

The response to the pandemic increased health spending in OECD countries in 2020 and 2021, while highlighting the need for further investments to guard against future shocks. OECD countries now face competing calls on public finances while inflation is at its highest level for decades. This policy brief discusses the impact on health care costs and the options open to increase health spending in the future.

Key findings

- Spending on health jumped by almost 1% of GDP across OECD countries, on average, during the pandemic as governments stepped in to cover unexpected public health and treatment costs. The crisis highlighted the need for further investments to strengthen health system resilience in the face of new shocks – estimated to be 1.4% of pre-pandemic GDP, on average across OECD.
- Russia's war in Ukraine has added to already rising energy costs with inflationary pressures across much of the OECD. This has repercussions for the cost of health care, as well as the ability to maintain service levels and address the backlog of care due to the pandemic.
- The economic outlook limits the options to increase overall government spending or allocate more of the government budget to health, which stood at 15%, on average across OECD, but would need to increase by 5 percentage points by 2040 based on projected revenues. Governments can re-examine ways to cut wasteful spending and reassess the benefit basket.

The current economic climate brings new challenges to health systems

The COVID-19 pandemic presented unprecedented challenges to health systems, economies, and societies worldwide. By the end of 2022, around 420 million cases and more than 3.2 million COVID-19 deaths had been reported across the OECD. There were 14% more deaths in 2020 and 2021 compared to pre-pandemic years. Almost 1% of GDP, on average, was added to OECD health spending, as significant resources were made available to track the virus, increase system capacity, develop treatment options, and eventually roll out vaccines to the population. There were also significant indirect health care effects: visits to general practitioners (GPs) and specialists were cancelled, elective surgery postponed, and cancer screening appointments delayed. At the same time, mental health care needs increased.

Hopes for a return to more stable economic conditions in 2022 were dented by Russia's war on Ukraine, and wide-spread disruptions in supply chains on top of the lingering effects of COVID-19. This has placed upward pressure on prices, above all for energy and food, leading to inflation running at levels not seen for decades in many OECD countries. Global GDP stagnated in the second quarter of 2022 and output declined in the G20 economies (OECD, 2022^[1]). While growth picked up in the third quarter of 2022, some more recent indicators indicate a longer period of subdued growth and elevated prices.

These economic and geo-political developments will affect the resources available to finance both public and private health spending, as well as the costs of health service delivery. This is in a context where countries must deal with the ongoing effects of the virus: continue to roll out COVID-19 vaccination programmes to vulnerable groups of the population, address backlogs in care and respond to pent-up demand for other health services and attempt to strengthen the resilience of their health systems to future health shocks.

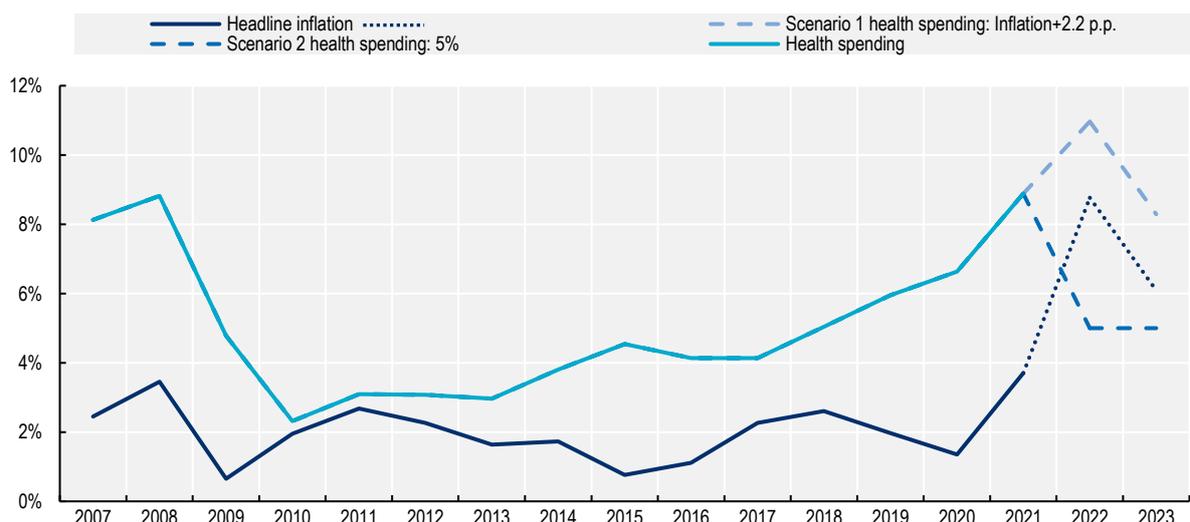
Can health spending growth continue to outpace inflation?

Growth in health spending has continually outpaced headline inflation over the last 15 years, with the difference particularly marked during both the global financial crisis and the pandemic as public spending on health was maintained – albeit for different reasons. The question is whether such growth can be sustained during times of high inflation (Figure 1), and if so, how can this be financed?

If health spending growth was to outpace inflation at the same rate as that observed over the period 2010-19 (i.e. post-global financial crisis and pre-pandemic), that is, by 2.2 percentage points, this would imply an average 11% nominal growth rate in health spending across OECD countries in 2022/23. This is a substantial increase on historical trends and even higher than health spending growth in 2020/21 at the height of the pandemic. Even for zero real (adjusted for headline inflation) health spending growth, nominal health spending growth would need to reach 8.8% on average to match the peak in inflation. On the other hand, if nominal health spending growth was constrained to an average growth rate of 5% – like that observed over the last 15 years, this would imply a decrease in real terms of 4.5% on average in 2023.

Figure 1. Health spending has consistently outpaced headline inflation over the last 15 years

Annual changes in current health expenditure, in nominal terms, compared to headline inflation, OECD average



Note: Scenario 1 (light blue dashed line) shows average health spending growth at 2.2 percentage points (the average between 2010 and 2019) above projected inflation (dotted line). Scenario 2 (dark blue dashed line) shows health spending growth at 5% – the average observed growth of health spending over the last 15 years.

Source: OECD Health Statistics 2022. OECD Economic Outlook, June 2022.

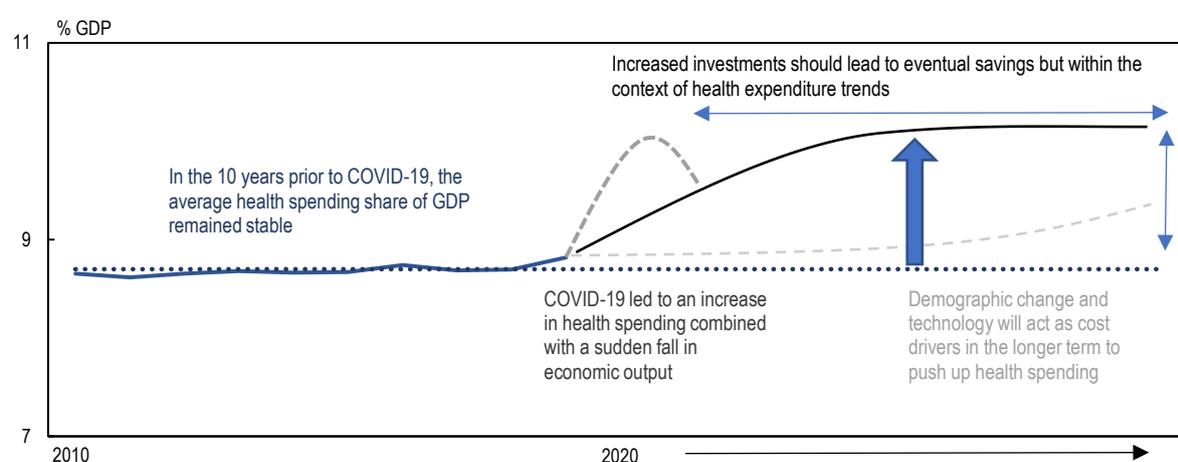
One lesson from the pandemic is that health systems need to become more resilient to shocks...

The public health crisis highlighted the need for smart investments to strengthen health system resilience – to protect underlying population health, fortify health system infrastructure, and bolster health workers on the frontline – providing countries with the agility to respond not only to evolving pandemics but also to other shocks, whether natural or man-made. Returns on investment extend beyond direct health benefits. More resilient health systems are at the core of stronger, more resilient economies – enabling substantial economic and societal benefits by avoiding the need for stringent and costly containment measures in future crises with healthier and better prepared societies (Morgan and James, 2022^[2]).

Broad estimates of the costs represent an average of 1.4% of GDP (ranging from 0.6 to 2.5% across OECD countries) set in the context of the pre-pandemic situation; that is, relative to health expenditure in 2019. Bolstering health professionals working on the frontline accounts for more than half of this investment cost, on average, at around 0.7% of GDP. Additional spending on preventive care is expected to cost about 0.3% on average while foundational investments in core equipment and better harnessing of health information are estimated to cost another 0.4% of GDP, on average.

Between the global financial crisis and the pandemic, OECD health spending growth matched economic growth, *in real terms*. A trajectory based on the level of additional investment to make health systems more resilient cited above would lead to an increase in the health spending-to-GDP ratio being reached at some point in the medium term in the context of underlying cost pressures – population growth, technology, etc. (Figure 2).

Figure 2. Medium-term spending implications of investing in more resilient health systems



Note: The blue dotted line represents the 2010-19 average health spending to-GDP-ratio. The light grey dashed line represents the projected increase due to underlying cost pressures, such as demographic change. The dark grey dashed line represents the short-term impact of COVID-19. The solid dark line indicates the trajectory resulting from increased investment in health system resilience.

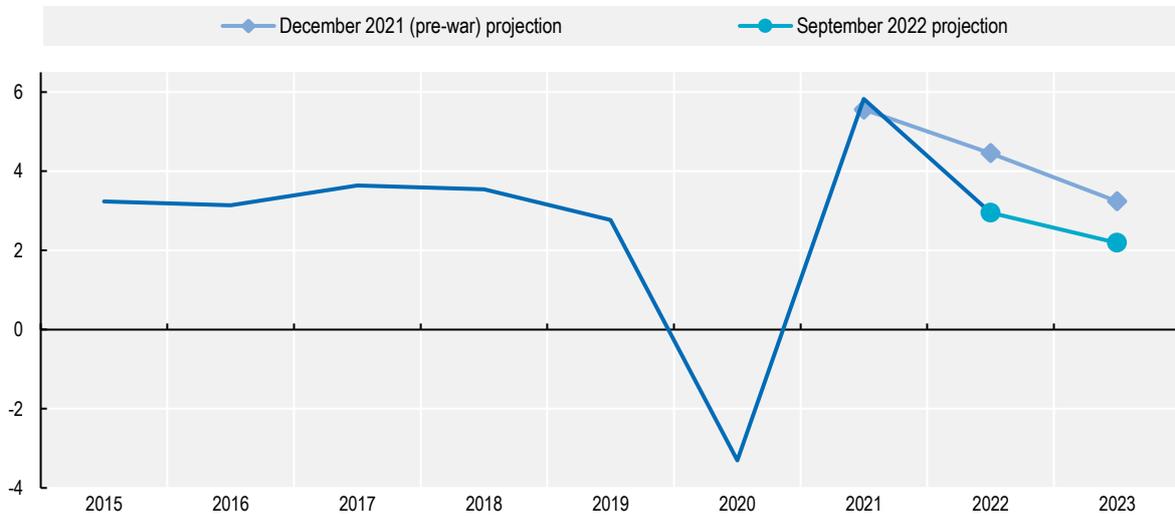
Source: OECD Secretariat calculations, Morgan and James (2022^[2]), "Investing in health systems to protect society and boost the economy: Priority investments and order-of-magnitude cost estimates", <https://doi.org/10.1787/d0aa9188-en>.

...but the significant economic challenges in OECD countries have put investment in health system resilience at risk...

Emerging from the worst of the pandemic, inflation started to increase due to an initial surge in energy prices, bottlenecks in supply chains, rising freight costs and a surge in private consumption (OECD, 2022^[1]). This was significantly exacerbated with Russia's invasion in Ukraine in February 2022, with sudden increases in the price of oil, gas, coal, and industrial metals, as well as of wheat and corn. Inflationary pressures since became prevalent in many countries as higher energy, transportation and other costs were passed onto the broad basket of goods and services (OECD, 2022^[1]). In Canada, the United States, the United Kingdom and other countries, wage and unit cost growth put additional pressure on prices. As a result, inflation in 2022 and 2023 is much higher than in recent decades in many countries. For example, across G20 countries, inflation was projected to grow from 3.8% in 2021 to 8.2% in 2022 and 6.6% in 2023; in some OECD countries, including Türkiye and the Baltic countries, inflation is running much higher.

Figure 3. Global growth is significantly weaker than expected prior to the war in Ukraine

World GDP growth in real terms, %



Source: OECD Economic Outlook 110 database (December 2021); and OECD Interim Economic Outlook 112 database (September 2022).

After a substantial contraction of GDP in 2020 (-4.6% in real terms on average across the OECD), there was a subsequent rebound in 2021 (+5.5% in 2021). However, disruptions of supply chains, continuing outbreaks of COVID-19, Russia's war on Ukraine and the resulting energy crises in many OECD countries dampened the economic outlook for 2022 and 2023, especially in Europe (Figure 3).

The OECD Economic Outlook Interim Report released in September 2022 projected GDP growth to slow in 2022 and 2023 across G20 countries (OECD, 2022_[1]). The outlook was more pessimistic for most G20 countries and the euro area, with declining real incomes and continuing disruptions in energy markets.

...all of which has substantial consequences for health systems...

The unusual inflationary pressures, the cost-of-living crisis and the economic downturn in many economies have repercussions for health system costs, the ability to maintain levels of services and to address the backlog of services resulting from the pandemic.

Health systems are experiencing a significant increase in input costs for service provision

Increasing service provision costs can already be felt by health providers in many OECD countries creating additional upward pressure for health spending or raising the insolvency risks for health care providers.

- **Rising costs for gas, fuel and electricity** are a particular concern for energy-intensive health providers such as hospitals, long-term care facilities or emergency transport. This holds true also for other inputs such as **food and other non-medical and medical inputs**.
- General wage and unit labour cost growth has strengthened in many countries putting upward pressure on the costs of a wide range of goods and services used as inputs into the health sector. As a labour-intensive sector, **increasing demand and decreasing supply of health care workers may further exacerbate the unit cost of labour**. One of the lessons from the pandemic was that to attract and retain workers to the nursing and care professions, a reassessment of baseline salary levels was required.

Higher inflation and economic slowdown will affect the resources to finance health services

- Initially, increases in prices and wages lead to a growth in total tax revenues and income-related social contributions, thus potentially increasing resources to public health spending (at least in nominal terms). For example, across the OECD, nominal wage growth across all industries was around 6-7% in 2021 and is expected to be on a similar level in 2022-23 (OECD, 2022^[1]).
- On the other hand, a protracted economic slowdown can be associated with an increase in unemployment and reduction in profits, reducing tax revenues and social insurance contributions. Together with high inflation it reduces disposable household income (and thus the ability of households to purchase health care services). However, expected unemployment rates of around 5% in the OECD in 2022 and 2023 remain the lowest recorded in the last decade reflecting the ongoing shortage of qualified workers in many OECD countries (OECD, 2022^[1]).
- Increasing input costs takes time to feed into revised reimbursement rates for service provision and/or increased premium and contribution rates. Typically, historical inflation or specific price indices feed into the following year's price setting. If payments do not consider increased costs there could be risk of running up deficits in the absence of additional intervention by governments, adjusted budgets, or limits on activity.

Higher than expected inflation can have a detrimental effect on health budgets

- Levels of future health spending established using expected inflation assumptions automatically become less generous as increasing costs of inputs outstrip any planned increases. Governments and finance ministries must decide whether to further adjust and compensate in the light of unexpected increases or leave health ministries and social insurance funds facing real term cuts in funding which may result in a reduction of volume of services provided.

What options remain open to governments to finance future health spending?

With population ageing, rising incomes, technological progress and other factors, health spending is expected to consume an even greater share of the economy in the future. At the same time, governments will face pressure on the revenues they can expect to raise, will see other competing demands, as well as unexpected increases in the costs of health care provision, as the current context shows.

Even without considering the need to further invest in the resilience of health systems to meet future crises, the OECD projects that an increasing part of government revenues would be needed to finance health spending. However, with health spending already making up 15% of total government budgets, the question of how to finance such increases will become ever more pressing. Various non-exclusive policy options have been proffered to meet these additional future spending needs:

- Increasing health spending without changing other government spending so overall government spending rises
- Keeping overall government spending constant but increasing the allocation to health within government budgets
- Reassessing boundaries between public and private spending
- Realising efficiency gains by cutting wasteful spending

To what extent do these various options remain open to decision-makers in the short- to medium term in the light of the current economic climate?

Increases in overall government spending will be challenging in many countries

Increasing government spending requires either an increase in government revenues (e.g. taxes) or additional debt financing. The OECD Risks that Matter Survey (OECD, 2020^[3]) undertaken at the height of the pandemic revealed perhaps not surprisingly that greater spending on public health services featured high as a priority. However, in the face of the current cost-of-living crisis and households and businesses facing significantly increased energy bills, the appetite for increasing personal and corporate taxes (or social insurance contributions) would appear to have largely diminished.

In addition, the widespread measures taken to support the economy during the pandemic have led to expanded government deficits in many OECD countries in recent years. With inflation far above target rates in many countries this has led in turn to higher interest rates. This further increases the cost of borrowing for governments, adding to future debts. Hence, relying entirely on debt financing for additional health spending may be particularly challenging for some countries in the current economic climate.

If economies do enter a more prolonged period of recession, government budgets may shrink because of reduced tax revenues, impacting the ability to increase deficits further.

Maintaining the priority of health in government budgets will be challenging

Russia's war on Ukraine, the energy crisis and inflationary pressures have led to a certain de-prioritisation of health in the public debate. Health is competing with a variety of new spending priorities including higher defence spending, rising direct costs of energy, investment into the green transformation and importantly, government support for households and enterprises to (partially) protect them from rising costs.

- Across the OECD, the 15% of government spending allocated to health spending in 2020 was unchanged from 2019. This was largely due to the stimulus packages to support various industries and economic actors outside of the health sector in many countries.
- Demographic change (among other factors) is expected to increase health care needs and at the same time reduce government revenues; the share of government expenditures allocated to health would need to increase by around 5 percentage points by 2040 to meet future needs.

The challenge is that health ministers represent a single voice among many competing calls on public finances. The importance of increasing the health budget to build more resilient health systems may be quickly forgotten in the face of other pressing needs. For health ministers to continue to make the case for health even in times of political and economic turmoil, it will be ever more important to link discussions on areas where additional targeted investments are essential to build more resilient health systems, with continued efforts to cut wasteful health spending – an unfinished agenda for health systems.

Reassess boundaries between public and private spending in the long term

In the case of no additional public resources available to meet future health spending needs, a default option would be to shift more burden to the private sector. In nearly all countries, the share of health spending financed from government or compulsory insurance increased with the onset of COVID-19. Many countries extended publicly financed services, for example by providing universal access to patients with COVID-19 symptoms, providing free face-coverings or tests. Yet, the issue of what to finance from the public purse is not limited to the context of the pandemic. It is a wider question of how to define the benefit basket by removing items that are no longer relevant or add value. Debates to introduce or increase user chargers for specific activities have recently resurfaced in some countries and there are instances in which patients are increasingly opting to self-finance treatment rather than remain on long waiting lists in countries with considerable COVID-19 induced backlogs.

Any perceived cuts to benefit packages would be politically challenging in the current climate and potentially hit hardest those population groups struggling with high energy bills and most affected by the cost-of-living crisis. Any additional out-of-pocket payments can represent an undue financial burden leading to further impoverishment or an increase in unmet need for health care, likely to further exacerbate inequalities. That said, in the long run, a debate on reassessing the boundaries between public and private spending will be necessary in many countries. As budgets are limited, not all interventions can be financed from the public purse. A strategic discussion on what are the best buys for limited public budgets, and how to define the benefit basket, will be necessary.

Identifying and cutting wasteful spending should become a priority again

Rather than increasing investment, the current fiscal and labour market pressures to “do more of the same with less” may be a sign that policy makers lack the levers to affect health spending at a more, granular level. However, there should still be room to cut spending that does not deliver better outcomes or is wasteful across the sector. The OECD report “Tackling Wasteful Spending in Health” (OECD, 2017^[4]) showed that gains can be found right across the health system and all actors – patients, clinicians, managers, and regulators – have an important role to play.

Reducing clinical waste should be one priority. Addressing medical errors that are largely preventable, the inappropriate use of antimicrobials, and unwarranted variation in medical practice can all have a large impact. Proven approaches to increase productivity include policies on health workforce, pharmaceuticals, and new technologies. For example, laws and regulations that extend the scope of practice for non-physicians can produce cost savings with no adverse effects on quality of care. For pharmaceuticals, price, market entry and prescribing regulations have all helped increase penetration of generics in the market, thereby saving costs. Health Technology Assessments (HTAs) have the potential to ensure cost-ineffective new technologies are not introduced, and existing cost-ineffective interventions are discontinued (Auraaen et al., 2016^[5]). Digitalisation can support new care delivery methods, notably in the form of telemedicine (which expanded rapidly in many countries because of the pandemic) and robotic tools for some limited procedures; as well as improving the quality and usefulness of health data (OECD, 2023^[6]). Moreover, organisational changes in the management of critical care resources and the increased use of modelling developed during the pandemic are leading to a more efficient use of scarce hospital resources.

Promoting healthier lifestyles requires action both within and beyond the health sector. Curbing major risk factors of smoking, alcohol consumption and obesity can reduce associated treatment costs. For example, alcohol prevention policies – such as brief GP interventions; taxation; and regulations on opening hours, advertising, and drink-driving – have been shown to reduce costs compared to when associated illnesses are treated when they appear (OECD, 2021^[7]). Similarly, a range of fiscal, regulatory and communication policies have been cost-effective in reducing rates of smoking, obesity, and other major risk factors.

Emerging evidence from the management of the COVID-19 pandemic also suggests that, in hindsight, resources could have been better used – although the urgency of the crisis presented considerable challenges to governments to ensure “value for money”.

In the current economic climate, the policy options remain limited

The ongoing economic situation represents a challenge for health policy makers. After a COVID-19-related “spending spree” in recent years, public money has become tight again and health providers may require additional financing due to unforeseen increases in input costs. The options as to how these additional and urgent financing needs are to be met are limited.

As mobilising additional government resources for health can become increasingly difficult, health ministries need to continue to make the case that investments in health need to remain a high priority,

even among other emergencies. This needs to be complemented by a reinforced call to find efficiency gains in all areas of the health system. Given the current cost-of-living crisis, shifting more health financing obligations on the private sector is undesirable but reassessing the boundaries between private and public spending could be an option in some countries in the longer-run.

One of the lessons from the pandemic response should be that getting value for each health dollar invested should remain a high priority of health ministers. This is even more true in the current economic climate.

References

- Auraaen, A. et al. (2016), “How OECD health systems define the range of good and services to be financed collectively”, *OECD Health Working Papers*, No. 90, OECD Publishing, Paris, <https://doi.org/10.1787/5jlnb59ll80x-en>. [5]
- Morgan, D. and C. James (2022), “Investing in health systems to protect society and boost the economy: Priority investments and order-of-magnitude cost estimates”, *OECD Health Working Papers*, No. 144, OECD Publishing, Paris, <https://doi.org/10.1787/d0aa9188-en>. [2]
- OECD (2023), *The COVID-19 Pandemic and the Future of Telemedicine*, OECD Publishing, Paris, <https://doi.org/10.1787/ac8b0a27-en>. [6]
- OECD (2022), *OECD Economic Outlook, Interim Report September 2022: Paying the Price of War*, OECD Publishing, Paris, <https://doi.org/10.1787/ae8c39ec-en>. [1]
- OECD (2021), *Preventing Harmful Alcohol Use*, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/6e4b4ffb-en>. [7]
- OECD (2020), *OECD Risks That Matter Survey*, OECD, Paris, <https://www.oecd.org/social/risks-that-matter.htm>. [3]
- OECD (2017), *Tackling Wasteful Spending on Health*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266414-en>. [4]

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