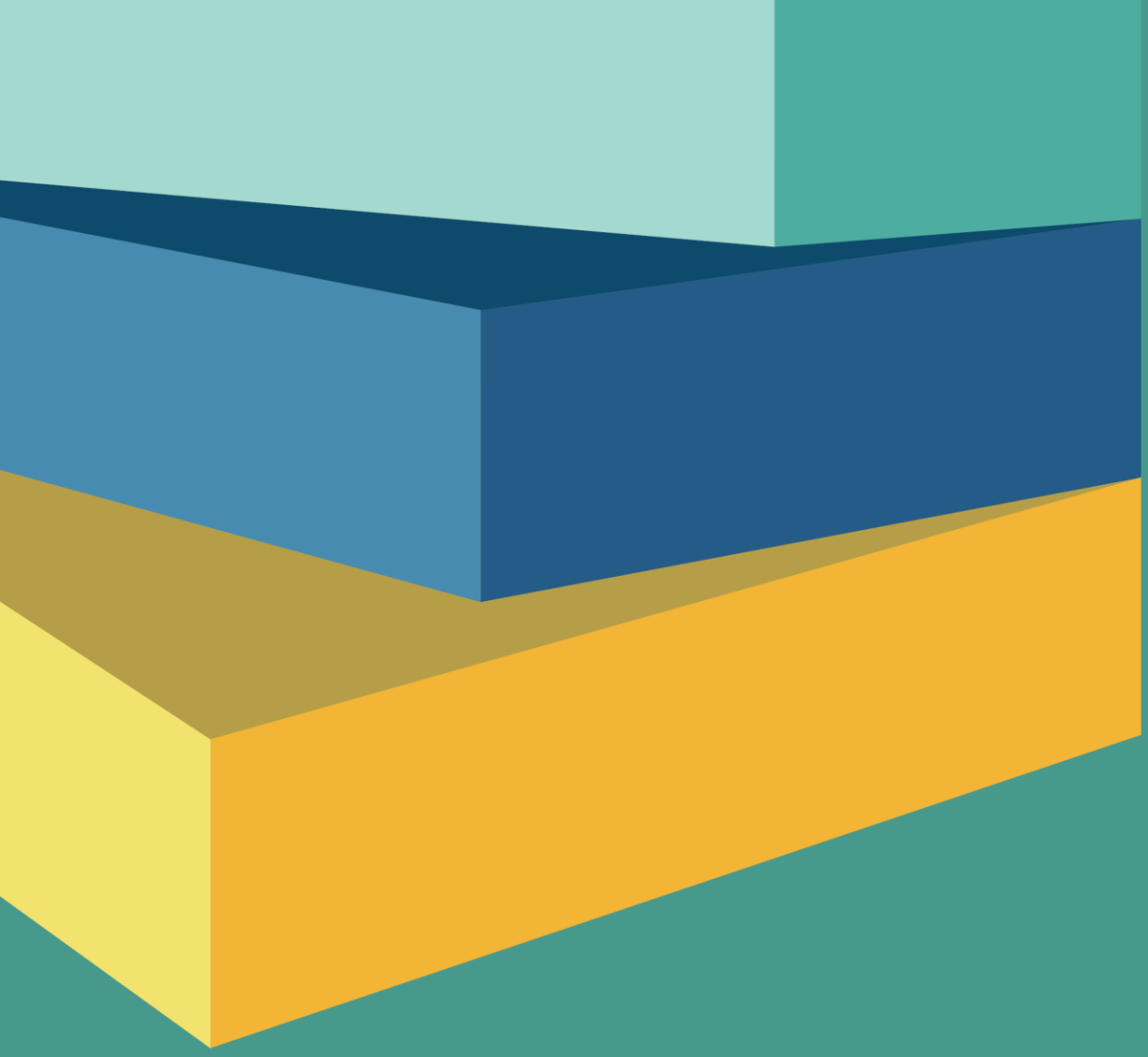

Issues Notes

Health Ministerial Meeting

23 January 2024

Better Policies for More Resilient Health Systems

OECD

BETTER POLICIES FOR BETTER LIVES

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Plenary Health system resilience: Learning from effective policies

Key facts

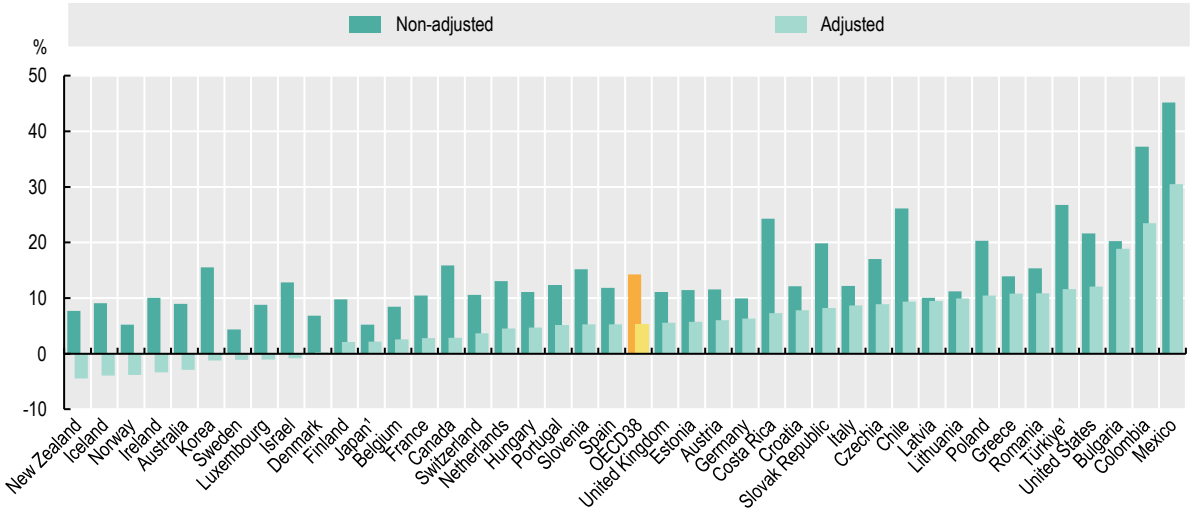
- The human, social and economic impacts of the pandemic have been dramatic, including over 6.8 million deaths between 2020 and 2022 worldwide, a 0.7-year reduction in average life expectancy from 2019 to 2021 across OECD countries, and a drop of 4.7% of GDP in 2020 across the OECD on average. Health systems were hugely exposed: in most cases, they were underprepared, understaffed, and suffering from underinvestment.
- The pandemic demonstrated the potential of adaptation to make health systems more flexible and resilient. For example, telemedicine was deployed rapidly with almost one in two adults using telemedicine in 22 OECD countries by early 2021.
- Boosting the resilience of health systems to ensure they are better prepared for future shocks requires additional investment in key areas such as workforce, prevention and infrastructure.

Health system vulnerabilities weaken resilience to shocks

Resilience is the ability of systems to prepare for, absorb, recover from and adapt to shocks. Not being sufficiently prepared for a high-impact shock to the health system like the COVID-19 pandemic results in substantial loss of life and well-being, and requires costly interventions that have repercussions for years to come. The pandemic led to a 0.7-year reduction in average life expectancy from 2019 to 2021 across OECD countries, with mortality increasing by over 5%, when comparing 2015-19 to 2020-22 and adjusting for population change (Figure 1).

Figure 1. Excess mortality in 2020-22 across OECD countries

Percentage increase in deaths in 2020-22 compared to the baseline years, 2015-19



Note: 1. Figures for Japan and Türkiye based on 2020 and 2021 data only. OECD average excludes three OECD accession countries: Bulgaria, Croatia and Romania.
Source: Morgan, D., et al. (2023), "Examining recent mortality trends: The impact of demographic change", https://doi.org/10.1787/78f69783-en.

Across the OECD, the pandemic revealed underlying weaknesses in health systems, highlighting the need to improve their resilience to a broader range of shocks:

- Health systems were *underprepared*. Prior to the pandemic, health systems spent less than 2.7% of total health expenditure on prevention, leaving too many in the population vulnerable. Pre-existing inequity and chronic diseases made the outcomes of the pandemic worse.
- Health systems were *understaffed*. Pre-existing workforce shortages in many OECD countries constrained effective responses to the pandemic. Looking ahead, despite record high numbers of healthcare workers across OECD countries, OECD analysis suggests that over 3 million additional healthcare and long-term care workers would be needed to improve resilience. Beyond increasing the number of healthcare workers, flexibility and agility – for example in terms of new skills and new roles of health professionals – will also be critical to build capacity to accommodate future shocks and stresses.
- Health systems suffered from *underinvestment*. To be ready for a broader range of future shocks, and to help achieve effective universal health coverage, targeted investment is needed across OECD countries on health workforce, illness prevention, and critical infrastructure such as health data systems and core medical equipment. The OECD has estimated the priority investments in workforce, prevention and infrastructure needed to strengthen health system resilience to be in the order of 1.4% of GDP on average across the OECD, ranging from 0.6% to 2.5% depending on country context, relative to 2019.

Policy reform can strengthen health system resilience, and deliver healthy benefits

Policy reform is needed to improve resilience to future shocks. The 2023 OECD report, *Ready for the Next Crisis? Investing in Health System Resilience,* drawing on the experience of OECD countries during the pandemic, identified six key policy areas to improve health system resilience:

- Addressing population health, equity and the environmental and social determinants of health: vulnerable populations can make for vulnerable health systems. Stronger involvement of patients in care is also crucial to ensure their needs are addressed, including during health shocks. As part of the Patient-reported Indicator Surveys (PaRIS) initiative, the OECD measures outcomes and experiences with healthcare as reported by patients.
- Workforce flexibility, retention and recruitment: people are the key to making systems resilient.
- Effectively harnessing data and technology: without the right data, decision-makers are flying blind. New technologies such as artificial intelligence, genomics and extended reality will also bring new opportunities and new risks for resilience.
- International co-operation: responses are better together than alone. This includes the adoption of an international instrument on pandemic preparedness and response, and mechanisms to incentivise the development and equitable distribution of essential products that are needed to tackle health threats.
- Supply chain resilience: getting products and services when and where they are needed.
- Governance and trust: without trust, whole-of-society responses are less effective.

For some countries, financing the reforms needed to strengthen health system resilience in a tight fiscal context will prove challenging. A combination of effective targeted spending and measures to reduce wasteful spending can increase resilience and efficiency across health systems. The return from investment extends beyond fewer lives lost and reduced morbidity. More resilient health systems are at the core of stronger, more resilient economies and societies.

Questions for discussion

1. Taking into account the lessons learned from the pandemic, what are the most critical additional changes that you and fellow Health Ministers should make to ensure that health systems are more resilient to future shocks and stresses? How can these measures be financed given the tight fiscal context?
2. What can be learned from your country's experience in promoting co-operation between the health system and interconnected systems such as those responsible for delivering social care, education, innovation, trade and investment?
3. How could the OECD best support your efforts to build health system resilience?

Working lunch on climate change and health

Key facts

- Around the world, deaths related to heat among people over 65 are estimated to have increased by nearly 70% since the turn of the millennium.
- Drivers of climate change are also drivers of poor health outcomes. In 2019, ambient particulate matter – generated in part by the burning of fossil fuels – contributed to nearly 375 000 premature deaths across OECD countries.
- Health systems contribute 3.8% of carbon emissions on average in OECD countries, making them one of the highest-emitting sectors.

Climate change is a growing threat to health and health systems

In recent years, the impact of climate change has accelerated, with serious consequences for health and the resilience of health systems. Threats to health linked to climate change – including extreme temperatures and weather, the expansion in vector-borne diseases, and air pollution – already contribute to a significant burden of ill-health and mortality. In 2019, about 4 million deaths globally were associated with exposure to outdoor fine particulate matter ($PM_{2.5}$). The rise in extreme temperatures associated with climate change has similarly harmful effects on health, with extreme heat and heat waves associated with spikes in mortality and poor health. Across OECD countries, more than 10% of the population is already exposed to at least two weeks of extreme heat per year. Moreover, the impacts of climate change disproportionately hit more vulnerable populations, and risk exacerbating existing inequalities. Globally, heat-related mortality is estimated to have increased by 68% among people over 65 between 2000-04 and 2017-21.

Health systems are also increasingly vulnerable to the physical impacts of extreme weather and other climate-related threats. Across OECD countries, nearly one in ten people are exposed to coastal or river flooding, while nearly one-quarter of forested areas across OECD countries are exposed to wildfire danger. Beyond the immediate health impacts of extreme weather events, climate-related shocks also threaten health system resilience: damage to healthcare facilities caused by extreme weather can dramatically disrupt care in already strained circumstances, and can impact the health and well-being of healthcare professionals.

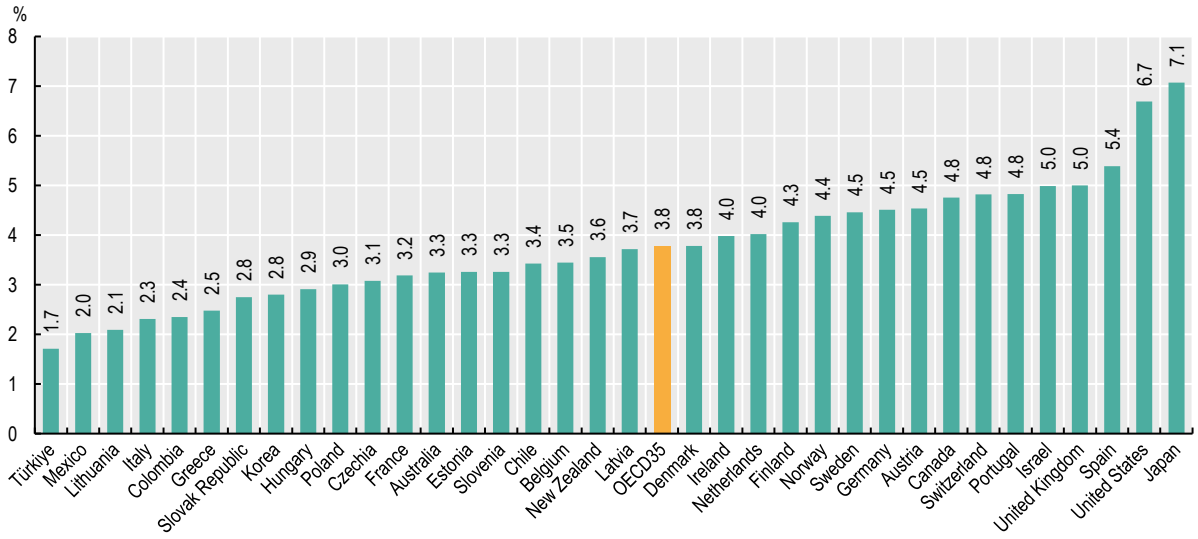
The health sector has one of the largest sectoral carbon footprints worldwide

Health systems represent one of the largest sectoral contributors to carbon emissions, taking into account their supply chains. The health sector has been found to contribute an average of 3.8% of OECD countries' total greenhouse gas emissions (Figure 2). Some studies put the average

even higher, closer to 6%. Most health sector emissions are linked to supply chains: in an assessment of the National Health Service's carbon footprint in the United Kingdom (England), for instance, 62% of emissions of the health sector were linked to supply chains, including the manufacturing of key medical inputs such as pharmaceuticals. Care delivery and emissions from healthcare facilities represent further important drivers of emissions. Cutting unnecessary and wasteful care could help to drive these down.

Figure 2. Climate footprint of healthcare

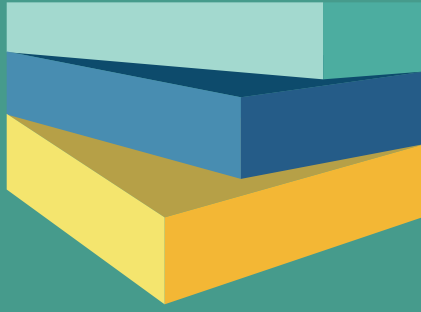
Percentage of national greenhouse gas emissions



Source: Lenzen, M. et al. (2020), "The environmental footprint of healthcare: a global assessment", https://doi.org/10.1016/s2542-5196(20)30121-2.

Moving towards climate resilient and climate neutral health systems

Urgent action is needed to prevent and adapt to the growing health impacts of climate change, and attention to this critical issue – including at the international level through fora such as the G7 – is growing. Anticipating and preparing for the impacts of climate change on health, for example by developing heat-health action plans, is critical to ensuring health systems are well prepared to meet the changing health and care needs spurred by a changing climate. A holistic approach to promoting healthy living that encompasses environmental sustainability can serve the dual purpose of protecting both the climate and population health. For example, in 2022 Germany launched the federal Health Climate Pact, mobilising key stakeholders in the healthcare sector to facilitate health-promoting and climate-protecting action, while in the United States, a co-ordinated response plan has been developed to improve resilience to heat. Better measurement – both of the impacts of climate change, and of health sector emissions – is critical.



Though healthcare services will always be needed, there remain significant opportunities to reduce health systems emissions by maximising the synergic effects of public health policies to reduce use of health services. Health systems continue to be challenged by a substantial burden of avoidable and preventable mortality and morbidity. Prevention policies that promote healthy living and reduce the need for healthcare services would help to drive down health system emissions. Moreover, even within the delivery of necessary and unavoidable healthcare services, many opportunities exist to reduce carbon intensity of health systems infrastructure, transport and medical products – for example, through switching to renewable energy sources, or modifying and adapting supply chains.

In recent years, emissions linked to healthcare systems in some OECD countries have fallen, reflecting the overall decline in greenhouse gas emissions across many countries. Nonetheless, much more action must be taken at the health system level, both to adapt to the growing impacts of climate change on health and health systems, and to move health systems more quickly towards a climate neutral future.

Questions for discussion

1. What are the one or two most critical actions that need to be taken to tackle the physical and mental health impacts of climate change?
2. What more must be done and what further opportunities for international co-operation exist to achieve carbon-neutral health systems by 2050?
3. What should be priority areas for improving benchmarking of the links between health systems and climate change, and how can the OECD support countries in their efforts?

1 The future of digital health after COVID-19

Key facts

- The health sector remains data rich, but information poor. Before the pandemic only 14 countries were able to link data across multiple settings within the health system, and data deficits constrained the efficacy of pandemic responses.
- Digitalisation and Artificial intelligence (AI) will have profound impacts on health systems, but risks must be managed. Estimates suggest that automation of routine tasks through AI could free-up capacity to effectively increase the workforce by 10%.
- Digital security in health is critical as the cost of cyberattacks are increasing and estimated to cost USD 10.5 trillion in damage per year by 2025.

Digital tools and artificial intelligence will transform health systems

Rapid advancements in the use of digital tools and new technologies are likely to have significant implications for health and healthcare in the years to come. The ability to use and integrate digital technologies will both support health system resilience and potentially be a source of new vulnerabilities. The rapid expansion of telemedicine during the pandemic helped to fill a critical care gap, for instance, with almost one in two adults using telemedicine in 22 OECD countries by early 2021. Since then, awareness of the potential clinical benefits and risks of AI have increased dramatically, leading to calls to set and enforce key principles of its trustworthy application that would both realise its benefits and protect people from harm.

Concerted efforts will be needed to ensure that policy and governance can keep up with the pace of technological advancement. Modernising policies and governance will facilitate trust and adoption of new digital tools, including AI. In 2019, the OECD published its guidelines for AI[1] with an emphasis on inclusion, human-centredness, transparency, robustness, and accountability. The European Commission, the United States, and others are developing specific guidelines or legislation for AI. Given the high-risk nature of health, along with the high-benefit opportunities from AI, there is a need to establish regulatory and legislative boundaries for responsible AI.

[1] OECD Council Recommendation on Artificial Intelligence (2019), https://legalinstruments.oecd.org/en/instruments/oecd-legal-0449.

Artificial intelligence can help address the health workforce crisis while improving outcomes, but risks must be managed

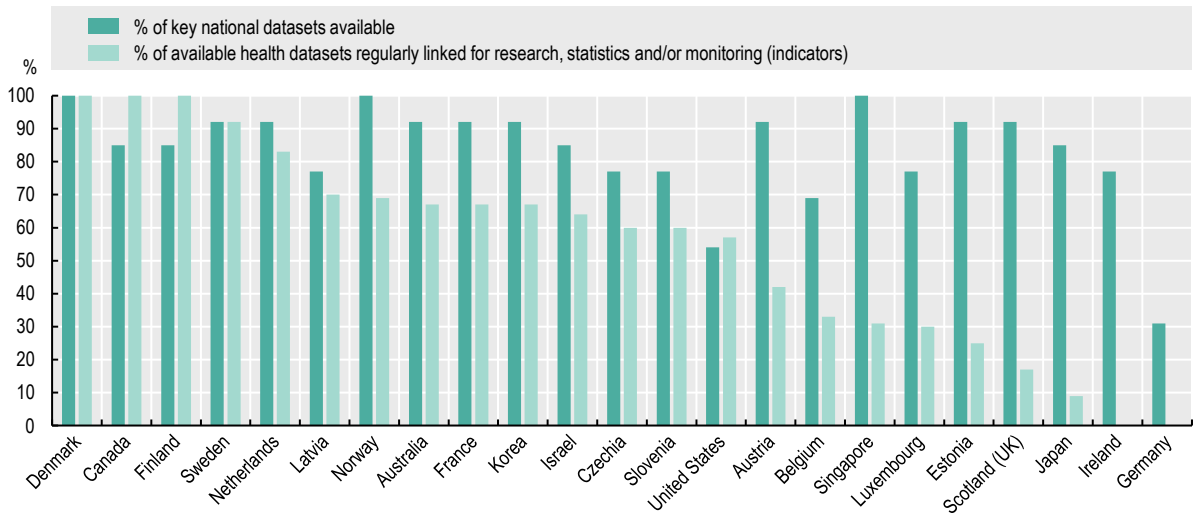
The potential for artificial intelligence to improve treatment and encourage prevention are vast. A potentially low-risk, high-impact application of AI involves streamlining administrative and routine tasks in health, which is estimated to account for 10% of the activities for doctors and nurses. Such applications will reduce work for providers while improving health outcomes and catching clinical issues that may have fallen between the cracks.

Yet, AI poses challenges and risks to policy makers and citizens. Alongside concerns that AI could dehumanise healthcare, there are a host of concerns around safety, security, ethics, equity, intellectual property, and workforce skills needs and impacts. Further, surveys of patients show many are not yet ready to trust AI to provide diagnosis and treatment recommendations. Effective governance and communication are needed to ensure that the transformative potential of AI is responsibly harnessed to improve outcomes for all.

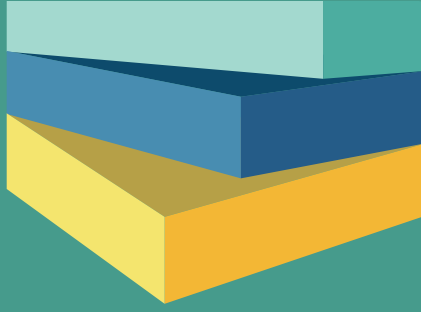
Strengthening data will be central to improving health outcomes

The capacity to effectively access, link, and govern data is critical for health systems performance and resilience: without good data, decision-makers are flying blind. Analysis conducted by the OECD shows that investing in digital health, including interoperability and the ability to link data, could generate a return of USD 3 for every USD 1 spent. Yet, despite progress in line with the 2017 OECD Recommendation on Health Data Governance, the quality and interoperability of data have been a persistent challenge across countries. Few OECD countries systematically link health datasets for research, statistics and/or health monitoring (Figure 3).

Figure 3. Availability of key datasets and ability to link across datasets



Source: OECD (2022), *Health Data Governance for the Digital Age*, https://doi.org/10.1787/68b60796-en.



Meanwhile, risks associated with cybercrime are increasing with global costs expected to grow to USD 10.5 trillion by 2025 across all industries. Health is at particular risk due to the value and sensitivity of its data assets. Almost all OECD countries have an approach to digital security, although only seven have a strategy specific to digital security in health. As the potential, use, and risks of data and technology accelerate within and across borders, there is significant potential for international co-operation and harmonisation to maximise benefit and minimise risk.

Questions for discussion

1. How is your country implementing and scaling up the use of AI in health (e.g. automating routine tasks, aiding clinical decision-making)? How are you addressing known and unknown risks and concerns?
2. What kind of governance, regulation or other measures are needed to ensure the effective, trustworthy and trusted use of digital tools and artificial intelligence in health? Drawing on the OECD's convening power, what would you like to see OECD do to help countries?
3. What progress has been made and what steps need to be taken to improve health data interoperability, safe cross-border sharing of health data, and security to support more effective use of health data for better care provision and health outcomes? How can the OECD assist country efforts and convergence of best practices?

2 Bolstering public health: Healthy populations for more resilient health systems

Key facts

- Risk factors such as overweight, harmful alcohol consumption and tobacco use bring high health and economic costs. For example, overweight-related chronic diseases are estimated to dampen GDP by 3.3% and absorb 8.4% of the healthcare budgets of OECD countries.
- Infectious diseases also pose a major threat to health systems. For example, antimicrobial resistance and hospital-acquired infections kill at least 523 000 people across the OECD and EU/EEA countries every year.
- Investing in public health is an investment in wealth and resilience and has the potential to decrease health inequalities. Before the pandemic, under 3% of health spending went to public health, despite returns up to 16 times higher than its costs for some interventions.

The health and economic costs of public health threats are high

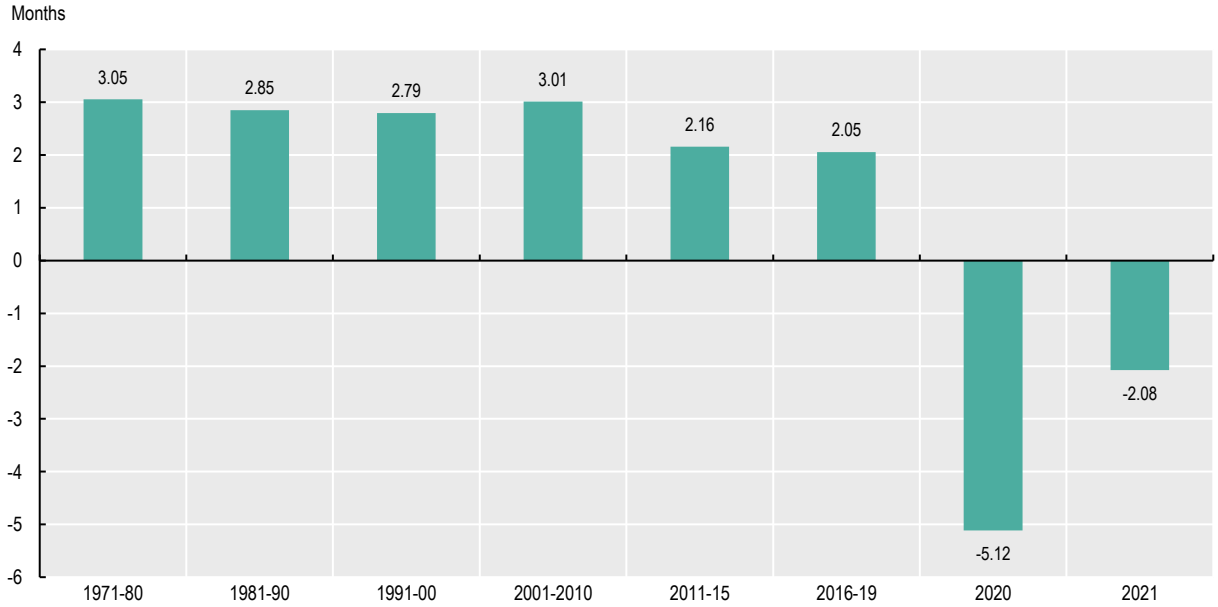
Following a century of sustained growth, life expectancy across OECD countries has stagnated at just above 80 years since 2012. The pandemic led to a 0.7-year reduction in average life expectancy across OECD countries, but even before the pandemic, gains in life expectancy across OECD countries were slowing down (Figure 4). Risk factors such as overweight, the use of opioids and rising temperatures were growing, likely contributing to the rise of chronic conditions, including cardiovascular diseases, cancers, mental ill-health and diabetes, which disproportionally affect certain population groups.

As countries grapple with a growing burden of chronic diseases, enduring and emerging infectious diseases pose a major threat to health and health systems. Antimicrobial resistance and hospital-acquired infections kill at least 523 000 people across the OECD and EU/EEA countries every year. Overweight and pre-existing chronic conditions, including mental ill-health, were major risk factors for serious illness or death from COVID-19.

In addition to driving an increase in healthcare expenditure, ill-health also negatively affects workforce productivity and the economy. For example, overweight-related diseases are estimated to drive healthcare costs of USD 311 billion per year across OECD countries (or 8.4% of the total budget), and lower GDP by 3.3%.

Figure 4. Life expectancy across OECD countries stagnated in the years prior to COVID-19 and dropped in 2020 and 2021

Average change in life expectancy (months) compared to previous term

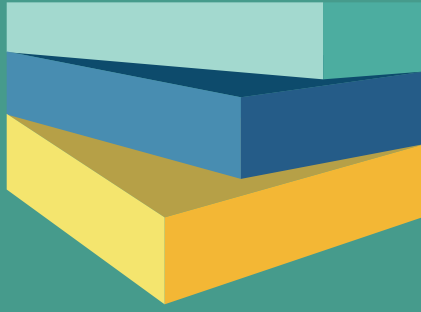


Note: Based on data from 33 OECD member countries for which data are available throughout the whole period.

Investing in public health pays off, but it receives insufficient policy attention

Effective public health strategies to promote healthier lifestyles and prevent infectious diseases can help decrease health inequalities, and often offer high return on investment. OECD research shows that up to USD 16 and USD 5 can be saved for every USD 1 invested in tackling harmful alcohol consumption and bacterial infections, respectively. However, before the pandemic, less than 3% of health budgets were invested in prevention across the OECD.

Despite the proven cost-effectiveness of such public health measures, it can be difficult to justify directing health resources to keep people in good health, especially given resource constraints and the competing need to care for sick patients. Implementing some public health interventions is also perceived as an intrusion by governments in personal life choices. Many of the most effective public health policies require strong co-ordination with other areas of government, including Ministries of Finance, Education, or Social Affairs, as well as other stakeholders. The need for such a high level of co-ordination and collaboration complicates the governance and delivery of public health interventions.



Mobilising resources and innovative governance arrangements for public health

Preventing chronic disease or infection caused by a resistant pathogen prevents health expenses from occurring and allows people to participate fully in society. Very often, these interventions are cost-effective and offer high return on investment. Additional investments in public health are crucial to minimise the threats posed by emerging pathogens and other health threats. As part of the broader investments required to strengthen health systems resilience, the OECD estimates that an annual targeted investment of 0.3% of GDP on average across countries is needed on public health (ranging from 0.1% to 0.6% across countries, relative to expenditure in 2019).

Questions for discussion

1. What novel or innovative approaches is your country implementing to promote health and well-being and to prevent chronic physical and mental health conditions (including, for example, approaches to engage citizens and industry in promoting healthy lifestyles)? What have been the successes and what more needs to be done to address the implementation challenges, including in relation to working with other sectors and collaborating with industry?
2. What should be the priority actions to tackle public health threats such a disease outbreaks or antimicrobial resistance at the national and international level?
3. Given the lessons learned from the pandemic, what should be the priorities to build stronger public health systems and more effective public health policies? What can be done to prioritise investment, given underinvestment in public health across countries?

3 Strengthening mental health resilience

Key facts

- Good mental health is essential for people to lead healthy and productive lives. Yet, even before the pandemic, mental ill-health affected millions of people and drove economic costs of up to 4% of GDP.
- The share of people reporting symptoms of anxiety and depression as much as doubled during the pandemic and remains elevated.
- The pandemic exposed a significant gap between the need for, and availability of, mental health support. Even before the pandemic, two-thirds of people seeking mental health support reported difficulties getting it, and demand for care has grown in some countries.

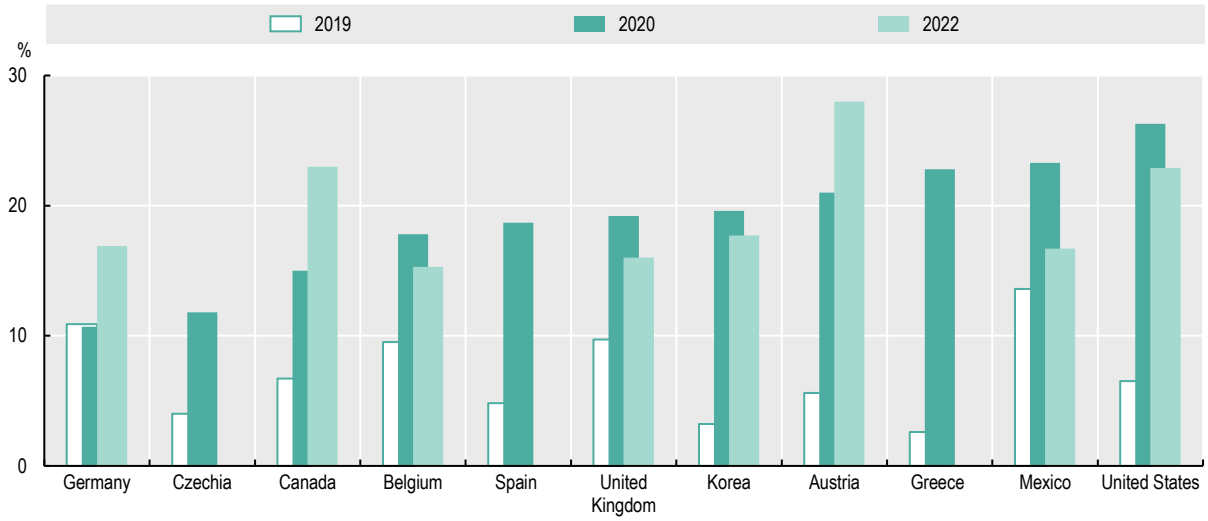
A series of crises have challenged mental health resilience

Recent and even ongoing crises have had a significant impact on population mental health, stressing the urgency to strengthen measures to promote good mental health and prevent mental ill-health. Symptoms of anxiety and depression as much as doubled at the height of the pandemic, and a confluence of emerging and enduring shocks, crises and conflicts continue to heighten the risk factors for poor mental health and suicide. Certain population groups such as young people and people in vulnerable circumstances have been at particularly high risk, calling for renewed focus on closing inequalities in mental health. In Europe, two-thirds of young people who reported financial difficulties were at risk of depression during the pandemic (67%), compared to just under half (45%) of those who did not report financial difficulties. The medium to long-term impacts of the pandemic on mental health remains to be seen. Yet, in 2022 almost all OECD countries with available data continued to see an increase in anxiety and depression compared to pre-pandemic levels (Figure 5 shows data for depression).

Recent crises have also exposed a significant gap between the need for, and availability of, high-quality mental health support. Even before the pandemic, two-thirds of people seeking mental health support reported difficulties getting it, and the quality and outcomes of care have proven difficult to measure and improve. The co-ordination of mental health and substance abuse services, for instance, has proven challenging in some countries. Countries rapidly deepened mental health support in response to the pandemic, including by expanding activities to promote good mental health and prevent mental ill-health, with 25 OECD countries reporting permanent increases in mental health services or capacity since the start of the pandemic. Yet, there are worrying signs that crises and conflicts have challenged and are challenging already-stretched services, driving up waiting times in some countries.

Figure 5. National estimates of prevalence of depression or symptoms of depression, 2019-22 (or nearest year)

Percentage of adult population



Notes: Survey instruments and population samples differ between countries and in some cases across years within countries, which limits direct comparability. Pre-pandemic data for Czechia from 2017; Canada from 2015-19; Japan from 2013; Belgium from 2018; United Kingdom from 2019-March 2020; and Korea from 2016-19.
Source: OECD (2023), *Health at a Glance 2023*, https://doi.org/10.1787/7a7afb35-en.

Rapid social and technological change will pose new challenges for mental health

The pandemic fuelled a significant shift toward telework, and rapidly accelerated the use of digital tools, technologies and apps in mental health. The expanded use of digital tools holds considerable potential to help address unmet needs for mental health care, but must be carefully managed: with the proliferation of freely-available apps, for instance, quality assurance has become a key issue. More time spent online and significant social media use are also a growing policy concern for children and young people's mental health. A central challenge will be to adopt policy approaches that minimise risks without restricting the positive benefits and opportunities that digital and social can bring.

In 2021, the OECD published a framework for understanding mental health performance, which highlighted that most OECD countries struggle to identify whether their mental health systems are delivering effective results. Many countries increased mental health data collection over the pandemic, with over 70% of OECD countries indicating that they collected data on mental health prevalence and service delivery. Yet, some of these surveys have already become less frequent or been discontinued, measurement of positive mental health is less consistent, and further efforts are needed to ensure these short-term measures are translated to long-term improvements in mental health data.

Integrated policy action is needed to protect and care for mental health

More than half of all mental health conditions have their onset in childhood and youth, meaning prevention and promotion measures must start early. Finland and Iceland, for instance, teach socio-emotional skills in schools, while countries including Chile, Lithuania and the Slovak Republic have introduced specific mental health promotion and prevention programmes in school settings. Persistently high unmet needs also call for renewed efforts to scale up a range of high-quality, accessible mental health support. Funding is critical. While some countries increased funding, before the pandemic, the share of health spending dedicated to mental health had not increased significantly over the past decade. Countries such as Canada, Norway and Slovenia have also explored strategies to use limited resources more effectively, for example through stepped-care approaches.

The OECD has estimated that mental health conditions drive economic costs of up to 4% of GDP, with more than a third of these costs related to lower rates of employment and productivity. Through early intervention in social welfare, labour and youth policies, individual and societal outcomes can be improved. Examples of good practice exist: many countries have made efforts to strengthen mental health capacity by training front-line workers such as general practitioners and teachers, for instance. Yet, cross-sectoral approaches are highly uneven within and across countries, and much more action must be taken to ensure systematic integration of mental health, skills and work policy.

Questions for discussion

1. What priority actions need to be taken to strengthen mental health and mental health support, within the healthcare system and beyond (for example in schools, workplaces, welfare systems and community-based settings)? What has worked to promote effective collaboration across care settings and sectors, and what further action is needed?
2. What further steps – including whole-of-government steps – are needed to prepare for and respond to changes in mental health needs and services driven by increased digitalisation? How could the OECD best support countries?
3. What further evidence on mental health and mental health systems performance is needed to support improved policy making and integrated policy responses for mental health?

4 The future of pharmaceutical policy

Key facts

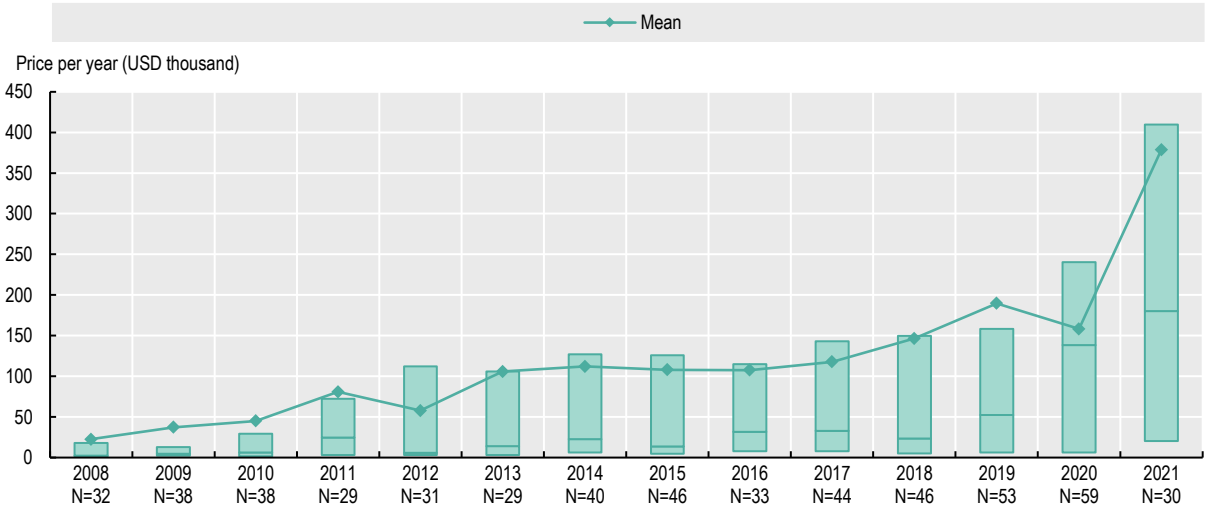
- Medicines continue to deliver great benefits to patients: the record-breaking development of COVID-19 vaccines was a huge scientific success.
- Prices of certain novel therapies can exceed USD 1 million, while medicine shortages are threatening affordable access to medicines and undermining the resilience and sustainability of health systems.
- Lack of transparency affects virtually every aspect of pharmaceutical markets: prices, clinical data, R&D costs and supply chains, affecting assessments of value for money and public accountability.

Affordable access to medicines is an increasingly challenging policy priority

Medicines have improved survival and quality of life for many people around the world. The rapid development of COVID-19 vaccines, supported by public subsidies, was a huge scientific success. Novel and increasingly expensive products are however challenging the sustainability of healthcare systems across OECD countries. In Europe, spending on cancer medicines more than doubled between 2008 and 2018, while in the United States, prescription medicines expenditure tripled between 2000 and 2020. Many novel therapies come with ultra-high prices, sometimes with limited evidence of the extent of clinical benefit, requiring payers to commit large sums of money despite considerable uncertainty about their value to patients and health systems.

The global medicines market is predicted to reach USD 1.8 trillion in value by 2026. Today, specialised medicines for chronic, complex and rare diseases (treating only 2-3% of patients) constitute half of pharmaceutical expenditure in high-income countries, raising questions about the efficiency of resource allocation. As the number of novel and potentially transformational medicines grows, patients with few treatment options will continue to demand rapid and affordable access.

Figure 6. US launch prices of novel medicines, 2008-21



Note: Box-and-whisker plots represent the prices per year (in 2021 USD) of drugs marketed each year, from 2008 to 2021. Boxes indicate 25th to 75th percentiles; horizontal lines, medians; green markers, means.
Source: Rome, B., A. Egilman and A. Kesselheim (2022), "Trends in Prescription Drug Launch Prices, 2008-2021", https://doi.org/10.1001/jama.2022.5542.

Enhancing transparency can contribute to more sustainable and resilient health systems

The costs and risks of pharmaceutical R&D are often used to justify launch prices, but the existence of a clear relationship cannot be verified without transparent data on R&D expenditure. The pharmaceutical industry benefits from a range of public policies, such as public support for early scientific and clinical research; tax credits that partly offset development costs; intellectual property rights that protect products from competition; and tax-subsidised government and third-party payments that facilitate consumption that would otherwise be unaffordable for patients. Despite the 2019 WHA Resolution 72.8 – which called on member states to publicly share a range of information on health products – R&D expenditures, production costs, and net prices are generally considered commercially confidential by the industry.

True innovation needs to be appropriately rewarded to ensure the sustainability of health systems and industry. Governments and payers attempting to contain expenditure and drive value for money need to safeguard incentives for the continued development of needed products. Strengthening stakeholders' understanding of how various aspects of the pharmaceutical market work and moving the debate to one on how the market can be made to work better for patients, payers and manufacturers, is essential for resilient health systems that deliver needed products at prices that do not undermine their sustainability. Better data should support such debates.

Enhancing supply chain resilience is now a priority objective for governments

The effective functioning of health systems also relies on the adequate and reliable supply of equipment and therapeutics, including essential medicines and medical devices. Already before the pandemic, notification of shortages of medicines had increased by 60% between 2017 and 2019 in 14 OECD countries. They mainly affected old, off-patent products and the main reported causes were quality issues, high pressure on prices and a high concentration of supply for some widely-used medicines. The COVID-19 crisis further highlighted the vulnerability of supply chains.

Promoting the long-term resilience of pharmaceutical supply chains would benefit from collaborative approaches that balance measures best undertaken by the private sector with those more appropriately managed by governments, as well as internationally harmonised and co-ordinated approaches to regulation and stockpiling. Greater visibility of the structure and functioning of supply chains, and transparency regarding sources of supply, stockholdings and production capacity between private and public stakeholders, and between countries, would improve co-ordination and predictability of supply. A number of initiatives have been implemented to improve the security of supply, such as the Pan-American Health Organization (PAHO) Strategic Fund aiming to improve access to health supplies for member countries through joint purchasing, the Oslo Medicines Initiative, or the National Medical Stockpile policy in Australia. In Europe, a Belgian-led initiative supported by 18 other countries promotes concrete actions at the EU level to tackle shortages through a voluntary solidarity mechanism and to reduce dependencies on foreign manufacturing for critical medicines.

Questions for discussion

1. What should be the priorities for international action to improve the resilience of pharmaceutical supply chains, including for off-patent products?
2. What further data, evidence or benchmarking is critically needed to ensure value-for-money in pharmaceutical pricing and reimbursement? How could the OECD best support countries in this area?
3. How can research and development in areas of unmet medical need be encouraged, while ensuring value-for-money and equitable access?

5 Investing in resilience: The health and social care workforce

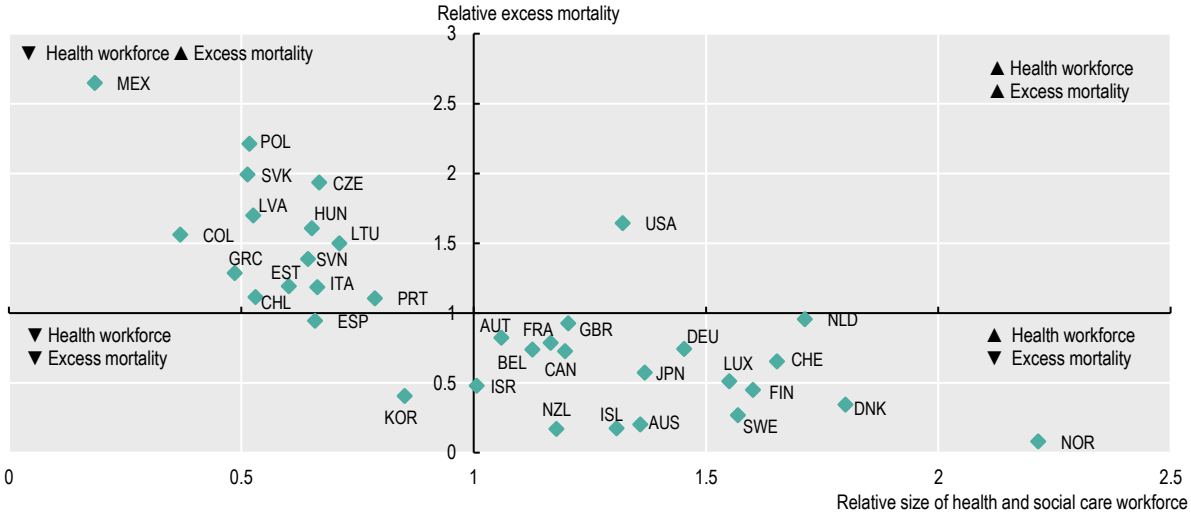
Key facts

- The pandemic exacerbated pre-existing health and social care workforce shortages, heightening work pressures and intentions to leave the profession. In several OECD countries in 2021, about 20% of nurses reported that they were considering quitting.
- The overall number of health and social care workers increased by over 10% in the past decade on average across OECD countries, but demand has also increased due to population ageing and an increasing number of people with chronic diseases.
- Investments in the health and social care workforce account for half of the overall investments needed to improve health system resilience in OECD countries.

Health and long-term care workers are under pressure

The pandemic exposed serious weaknesses in the health and long-term care workforce in many OECD countries, shining a spotlight on a workforce that was understaffed, under pressure and often undervalued. Shortages of health workers in critical parts of the health system were arguably the biggest capacity constraint faced in many OECD countries during the pandemic. Across countries, higher proportions of health and social care were associated with lower excess mortality in 2020 and 2021 (Figure 7). At the same time, in several countries the pandemic also highlighted a lack of flexibility in reallocating workers to meet the surge in demand for COVID-19 care, resulting in situations where some staff were over-burdened while others were under-employed.

Figure 7. Higher numbers of health and social care workers were associated with lower excess mortality during the first two years of the pandemic



Note: The quadrant chart shows the association between the health and social care workforce and excess mortality. The x-axis shows how much a country is above or below the OECD average for total health and social employment in 2019 (per 1 000 population); the y-axis shows how much a country is above or below the OECD average on excess mortality in 2020 and 2021.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

The overall number of health and social care workers increased by over 10% in the past decade on average across OECD countries, but demand has also increased due to population ageing and the need to cope with unexpected crises. The ratio of LTC workers relative to people aged over 80 has decreased in the past decade on average across OECD countries, falling from 25 workers per 100 people aged over 80 in 2010, to 23 in 2019. Similarly, the number of doctors and nurses trained across OECD countries has not kept up with the increase in the share of older people. International recruitment of workers has increased but has not been sufficient to fill the gaps, and risks exacerbating workforce shortages in countries of origin that often have even fewer health workers.

There is real concern that workforce shortages may be compounded by a vicious cycle whereby shortages result in greater pressures and resignations, further exacerbating the underlying shortages. Many health and care workers have emerged from the pandemic exhausted and demotivated by what they consider to be a lack of recognition for their work. In Belgium, Canada, France, the United Kingdom and the United States, one in five nurses reported in 2021 that they were considering leaving the profession. Moreover, in England (United Kingdom), the number of nurses leaving the NHS reached an all-time high in 2021/22, with over 40 000 leaving active service between June 2021 and June 2022.

There is a pressing need to address the causes and consequences of workforce shortages. The equivalent of over 3 million additional doctors, nurses and midwives would be required across OECD countries in the coming years to ensure adequate supply, according to OECD analysis.

Investments in capacity, skills and flexibility are needed to strengthen resilience

Greater investments are needed to strengthen health and social care workforce capacity, skills and flexibility, both to achieve effective universal health coverage and to reduce vulnerability to future crises. OECD work has shown that at least half of the additional investments needed to strengthen health system resilience in OECD countries should be allocated to strengthen the workforce, via training and recruitment, improvements in working conditions, and measures to increase the flexibility and adaptability of the workforce.

Recruitment and retention measures are critical. Beyond improving wages for categories of workers that have traditionally been undervalued, promoting a healthier work environment through measures such as better occupational health and safety, and improved flexibility in work schedules and organisation may help to keep staff from quitting. These measures could also help to address gender inequality.

Using the skills of different categories of workers more effectively is also crucial to promote greater job satisfaction and retention, and to respond to growing health and care needs. Previous OECD work has shown that over three-quarters of doctors and nurses report being over-skilled for some tasks they have to do, resulting in a waste in human capital. At the same time, the skills that health and care workers need are changing. Integrated care, increased digitalisation, demographic change, and climate change require different skills, different ways of working, and different professional roles and scopes of practice. Previous OECD work suggests that on average over half of doctors and over 40% of nurses report a need for further training to cope with the demands of their job. Concerted efforts are needed to ensure that the workforce is well-prepared and well-supported to meet current and future challenges.

The pandemic has shown the potential for innovation in health service delivery, and for greater task sharing and teamwork between doctors, nurses and other healthcare providers. As healthcare practices, services and tools continue to evolve, promoting continuous acquisition of new skills and removing barriers to innovations in skills mix and service delivery are key goals.

Questions for discussion

1. Given the lessons learned from the pandemic, what key investments in the health and care workforce are needed – for example in terms of improving working conditions and workplace support, training, recruitment and retention?
2. What actions needs to be taken to ensure that the health and care workforce are equipped with the skills needed for the future, and that these skills are used effectively? How do health professional skills need to be adapted in light of increased digitalisation, and what challenges remain to be addressed?
3. What policy measures are needed to promote workforce flexibility and adaptability to demand changes? What are the main barriers to change, and how is your country overcoming them?