems of disadvantaged groups

Examples of indicators to measure how healthcare systems respond to problems of disadvantaged groups
The EPF survey questions ➢ Have you ever felt stigmatised when seeking or receiving healthcare because of (mark all that apply): · Your young age, · Your older age, · Your physical disabilities, · Your intellectual disabilities, · Your mental health status, · Your chronic/long term condition, · Your ethnicity, · Being a woman, · Being a man, · Being intersex, · Being transgender, · Your income/social status, · Your religion, · Your sexual orientation, · No, · Other (please specify) ➢ What type of stigma or discrimination did you experience? Mark all that apply. · Attitude of healthcare staff, · Denial of my rights, · Inappropriate language, · Lack of healthcare facility in my community, · Refusal to provide me with treatment, · Other (please specify)

European Union Minorities and Discrimination Survey carried out by FRA in the framework of the EU-MIDIS project ➢ When using healthcare services in the past five years in [country] (or since you have been in [country]), have you ever felt discriminated against for any reasons? [list of reasons] ➢ When was the last time you felt discriminated against because of your: [tailored to target group categories; ethnic or immigrant background/Roma background/ethnic minority background] when using healthcare services?
Medecins du monde survey ➢ What were the obstacles to seeking healthcare: -did not try to access healthcare, -administrative barriers, -economic barriers, -a lack of knowledge of the, -healthcare system, -language difficulties, -denial of healthcare, -did not access healthcare because of fear of arrest

Source: own compilation

- **Considering health literacy** to understand how the healthcare system can better address information needs of the population. The table below provides examples of indicators, which could be used to this purpose.

Table1.4 Examples of indicators to measure how healthcare systems respond to health literacy

Examples of indicators to measure how healthcare systems respond to health literacy
The EPF survey questions ➢ I am adequately informed by healthcare providers about my treatment options; ➢ I am involved in decisions regarding my care by my healthcare providers; ➢ My healthcare providers give me the information I need about the safety of my treatment; ➢ My healthcare providers adapt my care according to my changing needs; ➢ My healthcare providers are capturing my feedback on quality of care provided (through satisfaction survey or other means).
Michigan Patient Experience of Care Initiative ➢ How often did this provider explain things clearly, listen carefully, show respect and spent enough time with you? ➢ Thinking about the past 6 months, did your health care professional(s) explain things in a way you could understand? ➢ Thinking about the past 6 months, did your health care professional(s) spend enough time with you?
QUALICOPC (quality and costs of primary care in Europe) ➢ Patient experience with Communication and Patient-Centred Care in primary care
Canada ➢ Difficulties accessing health information or advice, among those who required care at any time of day, household population aged 15 and over, Canada, provinces and territories, occasional, 2003 to 2013 ➢ Type of barrier to accessing health information or advice, by time of day, household population aged 15 and over, Canada, occasional, 2001

Source: own compilation

- **Developing analytical capacities**: this is a precondition to develop new data sources or adapt the existing tools so they provide the most pertinent input for the design and implementation of policies, which affect access to healthcare. Additional data collection or efforts to use existing administrative data should have a clear purpose. Providing new data and information should bring more transparency and foster policy attention and engagement of relevant stakeholders in more targeted policies to address difficulties faced by certain groups.
- **Using the feedback to ensure proportionate universalism:** providing a common set of universal measures addressed to everyone, equally, without targeting those who are most deprived is not effective. The proportionate universalism should apply to the whole spectrum of relevant policies: actions though universal, should be allocated proportionally to the population need, so they should accelerate the rate of improvement for the most disadvantaged (along improving the health of all).

The **Joint action on health equity in Europe**, which will end later in 2021, will provide the input to the work on access indicators adapted to the national context. Its objective is to support Member States to develop monitoring system on health inequalities adapted to the national contexts, well suited to policy requirements and sustainable over time. One of its goals is to support the development as well as the use of health inequalities indicators for health policy evaluation and prioritization and where applicable to integrate them in EU health information systems. It also supports the design and implementation of regional, national and local strategies, policies and programs for reducing inequalities in access to health and social services and through building MSs' capacity to effectively advance. The Joint Action focuses on vulnerable groups lagging in access to health and related social services e.g. lone parents with young children, people who have a physical, mental or learning disability, or poor mental health, the in work poor, the older people who are in vulnerable situations, people in unstable housing situations (e.g. the homeless), prisoners (or ex-prisoners in vulnerable situations), people living in rural/isolated areas in vulnerable situations, the long-term unemployed/inactive (not in education, training or employment), survivors of domestic and intimate partner violence, irregular migrants, asylum seekers, and refugees.

The impact of other policies on narrowing health inequalities should be measured

Accessible health systems are not enough to resolve the persisting problem of health inequity. The *European Health Equity Status Report (*Healthy, prosperous lives for all, WHO, 2019) stressed that there is no single indicator to measure health inequities, and no single solution to solve the challenge of inequities. The decomposition analysis used in the report showed how various contributing factors, that differ systematically between socio-economic groups, explain differences in health between these groups. This method allowed assessing which factors produce health inequities by estimating their relative weight in contributing to inequities (for a range of health indicators, such as mental health, limiting illness and well-being).

The analysis demonstrated the multisectoral conditions that impact on health inequities even when effective health systems are in place. Only between 10% and 12% of the health inequities in self-reported health, mental health and life satisfaction seem to be associated with health services, involving quality and affordability of health care services, as well as waiting times to access them. Income insecurity is the largest contributor to health inequities and between 35% and 46% of the health inequities in self-reported health, mental health and life satisfaction are associated with income security and social protection. As far as other factors are concerned, between 22% and 30% of health inequities in self-reported health, mental health and life satisfaction are associated with living conditions; between 6% and 10% - with employment and working conditions; between 7% and 19% - with social and human capital.

The European Health Equity Status Report highlights that making a difference in the action on health equity requires shifting to the more integrated governance based on the combination of policies and interventions. Differences in health are explained in the first instance by differences in income security and social protection, then by housing conditions, working conditions, human capital and to a lesser extent by differences in quality and accessibility of health care. Even if countries are able to narrow inequities in relation to one factor, inequities may still remain in others, emphasizing the importance of taking a complex approach to tackling health inequity.

The role of social security is becoming even more fundamental. The income security will decline due to the worsening situation on the labour market in the aftermath to the COVID- 2019 crisis and will have an impact on health. The corona virus outbreak has imposed the greatest cost on those already worst off, because people with lower socio-economic status are particularly vulnerable to labour market fluctuations resulting from macroeconomic shocks. Risks related to new forms of work (short term work contracts, platform work, etc.), including in-work poverty, bad working conditions, weaker social protection associated with these jobs, come even more to the fore. They can have enduring negative health effects and induce higher costs for public budgets through increasing demand for health, but also when bad health affects capacity to work -other branches of social protection (sickness benefits, unemployment benefits, etc.).

Therefore, measuring gaps in access to healthcare to reduce health inequalities should be accompanied by capturing problems in other areas. The comprehensive set of indicators needed to make a difference should, according to the *European Health Equity Status Report*, include:

- Health Services – indicators and interventions related to the availability, accessibility, affordability, and quality of prevention, treatment, and health care services and programmes.
- Income Security and Social Protection – indicators and interventions related to basic income security and the reduction of health-related risks and consequences of poverty over the life-course.
- Living Conditions – indicators and interventions relating to differential opportunities, access and exposure to environmental and living conditions, which each have an impact on health and wellbeing.
- Social and Human Capital – indicators and interventions related to human capital for health through education, learning and literacy, and relating to the social capital of individuals and communities in ways that protect and promote health and well-being.

- Employment and Working Conditions – indicators and interventions related to the health impact of employment and working conditions, including availability, accessibility, security, wages, physical and mental demands, and risks of work.

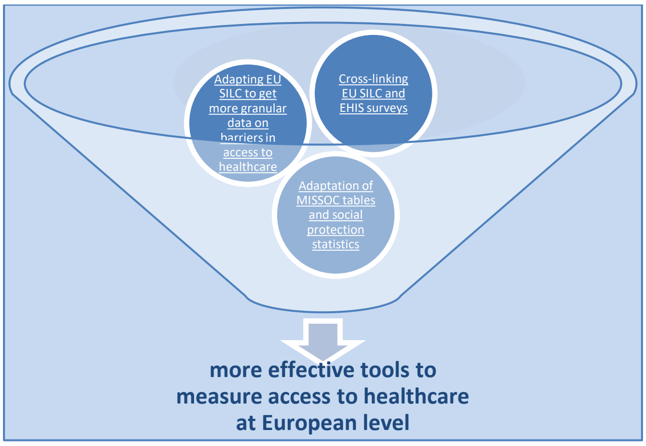
The *European Health Equity Status Report* stresses that concerted efforts on all the relevant policy fronts are feasible and have a clear economic return. The report estimates that comprehensive interventions to remove the barriers created by poor health and well-being can deliver reductions in health inequities even within 2–4 years. A 50% reduction in inequities in life expectancy between social groups would provide monetized benefits to countries ranging from 0.3% to 4.3% of gross domestic product (GDP).

To conclude: more holistic interventions to mitigate consequences of accumulated social, economic and health disadvantage are more effective than single factor interventions to deal with unhealthy behaviours which tend to cluster in certain social groups. The health sector must also work with other community partners to improve coordination and integration of services, and promote equitable access to services by reducing barriers.

1.3 Adaptation of existing tools providing comparable data across Europe

Adaptation of existing tools, providing the comparable data at European level, is an opportunity, which could be explored in the longer-time perspective. There are three possibilities: adapting EU SILC to get more granular data, cross-linking EU SILC and EHIS surveys through statistical matching, adapting MISSOC tables and social statistics.

Figure 1.4 Adaptation of existing tools



Cross-linking EU SILC and EHIS surveys

EU SILC survey and EHIS could be cross-linked to get better understanding of accessibility problems. EHIS collects data on diseases and chronic conditions suffered by the interviewee and on accidents and injuries. EHIS provides also some information on the socio-economic background, such as country of origin of parents, educational attainment level, activity status, household type and size as well as monthly net income. It could be considered to cross the answers to questions posed via both surveys and get more explanation on who people having forgone needs are. This could be achieved through statistical matching.

Statistical matching would allow the better use of existing data (using complementary variables) at minimum costs. This would require carrying out methodological work, identifying and testing statistical algorithms, suitable criteria for assessing validity of findings and production of methodological guidelines and recommendations for further implementation in Eurostat and Member States.

Adapting EU SILC to get more granular data on barriers in access to healthcare

Adapting EU SILC would provide a wealth of information to policymakers about which groups have coverage and access problems and whether it relates to lacking insurance, lacking benefits, high cost-sharing, waiting times, distance, unavailability, disability or discrimination. This could be achieved through the following:

- Respondents of the EU SILC could provide extra information (other than age) on their formal (legal) health coverage and social status and on their condition, using multiple-choice options according to the International Statistical Classification of Diseases and Related Health Problems.

- With regard to the question on unmet need due to financial reasons, respondents could be asked if they face financial barrier because they (1) lack insurance, (2) their insurance does not cover the specific service/ good, (3) cost sharing requirements are too high, (4) upfront payments in ambulatory care are too high (costs at point of service), (5) advance payments in hospital care are too high (fees required before admission and reimbursed after the service according to particular rules). [4]
- Extra questions could be considered such as whether people had an unmet need due to functional capacity (disability) and discrimination.
- Adaptations should also take into account requirements related to the development of the monitoring framework for the Council Recommendation on Access to Social Protection, namely a need to collect data on access to healthcare coverage in relation to various forms of employment contract or employment status.
- Currently the questions also do not include the option that a service is not available at all.
- Lastly, the results of EU-SILC could be published both for the population as a whole, and for those who had an actual need. This would provide additional insight for those countries where unmet need overall is low, but where there may be small groups of people who have a legitimate access or coverage problem.

Adaptation of the Mutual information system on social protection (MISSOC) and social protection statistics

MISSOC tables provide the qualitative data on the accessibility parameters of healthcare systems, such as information on applicable statutory basis (with references to regulations stipulating general accessibility conditions), basic principles (scope of universality), population coverage (beneficiaries, exemptions from compulsory insurance, voluntarily insured, eligible dependants), conditions such as qualifying period and duration of benefits, organisation of access (medical consultations and hospital care). The MISSOC tables also provide some information on conditions of getting access to benefits, explaining how the choice of doctors and hospitals is organised and how their services are charged.

Furthermore, the tables provide information on access to selected services and medical goods: dental care; prosthesis, spectacles, hearing aids; pharmaceutical products; the general category of ‘other benefits’. The later does not provide for structured reporting and only in some cases includes the information on services such as physiotherapy, psychotherapy, preventive care, home care provided by nurses, costs of travelling to get access to services. This reporting is largely incomplete, for example while accessibility conditions to medical care at home is reported for Austria, Denmark, Germany, Latvia, Poland, Romania, Slovenia showing huge differences is access conditions, it is not reported for other countries at all. Access to rehabilitation, mental care and psychotherapy is not reported systematically either and if reported, it shows big differences in accessibility conditions. Access to preventive care is rarely reported, with exceptions such as Sweden, reporting coverage for prescribed physical activity in the national health basket.

There is no clarity on whether and to what extent some critical (essential) services are included in healthcare baskets. MISSOC tables could be adapted to capture this important information and give more clarity on the extent of coverage of these services.

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[4] This could also apply to EHIS.

CHAPTER 2

SURVEY ON NATIONAL EXPERIENCE IN ASSESSING ACCESSIBILITY OF HEALTHCARE

This chapter summarises findings from a survey carried out with the Expert Group on Health Systems Performance Assessment on national experience in using more granular accessibility metrics. The objective of the survey was to provide policy makers with useful insights into more precise ways of identifying gaps in access to healthcare and into ways of capturing cumulative effects of various barriers in access to healthcare. The survey provides also a valuable input to the work on the improvement of the accessibility measurement framework undertaken by the Commission in co-operation with the Social Protection Committee Indicators Subgroup, building on the 2019 State of Health in the EU Companion Report. Finally, it reinforces the focus on effectiveness of health coverage: access to services, which are better adapted to the needs of the population.

Figure 2.1. Objectives of the survey

collecting and comparing national experiences in using more sensitive metrics to capture various layers of vulnerability in access to healthcare

providing policy makers at national and European level with useful insights into more precise ways of identifying gaps in access to healthcare and into ways of capturing cumulative effects of various barriers in access to healthcare

building knowledge on how to address the challenge of the growing proportion of the population with chronical diseases which is associated with changes in demand of healthcare, which increasingly require improvements in the types and quality of available services, better integration throughout the health care system and a continuing focus on prevention

2.1 Survey design and method

The survey was designed by DG SANTE (annex 2) on the basis of the discussion at the HSPA Group meeting on 4 December 2019 and conclusions of the 2019 State of Health in the EU Companion Report, which brought forward some ideas about strengthening the evidence-base on access to healthcare. The survey was sent to HSPA Members on 20 December 2019. Nineteen countries responded, including four countries, which do not measure the accessibility of healthcare system through HSPA.

The survey included questions of general nature on the use of HSPA to assess the performance of accessibility of healthcare systems (stand-alone analyses, focused on certain aspects), on the scope of HSPA used in countries and their impact on coverage policies design and implementation.

Figure 2.2. Scope of the survey

Dimensions of access monitored through HSPA

- Population coverage
- Financial coverage
- Benefits

Identification of people who fall through the cracks /face particular vulnerabilities in accessing healthcare

- Minorities
- People living in underserved areas
- People suffering from specific health problems / diseases/ having specific clinical characteristics
- People with certain socio-economic characteristics (age, income, gender, etc)
- People in new forms of work (with unstable, non-standard contracts)
- Other groups

Use of HSPA for the assessment of the completeness of the statutory coverage

- People who are in need of care that is not covered under the benefits package (what kind of services are problematic to get).
- Poeple in need of goods and services that are subject to high co-payments and /or high accumulation of co-payments or to restrictions (volume) or limitations (e.g. age): mechanisms for user charge reduction or co-payment exemptions, i) patients who fall outside the existing mechanisms for user charge reduction or co-payment exemption ii) patients faced with user charges that are not taken into account by the existing mechanisms for user charge reduction or co-payment exemptions.
- People who have good financial access to care but face other barriers (problems of physical availability, functional capacity, discrimination, etc).

Policy impact

- Is HSPA in your country used to define allocation of resources according to epidemiology challenges and match the supply of health services with demand? If yes, through which methods and how results are used?
- Do you use HSPA to draw conclusions on the impact of coverage policies on health outcomes?
- Do you use any aggregated / more comprehensive methods of assessing accessibility in HPSA: index indicators, other?
- Do you measure the impact of in-kind health benefits on distribution of resources among income groups and the effect on poverty reduction?
- How does HSPA input to the policy decisions in other sectors affecting access to healthcare: public transport, social inclusion and poverty reduction, regional policy, etc.

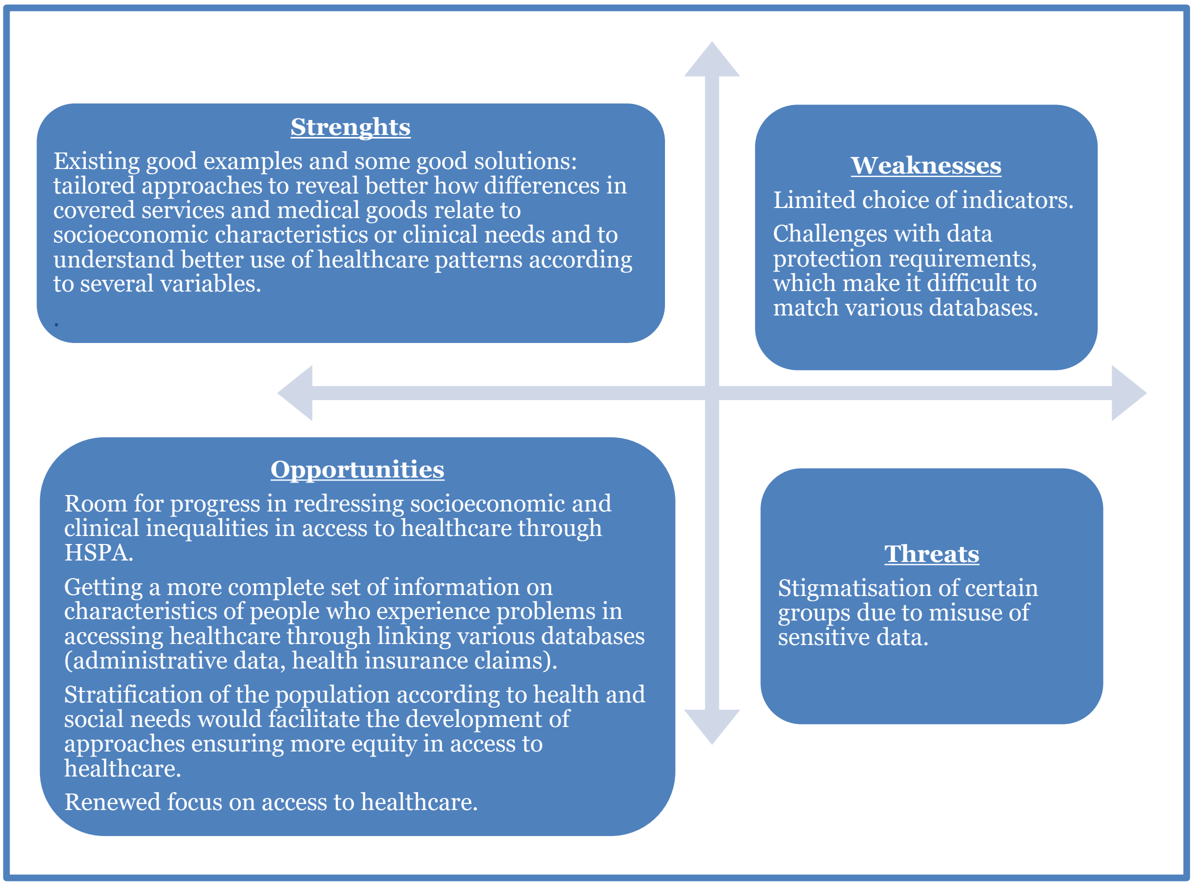
2.2 Analysis of results of the survey

This section presents conclusions of the survey, showing dimensions of accessibility most frequently covered by HSPA. It also provides an assessment of the state of play in terms of capturing complexities of access to healthcare according to various personal and clinical characteristics, showing a wide spectrum of practices across Europe. It summarises how HSPA is used to assess the completeness of healthcare coverage and the impact of other barriers to access healthcare. Finally, it shows the HSPA's policy impacts.

2.2.1 SWOT

The analysis of responses confirmed that there is some room to exploit more sensitive metrics to capture various layers of vulnerability in access to healthcare. There are many good examples and approaches on how to capture complex accessibility issues and countries found some ways to circumvent the limited choice of comparable indicators. The renewed focus on access to healthcare is an opportunity and there is certainly some room for progress in redressing socioeconomic and clinical inequalities in access to healthcare through better tools. A stratification of the population groups with areas according to health and social needs would facilitate the development of approaches ensuring more equal access to healthcare. However, some challenges in refining the measurement frameworks for access to healthcare would need to be addressed, mainly in relation to data protection issues and risks of misusing the data and stigmatising people in vulnerable situations.

Figure 2.3. SWOT analysis: survey on national practices



Strenghts

Existing good examples and some good solutions: tailored approaches to reveal better how differences in covered services and medical goods relate to socioeconomic characteristics or clinical needs and to understand better use of healthcare patterns according to several variables.

Weaknesses

Limited choice of indicators.

Challenges with data protection requirements, which make it difficult to match various databases.

Opportunities

Room for progress in redressing socioeconomic and clinical inequalities in access to healthcare through HSPA.

Getting a more complete set of information on characteristics of people who experience problems in accessing healthcare through linking various databases (administrative data, health insurance claims).

Stratification of the population according to health and social needs would facilitate the development of approaches ensuring more equity in access to healthcare.

Renewed focus on access to healthcare.

Threats

Stigmatisation of certain groups due to misuse of sensitive data.

2.2.2 Policy impact

HSPA makes various impacts on accessibility policies

The survey showed a wide spectrum of ways of using HSPA in policies. Some countries used HSPA to prepare and carry out specific reforms focused on accessibility of healthcare (Belgium, Ireland, Sweden), while other countries used HSPA to set targets in national strategies and monitor their impact (Austria, Estonia, Ireland, Latvia, Lithuania, Spain, Sweden), or to draw the attention of decision makers to important challenges (Hungary). The table below provides a snapshot of various situations and approaches.

Table 2.1. Use of HSPA in policy decisions on access to healthcare

Design and implementation of specific reforms
• **Belgium**: reform of maximum billing, which established annual out-of-pocket payment ceilings for healthcare expenditure according to households' net taxable income (2002); the reform expanding the healthcare coverage for independent workers (2010); third party payer system for consultations with GPs for all vulnerable patients (2015). • **Ireland**: input to the Slaintecare 10 year reform program aiming at the transformation of the healthcare system towards the universal healthcare coverage and free of charge access to primary care. Accessibility was an area of focus in 2020 with particular attention to enhanced community care, improvement of hospital productivity and scheduled care transformation. • **Sweden**: HSPA reports used to follow up reforms and assess their impact, e.g. National Health Guarantee Act, setting up certain minimum standards of care.
Setting and monitoring targets in national strategies
• **Austria**: improvement of access to healthcare through negotiation of targets within the healthcare reform (so-called target-based governance), as well as in the Austrian Health Targets process, with one target specifically addressing fair and equal opportunities for health (Target 2). • **Estonia**: monitoring of the level of achievement of targets set in the National Health Plan in relation to some accessibility metrics including out-of-pocket payments, healthcare coverage, population assessment of accessibility.

- **Ireland**: monitoring of targets set in the annual access plan for acute hospitals and access to cancer services.
- **Latvia**: monitoring of targets for service availability (e.g. rehabilitation, specialist consultations).
- **Lithuania**: monitoring of the level of achievement of targets set in the Health Strategy 2014-2025 in relation to some accessibility metrics including out-of-pocket payments, a number of doctors and nurses, the share of population at risk of poverty and monitoring of the implementation of the governmental programme including metrics on accessibility of medicines and waiting times.
- **Spain**: monitoring of vaccination coverage.
- **Sweden**: tailored-made analyses to analyze very specific problems and report on implementation of set objectives.

Putting important challenges into policy focus

- **Hungary**: summary reports are presented to policy-makers and touch upon issues such as improving health status of the population, financial protection and provision of services adapted to needs of the population.
- **Norway**: regular monitoring and publishing information on issues related to access to healthcare (through reports and web-dashboards).

Source: own compilation

Some tools can reduce the gap between needs and use of services

More effective measurement frameworks for access to healthcare should help ensure that the resources required to deliver relevant, appropriate and cost-effective health services are as closely matched to need as possible. They should therefore help reduce the gap between needs for healthcare and use of services and at the same time assist policy-makers in defining limits of acceptable variation in healthcare accessibility across the population. Belgium, as shown in the box below, provides a good example of the methodology used to capture these complexities.

Figure 2.4. Case study: needs-based resource monitoring

CASE STUDY: NEEDS-BASED RESOURCE MONITORING IN BELGIUM

Belgium developed a methodology, which puts into perspective the demand for healthcare, supply and use of healthcare services at subnational level. Dimensions included in the analysis of accessibility are:

- financial access,

- availability of qualified workforce,

- waiting times for consultations with specialists and geographical accessibility,

- percentage of people with insurance (by age, gender, location, social status) with at least one contact with a health professional (type of professional) per year, which allows comparing variation in utilisation of healthcare with the practice variation (a new indicator added to the spectrum of measures capturing the use of healthcare services).

The tool has many advantages. It allows combining various factors of accessibility: health outcomes, health literacy, affordability, density of professionals and some characteristics of the health system organisation. On this basis, it is possible to better understand trends in using healthcare according to the social gradient and patients' needs and to provide policy feedback with the aim of adaptations of the system (e.g. to minimise the use of acute care services through earlier interventions provided to patients who tend to deter care). The use of such a model is conditional to: relevant analytical capacities, access to necessary data, solving the issue of the use of sensitive data.

ADDED VALUE:

- it provides for better understanding of available data on access to healthcare and its effective use for decisions on the design of the healthcare services delivery,

-it captures problems experienced by vulnerable groups,

-it provides for the use of multifactorial data, which puts into focus all the important factors affecting access to healthcare along the patient's pathway,

-it allows making a better use of data on health utilisation.

BARRIERS TO DISSEMINATION IN OTHER COUNTRIES:

- no political support,

- limited access to data (incomplete or no data from private providers),

- sensitivity about linking data on the socio-economic status with data on the clinical status (this is not just a technical issue),

-no analytical capacity to analyse the huge amount of data.

The survey showed also other practices or confirmed the on-going reflection on using accessibility metrics in the allocation of resources according to health care outcomes and to drive the supply of health services according to the demand. While some tools are already used in Austria, Hungary, Spain, Sweden and the UK, such tools are being considered in Finland and Ireland.

Table 2.2. Use of HSPA in allocation of resources

Allocation of resources

- HSPA is used as one of the tools to support decisions on the allocation of resources to different segments of the population, services or areas requiring improvements, taking into account health outcomes and discrepancies between the supply and demand**: Belgium, Hungary, Spain, Sweden, and the UK.**
- **Austria:** a different (than HSPA) tool is used for healthcare planning: the on-line atlas tool.
- **Czech Republic:** HSPA informs reimbursement policy and subsidies decisions.
- **Latvia**: HSPA is used to decide on the allocation of additional resources to improve service availability on the basis of an in-depth analysis of the waiting times for services in different areas, for example, in-patient services, scheduled inpatient surgeries, rehabilitation, waiting times for specialists' consultations. HSPA is also used to define resources allocation parameters according to epidemiology challenges (e.g. immunization coverage of infants, incidence rate of tuberculosis etc.).
- **Finland:** tools being considered.
- **Hungary:** indicators used in HSPA are defined according to priority areas for public health and major causes of death. The objective is to assess capacities to deliver services according to needs.
- **Ireland:** as part of the Sláintecare reform programme, there are plans to move to a population-based approach to planning of the health and social services and the HSPA framework under development will be involved in this reform.

Source: own compilation

Tools are tailored to monitor areas with specific shortcomings

The survey showed that there are examples of HSPA used specifically to provide better access to healthcare in underserved areas (Czech Republic, Finland) or to improve access to certain healthcare services (Austria, Belgium, Czech Republic, Ireland, Latvia, Spain) or to analyse very specific problems with access, whether in relation to disease groups or groups with certain social characteristics (Sweden, Belgium, Hungary). In Austria and Sweden HSPA provided for operational improvements.

Table 2.3. Use of HSPA to tackle specific challenges with access to healthcare

Improving access to healthcare in underserved areas

- **Czech Republic**: maps of coverage for medical professions (built on the basis of maximum travel time between patient's home and nearest provider) are used to define incentives for providers in underserved areas, mainly for primary and dentist care.
- **Finland**: access to healthcare is assessed as part of the overall evaluation of healthcare and social services performance. The Ministry of Social Affairs and Health uses results of regional HSPA in policy design, discussion and collaboration with regions.

Improving access to certain services

- **Austria**: due to the pandemic, psychotherapy is now also available via online/ phone consultations.
- **Belgium**: HSPA provided input to the 2016 White Paper on Access to Services promoting access to primary care for people without statutory healthcare coverage.
- **Czech Republic**: HSPA provided input to maps of coverage of medical professions, which promote access mainly to primary care and dental care.
- **Ireland**: the Hospital In-Patient Inquiry (HIPE) system feeds into annual access plan to acute hospital care and is used to monitor the results of accessibility of acute care. In cancer services, weekly data is produced on access to urgent colonoscopy services broken down by individual hospital.
- **Latvia**: input to the Plan on improving access to primary healthcare and Plan to improve access to mental and oncological healthcare.
- **Lithuania:** monitoring a set of the indicators helps the National Health Insurance Fund to plan and allocate resources among the territorial branches according to needs of patients. Results of monitoring showed significant regional disparities and on this basis it was decided to set up a single country wide waiting list. Patients can see the waiting list in different health care entities and choose one where the waiting list is shorter (for hip replacement, dental prosthetics and other).
- **Spain**: monitoring of key NHS indicators allows planning and decision making at management level (Ministry of Health responsible for co-ordination of the NHS with regional health authorities). Results of the monitoring of healthcare coverage, accessibility of medicines and dental care are currently considered in modifications of the public basket of services. The monitoring of the surgical waiting list indicators is a basic tool for setting at macro level maximum time requirements for services (coronary surgery, knee prosthesis etc.). The same indicators at intermediate level are used to increase accessibility to health services when there is a surge in demand (e.g. monitoring the incidence of influenza cases, which facilitates planning of hospital beds, staffing of hospital emergency services when the an influenza epidemic peak is detected).

Improving access to healthcare for certain groups

- **Austria**: high-priced medication for people with spinal muscle atrophy is being reimbursed since late 2020.
- **Belgium**: the 2016 White Paper on Access called for measures to improve access for vulnerable groups, through setting up in all large towns a low-threshold healthcare system, providing for multidisciplinary care (including also social services, interpretation services, cultural mediators, guidance mechanisms) for people who have no access to formal care (the long-term objective is to reintegrate patients into the standard primary care). It called for improving access to healthcare for prisoners, homeless people, people with mental disability, migrants, young households, low-income households, single parents, people with lower education levels.
- **Hungary:** the first HSPA report focused on people suffering from myocardial infraction and tuberculosis; the second –on access to primary care.
- **Norway:** mental health services and services for addicted are prioritized in analyses.
- **Sweden**: tailored-made analyses of very specific problems of particularly vulnerable groups.

Operational improvements

- **Austria:** In the course of the target-based governance reform, efforts to reduce fragmented care for people with chronic illness are ongoing.
- **Sweden**: HSPA used for standardisation of healthcare pathways, reorganisation of primary care, benchmarking of healthcare providers, improvement of clinical procedures.

Source: own compilation

Some people experience particular difficulties in accessing health services. People with mental health issues are among systematically underserved population groups in Europe. This group experiences substantial problems in accessing healthcare due to fragmentation of services, complex needs, stigma, fear and mistrust. These problems are difficult to measure. As the Irish example described in the box below shows, specific strategies are needed to improve access to appropriate health services for people with mental health problems. A right approach should allow early detection of mental health problems and the effective delivery of mental health services. This involves ensuring that health professionals receive appropriate training in preventing, diagnosing and treating mental ill health, especially in primary care. This also involves raising awareness about mental ill health and reducing the stigma at all levels of health service delivery and in society more generally.

Figure 2.5. Case study: population-based planning of access for underserved populations

CASE STUDY: POPULATION-BASED PLANNING OF ACCESS TO HEALTHCARE FOR UNDERSERVED GROUPS IN IRELAND

The overall objective of the Irish reform is to maximise access to early interventions and minimize use of acute care for patients with mental health issues. A redesign of the system of services will potentially drive a more comprehensive way of measuring gaps in access to services. The planned change of the system should address persisting challenges related to unsustainability of current solutions with low availability of services especially in rural areas, weaknesses in co-ordination of services and continuity of care, the lack of involvement of patients in the design of service delivery, weak primary prevention and early intervention, problems in getting access to interventions at community level, the lack of digital interventions, concerns about quality and patient safety, and weaknesses in reporting.

The envisaged solutions should bring various services together, provide for population-based planning of services according to needs, ensure involvement of patients at early stage, and fill the gaps in early prevention services. The system would adapt primary healthcare settings through the use of digital health solutions, talking therapies, peer support and social prescribing (referrals to social, non-clinical services), expansion of community mental healthcare teams with relevant therapists, combination of primary care and community support.

As far as the implementation of the new model is concerned, it envisages cross-departmental co-operation, involvement of relevant actors, clear governance and accountability arrangements, and linking funds with outcomes.

ADDED VALUE:

- comprehensive strategy to address gaps in access to healthcare for people with mental health problems,

- model of services designed to meet needs of people, who are direclty involved in the deisgn of the system,

-solutions shifting a focus from institutional support to multpile points of access at local level and early intervention (consultation lines, deployment of specialsts, support groups).

BARRIERS TO DISSEMINATION IN OTHER COUNTRIES:

- no political support, no sufficient budget,

- barriers related to healthcare systems' organisation (countries which remain hospital centric would not be able to have several entry points at local level),

- underdevelopped comunity-based care,

- lack of openess to solutions such as social prescribing.

Measuring relationship between accessibility and health outcomes is rare

Access to healthcare should translate into health improvement. Therefore, the measurement framework for access to healthcare should ideally help monitor if services are effective enough to improve health, and at the same time, given the scarcity of resources, if they are cost-effective.

Examples of using HSPA in linking accessibility metrics with health outcomes are not frequent. Though in some countries health outcomes are put into perspective, for example Hungary reports on survival rates for cancer by type of cancer, place of care, patient characteristics; Latvia – on 5 year survival rates for cancer patients, health outcomes of people using neonatal or psychiatry care; Ireland and Latvia –on mortality and morbidity rates, links with typical accessibility indicators are rare or even non-existing. In Austria accessibility indicators are presented in the outcome measurement framework. Ireland is planning to include in its HSPA measurable and quantifiable outcome-based indicators linked to specific health policies and strategies. The survey showed also a use of different than HSPA tools; for example, Spain uses the Strategy of Patient Safety, Sweden – targeted reports and analyses and more subjective measures through the population survey. The UK concentrates its assessments on outcomes disaggregated by group characteristics, e.g. deprivation level, gender, region, local authority, age, ethnicity, using a selected set of indicators. The table below provides for some details of existing solutions.

Table 2.4. Measuring relation between accessibility and health outcomes

Measuring relation between accessibility and health outcomes

- Austria: Access indicators are presented in the country's outcome measurement framework.
- **Latvia:** used HSPA to draw conclusions on the impact of coverage policies on health outcomes and resulting rearrangements of neonatal, psychiatry and oncology care.
- **Ireland:** plans to include in HSPA measurable outcome-based indicators linked to specific health policies and strategies.
- **Spain:** within the framework of the Strategy of Patient Safety, specific programmes have been developed, that have an impact on health outcomes, not only on reducing mortality (the most frequently measured health outcome). For example, the *Zero Pneumonia programme* has contributed to the reduction of the rate of pneumonia associated with mechanical ventilation to less than nine episodes per 1,000 days of mechanical ventilation nationwide, which means a 50% reduction with respect to previous rates (2000-2005) and a 25% reduction in recent years with respect to the rates for 2009-2010.
- **The UK:** the government constantly monitors health outcomes by group characteristics and makes adjustments to local healthcare services, including targeted measures if appropriate to improve equity of outcomes. HSPA and other tools, especially the General Practice Patient Survey are used to provide input to policies to level out inequalities. Reduction of inequalities is an objective of the NHS -measured by improvement against indicators in the NHS Outcomes Framework (NHSOF). Similarly, England's public health institute (Public Health England) is expected to reduce health inequalities – measured by improvement against indicators in the Public Health Outcomes Framework (PHOF). Outcomes are disaggregated by group characteristics, e.g. deprivation level, gender, region, local authority, age, ethnicity, using a selected set of indicators: potential years of life lost from causes considered amenable to healthcare, health-related quality of life for people with long-term conditions, under 75 mortality rate from cardiovascular disease, under 75 mortality rate from cancer, infant mortality, unplanned hospitalisation for chronic ambulatory care sensitive conditions, emergency admissions for acute conditions that should not usually require hospital admission, patient experience of GP services, access to GP services, life expectancy at 75, life expectancy at birth, healthy life expectancy at birth.
- **Sweden:** more subjective assessment through population survey including questions: "Are we getting healthier and living longer"; "How well does healthcare contribute to keeping us healthy?"; "How does healthcare contribute to sustainable good health?" The assessment is carried out at national level with break downs for regions, municipalities, and units, encompassing public providers, as well as private and non-profit organisations (within the scope of publicly funded services).

Source: own compilation

Using index measures is not practiced

The survey also inquired about the use of more complex or aggregated measures of accessibility in HSPA, for example index measures. Using such measures, combing various dimensions of accessibility, is not a common practice. Hungary would wish to develop a more complex tool, while the UK believes that disaggregated indicators are more useful. Some alternative solutions reported by countries include e.g. specific surveys and studies in the context of the national health reform in Austria, a grid based data of population attributes (socio-economic factors, age groups, education) is now under analysis and is being used to calculate accessibility to primary care and specialized care services in Finland.

Measuring the redistributive impact of health benefits is not common either

The HSPA is not used either to measure the impact of in-kind health benefits on distribution of resources among income groups and their effect on poverty reduction. The only exceptions are Finland, which develops a stand-alone approach to assess the distributional effects of healthcare benefits and Belgium, which included such analysis in the 2020 HSPA report '*How equitable is the Belgian health system*'.

HSPA can have a wider policy impact

Access to healthcare is affected by public policies beyond the health system: fiscal, social protection, education, employment, transport and regional development policies. The survey provided some insight into the use of HSPA in the policy decisions in these sectors. In some cases processes of co-operation with other sectors, mainly social, education, regional development are established and HSPA provides input for debates, plans of joint work, for example in Finland, Latvia, Hungary or the UK. The results of such co-operation may result in very specific measures, for example in Latvia – planning of new public transport delivery models to improve timely access to healthcare. The Austrian programme 'Early Childhood Intervention' is an example of a well-established co-operation between the social and health sector in supporting families in raising healthy children. Spain integrated air pollution in the policies of access to healthcare to respond to the increased needs of care due to high levels of nitrogen dioxide, CO2 and noise. As a way of improving access to preventive measures, Spain ensures the cross-sectoral co-operation with the food sector and with schools to improve the quality of food for children and increase the physical activity of pupils.

Table 2.5 Wider policy impact of HSPA

Impact on other policies
• **Austria**: the national programme for Early Childhood Interventions is a good practice regarding collaboration of the social and health sector. The main objective of the model is to reach and support families in need (due to stressful living conditions or circumstances) during pregnancy or in the first three years of life of a child. "Frühe Hilfen" follows a multi-professional as well as multi-sectoral approach (investing in networking esp. with services from the health and social sector) to support families in raising healthy children. The programme is voluntary and ensures access of families through direct contact and through professionals, such as health and social workers, who can identify and refer them. • Processes of co-operation with other sectors established, mainly with education, social, regional development policies and HSPA provides input to debates, plans of joint work**: Finland, Latvia** and **the UK.** In **Hungary,** the HSPA demonstrated the possible scope of co-operation with other sectors. • **Lithuania:** monitoring of the level of achievement of targets set in the Health Strategy 2014-2025 related to environmental factors: greenhouse gas emissions and proportion of the population claiming to suffer from noise. Regular adult lifestyle surveys are conducted to analyse changes in the quality of food and physical activity of the adult people and school age children and how those changes affect health status of the population. • **Sweden:** HSPA may affect other sectors in a very general way, as part of the discussion on how to improve access to healthcare and the health status of the population. • **Spain:** air pollution integrated in policies on access to healthcare (monitoring of hospital admissions for specific pathologies and of mortality attributable to air pollution plays an important role in the design of policies); cross-sectoral co-operation with the food sector and schools to improve quality of food and increase physical activity of young people (objective: improve access to preventive measures).

Source: own compilation

Alternatives to HSPA in assessing accessibility of health systems

Countries, which do not have HSPA established, take recourse to other analytical methods. Romania reports accessibility indicators within the National Report on the Health Status of the Population and in the Report of progress of the National Health Strategy 2014-2020, which feeds into regional plans for health services. This monitoring provides for some granularity of data, especially in relation to rural areas and certain age groups. The Slovak Republic has not established yet the HSPA either. Some other existing tools have potential to feed into the future HSPA framework with data on accessibility. The adopted in 2013 Strategic Framework for Health 2013-2030 comprises a set of indicators, which could be used in HSPA. However, this framework has not been monitored or updated. Some semi-strategic papers, for example: "Value for money" paper that focuses on efficiency or "Stratification paper" which focuses on quality and accessibility have also some potential, though there is no regular reporting according to indicators established in these papers.

2.2.3 Accessibility dimensions covered in HSPA across Europe

National specificities are by far the main driver of what underpins the selection of indicators and approaches used

There is a huge variation in problems with access to healthcare across Europe and within countries. An analysis of replies to the survey suggests that national specificities are by far the main driver of what underpins the selection of indicators and approaches used to measure the accessibility of healthcare systems.

Many countries include in their HSPA typical and overarching indicators to measure access to healthcare without any specific focus on certain groups and / or characteristics of persons. These indicators normally include: unmet medical needs (EU SILC), out-of-pocket payments and other issues related to financing (for example pharmaceutical expenditure in Slovenia). Sometimes these overarching indicators are monitored beyond the HSPA, within other monitoring mechanisms.

Specific regulations on healthcare baskets may drive more tailored HSPA

Specific regulations on healthcare baskets may drive more tailored HSPA. Sweden has a set of regulations protecting the most vulnerable groups through defining entitlements according to population characteristics. The Health and Medical Services Act (2017-2030) puts priority on people with greatest needs. Furthermore, *The Health Guarantee Act* specifies the maximum time of waiting to get in touch with primary health care, to get a diagnosis, and the maximum time of waiting to get an appointment and the treatment within the specialized health care. The *Patient Act* also defines some rights of patients: right to be informed about illness and treatments available, right to participate in all decisions about care. The system provides also interpreter services for medical consultations, which are free of charge. Assessment of the performance of the healthcare system according to these legal obligations can be included in the HSPA.

There are examples of assessments covering multiple dimensions (e.g. waiting times measured for certain services or groups of patients or territories)

The HSPA Group survey showed that waiting times indicators are used regularly and sometimes are adapted to specific countries' context reflecting challenges in timely access to certain services or even problems faced by groups with certain clinical characteristics. Finland measures for example waiting times for non-urgent primary care consultations, Norway- for specialist care, Ireland - for occupational therapy or cancer care. Ireland also provides a good example of a waiting time indicator defined according to clinical characteristics, measuring waiting times for mental health for children or for home care for elderly persons. Ireland and Spain use waiting time indicators to define targets for waiting times: max.52 weeks of waiting for occupational therapy assessment in Ireland, max. 48 hours of waiting for consultation at primary care level in Spain. Estonia is working on a new set of waiting time indicators.

Table 2.6. Tailored made waiting time indicators – examples

Ireland
The following indicators are used: waiting times for procedures in acute hospitals, emergency department patient experience time, therapy waiting lists in community, mental health for children access times, cancer services waiting times, waiting times for support for older people in their homes, waiting time for elective procedures in inpatient and day case, percentage of people on the waiting list for occupational therapy for assessment less than or equal to 52 weeks. In addition, new indicators are planned: - A Scheduled Care Transformation Programme which will place a new emphasis on hospital waiting processes to ensure a robust, evidence-based, data-driven, co-ordinated approach to the planning and delivery of scheduled care services in line with waiting time guarantees set in Sláintecare. - A plan to implement the recommendations arising from the Trinity College review on international best practice for reporting of waiting lists. The Plan will focus on a move towards reporting on waiting times rather than waiting list numbers for radiology diagnostics, outpatients, inpatients and day cases.
Spain
Principal indicators: waiting time for surgical procedures, especially care consultations; % of population that makes an appointment in primary care in the first 48 hours. The following indicators, among others, have been used to measure the accessibility of the National Health System: percentage of the population that makes a PCH appointment on the requested day, percentage of the population that waits more than one day for a GP appointment, waiting times for specialists appointment, patients waiting for non-urgent surgery, waiting times for non-urgent interventions. For each of the selected indicators, the results of the last available year, the average values of the last 10 years and the difference between the results of the tenth and first year studied are analysed to obtain an approximation of the NHS performance trend in the last decade. At macro level (country) the analysis focuses essentially on showing the trend of each phenomenon measured by indicators through a regression line with a scatter plot of a ten-year period. The analysis is broken down by regions.

Source: own compilation

The OECD in its study '*Waiting times for health services*' (2020) notes that OECD countries increasingly measure waiting times beyond elective treatment, including for primary care, cancer care and mental health services. Some countries establish targets –maximum waiting times or develop 'waiting time strategies'. This happens more often for cancer care than for primary or mental care. The study refers to various policy options targeting supply and demand side to reduce waiting times, emphasising the role of new technologies in increasing access to healthcare. An important aspect of measuring waiting times is the way of measuring them with electronic registers providing an opportunity for the more accurate picture of challenges. Estonia uses waiting time reports from health care providers and since mid-2019, the national digital referral and registration system has been in place, which will eliminate double bookings. Finland also monitors waiting times through targeted information systems.

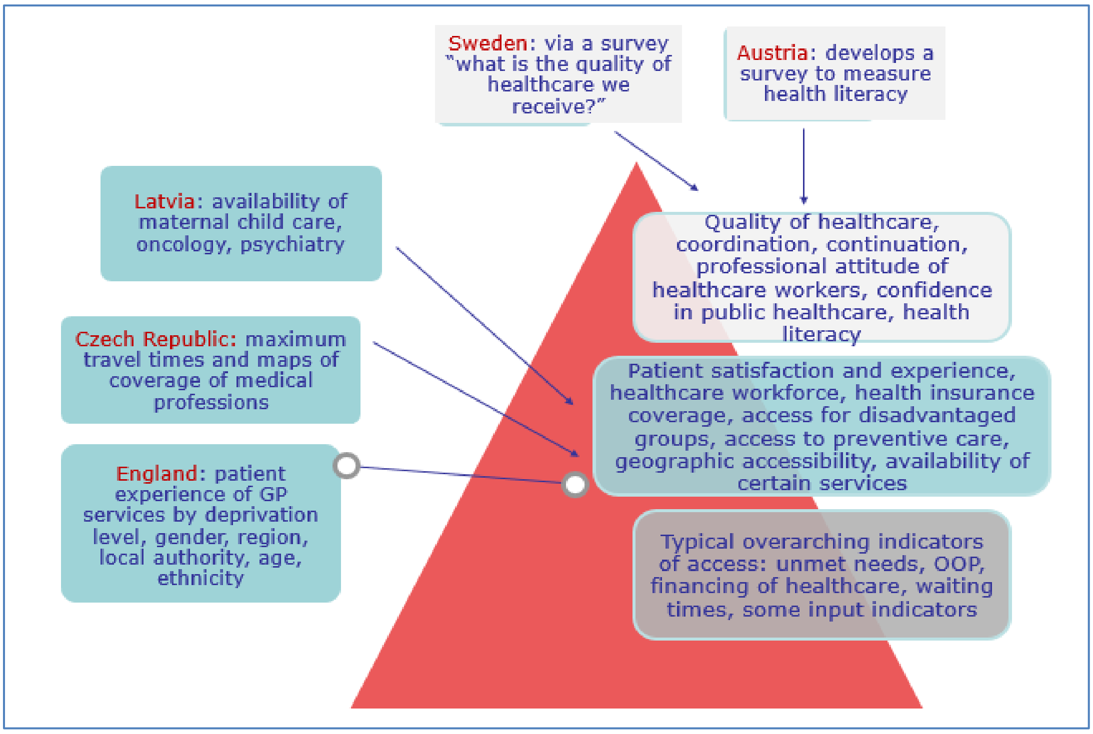
The potential of some important indicators remains untapped

While typical overarching indicators measuring accessibility are quite widely used in HSPA (as depicted at the bottom of the pyramid below), indicators related to patient satisfaction, healthcare workforce, insurance coverage and access to certain services, access to healthcare for disadvantaged groups, access to preventive care, geographic accessibility are used to lesser extent:

- Patient satisfaction and experience is measured in Austria, Sweden and Estonia. The UK provides an interesting example of certain granularity of data to measure patient experience of GP services as the data is collected by deprivation level, gender, region, local authority, age and ethnicity.
- Data on healthcare workforce is used in analyses of accessibility of healthcare systems for example in Belgium, Hungary, Norway, Slovenia and the Czech Republic.
- Estonia, Slovenia and Spain use also measures of health insurance coverage.
- Access to certain services is sometimes included in analyses of accessibility, for example, Latvia measures accessibility of services for maternal childcare, oncology and psychiatry.
- Access to services for disadvantaged groups can be included in HSPA in Sweden and was subject of the first ever HSPA report in Hungary.
- Measuring of access to preventive care is limited to vaccination rates (e.g. Spain), screening services (e.g. Latvia, Spain) or monitoring of determinants of health and risk factors (Hungary).
- As far as geographical accessibility is concerned, the Czech Republic provides an example of measuring maximum travel times and of maps of coverage of medical professions; Hungary carries out capacity planning taking into account minimum travel times; Finland carries out the analysis of access at regional level with a focus on primary care accessibility, recently adding the perspective of accessibility for different socio-economic groups and providing data for every municipality and postal code area; Hungary measures arrival time of ambulance. Belgium and Sweden also use specific measures of regional accessibility.

Indicators measuring quality of healthcare, access to co-ordinated and continuous care, professional attitude of healthcare workers, confidence in public healthcare and health literacy are used even less (as depicted at the top of the pyramid below). Sweden measures all these dimensions using targeted surveys and reports. Norway is working on a more comprehensive information system on healthcare quality in accordance with the national quality framework.

Figure 2.6. Hierarchy of access indicators used in HSPA with examples of indicators



Source: own compilation

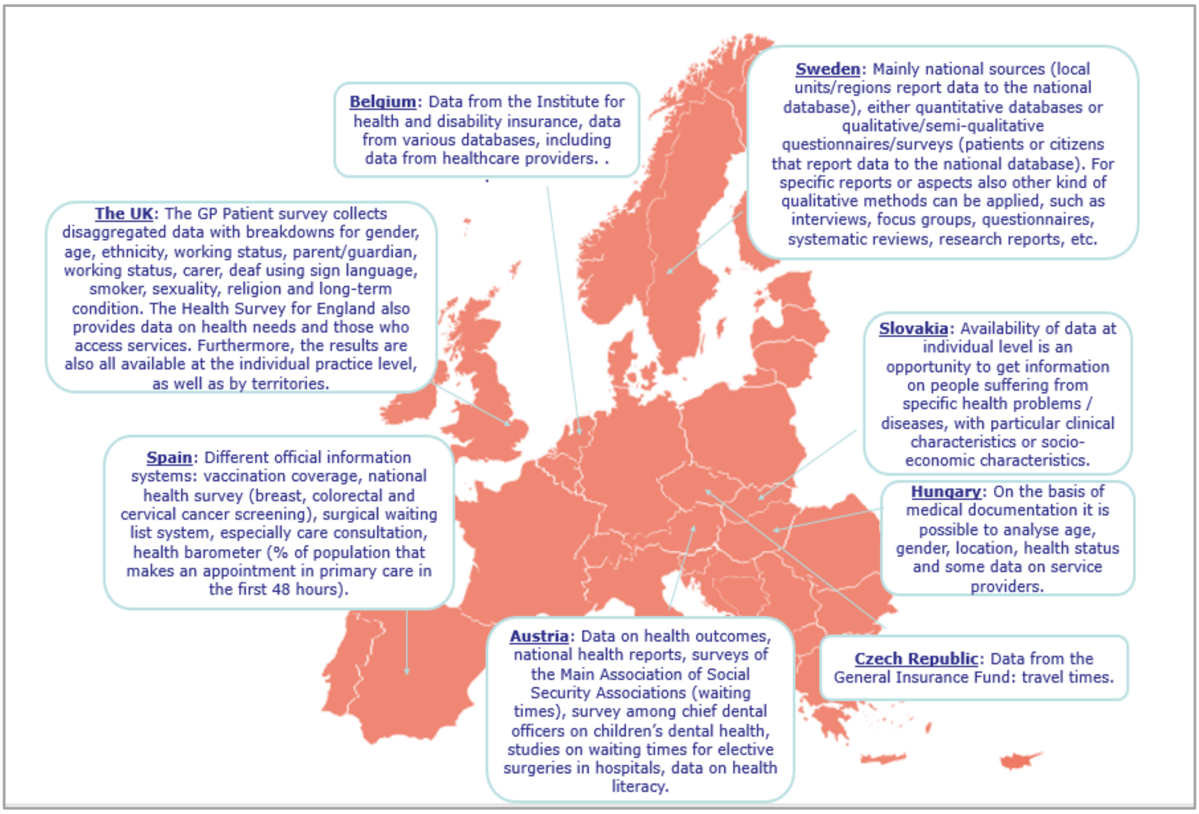
2.2.4 Opportunities to exploit available data

There are opportunities in exploiting available data

Some countries acknowledge that data availability contributes significantly to the choice of indicators and approaches in measuring access to healthcare. The survey analysis shows that on top of EU SILC, EHIS, SHA and SHARE, there are many national sources of data used and/or available, which either provide or could potentially provide input to HSPA. They include various administrative data sources, or data from health insurance claims.

Linking various databases is an opportunity to get a more complete set of information on characteristics of people who experience problems in accessing healthcare and more targeted policy responses. A main difficulty in doing it are data protection requirements. Another challenge with availability of data is lack of more reliable data on private insurance coverage. Nevertheless, the availability of various data sources (map below) could certainly be explored to make a step forward in revealing better how differences in covered services and medical goods relate to socioeconomic characteristics or clinical needs and to understand better use of healthcare patterns according to various personal characteristics.

Figure 2.7. National sources of data on access to healthcare



Belgium: Data from the Institute for health and disability insurance, data from various databases, including data from healthcare providers. .

Sweden: Mainly national sources (local units/regions report data to the national database), either quantitative databases or qualitative/semi-qualitative questionnaires/surveys (patients or citizens that report data to the national database). For specific reports or aspects also other kind of qualitative methods can be applied, such as interviews, focus groups, questionnaires, systematic reviews, research reports, etc.

The UK: The GP Patient survey collects disaggregated data with breakdowns for gender, age, ethnicity, working status, parent/guardian, working status, carer, deaf using sign language, smoker, sexuality, religion and long-term condition. The Health Survey for England also provides data on health needs and those who access services. Furthermore, the results are also all available at the individual practice level, as well as by territories.

Slovakia: Availability of data at individual level is an opportunity to get information on people suffering from specific health problems / diseases, with particular clinical characteristics or socio-economic characteristics.

Spain: Different official information systems: vaccination coverage, national health survey (breast, colorectal and cervical cancer screening), surgical waiting list system, especially care consultation, health barometer (% of population that makes an appointment in primary care in the first 48 hours).

Hungary: On the basis of medical documentation it is possible to analyse age, gender, location, health status and some data on service providers.

Austria: Data on health outcomes, national health reports, surveys of the Main Association of Social Security Associations (waiting times), survey among chief dental officers on children's dental health, studies on waiting times for elective surgeries in hospitals, data on health literacy.

Czech Republic: Data from the General Insurance Fund: travel times.

Source: own compilation

Some countries seize or plan to seize opportunities to use various data sources:

- Belgium started to cross-link data coming from sources providing information on health status, income, education, employment status and healthcare utilisation characteristics.
- Estonia: the 2015 World Bank study *The State of Health Care Integration* looks at prevention of chronic diseases with particular attention to the role and functioning of primary care and equity issues. The study is based on a quantitative analysis of health insurance claims (submitted by healthcare providers to the Estonian Health Insurance Fund), stakeholder interviews and focus group discussions. The study provided for some granularity according to certain personal and clinical characteristics.
- Finland prepared necessary legislation and the IT system to use more widely data collected through various sources (case study in the box below).
- Lithuania**:** one of the main directions of the National E-Health System development is to connect all components such as Statistics Lithuania, National Health Insurance Fund database, registers

and other non-health sector related information to find new more precise ways to address patient's needs.

- Sweden: assessments on access to healthcare can be done by different actors, whether the government or authorities in charge of health care and social policies. The National Board of Health and Welfare for example produces annual "open regional comparisons" that include many indicators and can be either generic or thematic and related to certain diseases (i.e. cancer) or patient groups (i.e. elderly people, children and adolescents). This Board and the Swedish Agency for Health and Care Services can also produce reports on demand with a possible focus on certain patient groups, diseases, follow-up to a reform or other aspects (for instance private health insurance, in-depth analysis of capacity and production planning). Finally, regional and local authorities and clinical units do their own assessments on the basis of data they collect.
- The UK: the population who access GP services is monitored via the GP Patient survey, which collects disaggregated data. Breakdowns are available for gender, age, ethnicity, working status, parent/guardian, carer, deaf using sign language, smoker, sexuality, religion and long-term condition. The results may be compared to the Health Survey for England to analyse whether there are any differences in underlying health needs and those who access services. The results are available at the individual practice level, as well as by region, local authority area and deprivation decile[5] of local authority area. Some of this information is used in the NHS outcomes framework to support the assessments, which seek to identify progress across the system on reducing health inequalities.

Needs-based resource allocation for better access to healthcare requires access to more precise data. Very few countries currently have the capacity to provide for record linkage within the health sector or across other sectors. One of the problems is the lack of unique patient identifiers. Linking databases may facilitate the needs-based resource allocation, although implementation may be challenging for political reasons.

Figure 2.8: Case study: linking databases to get more granular data

CASE STUDY: RECORD LINKAGE ACROSS DATABASES FOR MORE GRANULAR DATA ON ACCESS TO HEALTHCARE IN FINLAND

Finland has started to link the administrative data from various registers (biobanks, patient and prescription data repository, national health and social care registers, health and social care statistics, socio-economic data). These data have so far been used in evaluations and research.

Ultimately, it is planned to design the health and social care information system, which would combine various sources of data: data from service providers and authorities, regional data, health and social care authorities' databases, national client/patient data repositories, national statistics and registers, and other (genomics data, biobanks, scientific publications, supervision registers). The HSPA system at regional level, which provides many useful data, for example on timely access to hospital care for various socio-economic and education groups will also be used. The project in the pipeline will therefore allow the secondary use of social and healthcare data through linking systems registering use of services and payment for services, data on income, education, gender, age and other possible variables.

The precondition to put in place such a system is the existence of a unique patient identifier and adoption of the legal act on the secondary use of health and social data to ensure the compliance with data protection requirements. Risks in misuse of data can potentially be addressed by licensing and restricted access in research data centres.

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[5] The deprivation level of a Local Authority area is calculated using seven domains (income, employment, health and disability, education and skills training, crime, barriers to housing and services and living environment). These are then ranked and grouped by deciles.

ADDED VALUE:

- opportunity to benefit from existing multifactorial data, which puts into focus all the important factors affecting access to healthcare along the patient’s pathway,

- better understanding of available data on access to healthcare and it effective use for decisions on the design of the healthcare policies.

BARRIERS TO DISSEMINATION IN OTHER COUNTRIES:

- no political support,

- limited access to data (incomplete or no data from private providers),

- sensitivity about linking data on the socio-economic status with data on the clinical status, which is not just a technical issue,

-no analytical capacity to analyse the huge amount of data.

2.2.5 Capturing characteristics of patients

Characteristics of groups, which fall particularly through the cracks are captured only to some extent

The survey analysis showed that HSPA, but also other tools, are to some extent used to capture characteristics of groups, which fall particularly through the cracks. These groups include to varying degree minorities, people living in underserved areas, groups with some socio-economic and clinical characteristics. Some countries monitor the accessibility in underserved areas, which happens less for problems faced by minority groups and even less for problems in accessing services due to limitations related to the type of employment. Countries rarely put both clinical and socio-economic characteristics in the perspective to assess problems with accessibility and some do it exclusively for one or the other set of characteristics. The examples show a variety of approaches and include both HSPA and other methods.

Monitoring of gaps in accessibility of healthcare in medical deserts is more common

The survey showed that measuring accessibility of healthcare for people living in underserved areas can be focused on certain defined groups. For example, in Austria, access to specialist services in rural areas can be measured using geographic information systems. In Finland, analyses focus on people living far from emergency services in the north. Some countries use measures giving a broad overview of challenges in underserved areas, for example maps of coverage of medical professionals in the Czech Republic or analyses of regional accessibility in Sweden. England defines deprivation level of local areas and ranks them according to seven domains: income, employment, health and disability, education, skills and training, crime, barriers to housing and services and living environment. The table below shows the examples of various approaches.

Table 2.7. Various approaches in measuring accessibility of healthcare in underserved areas

Austria	Analysis of access in rural areas, and of geographical barriers to get access to some specialists and treatments (e.g. an analysis of per capita availability of public and private providers is possible for each region).
Czech Republic	Maximum travel time, maps of coverage of medical professionals, taking also into account people living in border and remote regions.
Estonia	The analysis of regional disparities in access included in the World Bank study: *The State of Health Care Integration.*
Finland	The analysis of problems of people living far from emergency services in the north of Finland.
Hungary	On the basis of documentation from the National Health Insurance Fund it is possible to show differences and trends in the utilisation of health services focusing on people living in areas according to zip codes and their classifications.
Ireland	Reporting is broken down by region which is further sub-divided into individual hospitals or Health Care Area (in the Acute Hospital area there are 7 Hospitals Groups and data is provided on each Hospital Group, e.g. % of people waiting less than 52 weeks for first access to Outpatient Department services). Within each Hospital Group, while the number of individual hospitals can vary, data for each hospital is provided on a monthly basis.
Lithuania	Regional disparities analysed for access to primary, emergency healthcare services, waiting times to

	the specialized health care services, mental health care services, as well as participation in the cancer screening programs by people living in the remote areas.
Norway	While underserved areas not identified as such, it is possible to identify municipalities, health districts and city districts in the biggest cities and health districts with different population characteristics can be compared.
Sweden	Regional disparities analysed in annual regional comparisons.
England	Targeted monitoring, including regional disparities possible. The GP Patient Survey provides information on access to GPs at the individual practice level, as well as by region, local authority area and deprivation decile of local authority area. The deprivation level of a Local Authority area is calculated using seven domains (income, employment, health and disability, education and skills training, crime, barriers to housing and services and living environment). These are then ranked and grouped by deciles.

Source: own compilation

Some countries monitor problems in access to healthcare for minorities

As far as minorities are concerned, measuring of gaps in access to healthcare (not exclusively through HSPA) targets clearly defined groups, for example in Estonia: Russian minority, in Finland: Samu people, In Ireland and Slovakia: Roma minority.

Table 2.8. Various approaches in measuring accessibility of healthcare for minorities

Estonia	Some ad hoc analyses for the Russian minority.
Finland	The analysis of access to healthcare for Samu people. The situation of asylum seekers, undocumented migrant is analysed too, but not through HSPA.
Ireland	Data provided mainly on a general population basis, but in some areas it covers certain groups: in the community healthcare area there are specific indicators for particular groups e.g. members of the Traveller community (e.g. KPI on the number of people who received information on cardiovascular health or participated in related initiatives).
Slovakia	No HSPA, but in 2019 the Ministry of Health in collaboration with other sectors published a report on marginalised communities, mainly Roma.
Sweden	Targeted analyses with a view of assessing the situation of vulnerable groups carried out on demand.
UK	Targeted analyses with a view of assessing the situation of vulnerable groups carried out on demand. The GP patient survey in England provides information on ethnicity.

Source: own compilation

Problems in access to healthcare related to the type of employment are hardly ever monitored

The survey inquired also about the use of more disaggregated data reflecting the employment status. It showed that Estonia in its recent analysis looked at health insurance coverage among people with unstable employment. Otherwise, this is not in the radar. The adoption of the *Council Recommendation on Access to Social Protection* in November 2019 calls for improvements in the collection of data on access to healthcare and other branches of social protection according to various employment situations. This should give more clarity on the situation of workers with unstable, non-standard contracts.

The level of granularity of data provides more information on socio-economic than on clinical characteristics of patients

The survey analysis showed huge opportunities in using data on personal characteristics of patients, whether clinical or socio-economic ones. Measuring gaps in access to healthcare according to socio-economic characteristics is much more common than measuring gaps according to clinical characteristics. Age, gender and income are most often taken into account, while education level seems to be covered to a lesser extent. As far as clinical characteristics are concerned, the approaches vary a lot, for example in Finland the morbidity index is used to assess equality of access to healthcare at regional level, in Spain performance reporting includes screening for some cancers, access to neuropsychiatric and mental care, access to care for patients with diabetes. The table below provides more examples.

The 2019 *State of Health in the EU Companion Report* highlighted that both socio-economic and clinical characteristics coincide and trigger each other. However, examples of putting both into perspective are not very common. Sweden is one of the examples, as various performance reports may present for selected disease groups comparisons of access to healthcare in municipalities and regions, by education level, age or gender. Spain is another example, where the socio-economic gradient is taken into account together with some clinical characteristics. England follows a different logic, focusing on patient outcomes, which can be disaggregated by certain socio-economic characteristics, being a way to get some information on clinical profiles of those who use healthcare. Moreover, the GP patient survey in England provides information with breakdowns by long-term health condition and various socio-economic and personal characteristics. Estonia combined various characteristics of patients in the report on *The State of Health Care Integration:* people with depression, dementia, disability from vision or hearing loss, patients who have a self-management impairing condition and subpopulations according to income, rural vs urban, Russian minority, gender. Belgium combined various sources of data providing information about clinical and socio-economic characteristics of people in the recent HSPA Report '*How equitable is the Belgian health system'*. Hungary sees some potential in existing tools to do it.

Table 2.9. Use of data on personal characteristics

<table>
<tr><th colspan="2">Combination of clinical characteristics and socio-economic characteristics</th></tr>
<tr><td colspan="2">Belgium: the 2020 HSPA Report '<i>How equitable is the Belgian health system'</i> showed how various sources of data can be combined to get more granular information on needs for healthcare and patterns of using services. The analysis drew from data on health status (including reporting on having a particular health condition or chronical disease), income, education, employment status and healthcare utilization by individuals and households. The databases do not provide information on certain groups, like elderly people living in residential care institutions or prisoners. The methodology used a needs-adjusted norm value to estimate gaps in access to healthcare for people sharing certain characteristics.
Estonia: recent analysis of access to healthcare included in the World Bank Study <i>The State of Health Care Integration</i> combines data for some subpopulations: people with depression, dementia, disability from vision or hearing loss, patients who have a self-management impairing condition and subpopulations according to income, rural vs urban, Russian minority, gender. The objective of the study was to account for potential differences in service delivery capacity and to identify any disadvantaged communities and groups. The study provides also some granularity on access to diagnostic and preventive procedures for patients according to clinical characteristics with some focus on diabetes, hypertension, CVD.
Hungary: analysis of trends and differences in healthcare utilization would be possible according to specific health problems, clinical characteristics, age, gender, location, service providers (on the basis of medical documentation). Registration of socio-economic data, education characteristics and other characteristics, such as or family status is not possible on the data protection grounds.
Spain: monitoring through the Health Information System for: cancer screening, neuropsychiatric conditions, mental illnesses and diabetes and according to gender, income, age. This information is used for annual performance monitoring.
Sweden: annual open regional comparisons and other reports produced on demand are either generic or have thematic focus, including on certain diseases (e.g. cancer) or patient groups (i.e. elderly, children, adolescents). Various reports often provide for various diseases: comparisons of municipalities or regions, nationwide development over time, data by educational level, distribution by age, gender. Some reports have also provided the in-depth analysis with sociodemographic variables in relation to received healthcare.
UK: not linking people's background information to their healthcare data, but this can be measured via health outcomes of those who benefited from services. Concentrating on outcomes disaggregated by group characteristics e.g. deprivation level, gender, region, local authority, age, ethnicity. The makeup of the population who access GP services can also be monitored via the GP Patient survey, which collects disaggregated data relating to access to GP services. Breakdowns are available for gender, age, ethnicity, working status, parent/guardian, carer, deaf using sign language, smoker, sexuality, religion and long-term condition. The results may be compared to the Health Survey for England to analyse whether there are any differences in underlying health needs and those who access services. Some of this information feeds into the NHS outcomes framework - used to support the assessments, which seek to identify progress across the system on reducing health inequalities.</td></tr>
<tr><th>People with specific health problems/ diseases/ clinical characteristics</th><th>People with certain socio-economic characteristics</th></tr>
</table>

Finland: regional morbidity index used to assess equality in access. **Norway**: data on the use of primary and specialist care, somatic care – total and specific treatment / groups (mental care, substance abuse treatment) available. Furthermore, data on access time and care use for cancer patients, mental health services, time to acute care for patients with stroke and cardiovascular diseases, use of dental care for specific groups. **Lithuania:** used indicators of results of the primary health care entities to compare the quality of services people receive: health care for children and for adult population; child screening; children dental health care; the implementation of cancer screening programs (Cervical cancer prevention program; Mammography screening program for breast cancer; Early Diagnostic Program for Colon Cancer; Early Diagnosis Program for Prostate Cancer), hospitalization of patients with chronic diseases; number of consultations for people with chronic diseases. The regional morbidity metrics and access to mental health services are monitored as well.	**Austria:** the use of healthcare is monitored by income (at district level) using geographical information system tools. **Belgium:** runs through HSPA a transversal analysis on equity since 2012 and so far the focus was on vulnerable patients having access to a preferential reimbursement scheme in link with some variables, for example education levels. Furthermore, the Appropriate Care Unit carries out analyses of variation in care use according to social status, identifying unexplained variations in consumption patterns after standardization. **Estonia:** made an analysis in 2018 which showed how gaps in healthcare insurance are distributed in the society. It showed the biggest gaps among men, people in working age, the non-Estonian speaking populations, people with lower levels of education and interruption of health insurance for women on parental leaves to take care of children over 3 years old. **Finland**: the system captures data on the overall economic situation of municipalities, low income (on the basis of the national survey). Finland is also working on an indicator, which will provide more granular data on primary care geographical accessibility for socio-economic groups (linking multiple data sources, calculations at municipality level and per postal code area). **Latvia**: indicators on age, gender, income. **Norway**: in registers of data on service use variables on age, gender, residence available. Income and education variables only used in dedicated studies, surveys or projects. **Ireland:** data provided mainly on a general population basis, but in some areas covers certain groups: in acute hospital setting there are specific indicators for persons 75+ (for example % of all attendees aged 75 years and over at emergency departments who are discharged or admitted within 24 hours of registration); in the community healthcare area there are specific indicators for particular groups e.g. homeless services (e.g. number of people who received information on cardiovascular health or participated in related initiatives). **Lithuania:** out of pocket payments of the low-income group; age, access to low-threshold health care services for risk groups.

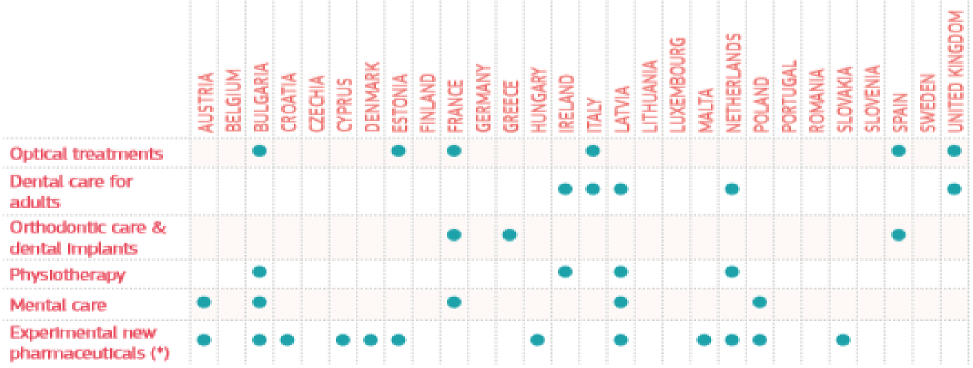
Source: own compilation

2.2.6 Completeness of healthcare coverage and other barriers in access to healthcare

Another objective of the survey was to understand to what extent HSPA methods are used to assess if the scope of coverage, both in terms of services included in the healthcare baskets and the degree of co-payments guarantees access to healthcare according to needs.

As far as the depth of healthcare coverage is concerned, the 2019 *State of Health Companion Report* referred to some services, which are frequently excluded from healthcare baskets.

Figure 2.9. Services frequently excluded from healthcare coverage



	AUSTRIA	BELGIUM	BULGARIA	CROATIA	CZECHIA	CYPRUS	DENMARK	ESTONIA	FINLAND	FRANCE	GERMANY	GREECE	HUNGARY	IRELAND	ITALY	LATVIA	LITHUANIA	LUXEMBOURG	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVAKIA	SLOVENIA	SPAIN	SWEDEN	UNITED KINGDOM
Optical treatments			●					●		●					●											●		●
Dental care for adults														●	●	●				●								●
Orthodontic care & dental implants										●		●														●		
Physiotherapy			●											●		●				●								
Mental care	●		●							●						●					●							
Experimental new pharmaceuticals (*)	●		●	●		●	●	●					●			●			●	●	●			●				

Source: Adapted from European Observatory on Health Systems and Policies (2019), Gaps in coverage and access in the European Union (based on the individual assessments of country correspondents). Note: (*) This category covers experimental or very expensive new pharmaceuticals that are not systematically covered or delayed in terms of their inclusion in the benefit package. It affects especially cancer patients in Austria, Czechia, Estonia, Hungary, Latvia and Slovakia, whereas it affects especially patients with rare diseases in Austria, Estonia, Croatia, Latvia, Poland, Malta and the Netherlands.

** Update on the state of play in Lithuania: optical treatments, dental care for adults, experimental new pharmaceuticals excluded from the coverage.*

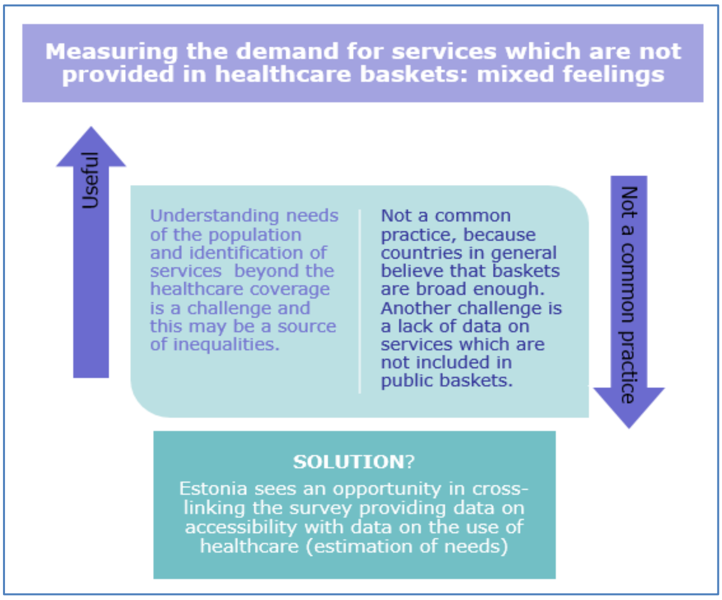
*** Clarification on coverage of mental health services in Austria: not excluded, but access may be affected by long waiting times.*

Source: 2019 State of Health in the EU Companion Report

Understanding needs for services beyond established healthcare coverage is a challenge

The diagram below summarises findings from the survey in relation to practices in capturing the depth of coverage. Measuring the demand for services, which are not provided in healthcare baskets is not a common practice. Understanding needs of the population and identification of needs for services beyond established healthcare coverage is a challenge and knowledge gaps in this area may drive inequalities. However, estimations can be made, for example Estonia cross-linked the survey monitoring accessibility with data on the use of healthcare within the dedicated studies on accessibility.

Figure 2.10. Measuring access to services excluded from healthcare coverage



Measuring the demand for services which are not provided in healthcare baskets: mixed feelings

Understanding needs of the population and identification of services beyond the healthcare coverage is a challenge and this may be a source of inequalities.

Not a common practice, because countries in general believe that baskets are broad enough. Another challenge is a lack of data on services which are not included in public baskets.

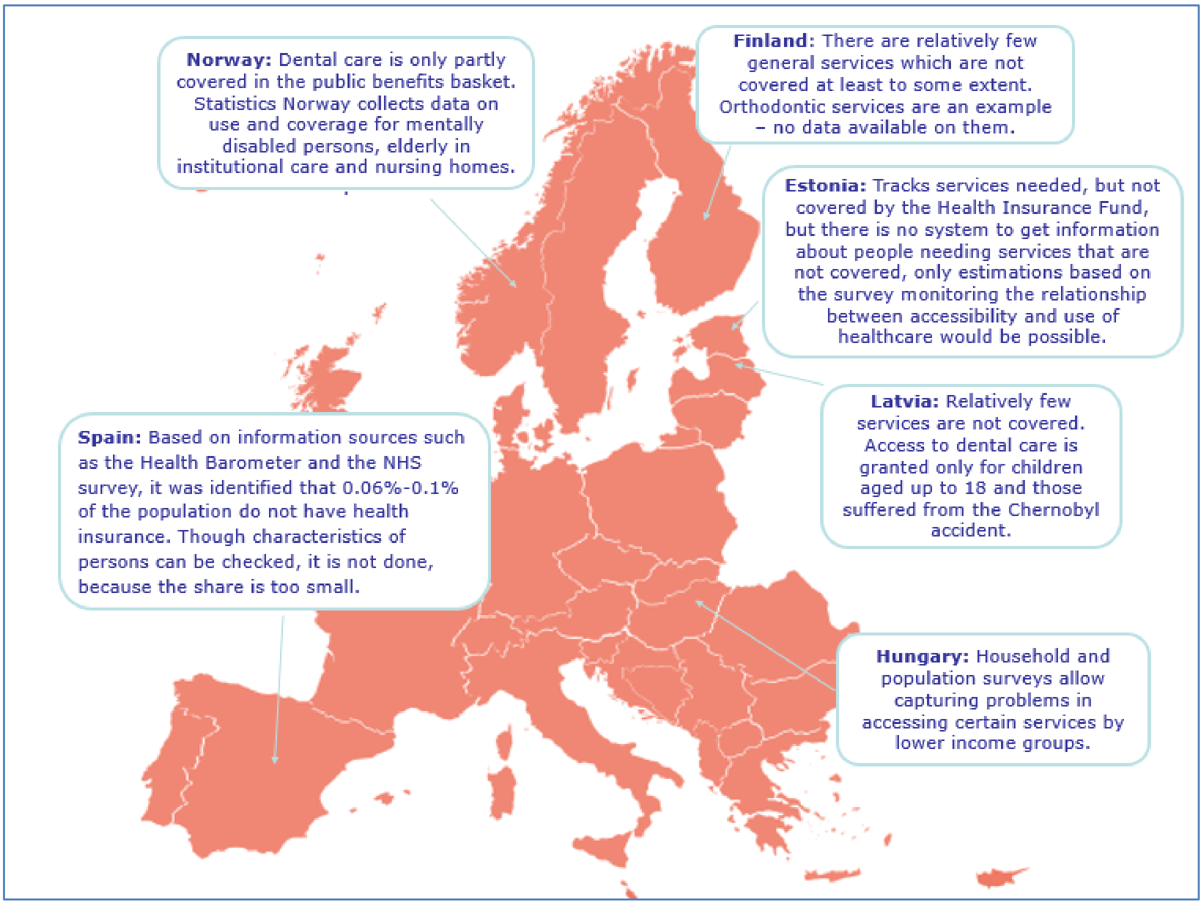
SOLUTION?

Estonia sees an opportunity in cross-linking the survey providing data on accessibility with data on the use of healthcare (estimation of needs)

Source: own compilation

In general, it seems that countries do not measure needs for services not included in public healthcare baskets, because they believe that baskets are broad enough and relatively few services are not covered, such as dental care. Some countries also believe that the share of the population, for whom coverage of certain services is not provided, is too insignificant or they simply do not have necessary data to understand the situation.

Figure 2.11. Capturing problems in accessing services beyond the healthcare baskets



Norway: Dental care is only partly covered in the public benefits basket. Statistics Norway collects data on use and coverage for mentally disabled persons, elderly in institutional care and nursing homes.

Finland: There are relatively few general services which are not covered at least to some extent. Orthodontic services are an example – no data available on them.

Estonia: Tracks services needed, but not covered by the Health Insurance Fund, but there is no system to get information about people needing services that are not covered, only estimations based on the survey monitoring the relationship between accessibility and use of healthcare would be possible.

Latvia: Relatively few services are not covered. Access to dental care is granted only for children aged up to 18 and those suffered from the Chernobyl accident.

Spain: Based on information sources such as the Health Barometer and the NHS survey, it was identified that 0.06%-0.1% of the population do not have health insurance. Though characteristics of persons can be checked, it is not done, because the share is too small.

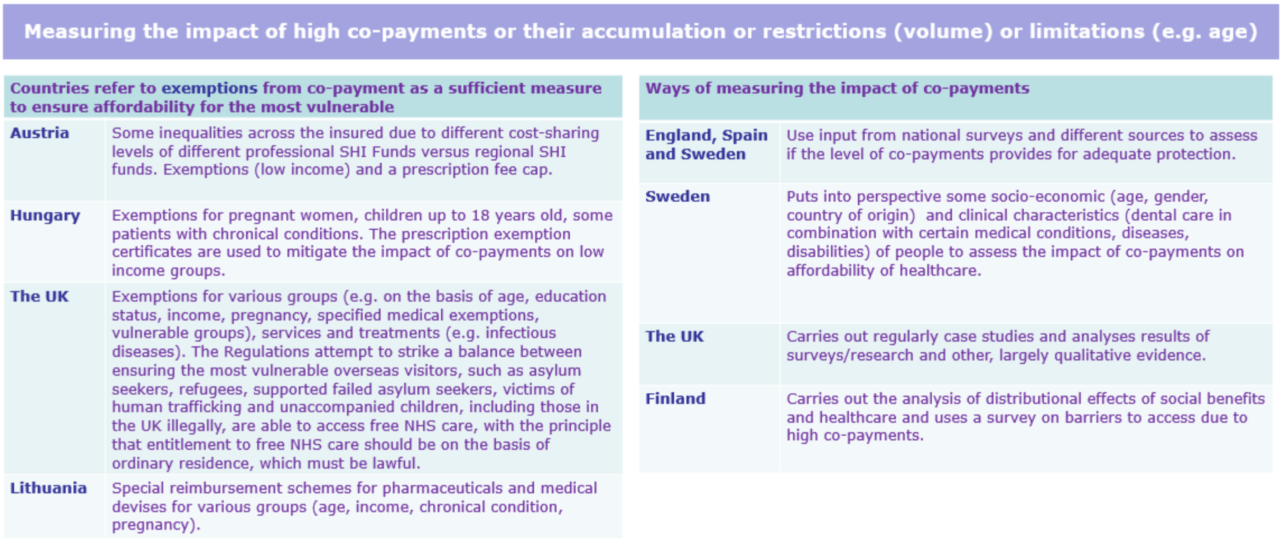
Hungary: Household and population surveys allow capturing problems in accessing certain services by lower income groups.

Source: own compilation

Monitoring of the impact of co-payments happens more regularly

In relation to high co-payments or high accumulation of co-payments or restrictions (volume) or limitations (e.g. age), their impact is monitored through various ways. England, Spain and Sweden use input from national surveys and other sources to assess if the level of co-payments provides for adequate financial protection. Moreover, Sweden puts into perspective some socio-economic and clinical characteristics of people to assess the impact of co-payments on affordability of healthcare. England carries out regularly case studies and analyses results of surveys, research and other, largely qualitative evidence. Finland carries out the analysis of distributional effects of social benefits and healthcare. Some countries drew attention to measures they have in place to mitigate their negative effect on low-income groups (e.g. prescription exemption certificate in Hungary). Finally, paying compulsory health contributions may be a challenge. Monitoring in Lithuania shows that irregular payment of contribution or even ‘evasion of contributions’ happens for people in certain forms of employment (working under business licences, self-employed and particular employment contracts).

Table 2.10. Measuring the impact of high co-payments



Measuring the impact of high co-payments or their accumulation or restrictions (volume) or limitations (e.g. age)

Countries refer to exemptions from co-payment as a sufficient measure to ensure affordability for the most vulnerable	
Austria	Some inequalities across the insured due to different cost-sharing levels of different professional SHI Funds versus regional SHI funds. Exemptions (low income) and a prescription fee cap.
Hungary	Exemptions for pregnant women, children up to 18 years old, some patients with chronical conditions. The prescription exemption certificates are used to mitigate the impact of co-payments on low income groups.
The UK	Exemptions for various groups (e.g. on the basis of age, education status, income, pregnancy, specified medical exemptions, vulnerable groups), services and treatments (e.g. infectious diseases). The Regulations attempt to strike a balance between ensuring the most vulnerable overseas visitors, such as asylum seekers, refugees, supported failed asylum seekers, victims of human trafficking and unaccompanied children, including those in the UK illegally, are able to access free NHS care, with the principle that entitlement to free NHS care should be on the basis of ordinary residence, which must be lawful.
Lithuania	Special reimbursement schemes for pharmaceuticals and medical devises for various groups (age, income, chronical condition, pregnancy).

Ways of measuring the impact of co-payments	
England, Spain and Sweden	Use input from national surveys and different sources to assess if the level of co-payments provides for adequate protection.
Sweden	Puts into perspective some socio-economic (age, gender, country of origin) and clinical characteristics (dental care in combination with certain medical conditions, diseases, disabilities) of people to assess the impact of co-payments on affordability of healthcare.
The UK	Carries out regularly case studies and analyses results of surveys/research and other, largely qualitative evidence.
Finland	Carries out the analysis of distributional effects of social benefits and healthcare and uses a survey on barriers to access due to high co-payments.

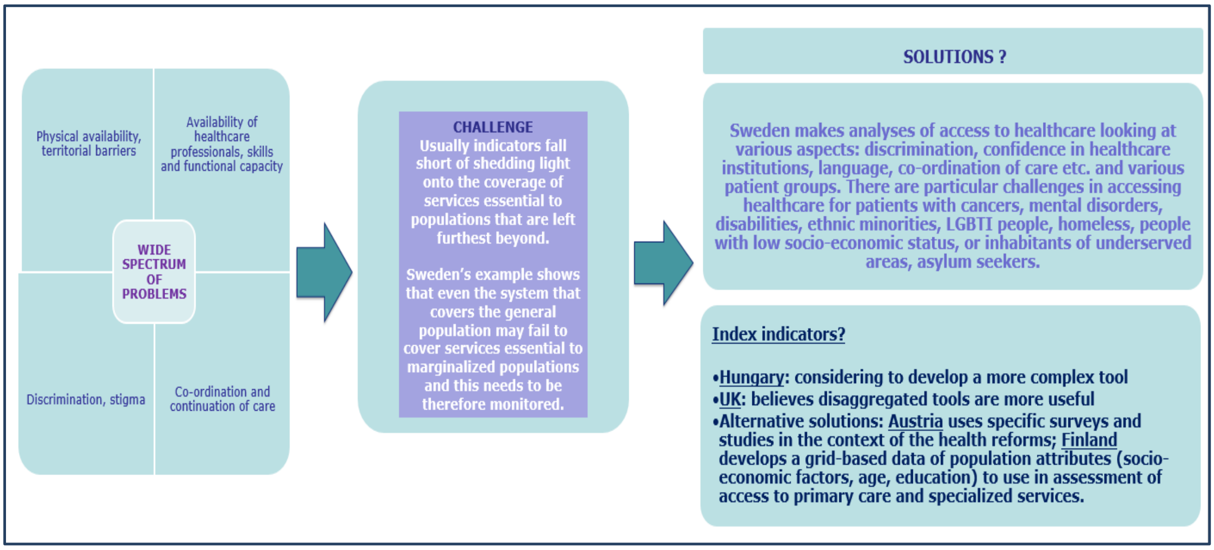
Source: own compilation

2.2.7 Measuring other barriers in access to healthcare

Problems experienced by vulnerable groups are not captured enough

The availability or affordability does not always translate into access and use of healthcare. The survey provides some insight into other barriers to healthcare services. Even if there are no financial barriers, even if facilities are physically available, barriers related to language, literacy, culture and various special needs can impair access. The analysis of the responses shows the wide spectrum of problems. Some of these problems were revealed already in responses to other questions of the survey, especially in relation to territorial barriers in access (e.g. Austria, Czech Republic, Finland) or availability of healthcare professionals (e.g. Hungary). Lack of measuring some barriers can especially obscure problems for more vulnerable groups.

Figure 2.12. Capturing other access barriers



Usually indicators fall short of shedding light onto the coverage of services essential to populations that are left furthest beyond.

Sweden's example shows that even the system that covers the general population may fail to cover services essential to marginalized populations and this needs to be therefore monitored.

Sweden makes analyses of access to healthcare looking at various aspects: discrimination, confidence in healthcare institutions, language, co-ordination of care etc. and various patient groups. There are particular challenges in accessing healthcare for patients with cancers, mental disorders, disabilities, ethnic minorities, LGBTI people, homeless, people with low socio-economic status, or inhabitants of underserved areas, asylum seekers.

- Hungary: considering to develop a more complex tool
- UK: believes disaggregated tools are more useful
- Alternative solutions: Austria uses specific surveys and studies in the context of the health reforms; Finland develops a grid-based data of population attributes (socio-economic factors, age, education) to use in assessment of access to primary care and specialized services.

Source: own compilation

The Swedish example confirms that even the system that covers the general population may fail to cover services essential to marginalized populations. Thus, it is crucial to monitor it. Sweden makes analyses of access to healthcare looking at various aspects: discrimination, confidence in healthcare institutions, language, co-ordination of care etc. and various patient groups. This analysis shows particular challenges in accessing healthcare for patients with cancers, mental disorders, disabilities, ethnic minorities, LGBTI people, homeless, people with low socio-economic status, or inhabitants of underserved areas, asylum seekers.

Table 2.11. Capturing various barriers to access healthcare in Sweden

Sweden Some patient groups do not achieve care according to the need they have, and some groups experience problems which can lead to lower confidence in the institutions.		
Regarding cancer patients, people with lower education levels get diagnosed in later stage, or do not get treatment in the same extent as people with higher education levels. Regional differences (mainly due to differences in 21 regions health systems and their complexity), civil status and country of birth can also make a difference in terms of access to services.	People with mental health issues may have problems in getting somatic health care services on an equal footing with patients with no psychiatric disorders, or experience timely access problems to consultations or treatments, or despite recent improvements, they may experience unprofessional attitude from health care professionals.	People with disability (physical or mental) may experience problems in getting access to co-ordinated health and social services from regions and municipalities. There is a need to ensure a better co-ordination at various levels, also through action plans of the regions and municipalities, as well as on unit level.
In general, there are gaps in knowledge about the minorities and their rights and the need for support and guidance in municipalities and regions. Some minorities in Sweden may experience problems in getting health care/social services and language barriers. The government recognised that needs of these groups should be better diagnosed and addressed, also through for example ensuring language competences of healthcare professionals (Finnish, Meänkieli and Sami).	LGBTI people may experience non-professional attitude from health care professionals. Further to the adoption of the 2014 strategy for equal rights and opportunities regardless of sexual orientation, gender identity or gender, many regions work to increase the knowledge and competence of healthcare professionals about sexual health, HIV and sexually transmitted diseases. Other goals are to prevent discrimination and increase the necessary competences of health care professionals.	Homeless people are a heterogenic group (can include people with mental illness or addiction, families with children, and people that make living through begging). More than one in five people in the 2017 survey reported that housing is their priority need. Some homeless people are excluded from coverage or avoid the health care system due to their beliefs.
Patient groups with low socioeconomic status (low education/income) and / or in certain geographical areas can experience information barriers, and thus have difficulties in navigating in the healthcare system. Cultural background can also affect decisions on seeking health care. There can also exist language barriers, although Swedish health care is obliged to offer interpreter services, which may however be insufficient in some cases.	The care needs of asylum seekers and new arrivals vary. Some need acute care while others are relatively healthy. Asylum seekers receive less care compared to the rest of the population, but the search pattern is different. They receive more primary care and less specialized care, with the exception of institutional child and adolescent psychiatric care. Newcomers look for dental care in acute problems and to a lesser extent for preventive purposes. They face barriers to access care, especially specialist care, and they may not always have access to care they are entitled to.	People living in rural areas can experience long distance to health care institutions. Even though access to digital services has increased, it is still people from the large cities with high socioeconomic status that use them. Furthermore, the opening hours is an issue with a variation between day-hours, evening-hours and night service.

Source: own compilation

Patients' experience provides important policy feedback

Capturing patients' experience of care provides valuable feedback for planning of healthcare services. Measuring patients' experience is not common. The UK provides an example of the survey, already mentioned in this chapter, which is carried out at GP practice level. The indicators used are presented in the box below.

Figure2.13. Capturing patients' experience

The UK: General Practice (GP) Patient Survey

The survey collects disaggregated data, available at the individual practice level, with breakdowns available for gender, age, ethnicity, working status, parent/guardian, working status, carer, deaf using sign language, smoker, sexuality, religion and long-term condition:

- Making an appointment:
    - When did you last try to make a general practice appointment, either for yourself or for someone else?
    - What was this appointment for?
    - How concerned were you at the time about your health, or the health of the person you were making this appointment for?
    - When would you have liked this appointment to be?
    - On this occasion, were you offered a choice of appointment?
    - Were you satisfied with the type of appointment (or appointments) you were offered?
    - How long after initially trying to book the appointment did the appointment take place?
    - Overall, how would you describe your experience of making an appointment?
- When your GP practice is closed
    - In the past 12 months, have you contacted an NHS service when you wanted to see a GP but your GP practice was closed?
    - How do you feel about how quickly you received care or advice on that occasion?
    - Overall, how would you describe your last experience of NHS services when you wanted to see a GP but your GP practice was closed?

Source: own compilation

CHAPTER III.

PATIENT VIGNETTES: A PROOF OF CONCEPT TO BETTER CAPTURE ACCESS CHALLENGES IN HEALTH CARE

Written by Wilm Quentin, Dimitra Panteli, Ewout van Ginneken (European Observatory on health Systems and Policies).

3.1 Introduction

Access to health care is a key performance dimension for health systems. Around 2% of the EU28 population experienced unmet need for health services in 2019 (Eurostat 2020). However, this average hides significant differences across and within countries, between income groups, levels of education and socio-economic categories. While some of the reasons for unmet need are more personal (no time, fear of doctor, etc.), the most common factors are health system-related. Although self-reported unmet need and other existing indicators, including catastrophic spending and impoverishing out-of-pocket spending, provide a general picture of the state of accessibility in EU Member States in relation to factors such as age, income or education, they do not necessarily reveal specific gaps in access or coverage that are linked to other characteristics (Palm et al. 2021).

Access gaps relate to different and cumulative dimensions: person status (gender, age, ethnicity, sexual orientation, religious and cultural preferences); health status (disease, disability, mental and physical functional capacity); social status (personal or household income, education, affiliation to a socio-professional group); and legal status (administrative status, nationality, residence, state of legal dependency). All these overlapping elements can play a role in how a person is covered and, when a need arises, is able to access the health and social care system given the specific hurdles he or she may encounter (Palm et al. 2021).

This chapter explores a new method to measure access to health care, which could help generating data that is more granular. The work builds on the findings of a 2019 survey "*Gaps in Coverage and Access in the European Union*", which identified a range of vulnerable groups facing access hurdles. The overall goal is to provide a 'proof of concept' to see whether a vignette approach could add to existing indicators, particularly regarding the differentiation between population coverage and realised access to care, and whether this could be a feasible approach for routine data collection.

To this end, this chapter first discusses the vignette method developed for this purpose (Section 2 and 3) before sharing the interpretation of results (Section 4). We conclude with lessons learned and discuss opportunities to scale up the vignette approach (Section 5).

3.2 What is the vignette methodology?

A vignette is a short description of a person or situation designed to simulate key features of a real-world scenario (e.g. Alexander and Becker, 1978; Atzmüller and Steiner, 2010; Gould, 1996; Schoenberg and Ravdal, 2000). Usually this vignette is then presented to relevant professionals to solicit their hypothetical response or behaviour. Since the 1950s, vignettes have been used to address a variety of questions across a wide range of scientific fields and professional disciplines, including anthropology, business, marketing, and economics; social and experimental psychology; sociology; developmental psychology; and education and school psychology (Evans et al., 2015). A clear limitation of vignettes is that they may not accurately reflect the real world both with regard to the textual descriptions and hypothetical behaviour (for example because of social desirability bias among respondents), which would affect the validity of results and conclusions (Converse et al., 2015; Evans et al., 2015).

In medical literature, vignettes are mostly used to study judgments and variations in decision-making processes, including clinical judgments made by health professionals (Bachmann et al., 2008, Converse et al., 2015). Over the years, a variety of new applications have been developed. These include using vignettes to self-assess health (Murray et al., 2003), to examine how age, sex and socioeconomic status affects chosen treatment (Laliberté et al., 2017), and to assess how insurance status affects treatment choices (Schuur et al., 2009). Another set of applications uses the vignette approach to compare price levels in hospitals (e.g. Koechlin et al., 2010; Quentin et al., 2011; Quentin et al., 2013). Even more recently, vignettes have been used to investigate the availability and the nature of certain types of care such as outpatient mental care (Mulder et al., 2014) and community dementia care (Bieber et al., 2017).

3.3 A new vignette approach to investigate access challenges

Below we detail the five-step approach taken to utilize case vignettes for understanding healthcare accessibility challenges. Our method combines several elements of the above-mentioned applications (e.g. influence of patient characteristics, availability of care), but it also integrates a care plan or patient pathway to increase comparability of results across countries. It is important to distinguish this approach from the manner in which vignettes have been previously used in health system performance assessment, namely to anchor survey responses and make them comparable across populations (see OECD, 2002; Murray et al., 2003; Robone, Rice & Smith, 2011).

Step 1: Selection of vignettes.

The survey "*Gaps in Coverage and Access in the European union*", which was carried out by the Observatory and its Health System and Policy Monitor (HSPM) network in 2019 provided insights in the determinants of coverage and access gaps in European countries (Palm et al. 2021). It found that on the whole the most significant barriers for accessing health care seem to be associated with social and income status, rather than specific medical conditions. However, it also identified several groups of services with access problems (aggregating problems due to population, service or cost coverage as well as availability), which are shown in Table 1. Furthermore, it showed that rural residents often face access barriers due to geographic distance, quality issues and travel costs. However, the most important hurdle for patient groups seeking care are long waiting times, which can be especially critical for certain areas, like mental health care, dental care and certain chronic illnesses.

Table 3.1: Results from the Gaps in Coverage and Access in the European Union survey, 2019

Coverage gaps	Country Examples
Optical treatments	BG, EE, ES, FR, IT, UK
Dental care for adults	IT, IE, LV, NL, NO, UK
Orthodontic care and dental implants	FR, EL, ES
Physiotherapy	BG, IE, LV, NL
Mental health care	BG, FR, LV
Mental health care for children	AT, PL
Reproductive health services	DK, NO, PL
Sterility treatment	HR, HU
Chronic patients	LV, BG, CZ, EL, HU, LV, PL, IE, EE
Services for transgender patients	Hormonal products (e.g. FR); gender reassignment surgery (e.g. BG, IT, LV)
Rare diseases	AT, EE, HR, LV, PL, MT, NL
Experimental or very expensive new pharmaceuticals	BG, DK, EE
Cancer patients	AT, CZ, EE, HU, LV, SK
Terminally ill patients	AT, EL, ES, HU, LV, MT

Source: Palm et al. 2021

From the results of the survey and other literature as well as consultation with the HSPA Group, four areas of health care provision were selected for drafting vignettes, i.e. mental health, oral health, chronic care with acute events (stroke) and palliative care. The main criteria were (1) relevance (is this a reported access challenge), (2) expected feasibility (is there enough information available) and (3) existence of European or international clinical practice guidelines, standards and recommendations. The latter is needed to write up a care plan or patient pathway that is as much as possible evidence based (see next step).

Step 2: Drafting of vignettes and questionnaire

The vignette

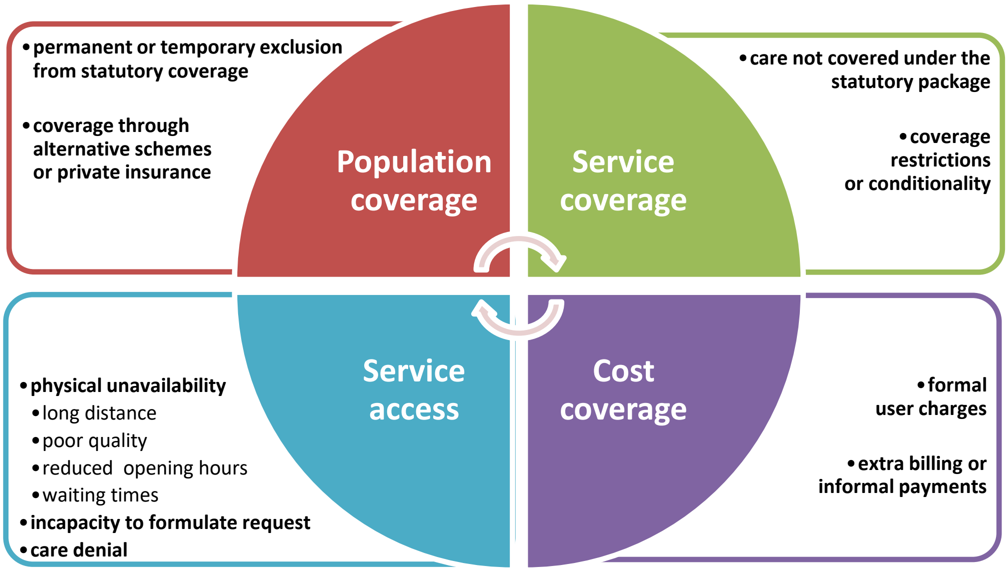
A vignette case generally specifies a hypothetical patient's age, gender, medical complaint, and health history. The vignette usually consist of (a) *experimental* aspects, which are systematically manipulated across vignettes to investigate their effect on the dependent variables; (b) *controlled* aspects, which are kept consistent across vignettes in order to eliminate irrelevant variance; and (c) in some cases, *contextual* aspects, to enhance reality of the vignette (Evans et al., 2015). The planned focus of this approach is not on differences in treatment, but rather gaps in access during an episode of care that can be compared across countries. Therefore – and this where the approach followed in the pilot differs from previous vignette approaches – the vignettes also include a delineation of the recommended care plan or patient pathway based on European or international clinical practice guidelines and standards (while allowing for expected variation due to different setups of health service delivery across countries). In practice this means that for every vignette a list of services was compiled that could then be used to benchmark and compare access across countries. For more information on the drafting of the vignettes, please refer to section 4.

The questionnaire

The questionnaire was broadly based on the framework developed for the Gaps in Coverage and Access survey (Palm et al 2021; European Commission 2014). In short, this framework explores the three traditional dimensions of coverage: i) population coverage, ii) service coverage (which benefits are covered) and iii) cost coverage (what proportion of costs is covered) as well as a fourth dimension, labelled service access (see Figure 1). How the coverage dimensions are designed determines public coverage of an individual's health care costs. However, other factors can hamper service access, which relate more to the *physical availability* of care, a *person's ability to obtain necessary care* or the *attitude of the provider.*

This particular questionnaire does not address population coverage, as we look at the level of provided services. Any gaps in statutory health coverage would be picked up under the service coverage dimension. Under service coverage, some services can be excluded from the statutory package, while others may be subject to restrictions or conditionality. Under cost coverage, both user charges, extra billings and informal payments contribute to gaps. In terms of service access, gaps could be due to i) lack of *physical availability* of services, due to long distances to the provider, lack of sufficient statutory/contracted providers, poor quality of services, limited opening hours, waiting times and waiting lists; ii) lack of *person's ability to obtain necessary care,* due to a person's incapacity to formulate care request, obtain the care or to apply for coverage (and fulfil the necessary requirements) due to their condition or situation (e.g. people with cognitive impairment, mentally ill, homeless), and ability to navigate the system (for example when referred from one provider to another one); and iii) *attitude of the provider*, for example due to discrimination (on age, gender, race, religious beliefs, sexual orientation, etc.) leading to care denial or inability to accommodate care to the patient's preferences. (Palm et al. 2011).

Figure 3.1: A framework to understand Coverage and Access

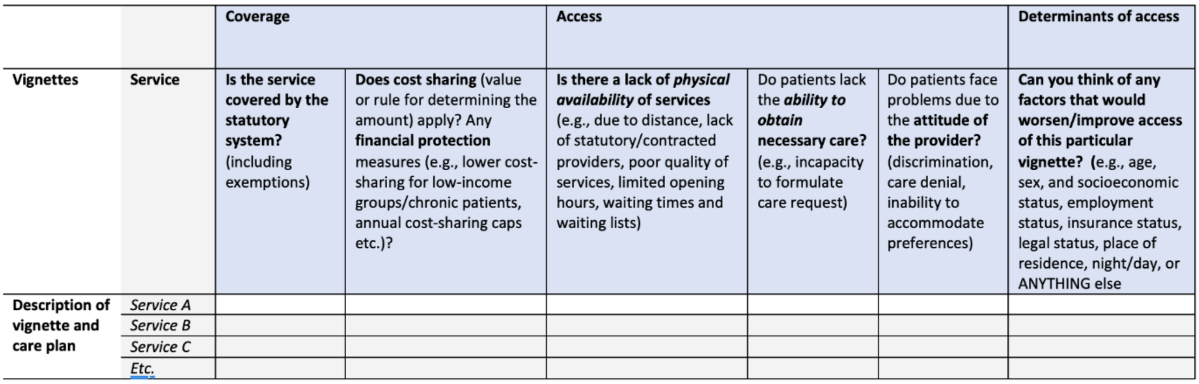


Source: Authors' own elaboration based on European Commission (2014).

In addition, we drafted a list of patient characteristics (e.g. age, sex, and socioeconomic status, insurance status, legal status, place of residence) as well as other factors (night vs. day treatment protocols) that could determine access challenges. Respondents were also asked to provide any other determinants they thought could affect access for the vignette. This was done to increase effectiveness of the survey in detecting gaps and being less vulnerable to the specificities of the respective vignette. A highly specific vignette could lead to greater comparability, but if the 'wrong' variables are chosen, it may not result in useful findings and insights. Effectively this created multiple variations of the developed vignettes, mimicking a factorial survey design, see e.g. Ludwick et al., 2004; Taylor, 2006; Wallander, 2009; Wallander, 2012.

We chose a simple tabular shape for our survey consisting of the vignette broken down in multiple services along the y-axis and the coverage and access dimensions as well the determinants of access on the x-axis (see Table 2).

Table 3.2: Vignette and care plan



		Coverage		**Access**			**Determinants of access**
Vignettes	**Service**	**Is the service covered by the statutory system?** (including exemptions)	**Does cost sharing** (value or rule for determining the amount) apply? Any **financial protection** measures (e.g., lower cost-sharing for low-income groups/chronic patients, annual cost-sharing caps etc.)?	**Is there a lack of *physical availability* of services** (e.g., due to distance, lack of statutory/contracted providers, poor quality of services, limited opening hours, waiting times and waiting lists)	Do patients lack the ***ability to obtain*** **necessary care?** (e.g., incapacity to formulate care request)	Do patients face problems due to the **attitude of the provider?** (discrimination, care denial, inability to accommodate preferences)	**Can you think of any factors that would worsen/improve access of this particular vignette?** (e.g., age, sex, and socioeconomic status, employment status, insurance status, legal status, place of residence, night/day, or ANYTHING else
Description of vignette and care plan	*Service A*						
	Service B						
	Service C						
	Etc.						

Source: own compilation

It should be noted that although this survey detects access to and availability of state-of-the-art treatment and services, it may not resemble how the patient in the vignette would actually be treated in the "real world" (a clear limitation of the vignette methodology in general). Therefore, we also invited the expert to comment if there are differences between the care plan in the vignette and the de facto treatment in a country context. This would give more qualitative information on treatment individuals receive, and a broader picture on quality as a driver of access problems and unmet need.

Step 3: validation of vignettes

Physicians from the Charité – Universitätsmedizin Berlin, one of Europe's largest university hospitals, have validated the vignettes. They assessed whether (1) this was a plausible vignette and care plan/ pathway and (2) there are other international guidelines or recommendations to take into account. Their responses led to extensive revisions of the vignettes. It was not possible in the end to validate the palliative care vignette even after approaching multiple physicians (also outside the Charité) and receiving an initial positive reply. This likely relates to their heavy workload during the Covid-19 pandemic.

Step 4: Application of vignette in country context

The vignettes (including recommended care plan, see above) were shared with experts in 12 European countries, including Bulgaria, Estonia, Germany, France, Ireland, Lithuania, the Netherlands, Poland, Portugal, Slovakia, Sweden and the UK. This selection was made to guarantee a good variety of health systems (i.e., Bismarck vs Beveridge, multi- vs single payer, centralised vs decentralized) as well as good geographical coverage. The UK was included as a non-EU country because of its importance in international guidelines work. In the end, not all respondents managed to fill out all the vignettes for time reasons or lacking expertise (see Table 3).

Table 3.3: Vignette Surveys received

Country	Stroke	Depression	Dental
Bulgaria	x	x	x
Germany	x	x	x
Estonia	x		x
France	x	x	x
Ireland			x
Lithuania	x	x	x
Netherlands	x	x	x
Poland	x	x	x
Portugal	x	x	x
Slovakia	x	x	x
Sweden			x
UK	x	x	
TOTAL	10	9	11

Source: own compilation

Experts were recruited from the European Observatory's Health Systems and Policy Monitor (HSPM) Network, which consists of experts with good general knowledge of their country's health system and an understanding of the coverage and access concepts used in the survey. For this proof-of-concept, only one country expert filled out the survey. The survey was sent out to the countries at the end of September and first results were collected by mid-October. Most of them had to consult with national medical experts to fill out the questionnaire. Due to the pandemic the deadline to respond was extended until 15 December.

Step 5. Analysis of country feedback

As a final step we analysed the various responses to the vignettes on the following aspects:

- Does the case vignette individual have access to care treatment according to internationally agreed care guidelines and how does this differ between countries?
- How do covered services, cost sharing, and availability differ between countries?
- How do the way these people are treated differ from the vignette treatment?
- Which personal characteristics and other determinants influence the above described access?

The results were translated into a traffic light system (green – yellow – orange - red) in order to visually compare results between countries. Different approaches were employed to analyse the feedback, for more information see the respective vignettes in Section 4.

3.4 Results

This section explains the choice for the vignettes (stroke, depression, dental care), describes their development, includes the analysis of results and explores their implications for future applications. Slightly different approaches to analyse the results were tested for three vignettes. The subsection on stroke provides an overview of access across ten included countries and also provides examples of detailed country results for two countries. The subsections on chronic depression and dental care provide only the overview of access across countries but it would be possible to generate similar detailed country results as shown for stroke. In the dental vignette, problems are not analysed by country but by service and access problem. These different approaches illustrate the advantages and disadvantages of different analyses. Obviously, a full analysis can use combinations of these options.

3.4.1 Access to stroke care in Europe: preliminary results of the vignette approach

Stroke is a major cause of death and disability in Europe (IHME 2020; GBD Stroke Collaborators 2019). In 2017, stroke was responsible for about 8% of total deaths in Western Europe and accounted for about 4% of total disability adjusted life years (DALYs) lost. The burden of stroke was even higher in Central and Eastern Europe, where it accounted for almost 15% of deaths and more than 8% of DALYs (IHME 2020). Stroke treatment and post-stroke care require substantial resources, with estimates suggesting that stroke-related costs account for 1.7% of health expenditures (Luengo-Fernandez et al. 2019).

There are two main types of stroke, which require different treatment strategies: ischemic stroke, accounting for about 85% of strokes, where the blood supply to the brain is blocked by blood clots; and haemorrhagic stroke, which is caused by intracerebral bleeding. For patients with acute ischemic stroke, rapid access to hospital care is essential to enable intravenous thrombolysis and thrombectomy in patients with large vessel occlusion (Turc et al. 2019). In addition, as most patients do not fully recover from stroke, rehabilitation is often recommended after discharge from hospital (ESO Guideline Committee 2008).

Development of the Vignette

The development of the stroke vignette benefited from relatively broad consensus concerning management and treatment of stroke patients in Europe. The European Stroke Organisation has published a set of guidelines on acute treatment of stroke, prevention and management of complications, secondary prevention, and rehabilitation and long-term consequences of stroke (ESO 2020). The stroke vignette reflects ESO recommendations of its general guideline on management of ischemic stroke (ESO Guideline Committee 2008 and subsequent updates by ESO), on pre-hospital management (Kobayashi et al. 2017), and on mechanical thrombectomy (Turc et al. 2019).

Table 4 presents the stroke vignette, which describes a typical case of ischemic stroke (70 year-old male with right-sided hemiparesis and aphasia). It specifies the time of symptom onset (2 hours ago) because time since onset of symptoms determines the further treatment approach. The described patient pathway (ambulance transfer to hospital, fast-track diagnostic stroke work-up, thrombolysis and mechanical thrombectomy, treatment on stroke unit, and inpatient rehabilitation) reflects recommendations for optimal care. The vignette describes the care pathway, and each service is specified in a separate line in order to enable assessment of whether patients received this service in the context of the national health systems of included countries.

Data collection and analysis

The vignette was shared with experts in 12 countries. They were asked to fill out the survey using the standard answering categories (see overall methods section above). In several countries, vignettes were completed by teams consisting of a health systems expert working together with neurological colleagues who provided insights and data on care patterns in the country. Answers varied in granularity of provided information. Some answers exhibited different interpretations of the original questions and different standards for what acceptable thresholds for good access to high quality care would be.

Table 3.4: Stroke vignette

Stroke Vignette	Service
A 70 year-old retired male calls emergency medical services due to right-sided hemiparesis and aphasia, onset 2 hours ago. An ambulance reaches the home of the patient and takes him to the closest hospital with a stroke unit. He is admitted to emergency care and receives a fast-track stroke work-up including CT-based brain and intracranial arterial imaging. Acute ischemic stroke due to middle cerebral artery occlusion is diagnosed and the patient is treated with intravenous thrombolysis and mechanical thrombectomy. The patient receives further treatment on a stroke unit for 7 days. He is transferred to an inpatient rehabilitation facility (including at least physiotherapy and occupational therapy, 45 min each, 5 days a week) where he requires treatment for 4 weeks. He is then discharged home with additional ambulatory physiotherapy.	Ambulance transfer to hospital
	Imaging
	Thrombolysis
	Thrombectomy
	Stroke unit treatment
	Rehabilitation (physio- and occupational therapy, 45 min each, 5 days a week), at least 3 weeks

Source: authors own compilation

Completed surveys were analysed to identify gaps in coverage and access. In some cases, the analyst had to interpret the received information, which needed to be validated by country experts. Furthermore, information received from country experts was supplemented by information from an earlier study of the European Stroke Organisation (ESO), the European Society of Minimally Invasive Neurological Therapy (ESMINT), the European Academy of Neurology (EAN) and the Stroke Alliance for Europe (SAFE) on access to delivery of stroke care in 44 European countries (Aguiar de Sousa et al. 2019).

Survey results were colour coded:

- Green indicates that the service is covered with standard user-charges, and there is no lack of availability
- Yellow indicates that the service is covered but there are some problems with availability of service and/or important user-charges.
- Orange indicates substantial problems with availability of services and/or services are often paid out-of-pocket

- Red indicates services that are not covered or usually unavailable and/or almost always paid out-of-pocket

Concerning intravenous thrombolysis (IVT), endovascular thrombectomy (EVT), and stroke unit treatment, the colour coding was used to reflect different proportions of patients receiving the service. Different cut-off points were used for each service with green reflecting high coverage rates and red and/or orange reflecting rather low coverage rates.

Results

Overview

Completed surveys were received from ten countries, including Bulgaria, Estonia, France, Germany, Lithuania, the Netherlands, Poland, Portugal, Slovakia, and the UK (England). Table 5 provides a high-level overview of results, summarizing the five coverage and access dimensions assessed in the survey into one response column per country. It is clear that patients in some countries face greater access barriers than in others. For example, stroke patients in the Netherlands have relatively good access to ambulance transfer, imaging, thrombolysis, thrombectomy, and stroke unit treatment; and only some patients face modest barriers related to user charges for inpatient rehabilitation services. By contrast, stroke patients in Bulgaria, face important access barriers with only a few hospitals providing thrombolysis and even fewer hospitals performing thrombectomies, and inpatient rehabilitation is not covered by the National Health Fund.

When looking at access to individual services across countries, the table shows that ambulance transfer to hospitals and initial diagnostic work-up are generally covered and available in the included countries. Only Bulgaria and Lithuania report relevant regional disparities or longer ambulance travel times in rural areas. Poland, and the UK report problems with 24hr and/or weekend availability for diagnostic imaging, and in France discussions are ongoing because recommended evaluation of stroke patients by MRI is not readily available in all hospitals, sometimes delaying treatment decisions.

Access to intravenous thrombolysis (IVT) exhibits considerable variation across countries. While all countries report the service to be covered, it is almost unavailable in Bulgaria, where only about 1% of patients receive IVT. The proportion of patients receiving IVT is comparatively low also in France, Lithuania, Poland, Portugal, ranging from 5.6% to 9.2%. It is higher in England (11.7%) and Germany (13-18%), and highest in Estonia (18%), the Netherlands (20.6%), and Slovakia (22.4%), although numbers in Slovakia refer to the proportion of patients treated in stroke centres.

Similarly, endovascular thrombectomy (EVT) is covered in all countries but EVT rates differ considerably, reflecting problems with service availability, in particular in rural areas. For example, in Bulgaria EVT is available only in hospitals in Sofia and Varna, and the proportion of stroke patients receiving EVT was only 0.1% in 2016 (coded as orange). By contrast, 37 hospitals perform EVT in France and the proportion of patients receiving EVT was 5.3% in 2016 (coded as green). However, even the higher rate in France might still reflect access problems in certain areas as the number of stroke patients that could potentially benefit from EVT is likely to be even higher.

Variation in the proportion of patients receiving high quality care on stroke units is similarly large. In Bulgaria and Lithuania, there are only relatively a few hospitals with stroke units. In Slovakia, while the number of stroke units is high, the care provided by these units does not conform with international standards for stroke unit care as early rehabilitation provided by these units is insufficient. By contrast, in Estonia and the UK (England), more than 80% of stroke patients are treated on stroke units; and in the Netherlands the number of stroke units per 1000 strokes is comparatively high.

Finally, important access problems exist for inpatient rehabilitation care after discharge from hospitals. While rehabilitation is formally covered, service availability is severely limited in most Eastern European countries (Bulgaria, Estonia, Poland, and Slovakia). Also Portugal and the UK (England) report insufficient capacity. For Germany, waiting lists were reported as obstacles for rehabilitation, and in the Netherlands, user-charges may apply for non-contracted providers. France and Lithuania were the only two countries that did not report access problems for inpatient rehabilitation.

Table 3.5: Overview of access to stroke care in ten selected countries

Services	Bulgaria[a]	Germany	Estonia	France[a]	Lithuania[a]	Netherlands[a]	Poland	Portugal[a]	Slovakia	UK (England)[a]
Ambulance transfer to hospital	Regional disparities in ambulance response times.	Ambulance response times vary between 8 and 17 mins.	🟩	90% of cases with ambulance response time ≤15 mins.	Possibly, long time for transport from rural areas.	Emergency response time <45 mins from call to arrival at hospital for >99%.	🟩	EMS have fast-track protocol for stroke.	🟩	90% of cases with ambulance response time <15mins.
Imaging	🟩	🟩	🟩	guidelines recommend MRI evaluation, which is not universally available.	🟩	🟩	Lack of 24h availability in some hospitals, leading to delay in diagnosis.	🟩	🟩	Weekend availability sometimes lower.
Thrombolysis (IVT)	Covered but not available in all hospitals, 1% of patients receive IVT.	Regional differences: 13.3-17.9% receive IVT.	18% received IVT in 2018, no evidence of regional disp.	9.2% of patients receive IVT.	5.6% of patients received IVT in 2016.	20.6% of patients receive IVT.	6.5% of patients receive IVT (De Sousa et al. 2019), some stroke units do not perform thrombolysis.	8.3% of patients receive IVT. Small hospitals do not have 24hr stroke teams.	43 stroke centres provide IVT; 22.4% of patients in these centres receive IVT	11.7% received IVT.
Thrombectomy (EVT)	Available only in Sofia and Varna, 0.1% of patients receive EVT.	Regional differences: 4.4-7.4% receive EVT.	2% received EVT.	5.3% receive EVT; 37 hospitals are performing EVT.	2.2% receive EVT in 2016.	4.6% of patients receive EVT.	18 facilities perform EVT, 1.5% of patients received EVT in 2019 [own calculations], referral rates from local stroke units vary by region.	EVT only available in 4 city areas, 4.6% of patients receive EVT.	10 facilities in country, regional disparities. 9.9% of patients receive EVT in these facilities	0.5% receive EVT. Weekend medical and surgical cover lower.
Stroke unit treatment	Most hospitals treat stroke patients but not on stroke units. 1.0 stroke units/1000 strokes.	60-80% of patients treated on SU (depending on region); 1.7 stroke units/1000 strokes.	82% treated on stroke unit in 2018; 1.1 stroke units/1000 strokes.	43% of patients were treated on stroke units in 2014; there are 1.6 stroke units/1000 strokes.	Density of stroke units is rather low (0.6/1000 strokes).	Density of stroke units is high in the Netherlands (3.6/1000 strokes).	71% treated on stroke unit; 1.7 stroke units/1000 strokes.	1.4 stroke units/1000 strokes. Small hospitals do not have 24hr stroke teams.	Early rehab at stroke units is insufficient; 2.2 stroke units/1000 strokes.[a]	84% of patients spend >90% of stay on stroke unit; <60% arrive on stroke unit within 4 hours of arrival at hospital. 2.3 stroke units/1000 strokes. Possible distance issues in rural areas.
Inpatient rehabilitation	Only early rehabilitation (up to 10 days) covered, availability of services limited.	Some waiting lists for neuro rehab.	Covered but access is difficult.	Problems reported only for ambulatory rehabilitation.	No problems reported.	Cost-sharing may apply for non-contracted rehabilitation facilities and for 20 ambulatory sessions.	Limited reimbursement from NHIF, insufficient public beds, available mostly in private facilities.	Often time lag before rehab. Patients have to pay user-charges for private rehab facilities covered by NHS.	Only one public facility; most rehabilitation is paid out-of-pocket.	Availability of rehabilitation beds very low compared to other countries. Most patients do not receive 4 weeks rehab.

[a] Reported proportions for IVT, EVT, and stroke units/1000 are based on Aguiar de Sousa et al. 2019, data are for 2016.

🟩 Service covered, no lack of availability, standard user-charges.	🟨 Service covered but some problems with availability of service and/or important user-charges.	🟧 Substantial problems with availability of services or services are often paid out-of-pocket.	🟥 Service not covered or usually unavailable and/or almost always paid out-of-pocket.

Examples of detailed country results

Tables 6 and 7 provide examples of detailed country results summarizing responses received on access to stroke care in Germany and Bulgaria, using the same colour coding approach as shown above. The detailed country results enable a better understanding of the cause of access barriers in a specific country. In addition, responses of country experts highlight that there is potential for improvement also in countries that provide comparatively good access to care.

For example, Table 6 shows that access to IVT differs across regions in Germany. In addition, IVT rates are generally lower at regional stroke units (SUs), which are mostly based in rural areas, than at supra-regional stroke units, which are mostly based in urban areas. This is also related to a lower availability of 24/7 MRI imaging at regional stroke units, which would allow imputing the time since symptom onset, when this is unknown. The table shows that similar regional differences exist also for EVT. However, as EVT rates are comparatively high in Germany (by international standards), thrombectomy is colour coded in green.

Table 3.6: Access to stroke care in Germany

	Coverage		**Access**			**Determinants of access**
Service	**Coverage**	**Cost-sharing**	**physical availability**	**Organizational barriers**	**acceptability**	**other factors**
Ambulance transfer to hospital	Yes.	Yes.	Ambulance response times vary between 8 and 17 mins.	No.	No.	Language barriers, place of residence.
Imaging	Yes.	No.	All hospitals with Stroke Unit have a 24/7 CT with CT-Angio.	No.	No.	No.
Thrombolysis (IVT)	Yes.	No.	Regional differences: 13.3% (Saxonia) to 17.9% (NRW) receive IVT; regional SUs have lower rates than supra-regional SUs.	No.	No.	24/7 MRI imaging availability may impact IVT rates; some hesitation to use IVT for >80 year olds
Thrombectomy (EVT)	Yes.	No.	Regional differences: 4.4% (Saxonia) to 7.4% (NRW) receive EVT; regional SUs have lower 24/7 neurointerventional service availability	No.	No.	Night-time is associated with lower availability in rural areas/regional SUs
Stroke unit (SU) treatment	Yes.	Yes: Co-payment (10 Euro/d, max. 28d/year)	Regional differences: 62.7% (Saxonia) to 79.7% (Schleswig-Holstein) treated on SU; also urban-rural disparities.	No.	No.	No.
Inpatient rehabilitation	Yes.	Yes: Co-payment (10 Euro/d, max. 28d/year or 42d/year if the pension fund has to pay the cost for rehabilitation)	Yes. There might be waiting lists especially for neurological inpatient rehabilitation spots. Some health care insurers have contracted providers and do not allow transfer to other rehabilitation facilities (e.g. AOK) which might further increases waiting times.	No.	Yes.	age, socioeconomic status, insurance and employment status may influence type of rehabilitation available (geriatric vs. neurological, and the generosity). Migrants without legal status might have to pay for rehabilitation.

Table 7 shows that access barriers to IVT, EVT, and stroke units in Bulgaria are related to problems of physical availability. IVT is available only in a limited number of major hospitals; EVT is concentrated only in Sofia and Varna; and the number of stroke units per 1000 strokes is also comparatively low. By contrast, the main problem for inpatient rehabilitation is that NHIF pays only for early rehabilitation up to 10 days after acute episodes. Other inpatient rehabilitation care and all outpatient rehabilitation services have to be paid out-of-pocket.

Table 3.7: Access to stroke care in Bulgaria

	Coverage		Access			Determinants of access
Service	**Coverage**	**Cost-sharing**	**physical availability[a]**	**Organizational barriers**	**acceptability**	**other factors**
Ambulance transfer to hospital	Yes - emergency care is covered by the state	No	Regional disparities in ambulance response times	No.	No	Place of residence
Imaging	Yes - covered by NHIF	Insured people pay user fees for each day of hospitalization up to 10 days per year. Patients who are not insured and not entitled to social support can either restore their health insurance rigths (paying contributions due) or have to pay out-of-pocket at prices set by the hospital.	Every hospital can do this.			
Thrombolysis	Yes -covered by NHIF		1% of patients receive IVT. Available only in some major hospitals. Ambulances transport patients to IVT centres.			
Thrombectomy	Yes -covered by NHIF		Available only in Sofia and Varna, 0.1% of patients receive EVT			
Stroke unit treatment	Yes - covered by NHIF		Most hospitals do not have stroke units. 1.0 stroke units/1000 strokes			
Inpatient rehabilitation	NO. NHIF covers only early rehabilitation up to 10 days after acute episode.	User fees for covered services. Out-of-pocket payment for each rehabilitation service at home, i.e. no protection.				Socioeconomic status and place of residence

Reported proportions for IVT, EVT, and stroke units/1000 are based on Aguiar de Sousa et al. 2019, data are for 2016

Because of space limits, Tables 6 and 7 provide only two country examples. However, looking across countries, access problems for IVT, EVT and stroke unit treatment are always related to physical availability issues as these services are generally covered with no or standard user charges. The only country, where a part of the patient pathway is excluded from coverage is Bulgaria, where rehabilitation is not covered by the statutory system.

However, access to rehabilitation is problematic in most countries (see Table 5, and these problems are related mostly to limited availability of publicly financed rehabilitation care. For example, in Poland, public reimbursement rates for rehabilitation are very low and, consequently, there is insufficient public capacity. As a result, patients usually have to pay out-of-pocket for private rehabilitation providers. Similarly, in Slovakia, although rehabilitation is officially covered, there is only one public rehabilitation centre and most patients have to pay out-of-pocket for rehabilitation. In Portugal, the National Health Service has contracted private providers to overcome capacity constraints, but patients have to pay user charges, while services directly provided by the NHS are free of charge. In England, because of low capacity of rehabilitation providers, most patients do not receive four weeks of rehabilitation as suggested in our vignette.

Discussion and Conclusion

This pilot study of access to stroke care in Europe using a vignette approach has demonstrated the potential of the approach but also allows identification of some limitations. The survey has shown that stroke patients in all countries face at least some access problems on their pathway through the health system. The most important access problems are related to rehabilitation care: inpatient rehabilitation after stroke is not covered in Bulgaria; and rehabilitation capacity of statutory providers is limited in Estonia, Poland, and Slovakia that patients either do not receive services or pay out-of-pocket for care provided by private providers. All other services are always covered but insufficient availability or organisational problems mean that at least some patients do not receive recommended care. For example, thrombolysis rates are comparatively low in Bulgaria, France, Lithuania, Poland, and Portugal. Thrombectomy rates are particularly low in Bulgaria and the UK (England). Stroke unit treatment is often unavailable in Bulgaria and Lithuania; and in Slovakia, while patients are formally treated on “stroke units”, they receive only a limited spectrum of early rehabilitation care, which should be an essential element of stroke unit treatment.

Detailed country results enable a more in-depth analysis of access problems and provide more background information on the national context. Received responses concerning coverage of stroke care were relatively easy to interpret as most countries did not report coverage problems with regard to stroke care. Responses concerning availability of care differed considerably concerning the level of granularity and detail of provided information. For example, some experts reported mostly qualitative information stating that a service was almost always available (or unavailable), while other experts provided detailed statistics on the proportion of stroke patients receiving each service. This made it difficult to compare availability of services across countries. Yet, when summarising results, we could supplement the more qualitative information received from some experts with data of the ESO-ESMINT-EAN-SAFE survey (Aguiar de Sousa et al. 2019), which reported proportions of patients receiving thrombolysis and thrombectomy, and information on the number of stroke units per 1000 stroke patients calculated using a standardised approach. However, these numbers sometimes differed from numbers reported by our national experts, who probably had access to more recent data than the 2016 data reported by Aguiar de Sousa et al. (2019). Given the rapid transformation of stroke care services in many countries (Ramsay et al. 2015; Lahr et al. 2012; Douw et al. 2015), comparing different time points across countries can introduce a bias when assessing access to care.

Concerning organisational barriers, acceptability and other factors, responses received from national experts showed even more variation. For example, national experts for the Netherlands, Portugal and Germany reported as organisation barriers that people with low health literacy and/or language barriers may have problems when calling for an ambulance, or they might be unable to recognize the symptoms of stroke. However, in fact, these are likely to be universal problems in any country, and it is impossible to assume that stroke patients in other countries would not face this barrier. The German expert reported that patients with severe aphasia who live alone would not be able to formulate a care request – another problem which is, of course, universally applicable. Similarly, an acceptability problem reported by the English expert was that some population groups have preferences for single-sex stroke units, which are not available in England – but they are probably also unavailable in most other countries. As a result, responses on organisational barriers and acceptability could not be interpreted as indicating greater access problems in one country than in another country.

An important implication of this pilot study is that future cross-country surveys of access to stroke care should include specific questions to collect quantitative data related to proportions of patients receiving thrombolysis or thrombectomy in a country, as well as data on the number of patients being treated in stroke units and receiving inpatient rehabilitation after discharge from acute inpatient care. In fact, a future project assessing access to stroke care in Europe should probably integrate the quantitative questions of the ESO-ESMINT-EAN-SAFE survey, expand these to include questions on imaging, and rehabilitation care, and combine these with the more qualitative questions that were asked in the survey. Institutionally, it might be possible to ask ESO-ESMINT-EAN-SAFE to take on the task setting up a monitoring process for systematically comparing access to stroke care in Europe on a routine basis.

3.4.2 Access to care for patients with chronic depression in Europe: preliminary results of the vignette approach

Depression is the mental health condition causing the largest burden of disease in Europe (IHME 2020, Wittchen et al. 2011). In 2017, depression was responsible for about 2.5% of total disability adjusted life years (DALYs) lost in Western Europe and accounted for about 5% of total years of life lost due to disability (YLD).

About 20 to 30% of major depressive disorders (the medical term for depression) have a chronic course (Jobst et al. 2016). Chronic depression – also called persistent depressive disorder (PDD) according to the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-V) – is defined as a depressive disorder with persistent or intermittent symptoms of more than 2 years (Vandeleur et al. 2017).

Development of the Vignette

The development of the chronic depression vignette was complicated by the absence of detailed European guidance concerning management and treatment of patients with chronic depression. Therefore, the vignette incorporates recommendations of the European Psychiatric Association (Jobst et al. 2016) as well as recommendations of national and international guidelines. These include guidelines of the National Institute for Health and Care Excellence (NICE 2009), World Federation of Societies of Biological Psychiatry (WFSBP 2013 and 2015), the American Psychiatric Association (APA 2019), The Canadian Network for Mood and Anxiety Treatments (CANMAT 2016) and of the German Association of Psychiatry and Psychotherapy (DGPPN 2015) and subsequent updates (last 2017).

Table 8 presents the vignette, which describes the care pathway of a severe case of chronic depression: A 50-year-old female with a major depressive episode (MDE) and persistent symptoms of growing severity for more than 24 months despite receiving anti-depressant medication and outpatient psychotherapy before being admitted for inpatient psychiatric treatment (persistent, treatment resistant MDE). The patient pathway is described from the first visit to a GP until discontinuation of outpatient psychotherapy 12 months after discharge from inpatient care.

The individual services described in the vignette are specified in separate lines to enable assessment of whether patients receive this service in the context of the national health systems of included countries. The specific services include: visits to an outpatient psychiatrist, outpatient antidepressant medication, weekly individual or group-based outpatient psychotherapy, three months inpatient psychiatric treatment, including adjunctive treatment options, such as electroconvulsive therapy and sleep deprivation, six weeks of intensified outpatient psychotherapy (e.g. at a day clinic), professional reintegration services, and monthly follow-up psychotherapy.

Data collection and analysis

The vignette was shared with experts in 12 countries. They were asked to fill out the survey using the standard answering categories (see overall methods section above). In several countries, vignettes were completed by teams consisting of a health systems expert working together with mental health specialists who provided insights and data on care patterns in the country. Answers varied in granularity of provided information. Some answers exhibited different interpretations of the original questions and different standards for good quality care.

Table 3.8: Chronic Depression Vignette

Vignette	Service
A 50-year-old teacher without previous mental health conditions visits her general practitioner (GP) because of depressed mood, insomnia and reduced pleasure in her daily activities for the last 12 months. She receives a prescription for a tricyclic antidepressant. Eight weeks later, her GP refers her to an out-patient psychiatrist because of worsening of symptoms, where she is diagnosed with first episode of major depressive disorder (MDE). Her pharmacotherapy is changed to a SSRI and additional out-patient psychotherapy (PT) is recommended. Ten months later, due to growing suicidal ideation the patient then visits the ER of her local hospital and is admitted to psychiatric inpatient care. She is diagnosed with persistent, treatment resistant MDE and receives multi-professional treatment for 3 months including augmentation pharmacotherapy (e.g. citalopram/ quetiapine) as well as 12 sessions of electroconvulsive therapy (ECT). Her symptoms improve and she is discharged home with an intensified psychiatric outpatient therapy (day clinic with multi-professional treatment concept including therapeutic support for professional reintegration) for another 6 weeks. After reaching full remission, psychiatric day clinic is discontinued and she is referred back to her regular outpatient psychiatrist/PT. She also starts her professional reintegration over 4 months. Her outpatient PT is subsequently gradually reduced to 1x/months and discontinued 12 months after discharge from inpatient care.	Visit to outpatient psychiatrist
	Pharmacotherapy (including generic SSRI/SNRI)
	Individual or group-based outpatient PT (e.g. CBT/short-term PP, CBASP or IPT), at least 1x/week for 3-4 months
	3 months inpatient psychiatric treatment with multi-professional treatment concept (e.g. pharmacotherapy, PT, occupational and physiotherapy)
	Adjunctive treatment options for psychiatric inpatients (e.g. ECT, sleep restriction)
	Six weeks of intensified psychiatric outpatient therapy (e.g. psychiatric day clinic with multi-professional treatment concept)
	Professional reintegration services for 4 months
	Monthly follow-up psychotherapy for at least 6 months

Source: authors own compilation

Completed surveys were analysed to identify gaps in coverage and access. In some cases, the analyst had to interpret the received information, which needed to be (re-)confirmed by country experts. Furthermore, information received from country experts was supplemented by information from Eurostat (2020) on numbers for psychiatric care beds in hospitals.

Survey results were colour coded:

- Green indicates that the service is covered with standard user-charges, and there is no lack of availability
- Yellow indicates that the service is covered but there are some problems with availability of service and/or important user-charges.
- Orange indicates substantial problems with availability of services and/or services are often paid out-of-pocket
- Red indicates services that are not covered or usually unavailable and/or almost always paid out-of-pocket

Results

Completed surveys were received from nine countries, including Bulgaria, France, Germany, Lithuania, the Netherlands, Poland, Portugal, Slovakia, and the UK (England). Table 9 provides a high-level overview of results, summarizing the five coverage and access dimensions assessed in the survey into one response column per country. It is clear that vignette patients in all countries would face certain barriers to access (often waiting lists) but these would be greater in some countries than in others.

For example, vignette patients in France and the Netherlands would have comparatively good access to care, despite problems with waiting lists in the Netherlands (9 weeks for first visit + 6 weeks to start treatment) and despite patients having to pay for psychotherapy provided by private psychologists, which is not covered in France. By contrast, vignette patients in Slovakia, would face important access barriers, with a general lack of psychiatrists, limited availability of publicly funded psychotherapy, unavailability of multi-professional inpatient care, and no coverage of important parts of the care pathway (ECT, sleep deprivation, professional reintegration, follow-up psychotherapy).

When looking at access to individual services across countries, the table shows that limited availability of psychiatric outpatient consultations is an important problem in many countries, often resulting in waiting lists, unequal access by place of residence (rural-urban), or for different socio-economic groups. The latter is particularly important, if high-income people can afford to pay for private psychiatrists who bill above standard fees (e.g. in France) or pay for private care in the grey economy (e.g. in Slovakia).

Access to antidepressants (SSRI/SNRI) is relatively good in most countries. Only Lithuania and Portugal report relatively high cost-sharing requirements, and in Bulgaria anti-depressants are not covered during a first episode of depression (as described in the vignette) but only for recurrent depression.

Psychotherapy is not covered in Poland and covered only for low-income patients in Slovakia (about 30% of psychotherapies are covered by statutory system). In Germany, it is often not covered for patients with private health insurance; and in France, it is not covered if provided by private self-employed psychologists. In Lithuania, the Netherlands, and Portugal, waiting lists are important and often access is worse in rural areas. In Portugal, economic inequalities are important as patients with VHI or insured through subsystems have better access to psychotherapy. The UK (England) is the only country that reports meeting its waiting time target of 75% starting treatment within 6 weeks.

Psychiatric inpatient care is covered in all countries with low or relatively limited user-charges. However, in Lithuania, coverage would be restricted to 1 month treatment (+ 2 weeks psychiatric rehabilitation), and in Poland and Slovakia care would not follow a multi-professional treatment concept. Bulgaria and the UK (England) report a lack of bed capacity, and in the Netherlands waiting times are important. Germany, France and Portugal are the only countries that do not report a general lack of capacity despite widely differing numbers of psychiatric beds per 100,000 population (Germany 128.5; France: 82.7; Portugal: 63.6).

Adjunctive treatment options (ECT, sleep restriction) are covered in all countries except Slovakia. However, in Poland, ECT would be available only in certain centuries, and in Bulgaria and the UK (England) ECT is a rather unusual practice. In the Netherlands, a lower number than 12 sessions would be used. In Germany, less than 50% of hospitals use ECT, and also in France practice variation means that it is not used in several hospitals. Lithuania and Portugal report no lack of availability of ECT.

Intensified psychiatric outpatient care provided by multi-disciplinary day-clinics is covered in all included countries but not necessarily for patients with private health insurance in Germany. Nevertheless, important access problems exist in Bulgaria, Poland, and Slovakia, where very limited availability (concentrated mostly in major cities) means that most patients do not receive psychiatric day care. Again, waiting lists are important also in France, Lithuania, Portugal, and the UK. The Netherlands is the only country, where waiting lists are not important because patients that have gained access do not need to wait for continuing therapy after hospital discharge.

Professional re-integration services are generally available in Germany, France, the Netherlands and the UK (England) although they may be covered by different social security schemes. In Portugal, services are generally covered and available but insufficiently developed in rural areas. In Lithuania, they are covered but not yet sufficiently developed. Bulgaria, Poland, and Slovakia do not cover professional re-integration services.

Finally, access barriers exist also for follow-up psychotherapy in most countries (see Table 9).

Table 3.9: Overview of access to care for chronic depression in nine selected countries

Services	Bulgaria	Germany	France	Lithuania	Netherlands	Poland	Portugal	Slovakia	UK (England)[a]
Visit to outpatient psychiatrist	Covered but large regional disparities.	Covered but waiting lists exist.	Covered, generally high numbers of psychiatrists; excess billing allowed.	Covered but waiting lists and limited availability in rural areas.	Covered but long waiting lists (9 wks for first visit + 6 wks to start treatment).	Covered but limited availability.	Covered but waiting lists in NHS, better access through VHI/subsystems.	Covered but lack of providers, grey economy, often paid OOP.	Covered but shortage of psychiatrists.
Pharmacotherapy (SSRI/SNRI)	Not covered for first episode (only for recurrent depression).	🟩	Covered, rather overtreatment.	Covered but significant co-payments.	Covered with standard cost-sharing, limited choice of drug.	Covered with user charges.	Covered but 63% cost-sharing for SSRI/SNRI.	Covered with low cost-sharing.	Covered with standard user-charges (GBP9.15 per item).
Individual or group-based outpatient PT, at least 1x/week for 3-4 months	Covered but available only in big cities.	Covered but waiting lists exist, often not covered by PHI.	Covered if provided by psychiatrist or public psychologist; not covered if provided by private psychologist; lack of psychologist PT.	Covered but waiting lists and limited availability in rural areas.	Covered but waiting lists are problematic (see above).	Not covered and lack of availability.	Covered but waiting lists in NHS, better access through VHI/subsystems.	Usually not covered (70% paid OOP); if covered (30% - low income), long waiting list; group therapy is not covered (only NGOs).	Covered and waiting time target of 75% starting within 6 weeks is currently achieved.
3 months inpatient psychiatric treatment with multi-professional treatment concept	Covered without user charges, bed capacity below EU average (56.8/100,000).	Covered but urban-rural disparities, bed numbers twice EU average (128.5/100,000).	Covered, no lack of beds, some regional disparities; bed capacity above EU average (82.7/100,000).	Covered but only 1 month + 2 weeks inpatient rehabilitation. Bed capacity above EU average (97.6/100,000).	Covered but waiting lists are problematic (see above); bed numbers above EU average (85.6/100,000).	Covered but no multi-professional treatment. Bed capacity below EU average (62.2/100,000).	Covered, no lack of capacity; below EU average bed numbers (63.6/100,000).	Covered but no multi-professional treatment. Bed capacity above EU average (81.0/100,000).	Covered but lack of beds; patients may be sent far away; bed numbers about half EU average (36.9/100,000).
Adjunctive inpatient treatment options (e.g. ECT, sleep restriction)	Covered but rarely used.	Covered but <50% of hospitals provide ECT.	Covered but practice variation determines adjunctive treatment options.	Covered and no lack of availability.	Covered and no lack but would use lower number of sessions of ECT.	Covered but available only in highly specialised units.	Covered, and available in most facilities or referral arrangements with other facilities.	Not covered and not available.	Covered but treatment is unusual.
Six weeks intensified outpatient care (e.g. multi-professional day clinic)	Covered but available only in big cities.	Covered but access issues (long travel times) in rural areas; often not covered by PHI.	Covered but day-clinics remain underdeveloped; regional disparities.	Covered but waiting lists and limited availability in rural areas.	Covered and waiting lists are not a problem.	Covered but available only in main cities.	Covered but unavailable in some rural areas.	Covered but long waiting lists, lack of providers, mostly provided by NGOs.	Covered but waiting times and rationing common.

Professional reintegration (4 months)	Not covered and rarely available.	Covered, no access problems.	Provided by social services .	Covered but services are insufficiently developed.	Covered by Employee Insurance; or taken care of by company.	Not covered and lack of availability.	Covered but unavailable in some rural areas.	Not covered and rarely available.	Provided by social services not covered by NHS.
Monthly follow-up psychotherapy for at least 6 months	Covered but available only in big cities.	Covered but waiting lists exist; often not covered by PHI.	Covered if provided by psychiatrist or public psychologist; not covered if provided by private psychologist; lack of psychologist PT.	Covered but waiting lists and limited availability in rural areas.	Covered but waiting lists may be problematic.	Covered but limited availability.	Covered but unavailable in some rural areas.	Most patients pay OOP.	Covered but waiting times and rationing common.

Source: authors own compilation. Notes: Reported numbers for psychiatric cares beds in hospitals are based on Eurostat (2020) and compared to the EU average of 68.0/100,000 population.

Service covered, no lack of availability, standard user-charges.	Service covered but some problems with availability of service and/or important user-charges.	Substantial problems with availability of services or services are often paid out-of-pocket.	Service not covered or usually unavailable and/or almost always paid out-of-pocket.

Discussion and Conclusion

This pilot study of access to care for chronic depression in Europe using a vignette approach has demonstrated the potential of the approach but also allows identification of some limitations. The survey has shown that patients with chronic depression in all countries face at least some access problems on their pathway through the health system. When compared with results for the stroke vignette, access problems for the chronic depression vignette appear to be even more wide-spread. In addition, and similar to the results for stroke, access problems tend to be more pronounced in Eastern European countries, when compared with Western European countries.

In general, limited availability of psychiatric outpatient care and psychotherapy seems to be a common problem in most countries, often leading to waiting lists and waiting problems, and/or regional inequalities, in particular between rural and urban areas. In addition, unlike with the stroke vignette, coverage gaps exist for several services in several countries. These include anti-depressants in Bulgaria (for first episode), psychotherapy in Poland, professional re-integration services in Bulgaria, Poland, and Slovakia; and psychiatric care and psychotherapy for patients with private health insurance in Germany.

Again, detailed country results enable a more in-depth analysis of access problems and provide more background information on the national context (not shown for chronic depression). Received responses concerning coverage of services for patients with chronic depression were sufficiently clear enabling direct interpretation of whether services were covered or not. Responses concerning availability of care differed considerably concerning the level of granularity and detail of provided information. For example, some experts reported mostly qualitative information stating that a service was almost always available (or unavailable), while other experts provided detailed statistics on waiting times or waiting lists. Nevertheless, received information was sufficiently clear to make comparisons across countries. Future surveys would benefit from more standardised data on waiting times for accessing psychiatric care, although this might be difficult to collect.

Similar as for stroke, responses received from national experts on acceptability and other factors showed important variation. For example, language barriers were again reported as potential barriers to access by experts in some countries but this is again likely applicable to most countries. In addition, ethnic minority groups were reported to have worse outcomes in the UK (England), but we would suspect that this is true also in many other countries.

Furthermore, experts provided information on practice variation across countries illustrating that care for patients with depression is less standardised than for stroke patients. For example, in France psychiatrists and hospitals were reported to follow their own schools of thought, leading to practice variation and different recommendations for certain therapeutic options. In England, ECT usage was reported to be rather unusual, also related to National Institute of Health and Care Excellence (NICE) guidance that ECT does not have greater cost-effectiveness than other treatment options. In France, ECT usage was reported to be controversial, also because of fear that patients do not receive proper anaesthesia. In England, it was reported that the standard care pathway would differ from the vignette as patients would usually be referred directly by their GPs for outpatient psychotherapy.

In general, while care pathways for chronic depression seem to show greater variability across countries than for stroke, the vignette as designed for this pilot study was able to capture differences in access, while allowing national experts to explain national particularities. While standardised data seemed important to obtain a better understanding of access to stroke care, relevant indicators of access to care for patients with chronic depression are currently unclear. Potentially, it would be interesting if data was available that would trace the care pathway, e.g. what is the proportion of patients presenting with symptoms of depression who are being referred to psychiatrists and access care after a certain number of days? What is the proportion of patients in need of psychotherapy who receive treatment? What is the proportion of patients in need of inpatient treatment referred to inpatient treatment? What are the treatment thresholds across countries? However, collecting information on such indicators would probably require a major research project to standardise data availability across countries.

3.4.3 Access to dental care in Europe: preliminary results of the vignette approach

Oral diseases, such as dental caries (tooth decay), periodontal disease and tooth loss are persistently among the most prevalent conditions globally, despite being largely preventable. This reflects widespread social and economic inequalities as well as a clear de-prioritization of funding in public health systems, both for prevention and treatment. However, untreated oral diseases have significant consequences, including unremitting pain, sepsis, reduced quality of life, lost school days, disruption to family life, and decreased work productivity. As such, they pose a substantial health and economic burden, for individuals, families and society as a whole (Peres et al. 2019).

Routine access to primary oral health care can help with early detection and management of oral diseases, and mitigate their negative impacts; however, due to the limitations of financial protection measures for dental services, access to such services is unequal within and across countries (Allin et al. 2020; Reda et al. 2018a; Reda et al. 2018b). Children living in poverty, socially marginalized groups, and older people are the most affected by oral diseases, and barriers to accessing dental care (Peres et al. 2019).

The most frequent oral diseases are oral pain caused by dental caries, periodontal disease and tooth loss (Peres et al. 2019). Together they amounted to approximately 0.7% of total DALYs and 2% of years lived with disability globally in 2017 (IHME 2020). These three conditions were chosen as the basis to develop vignettes and explore access barriers to dental care in European countries.

Development of the Vignettes

The development of the dental vignettes was complicated by the absence of detailed, common European guidance concerning management and treatment of patients with oral health problems. Therefore, the vignette incorporates recommendations found in systematic reviews of the evidence or developed by national, European or international organisations in the field of dentistry.

Specifically, oral health training and regular preventive exams can help in the prevention and early identification of **carious lesions** (Vignette 1). Depending on the extent of its progression and localization, dental caries may be addressed by non-restorative or restorative treatment and within each category, by the use of different materials (e.g. non-restorative: regular application of fluoride, gels, varnishes or sealants, or a combination thereof, resin infiltration; restorative: fillings using dental amalgams or composite resins, crowns) (Schwendicke et al. 2019; Slayton et al. 2018; Momoi 2012; AAPD 2016). Purely preventive, population-level measures, such as water fluoridation, are beyond the scope of this exercise.

Periodontal conditions (Vignette 2) are caused by plaque-induced inflammation of the gingivae characterized by red, swollen tissues and bleeding as a result of brushing or probing, painful mastication and tooth loss. Recommended treatment includes patient instruction on daily plaque removal as well as the removal of supra-gingival plaque, calculus, stain and sub-gingival deposits and control of local plaque retentive factors (SDCEP 2014).

(Partially) **edentulous patients**, whose number is expected to increase along with demographic change (Schwendicke et al. 2020), have a choice among different of restorative options. While complete dentures are widely used for edentulous patients, implant-borne restorations are increasing and there is evidence supporting that they may aid in minimizing bone resorption. Prosthetic dental work is costly, but different modalities may be more or less affordable to patients (Lee & Saponaro 2019; Bidra et al. 2016).

Table 10 presents the dental care vignettes, which describe three relatively typical patients of different ages suffering from the three conditions described above. Each vignette describes the patient, their symptoms and potentially their care decisions. The individual services described in the vignette are specified in separate lines to enable assessment of whether patients receive this service in the context of the national health systems of included countries. The sequence of services corresponds to the care pathway, at least in certain settings given the aforementioned lack of European/international consensus. Specifically, these vignettes were developed in collaboration with experts at the Department of Oral Diagnostics, Digital Health and Health Services Research at the Charité Medical University in Berlin, Germany. It was expected that the chosen services might not reflect standard practice in some participating countries, and this was part of the exercise.

Table 3. 10: Dental care vignettes – patient description and services in patient pathway

Vignette	Services
Vignette 1: A 35-year-old patient has not been able to sleep for two nights due to a strong, beating pain in the right-lower jaw. The patient requests an urgent appointment with the dentist. The dentist determines that the patient needs a root-canal treatment to preserve the first lower molar, and treat the pain. The patient decides for the root canal treatment and against the alternative of tooth extraction. Following the root canal treatment, reconstruction with composite material is used until a fixed prosthodontic treatment (crown/onlay) can be placed.	Emergency consultation with dentist
	Radiography ((bitewing) X-rays)
	Root canal treatment **OR** Tooth extraction
	(interim) reconstruction with composite material
	Fixed prosthodontic treatment (crown/onlay)
Vignette 2: A 66 year old patient with co-morbidities (obesity, diabetes) has frequent discomfort in the upper jaw. After a consultation, chronic periodontitis with generalized level 2 mobility is diagnosed, requiring surgical curettage, one dental extraction and frequent follow-ups to stop disease progression and stabilize bone-loss.	Scheduled visit with the dentist
	Curettage (performed by a dentist)
	Periodontal probing, and elimination of dental calculus (performed by dental assistant)
	Regular follow-up visits
Vignette 3: An edentulous 75-year-old patient received upper and lower full-dentures 5 years ago. She feels she has lost significant capacity to chew as the inferior prosthesis is poorly retained and gets displaced when speaking or eating. She seeks counselling from her dentist, who recommends two implants on the lower anterior jaw and an overdenture to increase retention. She agrees with this course of treatment and against more sophisticated (partially) fixed alternatives.	Consultation and surgical planning
	Surgical implantation
	Prosthetic rehabilitation: New prosthesis or adjustment of old prosthesis using the implants **OR** (partially) fixed dentures

Data collection and analysis

The vignette was shared with experts in 10 countries. They were asked to fill out the survey using the standard answering categories (see overall methods section above). Depending on the country, vignettes were completed by health services researchers knowledgeable on dental care, or dental care experts (dentists), or teams consisting of a health systems expert working together with clinical experts. Answers varied in granularity of provided information; occasionally the answers indicated that the differentiation between columns in the vignette template was unclear or interpreted differently than originally intended by the researchers of the European Observatory on Health Systems and Policies.

Completed surveys were analysed to identify gaps in coverage and access. In some cases, the analyst had to interpret the received information, which needed to be (re-)confirmed by country experts. Occasionally, respondents prefaced the filling-out of the template by inserting continuous text on the system of coverage for dental care services in their countries, perhaps because they felt that the categories specified in the template were restrictive and would not provide enough context for the analysis. In those cases, researchers who analysed the data took this information into consideration.

For the overview tables, country responses were abstracted to one overview statement per template category. These were color-coded for visual comprehension, as follows:

- Green indicates that countries reported no major issues; this does not preclude potential challenges for individual patients, but means that countries either do not have or are not aware of systematic problems
- Yellow indicates that there might be issues in coverage or access for substantial portions of the population at least in some countries
- Orange indicates substantial problems with the coverage or availability of services in several countries
- Red indicates services that are not covered or usually unavailable in most countries

Results

Completed surveys were received from eleven countries, including Bulgaria, Estonia, France, Germany, Ireland, Lithuania, the Netherlands, Poland, Portugal, Slovakia and Sweden. It was clear that patients in some countries face greater access barriers than in others. For example, dental care in Ireland and Portugal is barely covered by the statutory system, and (recent) reforms aim to remedy this situation. In countries such as France and the Netherlands, complementary voluntary health insurance (VHI) is standard for covering dental care costs. By contrast, barriers to high-quality care in other countries might be attributable also to lack of equipment or specialists, or the lagging establishment of "best practice" (e.g. Bulgaria, Poland). This variability on a country level is not visible in the abstracted overview tables that follow, but interesting examples are highlighted in the text below.

Table 11 shows results for the first vignette, on acute pain and need for treatment due to carious lesions. Overall, emergency services are covered in most responding countries, often with standard cost-sharing (sometimes covered by complementary VHI). However, it becomes clear that between the alternatives of root canal treatment and tooth extraction, coverage of the former is less widespread. Root canal is a tooth-maintaining approach; this is considered preferable to tooth extraction for a few reasons (medical and cosmetic).

Table 3.11: Coverage and access to acute dental care (Vignette 1)

Vignette 1	**Coverage**		**Access**			**Determinants of access**
Services	**Is the service covered by the statutory system?** (including exemptions)	**Does cost-sharing** (value or rule for determining the amount) apply? Any **financial protection** measures	**Is there a lack of *physical availability* of services**	Do patients lack the ***ability to obtain* necessary care?**	Do patients face problems due to the **attitude of the provider?**	**Can you think of any factors that would worsen/improve access of this particular vignette?**
Emergency consultation with dentist	Not covered in 3 countries (NL, PT, SK)	Only 3 countries without cost-sharing (DE, EE, PL)	Most countries report lower densities of practitioners in rural areas (and varying waiting times), but no major challenges in availability	Several countries report potential difficulties for patients with cognitive impairment or mental health conditions, but no evidence of major issues	Few countries highlight issues for specific patient groups (related to income/insurance status, ethnicity, comorbidities)	Only two countries (DE, NL) report no potential issues. Most other countries report potential differences along several parameters.
Radiography ((bitewing) X-rays)	Not covered in 3 countries (BG, NL, PT)	Only 3 countries without cost-sharing (DE, EE, PL)	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report lack of equipment in many clinics, particularly older or in rural areas			Almost all countries report potential differences along several parameters.
Root canal treatment ***OR***	Only few countries with substantial coverage	Most countries require substantial OOP payments	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report few specialists required for these services, and uneven distribution			
Tooth extraction	Not covered for most of the population in 3 countries	Standard cost-sharing in most countries, full OOP in 3 countries				
(interim) reconstruction with composite material	Only basic materials covered in several countries	Standard and top-up OOP required in most countries	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report few specialists required for these services, and uneven distribution			
Fixed prosthodontic treatment (crown/onlay)	Only basic materials covered in several countries; no coverage in half of the countries	Standard and top-up OOP required in most countries, can be substantial due to high overall cost	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report few specialists required for these services, and uneven distribution			

While immediate cost-sharing for root canal might be higher, costs to replace removed teeth may be more substantial. In Germany, root canal treatments are theoretically covered in full by SHI, but by a very small fee that does not recuperate the dentists' costs. This leads to either low-quality treatment or a net loss for the dentist. Patients may have to pay for certain components of the treatment, which improve quality and productivity in the instrumentation, out of pocket (e.g. rotary endodontic measures). These are usually covered for those with VHI. Tooth extractions are covered in full, but only by a small fee, so as not to incentivize them.

What also becomes clear from Table 11 is that, especially for specialized services, most countries report some level or regional variation in the availability of services. This refers in particular to the duration of time that patients have to wait in pain and may be related to different opening hours (shorter in rural areas) or longer travel distances. Several countries recognized that in theory, those with cognitive impairment or mental health conditions might be less well placed to formulate a care request or understand the different benefits and treatment processes of root canal vs. extraction. In some countries, the providers might deny care due to financial reasons (related to insurance status or income level) or comorbidities, especially chronic infectious conditions such as Hepatitis C and HIV. Also rare was the mention of dentists turning away patients due to lack of special skills (e.g. to work with children or those with cognitive impairment).

Personal characteristics of patients that may influence access were reported by all participating countries, but rarely with substantiating evidence on shares of the population affected. These were usually related to income and/or insurance status, and where thus directly related to the ability of patients to cover OOP costs. The geographic factor reported above regarding waiting time and service availability was also mentioned in this column, pointing to potential overlaps in the design of the survey.

The responses summarized in Table 11 reflect the nature of the first vignette, namely that of an acute problem that may require several visits but is likely limited to one episode of care. The second vignette (Table 12) focused on a chronic condition that requires an initial intervention and regular follow-up/maintenance visits. In this respect, access barriers related to service availability or adherence to treatment (or abstinence from determining factors) can conceivably weigh in more heavily than for the acute condition in Vignette 1. Interestingly, looking at the coverage of the preventive/regular visit with the dentist, it seems to be covered in more countries than the acute visit in Vignette 1. This reflects conscious policy in certain countries that incentivizes prevention to encourage oral health and stop more serious ailments in time. However, this is not the case for the surgical curettage suggested as part of the treatment of choice in the vignette. Here, the service is only partially covered or not standard procedure. The coverage of dental cleaning was in some cases dependent on the availability of qualified technicians to carry it out (e.g. Lithuania), whereas in other countries the same service can be performed and covered by the dentists themselves.

Access barriers in terms of availability are therefore once more affected by geography as well as by the general availability of professionals, and of professionals contracting with public payers. Almost all countries reported some issues in rural areas, particularly in relation to those performing more specialized services, or to dental hygienists who have lower salaries. For instance, in Poland the average waiting time in 2020 was 16 days, with a range of 6 to 41 days across voivodeships. Longer travelling distances become more problematic here compared to vignette 1, due to both the repetitive nature of the required visits and the older age of the patient. Access barriers due to difficulties with formulating the care request may be similarly exacerbated in this patient group, though this is even more pronounced for the third vignette (see below). Provider attitudes regarding care denial were sporadically reported, but there was some indication that dentists may give up on patients unable to follow treatment requirements and adhere to guidelines over time.

Table 3. 12: Coverage and access to chronic dental care (Vignette 2)

Vignette 2	**Coverage**		**Access**			**Determinants of access**
Services	**Is the service covered by the statutory system?**	**Does cost-sharing** (value or rule for determining the amount) apply? Any **financial protection** measures?	**Is there a lack of *physical availability* of services?**	Do patients lack the ***ability to obtain* necessary care?**	Do patients face problems due to the **attitude of the provider?**	**Can you think of any factors that would worsen/improve access of this particular vignette?**
Scheduled visit with the dentist	At least some coverage in most countries	Standard cost-sharing	Regional variation in availability, issues in rural areas to varying degrees in most countries	Several countries report potential difficulties for patients with cognitive impairment or mental health conditions, but no evidence of major issues.	Few countries highlight issues for specific patient groups (related to income/insurance status, ethnicity, comorbidities). In some countries lack of continuity for patients who do not adhere to treatment.	Almost all countries report potential differences along a number of parameters. Due to chronicity of problem, barriers may be exacerbated.
Curettage (performed by a dentist)	Covered with restrictions or not covered in most countries	OOP for certain elements even in countries with coverage	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report few specialists required for these services, and uneven distribution			
Periodontal probing, and elimination of dental calculus (performed by dental assistant)	At least partially covered in several countries	Standard cost-sharing in most countries, full OOP in 3 countries	Most countries report lower densities of practitioners in rural areas (and varying waiting times); some countries further report few/declining number of health professionals required for these services, and uneven distribution			

Regular follow-up visits	At least partially covered in several countries	Standard cost-sharing in most countries, full OOP in 3 countries	Regional variation in availability, issues in rural areas to varying degrees in most countries	🟩	🟨	🟧

Finally, looking at responses across countries for the third vignette, the prosthetic treatment of an older, edentulous patient (Table 13), it is evident that newer treatments involving surgical implants are not widely available and that coverage gaps exist, particularly regarding the need for OOP payments. The lack of access to implant-based alternatives reflects limited coverage and low availability of appropriately specialized dentists (and the two parameters likely influence each other). While some countries employ financial protection measures to support lower-income individuals with the procurement of dentures (e.g. Germany, Ireland, Netherlands), the OOP cost to be borne by the patients can remain substantial.

Also for this vignette, most respondents highlighted access issues for patients in rural areas. Here, too, the age of the patient in the vignette (and generally those usually affected by edentulism) further complicates traveling long distances or seeking care for remedial issues, inhibiting access and likely affecting outcomes. What is more, due to cognitive impairment or low educational level, some patients may find it difficult to understand the benefits of different options and/or navigate complicated administrative processes that would have helped with claiming support to cover OOP costs.

Table 3.13: Coverage and access to prosthetic rehabilitation for edentulism (Vignette 3)

Vignette 3	**Coverage**		**Access**			**Determinants of access**
Services	**Is the service covered by the statutory system?**	**Does cost-sharing** (value or rule for determining the amount) apply? Any **financial protection** measures?	**Is there a lack of *physical availability* of services?**	Do patients lack the ***ability to obtain* necessary care?**	Do patients face problems due to the **attitude of the provider?**	**Can you think of any factors that would worsen/ improve access of this particular vignette?**
Consultation and surgical planning	Not covered in 3 countries, otherwise partially or fully covered	Standard cost-sharing; if implants are not covered, neither is surgical consultation	Regional variability, less availability in rural areas, scarcity of specialists	Several countries report potential issues due to illiteracy/ cognitive impairment/ mental health issues (age group)	Several countries report potential issues with care denial due to coverage/income or lack of skill to work with patients with cognitive impairment	Most countries report socioeconomic status, place of residence as main influencing characteristics.
Surgical implantation	Only covered in two countries with OOP requirements	Full or considerable OOP payements required				
Prosthetic rehabilitation: New prosthesis or adjustment of old prosthesis ***using the implants OR***	Only covered in two countries with OOP requirements	Full or considerable OOP payements required				
(partially) fixed dentures	Mostly partial coverage (high OOP), or for specific types of dentures	Usually substantial OOP required, some countries with additional support for low-income patients				

Discussion and Conclusion

Much like the pilot studies on access to stroke and depression care in Europe using patient vignettes, this exercise on dental care has demonstrated the potential of the approach as well as its limitations. Further, it has confirmed previous knowledge about the limited coverage of dental services; this restrictive coverage automatically pre-disposes patients from lower socioeconomic strata to experiencing further barriers along the path to realised access.

While there were numerous differences between countries, there were also some similarities. Cost-sharing applies as a rule, but is structured differently (co-insurance in France, fixed subsidies in Estonia, deductible in the Netherlands, different schemes to incentivize preventive care and protect from very high costs in Sweden). VHI is common for dental care in several countries (e.g. DE, FR, NL, PT), for full coverage of services or coverage of cost-sharing obligations. Financial protection measures are often addressed to low-income or other vulnerable groups (pregnant women, children), but OOP burden is not necessarily fully alleviated. For services only provided in the private sector without public coverage, prices are often unregulated (e.g. Poland), and resulting OOP costs are substantial.

Another similarity across countries is increased level of difficulty faced by patients residing in rural areas or less wealthy regions, that may not benefit from the same density of professionals, specialized clinics or state of the art equipment as those residing in urban centers. Another interesting element brought up by some countries (e.g. Lithuania, Sweden) is the lack of consideration of physical accessibility for people with disabilities in older, more remote facilities (e.g. wheelchair access). Most respondents highlighted the potential difficulties of patients with cognitive impairment or other types of dependency to seek care, understand the benefits and disadvantages of different care options, adhere to treatment plans or navigate the complicated reimbursement system that may have helped them deal with financial barriers.

The question on the role of provider attitudes was the one most frequently left without adequate responses due to lack of relevant evidence. However, several countries reported indicative reasoning for motivating factors. Most frequently, care denial was driven by insufficient coverage (either because public coverage tariffs are too low or because patients are deemed unable to cover OOP costs) or insufficient skill on the side of the practitioner, for example for working with children or cognitively impaired or psychiatric patients. One country also mentioned dentists refusing care to patients with chronic infectious diseases, such as hepatitis C or HIV.

Regarding patient characteristics, beyond socioeconomic status and geography (which were also highlighted in previous categories of the vignette template), some countries identified female gender, higher educational levels, and native status as drivers for seeking care for chronic conditions – men, less educated people and foreigners are less likely to seek care. Foreigners and the less educated are also less likely to make use of cost-sharing alleviations. Evidence from Sweden further suggested that women and foreigners are taken less seriously when complaining of pain, which might mean they are less likely to be prescribed diagnostic services, such as bitewing X-rays.

From a methodological point of view, there was substantial variation in the level of detail of responses. Furthermore, it became clear that responses could have been skewed by the initial focus of the vignette template on coverage, as further categories were not always tackled in detail. This was probably also compounded by the background of respondents (see methods section). For this exercise on dental care, it is conceivable that the three chosen vignettes were too many to be answered at once, as a certain level of respondent fatigue was obvious for the third vignette on edentulism (less granularity, more skipped fields in the template).

Finally, the synthesis approach adopted in this example is different to the ones on stroke and depression care. Instead of abstracting all categories in the vignette matrix per service and country, the presentation included all the countries. This masks the access challenges of individual countries, which can be relevant for cross-country learning. An additional analysis at the country level would enable a better understanding in this respect. Depending on the goal of the HSPA exercise (monitoring of individual countries versus pinpointing the level where most urgent action is required), either approach holds merit.

4.Conclusions

The three pilots on stroke, depression and dental care have demonstrated that the vignette approach can identify gaps in coverage and access as well as differences in treatment and quality. In fact, it has revealed important gaps in coverage for certain areas of care provision that would have stayed under the radar when only looking at available services in the benefit basket of a country. Examples are the lack of rehabilitation care and low thrombolysis and thrombectomy rates, which mean that in some countries, patients do not receive recommended care even where formal coverage for such services exist. The access difficulties are even more pronounced for chronic depression, which shows that all countries have at least some access problems in their pathway through the health system. The dental vignettes mostly confirmed well documented knowledge about the limited coverage of dental services, which makes patients from lower socioeconomic strata more liable to barriers along the path to realised access.

Furthermore, asking the respondents to comment on any differences between the pathways based on international recommendations and usual practice in a country can give important insights on treatment differences between countries. It for example shows that for some areas (e.g. stroke) there seems to be much less difference between countries than in other areas (e.g. depression). A possible explanation is that the evidence base for stroke treatment guideline is much more established and agreed internationally than the guidelines in use for depression, which are influenced by different schools of thought dominating in different countries.

The pilot also revealed limitations of the methodology in its current form, which can be addressed in a future application, or scaled up approach. Below we discuss some of the lessons learnt.

Scope: The vignettes chosen in this pilot only look at selected areas and can reveal important access gaps. Yet to form an overall view of access in a country – if this is the goal – more vignettes would need to be developed. Perhaps these can be strategically chosen to cover a certain percentage of the total care burden in an average country. In addition, in an ideal scenario, a geographically representative set of experts per country should fill out the surveys to gauge regional differences. This may not be feasible in a small project as it poses a challenge for the data analysis as well. In this pilot, experts were asked to fill out the survey for the whole country, which means that important disparities within countries may have been missed, or that the respondent's area has biased their responses. Lastly, having a good degree of coverage in terms of the number of vignettes and number of respondents per country could allow constructing some kind of composite score.

User friendliness: For this pilot a simple tabular form was chosen for the survey. However, this was not especially user friendly for the respondents who often had difficulty filling out their answers in the small boxes, making the overall result also difficult for the researchers to process. An online survey asking the questions one by one with the option to save and edit would be better for both the respondent and the analyst. The questions could then also be accompanied with more in-depth explanation of the concept, something that will be important if the survey is rolled out among more respondents who may not be familiar with the concept.

Specific and quantitative survey questions: An important finding of this pilot study is that future cross-country surveys could include questions that are (1) more specific and (2) ask respondents to collect quantitative data. This could greatly enhance comparability of results across countries. For time reasons we opted to formulate questions in a more aggregated and open manner, but this contributed to substantial variety in detail of the answers. Indeed, the survey used broad answering categories (e.g. "Is there a lack physical availability of services?") instead of breaking these down in several specific questions that are then systematically queried (e.g., is this lack due to distance, lacking contracted provides, quality or limited opening hours?). Such an approach would stimulate respondents to investigate each cause and consider each influencing factor (insurance status, gender etc.). Furthermore, where some experts reported mostly qualitative opinions stating that a service was usually available (or unavailable), other experts provided detailed statistics (e.g., on the proportion of patients receiving each service). Therefore, the survey could include specific questions to collect quantitative data. Some of this information may not be available in a country or would need developing. Development of relevant questions would require specific medical expertise on treatment and therefore including medical experts from the onset of the drafting stage seems advisable.

Selection of experts: the surveys require a great deal of expertise in health systems and medical care. Health system experts were involved in this pilot, as they know the coverage and access concepts but also because there was not enough time to approach and brief medical professionals. Most of the respondents however, consulted with medical experts to fill in some of the details. In a scaled-up approach with multiple respondents per country, a national health system expert could act as focal point and coordinate the responses of a representative sample of experts, preferably medical specialists in the field. Alternatively, the European Association of Medical Specialists similar to the European Stroke Organisation (ESO) could be tasked to coordinate survey design and data collection in their respective medical fields. Concerning stroke, ESO has engaged in an earlier survey, collaborating with ESMINT-EAN-SAFE to collect data on access to stroke care across European countries (Aguiar de Sousa et al. 2019).

Language: In a larger future study with multiple experts in even more countries, the survey would have to be translated and validated in several languages. Although there was little indication that language was a large problem, some terms had to be clarified with national correspondents, or they had to clarify these with medical experts they consulted.

Scaling up the vignette approach would require careful consideration of the above factors. Much would depend on the time and resources available but also the scope and aim of the tool. On the one end of the spectrum, there is an option to roll out this pilot method in all EU countries, which could be done relatively easily and quickly but with the limitations detailed above. It could provide a one-off cross-sectional analysis of access problems as well as treatment differences in some key areas of care in the EU. At the other end of the spectrum, the methodology could be refined in a large international European funded study with several multidisciplinary research teams and work packages with the ultimate aim of developing an online tool/survey that would enable carrying out vignettes routinely. This project consortium could develop multiple vignettes covering the full care spectrum, prepare and develop new data on access and treatment dimensions, design an online tool with more specific questions and guidance, and it could address regional differences.

Figure 3.2 Policy focus group conclusions

The pilot of three vignettes described in this chapter was discussed at the Policy Focus Group, which took place on 1 February 2021. It was attended by HSPA Group Members and external stakeholders, including patient and healthcare professionals' organisations and Eurohealthnet.

Participants welcomed the methodology, recognising that it had some added value, providing more granular information on differences in health coverage and better capturing patient perspective. Their feedback provided valuable considerations about the possible use of vignettes for cross-country comparisons and to inform policy:

- Vignettes could be used to complement existing indicators and are relevant for policy dialogue and identifying good practices. When incorporating quantitative data, the most recent available data from national sources should be used to avoid discrepancies between existing indicators and information provided by vignettes. There is a need to reflect on how often the vignette research should be carried out : as policies take long time to change, it does not need to be too frequent (i.e. every few years could be sufficient).
- Vignettes show the real experience of patients. They can be a tool to check the validity of Mutual Information System on Social Protection (MISSOC) tables, which report on legislation i.e. formal conditions of access to healthcare. The vignette could be used to try and verify if formal health coverage translates into effective access to healthcare.
- The tool has some potential to be explored beyond strict disease groups, especially to assess access to prevention and health promotion or integration of care (also beyond health system).
- It may be worth exploring a vignette for patients with co-morbidities to capture accumulative impact of various conditions on experience of accessing healthcare.
- Linking vignettes with funding opportunities can increase their policy impact: they reveal gaps, which may be addressed through targeted investments from European Structural and Investment Funds.

Participants emphasised also some shortcomings in application of the method and possible improvements of the approach:

- The lack of patients (particularly vulnerable groups) as respondents in the survey was seen as a weakness.
- The tool could put a stronger emphasis on factors of disadvantage such as literacy, digital skills, stigma and discrimination. Though the pilot considered various hurdles according to some characteristics (e.g. disability, discrimination), involvement of social and behavioural scientists in the survey could reveal socio-economic barriers. Striking the right balance is an issue of choice between the vignettes looking at more specific person characteristics and vignettes providing feedback on broader determinants of accessibility. It should be assessed to what extent the impact of more specific person characteristics and to what extent a vertical disease approach are appropriate. The on-line design of the survey may facilitate collecting more data on characteristics of patients.
- Translation of specific information obtained through this method into general policy findings requires some caution. Gaps identified for a specific disease group or patients with specific

personal characteristics may apply to other groups, which were not included in the scope of the research. Findings may also be too general and ‘trivialise’ hurdles experiences by some parts of the population or individuals. Finally, how well vignettes explain health outcomes due to differences in access to healthcare may require more targeted surveys, or use of relevant data on quality of care. At the same time, linking vignettes with health outcomes may certainly make this tool more engaging for policy stakeholders.

- The exercise also showed that for better cross-country comparability, there is a need to get a common understanding of definitions and guidelines of care. Commonly agreed international standards may not exist for many care pathways.

CONCLUSIONS

A single indicator cannot capture the magnitude of challenges in access to healthcare

Access to healthcare is an intrinsically difficult concept to define and measure. There are many indicators, which are used in HSPA to measure accessibility. They usually capture only certain aspects, focusing on unmet medical needs, inputs, resources, waiting times, less often – on patient experience and effectiveness of health coverage showing if provided services meet the needs of the population and if some parts of the population experience particular hurdles. Any indicator can reveal deeply rooted problems but cannot describe fully the realities. Though a single measure of accessibility combining various dimensions of accessibility could be a more practical tool, such tools have not been put in practice of HPSA. A single measure of accessibility would risk simplifying what is inherently complex.

Complementary ways of gauging accessibility are necessary to better understand if health coverage is effective

Complementary accessibility indicators could enhance the potential of HSPA in mobilisation of scarce resources in ways, which ensure highest health gains. Indicators used to assess accessibility of health systems, including unmet medical needs data, out-of-pocket payments or health systems inputs may obscure important problems. The crude analysis of these indicators does not allow assessing how effective the health coverage is and if people with higher needs receive a greater degree of public support than people with lower needs. They hardly show either how the degree of public coverage and out-of-pocket costs are associated with poverty risk, while even small out-of-pocket payments can represent a large proportion of income for people with limited financial resources and may grow considerably as the severity of health conditions evolves. The equity-sensitive measures of catastrophic and impoverishing health spending developed by the WHO Regional Office for Europe and used to monitor financial protection in Europe aim to address some of these limitations by linking coverage policy to unmet need, out-of-pocket payments and poverty, and by capturing the impact of out-of-pocket payments on poor households (Cylus, Thomson & Evetovits, 2018; WHO Regional Office for Europe, 2019).

The epidemic crisis adds urgency to the need of refining accessibility metrics

The renewed focus on access to healthcare, which the current pandemic crisis is creating, is an opportunity to take a more critical look at accessibility challenges. Efforts in building more accessible health systems should seek to align the provision of health services to health profiles and to redress more decisively socioeconomic and clinical inequalities in access to healthcare. The crisis may further deepen health inequities, with a particular impact on already more vulnerable groups. The pandemic stressed once more that inequalities are a persisting challenge.

The COVID-19 outbreak showed that health systems are under immense pressure with a backlog of medical services, growing waiting times for healthcare, reduction of financial resources, which may have an impact on the completeness of the healthcare coverage in the future. Solving structural problems with accessibility would allow health systems respond better to shocks.

Commonly used indicators fall short of capturing instantly the challenges created by the pandemic. Indicators such as waiting times, unmet medical needs and financial protection are sensitive to crisis circumstances, but the most recent data do not capture yet new realities with additional problems in access to healthcare. Because of the time lag, their potential in providing feedback to policies may not be entirely exploited. The full magnitude of the negative impacts of the pandemic on access to healthcare, financial protection and health outcomes, will be only revealed in a few years from now.

Better accessibility metrics will be instrumental in ensuring accessibility-proof systems during and after shocks. Approaches and tools presented in this report explore opportunities of shifting the analysis of accessibility from inputs and processes to results understood as better health outcomes. They put effectiveness of healthcare coverage at the center of attention and capture better the realities, putting sharper lenses to the more obscure problems. These metrics simply capture better what matters to people and what makes health systems more resilient to shocks. Better accessibility data can indeed be useful in resilience testing of health systems[6] where the aim is to gather a mix of data and insight using a variety of tools in order to identify areas for improvement and to design concrete steps to systemic transformation.

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[6] See blueprint for resilience testing in Expert Panel on effective ways of investing in health (EXPH), The organisation of resilient health and social care following the COVID-19 pandemic, 25 November 2020

Preconditions of a stronger focus on effectiveness of health coverage

The report provides useful pointers of what is needed to move towards a more effective measurement framework of access to healthcare:

➢ *Developing indicators helping adjust health coverage according to needs*

There is quite an important variation in public health coverage across countries and across levels of healthcare needs. This merits a closer analysis using tools, which would allow assessing to what extent services excluded or restricted in health coverage are essential given the health status of the population and needs of more vulnerable groups.

The persisting trend in growing chronical conditions and ageing of the population calls for a more in-depth reflection on the adequacy of health coverage. Though the rise in the number of people with multiple health and care needs concerns in particular older people, it is becoming more prominent also among younger individuals. Chronically ill and people suffering from multiple health conditions have higher use of health services. This happens because they need continuous and more intense care, but also because they had not received the appropriate care to prevent the progression of their health problems. Preventive measures for chronic conditions or measures improving the health status are still underestimated and tend to be excluded or restricted in health coverage. Another example of inadequacy of health coverage is the limited access to mental care services, and this happens despite huge challenges with the mental status of the population, which will further be exacerbated by the pandemic crisis.

➢ *Increasing the use of indicators, which would underpin rethinking of ways of providing healthcare*

Indicators providing the information on adequacy of ways of providing health services are not systematically used to inform policies. While online health services showed their relevance in the times of pandemic, there is still a huge variation across Europe in using them. Many countries have rapidly adapted the ways in which services are delivered in response to COVID-19, providing for greater use of home-based care, teleconsultations and other forms of remote delivery. However, many challenges to ensure the uptake of e-health solutions pertain, including the digital divide and reduced availability of e-solutions for the more deprived parts of the population, lack of regulation on paying for e-services, etc. Finally, indicators tend to relate to single episodes of care, leaving challenges in access to more integrated services obscured.

➢ *Stronger involvement of patients and medical professionals in decisions on health coverage and ways of providing care*

Patient involvement in their own care remains suboptimal, which may result in inadequacy of health coverage and of ways of providing services. The involvement of patients in services design may play a critical role in progressing towards more person-centred care and adaptation of the health coverage to needs. It may also improve the performance of providers, quality of healthcare, contain health costs and ultimately - improve health outcomes. Similarly, the role of health professionals is crucial. Their role in designing services and organisation of provision of healthcare tailored to the needs of the population, along the health care pathways and not only- single episodes of care, should be enhanced.

➢ *Stronger consideration of heterogeneity of the population according to various factors*

National specificities are by far the main driver of what underpins the selection of indicators and approaches used to assess accessibility of health systems. This is justified by a huge variation in problems with access to healthcare across Europe. However, tools used do not capture sufficiently vulnerabilities. Health systems, which fail to deliver for the most vulnerable groups will remain weak and fragile, especially while facing the unexpected shocks. The accessibility policies should correct more decisively for health inequalities. Some needs for healthcare are not voiced as demand for services, especially among more vulnerable populations. Service delivery, which simply responds to demand may miss the needs of the most vulnerable groups. There is a need to proactively seek to understand needs of these groups, especially that individual circumstances, whether social, economic or clinical may pose an additional risk of inequalities. In result, those whose needs are greatest may be least able to access care.

It is clear that availability does not always translate into access and use of services. Even if facilities are physically accessible, barriers related to language, literacy, culture, income, employment status, type of job and various special needs can impair access. This is why identification of groups, needs in terms of volumes, types of services and ways of providing these services, addressing issues with health literacy are so important.

- ***Making a difference in health inequalities requires integration of other policies' perspective***

Income, housing conditions, labour status have a bigger impact on health inequalities than access to healthcare alone. The pandemic accentuated strong interrelations between various branches of social protection, showing a risk of deepening the vicious circle between income insecurity and insufficient guarantees of access to healthcare. Shocks, like the current pandemic, do not affect everyone equally and people who lose jobs or have precarious jobs may experience the long-term adverse impact on their health and access to healthcare. Health shocks are closely intertwined with the economic shocks. If the later is not properly addressed, it will further undermine health of the population. It is important to identify and assist those most in need and make an impact on a broader policy context, mitigating consequences of accumulated social, economic and health disadvantage.

- ***Exploiting the potential of national data sources***

Improving and linking various data sources such as various administrative databases, data from health insurance claims, data from private providers, is an opportunity. However, in many settings, the lack of reliable data seems to be a major obstacle. In their efforts to strengthen information systems, authorities should seek to capture both supply- and demand-side data on health services.

Tools to assess whether the health coverage is effective

More feedback on accessibility conditions, adequacy of services and their impact on health of people over time could contribute to the transformation of health systems. More effective tools of measuring accessibility can help. Tools presented in this report, whether the patient vignette, the analysis of redistributive impact of healthcare benefits or tools tailored to national context, have many advantages over the currently used indicators and can complement the existing indicators. Measurement of accessibility through proposed instruments goes beyond individual episodes of care or services, allowing to reveal people's experiences across clinical pathways and service boundaries. These tools take into account patients' needs and preferences and various characteristics which may link to vulnerabilities.

Patient vignettes and the analysis of the redistributive impact of health benefits can be developed at European level, but they could also be designed in the national specific context. Other tools are more appropriate for national and subnational level and their choice should relate to the local context.

- ***Measuring the redistributive impact of in-kind health benefits*** is an indispensable tool to support the proportionate universalism. The potential of this tools remains hugely untapped. It can inform decisions on more equitable distribution of benefits. It helps capture if for example older people on lower income receive a greater degree of public support and if contributions from care recipients are capped according to their capacity to pay. Unmet needs for medical care, which tend to be higher in countries with larger income inequalities plead for better targeting public support through setting income thresholds below which patients are eligible for greater public support and to ensure measures to relieve financial burden of low income persons through exemptions from fees, deductibles, etc. This would be even more pertinent in the context of the current crisis as this tool would help reduce inequalities in access to healthcare, financial distress and risk of poverty (alongside existing indicators that already do this, such as catastrophic and impoverishing health spending).

- ***Patient vignette*** is a tool, which allows exploring gaps in coverage in terms of groups and areas when access is suboptimal. It shows similarities and differences of patient characteristics and use of care informing further efforts to improve access, taking into account leading causes of disease and equity disaggregation. It is designed to pinpoint to challenges in accessing healthcare, taking into account various layers of vulnerability, which are normally obscured because of unavailability of data on patient characteristics or the lack of the analysis of such data. The pilot of the approach based on patient vignettes, presented in this report, proves clearly the added value of the tool.

- ***Tools fitting national and subnational level:***
  - *New indicators in domains which are not well monitored*: the review of practices provided in the report, shows that indicators related to patient satisfaction, healthcare workforce, completeness of insurance coverage, access to preventive care are used to a lesser extent. Indicators measuring quality of healthcare, access to co-ordinated and continuous care, professional attitude of health workers, confidence in public healthcare and health literacy are

used even less. Depending on local challenges, it may be useful to develop targeted tools to learn more about problems in access to healthcare related to these dimensions.

- *Qualitative assessments of unmet needs* at national level can help identify the nature of disadvantage in each country and the distribution of unmet need within the population. Countries can harness data from existing sources or carry out targeted periodic surveys to better understand the forgone medical needs.
- *Measures of coverage of services essential to populations that are left furthest beyond:* index indicators, specific surveys, studies, assessment grids and combination of disaggregated indicators can be used to better understand needs of people experiencing particular disadvantage. Ideally, these indicators should address a specific policy issue and draw attention to a particular outcome and measure progress attributable to the intervention /activity.

In a nutshell

The experience shows that the effectiveness of health coverage is not easily measured. Measures of the effectiveness of health coverage remain underdeveloped because data capturing the multifaceted nature of accessibility of healthcare is limited. However, the pandemic has added urgency to the need to investigate if health baskets are fit for purpose, if ways of financing healthcare are progressive and if healthcare services correspond to needs of the population. If systemic problems with accessibility are addressed, health systems would be better prepared to deal with any potential shocks in the future.

> Complementary and actionable tools of the effectiveness of health coverage can provide a more nuanced understanding of how well health systems deliver services to their populations. Such tools can contribute to building of more resilient health systems.
>
> It is crucial to ensure that tools help assess:
>
> - the adequacy of health coverage, showing if people get services they need,
> - equity, showing if the most vulnerable are protected (also financially),
> - efficiency, showing if intended results are achieved at the lowest possible costs.

Tools presented in this report have many advantages, as they:

- ensure stronger patient perspective (capturing experience and outcomes relevant to a patient), allowing the analysis of differences in covered services and goods with a degree of a granularity which does not overlook access problems as experienced by an individual;
- put health equity at the heart of the attention;
- capture various layers of vulnerability and cumulative effects of various barriers in access to healthcare;
- can reinforce the emphasis on cost-effectiveness, showing where certain outcomes require greater or fewer services and treatments or different ways of providing services, including through for example e-health solutions;
- build stronger conditions for the use of healthcare proportionate to needs and decoupled from individual income and contributions to the system;
- contribute to the change of the perception that inequalities in access to healthcare are too complex to address;
- can be used to support a comprehensive assessment of health system resilience and to identify steps to systemic transformation.

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Annexes

Annex I. Members' list

A. Members of the Expert Group on Health Systems Performance Assessment (HSPA)

Chairpersons:

- Dr Kenneth E Grech (Malta),
- Dr Andrzej Rys (European Commission)

Members:

Austria	Herwig Ostermann, Patrizia Theurer, Florian Bachner, Andrea Schmidt, Eva Kernstock.
Belgium	Pascal Meeus, Lieven De Raedt, Pol Gerits.
Bulgaria	Petko Salchev, Ivelina Georgieva, Ivian Benishev.
Croatia	Mate Car, Dubravka Teskera, Nina Boncic Mijatovic, Romana Tandara Hacek.
Cyprus	Vasos Scoutellas, Anna Demetriou.
Czechia	Tomas Troch, Katarina Sebestova.
Denmark	Mossa Al-Naggash, Laerke Ropke Nielsen.
Estonia	Ulla Raid, Eleri Lapp.
Finland	Liisa-Maria Voipio-Pulkki, Pekka Rissanen, Ilmo Keskimäki.
France	David Bernstein.
Germany	Philip Wahlster.
Greece	Georgios-Filippos Tarantilis.
Hungary	Fanni Borbás.
Ireland	Robert Mooney, Muiris O'Connor.
Italy	Modesta Visca, Maria Chiara Corti.
Latvia	Laura Boltāne.
Lithuania	Raimonda Janonienė, Daiva Dudutiene, Ilona Radvinauskiene.
Luxembourg	Françoise Berthet, Valerie Moran.
Norway	Birgitte Kalseth, Beate Margrethe Huseby.
Poland	Jacek Siwiec, Wojciech Niemczyk, Jan Olmiński, Dorota Luksza.
Portugal	Andreia Jorge Silva.
Romania	Claudia Dima, Alexandra Cucu.
Slovakia	Martin Smatana.
Slovenia	Dusan Josar, Mircha Poldrugovac, Vesna Zupancic, Robert Potisek, Denis Perko.
Spain	Elena Andradas Aragonés, Nieves Calcerrada Diaz Santos, Alicia Estirado Gomez.
Sweden	Ingrid Schmidt, Maria State, Patrik Hidefjäll.
The Netherlands	Patrick Jeurissen, Luc Hagenaars, José Van Dijk.

The OECD	Gaetan Lafortune, Guillaume Dedet.
The WHO Regional Office for Europe	Gabriele Pastorino, Ihor Perehinets.
The European Observatory on Health Systems and Policies	Josep Figueras, Jonathan Cylus, Marina Karanikolos, Stephen Thomas.

European Commission

DG Health and Food Safety (SANTE)	Maya Matthews, Philippe Roux, Filip Domański, Federico Pratellesi, Katarzyna Ptak-Bufkens.
DG Economic and Financial Affairs (ECFIN)	Santiago Alvaro Calvos Ramos, Boriana Goranova, Benedetta Martinelli.
DG Employment and Social Affairs (EMPL)	Ragnar Horn
DG Research and Innovation (RTD)	Leslie Pibouleau, Annika Stjernquist.

B. Participants of the Policy Focus Group

Chairpersons:
- Dr Kenneth E Grech (Malta),
- Dr Andrzej Rys (European Commission)

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Croatia	Romana Tandara Hacek
Cyprus	Vasos Scoutellas
Czechia	Tomáš Troch
Finland	Ilmo Keskimäki
Italy	Modesta Visca
Lithuania	Daiva Dudutiene
Luxembourg	Valerie Moran
Norway	Birgitte Kalseth
Poland	Dorota Luksza
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European Patients' Forum	Kaisa Immonen
Patient Access Partnership	Susanna Palkonen, Stanimir Hasardzhiev
European Stroke Organisation	Francesca Romana Pezzella
European Federation of Neurological Associations	Tadeusz Hawrot
Standing Committee of European Doctors	Sarada Das
Council of European Dentists	Daniela Timus

Annex II. Questionnaire: survey on national experience

Questionnaire to provide the input to the HSPA study on access to healthcare	
COUNTRY	
HSPA framework on access to healthcare	
How is the HSPA framework in relation to access to healthcare organised: who is doing the assessment how often is it carried out what is the nature of assessments on access to healthcare (stand-alone, focused on certain aspects, etc.) could you give a specific example/s of how it is used in health policies	
Scope of HSPA to assess accessibility	
Which dimensions of access to healthcare coverage are monitored through HSPA in your country: population coverage financial coverage benefits Could you, please, give some details.	
Does HSPA in your country draw from data sources, which allow identifying groups of people who fall through the cracks / face particular vulnerabilities in accessing healthcare? What sources of data do you use and what kind of groups are they: minorities (which particular ones) people living in underserved areas (which particular ones) people suffering from specific health problems / diseases / having specific clinical characteristics (which particular ones) people with certain socio-economic characteristics (age, income, gender, etc.) (which particular ones) people in new forms of work (with unstable, non-standard contracts) (which ones) other groups, please specify could you give examples of indicators used in your HSPA which provide for more granular data?	
Do HSPA methods allow getting information on people under the statutory system who are: in need of care that is not covered under the benefits package (what kind of services are problematic to get) in need of goods and services that are subject to high co-payments and /or high accumulation of co-payments or to restrictions (volume) or limitations (e.g. age): i) patients who fall outside the existing mechanisms for user charge reduction or co-payment exemptions ii) patients faced with user charges that are not taken into account by the existing mechanisms for user charge reduction or co-payment exemptions who have good financial access to care but face other access barriers: i) problems of physical availability of good quality healthcare within the statutory system ii) problems of functional capacity iii) problems of discrimination iiii) other, please, specify	
Impact of HSPA on coverage policy design and implementation	
Is HSPA in your country used to define resources allocation parameters according to epidemiology challenges and drive the supply of health services according to the demand? If yes, through which methods and how results are used?	
Do you use HSPA to draw conclusions on the impact of coverage policies on health outcomes? Please, describe in a few lines and explain how results are used.	
Do you use any aggregated / more comprehensive methods of assessing accessibility in HPSA: index indicator, other? Please, describe in a few lines and explain how results are used.	
Do you measure the impact of in-kind health benefits on distribution of resources among income groups and the effect on poverty reduction? If yes, please, describe in a few lines the methodology and explain how results are used.	
How does HSPA input to the policy decisions in other sectors affecting access to healthcare: public transport, social inclusion and poverty reduction, regional policy, etc.	

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