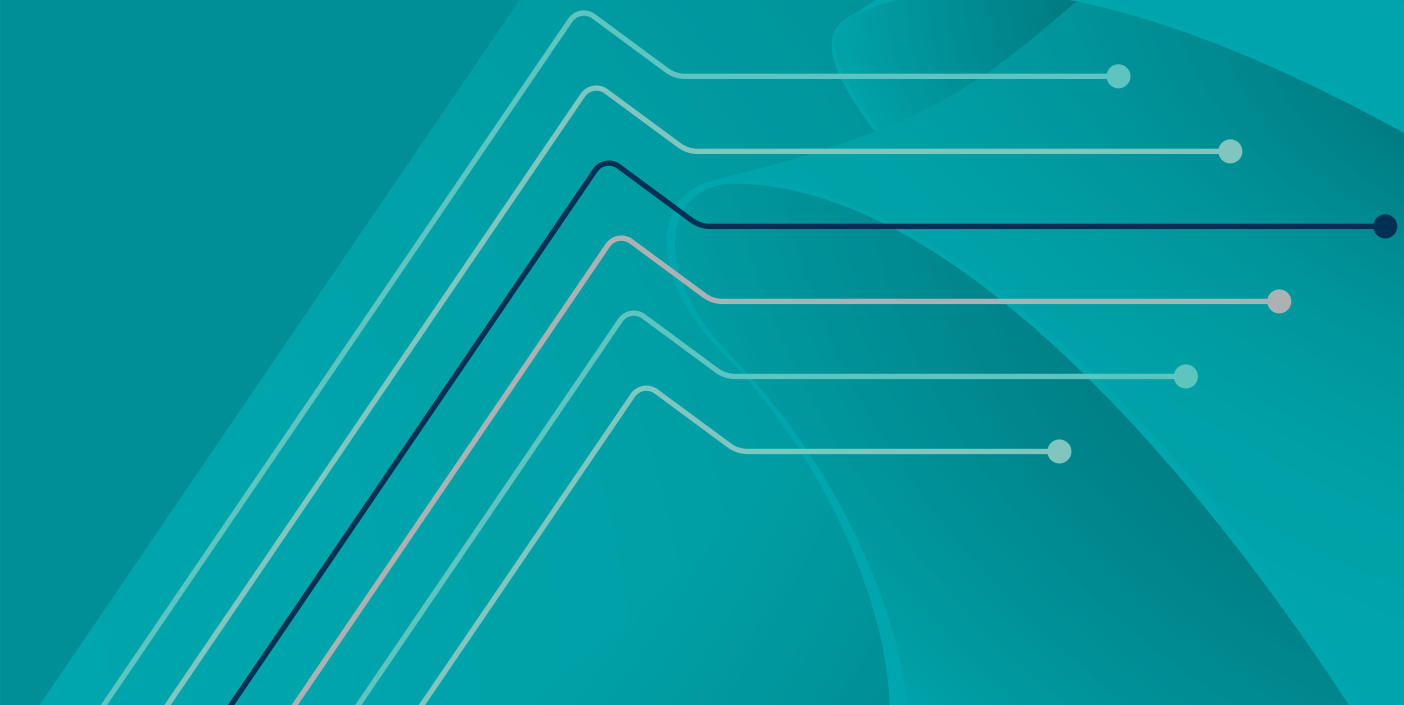
World Health Organization

European Region

Taking the pulse of quality of care and patient safety in the WHO European Region

Multidimensional analysis and future prospects



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Multidimensional analysis and future prospects

Abstract

This report presents the first cross-sectional analysis of quality of care and patient safety in the WHO European Region. It is based on an analysis of macro-level data from international sources and the results of a WHO survey conducted in 53 Member States. The findings, based on forty-six indicators, are grouped into governance and health system functions, six dimensions of quality of care and population health outcomes. Critical gaps include limited implementation of national action plans and policies for quality of care and patient safety and wide variations in indicator outcomes for dimensions of quality of care, health system functions and population health outcomes across the Region. The report's findings highlight the need for multidimensional quality improvement frameworks and a whole-system approach to quality of care to ensure sustainable, equitable and high-quality care for all.

Keywords

QUALITY OF HEALTH CARE; PATIENT SAFETY; HEALTH OUTCOMES; EVIDENCE-BASED PRACTICE

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Foreword

Dr Hans Henri P. Kluge, WHO Regional Director for Europe

Setting the foundations to strengthen quality of care and patient safety across the WHO European Region

Health systems are essential for ensuring good health outcomes, but it is clearer than ever that without a commitment to quality, universal health coverage (UHC) will remain an unfulfilled promise. While every country has a different path to UHC, all share a commitment to providing the best quality care within their systems.

No country can afford low-quality or unsafe health care as it leads to a wide range of preventable adverse health outcomes, demotivates the health and care workforce, and undermines people's trust and confidence in health systems. Moreover, it can negatively impact economic activity. Low-quality care also disproportionately affects the most vulnerable, and our commitment to leaving no one behind must be reflected in our concrete actions to improve quality and patient safety for all.

This is why we have worked on creating the first-ever regional report on quality of care and patient safety in the WHO European Region. In preparing this report, we have delved deeply into the current landscape of health-care quality and patient safety, and our findings highlight both achievements and areas that require urgent attention. Working alongside experts in quality of care and patient safety from each country has been a truly enriching experience, and I am thankful for their valuable insights and contributions.

We know that quality of care can be sustained and scaled up if it is championed by consistent leadership and supported by an enabling environment that encourages the engagement of all actors in continuous improvement, while encouraging a culture of meaningful innovation. Therefore, we have the responsibility to promote and harness quality data to track progress, identify areas for improvement, and guide our decisions and actions at each level of the health system. We are committed to fostering collaborative learning across countries in the Region, building on the shared commitment to actively closing existing quality gaps.

The challenges we face as patients today and tomorrow demand a much stronger focus on investing in and improving quality of care, including during emergencies and recovery, and amid rapid population ageing with long-term care being all the more a priority. I therefore urge health sector leaders to craft a path toward improvement without delay.

Looking ahead, the WHO Regional Office for Europe and its Office on Quality of Care and Patient Safety in Athens, whose staff are behind this report, are committed to supporting these efforts. I am optimistic that our next report, which will build on the foundational analysis set out here, will show just how much we have achieved together. Our efforts will also complement our second five-year European Programme of Work, EPW2, including a focus on health systems strengthening with the well-being of patients and the health workforce at its centre.

I congratulate and thank those involved in producing this landmark and pioneering report. You have delivered valuable, reliable and clear insights that can serve as a catalyst for countries to enhance current initiatives and design new policies aimed at improving quality of care and patient safety across our Region.

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Abbreviations

AMI:	acute myocardial infarction
AMR:	antimicrobial resistance
ASP:	antibiotic stewardship programme
AST:	antibiotic susceptibility testing
CHE:	current health expenditure
CIS:	Commonwealth of Independent States
COPD:	chronic obstructive pulmonary disease
CRD:	chronic respiratory disease
CVD:	cardiovascular disease
EHR:	electronic health record
EU13:	Member States of the European Union after May 2004
EU15:	Member States of the European Union before May 2004
E. coli:	*Escherichia coli*
FFS payments:	fee-for-service payments
GGE:	general government expenditure
GGHE-D:	domestic general government health expenditure
GP:	general practitioner
HALE:	healthy life expectancy
HCWF:	health and care workforce
KPI:	key performance indicator
MRSA:	methicillin-resistant *Staphylococcus aureus*
NCD:	noncommunicable disease
NHWA:	national health workforce account
OECD:	Organisation for Economic Cooperation and Development
PATH:	Performance Assessment Tool for Quality Improvement in Hospitals
PREMs:	patient-reported experience measures
PROMs:	patient-reported outcome measures
SEEHN:	South-eastern Europe Health Network
S. aureus:	*Staphylococcus aureus* species
TB:	tuberculosis
UHC:	universal health coverage

Executive summary

What is this report about?

This report provides a first-ever cross-sectional analysis of the current status of quality of care and patient safety in the WHO European Region. It offers insights into specific areas that need attention and investment and an overview of evidence-informed and actionable policy options to address existing quality of care and patient safety deficits across Member States. Crucially, it is accompanied by country-specific profiles which assess each country in the Region across the same dimensions.

Why did we develop this report?

Four reasons are behind this report. First, as health systems and health sector reforms must become increasingly quality-oriented in their goals, data on quality of care are paramount. The multidimensional country profiles provided in this report serve as a dashboard for countries and offer insights into indicator outcomes for different governance and health system functions (inputs), quality of care dimensions, and selected population health outcomes (outputs).

Second, a growing body of evidence points to persistent quality of care and patient safety deficits across conditions and settings, with the most vulnerable populations faring the worst. This report offers insights into specific areas that need attention and investment, and an overview of evidence-based and actionable policy recommendations to address existing deficits in countries.

Third, there has been a broadening of focus in the measurement of quality in countries beyond traditional health indicators, such as mortality and morbidity, to include measures of patient-reported experiences and outcomes. With this report, we want to underscore the importance of outcomes that matter to patients for improving patient-centred health services and health systems quality, building public health policy, and strengthening community action and supportive environments for quality of care.

Fourth, there are clear expectations from the public, civil society and media for improved transparency about the quality of health systems and health services alike. By providing a summarized yet analytical account of the state of quality of care and patient safety in the Region and individual countries, this report contributes to transparency on the functioning of health systems through a quality lens.

The concept of quality of care and methods

For the purposes of this report, quality of care was operationalized by focusing on specific quality dimensions. But as these do not exist in a vacuum, the report also considers a number of indicators related to governance structures, enabling health system functions, and related population health outcomes. In this way, the report has a tripartite structure, looking at the frameworks for quality care, the crucial role of the health system and service delivery in ensuring quality, and the quality of care and patient safety dimensions themselves. The following six dimensions of quality of care were selected: effectiveness, efficiency, people-centredness, safety, equity and access. Population health outcomes are quantifiable data points that are linked to quality of care and reflect any population's dynamic state of physical, mental and social well-being over the course of life. As such, a selection of outcomes that are particularly amenable to quality indicators were chosen as examples where improvements can be made in countries.

A total of 46 specific indicators across these areas were used to develop the regional findings and country profiles. In this way, the report takes, as its starting point, the need for whole-system quality. This demands integrated quality planning, quality control and quality improvement activities that inform a system-wide, interlinked and customer-centric strategic approach to quality.

The report is grounded in a survey conducted across all 53 Member States of the Region, and an analysis of macro-level data identified from international data repositories. The survey was a pivotal effort in assessing the implementation of national action plans and policies for quality of care and patient safety.

A limitation to the report is that it does not provide data showing trends or progressions in quality of care metrics. Subsequent reports will be able to track and analyse the trajectory and progress made over time, offering a more dynamic and longitudinal perspective that identifies trends and opportunities for improvement.

Target audience

It is hoped that patients and communities across the Region will be the ultimate beneficiaries of this report given the actionable policy options which complement the analysis. The target audience of this report is international, national and regional policy-makers responsible for designing health policies and implementing quality of care and patient safety interventions. The secondary audience is health workers, academics, communities, civil society groups, professional organizations and the private sector involved in the development, implementation and monitoring of quality of care and patient safety.

Key findings

Based on the full list of indicators (4.2 results section), organized according to the structure outlined above, this section provides a high-level snapshot of the main findings contained in the report.

Governance – national action plans and policies for quality of care and patient safety

Governance arrangements are central to establishing the parameters within which any health system functions, and they play a defining role in the quality of care provided to patients when individuals interact with the system at any level.

A scaling up of implemented national action plans for quality and patient safety, including a demonstration of learning and continuous improvement of better practices, processes and outcomes, is needed in the majority of countries.

Only one third of countries implemented both a national quality of care and patient safety action plan. The scaling up of national plans is needed as estimates suggest that around 1 in every 10 patients is harmed in health care, as many as 4 in 10 patients are harmed in primary and ambulatory settings, and at least 50% of this harm is avoidable. National action plans on quality of care and patient safety should be aligned with broader national health policy and supported by good governance, a skilled and competent health workforce, financing mechanisms, and policies for medicines, devices, and technologies and information systems that continuously monitor and learn to drive better care. They should also contain provisions for systematic and aligned activities for quality planning, control, assurance and improvement. Improving quality of care and patient safety requires a whole-system approach, with value created by implementing and investing in mutually reinforcing interventions within an integrated policy framework.

A higher number of national action plans and policies for quality of care and patient safety in countries is associated with improved population health outcomes.

Significant associations were noted between the use of action plans and policies and specific health outcomes. Such plans and policies include a quality of care action plan, patient safety action plan, antimicrobial resistance (AMR) plan, health misinformation prevention plan, accreditation systems for hospitals, and patient/public representation in national health governance. For every additional national action plan or policy used, healthy life expectancy at birth increases by 0.57 years while the probability of dying from selected noncommunicable diseases (NCDs) decreases by 1.34%. This can be explained because policy instruments for quality of care and patient safety not only largely contribute to defining needed quality improvement interventions and promote a culture for quality of care and patient safety, but also contribute positively to strengthening enabling health system functions (i.e., governance, health workforce, financing, medicines, and digital health solutions) that in turn positively contribute to improving health outcomes. To gain better insight into the complex relationship between national instruments for quality of care and patient safety and population health outcomes, multivariable regression models and longitudinal approaches are needed.

Hospital accreditation systems are implemented in only a minority of countries, hindered by a limited availability of evidence, particularly on their cost-effectiveness.

Only one third of countries have implemented a hospital accreditation plan. Country experience shows that accreditation contributes to driving continuous quality improvement in health-care institutions, but evidence on the cost-effectiveness and opportunity costs of these programmes remains scarce. This implies that further systematic learning from country experiences on the design and implementation of accreditation programmes and their linkages to quality of care is vital.

AMR plans are widely available in countries, but ample opportunities remain to combat AMR.

The majority of countries (79%) have implemented an AMR plan, but persistent disparities in AMR prevalence for *Escherichia coli* (E. coli) and methicillin-resistant *Staphylococcus aureus* (MRSA) remain across the Region. Data also show that access group antibiotics represent a mean value of 58.0% of total antibiotic consumption in the Region, with the proportion of these antibiotics ranging from 35.0% to 83.0% among individual countries. Access group antibiotics include antibiotics that have activity against a wide range of commonly encountered susceptible pathogens while also showing lower resistance potential than antibiotics in other groups. These antibiotics should be readily available in all health-care settings.

Since the surveillance of AMR in the non-EU Member States of the Region is not yet systematically implemented, regular surveillance of antibiotic consumption is a key priority to identify the potential overuse, underuse and inappropriate use of antibiotics and to identify potential targets for quality improvement interventions.

Patient or public representation in national health governance is nearly non-existent.

Patient or public representation in national health governance is nearly non-existent, with only 13% of countries using this policy mechanism. Ensuring patient and public representation is critical for collective quality improvement efforts. It enhances trust, transparency and accountability, and improves policy effectiveness, resource allocation and population health outcomes.

Health misinformation prevention plans are absent in nearly all countries.

Only four countries reported the use of a health misinformation plan. Such plans are important because they allow countries to deal effectively with infodemics during emergencies, including disease outbreaks, as well as with behaviours related to immunization adherence and NCDs.

Health system function and health service delivery indicators

Stemming from the governance structures are the actions and effects of key functions of the health system itself. Classified here as enabling factors/dimensions, these play a crucial role in the commitment to quality and patient safety in the delivery of health-care services. The findings suggest room for improvement in countries across the Region.

The scarcity of the health and care workforce (HCWF) has significant consequences for the delivery of high-quality care.

HCWF indicators show a large variability between countries in terms of the availability of general practitioners (GPs) and medical doctor and nursing personnel density. The availability of GPs ranged from 2.4 to 29.9 per 10 000 population in the Region. An even bigger variation was noted for nurses, ranging from 27.4 to 202.7 per 10 000 population. HCWF numbers affect various aspects of quality of care, through extended waiting times for appointments, surgeries and emergency care, and overall worsened health outcomes; and in cases where there are insufficient numbers, or without the needed training and supports, the impacts can be deleterious on quality outcomes. Addressing the scarcity of the HCWF also requires a fundamental debate on what is truly helping patients or, in other words, how to root out the inefficient use of caregivers, clinical inefficiencies, and overuse of services that contribute to inefficient and wasteful spending. Basically, funds which become lost due to wasteful spending cannot be invested in developing the current and future HCWF.

Robust public budgeting is a prerequisite for strategic investments in quality of care.

Data show substantial variation in public spending on health as a percentage of total public spending, ranging between 4.6% to 22.4% across countries in the Region. While the level of revenues matters, the allocation and use of these revenues are two crucial elements in supporting quality of care and effective progress toward UHC. Robust public budgeting supports better predictability of the sector's resource envelope, facilitates alignment between resources and sector priorities for quality of care, and improves execution. If the health budget is formulated according to quality-oriented goals, and the execution rules allow a certain degree of spending flexibility, budgeting will also be able to support a better achievement of results. While sufficient funding for quality of care is important, it will also be important to reconfigure payments to incentivize value for patients as opposed to paying for volume.

A limited number of countries have a national approved priority/essential medical devices list.

Data show that only 22 countries have a national list of approved priority/essential devices. As is the case with national essential medicines lists, medical devices are indispensable tools for quality health-care delivery and a national list of approved priority/essential devices facilitates decision-making for health professionals in the areas of health policy, strategic planning, health technology assessment, resource allocation, procurement, regulation and facility assessment, amongst others.

Electronic health records (EHR) are implemented in a low number of countries, jeopardizing the effective uptake of quality improvement interventions.

Less than three quarters of countries (70%) reported having implemented EHRs, with only 13% having guidelines for quality and safety in telehealth. While the need for the implementation of EHRs in health-care systems is increasingly recognized, the full integration of EHRs with health-care processes is implemented in very few countries. Investments in better technical infrastructure for digital health, interoperability, data quality and digital skills of the health workforce are needed in most countries.

Caesarean section (C-section) delivery rates show wide differences in clinical practice and reflect a limited use of evidence-based guidelines.

The proportion of C-section delivery rates showed a variation of more than 50 percentage points among countries in the Region. This variation can be attributed to a combination of factors, including medical, cultural, economic and systemic influences. One of the key issues underlying this variation is the inconsistent application of evidence-based guidelines in clinical practice.

Quality of care indicators by quality dimension

As noted earlier, the report has identified a number of key quality of care and patient safety indicators divided into six dimensions relating to: effectiveness, efficiency, people-centredness, safety, equity, and access. The findings, summarized in the following, represent the substance of the report, while also forming the basis for the multidimensional country profiles (Annex 1). When seen alongside the data related to specific population health outcomes, they suggest an imperative for action across countries.

Effectiveness and efficiency indicators highlight important disease burden from NCDs and the need for health system level action (such as through primary care to ensure quality outcomes).

Effectiveness and efficiency outcomes showed a large variability across the Region and subregions. Standardized preventable and treatable mortality both showed major room for improvement. Avoidable hospital admissions rates for both diabetes and chronic obstructive pulmonary disease (COPD) showed wide ranges across countries with median values of 112.6 and 129.3 per thousand population, respectively. These data show that many countries are lagging behind on the integration of NCD services into their health systems.

Patient safety-related indicators suggest a need for improvement with a high number of patient-reported medical mistakes.

Patient safety outcomes across the Region suggest room for improvement. Unfavourable outcomes were noted for surgical wound infection rates (ranging from 0.1% to 9.5%), post-operative pulmonary embolism rates after hip and knee replacement (median value of 260.5 cases per 100 000 population), and obstetric

trauma during vaginal delivery with instrument (ranging from 1.4 to 11.6 cases per 100 deliveries). The observed outcomes reflect poor quality of care, a lack of a patient safety culture, and possibly underlying medical errors. Our data also showed a relevant number of patient-reported medical mistakes across countries with a median value of 5.2%.

People-centredness indicators highlight important gaps in data collection on patient-reported outcome measures and experiences.

Less than one third of the countries report on people-centredness indicators. Patient-reported outcome measures (PROMs) and experiences (PREMs) have important consequences for public confidence in the health system, health-care utilization patterns, retention in care, and people's decision to bypass facilities. It is important to include PROMs and PREMs as part of a balanced set of appropriately adjusted structure, process and outcome measures.

Access and equity indicators showed high levels of unmet need in the Region and opportunities to implement equity-focused quality improvement strategies should be leveraged.

Data for access and equity outcomes showed high levels of unmet need in the Region. The share of households with catastrophic health spending ranged on average from 0.5% to 20.3%, and in the poorest quintile values varied between 0.2% and 13.8%. High levels of unmet need were also noted for health care and dental care, showing a range of, on average, 0.1% to 12.9% and 0.1% to 15.6% of the population, respectively. Vaccination against influenza and needs-standardized GP visits also showed large variation.

Aggregated data mask inequalities within countries, showing a need for local systems of data collection and an evidence-base for equity-oriented policies.

Aggregated data mask inequalities within countries, showing the need for disaggregated data by socioeconomic status, geography, ethnicity, gender, migrant/refugee status and education, amongst others. Countries can improve the granularity of their data by investing in local systems of data collection and by using risk stratification tools as part of broader population health management and quality improvement programmes. In this way, countries can generate an evidence base that is based on properly disaggregated data and use it for the development of equity-oriented policies and practices towards the progressive realization of UHC.

Western European countries report on a higher number of indicators compared to eastern European and central Asian countries.

Western European countries, in general, report on a higher number of indicators compared to eastern European and central Asian countries, which is particularly relevant for patient-reported indicators. Health sector reforms based on quality-oriented goals are conducive to the use of quality of care indicators, standardized data collection methods, enhanced data quality and timeliness, and increased data accessibility and usability.

Population health outcome indicators

Poor population health outcomes highlight the need for a life-course approach and intersectoral action taking a quality of care perspective on the health of individuals and generations.

The probability of dying from NCDs, including cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD) in people aged 30–70 years ranged from 7.9% to 28.3% across the Region with a median value of 15.2%. EU15 countries showed a median value of 10.4 while a value of 24.2 was observed for Commonwealth of Independent States (CIS) countries. Healthy life expectancy showed a difference of 11 years between the best and worst performing countries. Recognizing that risk and protective factors act interactively and cumulatively across the entirety of people's lives, it is important that NCD prevention and management, including mental health, starts in preconception and pregnancy and is sustained through all life stages. A life course approach and intersectoral action are needed, taking a quality of care perspective on the health of individuals and generations.

Policy actions

Based on the findings of the survey and towards addressing some of the challenges revealed across countries, a number of prospective actions to promote and/or ensure quality of care and patient safety emerge from the analysis.

1. Invest in whole-system quality that comprises integrated quality planning, quality control, and quality improvement activities.
2. Invest in the development of national action plans and policies for quality of care and patient safety.
3. Develop a harmonized set of indicators for measuring and continuously improving quality of care, including measures that matter most to patients.
4. Ensure patient and public representation in national health governance.
5. Establish clear, evidence-based standards for all care settings.
6. Re-design models of care around the needs and preferences of patients.
7. Invest in an HCWF with the capacity and capability to meet the demands and needs of the population for high-quality care.
8. Invest in robust public budgeting for quality of care and reconfigure payments to incentivize value in health service delivery.
9. Develop comprehensive and multistakeholder-led biotechnology sector policies to address quality and affordability for patients and health-care systems.
10. Invest in digital health solutions that support quality of care.

1

Background

Universal access to quality care without financial hardship has been a critical pillar of WHO's Regional Office for Europe's (Regional Office) European Programme of Work, 2020–2025 – "United Action for Better Health" *(1)* and the 2030 Agenda for Sustainable Development and related Sustainable Development Goals *(2)*. This means that all people and communities should have access to the high-quality health services they need – promotive, preventive, curative, rehabilitative or palliative – without incurring financial hardship *(3)*. As service use and coverage has increased in the Region, quality of care gains greater importance in improving health outcomes and societal goals *(4)*. As the Regional Office develops its newest regional strategy for 2026–2030, quality of care and patient safety remain firm commitments.

This report is the first ever to provide a cross-sectional analysis of the current status of quality of care and patient safety in the Region. A limitation to the report is it does not provide data showing trends or progressions in quality of care metrics. Subsequent reports will be able to track and analyse the trajectory and progress made over time, offering a more dynamic and longitudinal perspective.

There are four reasons why we developed this report. First, as health systems and health sector reforms must become increasingly quality-oriented in their goals, data on quality of care are paramount. The multidimensional country profiles provided in this report serve as a dashboard for countries and offer insights into indicator outcomes for different governance and health system functions (inputs), quality of care dimensions, and selected population health outcomes (outputs).

Second, a growing body of evidence points at persistent quality of care and patient safety deficits across conditions and settings, with the most vulnerable populations faring the worst. For example, poor-quality medical care is estimated to account for up to 58% of preventable deaths in low- and middle-income countries, exceeding the burden of disease attributable to a lack of access to health care. In high-income countries, estimates show that one in five patients faces an adverse and preventable event while receiving hospital care *(5)*, and the direct costs of treating patients who have been harmed during their care approaches 13% of health spending *(6)*.

Substandard care also exerts a substantial economic impact and side-effects, such as catastrophic expenditures and increases in the cost of expanding health coverage. This reports offers insights into specific areas that need attention and investment, and an overview of evidence-based and actionable policy recommendations to address existing deficits in countries.

Third, there has been a broadening of focus in the measurement of quality in countries beyond traditional health indicators, such as mortality and morbidity, to include measures of patient-reported experiences and outcomes. With this report, we want to underscore the importance of patient-reported experiences and outcomes for improving health service quality, building public health policy, and strengthening community action and supportive environments for quality of care.

Fourth, there are clear expectations from the public, civil society and media for improved transparency about the quality of health systems and health services alike. This report provides a summarized yet analytical account of the state of quality of care and patient safety in the Region and individual countries.

Considering quality of care is a universal concern, this report is relevant and valuable for a wide range of audiences. It contains insights and information beneficial to policy-makers, health and care workers, managers and regulators, patients and their advocates, and researchers – essentially anyone involved or interested in the improvement of quality of care in the Region.

2

Objectives

The report has been developed with the following objectives.

- Provide a first-of-a-kind account of the state of quality of care in the Region by presenting the data in a meaningful and comparative manner.
- Address expectations from the public, civil society and media for improved transparency about the quality of health systems.
- Propose a baseline against which progress can be measured going forward.
- Propose a series of evidence-informed and actionable policy options to address existing quality of care deficits in countries.

3

The concept of quality of care

To date, there is no single universally accepted definition of "quality" in health care *(7)*. Quality of care is a comprehensive construction that reflects the complexity inherent in any effort to improve or maximize health both in individuals and in populations. A review conducted as part of this study revealed varying definitions and dimensions across contexts, disciplinary paradigms and levels of analysis *(8–23)*. Findings show that quality of care is emerging as a longitudinal concept, a systems property affected by decisions occurring at all levels of any health-care system. Most interventions to date have focused on increasing access, improving training, instituting financial incentives, and a few other targeted efforts. By neglecting to take a holistic perspective, such interventions fail to address the underlying issue behind poor quality of care: poorly structured organizational contexts and process inefficiencies that interact not only with each other but also at multiple levels *(19)*. Whole-system quality comprises integrated quality planning, quality control, and quality improvement activities that inform a system-wide, interlinked, and customer-centric, strategic approach to quality *(24)*. This report takes the health system as its main focus and identifies the policies and actions that are needed to ensure quality of care within the system.

High-quality health systems involve the broader infrastructure and policies that enable quality of care at a systemic level. High-quality health-care systems are defined as "the ones that optimize health care in any given context by consistently delivering care that improves or maintains health outcomes, by being valued and trusted by all people, and by responding to everchanging population needs" *(25)*.

High-quality health services focus on the direct provision of care to individuals, emphasizing the quality of clinical interactions, processes, treatment outcomes, and patient-reported outcomes and experiences with care. High-quality health services are defined as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes grounded with evidence-based professional knowledge" *(26)*.

The conceptual basis of this report was informed by the global report on quality of health care, published by WHO, the World Bank, and Organisation for Economic Co-operation and Development (OECD) *(27)*, and the recent *WHO Performance Assessment Framework for Universal Health Coverage (22)*.

For the purpose of this report, a pragmatic approach was adopted to operationalize and contextualize quality of care by focusing on: (i) governance and health system functions (inputs); (ii) specific quality of care dimensions; and (iii) population health outcomes (outputs), acknowledging that these categories are not mutually exclusive.

Health system functions (inputs) are prerequisites to provide high-quality care and contribute to the overall functioning of the health system. Critical health system functions include governance, health service delivery, health workforce, financing, medicines/medical devices, and digital health. While leadership, infrastructure and consumables are also critical in the provision of high-quality care, this study considers them to be part of governance, financing, or medicines, respectively.

Quality of care dimensions are key attributes used to evaluate and ensure quality of care. For the purpose of this analysis, the following six dimensions were selected: effectiveness, efficiency, people-centredness, safety, equity, and access (Box 1). All these dimensions must merge at the point of service delivery for quality of care to occur. While some analytic frameworks for quality assessment also include timeliness, continuity and integration as attributes of quality of care, they are not included in this report because they either overlap with other quality of care dimensions or there is an absence of quantifiable indicators in international data repositories.

Box 1. Definitions of quality of care dimensions

- **Effectiveness**. The extent to which health services achieve intended outcomes at the individual, population and organizational levels.
- **Efficiency**. The extent to which health system inputs, in the form of expenditure and resources, are used to secure valued health system goals.
- **People-centredness**. The extent to which health services respond to the individual preferences, needs and values of people.
- **Safety.** The extent to which health-care processes avoid, prevent and improve adverse outcomes or injuries ensuing from the delivery of care itself.
- **Equity**. The extent to which the distribution of health care and its benefits among the population is fair, reflecting differences in needs and ability to benefit from services rather than equal access.
- **Access**. The extent to which services are made available and accessible in a timely manner without undermining financial protection.

Source: (22)

Population health outcomes (outputs) are quantifiable data points that are importantly linked to quality of care and that reflect any population's dynamic state of physical, mental and social well-being over the course of life. The accurate and reliable measurement of health outcomes enables the identification of health disparities, monitoring of trends, and evaluation of the effectiveness of quality of care improvement efforts.

While social and commercial determinants of health, individual behaviour, genetics, physical environment and climate change are interlinked with quality of care along with population health outcomes, they are not presented in this report as separate measurements.

Since quality of care is consistent with specific values, such as trust, respect, compassion, integrity, dignity, gender equality, transparency and accountability, this study considers these elements to be inherent parts of the concept of quality of care *(27, 28)*.

4

Quality of care in the WHO European Region

4.1 Methods

The methodology of the report is grounded in a WHO survey conducted in the 53 Member States of the Region and an analysis of macro-level data identified from international data repositories. An update of the data is planned for 2025.

To assess quality of care in the Region, four types of indicator clusters were developed that provided the basis for the development of individual country profiles (Annex 1). The indicator clusters are:

(i) governance (national action plans and policies for quality of care and patient safety)

(ii) health system function and health service delivery indicators

(iii) quality of care indicators by quality dimension

(iv) population health outcome indicators

Because of the multifaceted nature of quality of care, spanning many dimensions, settings and user groups, it was not possible to specify an optimum number of indicators. The country profiles, therefore, do not provide a definitive and unambiguous judgement on performance or quality in a country. Any country profile consequently needs to be treated with a degree of caution and interpreted in the context of other locally available information to get the best value from them.

4.1.1 Indicator selection criteria

The process of selecting indicators was based on a scoping literature review and the availability of indicators in major international data repositories. The selection of indicators was made by a multidisciplinary expert group established for the purpose of the study.

With the aim to have an indicator list that was informative and manageable – it must be useful to decision-makers – and with a view to highlighting issues that matter, a total of 46 indicators were adopted. Amongst the selection criteria applied, the expert group considered relevance to the disease burden in the Region and/or their potential for quality improvement in either primary or secondary care settings, validity, feasibility, meaningfulness, implications for action, and avoidance of perverse incentives. Some wider considerations also informed the selection of indicators, such as: size of the population covered; representation of important aspects of the care system (wholly or partly) within the control of care services; change detectable within suitable time frames; unambiguous interpretation; likelihood of being meaningful to users; likelihood of being meaningful to care professionals, managers and commissioners, carers and the public; reflections on the user perspective; timeliness; and the ability to assess the impact on inequalities between user groups and areas in terms of access and outcomes of care.

4.1.2 Reporting and analysis

All quantitative indicators are presented in the country profiles through the country values, along with the unweighted WHO minimum, maximum and median value, and in the results section through the unweighted subregion medians, minimum and maximum values. Qualitative indicators are presented through the country values, which are coded as “yes”, “no”, “in progress”, and “not available”. The country subregions are described in Table 1.

4.1.3 Country grouping

Country grouping (Table 1) was established to compare indicator outcomes for different parts of the Region. The grouping was based on the classification of the European Health Information Gateway *(29)*.

Table 1. Country grouping

Subregion	Countries
Commonwealth of Independent States (CIS)	Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan
Members of the European Union after May 2004 (EU13)	Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia
Members of the European Union before May 2004 (EU15: EU + United Kingdom of Great Britain and Northern Ireland)	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Kingdom of the Netherlands, Portugal, Spain, Sweden, United Kingdom
South-eastern Europe Health Network members (SEEHN)	Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, Republic of Moldova, Romania, Serbia
Other countries	Andorra, Georgia, Iceland, Monaco, Norway, San Marino, Switzerland, Türkiye, Ukraine

Indicator country profiles are provided in Annex 1. Indicator definitions, meta-data and data sources are provided in Annex 2. Data tables are provided in Annex 3, and additional detailed results are provided in Annex 4.

4.2 Results

4.2.1 Indicator cluster 1: Governance (national action plans and policies for quality of care and patient safety)

- **National quality of care plan.** Seventeen (32%) countries reported having developed a national quality of care plan, 16 (30.2%) reported that a plan was under development, and 6 (11.3%) countries reported not having a plan.
- **National patient safety plan.** Seventeen (32%) countries reported having developed a national patient safety plan, 15 (28.3%) countries were in the phase of developing a plan, and 8 (15.1%) countries did not have a plan.
- **Accreditation system for hospitals.** Nineteen (35.9%) countries reported having implemented an accreditation system for hospitals, while 14 (26.4%) reported that these systems were under development.
- **National AMR plan.** National AMR plans are implemented in 42 (79%) countries.
- **Mechanism for public representation in health governance.** Only seven (13%) countries reported having implemented mechanisms for public representation in health governance.
- **Misinformation prevention plan.** Four countries (7.6%) reported to have implemented a health misinformation prevention plan, while for more than half of the countries (50.9%) data were not available.

An overview of national plans and strategies for quality of care and patient safety is provided in Table 2.

Table 2. Overview of national action plans and policies for quality of care and patient safety

Country	National quality of care plan	National patient safety plan	National antimicrobial resistance plan	Health misinformation prevention plan	Accreditation systems for hospitals	Patient/ public representation in national health governance
Albania						
Andorra						
Armenia						
Austria						
Azerbaijan						
Belarus						
Belgium						
Bosnia and Herzegovina						
Bulgaria						
Croatia						
Cyprus						
Czechia						
Denmark						
Estonia						
Finland						
France						
Georgia						
Germany						
Greece						
Hungary						
Iceland						
Ireland						
Israel						
Italy						
Kazakhstan						
Kyrgyzstan						
Latvia						
Lithuania						
Luxembourg						
Malta						
Monaco						
Montenegro						

Country	National quality of care plan	National patient safety plan	National antimicrobial resistance plan	Health misinformation prevention plan	Accreditation systems for hospitals	Patient/ public representation in national health governance
Netherlands (Kingdom of the)						
North Macedonia						
Norway						
Poland						
Portugal						
Republic of Moldova						
Romania						
Russian Federation						
San Marino						
Serbia						
Slovakia						
Slovenia						
Spain						
Sweden						
Switzerland						
Tajikistan						
Türkiye						
Turkmenistan						
Ukraine						
United Kingdom						
Uzbekistan						

Legend: Yes Yes, in progress No No data

An overview of the indicator aggregates for cluster 1 for the subregions is provided in Table 3.

Table 3. Indicator aggregates for indicator cluster 1: Governance – national action plans and policies for quality and patient safety

Indicator cluster 1	Definition	Yes (N)	Yes (%)	No (N)	No (%)	In progress (N)	In progress (%)	N/A (N)	N/A (%)	Total (N)
Governance	**National quality of care plan**	17.0	32	6.0	11.3	16.0	30.9	14.0	26.4	53
	National patient safety plan	17.0	32	8.0	15.1	15.0	28.3	13.0	24.5	53
	Accreditation systems for hospitals	19.0	35.9	4.0	7.5	14.0	26.4	16.0	30.2	53
	National antimicrobial resistance plan	42.0	79.2	1.0	1.9	7.0	13.2	3.0	5.7	53
	Patient/public representation in national health governance	7.0	13.3	8.0	15.1	22.0	41.5	16.0	30.1	53
	Health misinformation prevention plan	4.0	7.6	15.0	28.3	7.0	13.2	27.0	50.9	53

Note: N: number; N/A (N): number of Member States for which it is not applicable.

4.2.2 Indicator cluster 2: Health system function and health service delivery indicators

Health and care workforce (HCWF)

- **General practitioners per 10 000 population**

  The median value for GPs in the Region was found to be 8.0, ranging from 2.4 to 29.9 GPs per 10 000 population. The highest median number was noted for EU15 countries (11.2), with CIS countries showing the lowest number (5.0). Data were retrieved for 47 (88.7%) of the countries.

- **Medical doctors per 10 000 population**

  The median value for medical doctors in the Region was found to be 36.2, ranging from 18.8 to 88.8 per 10 000 population. EU15 countries showed the highest median number (43.5), with SEEHN countries showing the lowest (29.6). Data were retrieved for all countries (n=53, 100%).

- **Nursing personnel per 10 000 population**

  The median value for nursing personnel in the Region was found to be 65.0, ranging from 27.4 to 202.7 per 10 000 population. EU15 countries showed the highest median number (104.5), while CIS countries showed the lowest (53.4). Data were retrieved for all countries (n=53, 100%).

Financing

- **Public spending on health as % of total public spending**

  Public spending on health as % of total public spending (estimates) ranged between 4.6% and 22.4%, showing a median value of 14.0% across the Region. Data were retrieved for all countries (n=53, 100%).

- **Public spending on health as % of GDP**

  Public spending on health as % of GDP (estimates) ranged from 0.9% to 10.3% in the Region, with a median value of 5.7%. A median value of 2.8% was observed for CIS countries, which was lower compared to other subregions showing median values of 6.2% for EU13, 8.0% for EU15, and 5.4% in SEEHN countries. Data were retrieved for all countries (n=53, 100%).

- **Out-of-pocket payments as % of current spending on health**

  The median out-of-pocket payments as a percentage of current spending on health (estimate) was 21.9%, ranging from 6.9% to 78.7% across the Region. Subregional differences of approximately 35 percentage points were noted, with a median value of 50.5% for CIS countries and 14.4% in EU15 countries. Data were retrieved for all countries (n=53, 100%).

Medicines

- **Antibiotic consumption**

  Access group antibiotics represented a mean value of 58.0% of the total antibiotic consumption in the Region, with the proportion ranging from 35.0% to 83.0%. Access group antibiotics include antibiotics that have activity against a wide range of commonly encountered susceptible pathogens while also showing lower resistance potential than antibiotics in other groups.

  Forty-eight (90.6%) of the countries provided data on the European Health Information Gateway and, of those, EU countries showed a median value close to 60% (EU13 median=60.0% and EU15 median=65.0%). CIS (median=49.0%) and SEEHN (44.0%) countries showed lower antibiotic consumption median values.

- **National list of approved priority/essential medical devices**

  Twenty-two countries (41.5%) have a national list of approved priority/essential devices and six (11.3%) have a list in a recommendation format only. Twenty-one (39.6%) of the countries do not have a national list of medical devices, and for four (7.5%) countries, data could not be retrieved (Table 4).

Digital health

- **National EHRs**

  Thirty-seven (69.8%) of the countries reported to have a national EHR system, 8 (15.1%) did not have such a system, and data were not available for two countries (3.8%) (Table 4).

- **Quality and safety in telehealth guidelines**

  Seven (13%) of the countries included quality and safety in telehealth guidelines. Twenty (37.7%) of the countries reported not to have data, and nine (17%) did not integrate quality of care or patient safety in telehealth guidelines (Table 4).

Table 4. Overview of digital health and medicines policies

Country	Health system functions: Digital health		Medicines
	National electronic health record system	Quality and safety in telehealth guidelines	National list of approved priority/ essential medical devices
Albania			
Andorra			
Armenia			
Austria			
Azerbaijan			
Belarus			
Belgium			
Bosnia and Herzegovina			
Bulgaria			
Croatia			
Cyprus			
Czechia			
Denmark			
Estonia			
Finland			
France			
Georgia			
Germany			
Greece			
Hungary			
Iceland			
Ireland			
Israel			
Italy			
Kazakhstan			
Kyrgyzstan			
Latvia			
Lithuania			
Luxembourg			
Malta			
Monaco			
Montenegro			
Netherlands (Kingdom of the)			

Country	Health system functions: Digital health		Medicines
	National electronic health record system	Quality and safety in telehealth guidelines	National list of approved priority/ essential medical devices
North Macedonia			
Norway			
Poland			
Portugal			
Republic of Moldova			
Romania			
Russian Federation			
San Marino			
Serbia			
Slovakia			
Slovenia			
Spain			
Sweden			
Switzerland			
Tajikistan			
Türkiye			
Turkmenistan			
Ukraine			
United Kingdom			
Uzbekistan			

Legend: Yes Yes, in progress No No data

Health service delivery

- **Cervical cancer screening**

  Screening coverage estimates for cervical cancer ranged between 3.9% (minimum Region point estimate) and 78.5% (maximum Region point estimate) for the eligible population, with a median value of 54.8%. The highest subregion median was for the EU15 (59.1%). Data were retrieved for 25 (47.2%) of the countries.

- **Colorectal cancer screening**

  Screening coverage estimates for colorectal cancer ranged between 2.8% (minimum Region point estimate) and 79.4% (maximum Region point estimate) for the eligible population, with a median value of 38.6%. The highest subregion median was found for SEEHN countries (64.2%). Data were retrieved for 17 (32.1%) of the countries.

- **Tuberculosis treatment coverage**

  Tuberculosis treatment coverage varied from 50.0% to 100% in the Region, with a median coverage of 87.0%. The highest median coverage was noted for EU13 and EU15 countries (87%), with the lowest coverage for CIS countries (63.5%). Data were retrieved for all countries (n=53, 100%).

- **Births by caesarean section (C-section) as % of all live births**

  The proportion of C-section deliveries varied from 4.0% to 56.9% across the Region, with a median value of 24.0%. The EU13 subregion showed the highest proportion of C-sections with a median of 30.3% while the CIS subregion showed the lowest, with a median of 14.2%. Data were retrieved from 51 (96.2%) of the countries.

- **Percentage of isolates with resistance phenotype – E. coli/aminopenicillin**

  The percentage of isolates with resistance phenotype for E. coli/aminopenicillin ranged from 31.7% to 96.3%, with a median value of 56.9%. Data were retrieved for 39 (73.6%) of the countries.

- **Percentage of isolates with resistance phenotype – S. aureus/MRSA, antibiotic susceptibility testing (AST) results for cefoxitin**

  The percentage of isolates with resistance phenotype for S. aureus/cefoxitin ranged from 0.9% to 43.4%, with a median value of 15.9%. Data were retrieved for 42 (79.2%) of the countries.

An overview of the indicator aggregates for cluster 2 for the subregions is provided in Table 5.

Table 5. Indicator aggregates for indicator cluster 2: Health system function and health service delivery indicators

Indicator cluster 2	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
Health and care workforce	**General practitioners per 10 000 population**	2.4	29.9	8.0	7.7	11.2	5.0	7.3	47.0	88.7
	Medical doctors per 10 000 population	18.8	88.8	36.2	35.5	43.5	31.1	29.6	53.0	100.0
	Nursing personnel per 10 000 population	27.4	202.7	65.0	65.0	104.5	53.4	56.4	53.0	100.0
Financing	**Public spending on health as % of total public spending**	4.6	22.4	14.0	14.0	15.6	9.3	13.2	53.0	100.0
	Public spending on health as % of GDP	0.9	10.3	5.7	6.2	8.0	2.8	5.4	53.0	100.0
	Out-of-pocket payments as % of current spending on health	6.9	78.7	21.9	20.9	14.4	50.5	35.1	53.0	100.0
Medicines	**Antibiotic consumption, %**	35.0	83.0	58.0	60.0	65.0	49.0	44.0	48.0	90.6

Indicator cluster 2	Definition	Yes (N)	Yes (%)	No (N)	No (%)	Yes, recommendation (N)	Yes, recommendation (%)	N/A (N)	N/A (%)	Total (N)
Medicines	**National list of approved priority/ essential medical devices**	22.0	41.5	21.0	39.6	6.0	11.3	4.0	7.5	53

Indicator cluster 2	Definition	Yes (N)	Yes (%)	No (N)	No (%)	In progress (N)	In progress (%)	N/A (N)	N/A (%)	Total (N)
Digital health	**National electronic health record system**	37.0	69.8	8.0	15.1	6	11.3	2.0	3.8	53
	Quality and safety in telehealth guidelines	7.0	13.2	9.0	17	17	32	20.0	37.7	53

Indicator cluster 2	Definition	WHO Minimum	WHO Maximum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
Health Service delivery	**Cervical cancer screening, %**	3.9	78.5	54.8	39.8	59.1	n/a	13.4	25.0	47.2
	Colorectal cancer screening, %	2.8	79.4	38.6	26.9	44.1	n/a	64.2	17.0	32.1
	Tuberculosis treatment coverage, %	50.0	100.0	87.0	87.0	87.0	63.5	79.0	53.0	100.0
	Births by caesarean section as % of all live births	4.0	56.9	24.0	30.3	27.3	14.2	24.9	51.0	96.2
	Percentage of isolates with resistance phenotype – E. coli/ aminopenicillin	31.7	96.3	56.9	57.1	52.7	75.6	71.0	39.0	73.6
	Percentage of isolates with resistance phenotype – S. aureus/ MRSA, AST results for cefoxitin	0.9	43.4	15.9	16.5	5.2	25.2	21.7	42.0	79.2

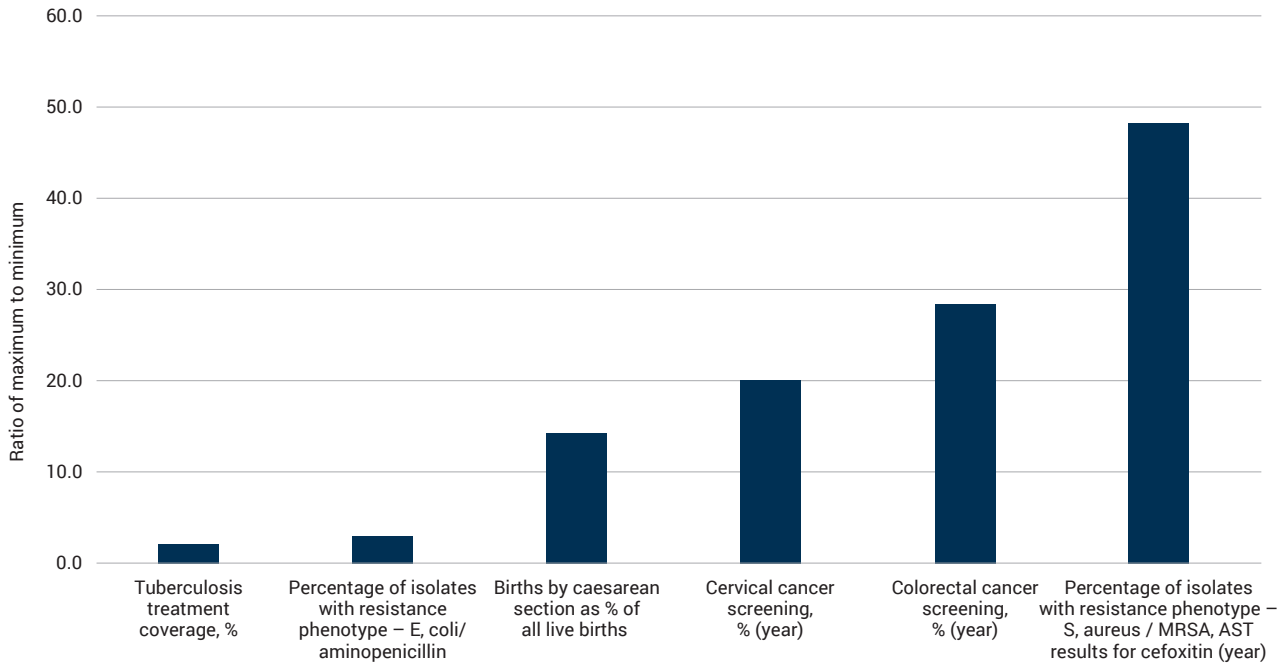
Note: AST: antibiotic susceptibility testing; CIS: Commonwealth of Independent States; EU13: Member States of the European Union after May 2004; EU15:Member States of the European Union before May 2004; GDP: gross domestic product; MRSA: methicillin-resistant *Staphylococcus aureus*; SEEHN: South-eastern Europe Health Network; N: number

The ratios of maximum to minimum values for health service delivery indicators are shown in Fig. 1. The highest variability is observed in the percentage of isolates with resistance phenotype - S. aureus/MRSA, AST results for cefoxitin, where the maximum value is nearly 50 times higher than the minimum.

For cancer screening indicators, the variability is more moderate, showing ratios for cervical and colorectal cancer screening of 20 and 28, respectively.

Lower variability is observed in about 30% (2 out of 6) of these indicators, where the maximum to minimum ratio is less than 3. This includes Tuberculosis treatment coverage and Percentage of isolates with resistance phenotype - E. coli/aminopenicillin.

Fig. 1. Ratio of maximum to minimum values for health service delivery indicators



4.2.3 Indicator cluster 3: Quality of care indicators by quality dimension

Effectiveness quality dimension

- **Standardized preventable and treatable mortality**

  The median standardized preventable mortality rate for the Region was 164.1 (ranging from 110.8 to 460.0). The highest point estimates were observed for SEEHN countries (440.1) and for the EU13 subregion (335.9), showing values of more than double the point estimates of EU15 countries (148.7).

  The median standardized treatable mortality rate for the Region was 78.4 (ranging from 46.1 to 254.7). The highest point estimates were observed for the SEEHN (225.1) and EU13 (145.9) subregions, showing values far above the point estimate of EU15 countries (64.4). A total of 33 countries (62.3%) reported on the indicator.

- **Thirty-day mortality after hospital admission for acute myocardial infarction (AMI)**

  Seen as a sentinel tracer, data on thirty-day mortality after hospital admission for AMI showed a median value of 8.0, and a range of 3.2 to 17.9. Data were retrieved for approximately 40% of the countries.

Efficiency quality dimension

- **Average length of stay, all hospitals, days**

  The average length of stay showed a median value of 7.9 days for the Region, with a range of 4.0 to 17.7 days. The differences between the subregion medians were negligible, with CIS countries showing the highest median value (8.3) and SEEHN countries the lowest (7.3). A total of 52 countries (98.1%) reported on the indicator.

- **One-year all-cause readmission or mortality after discharge from ischemic stroke, rate**

  The median one-year all-cause readmission or mortality rate after discharge from ischemic stroke was 40.9 (crude rate per 100 people) in the Region, ranging from 35.0 to 53.2. Similar point estimates were observed for the EU13 and EU15 countries showing medians of 44.6 and 39.2, respectively. Data were available only for eight (15.1%) of the countries.

- **Avoidable hospital admissions – COPD, rate**

  The rate of avoidable hospital admissions for COPD (number of hospital admissions with a primary diagnosis of COPD per 100 000 population) ranged from 38.6 to 386.2 (median=129.3). EU13 countries reported the lowest median value in the Region (95.5), while SEEHN countries reported the highest (154.6). Data were available for 27 (50.9%) of the countries.

- **Avoidable hospital admissions – diabetes, rate**

  The rate for avoidable hospital admissions for diabetes in the Region ranged from 37.1 to 221.9 (number of hospital admissions with a primary diagnosis of diabetes per 100 000 population), with a median value of 112.6. EU15 countries showed the lowest median value (112.1), with SEEHN countries showing the highest (151.4). Data were available for 27 (50.9%) of the countries.

Patient safety quality dimension

- **Patients reporting a medical mistake**

  A median of 5.2% of the population reported having experienced a medical mistake when health-care services were received, ranging from 3.0% to 12.6% in the Region. EU15 and EU13 subregion medians were 4.1% and 7.1%, respectively. Data were retrieved for only nine (17.0%) of the countries.

- **Surgical wound infection rate, all operations**

  A median surgical wound infection rate of 0.5% was observed for all operations, ranging from 0.1% to 9.5% in the Region. Subregion median values were equal to or below 1.0%. Data were retrieved for 28 (52.8%) of the countries.

- **Pulmonary embolism after hip and knee replacement**

  A median value of 260.5 cases of deep vein thrombosis per 100 000 population was observed, showing a range of 21.4 to 846.2 cases. The SEEHN subregion demonstrated the highest median value (318.3) and EU13 countries showed the lowest (127.3). Twenty (37.7%) of the countries reported on this indicator.

- **Obstetric trauma, vaginal delivery with instrument**

  The median value for obstetric trauma during vaginal delivery with instrument was 4.5 per 100 instrument-assisted vaginal deliveries, ranging from 1.4 to 11.6 cases. The median point estimate for the SEEHN subregion was 1.5, which is less than half of the median reported for EU13 (3.8) and EU15 (4.0) countries. Twenty-three (43.4%) of the countries reported on this indicator.

People-centredness quality dimension

- **Doctor spending enough time with patients during consultation**

  A median value of 86.6% of people reported that their doctor spent enough time with them during medical consultations, showing a point estimate ranging from 69.0% to 97.5%. In 14 countries (26.4%) reporting on this indicator, all subregion medians were above 80%.

- **Doctor providing easy-to-understand explanations**

  A median of 93.5% of people reported that their doctor provided easy-to-understand explanations during medical consultations, showing a point estimate ranging from 79.0% to 97.7%. In 15 countries (28.3%) reporting on this indicator, all subregion medians were above 90%.

- **Doctor involving patient in decisions about care**

  A median of 84.8% of people reported their doctor involved them in decisions about their care, showing a point estimate ranging from 61.5% to 95.6%. In 16 countries (30.2%) reporting on this indicator, all subregion medians were above 80%.

Equity quality dimension

- **Vaccination against influenza on average and in the poorest quintile**

  A median value of 16.4% was noted in people who reported to have been vaccinated against influenza, ranging from 2.0% to 38.1%. The median percentage for people in the poorest income quintile was 12.9%, ranging from 1.1% to 35.7%. The highest self-reported vaccination rates were noted in EU15 countries showing a median of 19.2% on average, and 15.6% in the poorest quintile. Data were retrieved for 31 (58.5%) of the countries.

- **Needs-standardized GP visit in the richest and poorest quintile**

  The point estimates amongst the people in the richest and the poorest quintile did not show major differences; the median, minimum and maximum values for the richest quintiles were 3.6, 2.1, 5.8, and for the poorest quintile 4.0, 2.2, 5.3, respectively. Data were retrieved for 12 (22.6%) of the countries.

Access quality dimension

- **Share of households with catastrophic health spending on average and in the poorest quintile**

  Data on the share of households with catastrophic health spending ranged on average from 0.5% to 20.3% in the Region, with a median value of 6.1%. In the poorest quintile, values varied between 0.2% and 13.8%, with a median value of 3.7%. CIS countries showed the highest point estimate of catastrophic health spending on average (16.0%) and 7.6% in the poorest quintile. EU15 countries showed the lowest point estimate on average (2.5%) and 1.8% in the poorest quintile.

Overall, 40 countries (75.5%) reported on the indicator.

- **Share of the population with unmet need for health care on average and in the poorest quintile**

  Data showed that on average between 0.1% and 12.9% of the population reported unmet needs for health care, with a median value of 2.4% in the Region. In the poorest quintile these data varied from 0.2% to 23.0%, with a median of 4.0%. Minor differences were noted when comparing subregion median values that did not exceed three percentage points. Overall, 36 countries (67.9%) reported on the indicator.

- **Share of the population with unmet need for dental care on average and in the poorest quintile**

  Data showed that on average between 0.1% to 15.6% of the population reported unmet needs for dental care, with a median value of 2.2% in the Region. In the poorest income quintile, data ranged from 0.3% to 27.1%, with a median value of 4.3%. EU15 countries showed the highest median values (3.0%) for both the overall population and for the poorest income quintile (6.6%). Overall, 36 countries (67.9%) reported on the indicator.

An overview of the indicator aggregates for cluster 3 for the subregions is provided in Table 6.

Table 6. Indicator aggregates for indicator cluster 3: Quality of care indicators by quality dimension

Indicator cluster 3	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
Effectiveness	**Standardized preventable mortality, rate**	110.8	460.0	164.1	335.9	148.7	n/a	440.1	33.0	62.3
	Standardized treatable mortality, rate	46.1	254.7	78.4	145.9	64.4	n/a	225.1	33.0	62.3
	Thirty-day mortality after hospital admission for AMI, rate	3.2	17.9	8.0	12.9	7.0	n/a	8.1	20.0	37.7
Efficiency	**Average length of stay, all hospitals, days**	4.0	17.7	7.9	7.6	8.1	8.3	7.3	52.0	98.1
	One-year all-cause readmission or mortality after discharge from ischemic stroke, rate	35.0	53.2	40.9	44.6	39.2	n/a	n/a	8.0	15.1
	Avoidable hospital admissions – COPD, rate	38.6	386.2	129.3	95.5	175.7	n/a	154.6	27.0	50.9
	Avoidable hospital admissions – diabetes, rate	37.1	221.9	112.6	141.3	112.1	n/a	151.4	27.0	50.9
Patient safety	**Patients reporting a medical mistake, %**	3.0	12.6	5.2	7.1	4.1	n/a	n/a	9.0	17.0
	Surgical wound infection rate, all operations, %	0.1	9.5	0.5	0.5	1.0	0.1	0.5	28.0	52.8
	Pulmonary embolism after hip and knee replacement, rate	21.4	846.2	260.5	127.3	293.6	n/a	318.3	20.0	37.7
	Obstetric trauma, vaginal delivery with instrument, rate	1.4	11.6	4.5	3.8	4.0	n/a	1.5	23.0	43.4

Indicator cluster 3	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
People-centredness	**Doctor spending enough time with patients during consultation, %**	69.0	97.5	86.6	82.6	89.7	n/a	96.1	14.0	26.4
	Doctor providing easy-to-understand explanations, %	79.0	97.7	93.5	91.9	94.8	n/a	97.5	15.0	28.3
	Doctor involving patient in decisions about care, %	61.5	95.6	84.8	83.1	89.8	n/a	84.1	16.0	30.2
Equity	**Vaccination against influenza on average and in the poorest quintile, %**	2.0	38.1	16.4	7.1	19.2	n/a	4.9	31.0	58.5
	poorest quintile values	1.1	35.7	12.9	7.0	15.6	n/a	4.8	31.0	58.5
	Needs-standardized GP visit in the richest and in the poorest quintile, mean number	2.1	5.8	3.6	n/a	3.5	n/a	n/a	12.0	22.6
	poorest quintile values	2.2	5.3	4.0	n/a	4.0	n/a	n/a	12.0	22.6
Access	**Share of households with catastrophic health spending on average and in the poorest quintile, %**	0.5	20.3	6.1	7.2	2.5	16.0	11.7	40.0	75.5
	(poorest quintile values)	0.2	13.8	3.7	4.7	1.8	7.6	7.0	40.0	75.5
	Share of the population with unmet need for health care on average and in the poorest quintile, %	0.1	12.9	2.4	3.2	2.0	n/a	2.9	36.0	67.9
	(poorest quintile values)	0.2	23.0	4.0	3.9	3.5	n/a	5.1	36.0	67.9

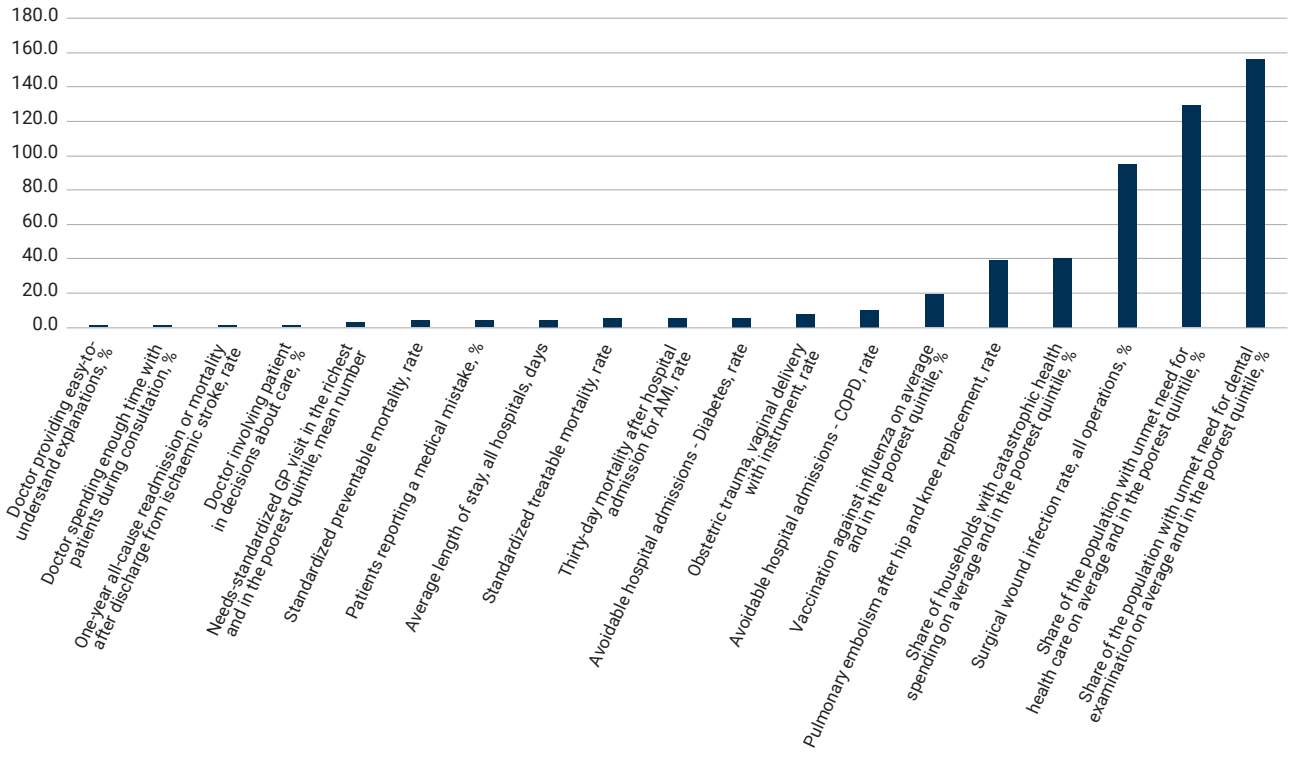
Indicator cluster 3	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
	Share of the population with unmet need for dental examination on average and in the poorest quintile, %	0.1	15.6	2.2	1.9	3.0	n/a	2.0	36.0	67.9
	(poorest quintile values)	0.3	27.1	4.3	3.4	6.6	n/a	4.6	36.0	67.9

Note: AMI: acute myocardial infarction; AST: antibiotic susceptibility testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; EU13: Member States of the European Union after May 2004; EU15:Member States of the European Union before May 2004; MRSA: methicillin-resistant Staphylococcus aureus; SEEHN: South-eastern Europe Health Network; N: number.

The ratios of maximum to minimum values for the quality of care indicators are shown in Fig. 2. The greatest variability is observed in the proportion of the population with unmet need for dental care, followed by the proportion of the population with unmet need for health care, both of which exceed a ratio of 100. As the maximum values are more than 100 times higher than the minimum values, this indicates a significant disparity in these indicators.

In contrast, approximately 26% (5 out of 19) of these indicators show less variability, with the ratio of maximum to minimum being less than 3. Examples include one-year all-cause readmission or mortality after discharge for ischaemic stroke and needs-standardized GP visits, which show relatively consistent values with minimal disparity between the highest and lowest values for these indicators.

Fig. 2. Ratio of maximum to minimum values for quality of care indicators



Western European countries in the EU13 and EU15 reported on a larger number of indicators than eastern European and central Asian countries (Fig. 3 and 4).

Fig. 3. Intraregional comparison of quality of care indicators usage, per dimension across subregions (%)

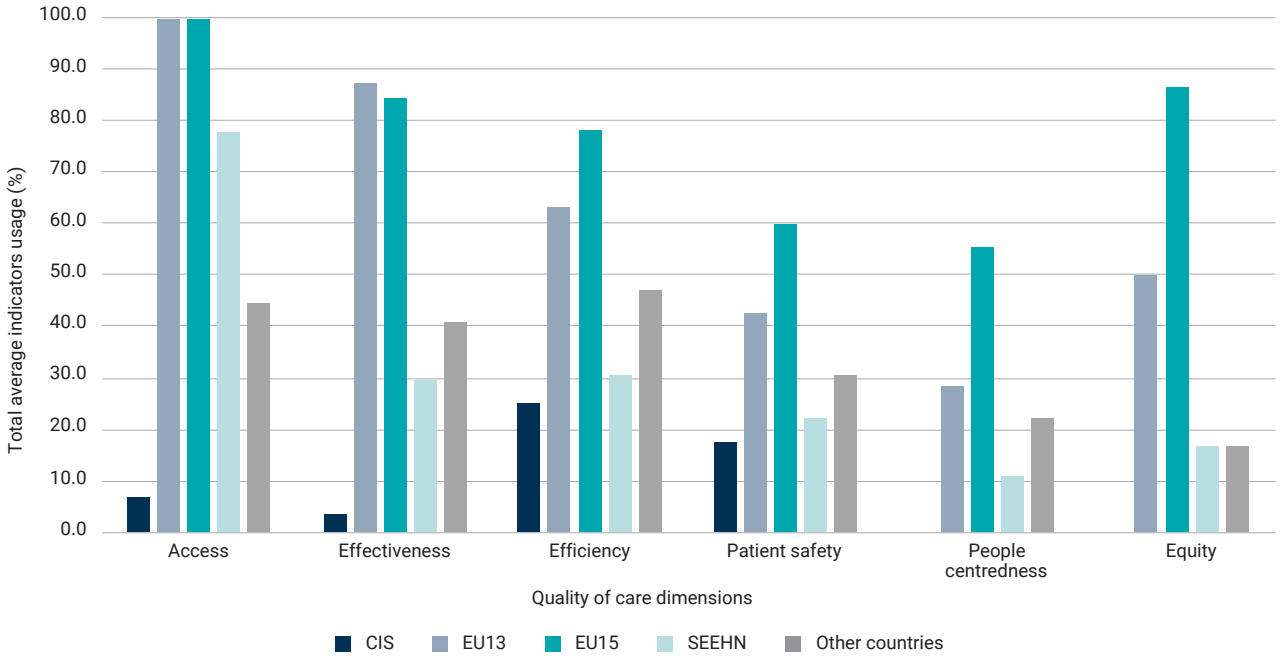
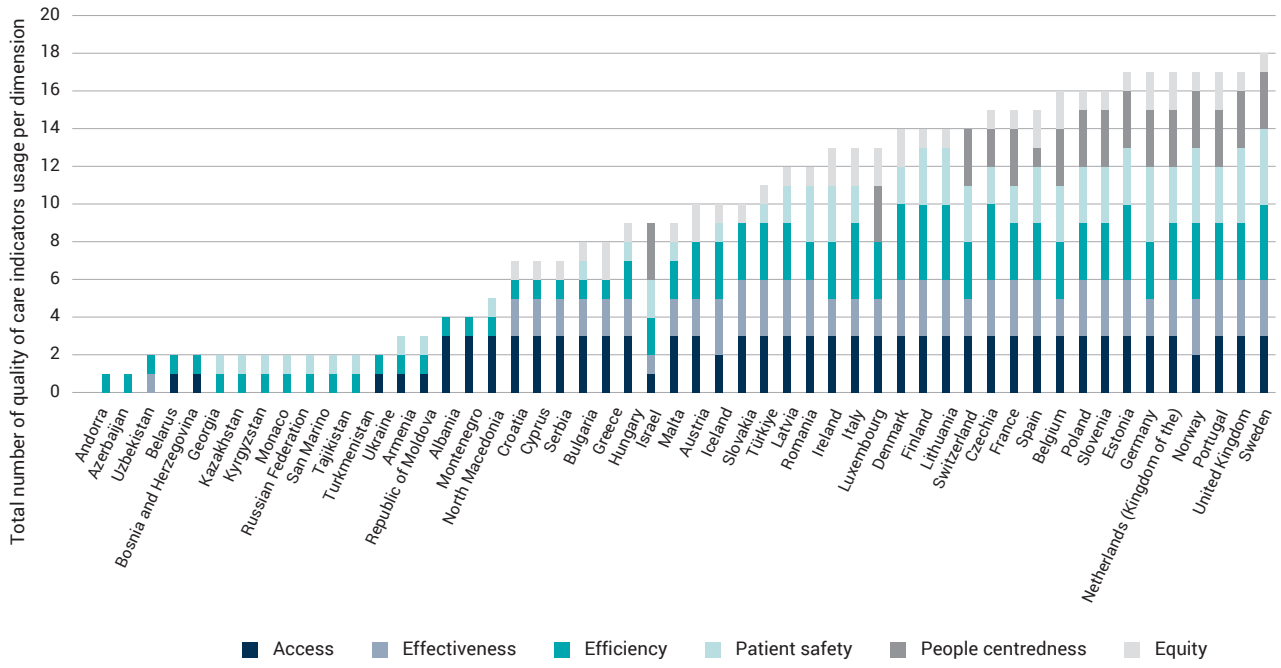


Fig. 4. Intraregional comparison of quality of care indicators usage, per dimension across WHO European Region



An intra-regional comparison of indicators for which the ratio of maximum to minimum values exceeds a threefold change is presented in Annex 4.

4.2.4 Indicator cluster 4: Population health outcome indicators

A number of population health outcome indicators were chosen as areas particularly amenable to quality of care and patient safety improvement. While not an exhaustive listing, the following indicators were agreed on as being especially relevant to all countries and of interest to decision-makers, health and care workers and the wider public.

- **Under-five mortality rate per 1000 live births**

  The median under-five mortality rate trend from 2000 to 2020 showed a stark decline, with a median rate of eight in 2000 and four deaths in 2021, per 1000 live births. The highest differences were observed in CIS and SEEHN countries with a change in the CIS median from 46 to 14 from 2000 to 2021, and a change in the SEEHN median from 16 to 6 from 2000 to 2021. Data were retrieved for all countries (n=53, 100%).

- **Maternal mortality ratio per 100 000 live births**

  Similar median maternal mortality ratio trends per 100 000 live births were observed from 2000 to 2020, declining from 12 (2000) to 7 maternal deaths per 100 000 live births in 2020. Data were retrieved for 50 (94.3%) of the countries.

- **Healthy life expectancy at birth**

  Healthy life expectancy at birth ranged from 62.0 to 72.5 years with a median of 68.8 years for the Region, showing a gap of approximately 11 years between the best- and worst-performing countries. CIS countries showed a median healthy life expectancy of 64.6 years, with EU15 countries showing a median of 71.1 years. Data were retrieved for 50 (94.3%) of the countries.

- **Probability of dying from CVD, cancer, diabetes, or CRD**

  The probability of dying from NCDs, including CVD, cancer, diabetes, or CRD in people aged 30–70 years ranged from 7.9% to 28.3% across the Region, with a median value of 15.2%. EU15 countries showed a median value of 10.4 while a value of 24.2 was observed for CIS countries. Data were retrieved for 50 (94.3%) of the countries.

- **Suicide following a hospitalization for a psychiatric disorder, within one year of discharge**

  The median suicide rate in people following hospitalization for a psychiatric disorder was 3.7 across the Region, ranging from 0.4% to 9.6%. Data were retrieved only for 12 (22.6%) of the countries.

An overview of the indicator aggregates for cluster 4 for the subregions is provided in Table 7.

Table 7. Indicator aggregates for indicator cluster 4: Population health outcome indicators

Indicator cluster 4:	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
Population health outcomes	**Under-five mortality (per 1000 live births), 2000**	4	84	8	10	6	46	16	53	100
	Under-five mortality (per 1000 live births), 2005	3	56	7	8	5	35	13	53	100
	Under-five mortality (per 1000 live births), 2010	3	43	5	6	4	24	10	53	100
	Under-five mortality (per 1000 live births), 2015	2	42	4	5	4	17	8	53	100
	Under-five mortality (per 1000 live births), 2020	2	42	4	4	3	15	6	53	100

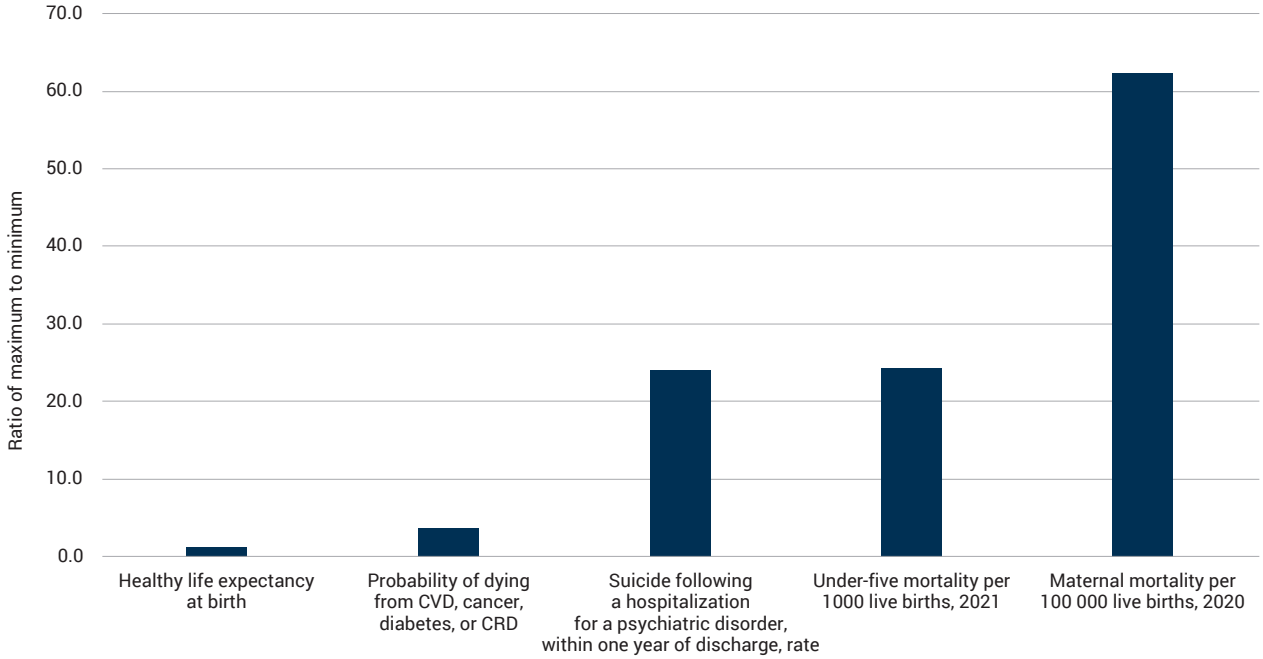
Indicator cluster 4:	Definition	WHO Mini-mum	WHO Maxi-mum	WHO Median	EU13 Median	EU15 Median	CIS Median	SEEHN Median	N	%
	Under-five mortality (per 1000 live births), 2021	2	41	4	4	3	14	6	53	100
	Maternal mortality (per 100 000 live births), 2000	4	87	12	15	8	51	16	50	94
	Maternal mortality (per 100 000 live births), 2005	3	83	11	11	7	37	11	50	94
	Maternal mortality (per 100 000 live births), 2010	3	72	8	8	6	26	9	50	94
	Maternal mortality (per 100 000 live births), 2015	1	61	7	6	6	19	7	50	94
	Maternal mortality (per 100 000 live births), 2020	1	68	7	5	5	15	7	50	94
	Healthy life expectancy at birth, years	62.0	72.5	68.8	68.6	71.1	64.6	66.9	50.0	94.3
	Probability of dying from CVD, cancer, diabetes, or CRD, rate	7.9	28.3	15.2	16.1	10.4	24.2	22.0	50.0	94.3
	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate	0.4	9.6	3.7	3.6	3.4	n/a	5.0	12.0	22.6

Note: CIS: Commonwealth of Independent; CRD: chronic respiratory disease; CVD: cardiovascular disease; States; EU13: Member States of the European Union after May 2004; EU15:Member States of the European Union before May 2004; SEEHN: South-eastern Europe Health Network; N: number.

The ratios of maximum to minimum values for the population health outcome indicators are shown in Fig. 5. The highest variability is observed for maternal mortality and under-five mortality, with maximum values exceeding minimum values by more than 60 and 20 times, respectively.

In contrast, only one of the five indicators – suicide following hospitalization for a psychiatric disorder within one year of discharge – has a maximum to minimum ratio below 3, indicating relatively low variability.

Fig. 5. Ratio of maximum to minimum values for population health outcome indicators



4.3 Regression analysis

Linear regression models were used to assess whether national plans and policies for quality and patient safety (i.e., quality of care plan, patient safety plan, accreditation systems for hospitals, AMR plan, health misinformation prevention plan, and patient/public representation in national health governance) are associated with selected population health outcomes, including healthy life expectancy, probability of dying from selected NCDs, preventable and treatable mortality, average length of stay, surgical wound infection rates, and vaccination coverage. A quantifiable summary measure was created by calculating the number of action plans/policies in each country ("yes" and "in progress" were coded as 1, and "no" and "not available" as 0). Univariable analysis was followed by bivariable analysis, adjusting initial comparisons for the potential confounding effect of public spending on health as a percentage of total public spending on the associations of interest. Regression coefficients, 95% confidence intervals (95% CI), and p-values were reported to determine the strength and significance of associations. The statistical significance was predefined at α=0.05 level. Data were analysed using Stata software, version 18. Results are provided in Table 8.

Data show there is a significant and positive association between the use of national instruments for quality and patient safety in countries and healthy life expectancy, and a negative association for the probability of dying from selected NCDs. More specifically, per increase of one plan or policy, healthy life expectancy at birth increases by 0.57 years (coef.=0.57, 95% CI: 0.12 to 1.02) while the probability of dying from selected NDCs decreases by 1.34% (coef.=-1.34, 95% CI: -2.31 to -0.36).

No significant associations were observed for preventable and treatable mortality, length of stay, surgical wound infection rates, vaccination against influenza, and under-five and maternal mortality.

Despite the regression analyses used having strong individual predictor effects, we acknowledge they do not account for the simultaneous influence of multiple factors, which could lead to an oversimplified understanding of the complex interactions at play. To gain better insight into the relationship between national instruments for quality of care and patient safety and population health outcomes, multivariable regression models and longitudinal approaches are needed.

Table 8. Associations between the number of national action plans and policies for quality of care and patient safety and selected population health outcomes

Traits	National action plans and policies for quality of care and patient safety (per increase of one plan or policy)			
	Crude estimates		Adjusted estimates	
	Coef. (95% CI)*	p-value	Coef. (95% CI)*	p-value
Healthy life expectancy at birth, years	0.57 (0.12 to 1.02)	0.015	0.46 (0.09 to 0.84)	0.017
Probability of dying from CVD, cancer, diabetes, or CRD	-1.34 (-2.31 to -0.36)	0.008	-1.1 (-1.9 to -0.30)	<0.001
Standardized preventable mortality, rate	-20.64 (-44.21 to 2.92)	0.084	-15.79 (-37.86 to 6.29)	0.155
Standardized treatable mortality, rate	-10.23 (-22.21 to 1.75)	0.092	-7.95 (-19.35 to 3.46)	0.165
Average length of stay, all hospitals, days	-0.24 (-0.55 to 0.06)	0.116	-0.24 (-0.55 to 0.07)	0.130
Surgical wound infection rate, all operations, %	-0.07 (-0.44 to 0.30)	0.699	-0.12 (-0.48 to 0.25)	0.519
Vaccination against influenza on average and in the poorest quintile, %	0.35 (-1.53 to 2.23)	0.705	0.13 (-1.71 to 1.97)	0.887
Under-five mortality rate, per 1000 live births	-0.65 (-1.70 to 0.39)	0.215	-0.52 (-1.36 to 0.32)	0.218
Maternal mortality ratio, per 100 000 live births	0.43 (-1.63 to 2.49)	0.677	0.70 (-1.29 to 2.68)	0.481

*95% CI: 95% confidence intervals; Coef.: regression coefficients. Crude and adjusted for public health spending associations estimates.

5

Discussion

The data in the results section offer important insights into 46 indicators used in this report.

A limitation to the report is that it does not provide data showing trends or progressions in quality of care metrics. Subsequent reports will be able to track and analyse the trajectory and progress made over time, offering a more dynamic and longitudinal perspective.

In this discussion section, critical reflections are provided on the results while testing them against available evidence.

5.1 Governance - national action plans and policies for quality of care and patient safety

A scaling up of implemented national action plans for quality and patient safety, including a demonstration of learning and continuous improvement of better practices, processes and outcomes, is needed in the majority of countries.

Data showed that only one third of countries implemented both a national quality of care and patient safety action plan. The scaling up of national action plans for quality of care and patient safety is needed because estimates suggest that around 1 in every 10 patients is harmed in health care *(6)*, as many as 4 in 10 patients are harmed in primary and ambulatory settings *(30)*, and above 50% of this harm can be avoided *(31)*. Coherent action plans provide an official, explicit statement of the approach and actions required to enhance the quality of care and patient safety across a country's health system *(18, 32)*. National action plans on quality of care and patient safety should be aligned with broader national health policy and supported by good governance, a skilled and competent health workforce, financing mechanisms, and policies for medicines, devices, and technologies and information systems that continuously monitor and learn to drive better care *(25)*. They should also contain provisions for systematic and aligned activities for quality planning, control, assurance and improvement. In other words, improving quality of care and patient safety requires a whole-system approach, with value created by implementing and investing in mutually reinforcing interventions within a policy framework encompassing all health system strata.

The "WHO Handbook for national quality policy and strategy" *(18)* and other interventions for delivering quality health services *(33, 34)* and patient safety *(32, 35)* provide policy-makers with further information.

A higher number of national action plans and policies for quality of care and patient safety in countries is associated with improved population health outcomes.

Data show important and significant associations between the use of national policy instruments for quality of care and patient safety in countries and healthy life expectancy and the probability of dying from selected NCDs. More specifically, for every additional action plan or policy used, healthy life expectancy at birth increases by 0.57 years while the probability of dying from selected NDCs decreases by 1.34%. This can be explained because policy instruments for quality and patient safety not only largely contribute to defining needed quality improvement interventions and promote a culture for quality of care and patient safety, but also positively contribute to strengthening enabling health system functions (i.e., governance, health workforce, financing, medicines and digital health solutions) that in turn positively contribute to improving health outcomes. We assume that countries which implement a higher number of instruments also benefit from an amplifying and positive effect on health outcomes that result from the interconnectedness of the instruments in terms of objectives, quality improvement and implementation strategies. Moreover, particular mechanisms that are used as part of the development of policy instruments – such as stakeholder involvement, effective policy cycles, intersectoral action, and the development of a learning and collaborative ecosystem *(25)* – may all contribute, directly or indirectly, to the significant results observed.

Despite the strong individual predictor effects of the regression analyses that were used, we acknowledge that they do not account for the simultaneous influence of multiple factors, which could lead to an oversimplified understanding of the complex interactions at play. To gain better insight into the relationship between national instruments for quality of care and patient safety and population health outcomes, multivariable regression models and longitudinal approaches are needed.

Hospital accreditation systems are implemented in only a minority of countries, hindered by a limited availability of evidence, particularly on their cost-effectiveness.

Our data show that hospital accreditation systems are implemented in only one third of the countries, which is in line with available evidence *(36)*. Accreditation is an umbrella term that encompasses a range of related activities that vary in their scope and scale (e.g., licensing, certification and accreditation). Illustrative country experiences from hospital settings show that accreditation supports the development of high standards of care and plays a crucial role in driving continuous improvement and maintaining the overall quality and reliability of health-care institutions *(37)*. But the evidence on the cost-effectiveness and opportunity costs of accreditation programmes remains unclear *(38)*. This implies that further systematic learning from country experiences on the design and implementation of accreditation programmes and their linkages to quality of care is vital. Moreover, accreditation has predominantly focused on hospital settings, while there is a critical need for evidence on the cost-effectiveness of comprehensive accreditation mechanisms for networks spanning primary, secondary and tertiary levels of care, from prevention to long-term care.

WHO's guidance on accreditation and the external evaluation of health-care facilities and organizations *(37)* and other interventions on accreditation provide policy-makers with further information.

AMR plans are widely available in countries, but ample opportunities remain to combat AMR.

A positive finding is that about 80% of the countries have implemented an AMR plan. AMR is one of the biggest threats to public health in the Region *(39)*, leading to mounting health-care costs, morbidity and death *(40, 41)*. Our data show there are persistent disparities in AMR prevalence across the Region for E. coli and MRSA. Ensuring prudent antimicrobial use is a key priority in an effective response to the challenges of AMR, but surveillance of AMR in the non-EU Member States of the Region is not yet systematically implemented *(42)*.

Our data also show that access group antibiotics represent a mean value of 58.0% of total antibiotic consumption in the Region, with the proportion ranging from 35.0% to 83.0%. Access group antibiotics include antibiotics that have activity against a wide range of commonly encountered susceptible pathogens while also showing lower resistance potential than antibiotics in other groups. These antibiotics should be readily available in all health-care settings.

The regular surveillance of antibiotic consumption is a key priority to identify the potential overuse, underuse and inappropriate use of antibiotics and to identify potential targets for quality improvement interventions. It is also important for countries to improve infection prevention and control measures in health-care settings, including adherence to hand hygiene protocols and isolation practices; educate the public about the dangers of AMR and the importance of using antibiotics responsibly; and continue promoting vaccination to reduce the incidence of infections that may require antibiotic treatment *(43)*. In this context, evidence supports the use of antibiotic stewardship programmes (ASPs) to ensure the appropriate use of antibiotics. A growing number of countries also focus on multisectoral engagement and collaboration through a One Health approach (i.e., an interdisciplinary effort that recognizes the interconnectedness of human health, animal health and environmental health) *(43, 44)*. Developing sustainable and impactful national responses to AMR will also require policies that consider socioeconomic drivers (e.g., gender, living conditions, educational level, access to health care, conflict and climate change) and the impacts of AMR for different population groups and contexts.

WHO's reports on antimicrobial medicines consumption *(45)*, other recommended interventions on medicines *(46, 47)*, and combatting AMR *(43)* provide policy-makers with further information.

Patient or public representation in national health governance is nearly non-existent.

Another important finding on the use of national instruments for quality of care and patient safety is that patient or public representation in national health governance is nearly non-existent. Only 13% of the countries reported using this policy mechanism. There is, however, increased recognition and acceptance that users of health services have a rightful role, the requisite expertise and competencies to engage in policy-making, organizational re-design and the evaluation of health services delivery to hold systems accountable and ensure an effective and humane experience *(48, 49)*. From a rights-based perspective, social participation can be seen as a human right in itself, which is essential for the achievement of other rights, for example, access to health care. Empowering the voices of vulnerable communities, and civil society organizations representing their interests, in health decision-making processes is pivotal to developing and implementing more equitable health policies and plans. In this context, the active

inclusion and participation of people with lived experience of mental health conditions in policy and service design is critical to ensure that services are acceptable and sought out by those who need them. Country experiences show that various modalities, techniques and methods are used to foster regular and institutionalized dialogue between governments and their population. Examples include stakeholder consultations, citizen panels, citizen advisory boards, health committees and digital mediums, such as social media platforms *(50)*. Legal endorsement and earmarked resource allocation can also help to protect and sustain funding for social participation *(27)*.

WHO's guidance on social participation for UHC *(50)*, community engagement frameworks for quality *(51)*, and other interventions for patient or public representation in national health governance provide policy-makers with further information.

Health misinformation prevention plans are absent in nearly all countries.

The policy instrument that is the least implemented in countries is a health misinformation prevention plan, with less than 8% of countries having such a plan. This finding is important because implementing a robust health misinformation prevention plan is crucial to effectively deal with infodemics. An infodemic is an overflow of information of varying quality that surges across digital and physical environments during a public health event, such as the COVID-19 pandemic and measles outbreaks, but it can also be related to NCDs. Infodemics can erode trust in health authorities, affect the mental health of the population, negatively influence health decisions and behaviours, and lead to stigma, especially in vulnerable groups. Good infodemic management, therefore, should apply a quality of care perspective that includes promotion of the understanding of risk and health expert advice; listening to community concerns and questions, notably through sentiment analysis; building resilience to misinformation; and engaging and empowering communities to take positive action *(52)*. These actions provide the basis to infodemic insights reports that some countries have developed during public health events and emergencies.

WHO's infodemic insights reports *(52)* and other interventions to prevent and address health misinformation provide policy-makers with further information.

5.2 Health system function and health service delivery indicators

The scarcity of the HCWF has significant consequences for the delivery of high-quality care.

HCWF outcomes show a large variability between countries in terms of the availability of GPs and medical doctor and nursing personnel density. This is in line with available evidence showing that countries at all levels of socioeconomic development face shortages and maldistribution, next to skill-mix imbalances, insufficient competencies and skills to deliver high-quality care, barriers to inter-professional collaboration, high levels of burn-out, poor working conditions and low motivation, and a skewed gender distribution *(53, 54)*. An ageing workforce and limited availability of health workforce data further complicates the picture in many cases *(53)*. The scarcity of the health workforce affects various aspects of quality of care. For example, patients may face extended wait times for appointments, surgeries and emergency care. In turn, delays in receiving care can lead to worsened health outcomes, including higher rates of preventable diseases. High patient-to-provider ratios can result in less time per patient, increasing the likelihood of misdiagnosis and treatment errors, while also jeopardizing compassionate and patient-centred care. It is important that people living in rural and remote areas and marginalized populations may suffer disproportionately from health workforce shortages, exacerbating health disparities. Health-care workers themselves may be overburdened, leading to high turnover rates, burnout, fatigue and errors *(53)*, further impacting their motivation to engage in post-graduate education. Addressing the scarcity of the HCWF also requires a fundamental debate on what is truly helping patients or, in other words, how to root out the inefficient use of caregivers, clinical inefficiencies, and overuse of services that contribute to inefficient and wasteful spending. Basically, funds that become lost due to wasteful spending cannot be invested in developing the current and future HCWF.

Countries are advised to invest in a comprehensive health workforce plan to address the scarcity of the HCWF through the development of effective strategies on education, renumeration and retention that provide high returns on investment *(55)*.

WHO's strategy on the HCWF in Europe *(53)* and other recommended interventions for health workforce strengthening *(56, 57)* provide policy-makers with further information.

Robust public budgeting is a prerequisite for strategic investments in quality of care.

Our data show that there is substantial variety in public spending on health in the Region. Other evidence shows that health expenditure in the Region is increasing, largely due to rising costs linked to technological progress and an overall greater demand for health care *(58)*. Some countries have consistently spent well below their means and would need to increase spending levels to achieve improvements in health system goals. In others, the returns from health spending have not been apparent and, in some cases, marginal increases in spending have not delivered commensurate benefits *(59)*. In these countries, there may be arguments for reassessing how countries spend on health care.

While the level of revenues matter, the allocation and use of these revenues are two crucial elements in supporting effective progress toward UHC *(60)*. Overall, robust public budgeting can support better predictability of the sector's resource envelope, facilitate alignment between resources and sector priorities, and improve execution. If the health budget is formulated according to quality-oriented goals and the execution rules allow a certain degree of spending flexibility, budgeting will also be able to support a better achievement of results *(61)*. While the level of revenues matter, it will also be important to reconfigure payments to incentivize value for patients as opposed to exclusively paying for volume. In practice, this means a shift from traditional fee-for-service (FFS) payments that are not entirely linked to quality or value to other payment and funding options *(62)*. Although it is not yet possible to reach a definitive, evidence-based conclusion about the impact of population-based payments on quality of care, there is a widespread belief that these types of payment models hold substantial promise for countries *(63, 64)*, especially to improve quality of care for people with chronic, complex or costly illnesses *(65)*.

WHO's reports on health financing *(66, 67)* and other recommended interventions on financing for quality *(68–70)* provide policy-makers with further information.

A limited number of countries have a national approved priority/essential medical devices list.

Our data show that only 22 countries have a national list of approved priority/essential devices. Medical devices are indispensable tools for quality health-care delivery, ranging from a syringe, catheter and surgical mask to complex devices, such as pacemakers, a prosthesis and magnetic resonance. A national list of approved priority/essential devices facilitates decision-making for health professionals in the areas of health policy, strategic planning, health technology assessment, resource allocation, procurement, regulation and facility assessment, amongst others.

Countries are encouraged to develop comprehensive and multistakeholder-led policies for medical devices and the pharmaceutical sector to address quality and affordability for patients and health-care systems. These should cover the regulation, pharmacovigilance, procurement, supply and distribution of devices/medicines; selection and responsible use of devices/medicines; and devices/medicines pricing and reimbursement policies *(71)*.

WHO's reports on priority medical devices *(72–74)* provide policy-makers with further information.

EHRs are implemented in a low number of countries, jeopardizing the effective uptake of quality improvement interventions.

Our data report shows that 37 countries have implemented EHRs. An even lower number of countries included quality of care and safety in telehealth guidelines – only 13% of countries. While the need for the implementation of EHRs in health-care systems is increasingly recognized, evidence shows that the full integration of EHRs with health-care processes is implemented in very few countries *(29, 75)*. Examples of the integration of EHRs with health-care processes are clinical decision-support systems that provide evidence-based recommendations to health-care providers; the tracking and reporting of quality metrics required by regulatory bodies; and population health management, through the analysis of datasets, which allows for the identification of risks and trends, management of chronic diseases, and implementation of preventive care strategies.

From a quality of care perspective, countries are encouraged to make investments in better technical infrastructure for digital health, interoperability and data quality *(76)*, knowing that the value of digital technologies is tied to the capacity of users to optimize their capabilities and integrate them effectively into their systems. A limited number of countries is looking into the quality of provided telehealth services. The WHO Athens Quality of Care and Patient Safety Office has recently developed a telehealth quality of care tool to support Member States in this endeavour *(77)*.

WHO's report on digital health *(76)* and other recommended interventions on digital health *(77-80)* provide policy-makers with further information.

Health service delivery indicators aim to improve the monitoring of service delivery in order to better target interventions, increase public accountability and improve health outcomes.

Results on health service delivery indicators are presented in box 2, 3 and 4.

Box 2. Screening estimates for cervical cancer and colorectal cancer

Screening estimates for cervical cancer and colorectal cancer show major differences between the best and worst performing countries, and hence, present important opportunities for collaborative efforts to reduce unwarranted variation.

Data showed that screening estimates across countries for cervical and colorectal cancer show major differences between the best and worst performing countries. For cervical cancer screening, a variation of more than 70 percentage points was noted between the best and worst performing countries, with some countries showing coverage rates of less than 10%. While cervical and colorectal cancer screening are available in most countries, evidence shows that only a minority of the screening programmes can be described as adequate in terms of quality and coverage *(81)*. This means that, in many countries, quality-assurance schemes are either not in place or insufficiently developed and, as a result, screening programmes do not deliver the expected benefits in social, health or economic terms. Examples of quality improvement strategies that well-performing countries have implemented to improve the uptake of cancer screening include: implementation of national screening programmes and public awareness and education campaigns; increasing the availability of trained health-care professionals; community outreach in rural, remote or underserved areas; and addressing gender preferences for health-care providers (especially in cultures where women prefer female health-care providers but lack access to them). From a quality of care perspective, it is also important that people are more likely to get screened if their health-care providers recommend it, which points to the importance of adequate communication from health-care providers.

WHO's guide to (cervical) cancer screening *(82, 83)* and other recommended interventions for the prevention and control of cancer *(84)* provide policy-makers with further information.

Box 3. TB treatment coverage

Current TB treatment coverage is not sufficient to achieve the ambitious goals of WHO's End TB Strategy.

While our data showed a favourable WHO median of 87% for TB treatment coverage across the Region, the range across countries is still substantial. Moreover, the combined evidence on TB treatment coverage, increase in drug-resistant TB cases, and below-target treatment success rates show that countries need to step up efforts to fight TB. The current situation is not good enough to reach the regional targets by 2030 (i.e., 90% reduction in TB deaths compared with 2015, 80% reduction in TB incidence compared with 2015, and 85% treatment success rate for multidrug-resistant or rifampicin-resistant TB) *(85)*. From a quality of care perspective, it is necessary to implement a multifaceted approach with the goal to interrupt transmission by identifying people with active TB in time and preventing the development of TB in those already infected. Examples of quality improvement strategies for TB care that countries have implemented are: public health campaigns to reduce stigma associated with TB, encouraging individuals to seek diagnosis and treatment early; and training of the HCWF on TB diagnosis and treatment protocols. Available evidence also shows that improved treatment adherence in patients can be achieved through the provision of high-quality patient education and the use of digital adherence technologies.

WHO's *Tuberculosis action plan for the WHO European Region, 2023–2030 (85)* and other recommended interventions for the prevention and control of TB provide policy-makers with further information.

Box 4. Caesarean section (C-section) delivery rates

Caesarean section (C-section) delivery rates show wide differences in clinical practice and reflect a limited use of evidence-based guidelines.

The proportion of C-section delivery rates showed a variation of more than 50 percentage points among countries in the Region, with CIS countries reporting a far lower percentage compared to the WHO median. This variation can be attributed to a combination of factors, including medical, cultural, economic and systemic influences. One of the key issues underlying this variation is the inconsistent application of evidence-based guidelines in clinical practice. Individual physicians may have different thresholds for recommending a C-section based on their training, experience and comfort level with vaginal deliveries, particularly in complex cases. However, some women may request a C-section for non-medical reasons, such as fear of labour pain or scheduling convenience. Other factors that impact the likelihood of performing a C-section are hospital policies and financial incentives and disincentives associated with different modes of delivery. Performing C-sections without medical necessity has important implications for patient safety as it increases the risk of complications for both the mother and baby. Conversely, not performing a C-section when it is medically indicated can lead to adverse outcomes, including increased risk of birth injuries and fetal distress. Countries should address the factors contributing to variations in C-sections and especially promote the consistent application of evidence-based guidelines.

WHO's recommended interventions in support of evidence-based C-section deliveries *(86, 87)* provide policy-makers with further information.

5.3 Quality of care indicators by quality dimension

Effectiveness and efficiency indicators highlight important disease burden from NCDs and the need for health system level action (such as through primary care to ensure quality outcomes).

Effectiveness and efficiency indicator outcomes showed large variability across the Region and subregions. For example, both standardized preventable and treatable mortality and avoidable hospitalizations for diabetes and COPD show major room for improvement, especially in SEEHN and CIS countries. To improve these outcomes, countries have ample opportunity to implement "WHO best buys" and other WHO-recommended interventions. WHO best buys are quality improvement interventions that are cost-effective and feasible in reducing NCD risk factors and improving health outcomes for countries at any level of income *(88)*. Examples are vaccination against human papillomavirus of girls aged 9–14 years and acute treatment of asthma exacerbations with inhaled bronchodilators and oral steroids. Cost-effective interventions for mental health include basic psychosocial support for people with mild depression and psychological treatment and mood-stabilizing medication for people with bipolar disorder *(89)*. Unfavourable effectiveness and efficiency outcomes for NCDs also point at the need to re-design current models of care around the needs, preferences and engagement of people living with these conditions, especially young people. Evidence shows promising results on the effectiveness of integrated care networks in improving health outcomes by providing patient-centred and comprehensive care to users and patients *(90, 91)*. Primary care can provide the much-needed platform for integrated networks to improve population level outcomes as it is the most inclusive, equitable, cost-effective and efficient approach to enhance people's physical and mental health as well as social well-being *(92–95)*.

WHO's regional strategy on NCDs *(96)* and other interventions to improve NCD outcomes *(88, 97–99)* provide policy-makers with further information.

Patient safety-related indicators suggest a need for improvement with a high number of patient-reported medical mistakes.

Patient safety outcomes, overall, showed poor performance. Our data showed an important median value of 5.2% of patient-reported medical mistakes across countries, in line with available evidence *(100)*. Common patient-reported medical mistakes include diagnostic, surgical and medication errors next to communication failures and patient falls *(101)*. Encouraging individuals involved in every aspect of health care to report adverse events is essential, while ensuring confidential reporting options. Other patient safety data showed that the number of surgical wound infection rates ranged from 0.1% to 9.5% in the Region, in line with available evidence, showing that 10% of hospitalized patients can expect to acquire an infection

during their stay in low- and middle-income countries, compared to 7% in high-income countries *(27)*. This is despite hospital-acquired infections being easily avoided through better hygiene, improved infection control practices, and the appropriate use of antimicrobials. Unfavourable outcomes were also noted for post-operative pulmonary embolism rates after hip and knee replacement, and obstetric trauma during vaginal delivery with instrument. Venous thromboembolism is a highly burdensome and preventable cause of patient harm, which contributes to one third of the complications attributed to hospitalization *(102)*. Obstetric trauma with instrument showed large variation between countries, with the median value for SEEHN countries being more than half of the median reported for EU13 and EU15 countries.

These patient safety outcomes, overall, reflect poor quality care, a lack of a patient safety culture, and possibly underlying medical errors. Countries are encouraged to implement a national action plan on patient safety as there is ample evidence that patient safety interventions offer a high return on investment and are cost-effective compared to other medical services. For example, interventions that address health-care-associated infections show a median saving-to-cost ratio of 7 : 1 *(100)*. A national plan on patient safety will also support the implementation of evidence-based guidelines and implementation of a patient safety incident reporting and learning system. Evidence shows that, only in one third of countries that have implemented such systems, the majority of health-care facilities actively report safety incidents to these systems *(103)*, showing the need to change workplace culture. Patient safety in primary and ambulatory care is even less prioritized compared to safety in hospitals, with only less than 20% of countries systematically including safety in primary care programmes *(100)*.

WHO's global strategy on patient safety and other recommended interventions on patient safety *(103–107)* provide policy-makers with further information.

People-centredness indicators highlight important gaps in data collection on patient-reported outcomes measures and experiences.

The indicators that countries report the least on relate to people-centredness. Less than one third of the countries reported on indicators that matter most to patients, such as "doctor spending enough time with patients during consultation" and "doctor providing easy-to-understand explanations". This finding is in line with available evidence showing that countries do not capture many of the processes and outcomes that matter most to people, notably PROMs and PREMs *(108)*. This is surprising since PROMs and PREMs have important consequences for public trust in the health system, health-care utilization patterns, retention in care, self-management and people's decision to bypass facilities *(109, 110)*. If, for example, primary health-care services are of insufficient quality, people will tend to rely on hospital, specialist and private care provision that in turn contributes to the widening of health inequalities. PREMs also provide important insight into the perceived quality of communication with health-care providers and accessibility of services *(108)* and determine the uptake of needed care and adherence to treatment *(111)*.

Countries are encouraged to address the gaps in the indicators covered for all quality of care dimensions by using a balanced set of appropriately adjusted structure, process and outcomes indicators, including indicators for measuring PROMs and PREMs.

Access and equity indicators showed high levels of unmet need in the Region and opportunities to implement equity-focused quality improvement strategies should be leveraged.

Data on access and equity outcomes showed high levels of unmet need in the Region. Access to care is essential for patients to obtain diagnostics and access treatments, and also for health promotion and prevention. However, very often this does not happen due to gaps in health coverage. Our data show that the share of households with catastrophic health spending ranged, on average, from 0.5% to 20.3%, and in the poorest quintile values varied between 0.2% and 13.8%. CIS countries showed the highest point estimate of catastrophic health spending on average while EU15 countries showed the lowest. High levels of unmet need were also noted for health care and dental care, showing a range of, on average, 0.1% to 12.9% and 0.1% to 15.6% in the population, respectively. In the poorest income quintile, the data ranges were even more substantial, showing values between 0.3% and 27.1%. Vaccination against influenza and needs-standardized GP visits also showed large variation.

There is good evidence on the effectiveness of quality improvement strategies to reduce differences in health outcomes associated with disparities and for different conditions. Important strategies include practice guidelines and physician education, the facilitated relay of clinical data to providers, physician reminder systems, audit and feedback, benchmarking, critical pathways, partnering with communities and patients, patient education, the promotion of self-management, and patient reminder systems *(112–115)*.

WHO's guidance reports on understanding the drivers of health equity *(116, 117)* and equity-proof policies and interventions *(118)* provide policy-makers with further information.

Aggregated data mask inequalities within countries, showing a need for local systems of data collection and an evidence-base for equity-oriented policies.

Aggregated data often mask inequalities within countries, which continues to be a fundamental challenge for UHC. Disaggregated data are often missing for socioeconomically vulnerable groups and people at risk, including children and adolescents, the elderly, people with NCDs, pregnant women and young mothers, racial minority groups, and migrant and refugee populations. To identify and track disadvantaged populations and populations at risk, it is important to invest in local systems of data collection that can bridge data gaps in national collections, ideally by using linked data sets and records. Local systems of data collection allow for the use of risk stratification tools as part of broader population health management programmes. Evidence on the use of these tools in primary care show particularly promising results in identifying vulnerable populations *(119)* and tailoring interventions for those who need it most *(120)*. For example, risk stratification tools allow for early identification and follow-up of people with NCDs and populations showing gaps in vaccination status. Overall, countries are encouraged to generate an evidence base for equity-oriented policies, programmes and practices towards the progressive realization of UHC.

WHO's reports on population health management *(120)* and other existing reports on this topic provide policy-makers with further information.

Western European countries report on a higher number of indicators compared to eastern European and central Asian countries.

Another important finding is that western European countries, in general, report on a higher number of indicators compared to eastern European and central Asian countries, which is particularly relevant for patient-reported indicators. These regional disparities are in large part explained by income level, the political priority that is given to quality of care and patient safety, health system efficiency, and data collection capacity, amongst others. But because all countries show gaps in data collection, they all have opportunities to expand their data collection efforts. In this context, it is important for countries to standardize data collection methods, enhance data quality and timeliness, implement systems for learning, and increase data accessibility and usability.

WHO's proposed strategies for the development of national indicators and indicator frameworks *(121, 122)* as well as strategies on digital health *(123)* provide policy-makers with further information.

5.4 Population health outcome indicators

Poor population health outcomes highlight the need for a life-course approach and intersectoral action taking a quality of care perspective on the health of individuals and generations.

Data show a positive and stark decline in maternal mortality from 2000 to 2020 in the Region. This positive result can be attributed, in part, to a wide range of quality improvement initiatives that have been implemented over the past decades, such as the WHO standards for improving the quality of care for mothers and newborns *(124)*. Mortality rates of children under five years of age have also improved, and WHO has standards, such as for improving quality of care for children and young adolescents aged 0–15 years in health facilities *(125)*, which contribute to quality of care improvements. Childhood mortality, however, is not simply a quality issue. Evidence shows that a child born in the countries of central Asia is still three times as likely to die before the age of five years as a child born in an EU country *(126)*. And one in five children in the Region is at risk of not reaching their full developmental potential due to factors such as poverty, social exclusion, inadequate nurturing or stimulating care within the family, or limited access to essential services *(127)*.

Other unfavourable population health outcomes show that progress in preventing and controlling NCDs and their key risk factors has been insufficient and uneven in the Region. There is also a gap of approximately 11 years for healthy life expectancy at birth between the best and worst performing countries.

Recognizing that risk and protective factors act interactively and cumulatively across the entirety of people's lives, it is important that NCD prevention and management, including for mental health, starts in preconception and pregnancy and is sustained through all life stages *(128)*. These findings show the

importance of an intersectoral and life-course approach that take a quality of care perspective on the health of individuals and generations.

WHO's reports on intersectoral action *(129)* and the life-course approach *(130-133)* provide policy-makers with further information.

A low number of countries reported on suicide following a hospitalization for a psychiatric disorder, reflecting the low priority given to mental health data collection.

Only 12 countries reported on suicide following a hospitalization for a psychiatric disorder, albeit 2019 data show an estimated 119 000 lives were lost across the Region due to suicide, which includes an increasing number of young people *(134)*. This finding reflects an overall limited prioritization of mental health in countries, despite mental disorders being highly prevalent and largely undertreated in most countries *(97, 135–138)*. In all countries, gaps in service coverage are compounded by a variability in quality of care. Quality includes how well mental health care aligns with human rights principles, whether or not treatment meets any defined minimum standards for adequacy, and to what extent mental health care supports social inclusion. Accumulated evidence shows that there is a core set of cost-effective interventions for priority conditions that are feasible, affordable and appropriate. Examples include a range of clinical interventions, as listed in the WHO UHC Compendium *(139)*.

WHO's reports on mental health *(135, 137, 140)* provide policy-makers with further information.

6

The way forward

Countries can use the country profiles, as provided in Annex 1, to inform and advocate for investments in the development of whole-system quality that comprises integrated quality planning, quality control and quality improvement activities.

Because of the health sector's complex composition, there is no single effective strategy for quality-oriented reforms. Instead, each reform must be analysed for its potential effect on quality of care so that strengths can be reinforced and weaknesses can be reduced or eliminated.

The recommendations below build on the findings from this report and provide countries with a summarized overview of actions to improve and strengthen quality of care at different levels of the health system and in different settings.

6.1 Invest in whole-system quality that comprises integrated quality planning, quality control, and quality improvement activities

What does the evidence say?	• Whole-system quality comprises integrated quality planning, quality control and quality improvement activities that inform a system-wide, interlinked, and customer-centric, strategic approach to quality *(24)*.
What can countries do?	• Identify shared quality objectives aligned with the values and needs of stakeholders, including patients, providers and policy-makers. • Recognize that whole-system quality is an ongoing, iterative process. • Establish mechanisms for transparency in decision-making processes, resource allocation and performance monitoring. • Establish a regulatory framework to enforce standards and guidelines. • Implement measurement and feedback systems. • Foster partnerships between health care, social care and public health to address broader determinants of health. • Support learning collaboratives, communities of practice and knowledge-sharing platforms. • Conduct periodic system-wide assessments to identify gaps and areas for improvement. • Scale up and disseminate best practices. • Leverage technology and innovation.

6.2 Invest in the development of national action plans and policies for quality of care and patient safety.

What does the evidence say?	• Investing in patient safety positively impacts health outcomes, reduces preventable suffering and costs related to patient harm, improves system efficiency, and helps in reassuring communities and restoring their trust in health-care systems *(30, 35)*. • The use of multiple action plans and policies for quality of care and patient safety is associated with positive outcomes for healthy life expectancy at birth and the probability of dying from NCDs, as per the analysis in this report. • At the same time, it is to be acknowledged that a myriad confounding factors detract from a robust evidence base.

What can countries do?

- Secure commitment from the highest levels of government for quality and patient safety and create or designate a dedicated body or agency to oversee quality and patient safety initiatives.
- Involve a broad range of stakeholders, including government agencies, health-care providers, patients, professional associations, and nongovernmental organizations, using robust policy cycles.
- Invest in the development and implementation of governing bodies, organizations and institutions for setting standards, conducting inspections, and evaluating health-care facilities to ensure compliance with quality and safety requirements (e.g., quality of care and patient safety offices at the level of a ministry of health; regulatory agencies and accreditation bodies; national quality of care and patient safety institutes; and quality of care and patient safety units in facilities across settings).
- Assess the current quality of care and patient safety by collecting and analysing data on health-care outcomes, patient satisfaction and system performance.
- Establish clear, measurable targets for quality and patient safety.
- Develop national standards and guidelines for quality and patient safety fully aligned with international practices, along with other requisite laws and regulations to support the implementation of these standards.
- Invest in continuous mechanisms at national and facility levels to discuss real-time data, identify the variation of real-time data over time and opportunities for their improvement, and inform ongoing activities to close safety and quality gaps.
- Develop or enhance systems for reporting patient safety incidents and mechanisms to analyse incidents and disseminate lessons learned.
- Implement clinical decision-support systems to help prevent errors.
- Create a non-punitive environment that encourages the reporting of errors and near misses.
- Implement mandatory patient safety training programmes for all health-care workers.
- Raise awareness and educate the public about patient safety to empower patients and their families.
- Ensure legislation is developed on patients' rights and the privacy and protection of the reporter of patient safety incidents.

6.3 Develop a harmonized set of indicators for measuring and continuously improving quality of care, including measures that matter most to patients.

What does the evidence say?

- The measurement of quality of care is a broad and complex field, including many dimensions, perspectives, approaches and settings. National quality of care indicator development efforts should be guided by the principles of evidence-based best practices in quality of care measurement, alignment with national priorities, and scientific soundness to ensure the feasibility of measuring indicators, which are usable and meaningful in settings where they are to be applied *(141)*.

What can countries do?	• Choose indicators that are relevant, reliable and valid for measuring and improving quality of care and conduct pilot studies to test feasibility and reliability. • Engage relevant stakeholders (e.g., patients, policy-makers, health-care providers, professional bodies, insurers, academia and community representatives) to ensure indicators are comprehensive and relevant. • Streamline and standardize data collection tools and methods to ensure consistency and comparability. • Invest in local systems of data collection to bridge existing data gaps in national collections and address local information needs, ideally by using linked data sets and records. • Periodically review and update the indicators to reflect changes in health-care practices and priorities. • Ensure that quality of care data is transparently reported to stakeholders, including the public. • Implement regular measures of patient experience using validated instruments. • Use the data for benchmarking and comparing performance across different regions and facilities.

6.4 Ensure patient and public representation in national health governance.

What does the evidence say?	• There is increased recognition and acceptance that users of health services have a rightful role and the requisite expertise and competencies to engage in policy-making, organizational re-design, and the evaluation of health services delivery to hold systems accountable and ensure an effective and humane experience *(48, 49)*.
What can countries do?	• Ensure there are designated seats for patient and public representatives in national health councils, advisory boards and committees. • Enact laws and regulations that require patient and public representation in health policy decision-making bodies. • Provide training for patient and public representatives to understand health policies, governance processes and effective advocacy. • Promote public health education to ensure that patients and the general public are informed and can participate meaningfully. • Regularly conduct public consultations and hearings on health policy issues to gather input from diverse stakeholders. • Implement systems for the transparent reporting of health governance decisions and provide feedback mechanisms for public input. • Ensure representation from diverse population groups, including marginalized and vulnerable communities. • Make participation accessible by addressing language, disability and other barriers that might prevent people from contributing.

What can countries do?	• Foster partnerships between government, patient organizations and civil society groups to co-create health policies. • Involve patients and the public in the drafting and revision of health policies from the outset. • Utilize digital tools and platforms to facilitate broader and more inclusive participation in health governance. • Promote e-health initiatives that encourage public involvement in health monitoring and decision-making processes. • Conduct regular reviews and assessments of patient and public involvement in health governance to identify areas for improvement. • Establish feedback loops where patient and public inputs are not only heard but also visibly incorporated into policy changes.

6.5 Establish clear, evidence-based standards for all care settings.

What does the evidence say?	• Illustrative country experiences from hospital settings show that accreditation has the potential to support the development of high standards of care and plays a crucial role in driving continuous improvement and maintaining the overall quality and reliability of health-care institutions *(37)*. But the evidence on the cost-effectiveness and opportunity costs of accreditation programmes remains unclear *(38)*.
What can countries do?	• Establish clear, evidence-based standards covering all aspects of primary and secondary care, including clinical services, patient safety, staff qualifications, infrastructure and administrative processes. • Tailor standards to address the specific health-care challenges, cultural factors and resource availability within the country. • Provide comprehensive training programmes on standards and procedures. • Develop a clear, transparent and consistent process for primary and secondary care assessments, including self-assessments, peer reviews and on-site evaluations. • Implement a system for continuous learning to ensure health-care facilities maintain required standards. • Collect and analyse data on performance to identify areas for improvement and guide policy decisions. • Encourage primary and secondary care facilities to engage in continuous quality improvement initiatives based on outcomes. • Facilitate the sharing of good practices and successful strategies among hospitals.

6.6 Re-design models of care around the needs and preferences of patients.

What does the evidence say?	• Integrated networks in primary health care offer opportunities for improving quality of care through the expansion of existing multidisciplinary teams with new profiles over time *(90, 91)*.
What can countries do?	• Invest in new models of multidisciplinary, integrated and networked care (e.g., as guided by the Quintuple Aim for health care improvement) *(142)*, and integrate primary health services with mental health, social health and behavioural health services. • Expand health-care services beyond traditional settings, such as hospitals and health centres, to enhance accessibility and address the diverse needs of the population (e.g., mobile clinics and home-based care models). • Invest in evidence-based screening services for population health. • Promote innovations that address disparities in health care, including underserved and rural communities. • Encourage collaboration between the public sector, private companies and non-profit organizations to drive innovation by combining resources, expertise and different perspectives.

6.7 Invest in an HCWF with the capacity and capability to meet the demands and needs of the population for high-quality care.

What does the evidence say?	• A national and comprehensive health workforce plan yields high returns on investment *(55)*.
What can countries do?	• Develop education and training suites, and regulation and supervision modules on quality and patient safety, in collaboration with the professional regulatory and training bodies at undergraduate and postgraduate levels, for all health-care workers. • Set up systems of lifelong learning and professional development based on competence assurance schemes for quality of care and patient safety to ensure that all members of the HCWF remain competent and fit for purpose throughout their working lives. • Address various aspects of well-being in the health workforce to support the health and resilience of health professionals. • Ensure that health-care managers develop capacity in using data and performance management and in holding health service providers to account. • Train health-care staff and stakeholders on data collection, reporting and analysis; encourage participation in quality measurement; and use data to demonstrate the effectiveness and safety of care. • Use data and analytics to forecast future HCWF needs (i.e., numbers, competencies, skills mix and distribution) and analyse the implications of different possible scenarios. • Encourage health-care facilities and professionals to obtain and maintain accreditation and certification from recognized bodies.

What can countries do?	• Ensure that health-care facilities are safe and well-equipped and are supportive environments for staff. • Promote equity and diversity in the HCWF and create an inclusive environment that respects and values different perspectives and backgrounds. • Implement strategies to reduce health disparities by ensuring an equitable distribution of health-care resources and services. • Integrate community health workers into the health-care system to provide culturally competent care and bridge gaps between the community and health-care providers. • Develop gender-responsive policies to improve the gender balance across services.

6.8 Invest in robust public budgeting for quality of care and reconfigure payments to incentivize value in health service delivery.

What does the evidence say?	• Robust public budgeting can support better predictability of the sector's resource envelope, facilitate alignment between resources and sector priorities, and improve execution. If the health budget is formulated according to quality-oriented goals and the execution rules allow for a certain degree of spending flexibility, budgeting will be able to support a better achievement of results *(61)*. • The delivery of quality and cost-effective care is supported by a payment system that is oriented towards paying for value (i.e., population-based payments) as opposed to paying for volume (i.e., FFS payments) *(143)*.
What can countries do?	• Invest in robust public budgeting for quality of care to support better predictability of the sector's resource envelope and a better alignment between resources and sector priorities, and to improve execution. • Purchase, fund and commission health services based on the principle of value and strategic purchasing. • Link payments to the achievement of specific quality and outcome metrics. • Promote models where primary, specialty and social care providers work together seamlessly. • Encourage transparent data-sharing between providers and payers to facilitate coordinated care and accountability. • Include patient experience as part of the payment criteria.

6.9 Develop comprehensive and multistakeholder-led biotechnology sector policies to address quality and affordability for patients and health-care systems.

What does the evidence say?	• Comprehensive and multistakeholder-led biotechnology sector policies facilitate decision-making in the areas of health policy, strategic planning, health technology assessment, resource allocation, procurement, regulation and facility assessment, amongst others *(144)*.
What can countries do?	• Develop policies that cover regulation, pharmacovigilance, procurement, supply and distribution of devices/medicines, selection and responsible use of devices/medicines, and devices/medicines pricing and reimbursement policies. • Invest in developing and expanding the national priority/ essential medicines/medical devices list.

6.10 Invest in digital health solutions that support quality of care.

• **What does the evidence say?**	• EHRs with integrated decision support and data quality assurance are multiplying possibilities for quality measurement on the basis of more detailed quality of care indicators, both locally and nationally *(75, 76)*.
• **What can countries do?**	• Define clear objectives for digital health, such as improving patient outcomes, increasing access to care, or enhancing system efficiency. • Adopt international standards for health data to facilitate information-sharing. • Create systems that allow different health information systems to communicate seamlessly. • Regularly review and update security practices to address emerging threats. • Involve health-care providers, patients, tech companies and academia in the development process. • Provide ongoing education and training to health professionals on using digital tools and technologies. • Offer resources to help patients understand and use digital health services. • Utilize digital health technologies, such as telemedicine, EHRs, and mobile health applications, to improve access and efficiency. • Develop user-friendly interfaces and ensure that digital tools are intuitive and accessible to all users. • Create solutions that empower patients to take an active role in their health management. • Implement advanced analytics by using big data and artificial intelligence (AI) to analyse health trends, predict outcomes and tailor treatments. • Adopt appropriate regulations and develop policies that support digital health while ensuring patient safety and privacy. • Align with international standards and follow global best practices and guidelines to ensure consistency and reliability.

6.11 The role of the WHO Athens Office for Quality of Care and Patient Safety

The WHO Athens Office for Quality of Care and Patient Safety promotes quality of care in the Region by acting in the following major areas.

- **Country support, national strategies and frameworks, and sharing lessons to scale up successful interventions.** Currently, the Office is running projects in 22 countries with a strong focus on southern European countries, to optimize quality of care and patient safety, and to provide country-specific assistance for strengthening quality of care and patient safety.

- **Quality of care and patient safety innovation and knowledge synthesis**. Initiatives to share novel quality of care and patient safety approaches at the regional level are being deployed. "Open Quality Day" is promoting the sharing of views and experiences around health-care innovation (digital and non-digital) to tackle key challenges in the health sector. "People's Voice Surveys" are being conducted to capture non-user perspectives of the health-care system in different countries to better inform policies and strategies on people-centredness.

- **Policy analysis in the sphere of quality of care and patient safety.** The Telehealth Quality of Care Tool provides a framework for the policy analysis of digital health at the country level from a quality of care perspective.

- **Network building, alliances and stakeholder engagement.** The WHO Regional Office for Europe Quality of Care and Patient Safety Focal Points Networks foster the attention of countries on quality of care and patient safety and create space for synergies with global health initiatives, strengthening partnerships with leading academic institutions and think tanks and collaborations with other partners and actors working with and across the Region. The 1st Autumn School on Quality of Care and Patient Safety aimed to equip policy-makers from different countries in the Region with the knowledge and skills necessary to effectively optimize health-care systems, improve patient outcomes, build resilience, and emphasize the importance of a well-prepared HCWF for challenging circumstances.

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Annex 1

Indicator country profiles

ALBANIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan — Yes
- National patient safety plan — Yes
- National antimicrobial resistance plan — Yes
- Health misinformation prevention plan — Yes, in progress
- Patient/public representation in health governance — Yes
- Accreditation system for hospitals — Yes
- National electronic health records — Yes
- Quality and safety included in telehealth guidelines — Yes

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 8.1 12.5 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2021

0 0.1 10.7 12.9 16.7 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2021

0 0.1 15.6 15.6 27.1 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2013

0 4.0 5.5 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation*, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations*, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care*, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Albania · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 68.0 — 100.0 100

Births by caesarean section as % of all live births, 2013

0 — 4.0 — 34.1 — 56.9 — 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, 2019

0 — 35.0 38.0 — 83.0 — 100

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2020

0 — 2.4 — 7.3 — 29.9 30

Medical doctors per 10 000 population, 2020

10 — 18.8 18.8 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 54.7 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 9.1 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 2.9 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 59.7 — 78.7 80

Digital health

National electronic health records

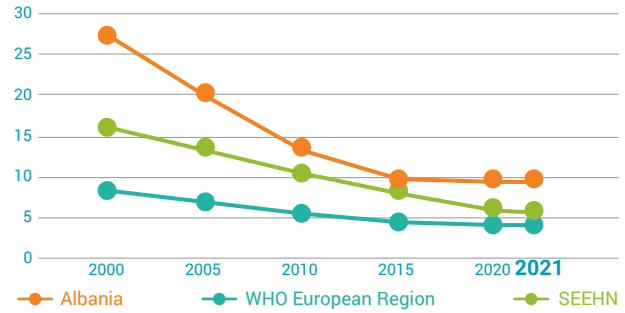
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

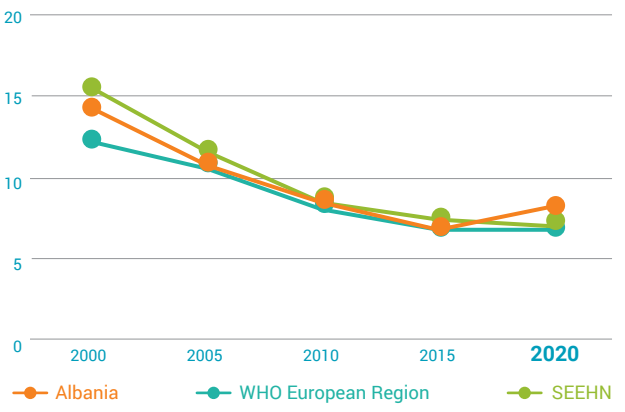
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 69.1 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 11.4 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * An update to this data may already be available or will be available in the near future.** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Albania | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ANDORRA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, year

0 — 4.0 — No data — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, year

0 0.1 — No data — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Andorra · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 — 87.0 — 100.0 100

Births by caesarean section as % of all live births, year

0 4.0 — No data — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 50

Medicines

Antibiotic consumption, %, year

0 — 35.0 — No data — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, year

0 2.4 — No data — 29.9 30

Medical doctors per 10 000 population, 2015

10 18.8 — 36.2 — 88.8 — 100

Nursing personnel per 10 000 population, 2015

20 27.4 — 41.3 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 15.7 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 6.2 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 11.7 — 78.7 80

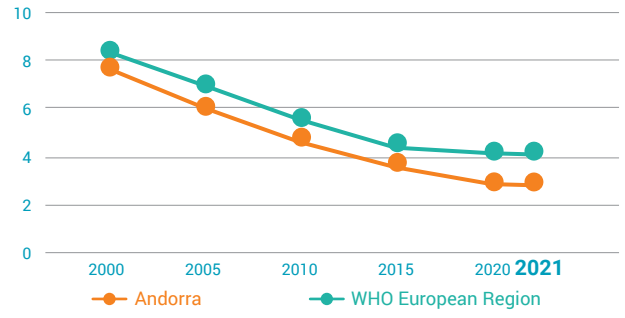
Digital health

National electronic health records: Yes | Yes, in progress | No

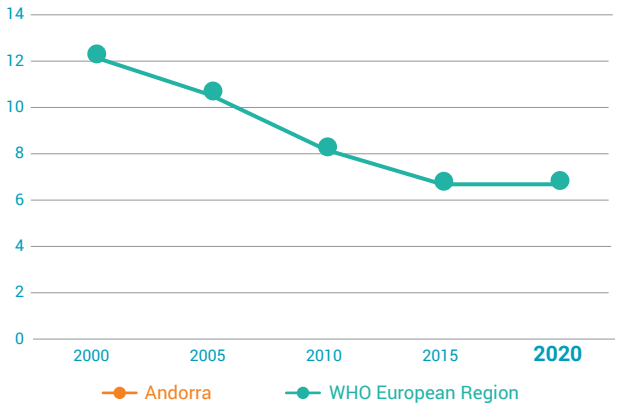
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, year

50 — 62.0 — No data — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), year

0 — 7.9 — No data — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Andorra | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ARMENIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 — 8.6 — **20.3** 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2021

0 — 4.0 — **7.2** — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 2021

0 0.1 **0.1** — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Armenia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 63.0 — 100.0 100

Births by caesarean section as % of all live births, 2010–2016

0 — 4.0 — 18.0 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 28.6 — 43.4 — 50

Health workforce

General practitioners per 10 000 population*, 2019

0 — 2.4 — 5.0 — 29.9 30

Medical doctors per 10 000 population, 2019

10 — 18.8 — 31.2 — 88.8 — 100

Nursing personnel per 10 000 population, 2019

20 27.4 44.3 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 7.6 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 2.2 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 78.7 78.7 80

Medicines

Antibiotic consumption, %, 2020

0 — 35.0 — 47.0 — 83.0 — 100

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Digital health

National electronic health records

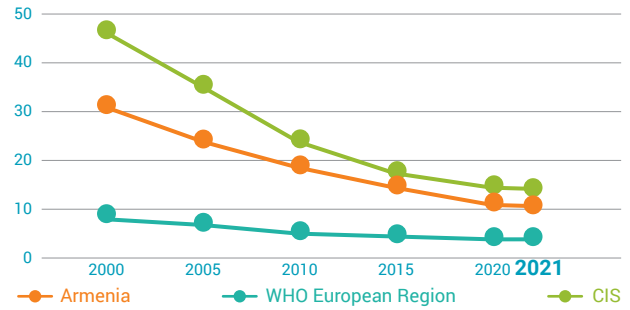
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

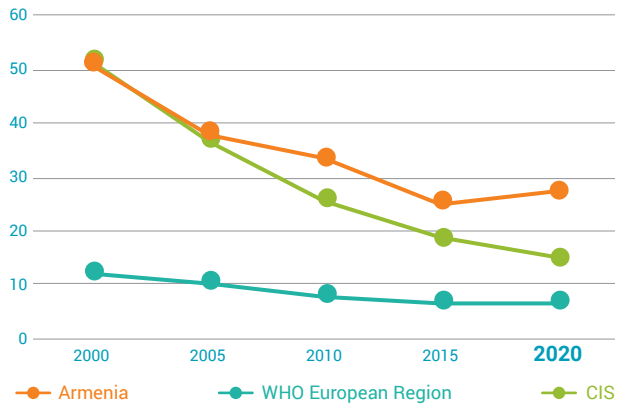
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 67.1 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 19.9 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Armenia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

AUSTRIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 2.2 3.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.6 0.8 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 0.9 1.9 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 173.3 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 71.2 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.2 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 129.3 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 112.6 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness*

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 8.8 8.9 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 5.1 5.8 5.8 6

Legend: Austria Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 No data 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 94.0 100.0 100

Births by caesarean section as % of all live births, 2016

0 4.0 29.5 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 45.1 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 3.1 43.4 50

Health workforce

General practitioners per 10 000 population**, 2022

0 2.4 14.8 29.9 30

Medical doctors per 10 000 population, 2022

10 18.8 55.1 88.8 100

Nursing personnel per 10 000 population, 2018

20 27.4 68.7 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 16.9 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 9.5 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 15.8 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 35.0 60.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

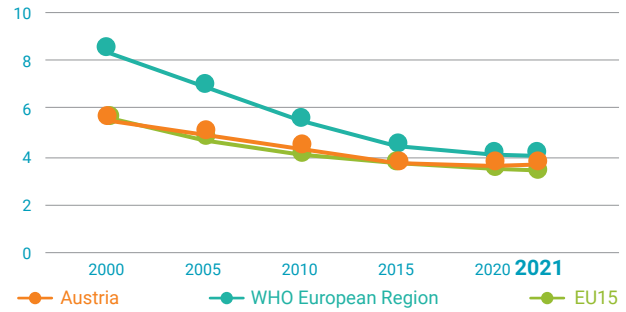
Digital health

National electronic health records: Yes | Yes, in progress | No

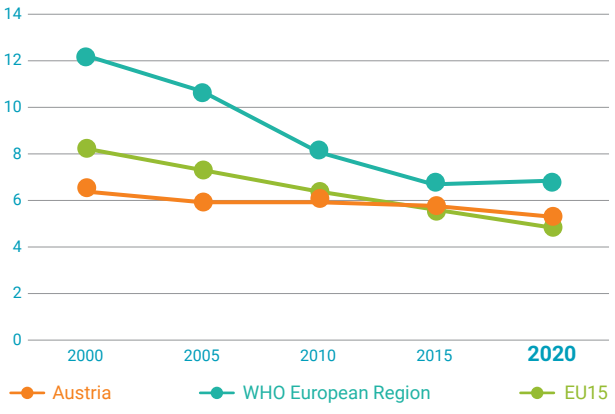
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 70.9 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 10.4 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future. ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Austria | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

AZERBAIJAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2017

0 — 4.0 — 10.2 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, year

0 0.1 — No data — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Azerbaijan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 57.0 — 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 — 27.6 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 40.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2014

0 — 2.4 — 8.5 — 29.9 30

Medical doctors per 10 000 population, 2020

10 — 18.8 — 30.9 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 53.3 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 4.6 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 1.5 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 66.0 — 78.7 80

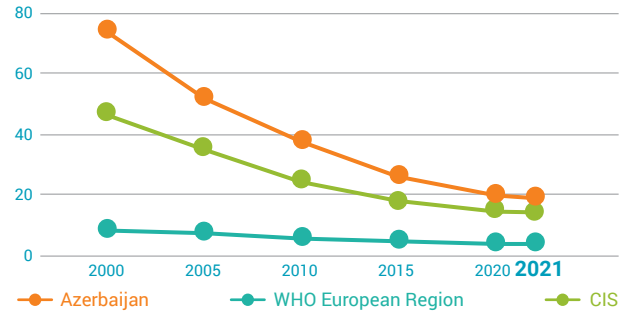
Digital health

National electronic health records: Yes | Yes, in progress | No

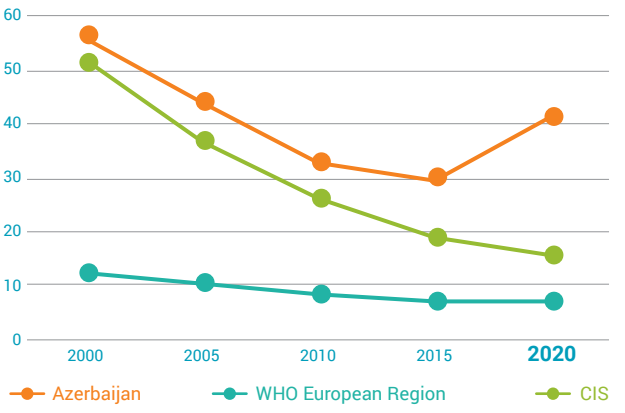
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 63.6 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 27.2 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Azerbaijan | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

BELARUS

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 No data No data 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 No data No data 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 No data No data 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2020

0 4.0 10.4 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 1995

0 0.1 0.1 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 No data No data 5.8 6

Legend: Belarus · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 64.0 — 100.0 100

Births by caesarean section as % of all live births, 2014

0 — 4.0 — 27.1 — 56.9 — 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 69.2 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 30.0 — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 66.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, year

0 2.4 — No data — 29.9 30

Medical doctors per 10 000 population, 2020

10 — 18.8 — 44.7 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 100.5 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 13.1 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 4.9 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 21.9 — 78.7 80

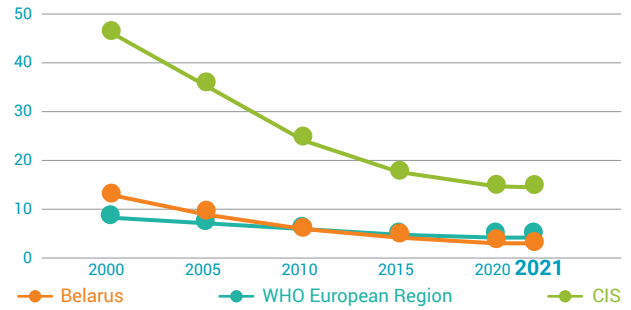
Digital health

National electronic health records: Yes | Yes, in progress | No

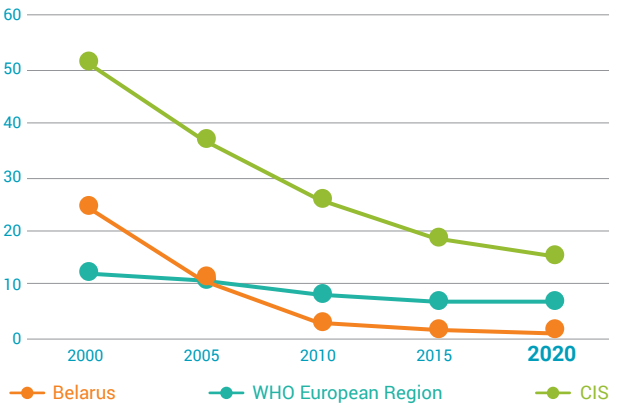
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 66.0 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 23.8 — 28.3 — 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Belarus | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

BELGIUM

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending* on average and in the poorest quintile, %, 2018

0 0.5 1.7 3.8 20.3 30

Share of the population with unmet needs for health care* on average and in the poorest quintile, %, 2023

0 0.1 1.1 2.8 12.9 30

Share of the population with unmet need for dental care* on average and in the poorest quintile, %, 2023

0 0.1 3.2 7.0 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 164.1 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 61.6 254.7 300

Thirty-day mortality after hospital admission for AMI*, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2013

0 4.0 7.8 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD*, rate, 2019

30 38.6 278.9 386.2 400

Avoidable hospital admissions – diabetes*, rate, 2019

30 37.1 134.6 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2014

0 0.1 1.5 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 232.3 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 4.5 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2010

60 69.0 97.5 97.5 100

Doctor providing easy-to-understand explanations, %, 2010

70 79.0 97.7 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 95.2 95.6 100

Equity

Vaccination against influenza* on average and in the poorest quintile, %, 2019

0 2.0 26.0 33.8 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 5.1 5.3 5.8 6

Legend: Belgium Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening*, %, 2020

0 3.9 45.7 78.5 80

Colorectal cancer screening*, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2013

0 4.0 21.2 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 55.2 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 4.1 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 69.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2021

0 2.4 12.0 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 32.4 88.8 100

Nursing personnel per 10 000 population, 2018

20 27.4 110.5 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 15.5 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 8.6 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 17.9 78.7 80

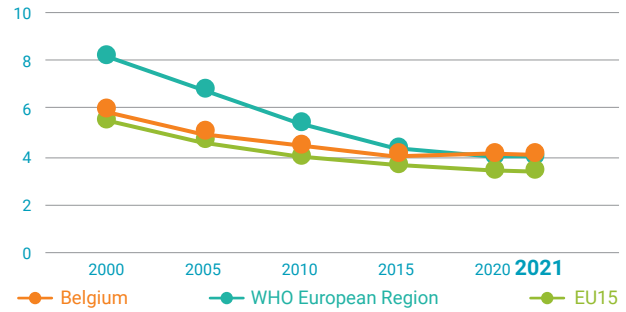
Digital health

National electronic health records: Yes | Yes, in progress | No

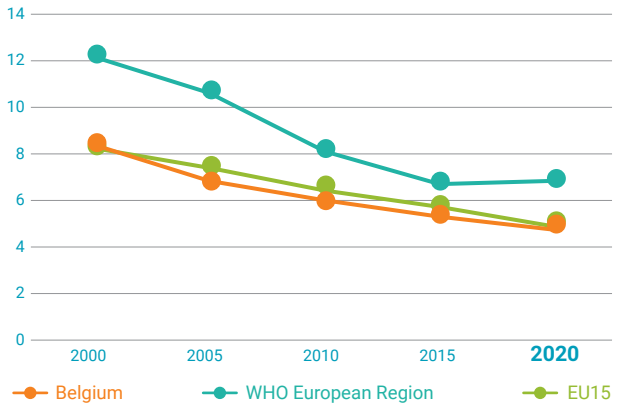
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years*, 2019

50 62.0 70.6 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 10.6 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Belgium | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

BOSNIA AND HERZEGOVINA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 5.4 8.8 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 12.9 No data No data 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 No data No data 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2019

0 4.0 6.8 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Bosnia and Herzegovina · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 55.0 — 100.0 100

Births by caesarean section as % of all live births, 2014

0 4.0 24.0 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 71.1 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 16.8 — 43.4 50

Health workforce

General practitioners per 10 000 population*, 2015

0 2.4 2.4 — 29.9 30

Medical doctors per 10 000 population, 2019

10 18.8 23.2 — 88.8 100

Nursing personnel per 10 000 population, 2019

20 27.4 60.8 — 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 16.4 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 6.5 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 30.7 — 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 35.0 58.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

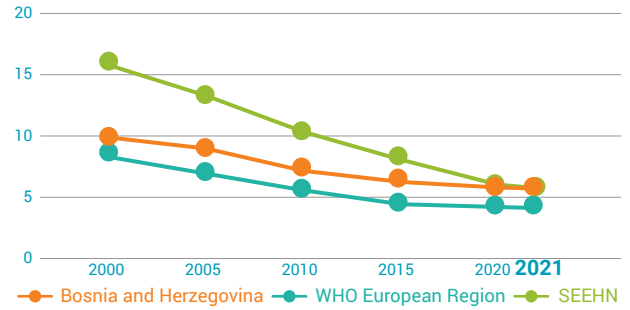
Digital health

National electronic health records: Yes | Yes, in progress | No

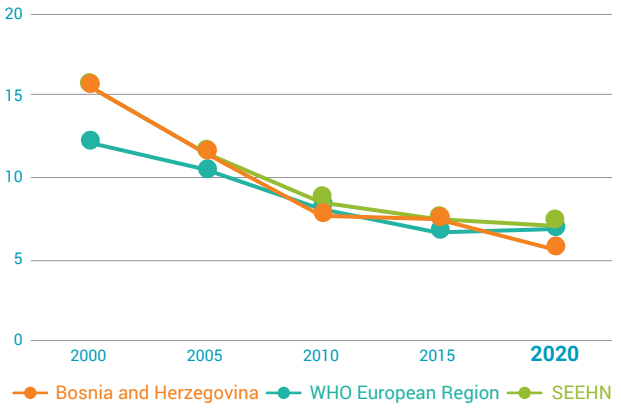
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 67.2 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 18.7 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Bosnia and Herzegovina | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

BULGARIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2018

0 0.5 — 12.7 — 19.2 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 1.1 2.5 — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.9 3.5 — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 — 460.0 460.0 — 500

Standardized treatable mortality, rate, 2021

40 46.1 — 225.1 — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 — 4.0 5.4 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 1996

0 0.1 0.9 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 1.1 2.0 2.0 — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Bulgaria · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2017

0 3.9 **13.4** 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 **72.0** 100.0 100

Births by caesarean section as % of all live births, 2014

0 4.0 **39.1** 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 **61.2** 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 **15.2** 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 **38.0** 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

0 2.4 **6.0** 29.9 30

Medical doctors per 10 000 population, 2022

10 18.8 **49.0** 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 **41.9** 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 **12.9** 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 **5.4** 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 **35.1** 78.7 80

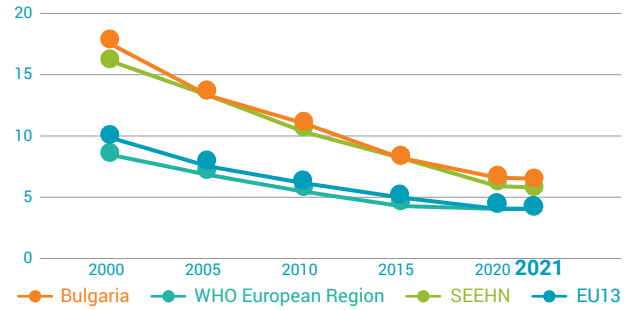
Digital health

National electronic health records: Yes | Yes, in progress | No

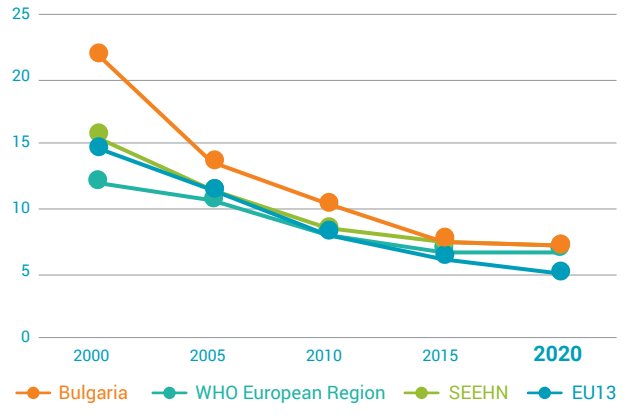
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 **66.3** 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 **24.2** 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Bulgaria | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

CROATIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

Effectiveness

Standardized preventable mortality, rate, 2021

Standardized treatable mortality, rate, 2021

Thirty-day mortality after hospital admission for AMI, rate, 2021

Efficiency

Average length of stay, all hospitals*, days, 2014

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

Avoidable hospital admissions – COPD*, rate, 2019

Avoidable hospital admissions – diabetes*, rate, 2019

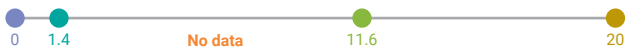
Patient safety

Patients reporting a medical mistake, %, 2020

Surgical wound infection rate, all operations, %, year

Pulmonary embolism after hip and knee replacement, rate, 2017

Obstetric trauma, vaginal delivery with instrument, rate, 2021



People-centredness*

Doctor spending enough time with patients during consultation, %, 2020

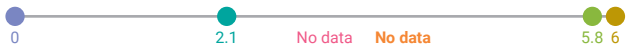
Doctor providing easy-to-understand explanations, %, 2020

Doctor involving patient in decisions about care, %, 2020

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year



Legend: Croatia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening*, %, 2021

0 3.9 No data 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 25.0 79.4 80

Tuberculosis treatment coverage*, %, 2022

40 50.0 >99 100.0 100

Births by caesarean section as % of all live births, 2016

0 4.0 23.0 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 55.8 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 34.8 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 60.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, **, 2021

0 2.4 8.0 29.9 30

Medical doctors per 10 000 population*, 2021

10 18.8 36.1 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 72.8 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 14.0 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 6.8 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 9.4 78.7 80

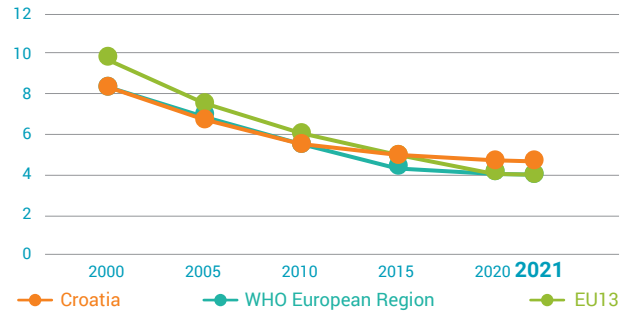
Digital health

National electronic health records: Yes | Yes, in progress | No

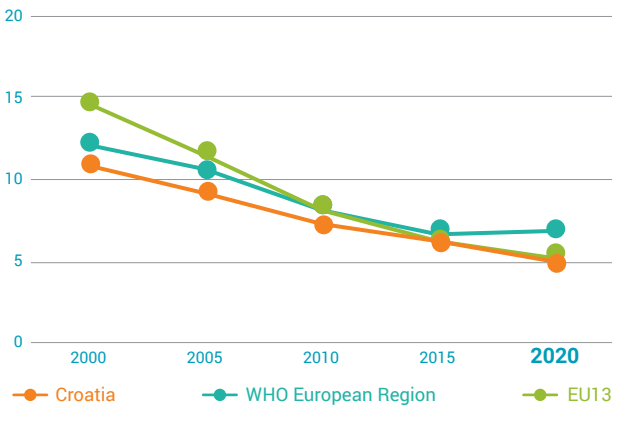
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 68.6 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 16.1 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Croatia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

CYPRUS

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 3.4 5.0 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.1 0.3 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.1 2.5 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 139.5 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 78.4 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 6.4 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 7.1 9.2 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Cyprus · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 91.0 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 56.9 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 70.2 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 42.9 43.4 50

Health workforce

General practitioners per 10 000 population*, 2015

0 2.4 6.2 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 35.5 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 42.8 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 18.4 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 8.0 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 9.9 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 35.0 48.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

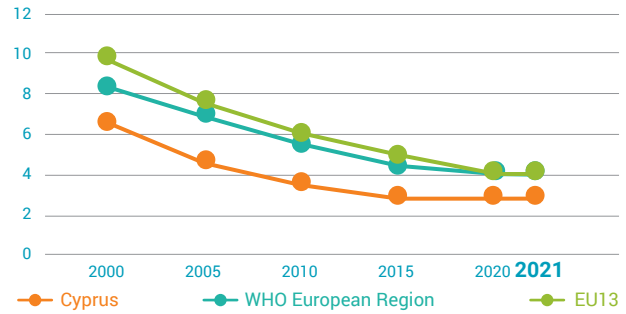
Digital health

National electronic health records: Yes | Yes, in progress | No

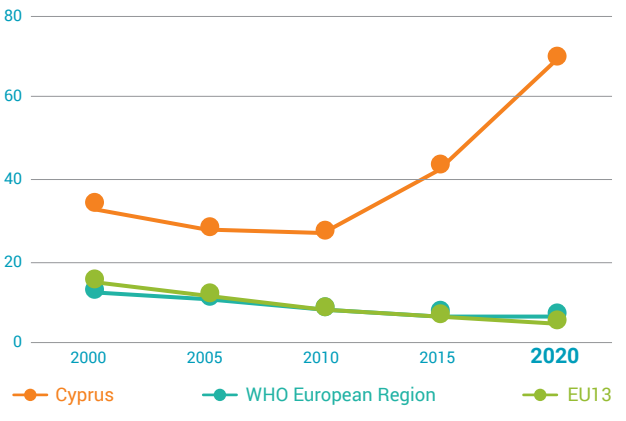
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 72.4 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 8.2 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria.
* Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Cyprus | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

CZECHIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 3.3 4.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.4 0.6 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.1 1.8 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 285.9 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 125.9 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 11.0 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 9.4 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 53.2 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 100.7 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 132.5 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2014

0 0.1 0.9 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 7.2 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, 2010

70 79.0 96.3 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 81.7 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 6.7 7.4 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Czechia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2012

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2020

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

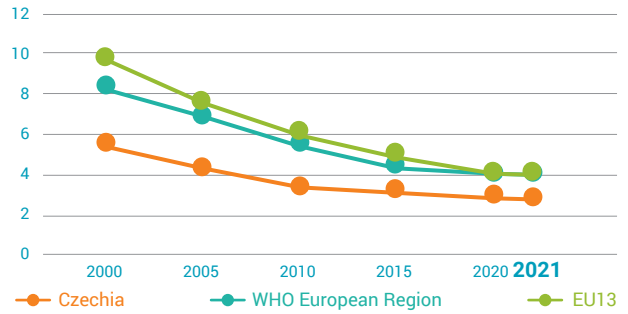
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

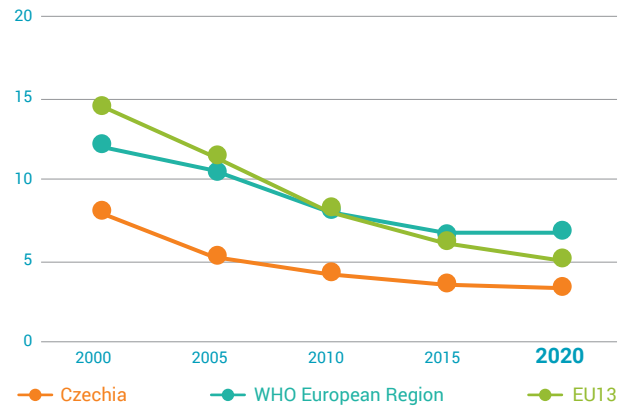
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births

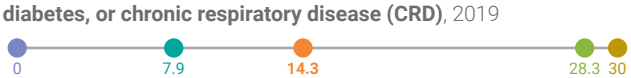


Maternal mortality ratio, per 100 000 live births

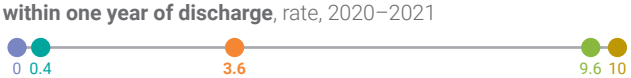


Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019



Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021



Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Czechia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

DENMARK

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 1.6 2.6 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 2.7 4.5 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 8.4 15.6 16.9 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 148.9 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 64.3 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 6.9 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2013

0 4.0 4.3 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 50.7 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 287.0 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 128.1 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2020

0 0.1 0.8 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2020

0 1.4 11.6 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 16.4 21.1 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 2.8 2.9 5.8 6

Legend: Denmark · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2020

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2020

Medical doctors per 10 000 population, 2020

Nursing personnel per 10 000 population, 2020

Financing

Public spending on health as % of total public spending, 2022

Public spending on health as % of GDP, 2022

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

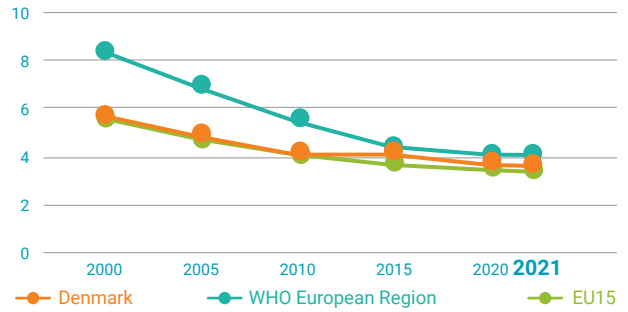
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

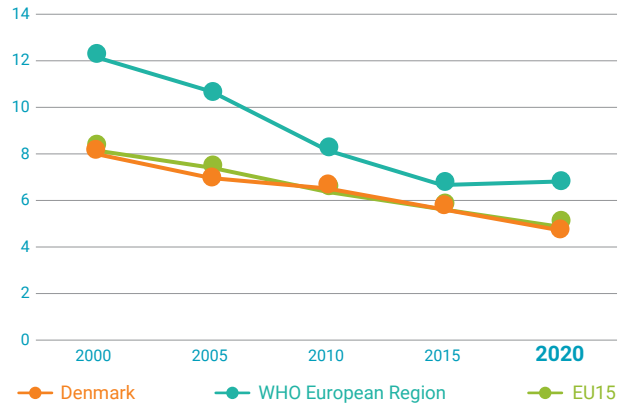
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2017

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria.
* Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Denmark | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ESTONIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 3.7 7.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 12.9 12.9 15.6 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 3.2 4.7 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 304.7 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 135.6 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 14.7 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 7.6 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 44.6 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 84.9 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 104.1 221.9 250

Patient safety

Patients reporting a medical mistake, %, 2020

0 3.0 5.2 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2017

20 21.4 73.2 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 6.0 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 92.3 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 93.5 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 89.2 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 7.7 11.6 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Estonia Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

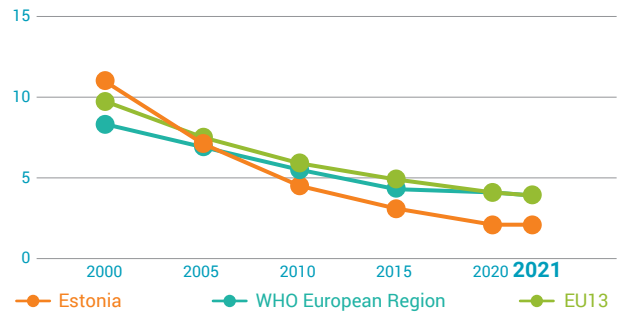
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

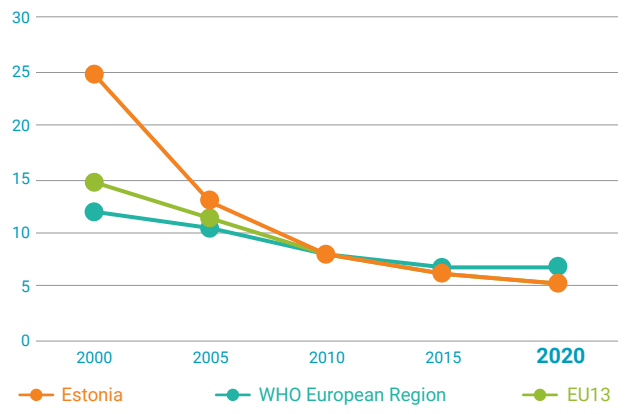
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria.
* Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Estonia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

FINLAND

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2016

0 0.5 2.4 3.8 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 7.9 10.0 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 7.7 10.6 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 156.4 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 69.8 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 8.0 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2014

0 4.0 10.6 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 35.0 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 124.7 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 112.1 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2022

0 0.1 1.5 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 533.1 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 3.1 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2010

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, 2010

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 20.2 28.8 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 No data No data 5.8 6

Legend: Finland · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 72.3 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 79.4 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2016

0 4.0 16.4 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 31.7 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 2.6 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 70.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2020

0 2.4 13.9 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 43.8 88.8 100

Nursing personnel per 10 000 population, 2020

20 27.4 189.2 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 15.1 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 8.4 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 16.1 78.7 80

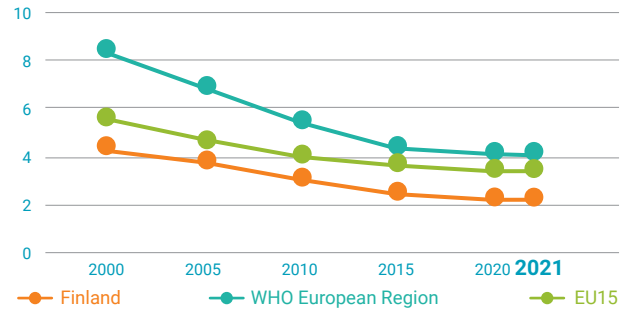
Digital health

National electronic health records: Yes | Yes, in progress | No

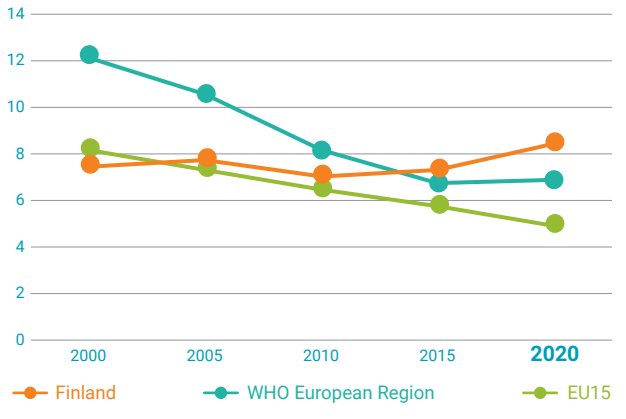
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.0 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 9.6 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020-2021

0 0.4 2.9 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Finland | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

FRANCE

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2017

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

Effectiveness

Standardized preventable mortality, rate, 2021

Standardized treatable mortality, rate, 2021

Thirty-day mortality after hospital admission for AMI, rate, 2019

Efficiency

Average length of stay, all hospitals, days, 2013

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

Avoidable hospital admissions – COPD, rate, 2019

Avoidable hospital admissions – diabetes, rate, 2019

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

Surgical wound infection rate, all operations, %, year

Pulmonary embolism after hip and knee replacement, rate, 2015

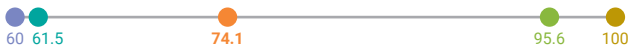
Obstetric trauma, vaginal delivery with instrument, rate, year

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

Doctor providing easy-to-understand explanations, %, 2020

Doctor involving patient in decisions about care, %, 2020



Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

Legend: France · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

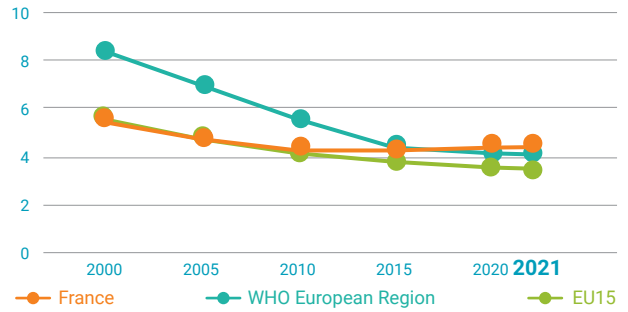
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

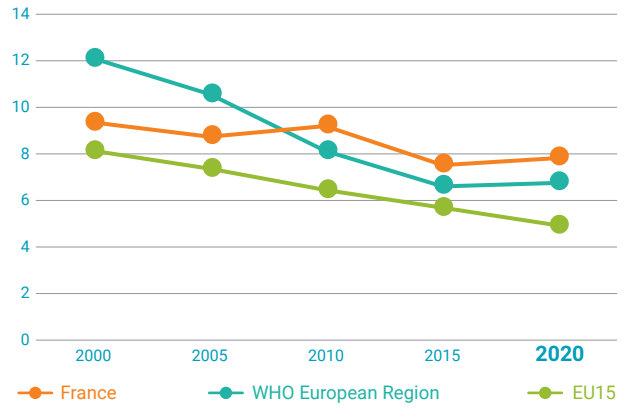
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: France | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

GEORGIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2018

0 0.5 9.1 17.4 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 No data No data 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 No data No data 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2021

0 4.0 6.7 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Georgia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 No data 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 68.0 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 41.4 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 78.6 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 25.8 43.4 50

Medicines

Antibiotic consumption*, %, 2020

0 35.0 53.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2022

0 2.4 8.2 29.9 30

Medical doctors per 10 000 population, 2022

10 18.8 56.1 88.8 100

Nursing personnel per 10 000 population, 2022

20 27.4 58.8 202.7 250

Financing

Public spending on health as % of total public spending, 2022

0 4.6 10.5 22.4 30

Public spending on health as % of GDP, 2022

0 0.9 3.1 10.3 20

Out-of-pocket payments as % of current spending on health*, 2021

0 6.9 31.2 78.7 80

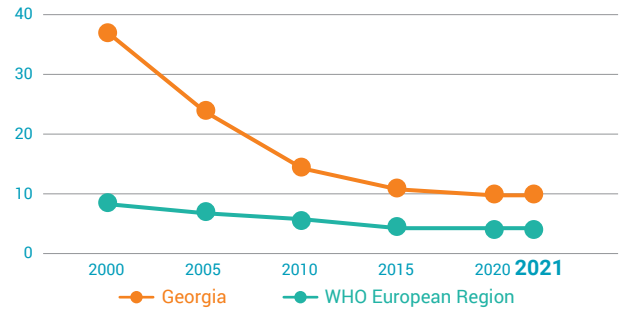
Digital health

National electronic health records: Yes | Yes, in progress | No

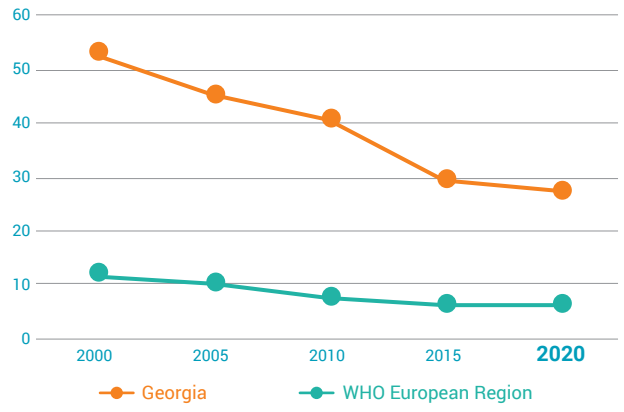
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years*, 2019

50 62.0 64.7 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 24.9 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Georgia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

GERMANY

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2018

0 0.5 1.5 2.4 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.2 0.3 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 0.3 0.6 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 171.3 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 81.3 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 9.0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 249.6 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 206.1 221.9 250

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

0 3.0 3.0 12.6 20

Surgical wound infection rate, all operations, %, 2021

0 0.1 0.2 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 385.8 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 6.1 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 86.9 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 93.7 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 88.6 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 19.2 21.8 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 4.7 5.0 5.8 6

Legend: Germany · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2019

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2018

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

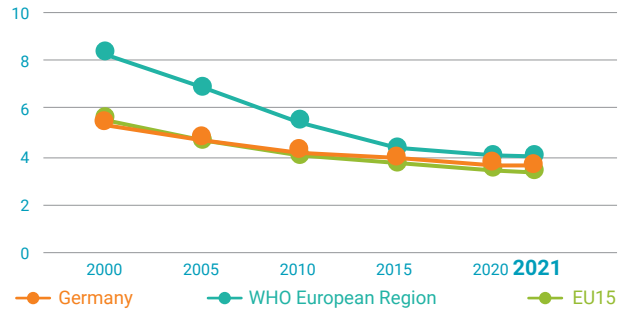
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

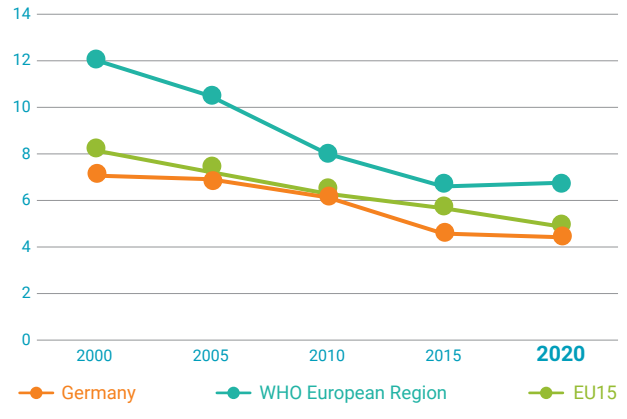
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Germany | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

GREECE

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 5.3 8.9 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 11.6 12.9 23.0 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 12.9 15.6 21.2 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 195.9 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 94.5 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2011

0 4.0 6.8 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 13.7 25.9 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 2.1 2.2 5.8 6

Legend: Greece · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 — >99 100.0 100

Births by caesarean section as % of all live births, year

0 4.0 — No data — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 59.8 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 41.9 43.4 — 50

Health workforce

General practitioners per 10 000 population*, 2021

0 — 2.4 — 4.7 — 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 — 63.7 — 88.8 — 100

Nursing personnel per 10 000 population, 2021

20 27.4 38.2 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 9.4 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 5.4 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 33.3 — 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 52.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

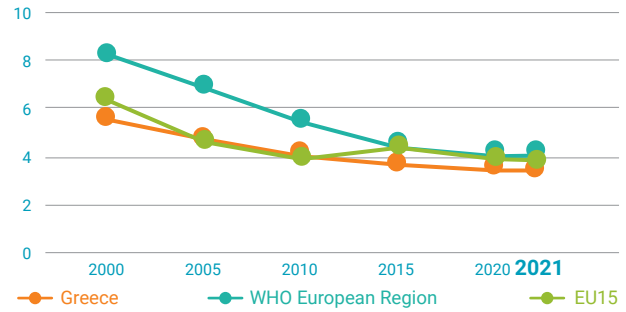
Digital health

National electronic health records: Yes | Yes, in progress | No

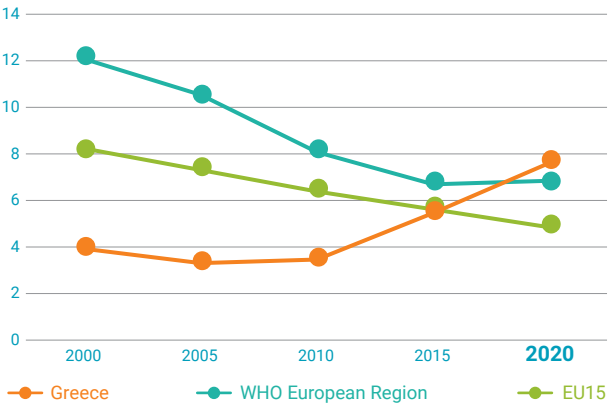
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 70.9 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 12.5 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Greece | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

HUNGARY

Quality of care and patient safety*

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 8.8 **11.6** 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 **1.0** 1.8 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 **0.6** 1.5 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 **452.4** 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 **188.9** 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 **9.5** 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2009

30 38.6 **386.2** 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2021

0 0.1 **0.2** 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 8.4 **10.3** 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Hungary · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 26.0 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 2.8 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2014

0 4.0 36.4 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 58.5 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 19.3 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 49.0 83.0 100

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2021

0 2.4 6.7 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 33.0 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 52.7 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 11.0 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 5.3 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 24.6 78.7 80

Digital health

National electronic health records

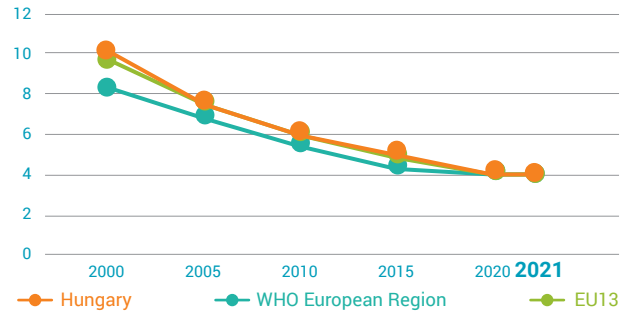
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

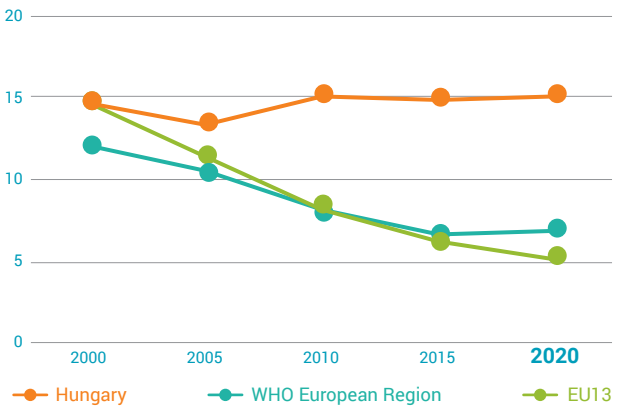
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 67.2 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 22.1 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * The data has not been validated by the Hungarian authorities. ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Hungary | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ICELAND

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2019

0 0.1 — 5.2 — 9.9 — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2019

0 0.1 — 9.4 — 15.6 16.1 — 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 110.8 — 460.0 — 500

Standardized treatable mortality, rate, 2021

40 46.1 59.2 — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 — 3.2 — 5.0 — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 — 4.0 — 6.1 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 — 100.6 — 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 37.1 — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, year

0 0.1 — No data — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 — 1.4 — 9.4 — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 — 22.5 — 38.1 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Iceland · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2022

0 3.9 62.0 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2016

0 4.0 18.3 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 46.6 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 1.1 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 83.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2022

0 2.4 5.9 29.9 30

Medical doctors per 10 000 population, 2022

10 18.8 45.2 88.8 100

Nursing personnel per 10 000 population, 2022

20 27.4 152.4 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 16.4 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 8.1 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 14.7 78.7 80

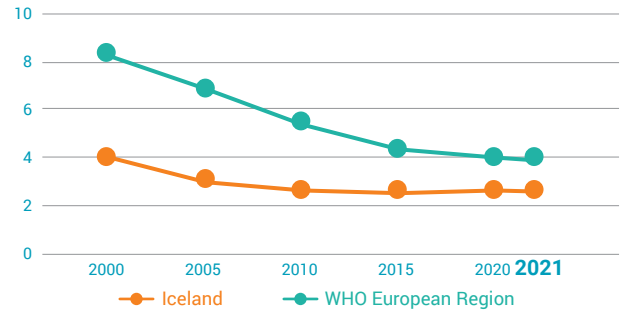
Digital health

National electronic health records: Yes | Yes, in progress | No

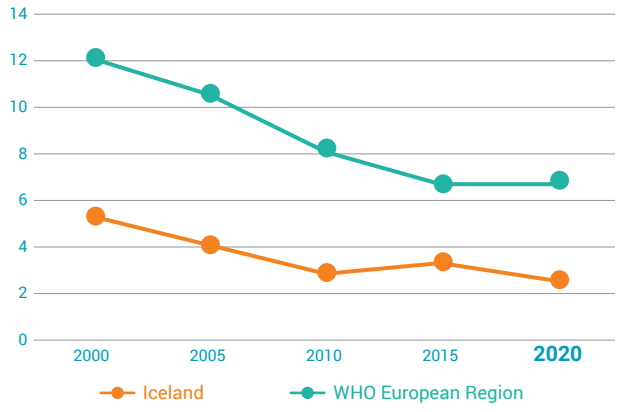
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 72.0 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 8.7 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021

0 0.4 0.4 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Iceland | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

IRELAND

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2016

0 0.5 1.0 1.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 2.7 4.7 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.9 4.9 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 148.4 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 69.2 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2014

0 4.0 6.0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD*, rate, 2020

30 38.6 238.0 386.2 400

Avoidable hospital admissions – diabetes*, rate, 2020

30 37.1 85.6 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2022

0 0.1 0.6 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2022

20 21.4 320.3 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 3.3 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 26.2 35.7 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 3.5 4.1 5.8 6

Legend: Ireland Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 72.9 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 49.5 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 31.3 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 63.0 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 10.6 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 74.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2021

0 2.4 23.6 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 40.6 88.8 100

Nursing personnel per 10 000 population, 2022

20 27.4 135.0 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 21.0 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 5.2 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 10.7 78.7 80

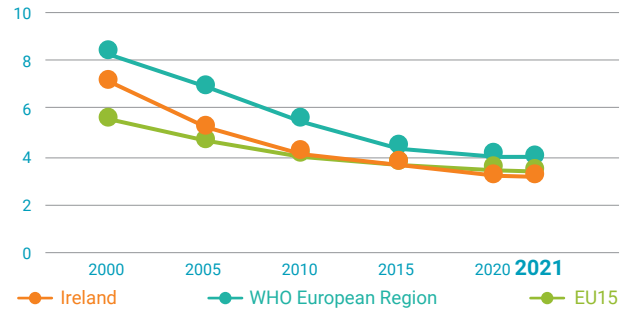
Digital health

National electronic health records: Yes | Yes, in progress | No

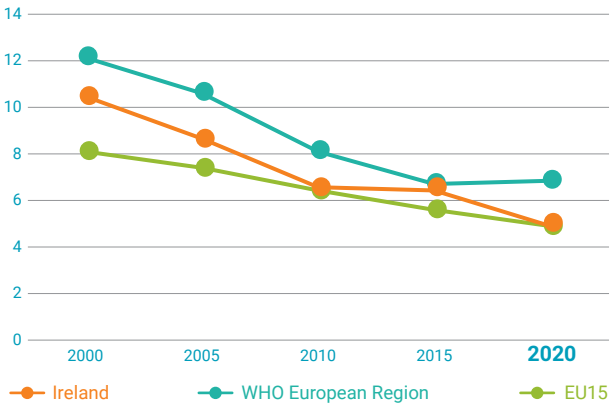
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.1 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 9.7 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Ireland | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ISRAEL

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan — Yes
- National patient safety plan — Yes
- National antimicrobial resistance plan — Yes, in progress
- Health misinformation prevention plan — Yes, in progress
- Patient/public representation in health governance — Yes
- Accreditation system for hospitals — Yes
- National electronic health records — No
- Quality and safety included in telehealth guidelines — Yes

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 3.8 5.7 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 12.9 No data No data 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 No data No data 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 7.2 7.2 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 6.8 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 154.6 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 516.8 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 1.4 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69 96.1 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79 97.5 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 84.1 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Israel · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2014

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

Medicines

Antibiotic consumption, %, year

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2022

Medical doctors per 10 000 population, 2022

Nursing personnel per 10 000 population, 2022

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

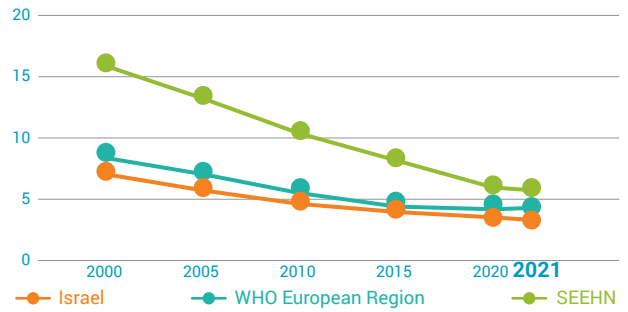
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

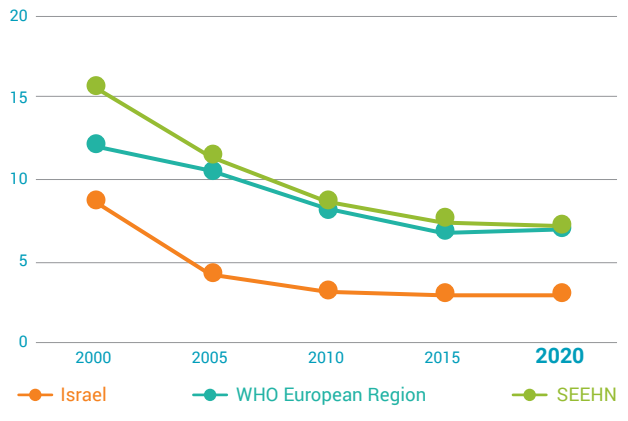
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2019

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Israel | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ITALY

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 6.5 9.4 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 1.8 3.8 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.8 3.9 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 128.0 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 64.5 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 38.4 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 38.6 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 40.7 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 25.4 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 2.9 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 13.2 17.3 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 4.2 4.6 5.8 6

Legend: Italy · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2014

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2022

Medical doctors per 10 000 population, 2022

Nursing personnel per 10 000 population, 2022

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

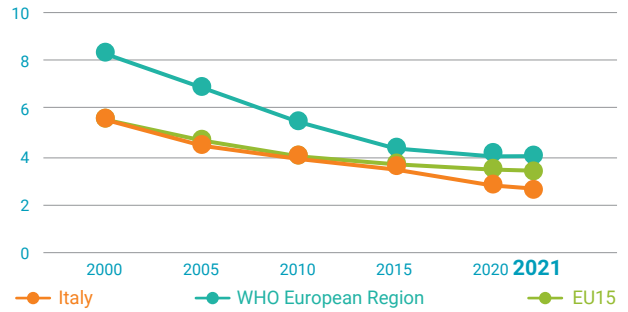
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

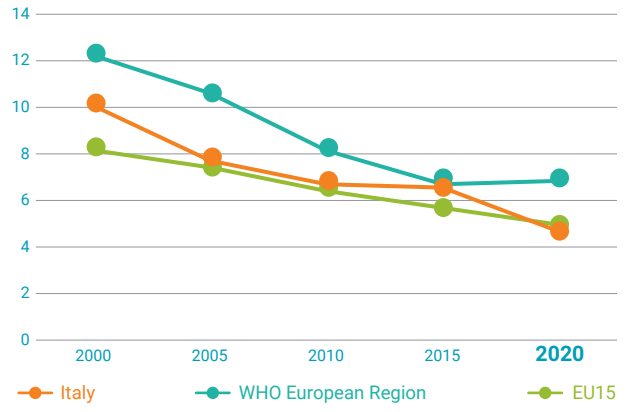
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births

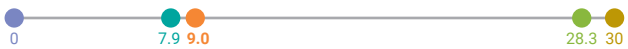


Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019



Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Italy | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

KAZAKHSTAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 No data No data 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 No data No data 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 No data No data 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2022

0 4.0 8.6 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2022

0 0.1 0.1 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 No data No data 5.8 6

Legend: Kazakhstan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 66.0 — 100.0 100

Births by caesarean section as % of all live births, 2013-2015

0 — 4.0 — 14.8 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, 2018

0 — 35.0 — 53.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2014

0 — 2.4 3.6 — 29.9 30

Medical doctors per 10 000 population, 2020

10 — 18.8 — 40.3 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 65.1 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 11.6 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 2.6 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 25.0 — 78.7 80

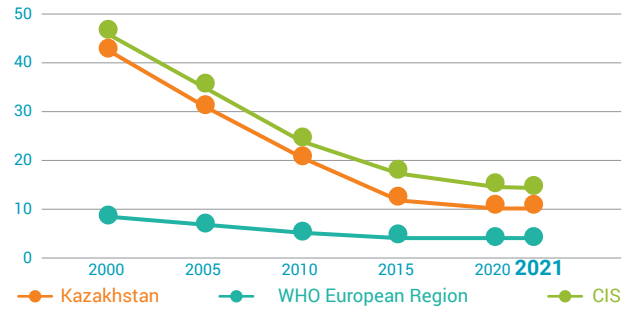
Digital health

National electronic health records: Yes | Yes, in progress | No

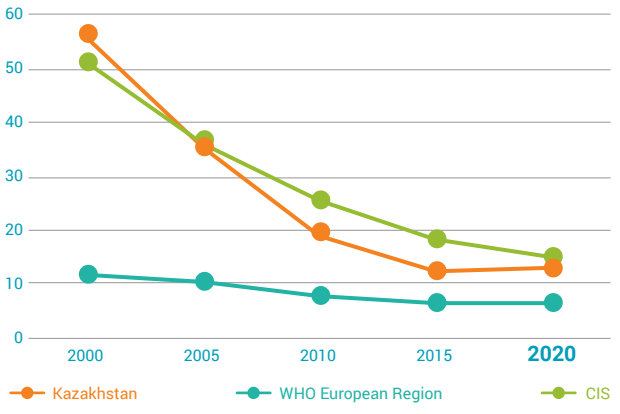
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 65.0 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 22.4 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Kazakhstan | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

KYRGYZSTAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2022

0 — 4.0 — 7.7 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 2022

0 0.1 0.3 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 — 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Kyrgyzstan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 53.0 — 100.0 100

Births by caesarean section as % of all live births, 2012–2014

0 4.0 7.4 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 50

Health workforce

General practitioners per 10 000 population*, year

0 2.4 — No data — 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 21.5 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 40.7 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 8.6 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 2.9 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 — 40.7 — 78.7 80

Medicines

Antibiotic consumption, %, 2020

0 — 35.0 — 54.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

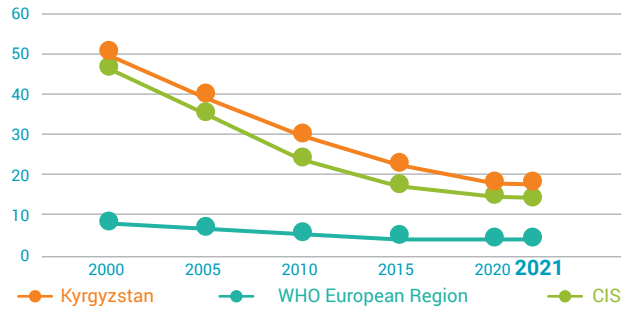
Digital health

National electronic health records: Yes | Yes, in progress | No

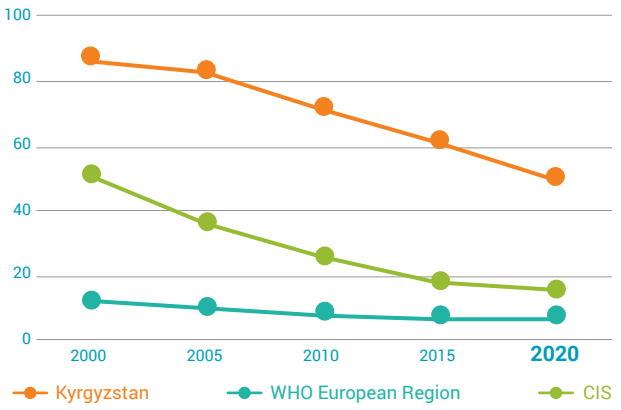
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 65.8 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 20.3 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Kyrgyzstan — Minimum — Maximum — WHO Min. — WHO Max. — Poorest quintile

LATVIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2016

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

Effectiveness

Standardized preventable mortality, rate, 2021

Standardized treatable mortality, rate, 2021

Thirty-day mortality after hospital admission for AMI, rate, 2021

Efficiency

Average length of stay, all hospitals*, days, 2014

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

Avoidable hospital admissions – COPD, rate, 2020

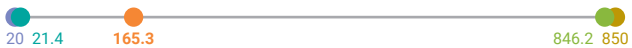
Avoidable hospital admissions – diabetes, rate, 2020

Patient safety

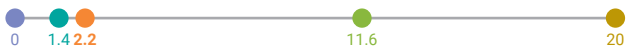
Patients reporting a medical mistake, %, year

Surgical wound infection rate, all operations, %, year

Pulmonary embolism after hip and knee replacement, rate, 2021



Obstetric trauma, vaginal delivery with instrument, rate, 2021



People-centredness*

Doctor spending enough time with patients during consultation, %, year

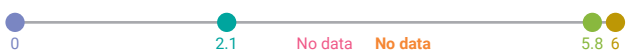
Doctor providing easy-to-understand explanations, %, year

Doctor involving patient in decisions about care, %, year

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year



Legend: Latvia Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Health workforce

General practitioners per 10 000 population**, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Digital health

National electronic health records

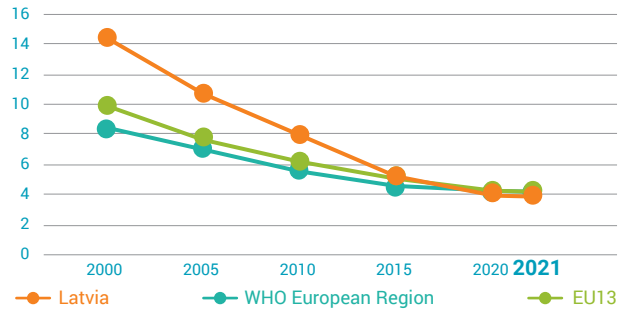
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

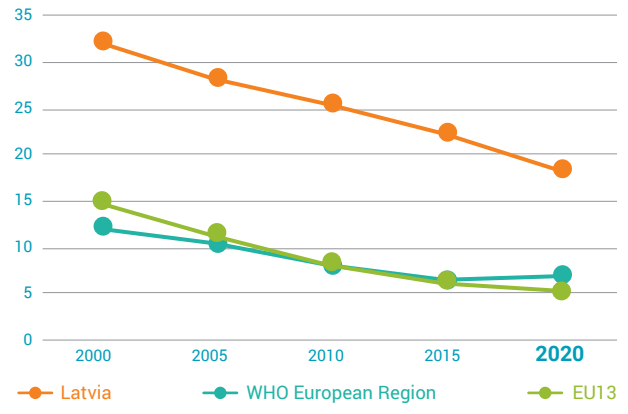
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



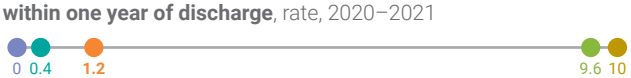
Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years*, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021



Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Latvia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

LITHUANIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2016

0 0.5 6,4 15.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 3.8 4.6 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 2.2 3.4 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 394.1 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 190.9 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 14.7 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 39.9 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 90.2 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 141.3 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2022

0 0.1 0.4 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2022

20 21.4 134.8 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 2.2 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 5.9 6.3 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Lithuania · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

Colorectal cancer screening, %, 2021

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2015

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2022

Nursing personnel per 10 000 population, 2022

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Digital health

National electronic health records

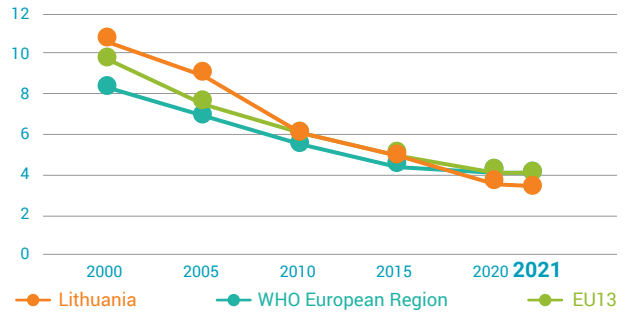
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

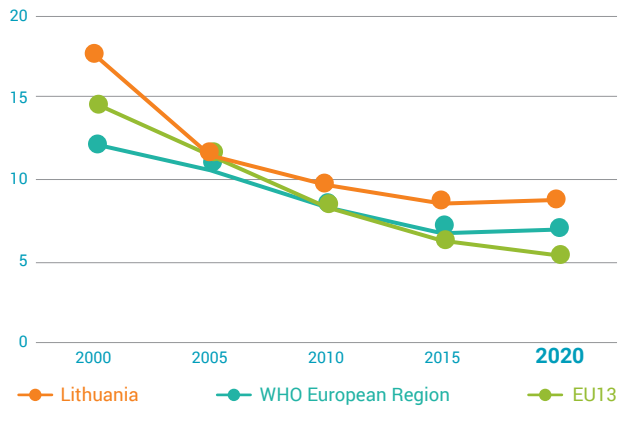
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Lithuania | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

LUXEMBOURG

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2017

0 0.5 2.1 2.3 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.8 1.6 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.2 3.0 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 132.6 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 54.7 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.8 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 180.7 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 139.3 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 91.0 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 94.8 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 95.6 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 16.5 17.4 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 3.0 3.4 5.8 6

Legend: Luxembourg · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2020

0 3.9 60.8 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 29.4 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2013

0 4.0 30.5 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 53.4 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 5.5 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 61.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2017

0 2.4 9.0 29.9 30

Medical doctors per 10 000 population, 2017

10 18.8 29.9 88.8 100

Nursing personnel per 10 000 population, 2017

20 27.4 117.3 202.7 250

Financing

Public spending on health as % of total public spending, 2022

0 4.6 11.0 22.4 30

Public spending on health as % of GDP, 2022

0 0.9 4.7 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 8.9 78.7 80

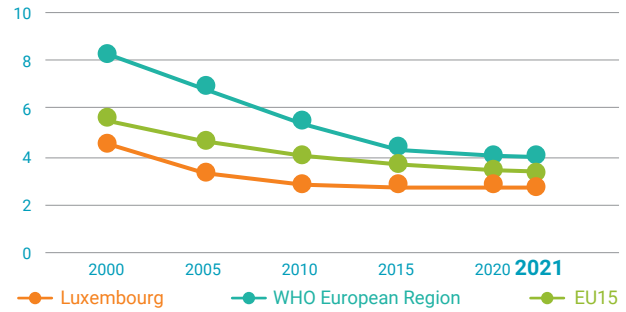
Digital health

National electronic health records: Yes | Yes, in progress | No

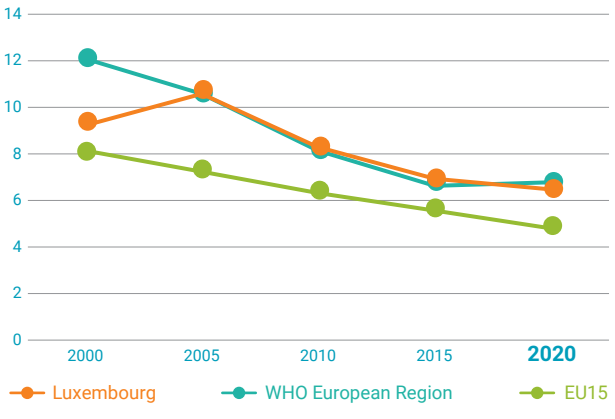
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.6 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 9.7 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Luxembourg | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

MALTA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 4.3 6.9 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.1 0.2 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 0.1 0.3 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 132.8 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 81.8 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 7.9 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 214.5 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement*, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument*, rate, 2021

0 1.4 11.5 11.5 20

People-centredness*

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 22.3 29.4 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits*, year

0 2.1 No data No data 5.8 6

Legend: Malta · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2016

0 4.0 30.7 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 64.5 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 20.4 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 58.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2015

0 2.4 7.6 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 42.8 88.8 100

Nursing personnel per 10 000 population, 2020

20 27.4 80.2 202.7 250

Financing

Public spending on health as % of total public spending*, 2021

0 4.6 16.2 22.4 30

Public spending on health as % of GDP*, 2021

0 0.9 7.1 10.3 20

Out-of-pocket payments as % of current spending on health, 2020

0 6.9 30.3 78.7 80

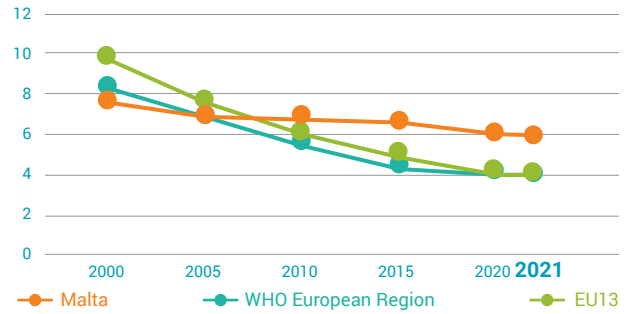
Digital health

National electronic health records: Yes | Yes, in progress | No

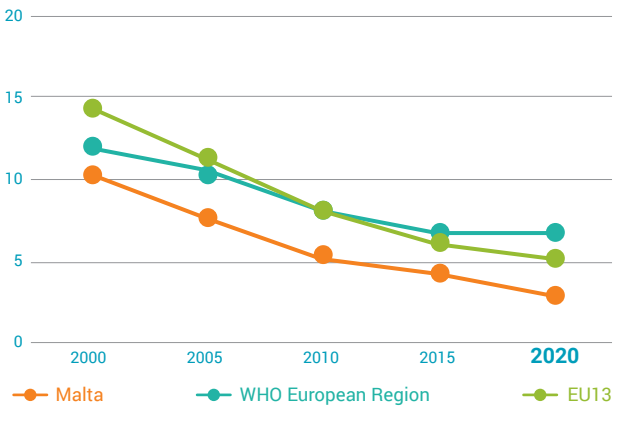
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.5 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 10.5 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Malta | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

MONACO

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — 12.9 — No data — No data — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2020

0 — 4.0 — 17.7 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 2020

0 0.1 0.6 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Monaco ● Minimum ● Maximum ● WHO Min. ● WHO Max. ○ Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2018

40 50.0 — 87.0 — 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 — 20.6 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 50

Health workforce

General practitioners per 10 000 population*, 2014

0 2.4 — 14.1 — 29.9 30

Medical doctors per 10 000 population, 2020

10 18.8 — 88.8 88.8 — 100

Nursing personnel per 10 000 population, 2014

20 27.4 — 202.7 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 13.6 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 3.3 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 6.9 — 78.7 80

Medicines

Antibiotic consumption, %, year

0 — 35.0 — No data — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

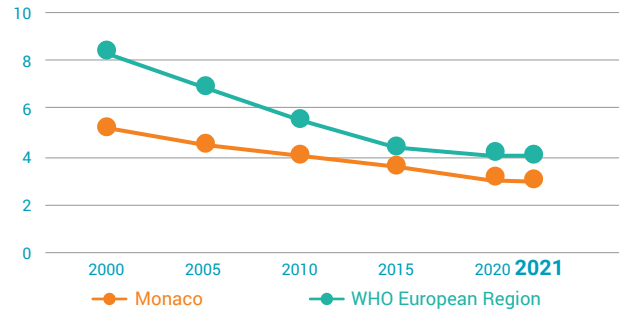
Digital health

National electronic health records: Yes | Yes, in progress | No

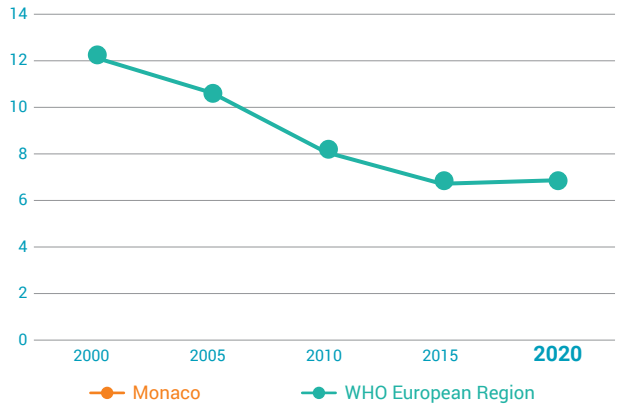
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, year

50 62.0 — No data — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), year

0 — 7.9 — No data — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Monaco | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

MONTENEGRO

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2017

0 0.5 7.0 9.4 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2022

0 0.1 2.6 3.8 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2022

0 0.1 2.0 4.2 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 No data 460.0 500

Standardized treatable mortality, rate, year

40 46.1 No data 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.5 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Montenegro · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 79.0 — 100.0 100

Births by caesarean section as % of all live births, 2011–2013

0 — 4.0 — 19.9 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2020

30 31.7 — 80.0 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 21.2 — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 46.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2022

0 — 2.4 — 5.0 — 29.9 30

Medical doctors per 10 000 population, 2022

10 — 18.8 — 27.5 — 88.8 — 100

Nursing personnel per 10 000 population, 2022

20 27.4 — 55.9 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 14.4 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 6.5 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 38.1 — 78.7 80

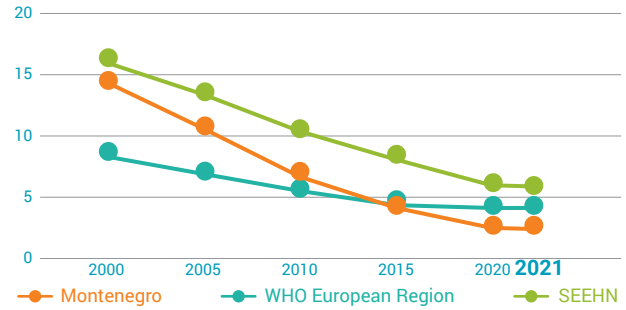
Digital health

National electronic health records: Yes | Yes, in progress | No

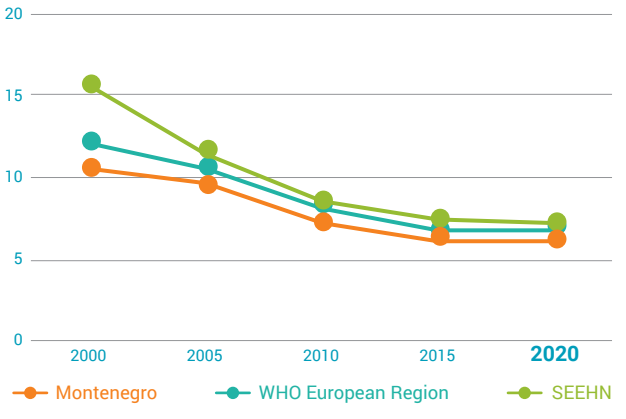
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 67.0 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 22.3 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Montenegro · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

NETHERLANDS (KINGDOM OF THE)

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 0.2 **0.5** 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 0.2 **0.3** 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 **0.4** 1.2 15.6 30

Effectiveness

Standardized preventable mortality*, rate, 2021

100 110.8 **146.5** 460.0 500

Standardized treatable mortality*, rate, 2021

40 46.1 **59.7** 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 **3.2** 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2006

0 4.0 **10.8** 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke*, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD*, rate, 2019

30 38.6 **175.7** 386.2 400

Avoidable hospital admissions – diabetes*, rate, 2019

30 37.1 **51.5** 221.9 250

Patient safety

Patients reporting a medical mistake*, %, 2020 or nearest year

0 3.0 **3.9** 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 **328.7** 846.2 850

Obstetric trauma, vaginal delivery with instrument*, rate, 2019

0 1.4 **3.4** 11.6 20

People-centredness*

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 **93.2** 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 **94.9** 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 **93.3** 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 14.5 **24.1** 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 **2.8** 2.8 5.8 6

Legend: Netherlands (Kingdom of the) · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 54.8 78.5 80

Colorectal cancer screening, %, 2021

0 2.8 70.6 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2015

0 4.0 16.6 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin*, 2021

30 31.7 41.4 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin*, 2021

0 0.9 1.5 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 70.0 83.0 100

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2021

0 2.4 18.3 29.9 30

Medical doctors per 10 000 population*, 2021

10 18.8 39.1 88.8 100

Nursing personnel per 10 000 population*, 2021

20 27.4 114.0 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 16.9 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 7.9 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 9.4 78.7 80

Digital health

National electronic health records

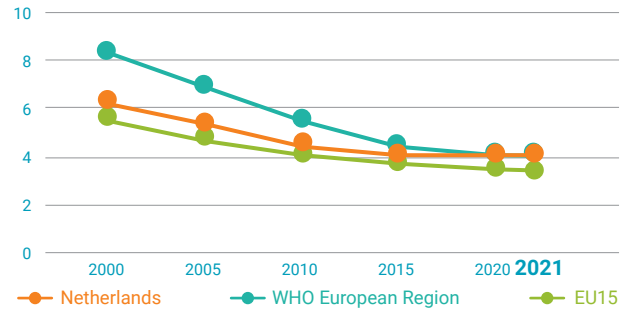
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

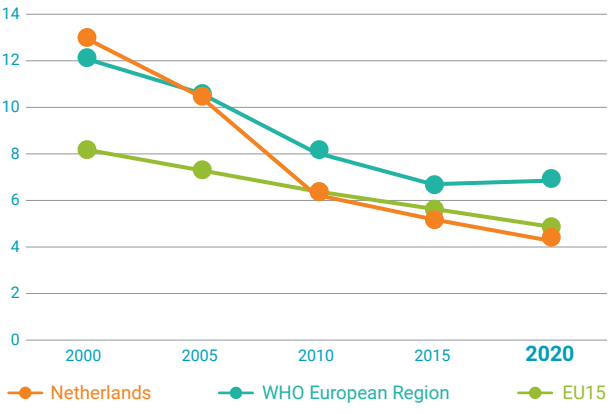
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.4 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 10.3 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2018

0 0.4 9.6 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Netherlands (Kingdom of the) | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

NORTH MACEDONIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2018

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2020

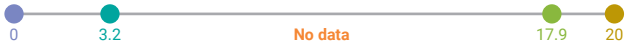
Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2020

Effectiveness

Standardized preventable mortality, rate, year

Standardized treatable mortality, rate, year

Thirty-day mortality after hospital admission for AMI, rate, year



Efficiency

Average length of stay, all hospitals*, days, 2013

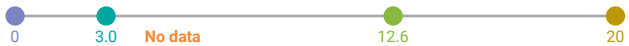
One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

Avoidable hospital admissions – COPD, rate, year

Avoidable hospital admissions – diabetes, rate, year

Patient safety

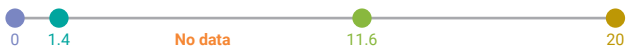
Patients reporting a medical mistake, %, year



Surgical wound infection rate, all operations, %, 2003

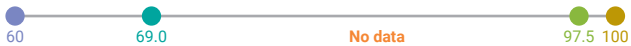
Pulmonary embolism after hip and knee replacement, rate, year

Obstetric trauma, vaginal delivery with instrument, rate, year



People-centredness

Doctor spending enough time with patients during consultation, %, year

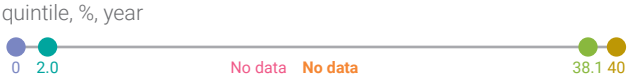


Doctor providing easy-to-understand explanations, %, year

Doctor involving patient in decisions about care, %, year

Equity

Vaccination against influenza on average and in the poorest quintile, %, year



Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

Legend: North Macedonia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 64.0 — 100.0 100

Births by caesarean section as % of all live births, 2009-2011

0 — 4.0 — 24.9 — 56.9 — 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 96.3 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 43.4 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 42.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*,**, 2013

0 2.4 — 9.6 — 29.9 30

Medical doctors per 10 000 population, 2020

10 18.8 — 29.6 — 88.8 — 100

Nursing personnel per 10 000 population*, 2020

20 27.4 44.0 — 202.7 — 250

Financing*

Public spending on health as % of total public spending, 2021

0 — 4.6 — 13.0 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 4.6 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2020

0 6.9 — 41.7 — 78.7 80

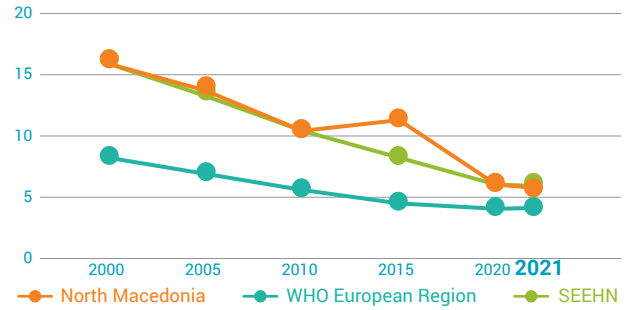
Digital health

National electronic health records: Yes | Yes, in progress | No

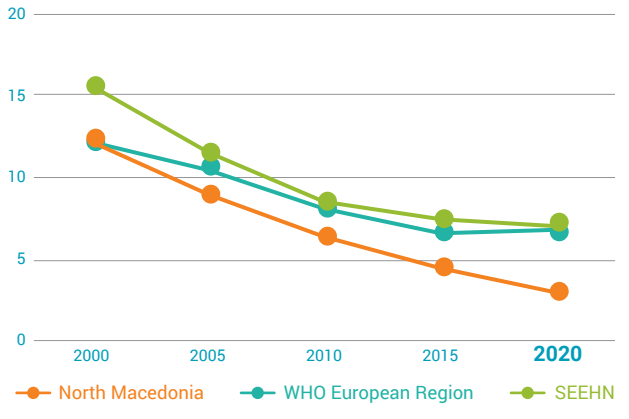
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births*



Maternal mortality ratio, per 100 000 live births*



Healthy life expectancy at birth, years*, 2019

50 — 62.0 66.1 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 22.7 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network * An update to this data may already be available or will be available in the near future: ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: North Macedonia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

NORWAY

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 1.8 — 4.9 — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 — 7.5 — 15.6 15.9 — 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 113.9 — 460.0 — 500

Standardized treatable mortality, rate, 2021

40 46.1 55.6 — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 — 3.2 — 6.0 — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 — 4.0 — 6.0 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

30 — 35.0 — 41.9 — 53.2 — 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 — 220.9 — 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 — 70.4 — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

0 — 3.0 — 12.6 12.6 — 20

Surgical wound infection rate, all operations, %, 2021

0 0.1 0.3 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2019

20 21.4 — 254.1 — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2019

0 — 1.4 2.7 — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 — 69.0 — 81.6 — 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 — 79.0 — 90.1 — 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 — 86.7 — 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 — 12.9 — 17.1 — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Norway · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2019

Colorectal cancer screening, %, year

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending, 2022

Public spending on health as % of GDP, 2022

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

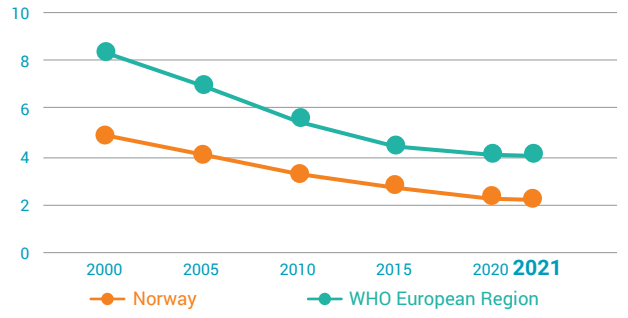
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

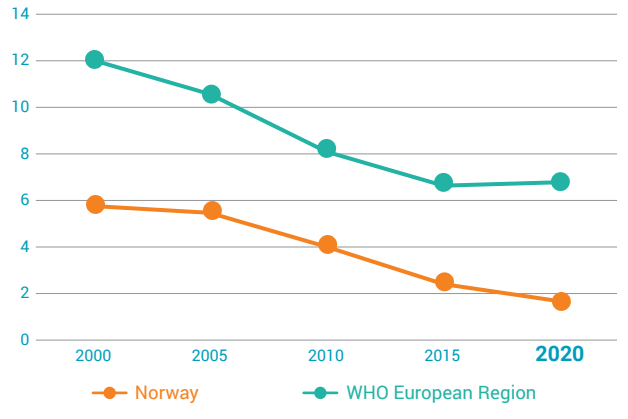
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2019

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Norway | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

POLAND

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 5.5 8.6 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 3.6 4.0 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 1.5 1.7 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 335.9 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 145.9 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 7.9 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 6.9 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 121.5 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 189.8 221.9 250

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

0 3.0 9.0 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 21.4 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 1.6 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 70.0 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 79.0 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 61.5 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 4.0 4.8 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Poland · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2022

0 3.9 **10.9** 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 **88.0** 100.0 100

Births by caesarean section as % of all live births, 2014

0 4.0 **35.6** 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 **60.6** 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 **16.5** 43.4 50

Health workforce

General practitioners per 10 000 population*, 2021

0 2.4 **8.7** 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 **33.9** 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 **56.0** 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 **10.5** 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 **4.6** 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 **20.3** 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 35.0 **61.0** 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

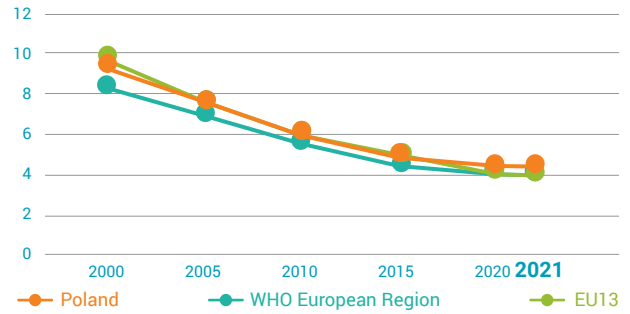
Digital health

National electronic health records: Yes | Yes, in progress | No

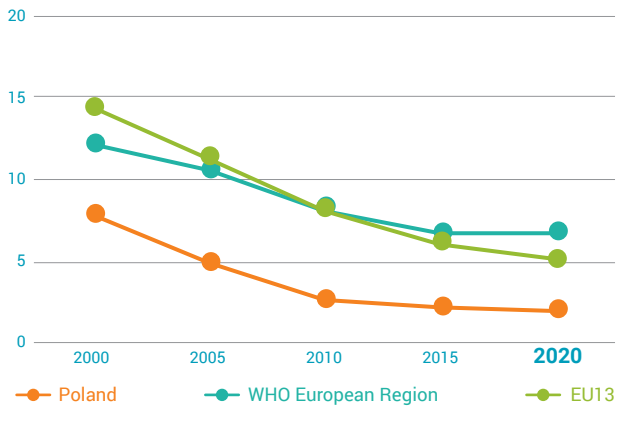
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 **68.7** 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 **17.0** 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Poland | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

PORTUGAL

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 7.2 **10.6** 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 **2.8** 5.9 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 **8.7** 15.6 19.3 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 **155.9** 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 **74.5** 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 **7.2** 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 **8.9** 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 **64.2** 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 **44.1** 221.9 250

Patient safety

Patients reporting a medical mistake*, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2012

0 0.1 **0.4** 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2022

20 21.4 **106.5** 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 **2.4** 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 **89.7** 97.5 100

Doctor providing easy-to-understand explanations, %, 2010

70 79.0 **96.3** 97.7 100

Doctor involving patient in decisions about care, %, 2010

60 61.5 **90.9** 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 14.2 **18.9** 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 3.2 **3.7** 5.8 6

Legend: Portugal · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening*, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening*, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 91.0 — 100.0 100

Births by caesarean section as % of all live births, 2011

0 4.0 — 35.2 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 52.7 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 25.1 — 43.4 — 50

Health workforce

General practitioners per 10 000 population**, 2021

0 — 2.4 — 29.9 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 — 57.7 — 88.8 — 100

Nursing personnel per 10 000 population, 2021

20 27.4 — 75.0 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 14.7 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 7.0 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 29.0 — 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 62.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

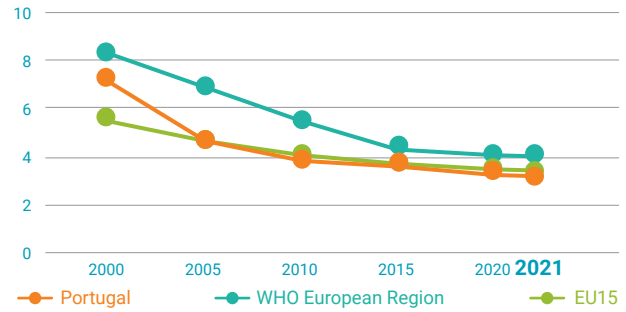
Digital health

National electronic health records: Yes | Yes, in progress | No

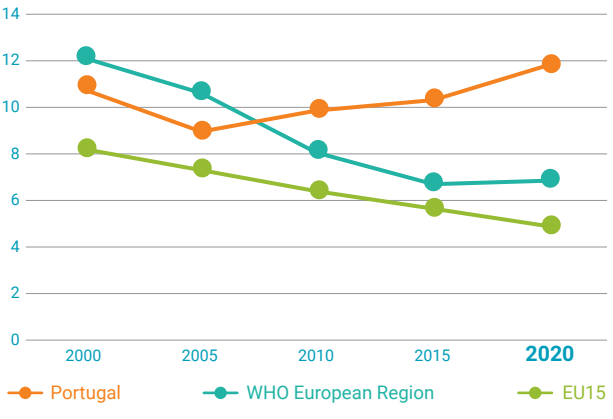
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 71.0 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 11.0 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Portugal | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

REPUBLIC OF MOLDOVA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 6.5 **11.7** 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 12.9 **No data** **No data** 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 **No data** **No data** 15.6 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 **No data** 460.0 500

Standardized treatable mortality, rate, year

40 46.1 **No data** 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 **No data** 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2021

0 4.0 **8.0** 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 **No data** 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 **No data** 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 **No data** 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 **No data** 12.6 20

Surgical wound infection rate, all operations, %, 1992

0 0.1 **0.3** 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 **No data** 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 **No data** 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 **No data** 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 **No data** 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 **No data** 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 **7.7** **No data** 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 **No data** **No data** 5.8 6

Legend: Republic of Moldova · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2014

0 4.0 18.4 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2019

0 0.9 21.7 43.4 50

Medicines

Antibiotic consumption, %, 2018

0 35.0 51.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*,**, 2021

0 2.4 5.4 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 32.5 88.8 100

Nursing personnel per 10 000 population, 2020

20 27.4 59.4 202.7 250

Financing

Public spending on health as % of total public spending*, 2021

0 4.6 14.6 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 5.1 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 29.4 78.7 80

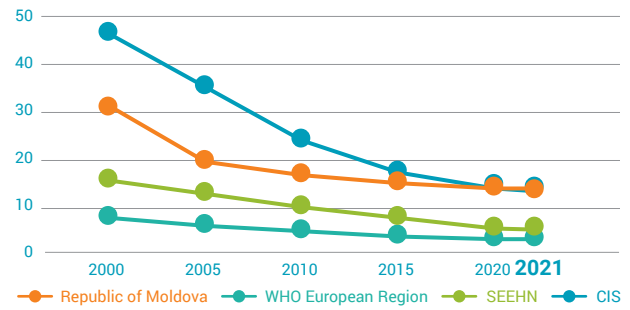
Digital health

National electronic health records: Yes | Yes, in progress | No

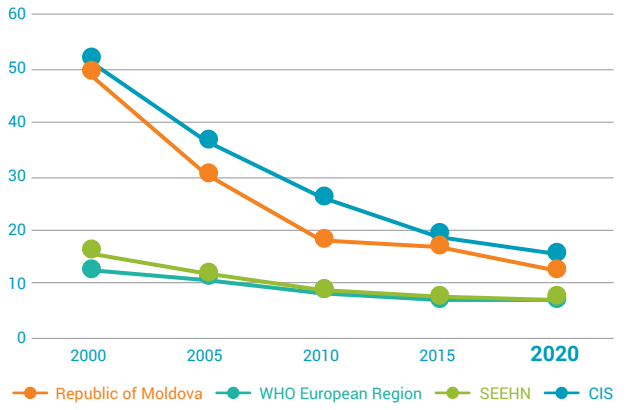
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 64.5 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 24.1 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Republic of Moldova | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

ROMANIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 7.3 **12.5** 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 **5.2** 9.3 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 **6.3** 10.5 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 **440.1** 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 **254.7** 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 **8.9** 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2013

0 4.0 **7.3** 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 **151.4** 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 1994

0 0.1 **0.4** 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2022

20 21.4 **119.7** 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 **1.6** 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 7.0 **10.1** 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Romania · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 **3.9** 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 **87.0** 100.0 100

Births by caesarean section as % of all live births, 2013

0 4.0 **40.1** 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 **64.2** 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 **41.0** 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 **49.0** 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

0 2.4 **7.8** 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 **34.7** 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 **79.1** 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 **12.3** 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 **4.9** 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 **20.9** 78.7 80

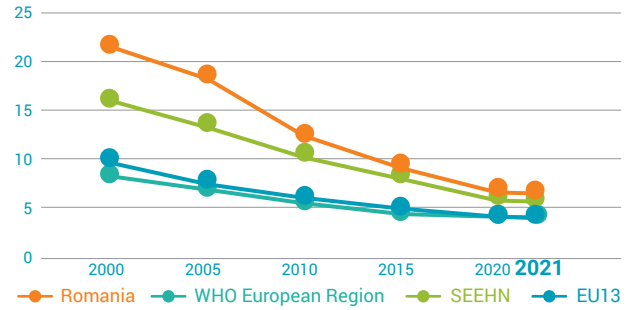
Digital health

National electronic health records: Yes | Yes, in progress | No

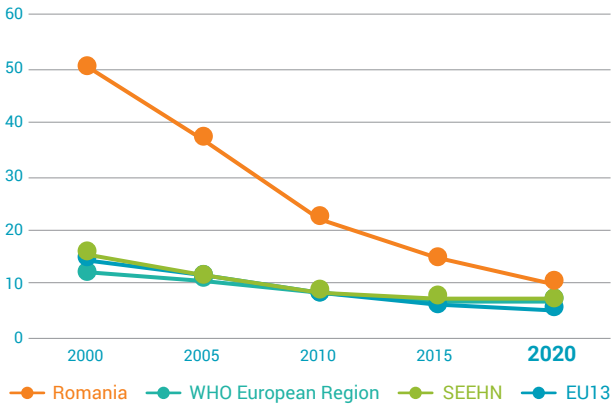
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 **66.8** 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 **21.0** 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Romania | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

RUSSIAN FEDERATION

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2021

0 — 4.0 — 10.2 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 1995

0 0.1 0.1 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Russian Federation · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 100.0 100.0 100

Births by caesarean section as % of all live births, 2006–2011

0 — 4.0 — 13.0 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 82.0 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 14.0 — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 43.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2019

0 — 2.4 3.3 — 29.9 30

Medical doctors per 10 000 population, 2020

10 — 18.8 — 38.3 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 59.1 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 15.1 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 5.3 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 27.2 — 78.7 80

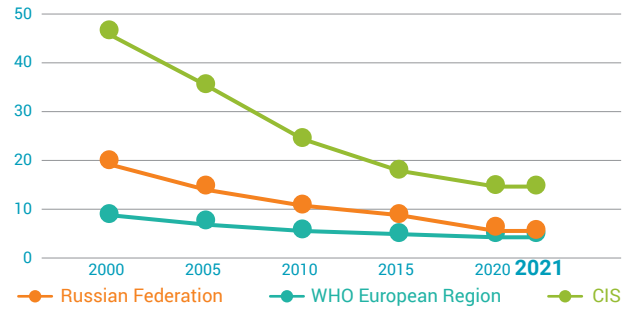
Digital health

National electronic health records: Yes | Yes, in progress | No

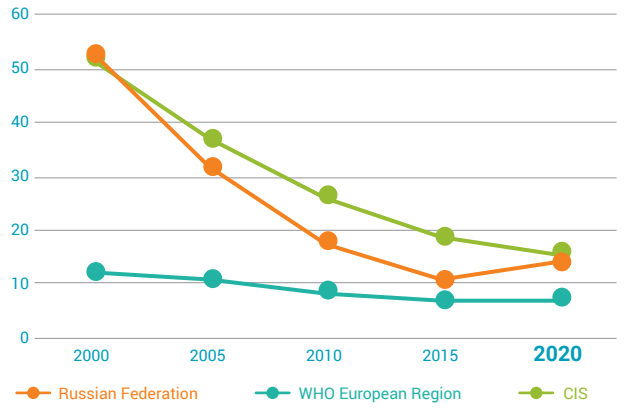
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 64.2 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 24.2 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Russian Federation | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SAN MARINO

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

Effectiveness

Standardized preventable mortality, rate, year

Standardized treatable mortality, rate, year

Thirty-day mortality after hospital admission for AMI, rate, year

Efficiency

Average length of stay, all hospitals, days, 2022

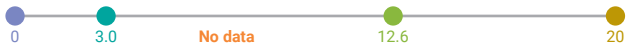
One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

Avoidable hospital admissions – COPD, rate, year

Avoidable hospital admissions – diabetes, rate, year

Patient safety

Patients reporting a medical mistake, %, year



Surgical wound infection rate, all operations, %, 2022

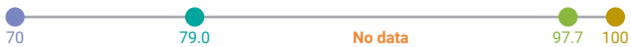
Pulmonary embolism after hip and knee replacement, rate, year

Obstetric trauma, vaginal delivery with instrument, rate, year

People-centredness

Doctor spending enough time with patients during consultation, %, year

Doctor providing easy-to-understand explanations, %, year



Doctor involving patient in decisions about care, %, year

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

Legend: San Marino · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 No data 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2003

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2016

0 4.0 27.5 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 No data 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 No data 43.4 50

Medicines

Antibiotic consumption, %, year

0 35.0 No data 83.0 100

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, year

0 2.4 No data 29.9 30

Medical doctors per 10 000 population, 2014

10 18.8 60.2 88.8 100

Nursing personnel per 10 000 population, 2014

20 27.4 75.8 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 17.9 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 7.0 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 11.9 78.7 80

Digital health

National electronic health records

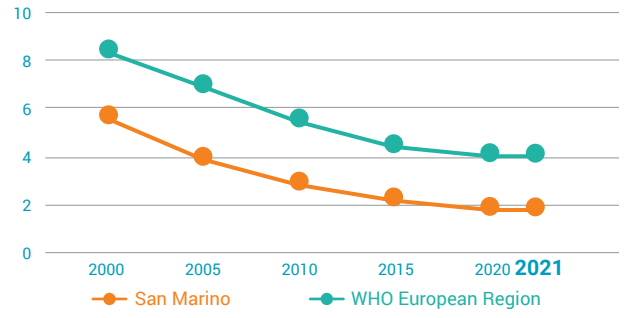
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

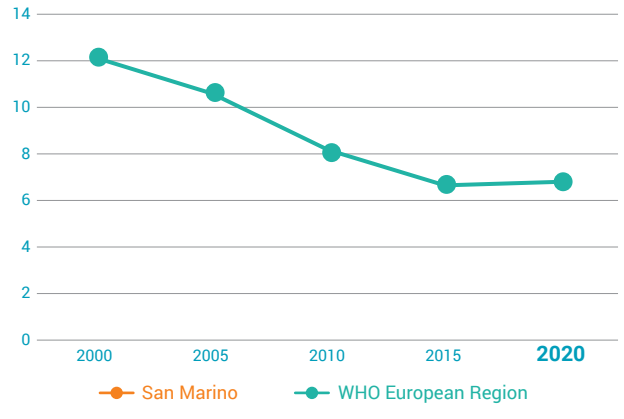
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, year

50 62.0 No data 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), year

0 7.9 No data 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 No data 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: San Marino | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SERBIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 9.9 12.2 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2022

0 0.1 3.1 6.3 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2022

0 0.1 2.0 5.0 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 412.7 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 186.6 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals*, days, 2014

0 4.0 10.0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 No data 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 No data 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 4.8 4.9 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Serbia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage*, %, 2022

40 50.0 — 100.0 100.0 100

Births by caesarean section as % of all live births, 2012–2014

0 4.0 — 28.8 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 70.8 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 36.0 — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 42.0 — 64.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2015

0 2.4 — 8.3 — 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 — 28.4 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 57.9 — 202.7 — 250

Financing*

Public spending on health as % of total public spending, 2021

0 — 4.6 — 13.4 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 6.3 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 — 35.8 — 78.7 80

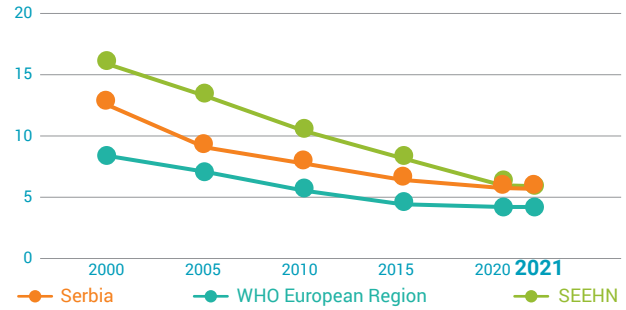
Digital health

National electronic health records: Yes | Yes, in progress | No

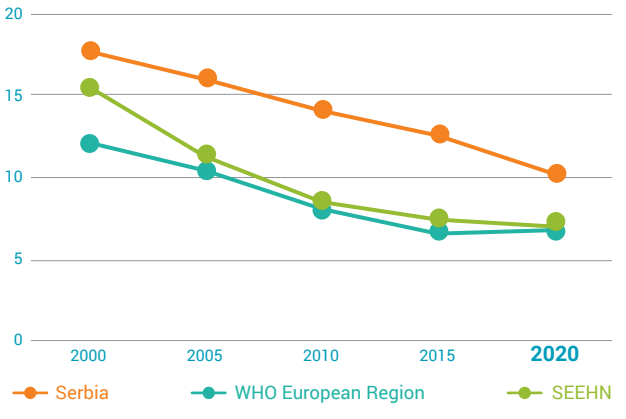
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 66.9 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 22.0 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria; SEEHN: South-eastern Europe Health Network. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Serbia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SLOVAKIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

0 0.5 4.7 5.1 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 3.2 5.3 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 2.2 4.0 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 379.3 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 206.0 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 15.4 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 7.3 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 69.0 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 180.8 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 4.3 5.1 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Slovakia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 44.4 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2012

0 4.0 30.3 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 54.5 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 22.3 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 40.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, year

0 2.4 No data 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 36.8 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 57.3 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 13.6 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 6.2 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 19.4 78.7 80

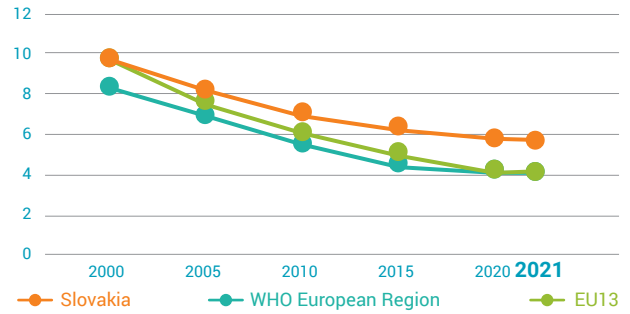
Digital health

National electronic health records: Yes | Yes, in progress | No

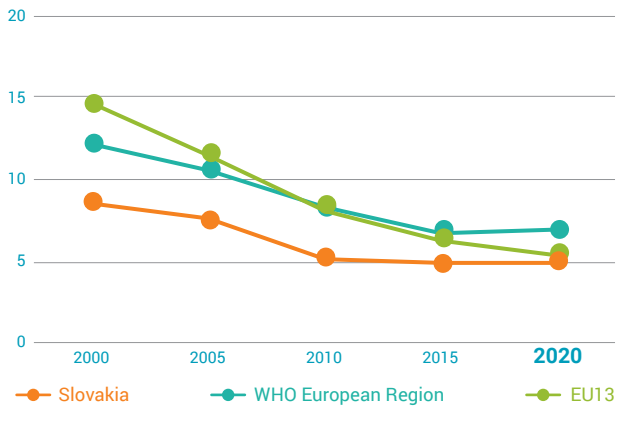
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 68.5 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 15.5 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021

0 0.4 3.9 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Slovakia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SLOVENIA

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending* on average and in the poorest quintile, %, 2018

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

Effectiveness

Standardized preventable mortality, rate, 2021

Standardized treatable mortality, rate, 2021

Thirty-day mortality after hospital admission for AMI, rate, 2021

Efficiency

Average length of stay, all hospitals*, days, 2014

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

Avoidable hospital admissions – COPD*, rate, 2019

Avoidable hospital admissions – diabetes*, rate, 2019

Patient safety

Patients reporting a medical mistake, %, year

Surgical wound infection rate, all operations, %, 2021

Pulmonary embolism after hip and knee replacement, rate, 2021

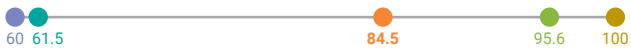
Obstetric trauma, vaginal delivery with instrument, rate, 2021

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

Doctor providing easy-to-understand explanations, %, 2020

Doctor involving patient in decisions about care, %, 2020



Equity

Vaccination against influenza* on average and in the poorest quintile, %, 2019

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

Legend: Slovenia · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 71.7 78.5 80

Colorectal cancer screening, %, 2022

0 2.8 59.1 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births*, 2012

0 4.0 18.9 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 50.8 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 7.8 43.4 50

Health workforce

General practitioners per 10 000 population**, 2021

0 2.4 6.9 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 33.3 88.8 100

Nursing personnel per 10 000 population, 2021

20 27.4 104.4 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 14.0 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 6.9 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 12.9 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 35.0 64.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

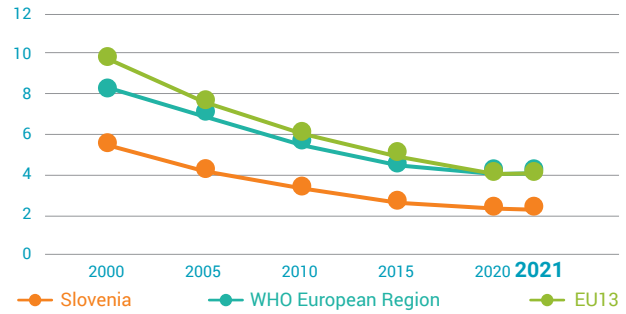
Digital health

National electronic health records: Yes | Yes, in progress | No

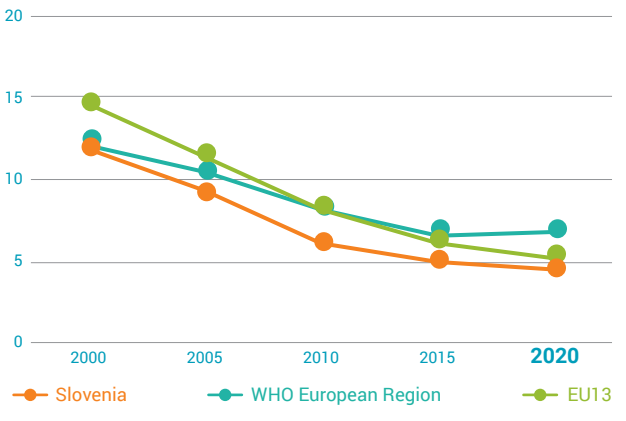
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 70.7 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 11.4 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021

0 0.4 6.8 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU13: Member States of the European Union after May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Slovenia | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SPAIN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2020

0 0.5 1.1 1.6 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

0 0.1 1.8 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

0 0.1 5.1 11.4 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 134.0 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 61.0 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 7.0 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 7.4 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 177.3 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 50.4 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2020

0 0.1 5.1 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 162.1 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 4.7 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 85.0 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 2.0 11.9 19.4 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 2.1 3.4 4.0 5.8 6

Legend: Spain Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 79.0 — 100.0 100

Births by caesarean section as % of all live births, 2014

0 — 4.0 — 27.3 — 56.9 — 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 56.3 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 — 24.2 — 43.4 — 50

Health workforce

General practitioners per 10 000 population*, 2021

0 — 2.4 — 9.4 — 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 — 44.8 — 88.8 — 100

Nursing personnel per 10 000 population, 2021

20 27.4 — 63.3 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 15.2 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 7.7 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 21.0 — 78.7 80

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 62.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

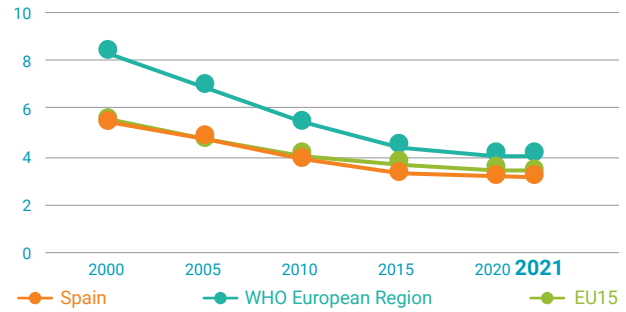
Digital health

National electronic health records: Yes | Yes, in progress | No

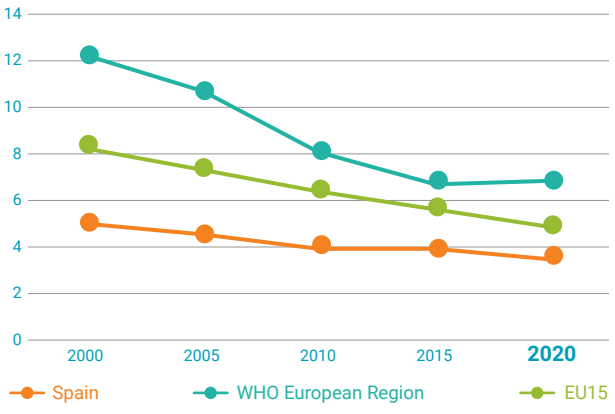
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 72.1 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 9.6 — 28.3 — 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Spain | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SWEDEN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

● Yes ● Yes, in progress ● No ● No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2015

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2023

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2023

Effectiveness

Standardized preventable mortality, rate, 2021

Standardized treatable mortality, rate, 2021

Thirty-day mortality after hospital admission for AMI, rate, 2021

Efficiency

Average length of stay, all hospitals, days, 2014

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, 2018

Avoidable hospital admissions – COPD, rate, 2019

Avoidable hospital admissions – diabetes, rate, 2019

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

Surgical wound infection rate, all operations, %, 2021

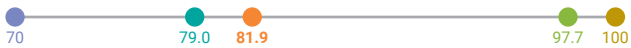
Pulmonary embolism after hip and knee replacement, rate, 2021

Obstetric trauma, vaginal delivery with instrument, rate, 2021

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

Doctor providing easy-to-understand explanations, %, 2020



Doctor involving patient in decisions about care, %, 2020

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

Legend: Sweden Minimum Maximum WHO Min. WHO Max. Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2021

0 3.9 78.5 78.5 80

Colorectal cancer screening, %, year

0 2.8 No data 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 87.0 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 17.4 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 No data 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 2.0 43.4 50

Medicines

Antibiotic consumption, %, 2021

0 35.0 68.0 83.0 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2020

0 2.4 6.1 29.9 30

Medical doctors per 10 000 population, 2020

10 18.8 43.1 88.8 100

Nursing personnel per 10 000 population, 2020

20 27.4 106.6 202.7 250

Financing

Public spending on health as % of total public spending, 2021

0 4.6 19.6 22.4 30

Public spending on health as % of GDP, 2021

0 0.9 9.7 10.3 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 13.1 78.7 80

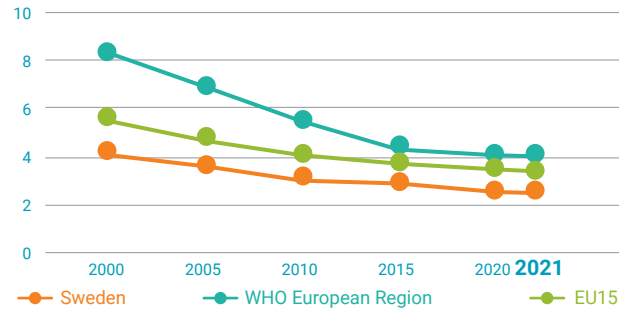
Digital health

National electronic health records: Yes | Yes, in progress | No

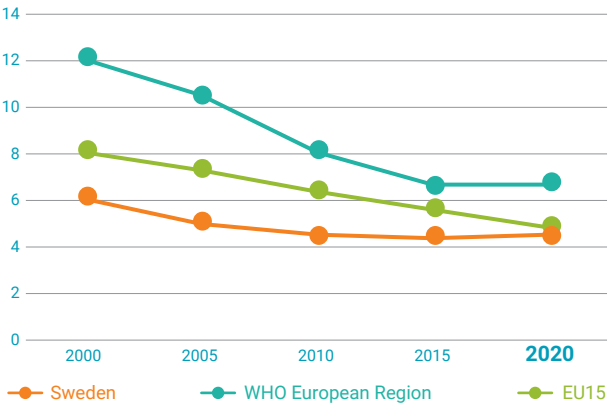
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 62.0 71.9 72.5 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 7.9 8.4 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, 2020–2021

0 0.4 2.9 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Sweden | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

SWITZERLAND

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2017

0 0.5 2.3 2.7 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2022

0 0.1 0.8 1.4 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2022

0 0.1 2.8 5.7 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 115.2 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 46.1 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 3.2 No data 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 8.5 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 140.9 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 106.9 221.9 250

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

0 3.0 9.9 12.6 20

Surgical wound infection rate, all operations, %, year

0 0.1 No data 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2021

20 21.4 355.7 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2021

0 1.4 7.4 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 86.3 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 92.0 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 84.3 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Switzerland · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 50.0 — 87.0 — 100.0 100

Births by caesarean section as % of all live births, 2015

0 4.0 — 33.3 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

30 31.7 — 46.8 — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

0 0.9 4.2 — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 65.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

0 2.4 — 11.5 — 29.9 30

Medical doctors per 10 000 population, 2021

10 18.8 — 44.4 — 88.8 — 100

Nursing personnel per 10 000 population, 2021

20 27.4 — 184.2 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 11.7 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 4.3 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 6.9 — 22.7 — 78.7 80

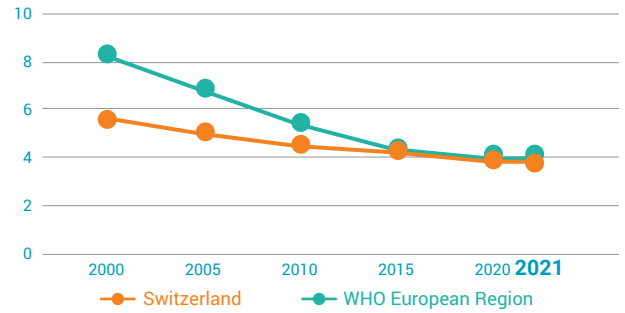
Digital health

National electronic health records: Yes | Yes, in progress | No

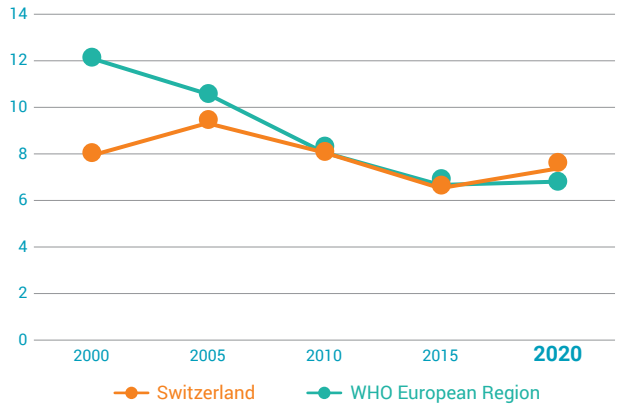
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 — 72.5 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 7.9 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Switzerland | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

TAJIKISTAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2018

0 — 4.0 — 9.0 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 2018

0 0.1 0.1 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 — 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Tajikistan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 55.0 — 100.0 100

Births by caesarean section as % of all live births, 2007–2012

0 — 4.0 4.0 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, 2021

0 — 35.0 — 49.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, year

0 2.4 — No data — 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 21.3 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 47.5 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 7.0 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 1.9 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 63.5 — 78.7 80

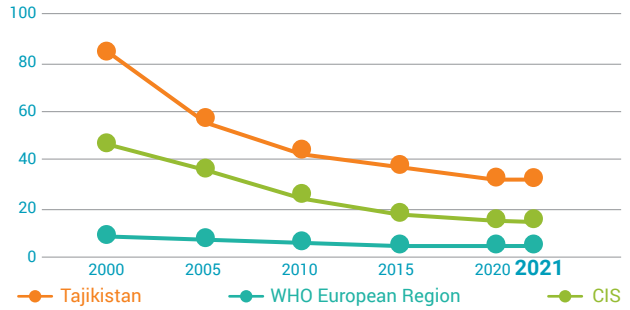
Digital health

National electronic health records: Yes | Yes, in progress | No

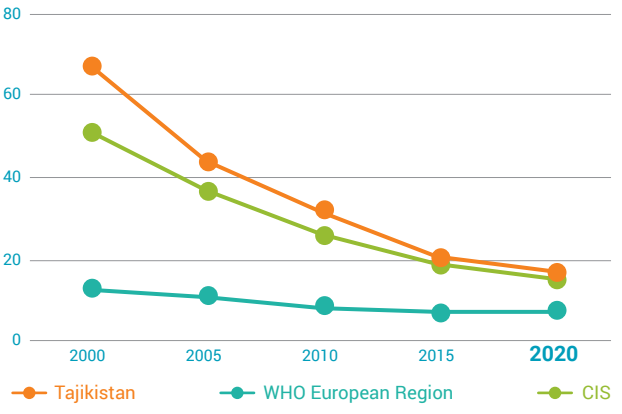
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 62.0 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 28.3 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Tajikistan — Minimum — Maximum — WHO Min. — WHO Max. — Poorest quintile

TÜRKIYE

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2018

0 0.5 3.2 4.3 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2022

0 0.1 1.7 5.0 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2022

0 0.1 1.8 3.5 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2021

100 110.8 226.2 460.0 500

Standardized treatable mortality, rate, 2021

40 46.1 164.2 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 9.7 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 4,0 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2019

30 38.6 335.9 386.2 400

Avoidable hospital admissions – diabetes, rate, 2019

30 37.1 221.9 221.9 250

Patient safety

Patients reporting a medical mistake, %, year

0 3.0 No data 12.6 20

Surgical wound infection rate, all operations, %, 2021

0 0.1 0.6 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 No data 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 1.4 No data 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 69.0 No data 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 79.0 No data 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 No data 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, 2019

0 1.9 2.0 2.1 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 No data No data 5.8 6

Legend: Türkiye · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening*, %, 2022

Colorectal cancer screening*, %, 2022

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2008–2013

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption*, %, 2021

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, **, 2021

Medical doctors per 10 000 population, 2021

Nursing personnel per 10 000 population, 2021

Financing

Public spending on health as % of total public spending*, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health*, 2021

Digital health

National electronic health records

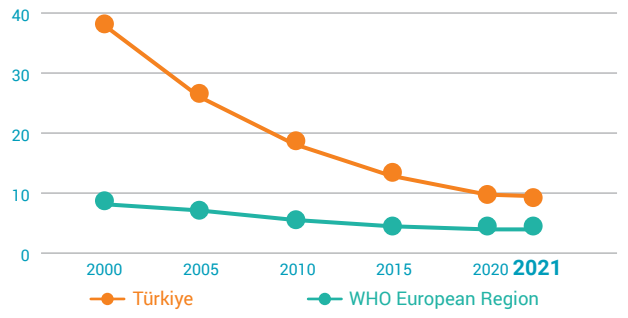
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

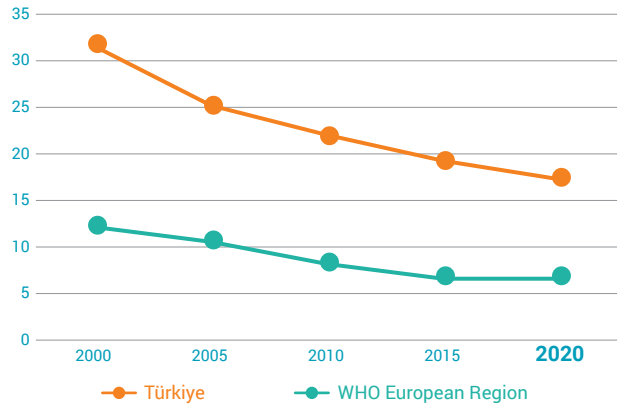
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births

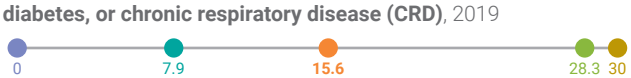


Maternal mortality ratio*, per 100 000 live births

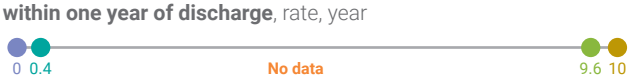


Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019



Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year



Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Türkiye | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

TURKMENISTAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National antimicrobial resistance plan
- Patient/public representation in health governance
- National electronic health records
- National patient safety plan
- Health misinformation prevention plan
- Accreditation system for hospitals
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2021

0 — 4.0 — 7.8 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, 1992

0 0.1 0.3 — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Turkmenistan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 — 81.0 — 100.0 100

Births by caesarean section as % of all live births, 2013–2016

0 — 4.0 6.3 — 56.9 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, year

0 — 35.0 — No data — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2021

0 — 2.4 — 7.2 — 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 21.4 — 88.8 — 100

Nursing personnel per 10 000 population, 2021

20 27.4 37.3 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 8.7 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 0.9 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 78.6 78.7 80

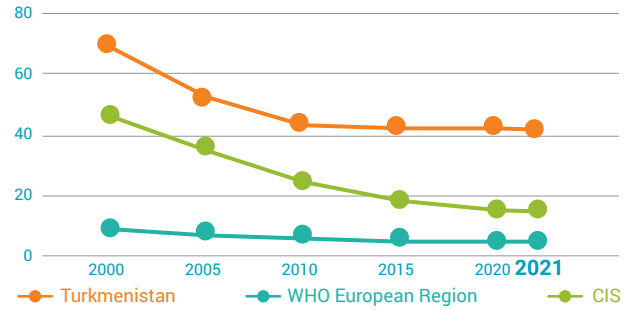
Digital health

National electronic health records: Yes | Yes, in progress | No

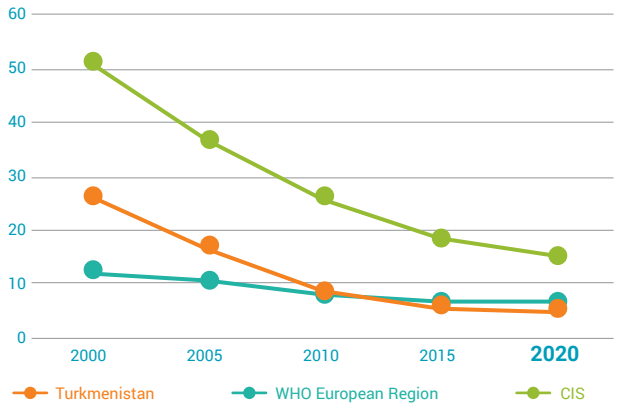
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 62.1 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 27.7 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Turkmenistan | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

UKRAINE

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 — 13.8 — 18.0 — 20.3 — 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, year

0 0.1 — 12.9 — No data — No data — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2019

0 — 4.0 — 10.6 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, year

0 0.1 — No data — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 — 2.1 — No data — No data — 5.8 6

Legend: Ukraine · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

Colorectal cancer screening, %, year

Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2010–2012

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Health workforce

General practitioners per 10 000 population*, 2014

Medical doctors per 10 000 population, 2014

Nursing personnel per 10 000 population, 2014

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Medicines

Antibiotic consumption, %, 2018

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Digital health

National electronic health records

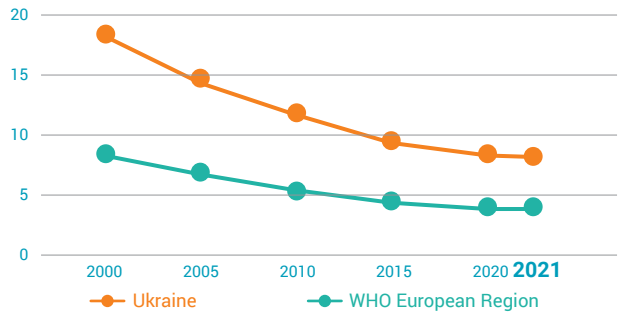
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

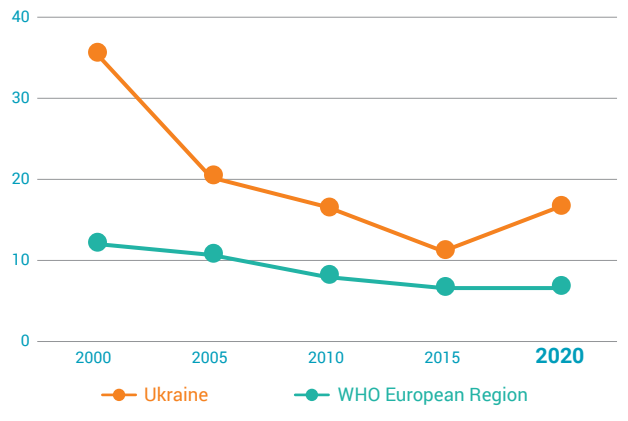
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Ukraine | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

UNITED KINGDOM

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan — Yes
- National patient safety plan — Yes
- National antimicrobial resistance plan — Yes
- Health misinformation prevention plan — No
- Patient/public representation in health governance — Yes
- Accreditation system for hospitals — Yes
- National electronic health records — No
- Quality and safety included in telehealth guidelines — Yes, in progress

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending on average and in the poorest quintile, %, 2019

0 0.5 0.9 1.5 20.3 30

Share of the population with unmet needs for health care on average and in the poorest quintile, %, 2018

0 0.1 4.5 4.9 12.9 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, 2018

0 0.1 2.5 3.2 15.6 30

Effectiveness

Standardized preventable mortality, rate, 2018

100 110.8 150.5 460.0 500

Standardized treatable mortality, rate, 2018

40 46.1 87.4 254.7 300

Thirty-day mortality after hospital admission for AMI, rate, 2021

0 3.2 8.3 17.9 20

Efficiency

Average length of stay, all hospitals, days, 2014

0 4.0 7.1 17.7 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 35.0 No data 53.2 60

Avoidable hospital admissions – COPD, rate, 2020

30 38.6 115.2 386.2 400

Avoidable hospital admissions – diabetes, rate, 2020

30 37.1 72.0 221.9 250

Patient safety

Patients reporting a medical mistake, %, 2020 or nearest year

0 3.0 3.5 12.6 20

Surgical wound infection rate, all operations, %, 2017

0 0.1 1.0 9.5 10

Pulmonary embolism after hip and knee replacement, rate, 2022

20 21.4 846.2 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, 2022

0 1.4 5.7 11.6 20

People-centredness

Doctor spending enough time with patients during consultation, %, 2020

60 69.0 72.7 97.5 100

Doctor providing easy-to-understand explanations, %, 2020

70 79.0 86.7 97.7 100

Doctor involving patient in decisions about care, %, 2020

60 61.5 80.6 95.6 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 No data No data 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits, year

0 2.1 3.6 4.0 5.8 6

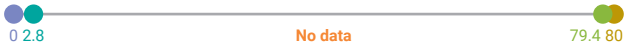
Legend: United Kingdom · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, 2022

Colorectal cancer screening, %, year



Tuberculosis treatment coverage, %, 2022

Births by caesarean section as % of all live births, 2016–2017

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, 2021

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, 2021

Medicines

Antibiotic consumption, %, 2019

National list of approved priority/essential medical devices

Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population*, 2022

Medical doctors per 10 000 population, 2022

Nursing personnel per 10 000 population, 2022

Financing

Public spending on health as % of total public spending, 2021

Public spending on health as % of GDP, 2021

Out-of-pocket payments as % of current spending on health, 2021

Digital health

National electronic health records

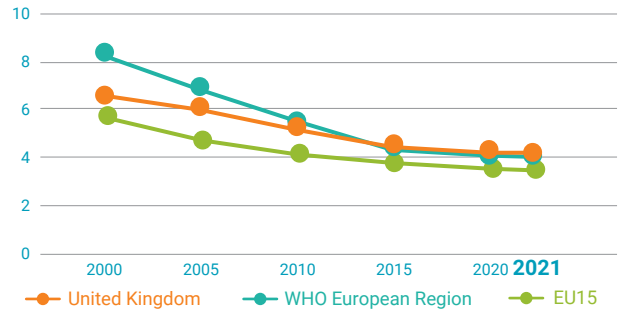
Yes | Yes, in progress | No

Quality and safety in telehealth guidelines

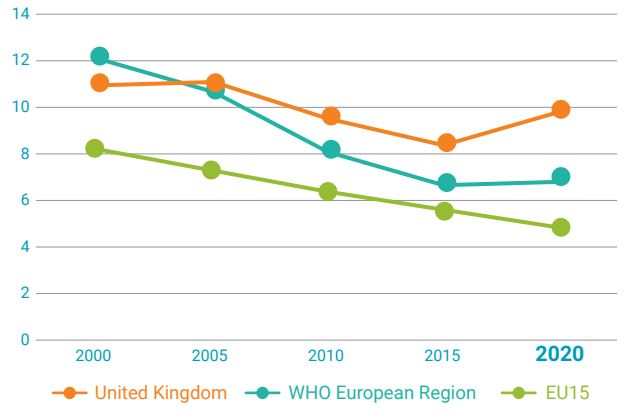
Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; EU15: Member States of the European Union before May 2004; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: United Kingdom | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

UZBEKISTAN

Quality of care and patient safety

National Policies and Action Plans

- National quality of care plan
- National patient safety plan
- National antimicrobial resistance plan
- Health misinformation prevention plan
- Patient/public representation in health governance
- Accreditation system for hospitals
- National electronic health records
- Quality and safety included in telehealth guidelines

Yes · Yes, in progress · No · No data

QUALITY OF CARE INDICATORS

Access

Share of households with catastrophic health spending* on average and in the poorest quintile, %, year

0 0.5 — No data — No data — 20.3 — 30

Share of the population with unmet needs for health care* on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 12.9 — 30

Share of the population with unmet need for dental care on average and in the poorest quintile, %, year

0 0.1 — No data — No data — 15.6 — 30

Effectiveness

Standardized preventable mortality, rate, year

100 110.8 — No data — 460.0 — 500

Standardized treatable mortality, rate, year

40 46.1 — No data — 254.7 — 300

Thirty-day mortality after hospital admission for AMI, rate, year

0 — 3.2 — No data — 17.9 — 20

Efficiency

Average length of stay, all hospitals, days, 2019

0 — 4.0 — 6.7 — 17.7 — 20

One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate, year

30 — 35.0 — No data — 53.2 — 60

Avoidable hospital admissions – COPD, rate, year

30 38.6 — No data — 386.2 400

Avoidable hospital admissions – diabetes, rate, year

30 37.1 — No data — 221.9 — 250

Patient safety

Patients reporting a medical mistake, %, year

0 — 3.0 — No data — 12.6 — 20

Surgical wound infection rate, all operations, %, year

0 0.1 — No data — 9.5 10

Pulmonary embolism after hip and knee replacement, rate, year

20 21.4 — No data — 846.2 850

Obstetric trauma, vaginal delivery with instrument, rate, year

0 — 1.4 — No data — 11.6 — 20

People-centredness

Doctor spending enough time with patients during consultation, %, year

60 — 69.0 — No data — 97.5 100

Doctor providing easy-to-understand explanations, %, year

70 — 79.0 — No data — 97.7 — 100

Doctor involving patient in decisions about care, %, year

60 61.5 — No data — 95.6 — 100

Equity

Vaccination against influenza on average and in the poorest quintile, %, year

0 2.0 — No data — No data — 38.1 40

Needs-standardized GP visit in the richest and in the poorest quintile, mean number of visits

0 — 2.1 — No data — No data — 5.8 6

Legend: Uzbekistan · Minimum · Maximum · WHO Min. · WHO Max. · Poorest quintile

HEALTH SYSTEM FUNCTIONS

Service delivery

Cervical cancer screening, %, year

0 3.9 — No data — 78.5 80

Colorectal cancer screening, %, year

0 2.8 — No data — 79.4 80

Tuberculosis treatment coverage, %, 2022

40 — 50.0 50.0 — 100.0 100

Births by caesarean section as % of all live births, 2015

0 — 4.0 — 13.6 — 56.9 — 60

Percentage of isolates with resistance phenotype – E. coli/aminopenicillin, year

30 31.7 — No data — 96.3 100

Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin, year

0 0.9 — No data — 43.4 — 50

Medicines

Antibiotic consumption, %, 2019

0 — 35.0 35.0 — 83.0 — 100

National list of approved priority/essential medical devices: Yes | Yes, in progress | No

Health workforce

General practitioners per 10 000 population**, 2014

0 — 2.4 — 4.9 — 29.9 30

Medical doctors per 10 000 population, 2021

10 — 18.8 — 28.1 — 88.8 — 100

Nursing personnel per 10 000 population, 2020

20 27.4 — 53.5 — 202.7 — 250

Financing

Public spending on health as % of total public spending, 2021

0 — 4.6 — 9.9 — 22.4 — 30

Public spending on health as % of GDP, 2021

0 0.9 — 3.0 — 10.3 — 20

Out-of-pocket payments as % of current spending on health, 2021

0 — 6.9 — 60.3 — 78.7 80

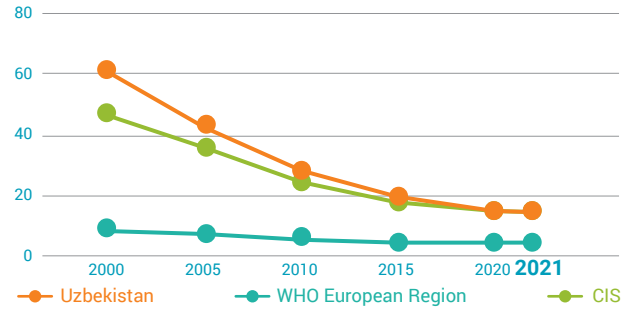
Digital health

National electronic health records: Yes | Yes, in progress | No

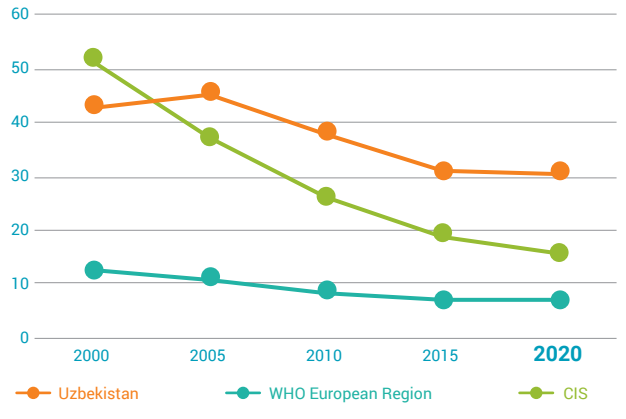
Quality and safety in telehealth guidelines: Yes | Yes, in progress | No

POPULATION HEALTH OUTCOMES

Under-five mortality rate, per 1000 live births



Maternal mortality ratio, per 100 000 live births



Healthy life expectancy at birth, years, 2019

50 — 62.0 64.7 — 72.5 — 100

Probability of dying from cardiovascular disease (CVD), cancer, diabetes, or chronic respiratory disease (CRD), 2019

0 — 7.9 — 25.3 — 28.3 30

Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate, year

0 0.4 — No data — 9.6 10

Notes: The visual distance between data points does not equal or is not proportional to the absolute difference of the corresponding point estimates. For more information on definitions, data values, and metadata, please refer to the Annexes. AMI: acute myocardial infarction; AST: active surveillance testing; CIS: Commonwealth of Independent States; COPD: chronic obstructive pulmonary disease; CRD: chronic respiratory disease; CVD: cardiovascular disease; GDP: gross domestic product; GP: general practitioner; MRSA: methicillin-resistant *Staphylococcus aureus* bacteria. * An update to this data may already be available or will be available in the near future; ** Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.

Legend: Uzbekistan | Minimum | Maximum | WHO Min. | WHO Max. | Poorest quintile

Annex 2

Indicator definitions, meta-data and data sources

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
Health system functions: Governance	National quality of care plan	National quality of care plan	N/A	Availability of national quality of care plan	WHO Quality of Care and Patient Safety Survey – Data from country consultation
	National patient safety plan	National patient safety plan	N/A	Availability of national patient safety plan	WHO Quality of Care and Patient Safety Survey - Data from country consultation
	National AMR plan	National AMR plan	N/A	Availability of national AMR plan	WHO Quality of Care and Patient Safety Survey – Data from country consultation
	Health misinformation prevention plan	Health misinformation prevention plan	N/A	Availability of health misinformation prevention plan	WHO Quality of Care and Patient Safety Survey – Data from country consultation
	Accreditation systems for hospitals	Accreditation systems for hospitals	N/A	Availability of accreditation systems for hospitals	WHO Quality of Care and Patient Safety Survey – Data from country consultation

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Patient/public representation in national health governance	Patient/public representation in national health governance	N/A	Availability of patient/public representation in national health governance	WHO Quality of Care and Patient Safety Survey – Data from country consultation
Health system functions: Health workforce	GPs per 10 000 population	GPs density, per 10 000 population	Number per 10 000 population	Health workers are classified using the International Standard Classification of Occupations 8th revision (ISCO-08) from the International Labour Organization. Details on the classification of health workers included in the current platform can be found in the NHWA Handbook. Density: number of health workers, by specific occupation, in a defined period and population. This measure is expressed as the number of health workers per 10 000 population in the given national area in the given year. The denominator data for the computation of health workforce density were obtained from the latest release of the United Nations Population Division's World Population Prospects database. In cases where the source report provides density indicators instead of counts, estimates of the stock are then calculated using the population estimated from the United Nations Population Division's World population prospects database. Occupations included in this unit group require completion of a university-level degree in basic medical education plus postgraduate clinical training or equivalent for competent performance. Medical interns or residents who have completed their university education in basic medical education and are undertaking postgraduate clinical training in general medicine without any area of specialization are included here. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations should always be classified here.	NHWA *(1)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Medical doctors per 10 000 population	Medical doctors density, per 10 000 population	Number per 10 000 population	Health workers are classified using the International Standard Classification of Occupations 8th revision (ISCO-08) from the International Labour Organization. Details on the classification of health workers included in the current platform can be found in the NHWA Handbook. Density: number of health workers, by specific occupation, in a defined period and population. This measure is expressed as the number of health workers per 10 000 population in the given national area in the given year. The denominator data for the computation of health workforce density were obtained from the latest release of the United Nations Population Division's World Population Prospects database. In cases where the source report provides density indicators instead of counts, estimates of the stock are then calculated using the population estimated from the United Nations Population Division's World population prospects database.	NHWA *(1)*
	Nursing personnel per 10 000 population	Nursing professionals density, per 10 000 population	Number per 10 000 population	Health workers are classified using the International Standard Classification of Occupations 8th revision (ISCO-08) from the International Labour Organization. Details on the classification of health workers included in the current platform can be found in the NHWA Handbook. Density: number of health workers, by specific occupation, in a defined period and population. This measure is expressed as the number of health workers per 10 000 population in the given national area in the given year. The denominator data for the computation of health workforce density were obtained from the latest release of the United Nations Population Division's World Population Prospects database. In cases where the source report provides density indicators instead of counts, estimates of the stock are then calculated using the population estimated from the United Nations Population Division's World population prospects database.	NHWA *(1)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
Health system functions: Service delivery	Cervical cancer screening, %	Cervical cancer screening, programme data, % of females aged 20– 69 screened	Percentage	Number of women aged 20–69 who have been screened for cervical cancer within the past three years (or according to the specific screening frequency recommended in each country) divided by the number of women aged 20–69 answering the survey question (for survey-based data) or eligible for an organized screening programme (for programme-based data). Available estimates extracted from the OECD database describe the percentage of females aged 50–69 screened.	OECD *(2)*
	Colorectal cancer screening, %	Colorectal cancer screening, programme data, % of population aged 50–74 screened	Percentage	Proportion of target population who have undergone colorectal cancer screening based on the country's colorectal cancer screening policy, which defines, among others, the target age range and the screening method and interval. Programme data and survey data are collected for males, females and both. Numerator: the number of target population who had the initial screening test specified in the country's colorectal cancer screening programme during the period specified in the screening programme. Denominator: the number of target population who were eligible for the initial screening test specified in the country's colorectal cancer screening programme during the period specified in the screening programme.	OECD *(2)*
	Tuberculosis treatment coverage, %	Tuberculosis treatment coverage for all forms of tuberculosis	Percentage	Tuberculosis treatment coverage for all forms of tuberculosis. Number of new and relapse TB cases that were notified and treated in a given year, divided by the estimated number of incident TB cases in the same year.	Global Health Observatory *(3)*
	Births by caesarean section as % of all live births	Percentage of births by caesarean section among all live births in a given time period	Percentage	Percentage of births by caesarean section among all live births in a given time period.	Global Health Observatory *(4)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Percentage of isolates with resistance phenotype aminopenicillin	Percentage of isolates with resistance phenotype (%) – E. coli/ Aminopenicillin (amoxicillin/ampicillin) resistance	Percentage	Before data analysis, data are de-duplicated to include only the first isolate per patient, year and bacterial species. Percentages of isolates with resistance phenotype are presented only if data are available for ≥20 isolates.	WHO report "Antimicrobial resistance surveillance in Europe 2023–2021 data" *(5)*
	Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin	Percentage of isolates with resistance phenotype (%) – S.aureus/MRSA (MRSA is based on AST results for cefoxitin or, if unavailable, oxacillin)	Percentage	Before data analysis, data are de-duplicated to include only the first isolate per patient, year and bacterial species. Percentages of isolates with resistance phenotype are presented only if data are available for ≥20 isolates. MRSA is based on AST results for cefoxitin or, if unavailable, oxacillin.	WHO report "Antimicrobial resistance surveillance in Europe 2023–2021 data" *(5)*
Health system functions: Financing	Public spending on health as % of total public spending	Domestic general government health expenditure (GGHE-D) as % general government expenditure (GGE)	Percentage	All the indicators refer to expenditures by financing agent, except external resources, which is a financing source. WHO regional, income-group and global aggregates are calculated using absolute amounts in national currency units converted to purchasing power parity (PPP) equivalents unless otherwise noted. For health expenditure ratios, values smaller than 0.05% may appear as zero. For more information on the indicator metadata, please refer to the data source *(6)*.	Global Health Expenditure Database *(6)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Public spending on health as % of GDP	Domestic general government health expenditure (GGHE-D) as % general government expenditure (GGE)	Percentage	All the indicators refer to expenditures by financing agent, except external resources, which is a financing source. WHO regional, income-group and global aggregates are calculated using absolute amounts in national currency units converted to Purchasing Power Parity (PPP) equivalents unless otherwise noted. For health expenditure ratios, values smaller than 0.05% may appear as zero. For more information on the indicator metadata, please refer to the data source *(6)*.	Global Health Expenditure Database *(6)*
	Out-of-pocket payments as % of current spending on health	Domestic General Government Health Expenditure (GGHE-D) as % General Government Expenditure (GGE)	Percentage	Share of current health expenditure funded from household out-of-pocket payments.	Global Health Expenditure Database *(6)*
Health system functions: Medicines	Antibiotic consumption, %	Proportion of access group antibiotics as percentage of overall (or total) antibiotic consumption. Definition title in WHO Gateway under "Antibiotic consumption" (%)	Percentage	Indicator notes: proportion of access group antibiotics as percentage of overall (or total) antibiotic consumption.	WHO Gateway *(7)*
	National list of approved priority/ essential medical devices	National list of approved priority/essential medical devices (including in vitro diagnostics), for procurement or reimbursement	N/A	Availability of national list of approved priority/essential medical devices	WHO report "Global atlas of medical devices 2022" *(8)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
Health system functions: Digital health	National electronic health records (EHRs)	National EHRs	N/A	Availability of national EHRs	WHO report "Exploring the digital health landscape in the WHO European Region: digital health country profiles" *(9)*
	Quality and safety in tele-health guidelines	Quality and safety in tele-health guidelines	N/A	Availability of quality and safety in tele-health guidelines	WHO Quality of Care and Patient Safety Survey – Data from country consultation
Quality of care: Effectiveness	Standardized preventable mortality, rate	Standardized preventable mortality, age-standardized rate	Number per 100 000 persons	Preventable mortality refers to mortality that can mainly be avoided through effective public health and primary prevention interventions (i.e. before the onset of diseases/injuries, to reduce incidence). The data are presented as standardized death rates, meaning they are adjusted to a standard age distribution in order to measure death rates independently of different age structures of populations. The standardized death rates used here are calculated on the basis of the standard European population. Unit of measure: number per 100 000 persons aged less than 75 years. Online data code: sdg_03_42	Eurostat *(10)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Standardized treatable mortality, rate	Standardized treatable mortality, age- standardized rate	Number per 100 000 persons	Treatable mortality can mainly be avoided through timely and effective health-care interventions, including secondary prevention and treatment (after the onset of diseases to reduce case-fatality). The data are presented as standardized death rates, meaning they are adjusted to a standard age distribution in order to measure death rates independently of different age structures of populations. The standardized death rates used here are calculated on the basis of the standard European population. Unit of measure: number per 100 000 persons aged less than 75 years. Online data code: sdg_03_42	Eurostat *(10)*
	Thirty-day mortality after hospital admission for AMI, rate	Thirty-day mortality after admission to hospital for acute myocardial infarction (AMI) based on linked data, 2011, 2019 and 2021 (or nearest year), age-sex standardized rate per 100 admissions for people aged 45 years and over	Age-sex standardized rate per 100 admissions	The case fatality rate measures the percentage of people aged 45 years and over who die within 30 days following hospital admission for a specific acute condition. The linked data-based method, requiring a unique patient identifier, is considered more robust than the rates based on unlinked data. Rates are age-standardized to the 2010 OECD population aged 45 and over admitted to hospital for AMI, using International Classification of Diseases, tenth revision (ICD-10) codes I21–I22.	OECD *(11)*
Quality of care: Efficiency	Average length of stay, all hospitals, days	Average length of stay, all hospitals	Number of days	Total number of occupied hospital bed-days divided by the total number of admissions or discharges. Length of stay (LOS) of one patient = date of discharge - date of admission. If these are the same dates, then LOS is set to one day. Average length of stay (ALOS) is calculated by dividing the number of bed-days by the number of discharges during the year (see definition for hospital ALOS below). Only the overall average length of stay in all hospitals is requested (no breakdown by diagnostic categories).	WHO Gateway *(12)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate	One-year all-cause readmission or mortality after discharge from ischaemic stroke, 2013 and 2018, crude rate per 100 people	Crude rate per 100 people	Crude rate per 100 people. Integrated care indicators are calculated for people aged 15 and over at the day of admission presenting with an acute (urgent) episode of care for a first-time event of ischaemic stroke or chronic heart failure. A first-time event refers to people who had no disease-specific hospital admission in the previous five years.	OECD *(13)*
	Avoidable hospital admissions – COPD	Chronic obstructive pulmonary disease hospital admission, age-sex standardized rate per 100 000 population	Age-sex standardized rate per 100 000 population	The indicators are defined as the number of hospital admissions with a primary diagnosis of COPD among people aged 15 years and over per 100 000 population. Rates are age- and sex-standardized to the 2010 OECD population aged 15 and over. Admissions resulting from a transfer from another hospital and where the patient dies during admission are excluded from the calculation, as these are considered unlikely to be avoidable.	OECD *(14)*
	Avoidable hospital admissions – diabetes	Diabetes hospital admission, age-sex standardized rate per 100 000 population	Age-sex standardized rate per 100 000 population	The indicator is defined as the number of hospital admissions with a primary diagnosis of diabetes among people aged 15 years and over per 100 000 population. Avoidable admissions for diabetes include admissions for short-term and long-term complications and for uncontrolled diabetes without complications. Rates are age-sex standardized to the 2010 OECD population aged 15 years and over.	OECD *(15)*
Quality of care: Patient safety	Patients reporting a medical mistake, %	Patients reporting that a medical mistake was made during treatment or care, 2020 (or nearest year), %	Percentage	Health worker perceptions of patient safety are based on the assessment of workers in the hospital setting (including psychiatric hospitals) using the Hospital Survey of Patient Safety Culture (HSPSC). Patient-reported data from the Commonwealth Fund survey were collected from a sample of population aged 18 and over, whereas national surveys based on the pilot instrument were collected from hospitalized patients aged 18 and over, so they are not directly comparable.	OECD *(16)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Surgical wound infection rate, all operations, %	Surgical wound infection rate (%), all operations	Percentage	Average rate of inpatient surgical operations in all hospitals with postoperative surgical wound infection during the given calendar year (ICD-9: 998.5 or ICD-10: T81.4).	
	Pulmonary embolism after hip and knee replacement, rate	Post-operative pulmonary embolism – hip and knee replacement discharges, crude rate per 100 000 hospital discharges, 15 years old and over	Crude rate per 100 000 hospital discharges	Unlinked data. Hip and knee replacement discharges for patients aged 15 and older. Numerator: discharges among cases defined in the denominator with ICD code for deep vein thrombosis in a secondary diagnosis field during the surgical admission. Denominator: hip and knee replacement discharges meeting the inclusion and exclusion rules with an ICD code for an operating room procedure (9).	
	Obstetric trauma, vaginal delivery with instrument, rate	Obstetric trauma vaginal delivery with instrument, crude rate per 100 vaginal deliveries, all age groups	Crude rate per 100 vaginal deliveries	All age groups – crude rate per 100 vaginal deliveries. Coverage: Vaginal delivery discharges for patients. Numerator: discharges among cases defined in the denominator with ICD code for 3rd and 4th degree obstetric trauma in any diagnosis or procedure field. Denominator: all vaginal delivery discharges with any procedure code for instrument-assisted delivery.	
Quality of care: People-centredness	Doctor spending enough time with patients during consultation, %	Doctor spending enough time with patient during consultation, 2010 and 2020 (or nearest year), %	Percentage	Survey respondents aged 16 and over (four age groups (16–24, 25–44, 45–65 and 65+) and 16+) who answered the specific question. Numerator: number of survey respondents among denominator cases who answered positively to a question on whether a doctor spent enough time with them. Denominator: number of survey respondents who reported having had a consultation with a doctor in the reference year and answered "Yes" or "No" to a survey question on whether a doctor spent enough time with them.	OECD *(14)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Doctor providing easy-to-understand explanations, %	Doctor providing easy-to-understand explanations, 2010 and 2020 (or nearest year), %	Percentage	Numerator: number of survey respondents among denominator cases who answered positively to a question on whether a doctor explained things in a way that was easy to understand. Denominator: number of survey respondents who reported having had a consultation with a doctor in the reference year and answered "Yes" or "No" to a survey question on whether a doctor explained things in a way that was easy to understand.	OECD *(14)*
	Doctor involving patient in decisions about care, %	Doctor involving patient in decisions about care and treatment, 2010 and 2020 (or nearest year), %	Percentage	Numerator: number of survey respondents among denominator cases who answered positively to a question on whether a doctor involved them as much as they wanted to be in decisions about their care and treatment. Denominator: number of survey respondents who reported having had a consultation with a doctor in the reference year and answered "Yes" or "No" to a survey question on whether a doctor involved them as much as they wanted to be in decisions about their care and treatment.	OECD *(14)*
Quality of care: Equity	Vaccination against influenza on average and in the poorest quintile, %, year	Self-reported vaccination against influenza by sex, age and income quintile	Percentage	Self-reported vaccination against influenza: percentage of the population vaccinated against flu during the past 12 months.	Eurostat *(17)*
	Needs-standardized GP visit in the richest and in the poorest quintile	Needs-standardized probability and frequency of a GP visit, by income quintile	Mean number of visits	Standardized distributions were obtained by adding the difference between the observed and standardized (or expected) means per quintile to the overall country sample mean. Expected means were obtained using a simple (one-part) Ordinary least squares model for convenience. European quintile rates must be interpreted with caution as they were computed as population-weighted averages of country-specific quintiles. Simple difference and ratio measures for the bottom and top quintile have been added to ease cross-country comparisons of utilization differences by income level.	OECD report "Measuring Up: Improving Health System Performance in OECD Countries" *(18)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
Quality of care: Access	Share of households with catastrophic health spending on average and in the poorest quintile	Households with catastrophic health spending by consumption quintile	Percentage	Further information on the indicator can be found in the UHC Watch "Methods" section *(18)*..	UHC Watch *(19)*
	Share of the population with unmet need for health care on average and in the poorest quintile	Unmet need for health care due to cost, distance and waiting time by income quintile	Percentage	Further information on the indicator can be found in the UHC Watch "Methods" section *(18)*.	UHC Watch *(19)*
	Share of the population with unmet need for dental care on average and in the poorest quintile	Unmet need for dental care due to cost, distance and waiting time by income quintile	Percentage	The variables on unmet needs for health care target two broad types of services: medical care and dental care. The variables refer to the respondent's own assessment of whether he or she needed the respective type of examination or treatment, but did not have it and, if so, what was the main reason for not having it. Eurostat currently disseminates the following indicators for unmet needs: (a) self-reported unmet needs for medical examination for reasons of barriers of access; (b) self-reported unmet needs for medical examination by reason; and (c) self-reported unmet needs for dental examination by reason. Dental care refers to individual health-care services provided by or under the direct supervision of stomatologists (dentists). Health care provided by orthodontists is included.	Eurostat *(20)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
Population health outcomes	Under-five mortality rate, per 1000 live births	Under-five mortality rate (per 1000 live births)	Deaths per 1000 live births	The probability of a child born in a specific year or period dying before reaching the age of five, if subject to age-specific mortality rates of that period. Under-five mortality rate as defined here is strictly speaking not a rate (i.e. the number of deaths divided by the number of children at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1000 live births.	Global Health Observatory *(21)*
	Maternal mortality ratio, per 100 000 live births	Maternal mortality ratio (per 100 000 live births)	Maternal deaths per 100 000 live births	The maternal mortality ratio can be calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100 000.	WHO Data *(22)*
	Healthy life expectancy at birth, years	Healthy life expectancy at birth (years)	Years	Average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury.	Global Health Observatory *(23)*
	Probability of dying from CVD, cancer, diabetes, or CRD	Probability of dying between age 30 and exact age 70 from any of CVD, cancer, diabetes, or CRD	Percentage	Percentage of 30-year-old-people who would die before their 70th birthday from any of CVD, cancer, diabetes, or CRD, assuming that she/he would experience current mortality rates at every age, and she/he would not die from any other cause of death (e.g. injuries or HIV/AIDS).	Global Health Observatory *(24)*

Indicator cluster – category	Indicator – running definition	Indicator – formal definition	Unit	Metadata	Data source
	Suicide following a hospitalization for a psychiatric disorder within one year of discharge, rate	Suicide within one year after discharge among patients diagnosed with a mental disorder, age-sex standardized rate per 100 patients, 15 years-old and over	Age-sex standardized rate per 100 patients	Suicide within one year of discharge is established by linking patients discharged following hospitalization with a principal diagnosis or first two listed secondary diagnosis code of mental health and behavioural disorders (ICD-10 codes F10-F69 and F90-99), and with suicide recorded in death registries (ICD-10 codes X60-X84). For excess mortality indicators, the numerator is the overall mortality rate for people aged 15–74 diagnosed with schizophrenia or bipolar disorder. The denominator is the overall mortality rate for the general population in the same age group. The relatively small number of people with schizophrenia or bipolar disorder dying in any given year can cause substantial variations from year to year. Mental health patient-reported experience measures (PREMs) are based on the assessment of inpatient and community mental health service users. Data refer to people aged 16 and over with a principal diagnosis of mental health and behavioural disorders. Cross-country comparisons of mental health PREMs should be made with caution because there are substantial variations in survey instrument including response categories, sampling methodology, sample size, survey implementation, patient case mix and service mix of users. Data for Belgium are limited to Flanders, for France to Paris, and for Korea to Seoul.	OECD *(11)*

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Annex 3

Data tables

Annex 3a: National action plans and policies for quality of care and patient safety

	Health system functions: Governance					
Country	**National quality of care plan**	**National patient safety plan**	**National antimicrobial resistance plan**	**Health misinformation prevention plan**	**Accreditation systems for hospitals**	**Patient/public representation in national health governance**
Albania	In progress	In progress	In progress	In progress	Yes	Yes
Andorra	N/A	N/A	N/A	N/A	N/A	N/A
Armenia	Yes	No	Yes	No	No	No
Austria	Yes	Yes	Yes	No	Yes	No
Azerbaijan	In progress	In progress	In progress	No	In progress	In progress
Belarus	No	No	Yes	No	In progress	In progress
Belgium	In progress	In progress	Yes	In progress	In progress	In progress
Bosnia and Herzegovina	No	In progress	N/A	N/A	N/A	No
Bulgaria	In progress	In progress	In progress	No	In progress	No
Croatia	No	In progress	Yes	N/A	In progress	No
Cyprus	In progress	In progress	Yes	No	In progress	In progress
Czechia	Yes	Yes	Yes	N/A	Yes	In progress
Denmark	N/A	No	Yes	N/A	N/A	N/A
Estonia	Yes	Yes	In progress	In progress	In progress	In progress
Finland	In progress	Yes	Yes	No	In progress	In progress
France	Yes	In progress	Yes	Yes	Yes	Yes
Georgia	N/A	In progress	Yes	N/A	N/A	In progress
Germany	N/A	No	Yes	N/A	N/A	N/A
Greece	Yes	In progress	Yes	No	No	In progress

	Health system functions: Governance					
Country	National quality of care plan	National patient safety plan	National antimicrobial resistance plan	Health misinformation prevention plan	Accreditation systems for hospitals	Patient/public representation in national health governance
Hungary	N/A	N/A	Yes	N/A	N/A	N/A
Iceland	In progress	Yes	Yes	N/A	N/A	In progress
Ireland	No	Yes	Yes	No	In progress	Yes
Israel	Yes	Yes	In progress	In progress	Yes	In progress
Italy	In progress	N/A	Yes	N/A	N/A	N/A
Kazakhstan	Yes	In progress	Yes	No	Yes	In progress
Kyrgyzstan	Yes	Yes	Yes	N/A	In progress	In progress
Latvia	In progress	In progress	Yes	No	In progress	No
Lithuania	N/A	N/A	In progress	N/A	N/A	N/A
Luxembourg	N/A	N/A	Yes	N/A	N/A	N/A
Malta	No	No	Yes	N/A	N/A	No
Monaco	N/A	N/A	N/A	N/A	N/A	N/A
Montenegro	Yes	No	Yes	No	No	In progress
Netherlands (Kingdom of the)	N/A	Yes	Yes	N/A	Yes	Yes
North Macedonia	In progress	In progress	Yes	No	Yes	In progress
Norway	Yes	Yes	Yes	N/A	Yes	Yes
Poland	In progress	In progress	In progress	No	Yes	No
Portugal	Yes	Yes	Yes	Yes	Yes	Yes
Republic of Moldova	No	No	Yes	N/A	Yes	In progress
Romania	In progress	N/A	Yes	N/A	N/A	N/A
Russian Federation	N/A	N/A	Yes	N/A	N/A	N/A

	Health system functions: Governance					
Country	**National quality of care plan**	**National patient safety plan**	**National antimicrobial resistance plan**	**Health misinformation prevention plan**	**Accreditation systems for hospitals**	**Patient/public representation in national health governance**
San Marino	N/A	N/A	No	N/A	N/A	N/A
Serbia	In progress	N/A	Yes	N/A	N/A	N/A
Slovakia	N/A	No	Yes	N/A	Yes	N/A
Slovenia	Yes	In progress	Yes	In progress	No	In progress
Spain	Yes	Yes	Yes	Yes	Yes	In progress
Sweden	In progress	Yes	Yes	No	Yes	In progress
Switzerland	Yes	Yes	Yes	No	Yes	N/A
Tajikistan	N/A	N/A	Yes	N/A	N/A	N/A
Türkiye	Yes	Yes	Yes	Yes	Yes	In progress
Turkmenistan	N/A	N/A	Yes	N/A	N/A	N/A
Ukraine	In progress	No	Yes	In progress	In progress	In progress
United Kingdom	Yes	Yes	Yes	N/A	Yes	Yes
Uzbekistan	N/A	N/A	Yes	N/A	N/A	N/A
Total Yes (N)	**17.0**	**16.0**	**42.0**	**4.0**	**18.0**	**7.0**
Total Yes (%)	**32**	**30**	**79**	**8**	**34**	**13**
Total No (N)	**6.0**	**9.0**	**1.0**	**16.0**	**4.0**	**8.0**
Total No (%)	**11.3**	**17.0**	**1.9**	**30.2**	**7.5**	**15.1**
Total In progress (N)	**15.0**	**15.0**	**7.0**	**6.0**	**12.0**	**21.0**
Total In progress (%)	**28.3**	**28.3**	**13.2**	**11.3**	**22.6**	**39.6**
Total N/A (N)	**15.0**	**13.0**	**3.0**	**27.0**	**19.0**	**17.0**
Total N/A (%)	**28.3**	**24.5**	**5.7**	**50.9**	**35.8**	**32.1**

Annex 3b: Country values and subregion unweighted aggregates

	Health system functions: Health workforce						Health system functions: Financing					
Country	General practitioners per 10 000 population (year)	Year	Medical doctors per 10 000 population (year)	Year	Nursing personnel per 10 000 population (year)	Year	Public spending on health as % of total public spending (year)	Year	Public spending on health as % of GDP (year)	Year	Out-of-pocket payments as % of current spending on health (year)	Year
Albania	7.3	2020	18.8	2020	54.7	2020	9.1	2021	2.9	2021	59.7	2021
Andorra			36.2	2015	41.3	2015	15.7	2021	6.2	2021	11.7	2021
Armenia	5.0	2019	31.2	2019	44.3	2019	7.6	2021	2.2	2021	78.7	2021
Austria	14.8	2022	55.1	2022	68.7	2018	16.9	2021	9.5	2021	15.8	2021
Azerbaijan	8.5	2014	30.9	2020	53.3	2020	4.6	2021	1.5	2021	66.0	2021
Belarus			44.7	2020	100.5	2020	13.1	2021	4.9	2021	21.9	2021
Belgium	12.0	2021	32.4	2021	110.5	2018	15.5	2021	8.6	2021	17.9	2021
Bosnia and Herzegovina	2.4	2015	23.2	2019	60.8	2019	16.4	2021	6.5	2021	30.7	2021
Bulgaria	6.0	2021	49.0	2022	41.9	2021	12.9	2021	5.4	2021	35.1	2021
Croatia	8.0	2021	36.1	2021	72.8	2021	14.0	2021	6.8	2021	9.4	2021
Cyprus	6.2	2015	35.5	2021	42.8	2021	18.4	2021	8.0	2021	9.9	2021
Czechia	7.2	2021	42.5	2021	99.7	2020	17.6	2021	8.2	2021	12.7	2021
Denmark	8.0	2020	43.8	2020	102.5	2020	17.8	2022	8.1	2022	12.6	2021
Estonia	8.7	2021	34.4	2021	65.0	2021	13.8	2021	5.7	2021	22.3	2021
Finland	13.9	2020	43.8	2021	189.2	2020	15.1	2021	8.4	2021	16.1	2021

	Health system functions: Health workforce						Health system functions: Financing					
Country	General practitioners per 10 000 population (year)	Year	Medical doctors per 10 000 population (year)	Year	Nursing personnel per 10 000 population (year)	Year	Public spending on health as % of total public spending (year)	Year	Public spending on health as % of GDP (year)	Year	Out-of-pocket payments as % of current spending on health (year)	Year
France	14.5	2021	33.4	2021	90.1	2021	15.8	2021	9.3	2021	8.9	2021
Georgia	8.2	2022	56.1	2022	58.8	2022	10.5	2022	3.1	2022	31.2	2021
Germany	10.3	2021	45.2	2021	120.0	2021	19.9	2021	10.2	2021	12.2	2021
Greece	4.7	2021	63.7	2021	38.2	2021	9.4	2021	5.4	2021	33.3	2021
Hungary	6.7	2021	33.0	2021	52.7	2021	11.0	2021	5.3	2021	24.6	2021
Iceland	5.9	2022	45.2	2022	152.4	2022	16.4	2021	8.1	2021	14.7	2021
Ireland	23.6	2021	40.6	2021	135.0	2022	21.0	2021	5.2	2021	10.7	2021
Israel	10.7	2022	37.1	2022	56.4	2022	13.2	2021	5.4	2021	19.8	2021
Italy	8.2	2022	42.5	2022	77.1	2022	12.4	2021	7.1	2021	21.9	2021
Kazakhstan	3.6	2014	40.3	2020	65.1	2020	11.6	2021	2.6	2021	25.0	2021
Kyrgyzstan			21.5	2021	40.7	2020	8.6	2021	2.9	2021	40.7	2021
Latvia	7.7	2021	33.8	2021	42.1	2021	14.2	2021	6.3	2021	27.0	2021
Lithuania	10.3	2021	51.3	2022	90.5	2022	14.0	2021	5.3	2021	30.2	2021
Luxembourg	9.0	2017	29.9	2017	117.3	2017	11.0	2022	4.7	2022	8.9	2021
Malta	7.6	2015	42.8	2021	80.2	2020	16.2	2021	7.1	2021	30.3	2020
Monaco	14.1	2014	88.8	2020	202.7	2014	13.6	2021	3.3	2021	6.9	2021
Montenegro	5.0	2022	27.5	2022	55.9	2022	14.4	2021	6.5	2021	38.1	2021

	Health system functions: Health workforce						Health system functions: Financing					
Country	General practitioners per 10 000 population (year)	Year	Medical doctors per 10 000 population (year)	Year	Nursing personnel per 10 000 population (year)	Year	Public spending on health as % of total public spending (year)	Year	Public spending on health as % of GDP (year)	Year	Out-of-pocket payments as % of current spending on health (year)	Year
Netherlands (Kingdom of the)	18.3	2021	39.1	2021	114.0	2021	16.9	2021	7.9	2021	9.4	2021
North Macedonia	9.6	2013	29.6	2020	44.0	2020	13.0	2021	4.6	2021	41.7	2020
Norway	10.0	2021	51.7	2021	183.4	2021	17.8	2022	7.0	2022	14.1	2021
Poland	8.7	2021	33.9	2021	56.0	2021	10.5	2021	4.6	2021	20.3	2021
Portugal	29.9	2021	57.7	2021	75.0	2021	14.7	2021	7.0	2021	29.0	2021
Republic of Moldova	5.4	2021	32.5	2021	59.4	2020	14.6	2021	5.1	2021	29.4	2021
Romania	7.8	2021	34.7	2021	79.1	2021	12.3	2021	4.9	2021	20.9	2021
Russian Federation	3.3	2019	38.3	2020	59.1	2020	15.1	2021	5.3	2021	27.2	2021
San Marino			60.2	2014	75.8	2014	17.9	2021	7.0	2021	11.9	2021
Serbia	8.3	2015	28.4	2021	57.9	2020	13.4	2021	6.3	2021	35.8	2021
Slovakia			36.8	2021	57.3	2021	13.6	2021	6.2	2021	19.4	2021
Slovenia	6.9	2021	33.3	2021	104.4	2021	14.0	2021	6.9	2021	12.9	2021
Spain	9.4	2021	44.8	2021	63.3	2021	15.2	2021	7.7	2021	21.0	2021
Sweden	6.1	2020	43.1	2020	106.6	2020	19.6	2021	9.7	2021	13.1	2021
Switzerland	11.5	2021	44.4	2021	184.2	2021	11.7	2021	4.3	2021	22.7	2021
Tajikistan			21.3	2021	47.5	2020	7.0	2021	1.9	2021	63.5	2021

	Health system functions: Health workforce						Health system functions: Financing					
Country	General practitioners per 10 000 population (year)	Year	Medical doctors per 10 000 population (year)	Year	Nursing personnel per 10 000 population (year)	Year	Public spending on health as % of total public spending (year)	Year	Public spending on health as % of GDP (year)	Year	Out-of-pocket payments as % of current spending on health (year)	Year
Türkiye	7.1	2021	21.7	2021	27.4	2021	11.5	2021	3.6	2021	16.3	2021
Turkmenistan	7.2	2021	21.4	2021	37.3	2021	8.7	2021	0.9	2021	78.6	2021
Ukraine	3.6	2014	29.9	2014	63.0	2014	10.1	2021	4.1	2021	46.3	2021
United Kingdom	8.1	2022	31.7	2022	86.7	2022	22.4	2021	10.3	2021	13.5	2021
Uzbekistan	4.9	2014	28.1	2021	53.5	2020	9.9	2021	3.0	2021	60.3	2021
WHO minimum	2.4		18.8		27.4		4.6		0.9		6.9	
WHO maximum	29.9		88.8		202.7		22.4		10.3		78.7	
WHO median	8.0		36.2		65.0		14.0		5.7		21.9	
Missing (N)	6.0		0.0		0.0		0.0		0.0		0.0	
Missing (%)	11.3		0.0		0.0		0.0		0.0		0.0	
Available (N)	47.0		53.0		53.0		53.0		53.0		53.0	
Available (%)	88.7		100.0		100.0		100.0		100.0		100.0	
EU13 Median	7.7		35.5		65.0		14.0		6.2		20.9	
EU15 Median	11.2		43.5		104.5		15.6		8.0		14.4	
CIS Median	5.0		31.1		53.4		9.3		2.8		50.5	
SEEHN Median	7.3		29.6		56.4		13.2		5.4		35.1	

	Health system functions: Service delivery											
Country	Cervical cancer screening, % (year)	Year	Colorectal cancer screening, % (year)	Year	Tuberculosis treatment coverage, % (year)	Year	Births by caesarean section as % of all live births (year)	Year	Percentage of isolates with resistance phenotype – E. coli/ aminopenicillin (year)	Year	Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)	Year
Albania					68.0	2022	34.1	2013				
Andorra					87.0	2022						
Armenia					63.0	2022	18.0	2010-2016			28.6	2021
Austria					94.0	2022	29.5	2016	45.1	2021	3.1	2021
Azerbaijan					57.0	2022	27.6	2015				
Belarus					64.0	2022	27.1	2014	69.2	2021	30.0	2021
Belgium	45.7	2020			87.0	2022	21.2	2013	55.2	2021	4.1	2021
Bosnia and Herzegovina					55.0	2022	24.0	2014	71.1	2021	16.8	2021
Bulgaria	13.4	2017			72.0	2022	39.1	2014	61.2	2021	15.2	2021
Croatia			25.0	2021	>99	2022	23.0	2016	55.8	2021	34.8	2021
Cyprus					91.0	2022	56.9	2015	70.2	2021	42.9	2021
Czechia	74.5	2021	26.9	2021	87.0	2022	25.9	2012	51.4	2021	9.4	2021
Denmark	59.4	2020	61.0	2021	87.0	2022	19.5	2016	41.5	2021	1.8	2021

	Health system functions: Service delivery											
Country	Cervical cancer screening, % (year)	Year	Colorectal cancer screening, % (year)	Year	Tuberculosis treatment coverage, % (year)	Year	Births by caesarean section as % of all live births (year)	Year	Percentage of isolates with resistance phenotype – E. coli/ aminopenicillin (year)	Year	Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)	Year
Estonia	50.6	2021	47.5	2021	87.0	2022	20.3	2016	41.1	2021	1.5	2021
Finland	72.3	2021	79.4	2021	87.0	2022	16.4	2016	31.7	2021	2.6	2021
France	58.8	2021	34.6	2021	82.0	2022	19.6	2016	52.3	2021	11.0	2021
Georgia					68.0	2022	41.4	2015	78.6	2021	25.8	2021
Germany	45.0	2021	15.0	2019	91.0	2022	30.5	2016	45.6	2021	4.9	2021
Greece					>99	2022			59.8	2021	41.9	2021
Hungary	26.0	2021	2.8	2021	87.0	2022	36.4	2014	58.5	2021	19.3	2021
Iceland	62.0	2022			87.0	2022	18.3	2016	46.6	2021	1.1	2021
Ireland	72.9	2021	49.5	2021	87.0	2022	31.3	2015	63.0	2021	10.6	2021
Israel	54.9	2021	64.2	2021	87.0	2022	16.1	2014				
Italy	39.2	2021	38.6	2021	85.0	2022	35.0	2014	58.9	2021	30.0	2021
Kazakhstan					66.0	2022	14.8	2013-2015				
Kyrgyzstan					53.0	2022	7.4	2012-2014				

	Health system functions: Service delivery											
Country	Cervical cancer screening, % (year)	Year	Colorectal cancer screening, % (year)	Year	Tuberculosis treatment coverage, % (year)	Year	Births by caesarean section as % of all live births (year)	Year	Percentage of isolates with resistance phenotype – E. coli/ aminopenicillin (year)	Year	Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)	Year
Latvia	35.1	2021	18.8	2021	87.0	2022	21.7	2016	49.4	2021	5.3	2021
Lithuania	53.4	2021	48.1	2021	87.0	2022	21.9	2015	57.1	2021	9.0	2021
Luxembourg	60.8	2020	29.4	2021	87.0	2022	30.5	2013	53.4	2021	5.5	2021
Malta					87.0	2022	30.7	2016	64.5	2021	20.4	2021
Monaco					87.0	2018	20.6	2015				
Montenegro					79.0	2022	19.9	2011-2013	80.0	2020	21.2	2021
Netherlands (Kingdom of the)	54.8	2021	70.6	2021	87.0	2022	16.6	2015	41.4	2021	1.5	2021
North Macedonia					64.0	2022	24.9	2009-2011	96.3	2021	43.4	2021
Norway	78.0	2019			85.0	2022	16.1	2016	35.4	2021	0.9	2021
Poland	10.9	2022			88.0	2022	35.6	2014	60.6	2021	16.5	2021
Portugal					91.0	2022	35.2	2011	52.7	2021	25.1	2021
Republic of Moldova					87.0	2022	18.4	2014			21.7	2019
Romania	3.9	2021			87.0	2022	40.1	2013	64.2	2021	41.0	2021

	Health system functions: Service delivery											
Country	Cervical cancer screening, % (year)	Year	Colorectal cancer screening, % (year)	Year	Tuberculosis treatment coverage, % (year)	Year	Births by caesarean section as % of all live births (year)	Year	Percentage of isolates with resistance phenotype – E. coli/ aminopenicillin (year)	Year	Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)	Year
Russian Federation					100.0	2022	13.0	2006-2011	82.0	2021	14.0	2021
San Marino					87.0	2003	27.5	2016				
Serbia					100.0	2022	28.8	2012-2014	70.8	2021	36.0	2021
Slovakia	44.4	2021			87.0	2022	30.3	2012	54.5	2021	22.3	2021
Slovenia	71.7	2021	59.1	2022	87.0	2022	18.9	2012	50.8	2021	7.8	2021
Spain					79.0	2022	27.3	2014	56.3	2021	24.2	2021
Sweden	78.5	2021			87.0	2022	17.4	2015			2.0	2021
Switzerland					87.0	2022	33.3	2015	46.8	2021	4.2	2021
Tajikistan					55.0	2022	4.0	2007-2012				
Türkiye	31.2	2022	15.4	2022	83.0	2022	48.1	2008-2013	74.8	2021	30.7	2021
Turkmenistan					81.0	2022	6.3	2013-2016				

	Health system functions: Service delivery										
Country	Cervical cancer screening, % (year)	Year	Colorectal cancer screening, % (year)	Year	Tuberculosis treatment coverage, % (year)	Year	Births by caesarean section as % of all live births (year)	Year	Percent-age of isolates with resistance phenotype – E. coli/ aminopeni-cillin (year)	Year	Percent-age of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)	Year
Ukraine					52.0	2022	12.1	2010-2012	57.1	2021	30.1	2021
United Kingdom	69.9	2022			92.0	2022	31.2	2016-2017	56.9	2021	5.6	2021
Uzbekistan					50.0	2022	13.6	2015				
WHO minimum	3.9		2.8		50.0		4.0		31.7		0.9	
WHO maximum	78.5		79.4		100.0		56.9		96.3		43.4	
WHO median	54.8		38.6		87.0		24.0		56.9		15.9	
Missing (N)	28.0		36.0		0.0		2.0		14.0		11.0	
Missing (%)	52.8		67.9		0.0		3.8		26.4		20.8	
Available (N)	25.0		17.0		53.0		51.0		39.0		42.0	
Available (%)	47.2		32.1		100.0		96.2		73.6		79.2	
EU13 Median	39.8		26.9		87.0		30.3		57.1		16.5	
EU15 Median	59.1		44.1		87.0		27.3		52.7		5.2	
CIS Median					63.5		14.2		75.6		25.2	
SEEHN Median	13.4		64.2		79.0		24.9		71.0		21.7	

	Health system functions: Medicines				Health system functions: Digital health	
Country	**Antibiotic consumption, % (year)**	**Year**	**National list of approved priority/ essential medical devices**	**Year**	**National electronic health record system**	**Quality and safety in telehealth guidelines**
Albania	38.0	2019	No	2022	Yes	In progress
Andorra			N/A	2022	Yes	N/A
Armenia	47.0	2020	No	2022	Yes	N/A
Austria	60.0	2021	Yes	2022	Yes	Yes
Azerbaijan	40.0	2021	Yes, recommendation	2022	No	No
Belarus	66.0	2021	Yes	2022	No	No
Belgium	69.0	2021	Yes, recommendation	2022	Yes	In progress
Bosnia and Herzegovina	58.0	2021	Yes	2022	N/A	No
Bulgaria	38.0	2021	Yes	2022	Yes	In progress
Croatia	60.0	2021	No	2022	Yes	In progress
Cyprus	48.0	2021	No	2022	No	In progress
Czechia	61.0	2021	Yes	2022	No	Yes
Denmark	80.0	2021	No	2022	No	N/A
Estonia	64.0	2021	Yes	2022	Yes	In progress
Finland	70.0	2021	No	2022	Yes	In progress
France	72.0	2021	Yes	2022	Yes	Yes
Georgia	53.0	2020	No	2022	Yes	N/A
Germany	56.0	2018	No	2022	Yes	N/A
Greece	52.0	2021	No	2022	Yes	No

	Health system functions: Medicines				Health system functions: Digital health	
Country	Antibiotic consumption, % (year)	Year	National list of approved priority/ essential medical devices	Year	National electronic health record system	Quality and safety in telehealth guidelines
Hungary	49.0	2021	Yes	2022	Yes	N/A
Iceland	83.0	2021	No	2022	Yes	N/A
Ireland	74.0	2021	N/A	2022	No	In progress
Israel			Yes	2022	No	Yes
Italy	48.0	2021	Yes	2022	Yes	N/A
Kazakhstan	53.0	2018	Yes, recommendation	2022	Yes	In progress
Kyrgyzstan	54.0	2020	Yes	2022	No	N/A
Latvia	71.0	2021	No	2022	Yes	No
Lithuania	69.0	2021	Yes	2022	Yes	N/A
Luxembourg	61.0	2021	No	2022	Yes	N/A
Malta	58.0	2021	No	2022	No	N/A
Monaco			No	2022	N/A	N/A
Montenegro	46.0	2021	Yes	2022	No	No
Netherlands (Kingdom of the)	70.0	2021	No	2022	No	N/A
North Macedonia	42.0	2021	No	2022	Yes	In progress
Norway	59.0	2021	Yes	2022	No	N/A
Poland	61.0	2021	No	2022	Yes	In progress
Portugal	62.0	2021	No	2022	Yes	In progress
Republic of Moldova	51.0	2018	No	2022	No	No

	Health system functions: Medicines					Health system functions: Digital health	
Country	Antibiotic consumption, % (year)	Year	National list of approved priority/ essential medical devices	Year		National electronic health record system	Quality and safety in telehealth guidelines
Romania	49.0	2021	No	2022		Yes	N/A
Russian Federation	43.0	2021	Yes, recommendation	2022		Yes	N/A
San Marino			No	2022		Yes	N/A
Serbia	42.0	2021	Yes	2022		Yes	N/A
Slovakia	40.0	2021	Yes	2022		Yes	N/A
Slovenia	64.0	2021	Yes	2022		Yes	No
Spain	62.0	2021	Yes	2022		Yes	Yes
Sweden	68.0	2021	No	2022		No	Yes
Switzerland	65.0	2021	Yes	2022		Yes	N/A
Tajikistan	49.0	2021	Yes	2022		Yes	N/A
Türkiye	56.0	2021	Yes	2022		Yes	In progress
Turkmenistan			N/A	2022		Yes	N/A
Ukraine	40.0	2018	Yes	2022		Yes	Yes
United Kingdom	68.0	2019	No	2022		No	N/A
Uzbekistan	35.0	2019	N/A	2022		No	N/A
WHO minimum	35.0		Yes (N)	22.0	Yes (N)	35.0	7.0
axis MIN			Yes (%)	42	Yes (%)	66	13
WHO maximum	83.0		No (N)	23.0	No (N)	16.0	8.0
axis MAX			No (%)	43.4	No (%)	30	15

	Health system functions: Medicines					Health system functions: Digital health	
Country	Antibiotic consumption, % (year)	Year	National list of approved priority/ essential medical devices	Year		National electronic health record system	Quality and safety in telehealth guidelines
WHO median	58.0	Yes, rec/tion (N)	4.0	In progress (N)			
Missing (N)	5.0	Yes, rec/tion (%)	7.5	In progress (%)			
Missing (%)	9.4	N/A (N)	4.0	N/A (N)		2.0	25.0
Available (N)	48.0	N/A (%)	7.5	N/A (%)		3.8	47.2
Available (%)	90.6						
EU13 Median	60.0						
EU15 Median	65.0						
CIS Median	49.0						
SEEHN Median	44.0						

Annex 3c: Country values and subregion unweighted aggregates for different quality of care dimensions

	Quality of care indicators: Effectiveness						Quality of care indicators: Efficiency							
Country	Standardized preventable mortality, rate (year)	Year	Standardized treatable mortality, rate (year)	Year	Thirty-day mortality after hospital admission for AMI, rate (year)	year	Average length of stay, all hospitals, days (year)	Year	One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate (year)	Year	Avoidable hospital admissions – COPD, rate (year)	Year	Avoidable hospital admissions – diabetes, rate (year)	Year
Albania							5.5	2013						
Andorra														
Armenia							7.2	2021						
Austria	173.3	2021	71.2	2021			8.2	2014			129.3	2020	112.6	2020
Azerbaijan							10.2	2017						
Belarus							10.4	2020						
Belgium	164.1	2021	61.6	2021			7.8	2013			278.9	2019	134.6	2019
Bosnia and Herzegovina							6.8	2019						
Bulgaria	460.0	2021	225.1	2021			5.4	2014						
Croatia	312.0	2021	139.7	2021			8.8	2014						
Cyprus	139.5	2021	78.4	2021			6.4	2014						
Czechia	285.9	2021	125.9	2021	11.0	2021	9.4	2014	53.2	2018	100.7	2020	132.5	2020
Denmark	148.9	2021	64.3	2021	6.9	2021	4.3	2013	50.7	2018	287.0	2019	128.1	2019

	Quality of care indicators: Effective-ness						Quality of care indicators: Efficiency							
Country	Standard-ized pre-ventable mortality, rate (year)	Year	Stan-dardized treatable mortality, rate (year)	Year	Thirty-day mortality after hospital admission for AMI, rate (year)	year	Average length of stay, all hospitals, days (year)	Year	One-year all-cause readmis-sion or mortal-ity after discharge from ischaemic stroke, rate (year)	Year	Avoidable hospital admissions – COPD, rate (year)	Year	Avoidable hospital admissions – diabetes, rate (year)	Year
Estonia	304.7	2021	135.6	2021	14.7	2021	7.6	2014	44.6	2018	84.9	2019	104.1	2019
Finland	156.4	2021	69.8	2021	8.0	2021	10.6	2014	35.0	2018	124.7	2019	112.1	2019
France	145.2	2021	58.8	2021	7.2	2019	10.1	2013			120.4	2019	150.6	2019
Georgia							6.7	2021						
Germany	171.3	2021	81.3	2021			9.0	2014			249.6	2019	206.1	2019
Greece	195.9	2021	94.5	2021			6.8	2011						
Hungary	452.4	2021	188.9	2021			9.5	2014			386.2	2009		
Iceland	110.8	2021	59.2	2021	5.0	2021	6.1	2014			100.6	2020	37.1	2020
Ireland	148.4	2021	69.2	2021			6.0	2014			238.0	2020	85.6	2020
Israel					7.2	2021	6.8	2014			154.6	2019		
Italy	128.0	2021	64.5	2021			8.0	2014	38.4	2018	38.6	2019	40.7	2019
Kazakhstan							8.6	2022						
Kyrgyzstan							7.7	2022						
Latvia	439.0	2021	205.0	2021	17.9	2021	8.3	2014			103.3	2020	120.5	2020
Lithuania	394.1	2021	190.9	2021	14.7	2021	8.0	2014	39.9	2018	90.2	2020	141.3	2020
Luxembourg	132.6	2021	54.7	2021			8.8	2014			180.7	2019	139.3	2019

	Quality of care indicators: Effectiveness						Quality of care indicators: Efficiency							
Country	Standardized preventable mortality, rate (year)	Year	Standardized treatable mortality, rate (year)	Year	Thirty-day mortality after hospital admission for AMI, rate (year)	year	Average length of stay, all hospitals, days (year)	Year	One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate (year)	Year	Avoidable hospital admissions – COPD, rate (year)	Year	Avoidable hospital admissions – diabetes, rate (year)	Year
Malta	132.8	2021	81.8	2021			7.9	2014					214.5	2019
Monaco							17.7	2020						
Montenegro							8.5	2014						
Netherlands (Kingdom of the)	146.5	2021	59.7	2021	3.2	2021	10.8	2006			175.7	2019	51.5	2019
North Macedonia							7.9	2013						
Norway	113.9	2021	55.6	2021	6.0	2021	6.0	2014	41.9	2018	220.9	2019	70.4	2019
Poland	335.9	2021	145.9	2021	7.9	2021	6.9	2014			121.5	2019	189.8	2019
Portugal	155.9	2021	74.5	2021	7.2	2021	8.9	2014			64.2	2020	44.1	2020
Republic of Moldova							8.0	2021						
Romania	440.1	2021	254.7	2021	8.9	2021	7.3	2013					151.4	2020
Russian Federation							10.2	2021						
San Marino							6.5	2022						

	Quality of care indicators: Effectiveness						Quality of care indicators: Efficiency							
Country	Standardized preventable mortality, rate (year)	Year	Standardized treatable mortality, rate (year)	Year	Thirty-day mortality after hospital admission for AMI, rate (year)	year	Average length of stay, all hospitals, days (year)	Year	One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate (year)	Year	Avoidable hospital admissions – COPD, rate (year)	Year	Avoidable hospital admissions – diabetes, rate (year)	Year
Serbia	412.7	2021	186.6	2021			10.0	2014						
Slovakia	379.3	2021	206.0	2021	15.4	2021	7.3	2014			69.0	2020	180.8	2020
Slovenia	211.9	2021	66.9	2021	8.1	2021	6.9	2014			89.8	2019	106.3	2019
Spain	134.0	2021	61.0	2021	7.0	2021	7.4	2014			177.3	2019	50.4	2019
Sweden	117.8	2021	59.7	2021	6.8	2021	5.7	2014	39.9	2018	139.9	2019	75.5	2019
Switzerland	115.2	2021	46.1	2021			8.5	2014			140.9	2019	106.9	2019
Tajikistan							9.0	2018						
Türkiye	226.2	2021	164.2	2021	9.7	2021	4.0	2014			335.9	2019	221.9	2019
Turkmenistan							7.8	2021						
Ukraine							10.6	2019						
United Kingdom	150.5	2018	87.4	2018	8.3	2021	7.1	2014			115.2	2020	72.0	2020
Uzbekistan							6.7	2019						
WHO minimum	110.8		46.1		3.2		4.0		35.0		38.6		37.1	

	Quality of care indicators: Effectiveness						Quality of care indicators: Efficiency									
Country	Standardized preventable mortality, rate (year)	Year	Standardized treatable mortality, rate (year)	Year	Thirty-day mortality after hospital admission for AMI, rate (year)	year	Average length of stay, all hospitals, days (year)	Year	One-year all-cause readmission or mortality after discharge from ischaemic stroke, rate (year)	Year	Avoidable hospital admissions – COPD, rate (year)	Year	Avoidable hospital admissions – diabetes, rate (year)	Year
WHO maximum	460.0		254.7		17.9		17.7		53.2		386.2		221.9	
WHO median	164.1		78.4		8.0		7.9		40.9		129.3		112.6	
Missing (N)	20.0		20.0		33.0		1.0		45.0		26.0		26.0	
Missing (%)	37.7		37.7		62.3		1.9		84.9		49.1		49.1	
Available (N)	33.0		33.0		20.0		52.0		8.0		27.0		27.0	
Available (%)	62.3		62.3		37.7		98.1		15.1		50.9		50.9	
EU13 Median	335.9		145.9		12.9		7.6		44.6		95.5		141.3	
EU15 Median	148.7		64.4		7.0		8.1		39.2		175.7		112.1	
CIS Median							8.3							
SEEHN Median	440.1		225.1		8.1		7.3				154.6		151.4	

	Quality of care indicators: Patient safety								Quality of care indicators: People centredness					
Country	Patients reporting a medical mistake, % (year)	Year	Surgical wound infection rate, all operations, % (year)	Year	Pulmonary embolism after hip and knee replacement, rate (year)	Year	Obstetric trauma, vaginal delivery with instrument, rate (year)	Year	Doctor spending enough time with patients during consultation, % (year)	Year	Doctor providing easy-to-understand explanations, % (year)	Year	Doctor involving patient in decisions about care, % (year)	Year
Albania														
Andorra														
Armenia			0.1	2021										
Austria														
Azerbaijan														
Belarus			0.1	1995										
Belgium			1.5	2014	232.3	2021	4.5	2021	97.5	2010	97.7	2010	95.2	2010
Bosnia and Herzegovina														
Bulgaria			0.9	1996										
Croatia														
Cyprus														
Czechia			0.9	2014			7.2	2021			96.3	2010	81.7	2010
Denmark			0.8	2020			11.6	2020						
Estonia	5.2	2020 or nearest year			73.2	2017	6.0	2021	92.3	2020	93.5	2020	89.2	2020

	Quality of care indicators: Patient safety								Quality of care indicators: People centredness					
Country	Patients reporting a medical mistake, % (year)	Year	Surgical wound infection rate, all operations, % (year)	Year	Pulmonary embolism after hip and knee replacement, rate (year)	Year	Obstetric trauma, vaginal delivery with instrument, rate (year)	Year	Doctor spending enough time with patients during consultation, % (year)	Year	Doctor providing easy-to-understand explanations, % (year)	Year	Doctor involving patient in decisions about care, % (year)	Year
Finland			1.5	2022	533.1	2021	3.1	2021						
France	4.3	2020 or nearest year			266.8	2015			83.5	2020	91.1	2020	74.1	2020
Georgia														
Germany	3.0	2020 or nearest year	0.2	2021	385.8	2021	6.1	2021	86.9	2020	93.7	2020	88.6	2020
Greece														
Hungary			0.2	2021										
Iceland							9.4	2022						
Ireland			0.6	2022	320.3	2022	3.3	2022						
Israel					516.8	2021	1.4	2021	96.1	2020	97.5	2020	84.1	2010
Italy					25.4	2021	2.9	2021						
Kazakhstan			0.1	2022										
Kyrgyzstan			0.3	2022										
Latvia					165.3	2021	2.2	2021						
Lithuania			0.4	2022	134.8	2022	2.2	2022						

	Quality of care indicators: Patient safety								Quality of care indicators: People centredness					
Country	Patients reporting a medical mistake, % (year)	Year	Surgical wound infection rate, all operations, % (year)	Year	Pulmonary embolism after hip and knee replacement, rate (year)	Year	Obstetric trauma, vaginal delivery with instrument, rate (year)	Year	Doctor spending enough time with patients during consultation, % (year)	Year	Doctor providing easy-to-understand explanations, % (year)	Year	Doctor involving patient in decisions about care, % (year)	Year
Luxembourg									91.0	2020	94.8	2020	95.6	2010
Malta							11.5	2021						
Monaco			0.6	2020										
Montenegro														
Netherlands (Kingdom of the)	3.9	2020 or nearest year			328.7	2021	3.4	2019	93.2	2020	94.9	2020	93.3	2020
North Macedonia			0.5	2003										
Norway	12.6	2020 or nearest year	0.3	2021	254.1	2019	2.7	2019	81.6	2020	90.1	2020	86.7	2020
Poland	9.0	2020 or nearest year			21.4	2021	1.6	2021	70.0	2020	79.0	2020	61.5	2020
Portugal			0.4	2012	106.5	2022	2.4	2022	89.7	2020	96.3	2010	90.9	2010
Republic of Moldova			0.3	1992										
Romania			0.4	1994	119.7	2022	1.6	2022						

	Quality of care indicators: Patient safety								Quality of care indicators: People centredness					
Country	Patients reporting a medical mistake, % (year)	Year	Surgical wound infection rate, all operations, % (year)	Year	Pulmonary embolism after hip and knee replacement, rate (year)	Year	Obstetric trauma, vaginal delivery with instrument, rate (year)	Year	Doctor spending enough time with patients during consultation, % (year)	Year	Doctor providing easy-to-understand explanations, % (year)	Year	Doctor involving patient in decisions about care, % (year)	Year
Russian Federation			0.1	1995										
San Marino			9.5	2022										
Serbia														
Slovakia														
Slovenia			0.5	2021	415.5	2021	5.3	2021	82.6	2020	90.3	2020	84.5	2020
Spain			5.1	2020	162.1	2021	4.7	2021					85.0	2020
Sweden	8.7	2020 or nearest year	1.2	2021	518.1	2021	9.2	2021	69.0	2020	81.9	2020	68.5	2020
Switzerland	9.9	2020 or nearest year			355.7	2021	7.4	2021	86.3	2020	92.0	2020	84.3	2020
Tajikistan			0.1	2018										
Türkiye			0.6	2021										
Turkmenistan			0.3	1992										
Ukraine														
United Kingdom	3.5	2020 or nearest year	1.0	2017	846.2	2022	5.7	2022	72.7	2020	86.7	2020	80.6	2020

	Quality of care indicators: Patient safety								Quality of care indicators: People centredness					
Country	Patients reporting a medical mistake, % (year)	Year	Surgical wound infection rate, all operations, % (year)	Year	Pulmonary embolism after hip and knee replacement, rate (year)	Year	Obstetric trauma, vaginal delivery with instrument, rate (year)	Year	Doctor spending enough time with patients during consultation, % (year)	Year	Doctor providing easy-to-understand explanations, % (year)	Year	Doctor involving patient in decisions about care, % (year)	Year
Uzbekistan														
WHO minimum	3.0		0.1		21.4		1.4		69.0		79.0		61.5	
WHO maximum	12.6		9.5		846.2		11.6		97.5		97.7		95.6	
WHO median	5.2		0.5		260.5		4.5		86.6		93.5		84.8	
Missing (N)	44.0		25.0		33.0		30.0		39.0		38.0		37.0	
Missing (%)	83.0		47.2		62.3		56.6		73.6		71.7		69.8	
Available (N)	9.0		28.0		20.0		23.0		14.0		15.0		16.0	
Available (%)	17.0		52.8		37.7		43.4		26.4		28.3		30.2	
EU13 Median	7.1		0.5		127.3		3.8		82.6		91.9		83.1	
EU15 Median	4.1		1.0		293.6		4.0		89.7		94.8		89.8	
CIS Median			0.1											
SEEHN Median			0.5		318.3		1.5		96.1		97.5		84.1	

	Quality of care indicators: Equity					Quality of care indicators: Access								
Country	Vaccination against influenza on average and in the poorest quintile, % (year)	Values of poorest quintile	Year	Needs-standardized GP visit in the richest and in the poorest quintile, mean number (year)	Values of poorest quintile	Share of households with catastrophic health spending on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for health care on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for dental examination on average and in the poorest quintile, % (year)	Poorest quintile values	Year
Albania						12.5	8.1	2015	10.7	16.7	2021	15.6	27.1	2021
Andorra														
Armenia						20.3	8.6	2019						
Austria	8.8	8.9	2019	5.8	5.1	3.2	2.2	2015	0.6	0.8	2023	0.9	1.9	2023
Azerbaijan														
Belarus														
Belgium	26.0	33.8	2019	5.1	5.3	3.8	1.7	2018	1.1	2.8	2023	3.2	7.0	2023
Bosnia and Herzegovina						8.8	5.4	2015						
Bulgaria	2.0	1.1	2019			19.2	12.7	2018	1.1	2.5	2023	1.9	3.5	2023
Croatia	16.4	17.6	2019			3.6	2.8	2019	1.0	3.1	2023	0.5	1.0	2023
Cyprus	7.1	9.2	2019			5.0	3.4	2015	0.1	0.3	2023	1.1	2.5	2023
Czechia	6.7	7.4	2019			4.2	3.3	2019	0.4	0.6	2023	1.1	1.8	2023
Denmark	16.4	21.1	2019	2.8	2.9	2.6	1.6	2015	2.7	4.5	2023	8.4	16.9	2023
Estonia	11.6	7.7	2019			7.2	3.7	2019	12.9	15.6	2023	3.2	4.7	2023

	Quality of care indicators: Equity					Quality of care indicators: Access								
Country	Vaccination against influenza on average and in the poorest quintile, % (year)	Values of poorest quintile	Year	Needs-standardized GP visit in the richest and in the poorest quintile, mean number (year)	Values of poorest quintile	Share of households with catastrophic health spending on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for health care on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for dental examination on average and in the poorest quintile, % (year)	Poorest quintile values	Year
Finland	28.8	20.2	2019			3.8	2.4	2016	7.9	10.0	2023	7.7	10.6	2023
France	19.0	16.5	2019			2.1	1.8	2017	3.7	5.3	2023	6.6	10.8	2023
Georgia						17.4	9.1	2018						
Germany	21.8	19.2	2019	4.7	5.0	2.4	1.5	2018	0.2	0.3	2023	0.3	0.6	2023
Greece	25.9	13.7	2019	2.1	2.2	8.9	5.3	2019	11.6	23.0	2023	12.9	21.2	2023
Hungary	10.3	8.4	2019			11.6	8.8	2015	1.0	1.8	2023	0.6	1.5	2023
Iceland	38.1	22.5	2019						5.2	9.9	2019	9.4	16.1	2019
Ireland	26.2	35.7	2019	3.5	4.1	1.2	1.0	2016	2.7	4.7	2023	1.9	4.9	2023
Israel						5.7	3.8	2019						
Italy	17.3	13.2	2019	4.2	4.6	9.4	6.5	2019	1.8	3.8	2023	1.8	3.9	2023
Kazakhstan														
Kyrgyzstan														
Latvia	7.6	4.9	2019			15.0	5.9	2016	7.8	13.9	2023	10.0	15.8	2023
Lithuania	6.3	5.9	2019			15.2	6.4	2016	3.8	4.6	2023	2.2	3.4	2023
Luxembourg	16.5	17.4	2019	3.0	3.4	2.3	2.1	2017	0.8	1.6	2023	1.2	3.0	2023

	Quality of care indicators: Equity					Quality of care indicators: Access								
Country	Vaccination against influenza on average and in the poorest quintile, % (year)	Values of poorest quintile	Year	Needs-standardized GP visit in the richest and in the poorest quintile, mean number (year)	Values of poorest quintile	Share of households with catastrophic health spending on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for health care on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for dental examination on average and in the poorest quintile, % (year)	Poorest quintile values	Year
Malta	22.3	29.4	2019			6.9	4.3	2015	0.1	0.2	2023	0.1	0.3	2023
Monaco														
Montenegro						9.4	7.0	2017	2.6	3.8	2022	2.0	4.2	2022
Netherlands (Kingdom of the)	24.1	14.5	2019	2.8	2.8	0.5	0.2	2015	0.3	0.2	2023	0.4	1.2	2023
North Macedonia						6.5	3.1	2018	1.7	3.9	2020	1.7	3.4	2020
Norway	17.1	12.9	2019						1.8	4.9	2023	7.5	15.9	2023
Poland	4.8	4.0	2019			8.6	5.5	2019	3.6	4.0	2023	1.5	1.7	2023
Portugal	18.9	14.2	2019	3.7	3.2	10.6	7.2	2015	2.8	5.9	2023	8.7	19.3	2023
Republic of Moldova						11.7	6.5	2019						
Romania	10.1	7.0	2019			12.5	7.3	2015	5.2	9.3	2023	6.3	10.5	2023
Russian Federation														
San Marino														

	Quality of care indicators: Equity					Quality of care indicators: Access								
Country	Vaccination against influenza on average and in the poorest quintile, % (year)	Values of poorest quintile	Year	Needs-standardized GP visit in the richest and in the poorest quintile, mean number (year)	Values of poorest quintile	Share of households with catastrophic health spending on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for health care on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for dental examination on average and in the poorest quintile, % (year)	Poorest quintile values	Year
Serbia	4.9	4.8	2019			12.2	9.9	2019	3.1	6.3	2022	2.0	5.0	2022
Slovakia	5.1	4.3	2019			5.1	4.7	2015	3.2	5.3	2023	2.2	4.0	2023
Slovenia	5.9	5.8	2019			0.8	0.5	2018	3.8	3.9	2023	4.0	4.4	2023
Spain	19.4	11.9	2019	3.4	4.0	1.6	1.1	2020	1.8	1.8	2023	5.1	11.4	2023
Sweden	13.2	14.7	2019			1.6	1.2	2015	2.1	3.1	2023	2.7	6.1	2023
Switzerland						2.7	2.3	2017	0.8	1.4	2022	2.8	5.7	2022
Tajikistan														
Türkiye	2.1	1.9	2019			4.3	3.2	2018	1.7	5.0	2022	1.8	3.5	2022
Turkmenistan														
Ukraine						18.0	13.8	2019						
United Kingdom				3.6	4.0	1.5	0.9	2019	4.5	4.9	2018	2.5	3.2	2018
Uzbekistan														
WHO minimum	2.0	1.1		2.1	2.2	0.5	0.2		0.1	0.2		0.1	0.3	

	Quality of care indicators: Equity				Quality of care indicators: Access					
Country	Vaccination against influenza on average and in the poorest quintile, % (year)	Values of poorest quintile	Year	Needs-standardized GP visit in the richest and in the poorest quintile, mean number (year)	Values of poorest quintile	Share of households with catastrophic health spending on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for health care on average and in the poorest quintile, % (year)	Poorest quintile values	Year	Share of the population with unmet need for dental examination on average and in the poorest quintile, % (year)	Poorest quintile values	Year
WHO maximum	38.1	35.7		5.8	5.3	20.3	13.8		12.9	23.0		15.6	27.1	
WHO median	16.4	12.9		3.6	4.0	6.1	3.7		2.4	4.0		2.2	4.3	
Missing (N)	22.0	22.0		41.0	41.0	13.0	13.0		17.0	17.0		17.0	17.0	
Missing (%)	41.5	41.5		77.4	77.4	24.5	24.5		32.1	32.1		32.1	32.1	
Available (N)	31.0	31.0		12.0	12.0	40.0	40.0		36.0	36.0		36.0	36.0	
Available (%)	58.5	58.5		22.6	22.6	75.5	75.5		67.9	67.9		67.9	67.9	
EU13 Median	7.1	7.0				7.2	4.7		3.2	3.9		1.9	3.4	
EU15 Median	19.2	15.6		3.5	4.0	2.5	1.8		2.0	3.5		3.0	6.6	
CIS Median						16.0	7.6							
SEEHN Median	4.9	4.8				11.7	7.0		2.9	5.1		2.0	4.6	

Annex 3d: Country values and subregion unweighted aggregates for different population health outcomes

	Population health outcomes																
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
Albania	27.2	20.0	13.3	9.6	9.4	9.5	14.3	10.8	8.5	6.9	8.3	69.1	2019	11.4	2019		
Andorra	7.6	6.0	4.6	3.5	2.9	2.8											
Armenia	30.7	23.9	18.5	14.4	11.3	10.7	50.2	37.8	33.2	25.1	27.2	67.1	2019	19.9	2019		
Austria	5.5	4.9	4.3	3.7	3.6	3.7	6.4	5.9	6.0	5.7	5.2	70.9	2019	10.4	2019		
Azerbaijan	74.6	52.0	37.3	26.3	19.4	18.6	55.5	43.9	32.8	29.4	40.8	63.6	2019	27.2	2019		
Belarus	12.8	8.7	5.6	4.1	2.9	2.7	24.3	10.8	2.7	1.3	1.1	66.0	2019	23.8	2019		
Belgium	5.9	5.0	4.5	4.1	4.1	4.1	8.3	6.8	5.9	5.2	4.8	70.6	2019	10.6	2019		
Bosnia and Herzegovina	9.9	8.9	7.2	6.3	5.8	5.6	15.6	11.5	7.7	7.4	5.7	67.2	2019	18.7	2019		
Bulgaria	17.4	13.3	10.8	8.1	6.5	6.3	21.9	13.7	10.3	7.5	7.1	66.3	2019	24.2	2019		
Croatia	8.3	6.7	5.5	4.9	4.7	4.6	10.9	9.2	7.2	6.1	4.8	68.6	2019	16.1	2019		
Cyprus	6.5	4.6	3.5	2.8	2.8	2.8	33.2	27.3	26.8	42.4	68.4	72.4	2019	8.2	2019		
Czechia	5.5	4.4	3.4	3.2	2.9	2.8	8.0	5.3	4.3	3.5	3.4	68.8	2019	14.3	2019	3.6	2020-2021

	Population health outcomes																
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
Denmark	5.6	4.8	4.1	4.1	3.7	3.6	8.0	6.9	6.5	5.6	4.7	71.0	2019	10.8	2019	3.8	2017
Estonia	11.0	7.1	4.6	3.1	2.1	2.0	24.8	13.0	8.1	6.1	5.2	69.2	2019	14.9	2019		
Finland	4.3	3.8	3.0	2.5	2.2	2.2	7.5	7.7	7.0	7.3	8.3	71.0	2019	9.6	2019	2.9	2020-2021
France	5.4	4.6	4.2	4.2	4.4	4.4	9.4	8.8	9.3	7.6	7.9	72.1	2019	10.6	2019		
Georgia	36.8	23.7	14.2	10.5	9.6	9.5	52.8	45.4	41.0	29.7	27.6	64.7	2019	24.9	2019		
Germany	5.4	4.7	4.2	3.9	3.7	3.6	7.2	6.9	6.2	4.6	4.4	70.9	2019	12.1	2019		
Greece	6.4	4.6	3.9	4.4	3.9	3.7	3.8	3.2	3.4	5.4	7.7	70.9	2019	12.5	2019		
Hungary	10.1	7.6	6.0	5.1	4.1	4.0	14.6	13.3	15.0	14.8	15.0	67.2	2019	22.1	2019		
Iceland	4.0	3.1	2.7	2.6	2.7	2.6	5.3	4.0	2.9	3.4	2.7	72.0	2019	8.7	2019	0.4	2020-2021
Ireland	7.1	5.2	4.2	3.7	3.2	3.2	10.4	8.6	6.5	6.5	5.0	71.1	2019	9.7	2019		
Israel	6.9	5.6	4.6	3.9	3.4	3.4	8.6	4.1	3.0	2.9	2.8	72.4	2019	8.8	2019	5.0	2019
Italy	5.6	4.5	4.0	3.5	2.8	2.6	10.1	7.7	6.7	6.5	4.6	71.9	2019	9.0	2019		
Kazakhstan	42.6	31.1	20.4	11.9	10.2	10.3	56.3	35.5	19.6	12.6	13.4	65.0	2019	22.4	2019		
Kyrgyzstan	49.9	39.3	29.6	22.3	17.8	17.4	86.9	83.4	71.7	61.3	50.4	65.8	2019	20.3	2019		

	Population health outcomes																
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
Latvia	14.2	10.5	7.8	5.1	3.8	3.7	32.0	28.0	25.4	22.2	18.3	66.2	2019	21.6	2019	1.2	2020-2021
Lithuania	10.7	9.0	6.0	4.9	3.5	3.3	17.5	11.4	9.7	8.4	8.7	66.7	2019	19.3	2019	3.5	2020-2021
Luxembourg	4.5	3.4	2.8	2.8	2.8	2.7	9.3	10.7	8.3	6.9	6.5	71.6	2019	9.7	2019		
Malta	7.6	6.9	6.8	6.6	6.0	5.8	10.5	7.6	5.3	4.2	2.9	71.5	2019	10.5	2019		
Monaco	5.2	4.5	4.0	3.5	3.0	2.9											
Montenegro	14.2	10.6	6.7	4.1	2.5	2.3	10.5	9.6	7.2	6.1	6.2	67.0	2019	22.3	2019		
Netherlands (Kingdom of the)	6.2	5.3	4.4	4.1	4.1	4.1	13.0	10.5	6.3	5.2	4.3	71.4	2019	10.3	2019	9.6	2018
North Macedonia	16.0	13.7	10.4	11.4	5.9	5.3	12.3	8.9	6.3	4.5	3.0	66.1	2019	22.7	2019		
Norway	4.9	4.1	3.3	2.7	2.3	2.2	5.7	5.5	4.0	2.4	1.7	71.4	2019	8.7	2019	5.2	2019
Poland	9.3	7.6	6.0	4.9	4.4	4.4	7.8	4.8	2.5	2.1	2.0	68.7	2019	17.0	2019		
Portugal	7.2	4.6	3.8	3.7	3.3	3.1	10.8	9.0	9.9	10.4	11.8	71.0	2019	11.0	2019		
Republic of Moldova	31.5	19.8	17.1	15.8	14.5	14.2	48.9	30.1	18.1	16.7	12.3	64.5	2019	24.1	2019		

	Population health outcomes																
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
Romania	21.5	18.3	12.4	9.2	6.7	6.4	50.2	36.8	22.2	14.8	10.1	66.8	2019	21.0	2019		
Russian Federation	19.4	13.9	10.4	8.3	5.4	5.1	52.3	31.4	17.2	10.5	13.7	64.2	2019	24.2	2019		
San Marino	5.6	3.9	2.9	2.2	1.8	1.7											
Serbia	12.6	9.0	7.6	6.3	5.6	5.5	17.8	16.1	14.2	12.7	10.2	66.9	2019	22.0	2019		
Slovakia	9.8	8.2	7.0	6.3	5.7	5.6	8.6	7.4	5.1	4.9	4.8	68.5	2019	15.5	2019	3.9	2020-2021
Slovenia	5.5	4.2	3.2	2.6	2.2	2.2	11.9	9.2	6.0	5.0	4.5	70.7	2019	11.4	2019	6.8	2020-2021
Spain	5.4	4.7	3.9	3.3	3.1	3.1	5.0	4.5	3.9	3.9	3.4	72.1	2019	9.6	2019		
Sweden	4.1	3.6	3.1	2.9	2.6	2.5	6.1	5.1	4.5	4.4	4.5	71.9	2019	8.4	2019	2.9	2020-2021
Switzerland	5.6	5.1	4.6	4.3	3.9	3.8	7.9	9.4	8.1	6.5	7.4	72.5	2019	7.9	2019		
Tajikistan	83.7	55.9	42.9	37.4	32.5	31.4	67.5	44.3	31.9	20.4	16.6	62.0	2019	28.3	2019		
Türkiye	37.9	26.1	18.1	13.0	9.5	9.0	31.7	25.4	22.1	19.4	17.3	68.4	2019	15.6	2019		
Turkmenistan	69.8	52.2	43.2	42.4	42.2	41.4	26.1	16.8	8.8	5.8	5.1	62.1	2019	27.7	2019		
Ukraine	18.2	14.5	11.7	9.5	8.4	8.2	35.8	20.5	16.9	11.1	16.5	64.3	2019	25.5	2019		

	Population health outcomes															
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
United Kingdom	6.6	6.0	5.2	4.5	4.3	4.2	11.0	11.0	9.5	8.4	9.8	70.1	2019	10.3	2019		
Uzbekistan	60.5	42.7	28.0	19.2	14.7	14.1	42.6	45.1	37.8	30.7	30.2	64.7	2019	25.3	2019		
WHO minimum	4.0	3.1	2.7	2.2	1.8	1.7	3.8	3.2	2.5	1.3	1.1	62.0		7.9		0.4	
WHO maximum	83.7	55.9	43.2	42.4	42.2	41.4	86.9	83.4	71.7	61.3	68.4	72.5		28.3		9.6	
WHO median	8.3	6.9	5.5	4.4	4.1	4.0	12.1	10.6	8.1	6.7	6.8	68.8		15.2		3.7	
Missing (N)	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		41.0	
Missing (%)	0.0	0.0	0.0	0.0	0.0	0.0	5.7	5.7	5.7	5.7	5.7	5.7		5.7		77.4	
Available (N)	53.0	53.0	53.0	53.0	53.0	53.0	50.0	50.0	50.0	50.0	50.0	50.0		50.0		12.0	
Available (%)	100.0	100.0	100.0	100.0	100.0	100.0	94.3	94.3	94.3	94.3	94.3	94.3		94.3		22.6	
EU13 Median	9.8	7.6	6.0	4.9	4.1	4.0	14.6	11.4	8.1	6.1	5.2	68.6		16.1		3.6	
EU15 Median	5.5	4.7	4.0	3.7	3.5	3.4	8.1	7.3	6.4	5.6	4.9	71.1		10.4		3.4	

	Population health outcomes															
Country	Under-five mortality (per 1000 live births), 2000	Under-five mortality (per 1000 live births), 2005	Under-five mortality (per 1000 live births), 2010	Under-five mortality (per 1000 live births), 2015	Under-five mortality (per 1000 live births), 2020	Under-five mortality (per 1000 live births), 2021	Maternal mortality (per 100 000 live births), 2000	Maternal mortality (per 100 000 live births), 2005	Maternal mortality (per 100 000 live births), 2010	Maternal mortality (per 100 000 live births), 2015	Maternal mortality (per 100 000 live births), 2020	Healthy life expectancy at birth, years (year)	Year	Probability of dying from CVD, cancer, diabetes, or CRD, (year)	Year	Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)	Year
CIS Median	46.2	35.2	24.2	17.5	14.6	14.1	51.2	36.7	25.8	18.5	15.2	64.6		24.2			
SEEHN Median	16.0	13.3	10.4	8.1	5.9	5.6	15.6	11.5	8.5	7.4	7.1	66.9		22.0		5.0	

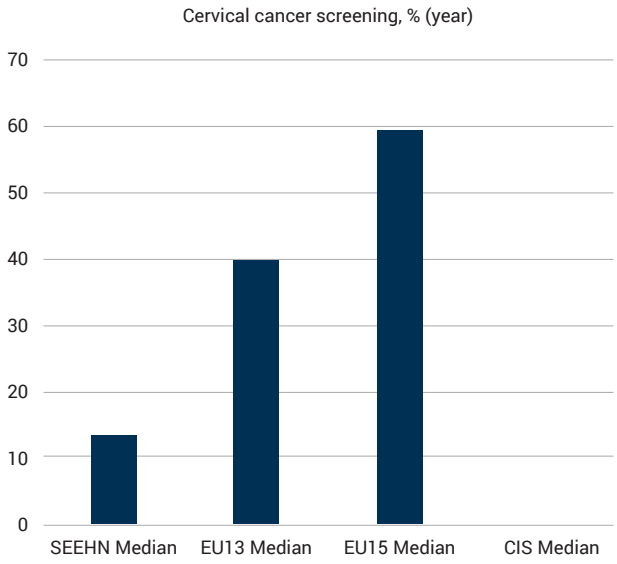
Annex 4

Additional results

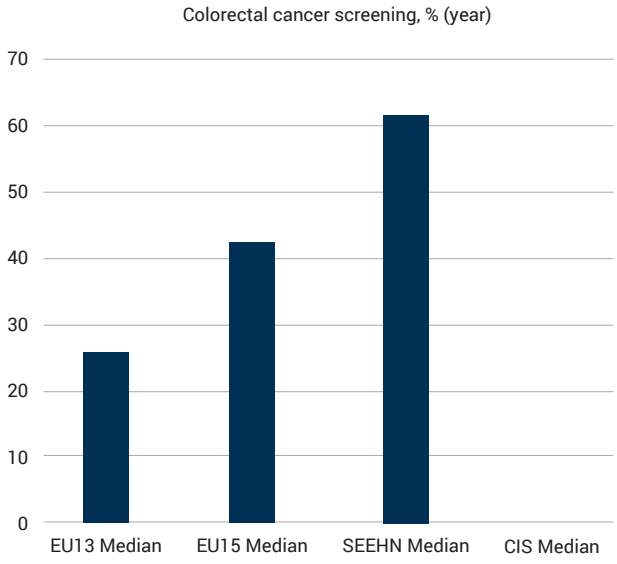
This annex details intra-regional comparison of indicators for which the ratio of maximum to minimum values exceeds a three-fold change, indicating disparities in performance or outcomes.

1. Health system function indicators

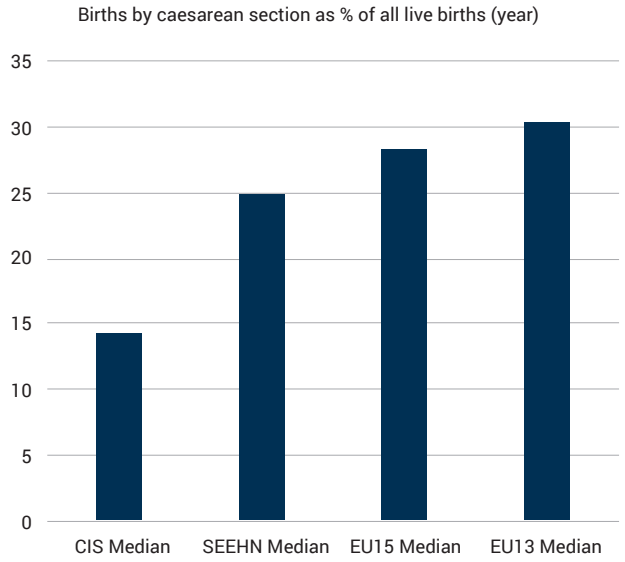
A4.1 Cervical cancer screening, % (year)



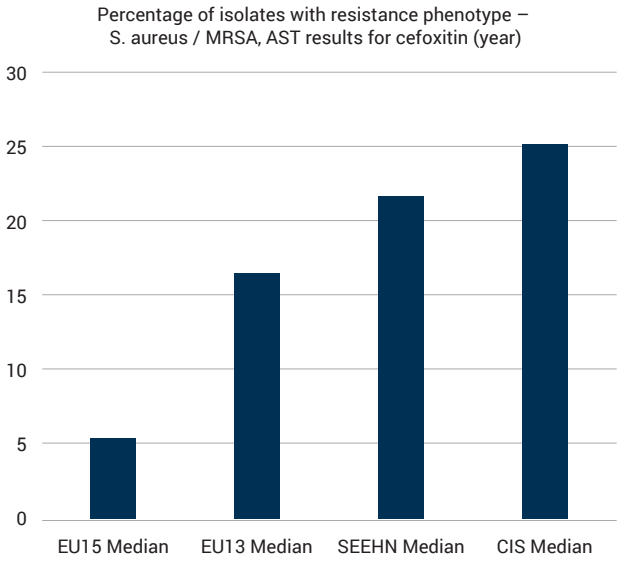
A4.2 Colorectal cancer screening, % (year)



A4.3 Births by caesarean section as % of all live births (year)



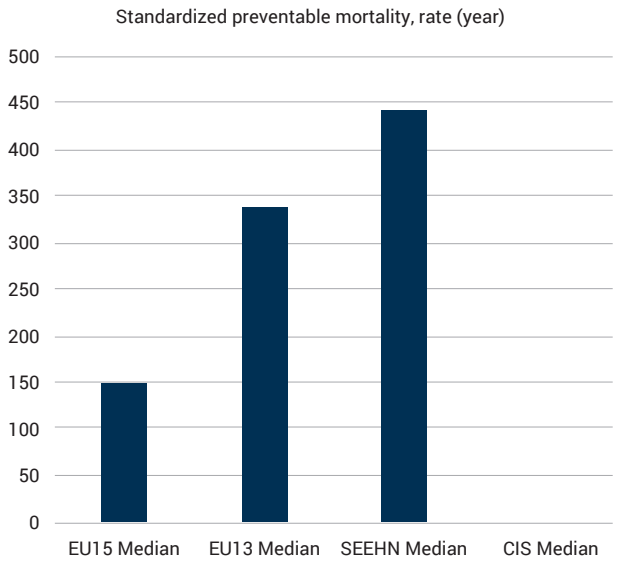
A4.4 Percentage of isolates with resistance phenotype – S. aureus / MRSA, AST results for cefoxitin (year)



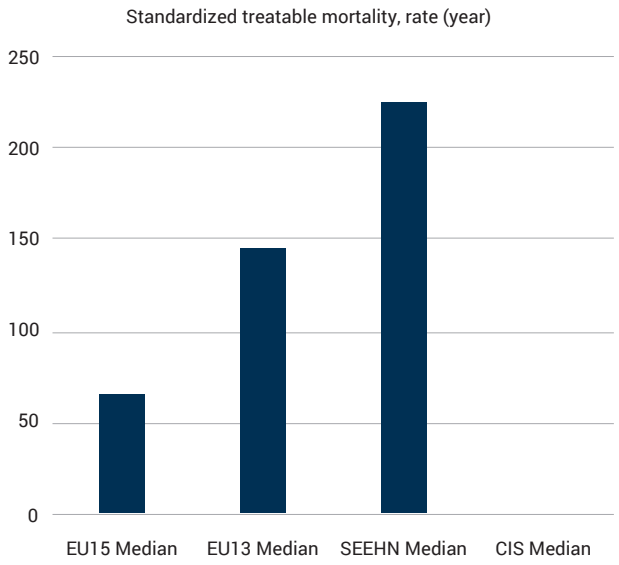
2. Quality of care indicators by quality dimension

Effectiveness quality dimension

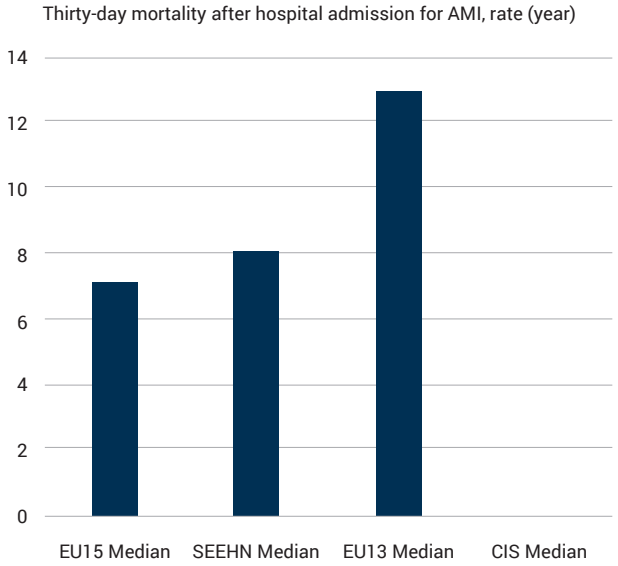
A4.5 Standardized preventable mortality, rate (year)



A4.6 Standardized treatable mortality, rate (year)

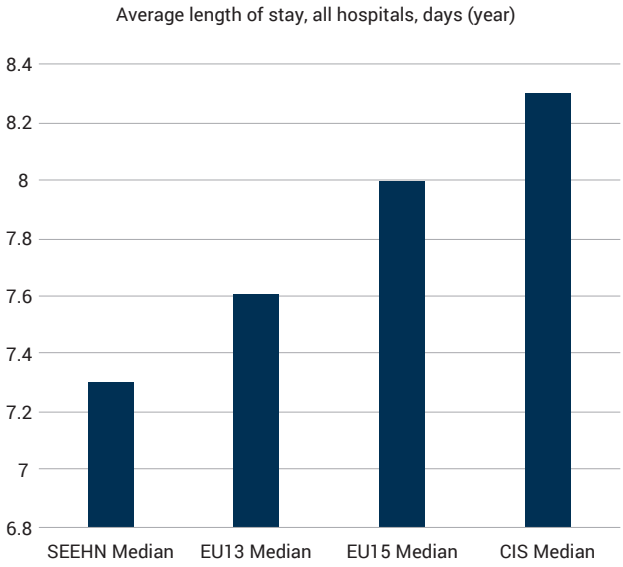


A4.7 Thirty-day mortality after hospital admission for AMI, rate (year)

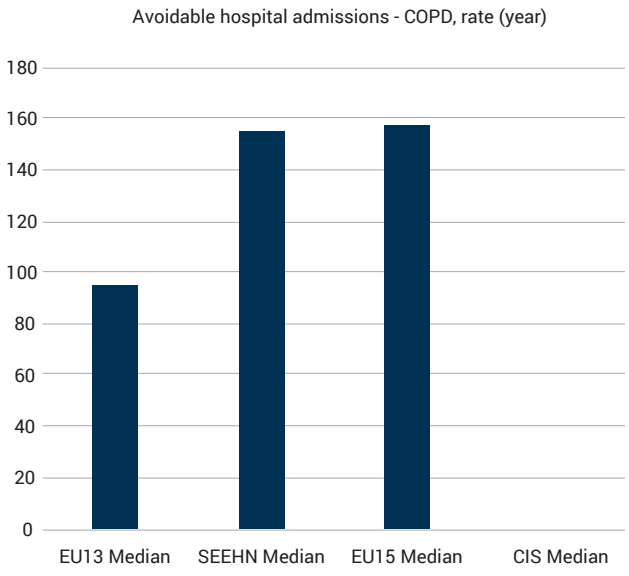


Efficiency quality dimension

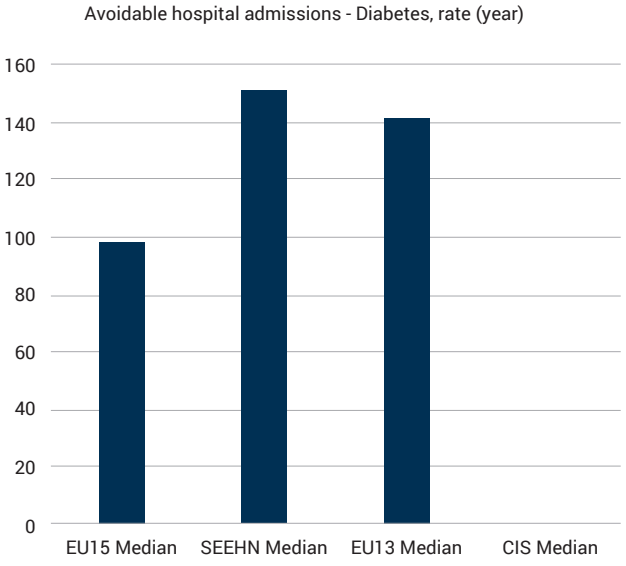
A4.8 Average length of stay, all hospitals, days (year)



A4.9 Avoidable hospital admissions - COPD, rate (year)

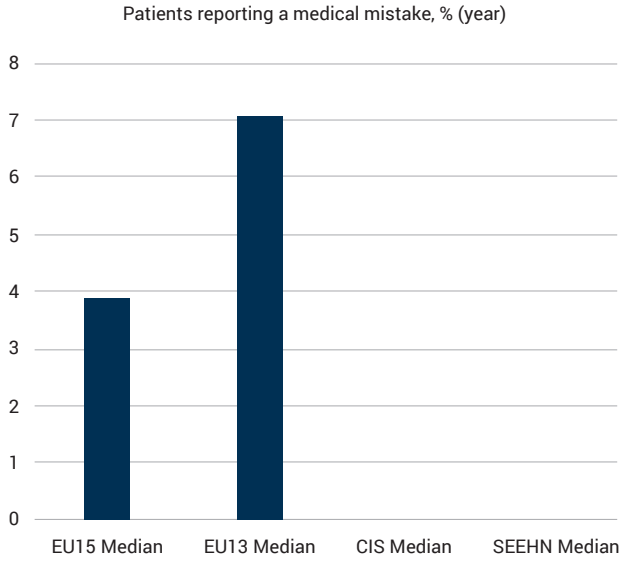


A4.10 Avoidable hospital admissions - Diabetes, rate (year)

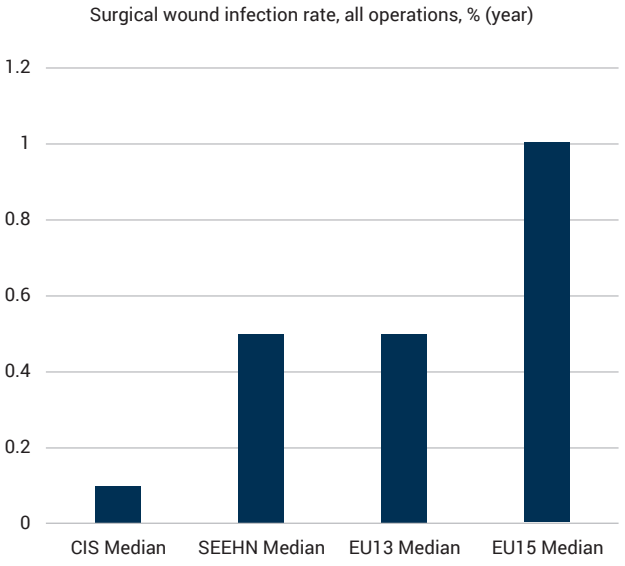


Patient safety quality dimension

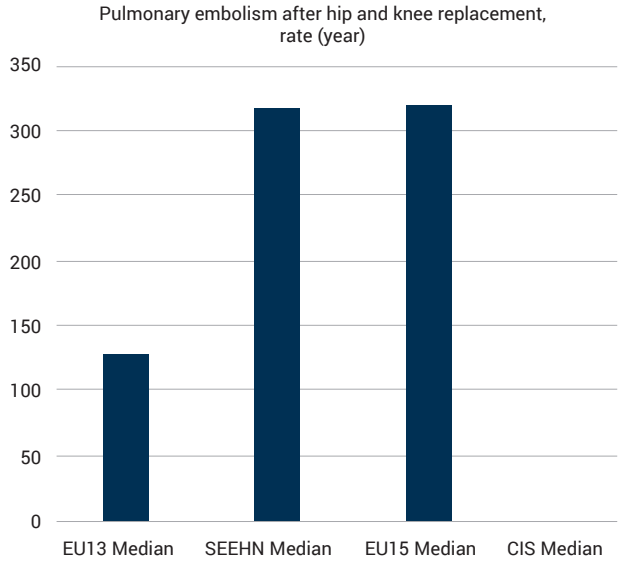
A4.11 Patients reporting a medical mistake, % (year)



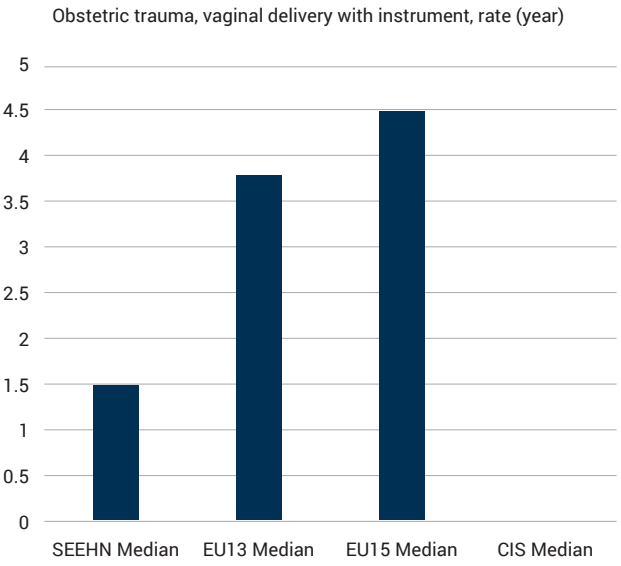
A4.12 Surgical wound infection rate, all operations, % (year)



A4.13 Pulmonary embolism after hip and knee replacement, rate (year)

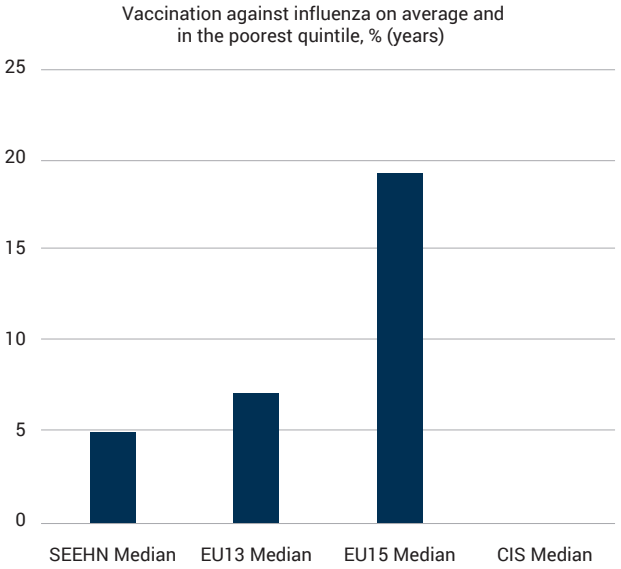


A4.14 Obstetric trauma, vaginal delivery with instrument, rate (year)



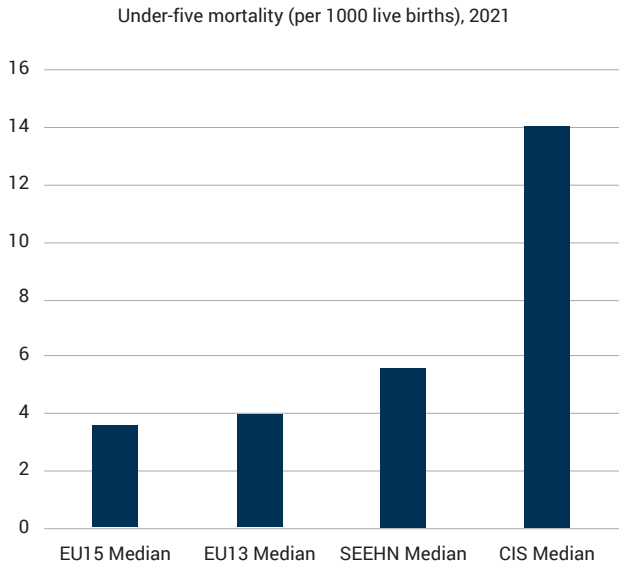
Equity quality dimension

A4.15 Vaccination against influenza on average and in the poorest quintile, % (years)

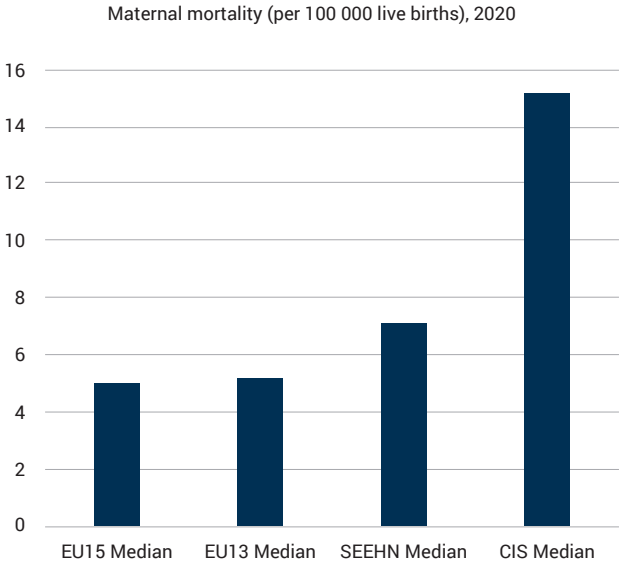


3. Population health outcome indicators

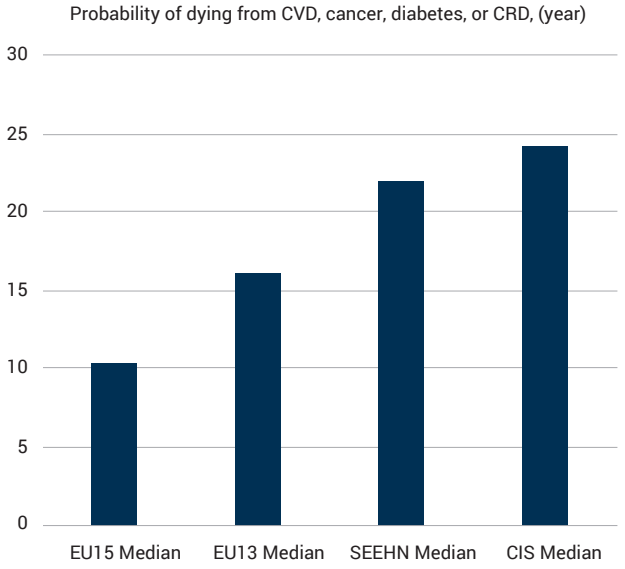
A4.16 Under-five mortality (per 1000 live births), 2021



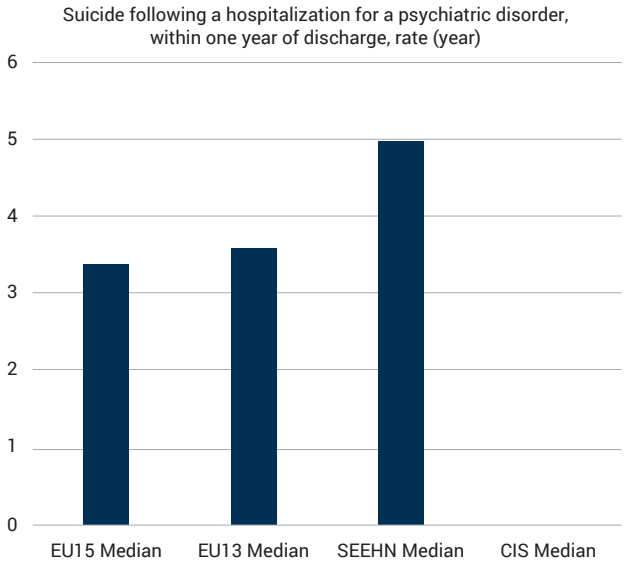
A4.17 Maternal mortality (per 100 000 live births), 2020



A4.18 Probability of dying from CVD, cancer, diabetes, or CRD, (year)



A4.19 Suicide following a hospitalization for a psychiatric disorder, within one year of discharge, rate (year)



THE WHO REGIONAL OFFICE FOR EUROPE

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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