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Gaps in Coverage and Access in the European Union

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Highlights

Despite near-universal population coverage, significant gaps in access exist in the EU.

Groups often excluded from statutory coverage include asylum seekers and irregular residents.

Excluded or restricted services include optical treatments, dental care, physiotherapy, reproductive health services, psychotherapy and new pharmaceuticals.

Low perceived quality, long waiting times and physical distance pose barriers for many groups, especially rural residents.

Available access indicators fail to capture the underlying causes of gaps in coverage and access.

Abstract

This study identifies gaps in universal health coverage in the European Union, using a questionnaire sent to the Health Systems and Policy Monitor network of the European Observatory on Health Systems and Policies. The questionnaire was based on a conceptual framework with four access dimensions: population coverage, service coverage, cost coverage, and service access. With respect to population coverage, groups often excluded from statutory coverage include asylum seekers and irregular residents. Some countries exclude certain social-professional groups (e.g. civil servants) from statutory coverage but cover these groups under alternative schemes. In terms of service coverage, excluded or restricted services include optical treatments, dental care, physiotherapy, reproductive health services, and psychotherapy. Early access to new and expensive pharmaceuticals is a concern, especially for rare diseases and cancers. As to cost coverage, some countries introduced protective measures for vulnerable patients in the form of exemptions or ceilings from user chargers, especially for deprived groups or patients with accumulation of out-of-pocket spending. For service access, common issues are low perceived quality and long waiting times, which are exacerbated for rural residents who also face barriers from physical distance. Some groups may lack physical or mental ability to properly formulate their request for care. Currently, available indicators fail to capture the underlying causes of gaps in coverage and access.

1. Introduction

Access to health care is one of the most important performance dimensions for health systems. With a renewed focus on universal health coverage after the financial crisis reversed the progress that had been achieved in the years prior to 2009, it again features high on the political agenda and has been identified as part of the 2030 Agenda for Sustainable Development (SDG 3.8).

Around 3.2% of the EU28 population experienced unmet need for health services in 2018 (1). 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.

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.

This study explores gaps in universal health coverage in the European Union. It first develops a framework to identify gaps in coverage at a granular level across groups and areas along four access dimensions (population coverage, service coverage, cost coverage, and service access), which was used to develop a questionnaire sent to country contacts within the Health Systems and Policy Monitor network of the European Observatory on Health Systems and Policies. It then provides and discusses results of reported access gaps across the European Union along the different dimensions.

Within Europe, population coverage is generally high, although there is evidence of fragmented coverage and gaps in access across countries (2). Service coverage and benefit packages are notoriously difficult to compare, with the FP6 HEALTHBASKET project as example of evaluating the intricacies of benefit baskets across nine countries (3). Access barriers related to cost coverage often focus on financial protection and out-of-pocket (OOP) payments. Many studies in this area do not distinguish between OOP payments due to cost sharing requirements (related to cost coverage) and direct payments made for uncovered services (related to service access), in part due to inconsistent data reporting across countries (4). Furthermore, a systematic review on financial protection literature found limited analysis to inform policymakers (5).

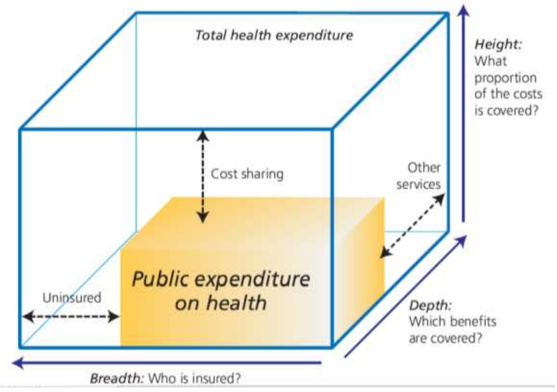
Several studies use the European Union statistics on income and living conditions (EU-SILC) data as a basis to evaluate unmet need to health care across countries (6, 7, 8) and even within countries (9, 10). The EU-SILC asks respondents whether they have experienced unmet need, and if so, the reason (11), with unmet need due to lack of affordability, waiting times and distance are categorized as “Reasons of barriers of access”. While these data touch on the cost coverage and service access dimensions of access, they do not provide information about several factors including health condition or legal and social status to have insight into the root cause for unmet need.

2. Methods

2.1 Conceptual Framework

To explore gaps in universal health coverage more systematically, our framework builds on the cube model shown in Figure 1, which comprises 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).

Figure 1. Coverage dimensions: population, service and cost

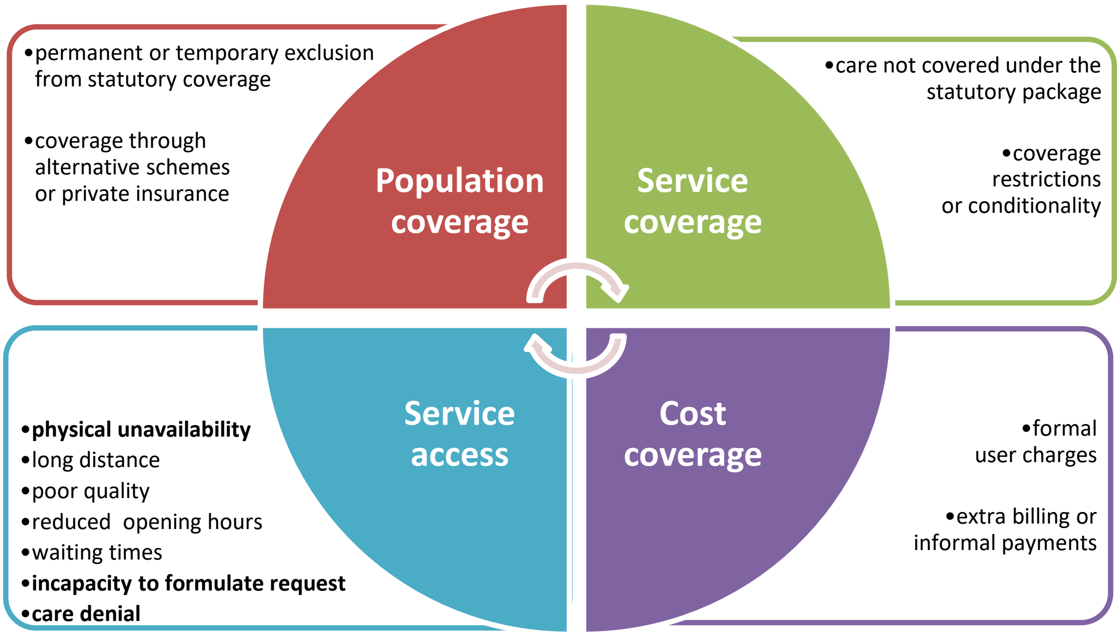


Source: Based on (12).

Figure 2 expands this framework by adding a fourth dimension of coverage, which we label <u>service access</u>. The design of the coverage in each of the above three dimensions (population, service and cost) determines the extent to which the *public* sector covers a person's health care costs, or more broadly financial access. However, other factors can hamper service access, which relate more with the *physical availability* of care, a *person's ability to obtain necessary care* or the *attitude of the provider*.

We use the four dimensions in Figure 2 to identify gaps in access and coverage. Under population coverage, we identify two groups which do not fall under statutory coverage. The first group refers to those who are permanently or temporarily excluded from statutory health coverage. The second includes those who are covered by an alternative health scheme. 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.

Figure 2. Coverage dimensions: adding service access



Source: Authors' own elaboration based on (40).

In Figure 3 we develop a decision tree to explore which groups of citizens may face particular barriers to coverage and access in each country based on the framework in Figure 2. This in turn informed the development of a questionnaire structured along the same dimensions. The decision tree starts from population coverage and then moves clockwise to the other dimensions. We use yellow shade to indicate obstacles in coverage and access, and blue shade when there are few or no obstacles to coverage and access.

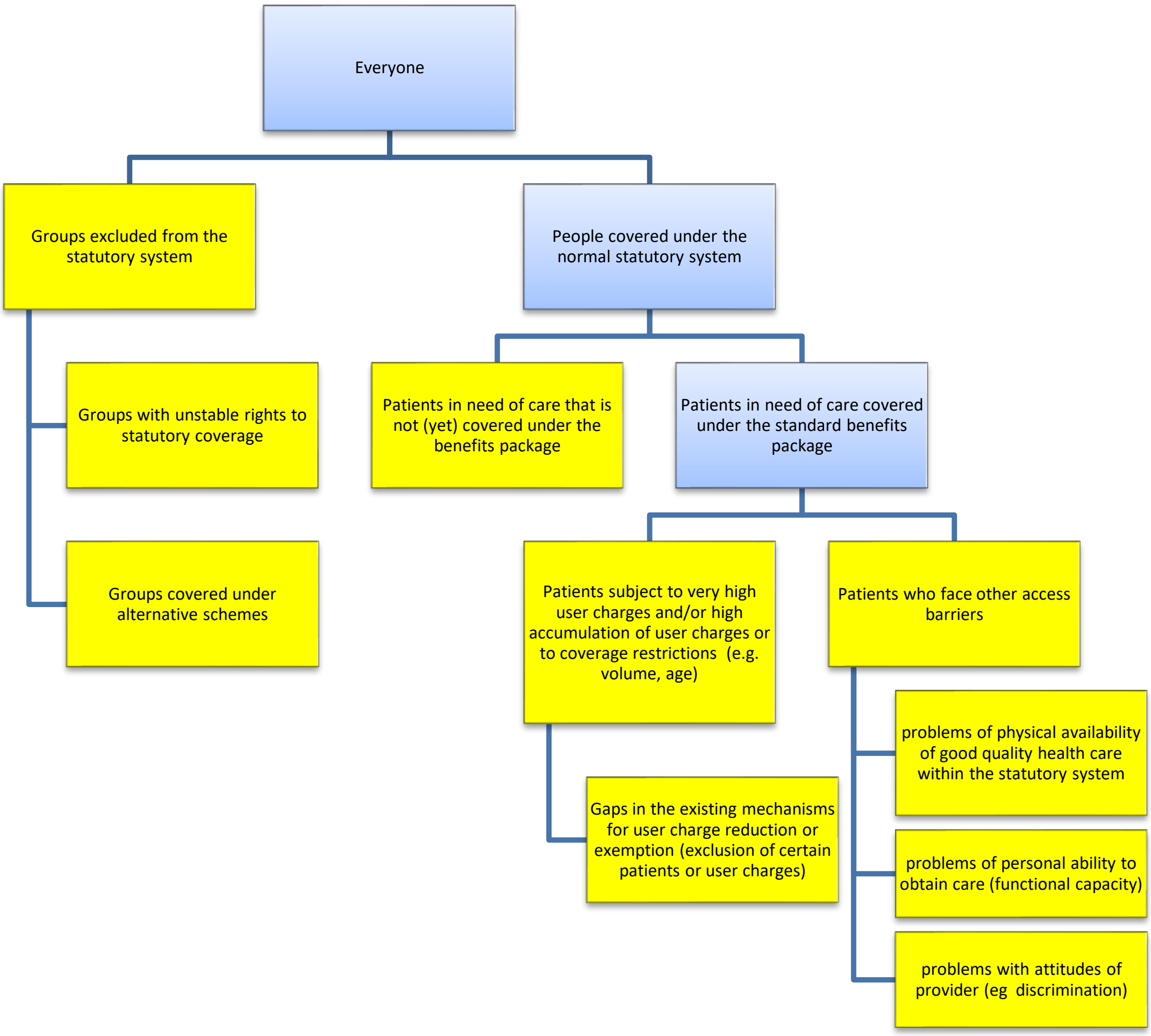
Figure 3 starts from <u>population coverage</u> and asks whether the population is covered under the statutory coverage (shaded in blue) or excluded (shaded in yellow). People can be excluded because they are either covered by alternative schemes, or because they have unstable rights which is a source of temporary or permanent exclusion.

We then focus on service coverage within the statutory system and ask whether a certain type of care is covered under the standard benefits package (shaded in blue), or not covered (in yellow), due to *restrictions* for examples if a service is not included in the health basket, or *conditionality*, for example if the service has an age restriction.

Even if people have statutory health coverage, they can still face gaps due to poor cost coverage caused by very high user charges or accumulation of smaller user charges (e.g. for patients with chronic conditions).

Finally, even if patients face low or zero user charges, they may still face gaps in service access due to problems with *physical availability* of quality services. These barriers may stem from long distances to the provider, lack of contracted providers or long waiting times, which in turn may lead some patients to purchase these services out-of-pocket from a private provider or jump the queue (if allowed), if they are able to afford them. Further, service access gaps may arise due to functional capacity and a *person's ability to obtain necessary care*; and problems with *attitudes of the provider*, such as discrimination leading for example to care denial.

Figure 3. Potential causes of gaps in access and coverage



Source: Authors’ own elaboration.

2.2 Questionnaire

In order to explore which groups of citizens may face particular access barriers, we developed a questionnaire and sent it to country experts within the Health Systems and Policy Monitor network of the European Observatory on Health Systems and Policies. We structured the survey according to the decision tree in Figure 3 along the four dimensions of population coverage, service coverage, cost coverage and service access (see Annex 1). For each of the dimensions we asked the respondents to (1) indicate who would (or is reported to) typically encounter serious access problems and specify what these problems would be; (2) add any references or links to data sources (studies, report, media coverage etc., even in national language); and (3) if possible, also provide any qualitative data (even estimates) of the number of people concerned by the described problem. We also sent the questionnaire to the European Patients Forum (EPF) for sharing it with its country member organisations. Country correspondents were invited to provide information based on studies or surveys conducted at national level, as well as reports in the media or information from health system actors. We did not provide common definitions on specific metrics but allowed respondents to use all available evidence in different formats and quality from the country.

Out of the 29 countries contacted between 5 and 23 March 2019, we received responses from all EU Member States plus Norway (Table 1). We compiled the results based on responses to the survey questions and supporting research.

Table 1. Surveyed countries

Country	**Code**	**Country**	**Code**
Austria	AT	Latvia	LV
Belgium	BE	Lithuania	LT
Bulgaria	BG	Luxembourg	LU
Croatia	HR	Malta	MT
Cyprus	CY	Netherlands	NL
Czech Republic	CZ	Norway	NO
Denmark	DK	Poland	PL
Estonia	EE	Portugal	PT
Finland	FI	Romania	RO
France	FR	Slovak Republic	SK
Germany	DE	Slovenia	SI
Greece	EL	Spain	ES
Hungary	HU	Sweden	SE
Ireland	IE	United Kingdom	UK
Italy	IT		

3. Results

3.1 Population coverage

Groups excluded from the statutory system

Statutory health systems in most surveyed countries achieve coverage for the entire population, or near-to universal coverage. However, in some countries, **considerable groups of the population are excluded** from the scope or do not have the same coverage. Smaller gaps in population coverage generally relate to imperfections in the legislation, unstable rights (e.g. change in socio-professional status, status unclear or not recognised) or non-compliance with administrative requirements or payment of contributions (e.g. defaulters).

Bulgaria has a high share of its population uninsured: about 2 million people (27.5% of the population) in 2016 (13). Around 50% are Bulgarian citizens who live abroad; 25% are permanently unemployed and experience difficulties in paying SHI contributions, and 25% could afford to pay SHI contributions but do not. The uninsured pay SHI contributions (and so renew their insurance status) only in cases of serious health problems, most often when they need hospital care (14). Individuals lose SHI coverage if they fail to pay more than three monthly contributions over three years. To renew coverage, defaulters need to settle 60 months of outstanding contributions (15). Additionally, insurance coverage requires a valid ID card, an issue that particularly affects Roma people and undocumented migrants.

In **Cyprus,** young unemployed people with low incomes have trouble meeting requirements for coverage, as Cyprus restricts access to population coverage to permanent residents and those who contributed to social insurance for at least three years. Nearly a quarter of the population above an income threshold (more than €15,400 annually for a single person) are also excluded from statutory coverage, but most of these individuals have private health insurance coverage and seek care in the private sector for which they pay high fees (16, 17).

Estonia has a high number of people who are temporarily uninsured. In November 2017, only 86% of the working-age population was insured for the whole year, and many experienced temporary uninsurance. These are mainly working-age people (up to 120,000 individuals) who are economically inactive or working abroad and not registered as unemployed or disabled, but also people with unstable employment or who are informally employed (18, 19).

Since 2007, **Hungary** has operated an online system that verifies social insurance status, which publicly-funded providers are obliged to use. If a patient does not have a valid social insurance number, the patient has to cover the costs of services either out-of-pocket or through private insurance. Around 500,000 people, or 5% of the population, have unclarified social health insurance status (20). Half of these are reported to be Hungarian citizens working abroad. Some groups of non-EU foreigners are required to voluntarily affiliate to the system for a fixed premium, but are entitled to a smaller benefit package (excluding dental care, cross-border treatment and transplantation).

In **Ireland**, people who do not hold a medical card have reduced coverage. Under the 1970 Health Act, everyone is entitled to access public hospital care, and 33% of the population with lower income (medical cardholders) can also access primary care services free of charge. The rest of the population is required to pay high charges out-of-pocket or take out private health insurance. Some patients with high medical needs can be awarded medical cards status on a discretionary basis.

In **Poland**, certain groups are not covered under the statutory health insurance system. In 2016, this accounted for 2.5 million people (6.5-7% of the population) and included self-employed on specific-task contracts (600,000), workers in the informal economy (700,000), unregistered unemployed (up to 1 million) and foreign residents without special status.

In **Romania**, Roma individuals and homeless people without identity documents are excluded from statutory coverage as they cannot register in the system. Other groups that do not contribute to SHI and remain uncovered include people working in agriculture, those employed ‘unofficially’ in the private sector, the self-employed, and the unemployed who are not registered for benefits.

In **Slovenia**, there is a lack of health insurance for marginalised populations (ethnic minorities such as Roma, undocumented migrants, and homeless people). The main issue is unclear residence status, as permanent residency is one of the eligibility criteria for compulsory health insurance. There are some initiatives to tackle this. For example, homeless people can register for permanent residence at specific institutions (e.g. Centre for Social Work) and become eligible with municipal budgets covering their insurance contributions.

Excluded groups: asylum seekers, irregular residents

The groups most frequently excluded from regular statutory coverage are **asylum seekers** (BE,DE,EE,SE) and **irregular residents** (AT,BE,BG,CY,DE,ES,FR,MT,NL,SE,FI,IT,LT). Especially for the latter group, access to care is often restricted to emergency care or urgent medical aid (AT,BE,DE,FI,IT,SE,UK). In some cases, practical problems and administrative obstacles are reported, which make access difficult (BE,DK,ES,UK). Some countries have specific mechanisms to ensure access for asylum seekers with separate funding and/or provision (BE,EE,FI,SI) and irregular residents (FR). Also, groups of citizens without identity documents or fixed residence (homeless) (BG,NO,RO) typically experience difficulties of getting included into the statutory system.

In **Belgium,** undocumented migrants face difficulties in obtaining urgent medical aid. Irregular residents (including EU citizens not fulfilling the conditions for legal stay beyond three months) are entitled to urgent medical aid covered by the municipality where they reside, but applicants may be insufficiently aware or afraid of making use of their right, and the procedures can take a long time.

France operates a state health insurance scheme for irregular migrants (*Aide Médicale d'État*) providing free coverage on the basis of uninterrupted residence of minimum three months. While about 300,000 people benefit from it, some administrative or other barriers may hamper access: it is not always easy to prove uninterrupted residence; the scheme is means-tested, so people have to prove their income falls below the threshold; the paperwork can be complicated and no translation services are offered; some migrants fear that they will be reported to the police if they visit the health insurance centres.

Malta has undocumented migrants without coverage. Persons with expired temporary visa and persons whose asylum status was rejected or who received a status in another country can always get emergency and immediately necessary care but they will be expected to pay for ongoing treatment. This is especially relevant when chronic medications are needed, such as for HIV or cancer.

Spain requires administrative procedures for non-EU migrants to access care. For migrants from countries outside the EU and countries with bilateral agreements who stay less than 90 days require a ‘report of need’ from the social services in case they need assistance within those first 90 days. This policy is implying a *de facto* administrative barrier for access, as denounced by Amnesty International and the Spanish network REDER.

Groups covered under alternative schemes

In some countries, special social-professional groups are covered under **separate alternative schemes** or referred to private insurance (DE, ES). This is most often the case for **civil servants** (AT,BG,CY,DE,EE,ES,FR,NL,RO), including military, police or railway personnel. In general, access under these schemes is equal or even better than for the general population.

In **Germany,** those above a certain income threshold and civil servants have substitutive private health insurance. While private health insurance is mandatory for civil servants, other groups with incomes above a certain threshold and self-employed can opt between statutory and private insurance. Private health insurance covers 11% of the population (21).

In **Spain,** civil servants have better access. Civil servants (MUFACE), justice staff (MUGEJU) and military (ISFAS) are covered under private alternative schemes organised by mutual health funds. Unlike other citizens covered under the National Health Service, they can opt for getting care from private providers (80% of insurees do so) and experience shorter waiting times. Yet, they have a coinsurance rate of 15%, which has not seemingly resulted in access barriers (22).

Prisoners also often have access for health services organised separately from normal statutory cover (AT,BE,DE,EE,ES,FI,LT), and instead fall under the direct authority of the Ministry of Justice. According to a 2013 report by the European Prison Observatory, healthcare services generally tend to be substandard, and are often provided by different authorities than those responsible for the general public (23).

3.2 Service coverage

Most benefits packages are reported to be comprehensive and generally include a wide range of standard services for the entire population and for groups with specific needs. The definition of service coverage varies from general (all services within the public health service) to very detailed, using a service list following defined processes. In some cases, statutory coverage can be restricted to a limited number of services, specific age groups or medical indications.

Services not covered under the standard benefits package

Services that are most often reported to be excluded or have restricted coverage from the statutory benefit package include:

- **Optical treatments** (BG,EE,ES,FR,IT,UK).

- **Dental care for adults** (IT,IE,LV,NL,NO,UK), especially **orthodontic care and dental implants** (FR,EL,ES).
- **Physiotherapy** (BG,LV,IE,NL).
- **Mental care** (BG,FR,LV) with wide differences psychotherapy coverage, including type and length of treatment. Certain groups like children face particular barriers to access (AT,PL).
- **Reproductive health services** (DK,NO,PL) and **sterility treatment** (HR,HU).
- **Services for transgender patients, including hormonal products,** are not reimbursed in some countries (FR). **Gender reassignment surgery** is also often not covered (BG,IT,LV,MT).
- Services considered less essential or effective are left out of standard benefit packages: cosmetic surgery, home nursing, speech therapy, detoxifying programmes for alcoholics and other drug addicts, accidents related to extreme sports.

Access to certain medical goods is reported to be problematic in some cases. In many countries, experimental or **very expensive new pharmaceuticals** are not systematically covered (BG,DK,EE) or their inclusion is delayed, especially for cancer patients (AT,CZ,EE,HU,LV,SK) and patients with rare diseases (AT,EE,HR,LV,PL,MT,NL). Other items not covered in the benefit package include therapeutic, optical and hearing aids; dental appliances; dietary supplements; non-compulsory vaccinations; OTC drugs.

Ireland has poor dental coverage, especially for under 6-year-olds with parents having to cover the full cost of any treatment unless it is an emergency. Children are meant to have oral health checks twice in primary school although coverage is sporadic. While 80% of adults are entitled to an annual check-up, 20% have no dental coverage at all (24). People with medical cards are only covered for an annual check-up and two fillings, which means there are high numbers of extractions.

In **Portugal**, the NHS offers limited dental coverage, and reports one of the highest unmet needs for dental care. Since 2008, dental vouchers were launched for children and young people, pregnant women, elderly people receiving social benefits, and HIV/AIDS patients. Since 2018, the NHS is developing dental care consultations in some primary health care facilities.

In **France**, access to mental health services can be problematic as coverage is focused on acute cases, with little flexibility in treatment options. Consultations with outpatient psychologists are not reimbursed for people with mild mental health problems, which may deter low-income groups. In 2016, 7 million people reported to have had a consultation for mental disorders or a prescription for psychotropic drugs.

In the **Netherlands**, there is restricted access to expensive drugs for rare diseases. From 2018 the expensive drug (Spinraza) for treatment of SMA, a rare neuromuscular disease, is covered only for children below the age of 9.5 years, whereas in other countries all patients with SMA are entitled.

In **Poland**, better coverage for rare diseases is needed, as 2.3-3 million patients with rare diseases face access problems due to high need of medical services not covered by the standard benefit package (25).

In the **Czech Republic**, there are delays in reimbursement for expensive medicines. As often reimbursement for new, innovative and hence very expensive drugs is delayed or restricted, health insurers can grant authorisation to seek treatment abroad where it is generally more expensive.

In **Denmark**, there are some restrictions on access to reproductive health services. Infertility treatment for women above 40 is not provided in public facilities. Most regions also only cover for up to three IVF treatments.

Malta removed LGBT discrimination in the definition of the benefit package. While reproductive health services have been available since 2012, amendments to the Embryo Protection Act in 2018 expanded entitlement to in-vitro fertilisation (IVF) to any individual irrespective of gender or sexual orientation.

Special protection mechanisms

Some countries have put in place **special protection mechanisms** to exceptionally allow for the reimbursement treatments that are not covered in the benefit package, usually under strict conditions.

Since 1990, **Belgium** has operated a Special Solidarity Fund for exceptional reimbursement that can reimburse medical treatments that are not covered and exceptionally expensive. This affects patients with severe illnesses, such as a rare disease, or in need of continuous and complex care. Reimbursement is set according to availability of funds.

In **Ireland**, the Long-Term Illness Scheme covers certain patients with pre-defined chronic conditions, including diabetes, epilepsy, multiple sclerosis, cystic fibrosis, Parkinson’s disease and acute leukaemia, for the costs of all listed necessary drugs and appliances.

In **Latvia**, an individual reimbursement scheme for high-cost pharmaceuticals is available under specific conditions for patients suffering from severe medical conditions, such as cancer or a rare disease. The annual reimbursement limit is €14,228.72, above which the patient is required to cover (26).

In **Romania**, the Ministry of Health has set up a special fund for treatment abroad to cover services that are not in the benefit package, but it remains limited in scope.

In the **United Kingdom**, the Cancer Drugs Fund provides a rapid and exceptional access route to cancer drugs that have not been fully approved by the National Institute for Health and Care Excellence (NICE). It covered over 74,000 patients in 2010-15 (27).

3.3 Cost coverage

Even if covered by the standard benefit package, user charges or extra billing can generate additional barriers to access (AT,BG,DE,EE,HU,LT,NL,PL,SK), especially for low-income groups, patients with accumulation of out-of-pocket spending, and patients in need of additional support arising from their medical condition (e.g. chronic conditions or mental illness). User charges tend to be higher for certain care, such as dental care (especially adults) and physiotherapy. Lack of contracted providers can be source of extra billing (AT,BE) and the reason why patients use private or non-contracted providers, e.g. dentists or psychiatrists. Delaying or forgoing treatment as a result of access barriers may worsen health outcomes and also increase costs in the future if patients will require more specialised and acute care.

In **Austria**, there are access barriers for child and adolescent mental health services. Out-of-pocket spending on mental health services for children and adolescents amounted to €324 on average per patient within 6 months for services provided by non-contracted psychiatrists and psychotherapeutic services (28).

In **Belgium**, extra billing for medical fees increased by 15% in 2016-2017 according to sickness fund data. In most of these cases, physicians did not apply the conventional tariffs negotiated between sickness funds and doctors' syndicates on which statutory reimbursement is based. The steepest increase was in dental care (27%), where only 40% of dentists applied the conventional tariffs. For patients in hospitals, private rooms can incur additional fee supplements. In 2016, the Minister of Health negotiated a special agreement with plastic surgeons to limit the so-called aesthetic supplements charged for breast reconstruction with own tissue following breast cancer.

In **France**, vulnerable groups face financial access barriers. The statutory health insurance system has cost-sharing for nearly all services. Five percent of the population is at risk of delaying or forgoing treatment, mostly people without private complementary insurance, those suffering from mental health problems, patients with multimorbidity and dependent elderly. Doctors practising in sector 2 also charge extra billing, especially psychiatrists, charging fees well above the regulated tariffs. Despite exemptions, chronic multi-morbid and dependent elderly patients can accumulate high user charges, especially in residential care.

Greece has considerably increased user charges in the statutory health system since 2010, ranging from co-payments for afternoon outpatient visits in public hospitals (€16-€72 depending on physician's location and qualification), 15% co-insurance for diagnostic tests in publicly-contracted private centres and 30% co-insurance for inpatient care in publicly-contracted private clinics (29). Patients can be informally charged under-the-table fees (€10-

€20) for care that is free-of-charge. A 25% co-insurance is levied on outpatient prescription medicines.

Special mechanisms to protect vulnerable groups

Countries have introduced measures for vulnerable groups to protect them against high user charges, mostly in the form of **exemptions**, **caps** on amount of user charges paid within a period of time (either income-related or fixed), and preferential reimbursement rates or co-pay reductions. These measures apply to specific services (e.g. prescription drugs) or all services.

Belgium has an array of protection mechanisms for vulnerable groups: preferential reimbursement rates, income-related annual maximum ceilings, third-party payer for out-patient services. Since 2013, patients with chronic conditions have lower user charge caps. While only 2% of the population benefited from preferential reimbursement rates in 2012, around 11% were eligible for it (30). For this reason, the automatic attribution of rights is currently being implemented.

The **Czech Republic** has an annual co-payment limit on prescribed medicines (CZK 5,000 or €196) for statutorily insured persons. Lower caps apply for children (<18) and elderly above 65 (CZK 1,000 or €39) and 70+ (CZK 500 or €19.6).

In **Croatia**, there are co-payment exemptions for certain groups (children under 18, severely disabled people, disabled war veterans and families of people killed in military service) and treatments (cancer, infectious disease, chronic psychiatric illness, fertility treatment and antenatal care). Croatia also has a maximum co-payments ceiling (HRK 2000, €412) per episode of care, and certain groups are eligible for state-paid complementary health insurance: low-income households, disabled, blood and organ donors and students aged over 18 (31).

Finland sets out-of-pocket payment annual ceilings for medicines and travel costs, which combined amount to €1558. While user fees for various services increased by 20-40% in 2010-2018, the ceiling remained unchanged (32). Basic social assistance by the Social Insurance Institute (Kela) and municipalities can provide additional coverage for those with low income.

In **Italy**, the most vulnerable groups are exempt from cost sharing: people aged 65+, children until age 6, unemployed, low-income patients, people with severe disabilities and prisoners. Some are exempt based on their (medical) condition: people suffering from chronic or rare diseases, HIV-positive, pregnant women. Gaps remain for middle-aged citizens with relatively low income (just above the threshold) with substantial user charges for outpatient specialist care and pharmaceuticals.

Norway has two separate annual cost-sharing ceilings. Publicly-funded health services, including primary care, have cost-sharing (except inpatient care and long-term home-based nursing care). A first ceiling (Nkr 2369 or €227) applies to treatment by physicians and psychologists, some medicines, diagnostic tests and transportation expenses. A second ceiling (Nkr 2085 or €200) applies to physiotherapy, dental treatment, accommodation at rehabilitation centres and treatment abroad.

3.4 Service access

Even in the absence of financial access barriers created by gaps in population, service or cost coverage, people may still struggle to access health care for other reasons, including physical ability, functional capacity, and attitudes of the provider.

Problems with physical availability of services

The most common problems in this area relate to **rural communities and peripheral populations** cut off from geographical access to basic health services and specialised referrals (AT,BG,CZ,DE,DK,EE,FR,HR,HU,NL,NO,PL,PT,RO,IT,FI,LT,LV,SK), and issues of quality and costs, including from travelling.

In some countries, the negative perception of quality within the statutory health system is more generalised (CY,HU,IT,PL). This is sometimes linked to **long waiting times** affecting access in general (AT,EE,HU,IT,NL,PL,SI), or specific areas like chronic illnesses (EL), mental health for children (AT,PL,MT) and dental care (MT).

In **Romania**, mobile medical units were introduced in 2018 to improve access in rural or remote areas and in areas with access limited by lack of human resources or economic factors.

In **Estonia**, access to primary care is increasingly challenging in rural areas as it is difficult to attract GPs willing to work there. People in rural areas face difficulties in accessing outpatient and inpatient specialist care due to gaps in public transport connections and costs related to the distance/transportation. Despite the existence of maximum waiting times for different types of care, targets are not met for outpatient specialist care, day surgery and inpatient care.

In **Poland**, large inequalities in access exist between regions. Certain specialities have substantially longer waiting times or are even lacking in certain regions. There is evidence of limited access to depression treatment, and to legal abortion in connection with doctors' recourse to the ‘conscience clause’.

Problems with ability to obtain necessary care

In some countries, timely access to services for **terminally ill patients** (palliative care) is an issue (AT,EL,ES,HU,LV,MT), also linked to the inability or reduced capacity of this group to express their wishes and formulate their consent to care provided. Similar concerns are reported for **elderly** patients (CY,EE,HU,MT,NL,PL,IT) especially when affected by **dementia** (BG,DE,EE,EL), patients with **mental illnesses** (BG,DE,EL,HU,LV,MT,PL) or **physically disabled** patients (DE,EL,FR,HU,IT,LV,UK). **Homeless** or deprived societal groups present concerns related to their ability to apply for care and comply with administrative procedures (AT,DE,ES,HU,IT,LV,PL,SI,UK).

In **France**, persons reporting functional limitations are less likely to have access to care (33), possibly due to limited "disability access" (34). Foreign people not speaking sufficient French may also experience difficulties, due to lack of translation services, documents not translated into other languages and the complexity of the system.

In **Lithuania**, the health insurance provides sign language interpreters and assistants for patients who are deaf and blind. However, interpreters are located in the largest cities, with limited accessibility for rural areas. Disabled patients with behavioural disorders are not able to use regular dentist services and are treated with general anaesthesia. Few institutions provide dental treatment with anaesthesia as a day surgery as required by legal regulation, leading to a limited availability of services.

Spain experiences limited availability of palliative care (in-hospital and at home) and long-term care services and providers, especially in rural areas. In 2015, 54,000 people reported not to have received the appropriate care at the end of life, in accordance with the Spanish

Society of Palliative Care (35). Although long-term care coverage of the System for the Assistance of Dependent people has increased, in January 2019, 250,368 people were estimated not to receive the benefits they had applied for, despite having their right recognized (36).

Problems with attitudes of the provider

Whereas some groups may be more difficult for providers to diagnose and treat, access to care can be hampered by a mix of factors including social stigma. Some groups are reported as being at risk of not getting coverage or care due to **occasional or perceived discrimination**: Roma population (BG,EL,HU,HR), asylum seekers (CY,DE,EL), individuals with same-sex orientation or transgender people (DE,HR,PL), homeless (EL,ES,HR), individuals with stigmatizing illnesses such as HIV/AIDs, STDs, and mental illnesses (DE,FR,HR), and irregular residents (CY,EL,ES). Groups who face social stigma can have high needs in terms of mental health support, which exacerbates the difficulties in accessing services.

In the **Slovak Republic**, marginalised communities report significantly worse health than the average population, with mortality rates three times higher and life expectancy 7 years lower than the average population.

In **Greece**, Roma population is at risk of discrimination due to the attitude of health professionals, difficulties in communication, lack of knowledge of disease prevention in this group as well as their lack of knowledge about health service rights (37). This is also the case for migrants, refugees and asylum seekers (38).

4. Discussion

In this section, we discuss key lessons learned along the four access dimensions identified in the conceptual framework and the limitations of our study.

With respect to **population coverage**, most countries surveyed report high levels of population coverage, reaching complete or nearly universal coverage. The groups most often excluded from statutory coverage are asylum seekers and irregular residents, for whom access to care is often restricted to emergency care or urgent medical aid. Smaller gaps in population coverage generally relate to imperfections in the legislation, unstable rights or non-compliance with administrative requirements or payment of contributions. They are mostly identified for citizens without identity documents or fixed residence (homeless), unemployed with no entitlement to benefits, and short-term contractors or people working in the informal economy. Several social-professional groups, such as civil servants, including military, police or railway personnel, are excluded from standard statutory coverage but covered under alternative schemes with similar or better access. Although covered by statutory coverage, prisoners' access to health services in most countries is organised separately and services tend to be substandard.

In terms of **service coverage**, most statutory benefit packages are reported to be comprehensive, covering a wide range of services. Excluded or restricted services tend to include optical treatments, adult dental care, physiotherapy, reproductive or gender health services, and psychotherapy. These results are in line with the latest evidence from the Health at a Glance 2020 report, which shows that there are differences in the extent of coverage depending on the services, and that excluded services are usually characterised by restricted service packages and higher levels of cost-sharing (39). Among medical goods, most countries identify early access to new, experimental and often very expensive pharmaceuticals as the most important point of concern, especially in relation to high-cost treatments for rare diseases and cancers. Certain countries have set up special mechanisms or relief funds for exceptional coverage outside the benefit basket.

As to **cost coverage**, patients face user charges for services that are only partially covered or provided outside the remit of the statutory contracts with providers (involving extra billing, informal or private payments). User charges tend to be higher for certain types of care, similar to the ones that are also most likely to be excluded from the benefit basket. To prevent vulnerable patients from deferring from care needed, some countries have introduced protective measures to mitigate the effect of user charges, especially for more socially deprived groups or patients with a high accumulation of out-of-pocket spending. They mainly consist of user charge exemptions, reductions or ceilings.

Even in the absence of affordability barriers, patients may struggle to **access services**. Rural residents seem to be especially affected, and face access barriers in the form of geographic distance, quality issues and costs due to travel. But long waiting times are the most important hurdle, and can be especially critical for areas like mental health care, dental care and certain chronic illnesses. Even if care is available, some groups may lack the functional ability or physical and mental strength to properly formulate their request for care. This is particularly true for terminally ill patients, frail elderly, patients with cognitive impairment (dementia) or suffering from mental illness, but it can also affect people in a socially precarious situation, like homeless, undocumented migrants or minority groups (e.g. Roma). Moreover, these groups may face or fear discrimination by the provider and as a result have their care needs denied.

As a whole, the most significant barriers for accessing health care seem to be associated with social and income status, rather than specific medical conditions. However, clinical and social vulnerability often coincide and trigger each other. Mentally ill, homeless, frail elderly, and undocumented migrant groups are more likely to face multiple layers of exclusion and complex barriers to access. There is scope to better understand the challenges these groups encounter and to work out solution through collaboration with groups that speak for or work on behalf of them.

Our study has some limitations. First, our study is based on a questionnaire filled out by country experts. This implies an element of subjectivity as they have to exercise their judgement in identifying relevant evidence and the significance of the gaps along the dimensions of our framework. Second, as in any international comparison, there is likely to be extensive variations in gaps in access and coverage also within countries across different regions, especially those where governance of the health sector is decentralised at the regional level. Lastly, the nature of the evidence does not allow direct comparisons between countries, so does not support determinations about which countries have greater or lesser challenges on the access dimensions.

5. Conclusions

Despite close to universal population coverage, the European Union has significant gaps in access along different dimensions of coverage. Health system interventions can close or reduce access gaps through a number of policy interventions such as expanding (population) coverage for vulnerable groups with higher needs if they lack adequate coverage; redefining the benefit basket (service coverage); introducing protective measures against user charges (cost coverage) for those at risk for accumulating excess out-of-pocket payments leading towards financial hardship; and managing waiting times, increasing quality, and reducing regional disparities (service access).

Our four-dimensional framework could be used in future work for countries to report quantitative and qualitative information on gaps in coverage and access more systematically and in a more granular way. In turn, this could be used to monitor progress in reducing such gaps over time, and to compare across countries. For the latter however, comparable definitions and data for the different dimensions will have to be improved or developed, for example in the context of cost sharing and out-of-pocket payments. Indeed, unmet need data from EU-SILC and EHIS could have respondents provide additional information on their legal and social status, and their health condition (e.g. by ICD chapter). Furthermore, respondents could also be asked why exactly they experience an unmet need for financial reasons. Was it because they (1) lack insurance, (2) their insurance does not cover it, or (3) cost sharing requirements are too high? Furthermore, extra questions could be considered such as whether people had an unmet need due to functional capacity (disability), discrimination or that a service is not available at all. The development of a common taxonomy of benefit baskets (as for example in the FP6 HealthBasket project) to construct an index on the comprehensiveness of benefit baskets would also support comparability of service coverage across the EU.

The study provides a framework to identify gaps along different dimensions. The severity of such gaps is likely to differ within and across countries. It was beyond the scope of the study to assess which of the gaps were more significant, or how to trade-off the gaps against each other. Future work could develop tools that support policymakers to address such trade-offs, though the answer is likely to depend on institutional and political context, in addition to economic and cultural factors.

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