Fiscal Sustainability of Health Systems

HOW TO FINANCE MORE RESILIENT HEALTH SYSTEMS WHEN MONEY IS TIGHT?

OECD

Fiscal Sustainability of Health Systems

HOW TO FINANCE MORE RESILIENT HEALTH SYSTEMS WHEN MONEY IS TIGHT?

Please cite this publication as:
OECD (2024), *Fiscal Sustainability of Health Systems: How to Finance More Resilient Health Systems When Money Is Tight?*, OECD Publishing, Paris, https://doi.org/10.1787/880f3195-en.

ISBN 978-92-64-47608-0 (print)
ISBN 978-92-64-39487-2 (pdf)
ISBN 978-92-64-37904-6 (HTML)
ISBN 978-92-64-91309-7 (epub)

Photo credits: Cover © Madcat_Madlove/Shutterstock.com.

Corrigenda to OECD publications may be found on line at: www.oecd.org/about/publishing/corrigenda.htm.

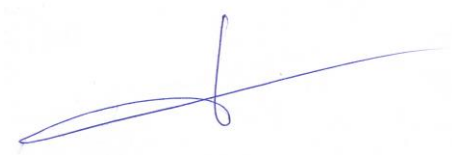
Preface

Since the launch of the OECD Joint Network of Senior Budget and Health Officials in 2011, health systems have been confronted with a range of challenges that put increasing pressure on public budgets for health. New challenges are ahead that will affect the funding available for health systems, and in the words of some analysts, we could be entering a period of 'permacrisis'.

This context underlines the need for health systems to be better prepared and to find the funds necessary to strengthen resilience whilst maintaining fiscal sustainability. An essential building block in this regard is applying a robust budgetary framework for health. Such a framework should meet several key objectives, notably safeguarding the fiscal sustainability of health systems, promoting the efficient use of resources, whilst delivering high quality and equitable health services that are accessible to all.

This publication shows that good budgeting practices are a cornerstone of well-functioning health systems. They are a precious instrument for public authorities to retain control and stewardship over expenditure whilst respecting health policy objectives.

The analysis is not purely theoretical. Rather, it is based on an exchange of policy experiences during the meetings and workshops of this OECD Joint Network. In that sense, this publication should be seen as the product of a co-creation process between the participants of the OECD Joint Network and the OECD staff, built on a constructive communication between health and finance officials of member states as well as the OECD staff.



Jo De Cock,

Chair of the OECD Joint Network of Senior Budget and Health Officials

Foreword

Finding sufficient funds to pay for more resilient health systems is challenging in the current economic context. This publication explores the policy options to finance more resilient health systems whilst maintaining fiscal sustainability. It finds that the scale of the additional health financing needs requires ambitious and transformative policy changes. Robust actions to encourage healthier populations and policies can put future health expenditure on a far gentler upward trajectory. These would enable spending to reach a more sustainable 10.6% of GDP in 2040 (as compared with health spending reaching 11.8% of GDP in the absence of major policy change).

Better budgetary governance is critical. It improves how public funds for health are determined, executed and evaluated. Findings of this report are targeted at health and finance policy makers. Improved dialogue between health and finance ministries is especially important when governments are operating in a constrained fiscal setting.

This report would not have been possible without the government officials and other participants of the OECD Joint Network of Senior Budget and Health Officials. Many of the findings build upon insights from these participants during meetings and workshops, who also provided a thorough review of the chapters contained in this report.

The report was prepared by the OECD Health Division and Public Management and Budgeting Division, under the co-ordination of Chris James and Camila Vammalle. Chapter 1 was written by Chris James, David Morgan, Michael Mueller, Caroline Penn and Camila Vammalle; Chapter 2 by Michael Mueller, Caroline Penn and David Morgan; Chapter 3 by Luca Lorenzoni, Pietrangelo De Biase and Sean Dougherty; Chapter 4 by Camila Vammalle, Caroline Penn, Laura Cordoba Reyes and Chris James; Chapter 5 by Caroline Penn, Chris James and Camila Vammalle; and Chapter 6 by Chris James, Caroline Penn, Ivor Beazley, Camila Vammalle and Andrew Blazey.

Chapter 4 is based on work funded by “Le Haut conseil pour l’avenir de l’assurance maladie (HCAAM)”. Nathalie Fourcade and Renaud Legal (HCAAM), and David Bernstein from the ‘Ministère des Solidarités et de la Santé’ provided important inputs. Findings in this chapter draw from a series of in-depth discussions with officials from ministries of health, finance and other non-governmental health policy experts from Belgium (Jo de Cock, Joanna Geerts, Anika Meskens, Johan Peetermans, Karen Raeymaekers, Brieuc Van Damme, and Dirk Wouters); Israel (Noa Heymann, Haim Hoffert, Daniel Padon, Ran Ridnik, and Nadav Ben Yosef); New Zealand (Jess Hewat, Jess Jenkins, Niki Lomax, Simon McLoughlin, and Cara Palmer-Oldcorn) and the United Kingdom (Anita Charlesworth, Becky Henderson, Dylan Kirkland, Peter Lilford, Peter Smith, and Amelia Tudor-Beamish). Chapter 6 builds on earlier work funded by the World Health Organization, with the country case studies done in close collaboration with government officials and other partners from Chile, Latvia and New Zealand. In particular, we would like to thank Hélène Barroy, Svetlana Batare, Cristian Herrera, Alejandro Pino, Klinta Stafecka and Erick Vargas. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD member countries or other organisations mentioned above.

This publication benefitted from comments by Andrew Blazey, Jón Blöndal, Francesca Colombo, Mark Pearson and Stefano Scarpetta. Editorial assistance was provided by Lucy Hulett.

Table of contents

FIGURES

TABLES

Executive summary

In the two decades leading up to the COVID-19 pandemic, spending on health across OECD countries increased steadily, on average, from around 7% of GDP in 2000 to almost 9% by 2019. Over time, the increase in the share of the economy allocated to health has been driven by a combination of **rising incomes, technological innovation and ageing populations**. Without a major policy shift, the OECD projects a continuation of this trend, with an increase of 2.4 percentage points to the health-to-GDP ratio as compared to pre-pandemic levels, and total health expenditure reaching 11.2% in 2040. Even if overall economic growth is forecasted to grow at a slower rate over the coming decades, health spending is projected to outstrip both expected growth in the overall economy and in government revenues across OECD countries.

In addition, the pandemic highlighted the need for smart spending to **strengthen health system resilience** and to provide countries with the agility to respond to shocks, notably to protect underlying population health; fortify the foundations of health systems through a digital transformation and investment in core medical equipment; and bolster health workers on the frontline through measures to train and retain health workers. The benefits extend beyond direct health benefits, as healthier populations are at the heart of stronger, more resilient economies. This enables substantial economic and societal benefits by increasing productivity, improving labour market outcomes and reducing the need for more costly health interventions in the future.

Previous analysis estimated that on average OECD countries need to spend an additional 1.4% of GDP relative to pre-pandemic levels to be better prepared for future shocks. Combining this additional spend on strengthening resilience to projections of health spending, health expenditure is, without other major policy changes, projected to result in a 3.0 percentage point increase by 2040 compared to pre-pandemic levels, reaching 11.8% of GDP in 2040, on average across OECD countries.

Urgent action is therefore needed to finance more resilient health systems while ensuring the fiscal sustainability of health systems. The current economic outlook in many OECD countries only serves to intensify this task in the medium term. While inflation is down from its 2022 peak, it remains higher than historical levels, adding to the input costs of healthcare providers and feeding into planned medium-term spending plans. Competing priorities for government spending are also squeezing health budgets. This follows the effects of unprecedented pressure on health systems during the COVID-19 pandemic, and ongoing pandemic-induced backlogs for certain health services.

Facing up to this challenge, OECD countries have typically considered four broad (non-exclusive) policy options:

- **Option 1: increase government spending and allocate part of these additional funds to health.** This requires an increase in government revenues or additional debt financing. Yet government revenues already represent 39% of GDP across OECD countries. Many countries have high and increasing levels of government debt and associated higher costs of borrowing, as well as the unpalatable challenge of trying to raise taxes during a cost-of-living crisis.

- **Option 2: increase the allocation to health within existing government budgets.** While citizens often state a high relative priority to health, health is increasingly competing with major new spending priorities, notably to tackle the cost-of-living crisis, fund a green transformation, and, for some countries, increase defence spending. Still, in countries with comparatively low budget allocations to health, health authorities could use this as political leverage to push for increased budget shares. In ten countries, the share of health spending as a share of total government spending was 12% or less in 2022, well below the OECD average of 15%.
- **Option 3: reassess the boundaries between public and private spending**. In 2022, the share of spending by governments or compulsory health insurance across OECD countries was already at 76%. Without additional public resources available for health, more healthcare spending will by default shift to the private sector. Cuts to benefit packages or increases in user charges may exacerbate health inequities. Nevertheless, a debate on longer-term directions on the public-private boundary needs to be had, in terms of what are the best buys for limited public budgets, and whether changes could be made to user charges without impeding access.
- **Option 4: find efficiency gains.** Increasing value-for-money of health services must be even more strongly emphasised. Achieving bold efficiency gains by cutting ineffective and wasteful spending, while also reaping the benefits of technology and the digital transformation of health systems, including Artificial Intelligence (AI), is imperative. Otherwise, expectations on the magnitude of such gains needs to be realistic. Actions to encourage healthier populations and policies to eliminate up to half of the ineffective and wasteful spending identified in an earlier OECD analysis could save up to 1.2 percentage points of GDP. This would put future total health expenditure on a far gentler and more sustainable upward trajectory, reaching 10.6% of GDP in 2040 (as compared to 11.8% of GDP in the absence of major policy changes).

In this challenging context, **good budgeting practices are also critical**. They improve how public funds for health are determined, executed and evaluated. This not only increases the efficiency of current public spending, but also enables more ambitious policy changes in the medium to longer term. Analysis of OECD country experiences highlights good practices, notably that:

- **Clear rules, monitoring and review mechanisms should be agreed upon across the annual budget cycle.** This includes separating the cost of new health policy initiatives from baseline costs of maintaining existing services and coverage; the use of explicit criteria to facilitate budget negotiation; ensuring regular in-year budget monitoring, with corrective mechanisms to improve compliance; and using spending reviews to analyse health expenditures and ensure they are aligned with government priorities.
- **Medium-term budgeting for health** enables countries to move to a more proactive forward-looking strategy that goes beyond the regular annual budget cycle. It should allow health agencies to plan based on a reasonable assumption of the financial resource envelope available, while preserving the government's flexibility to adjust to the public finance and macroeconomic climate.
- **Programme budgeting promotes more performance-oriented budgets**, improving alignment between health sector objectives and financial resources. By shifting the focus towards outcomes, it also offers more flexibility for health authorities in the use of public resources, while improving transparency and accountability of results. Common objectives are programmes on improving health promotion, digital health, medical education; and when the scope of programme budgeting is greater, can include broad health service type (such as primary care, hospital services and long-term care).

Maintaining the fiscal sustainability of health systems requires co-ordinated policy action across budget and health officials. Questions about the fiscal sustainability of health systems are likely to become ever more challenging to address. This publication provides an in-depth analysis of the policy options available to meet the growing price tag of sustainable and resilient health systems, and the central role of effective budgeting practices for health in optimising the effectiveness and efficiency of public spending on health.

1 Financing resilient health systems in times of crisis: How finance and health authorities can find common policy solutions

Chris James, David Morgan, Michael Mueller, Caroline Penn, Camila Vammalle

This chapter analyses both the short-term challenges to increase health budgets in an uncertain economic climate, as well as medium to longer-term solutions to financing more resilient health systems. The chapter discusses the policy options and good practices open to governments to meet both health and finance objectives.

Key messages

- Following the unprecedented funds spent on combatting COVID-19, many OECD countries continue to face acute health spending pressures. This reflects ongoing pandemic-induced backlogs for certain health services, and higher than expected inflation. However, many countries' health systems are now also operating under more stringent budgetary constraints, linked to sluggish economic growth and competing pressures for public resources.
- Unless there is a major policy shift, this dual challenge of health spending pressures and resource constraints is only going to intensify. This reflects rising incomes and ageing populations increasing the demand for healthcare, potential constraints to productivity growth given the labour-intensive nature of the health sector, and new technologies that expand the boundaries of what illnesses can be treated.
    - Projections show that over the next two decades, growth in health spending from public sources is likely to outstrip both the growth in the economy and in government revenues, across OECD countries.
    - Without significant policy change, an increase of 2.4 percentage points to the health-to-GDP ratio is projected, as compared to pre-pandemic levels. That is, total health expenditure is projected to reach 11.2% in 2040, on average across OECD countries (up from 8.8% of GDP in 2018).
- At the same time, the pandemic highlighted the need for smart spending to strengthen health system resilience, notably to protect underlying population health, fortify the foundations of health systems through a digital transformation and investment in core medical equipment, and bolster health professionals working on the frontline.
    - Previous analysis estimated that on average OECD countries need to spend an additional 1.4% of GDP relative to pre-pandemic levels to be better prepared for future shocks (ranging from 0.6% to 2.5% across countries), though such spending is expected to produce some cost-savings in future years.
    - Combining this additional spend on strengthening resilience with the projections of health spending described above, health expenditure is, without other major policy changes, projected to result in a 3.0 percentage point increase by 2040 compared to pre-pandemic levels, to stand at 11.8% of GDP in 2040, on average across OECD countries.
- Urgent action is therefore needed to finance more resilient health systems whilst ensuring the fiscal sustainability of health systems. Historically, OECD countries have relied on **four broad policy options.** These options are non-exclusive but constrained to differing extents by the economic climate, especially in the more immediate term.
- **Option 1: increase overall government spending and allocate part of these additional funds to health.** This requires an increase in government revenues or additional debt financing. OECD surveys on citizen social programme preferences consistently show that health is the area where citizens are most willing to increase government spending, with the latest of these OECD surveys showing that 74% of respondents supported greater spending when primed with a general reminder on the costs. However, despite this support, large increases in overall government spending will be hard for many countries, due to high levels of government debt and associated higher costs of borrowing, as well as the challenge of trying to raise taxes during a cost-of-living crisis.

- **Option 2: increase the allocation to health within existing government budgets.** Even though citizens rate health as a high priority, the relative priority given to health in government budgets has only seen a modest increase over time: health spending accounted for 15% of total government expenditure on average in 2021, an increase of 1 percentage point compared to 2011, despite higher spending during the pandemic. Today, health is increasingly competing with other government spending priorities, notably to tackle the cost-of-living crisis, fund a green transformation, and, for some countries, increased defence spending. Still, in countries with comparatively low budget allocations to health, health authorities could use this as political leverage to push for an increased budget share.
- **Option 3: reassess the boundaries between public and private spending.** Without additional public resources available for health, more healthcare spending will by default shift to the private sector. In 2022, the share of spending by governments or compulsory health insurance across OECD countries was already at 76%. However, cuts to benefit packages or increases in user charges risk exacerbating health inequities. The ratio of private to public spending has remained relatively constant over the last two decades, on average across OECD countries. Nevertheless, a debate on longer-term directions on the public-private boundary needs to be had, in terms of what are the best buys for limited public budgets, and whether changes could be made to user charges without impeding access.
- **Option 4: find efficiency gains.** Given the limits of the three options above, increasing value-for-money of health services must be even more strongly emphasised. Achieving bold efficiency gains by cutting ineffective and wasteful spending, while also reaping the benefits of technology and the digital transformation of health systems, including Artificial Intelligence (AI), is imperative. Otherwise, expectations on the magnitude of such gains needs to be realistic. In particular:
  - Cost control policies are likely to produce only modest cost savings. Applied to overall health expenditure, these savings are equivalent to 0.1 percentage point of GDP.
  - Policies that improve healthy ageing are expected to provide somewhat larger savings, equivalent to 0.4 percentage points of GDP. While welcome, these are not enough in themselves to fundamentally alter the upward trajectory of health spending.
  - More ambitious and transformative policy changes are therefore needed to rein in health spending growth whilst still strengthening resilience and maintaining high quality, accessible care for all. If countries are successful in eliminating half of the ineffective and wasteful spending identified in earlier OECD analysis, projections point to a far more modest increase in total health expenditure, to an average of 10.6% of GDP in 2040 (a saving equivalent to 1.2 percentage points of GDP).
- In this challenging context, good budgeting practices are critical to maximise the efficiency of current spending and as an enabler of more ambitious policy changes in the medium to longer-term. Good budgeting practices across the budget cycle facilitate better decisions on whether, when and by how much public funding for health can increase, as well as identifying efficiency gains and where priorities can be shifted.

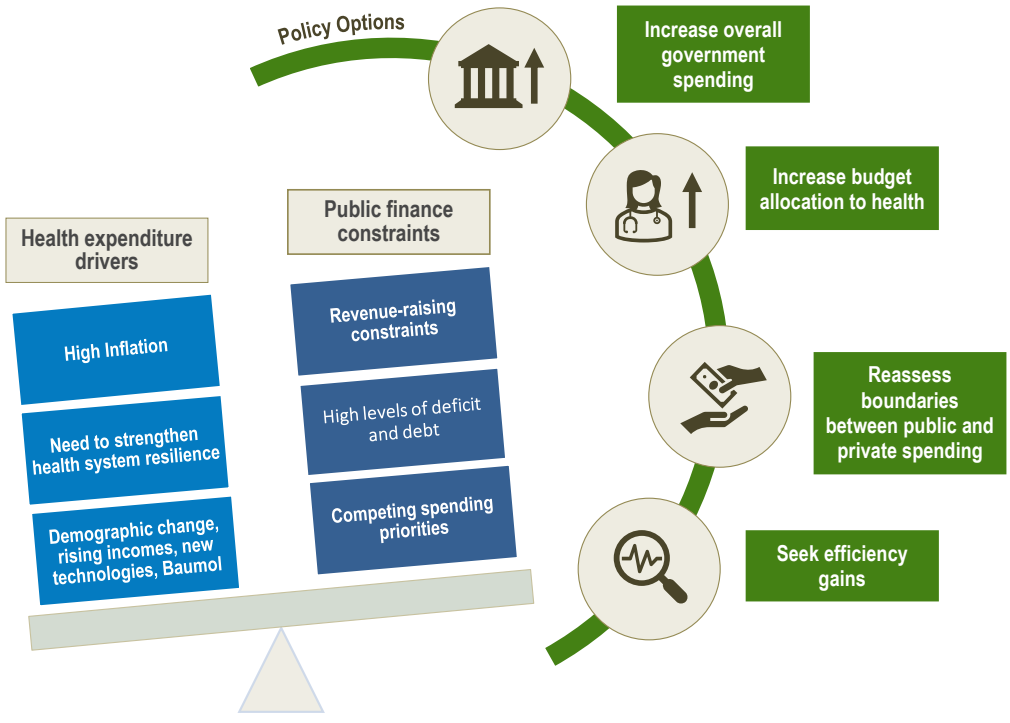
1.1. Introduction

Improving the quality and accessibility of healthcare for all while respecting public finance constraints is a difficult balancing act. Raising sufficient public funds for health to continue to meet ever-growing needs is challenging enough, given the inherent cost pressures. On top of this, the pandemic made it clear that additional spending is needed to strengthen the resilience of health systems to future crises (OECD, 2023[1]). Yet, at the same time, many OECD governments are operating in a particularly constrained fiscal environment. Higher and less predictable inflation, coupled with an uncertain economic outlook, adversely impacts government budgets with knock-on effects to the health sector.

Within this context, policy makers need to clearly lay out the options for meeting the growing price tag of sustainable and resilient health systems, with serious conversations needed about the willingness to pay for health by government and society at large. The pressing policy question is how to find a fiscally sustainable path to fund needed increases in health spending, as illustrated in Figure 1.1.

Funding more resilient health systems requires finance and health authorities[1] to find common solutions that combine raising additional funds with efforts to free up current resources by reducing wasteful spending in health systems. Such solutions require forward-looking, multi-year commitments. This is not straightforward, but the rewards are immense. Strengthening health system resilience protects economies from destabilising health shocks, as well as protecting people from ill health and premature death.

Figure 1.1. The challenge of raising sufficient funds for health within public finance constraints



The remainder of this chapter is structured as follows. The next section assesses the health spending pressures and public finance constraints faced by OECD countries today and in the coming decades. Section 1.3 explores fiscally sustainable policy levers for financing more resilient health systems. Section 1.4 summarises the role of good budgeting practices in improving public resource allocation decisions and in increasing efficiency of public health spending. Section 1.5 concludes. Box 1.1 provides definitions on the main technical terms used in this chapter.

Box 1.1. Fiscal sustainability, efficiency, resilience and related terms – definitions and scope

Fiscal sustainability: the ability of a government to maintain public finances at a credible and serviceable position over the long term. Fiscal sustainability implies governments can maintain policies and expenditures into the future, without major adjustments and excessive debt burdens for future generations (OECD, 2015[2]). Fiscal sustainability is not about health objectives per se. Rather, it is about ensuring public spending on health respects public finance constraints (whilst seeking to realise health objectives).

Financial sustainability: the ability of an organisation to have sufficient revenues to cover financial obligations in the long term.[1] See Gleißner, Günther and Walkshäusl (2022[3]) for an in-depth discussion of the term. Applying this term to the health sector, it can refer to private as well as public organisations engaged in financial transactions in healthcare. This includes households (a household's income and assets need to be sufficient to cover out-of-pocket health expenses), private purchasers such as health insurance firms (a firm's insurance premiums need to be sufficient to cover its reimbursement obligations), private health providers (revenues need to be sufficient to cover its costs), as well as government.

Public expenditure on health: spending by governments directly and/or by social health insurance, consistent with System of Health Accounts definitions of health financing schemes (OECD/Eurostat/WHO, 2017[4]).

Efficiency: obtaining the best possible outputs from available inputs. For health, this can involve reallocating resources within the health system (allocative efficiency) or, less disruptively, obtaining a given result at the lowest possible cost (productive efficiency) (OECD, 2017[5]; OECD, 2010[6]).

Wasteful spending: services and processes that are harmful or do not deliver benefits; and costs that could be avoided by substituting cheaper alternatives with identical or better benefits. It falls within the broader concept of efficiency, corresponding to the notion of 'productive efficiency' above (OECD, 2017[5]).

Cost containment policies: efforts to contain the growth of expenditures. Such policies are not necessarily efficient, notably when cost containment policies simply reduce outputs. For example, blanket cuts to public budgets for health will contain costs (at least in the short run), but at the expense of worse access and quality of care (OECD, 2015[2]).

Health system performance: the ability of a health system to achieve health-related objectives. Notwithstanding differences in health system performance assessment approaches, health-related objectives typically include the intermediate objectives of maximising the access to and quality of healthcare, with people's health outcomes as the final goal (OECD, 2024[7]).

Resilience: the ability of systems to prepare for shocks, absorb disruptions while maintaining performance, recover quickly, and adapt by learning lessons to improve and manage future risks (OECD, 2023[1]). In terms of scope, this concept of resilience includes but goes beyond preparedness.

1. Distinct from the term 'sustainable finance', which is increasingly used to refer to the incorporation of environmental considerations when making finance decisions (OECD, 2020[8]).

1.2. Countries face upward pressures on health spending, now and in the future

The pandemic demonstrated the need for additional spending to strengthen health system resilience…

Governments across the OECD allocated unprecedented financial resources to the health sector to combat COVID-19. Average health spending growth was 5% in real terms in 2020, and accelerated to 8.5% in 2021, as significant funds were made available to track the virus, increase system capacity, develop treatment options, and eventually roll out vaccines to the population. At its peak in 2021, spending linked directly to COVID-19 consumed around 9% of total public spending on health, on average. For some OECD countries the extra spending was an emergency short-term fix for chronic underinvestment in health workforce and capital as a side effect of government austerity and cost-containment policies in the health sector (Partnership for Health System Sustainability and Resilience, 2023[9]).

Much of this additional spending was in the form of emergency funding. Contingency funds were drawn upon or supplementary budgets were advanced. Accelerated contracting frameworks were put in place to speed up disbursement of needed funds. This helped ensure a rapid acquisition of supplies. However, shortcutting the usual budgetary and procurement processes introduces a greater risk of inefficiencies, such as unnecessary purchases or paying elevated prices (OECD, 2020[10]).

Indeed, internal evaluation and audit by some countries point to sub-optimal spending, especially early in the crisis. In Ireland, for example, an official review found that not following traditional procurement procedures led to a reported loss of more than EUR 370 million on personal protective equipment (PPE) (Health Service Executive, 2020[11]). In the United Kingdom, over 40% (GBP 22 billion) of the government's additional health spending commitments for COVID-19 in 2020 were allocated to the NHS Test and Trace Programme. However, a parliamentary report concluded that despite the significant resources spent, it appeared to have made little measurable difference to stem the spread of the virus (UK Parliament, 2021[12]). In Germany, the Federal Court of Audit stated that payments to hospitals to compensate for postponed activity in 2020 were not sufficiently targeted, leading to a substantial overcompensation of reduced hospital income (Bundesrechnungshof, 2021[13]).

These experiences during the pandemic demonstrated that short-term firefighting approaches, while necessary, were often inefficient, therefore emphasising the importance of a longer-term vision to strengthen health system resilience built on smarter spending. A recent major publication by the OECD, identified the pressure points in existing health systems, and estimated the additional funds needed to strengthen health system resilience (OECD, 2023[1]). Such additional spending was calculated to be equivalent to around 1.4%[2] of pre-pandemic GDP, on average, ranging from 0.6% to 2.5% across OECD countries, depending on existing country-specific provisions and spending levels (Figure 1.2).

Three broad priority areas to strengthen health system resilience were highlighted. Bolstering health professionals working on the frontline, accounting for half of this overall investment, at around 0.7% of GDP. Additional spending on preventive care could be expected to cost about 0.3% of GDP, on average. Foundational investments in core equipment and a digital transformation of health systems would cost a further 0.4% of GDP, on average.

Figure 1.2. How much would it cost to strengthen health system resilience?

Source: Morgan, D. and C. James (2023[14]), "Investing in Health System Resilience", https://doi.org/10.1787/648e8704-en.

These costs, set in the context of the pre-pandemic situation, would have amounted to around 9% of the total that OECD countries spent on health in 2019, or the equivalent of USD 460 per capita. To put this in context, this is similar to what OECD governments spent on prescription drugs in 2019. One might point to the 0.9 percentage point jump in the health spending to GDP ratio between 2019 and 2021 as a significant step towards this target. However, this increase was driven just as much by the significant fall in GDP and the emergency funding in response to the pandemic, rather than any long-term sustained and targeted spending plan. Indeed, 2022 has seen a subsequent drop in the health-to-GDP ratio in many OECD countries, and if direct COVID-19 spending is stripped out of the total, then average per capita health spending in 2022 is likely to have fallen below pre-pandemic trends (see Chapter 2).

…but finding sufficient additional funds for health in the current economic context is challenging

Despite the large sums spent on combatting COVID-19, many OECD countries continue to face significant health spending pressures now and in the short term. Part of these spending pressures reflect ongoing pandemic-induced backlogs for certain health services. This includes the impact of delayed care and treatment leading to the need for more costly care. For example, COVID-19 disrupted cancer prevention efforts and routine cancer care (Fujisawa, 2022[15]). Further, waiting times for elective surgery remain higher than they were pre-pandemic, across all countries with available data (OECD, 2023[16]).

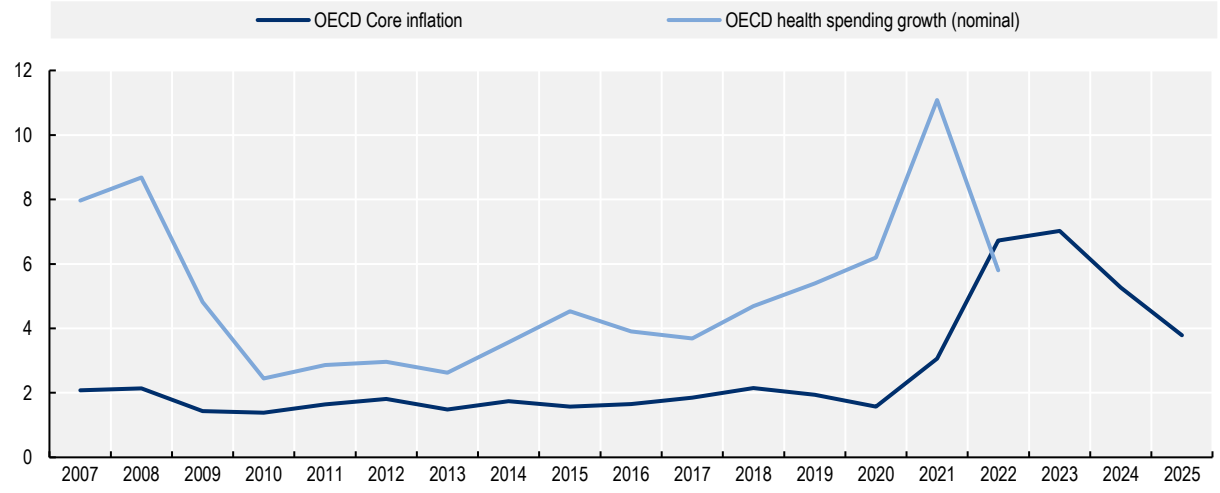
But even as backlogs start to clear, the current political and economic environment continues to have major consequences for the health sector (Spiegel, Kovtoniuk and Lewtak, 2023[17]). Competing priorities, such as the cost-of-living crisis, have squeezed health budgets, leading to a downturn in real health spending growth in many countries.

While inflation may have fallen from its 2022 peak, it has remained at higher-than-expected levels. This increases health provider input costs (e.g. for energy and food) with a knock-on effect of higher labour costs on top of the existing challenge to retain and attract health professionals. The Austrian Medical Chamber, for example, estimated that energy costs in outpatient practices increased by 500% in 2022 compared to the previous year (OTS, 2022[18]). The hospital federation in France predicted additional inflation-related costs of EUR 1 000 million for all public health providers (of which EUR 750 million for hospitals), with a further 600-650 million for long-term care facilities (Les Echos, 2022[19]). In Germany, the

hospital federation claimed additional expenses due to inflation of energy prices and other inputs of around EUR 15 billion for 2022 and 2023 (Deutsche Krankenhausgesellschaft, 2022[20]).

Yet finding the funds needed to maintain historical trends in health spending growth, let alone to strengthen health system resilience, is challenging. Examining health expenditure data shows that for average health spending growth to outpace OECD core 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 around 2 percentage points – would have implied an average nominal growth rate in health spending across OECD countries in 2022 at around 8.5%, followed by a similar increase in 2023 and only dropping in 2024 and 2025, as projected inflation is set to stay well above pre-pandemic levels (Figure 1.3). After the exceptional growth in 2021, average nominal health spending growth in 2022 actually dropped below core inflation, resulting in an average real term decrease of 1.5%. While health budgets may be set to return to growth in nominal terms, they risk resulting in a cut in real term spending in the face of higher-than-expected inflation, at least in the short term (see Chapter 2).

Figure 1.3. Will health spending continue to outpace inflation in the short term?



Note: Projected core inflation for 2023 and 2024. Average OECD nominal health spending growth excludes Türkiye.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en; OECD Economic Outlook No. 114, https://doi.org/10.1787/62ec50a4-en.

In the coming decades, OECD countries face a dual challenge of upward pressures on health spending and constraints on government revenues

Looking further ahead, OECD projections show that over the next two decades, growth in health spending from public sources is likely to be twice the average growth in government revenues (in a 'base' scenario). This reflects underlying cost pressures such as rising incomes, population ageing, potential productivity constraints and technology. It also reflects constraints on the revenues that governments can expect to raise (these projection results are discussed in detail in Chapter 3).

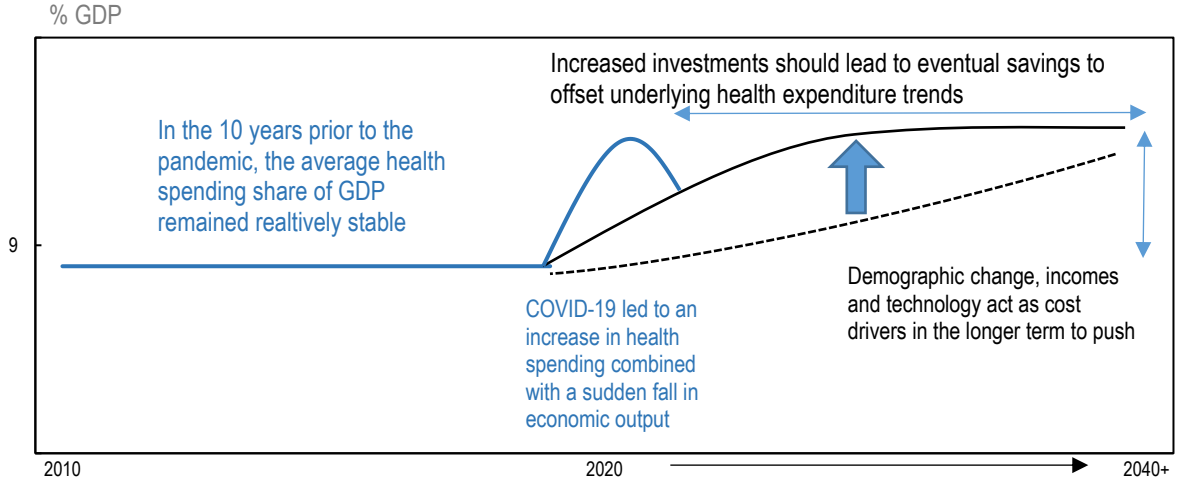
Growth in health spending is also expected to outstrip economic growth over this period, leading to a growing share of the economy allocated to health. Extending this base scenario to overall health spending could see an average 2.4 percentage points added to the pre-pandemic health-to-GDP ratio by 2040. That is, total health expenditure is projected to reach 11.2% in 2040, on average across OECD countries (up from 8.8% of GDP in 2018).

This base scenario does not include the additional spending needed to strengthen health system resilience. A long-term trajectory to include this additional investment would increase overall spending on

health in the medium term but could be expected to lead to a plateauing in the health spending to GDP ratio at some point down the line. This reflects that such spending should lead to eventual returns on investment, as illustrated in Figure 1.4. For example, OECD microsimulations estimate the effective implementation of cost-effective interventions to combat obesity and related unhealthy lifestyles. Overall, for each USD PPP invested in one of the policy packages, a return of USD PPP 1.3 to USD PPP 4.6 can be expected in the form of economic benefits (OECD, 2019[21]). Stronger and more resilient systems will also save many lives and help build stronger, more resilient economies.

Combining this additional spend on strengthening resilience to projections of health spending, total health spending is, without any other major policy changes, projected to increase by 3.0 percentage points compared to pre-pandemic levels, to reach 11.8% of GDP in 2040, on average across OECD countries.

Figure 1.4. Strengthening health system resilience – cost implications over time



Note: The blue line represents the 2010-19 average health spending to GDP ratio across OECD countries followed by the short-term impact of COVID-19. The black dashed line represents the projected increase due to underlying cost pressures such as demographic change. The solid black line indicates the trajectory resulting from increased investment in health system resilience.
Source: OECD Secretariat calculations, adapted from Morgan, D. and C. James (2022[22]), "Investing in health systems to protect society and boost the economy: Priority investments and order-of-magnitude cost estimates", Paris, https://doi.org/10.1787/d0aa9188-en.

1.3. Countries have four broad policy levers to finance more resilient health systems

Considering both the immediate pressures on the health budget (linked to high inflation and competing pressures on government budgets), and longer-term drivers of health spending (linked to population ageing, rising incomes, potential productivity constraints and technological change, and the need to spend more to strengthen health system resilience), questions about the fiscal sustainability of health systems are likely to become ever more challenging to address.

OECD countries have four broad (non-exclusive) policy levers to finance more resilient health systems:

1. Increase government spending and allocate part of these additional funds to health
2. Increase the allocation to health within existing government budgets
3. Reassess the boundaries between public and private spending
4. Find efficiency gains

The extent to which each of these options is feasible will depend on the economic context and relative political priorities, as discussed further below.

Policy lever 1: Increase government spending and allocate part of these additional funds to health

Dependent on the state of public finance, more feasible in countries with low tax burdens and debt levels

This option requires either an increase in government revenues (mostly taxes) or additional debt financing. Yet many OECD countries have high levels of government debt, with associated higher costs of borrowing, which are important public finance constraints. Furthermore, trying to raise taxes during a cost-of-living crisis is politically challenging and unpalatable, at least in the short term. There may also be more scope to increase taxes that tend to reduce inequalities or target environmental improvement.

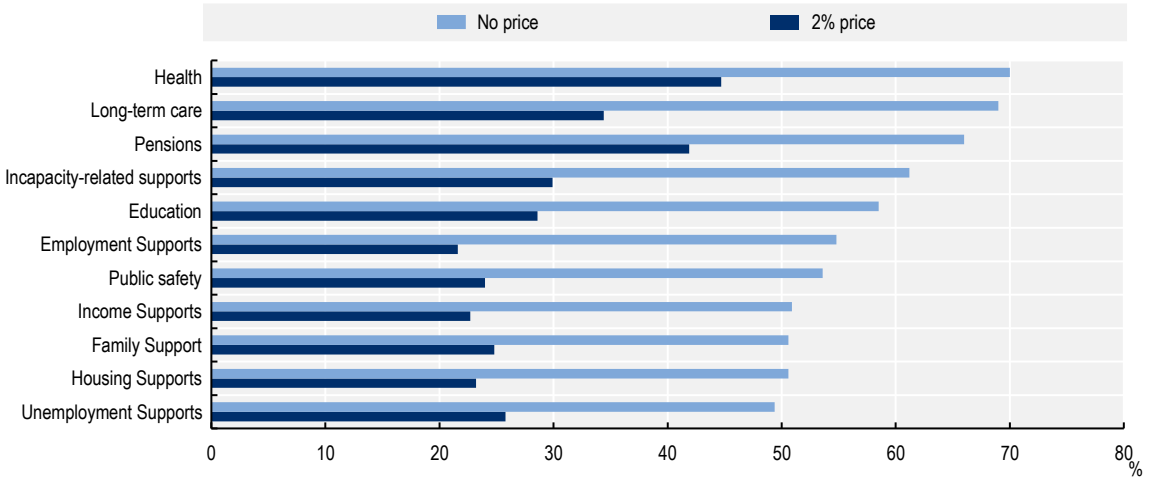
Countries could also raise more health-specific taxes, notably through increased social insurance contributions, notwithstanding concerns about reducing labour competitiveness. A key issue here is to assess whether the social insurance contribution base can be broadened, for example to cover pensions or personal capital income (if these are not yet included). Health taxes are also an option, and although they have proven health benefits in reducing consumption of harmful products, their revenue-raising potential here is far more limited due to a smaller tax base.

The OECD Risks That Matter Survey provides an insight on whether people are willing to support governments spending more on health and other social programmes, even when this means an increase in their tax burden or social contributions (OECD, 2023[23]). The latest survey results for 2022 show that health continues to be the area where respondents are most willing to increase government spending. On average, 74% of respondents said they supported greater spending on public health services – when primed with a general reminder of the costs of social programmes. With a specific price tag of an additional 2% of income in taxes and social contributions, support for more spending dropped to 43% on average, though this was still the highest level of support across all social programmes (Figure 1.5).

These survey results for 2022 are very close to the 2020 results (where the respective figures were 70% and 45% of respondents supporting more public spending on health). They demonstrate the high priority citizens continue to give to governments spending more on health, even during the current difficult economic climate.

Trends show that since the Global Financial Crisis and up to the pandemic, government spending growth has, on average, been slightly lower than GDP growth. However, the pandemic and subsequent economic downturn has led to expanded government deficits in many OECD countries. Across the OECD, while countries' borrowing needs have fallen since the peak levels during the pandemic, borrowing and debt levels remain much higher than pre-pandemic levels. In 2022, borrowing needs were 43% above the 2011-19 average, with total outstanding debt 10 percentage points of GDP above the average over that same period. Almost half of this debt will need to be repaid or refinanced in the next three years (OECD, 2023[24]). Higher levels of inflation have led to central banks increasing interest rates, further increasing the cost of borrowing for governments.

Figure 1.5. Willingness to spend more on health services as compared with other social programmes



Note: Results based on nationally representative surveys conducted in 27 countries in 2022. Results show unweighted cross-country average. Respondents were asked if they would like to see less, the same, or more government spending in these different social policy areas – first with a general reminder of the costs of social programmes (light blue bar), then with a specific price tag of an additional 2% of income in taxes and social contributions (dark blue bar).
Source: OECD Secretariat, using the OECD Risks That Matter Survey (2022), www.oecd.org/social/risks-that-matter.htm.

This difficult public finance context will constrain how much governments can increase government spending (particularly through deficit-financing), and consequently how much more public funds will be available for health and other sectors. Indeed, the current state of public finance in many OECD countries points to a sizeable share of any increase in government revenues needing to be used to reduce fiscal deficits and manage government debt. Whilst both the latest OECD and IMF outlooks for the world economy point to a slight improvement in GDP growth, as inflation moderates and real incomes strengthen, growth rates are uncertain and still projected to be below trend in the coming years (OECD, 2023[25]; International Monetary Fund, 2023[26]). This has knock-on effects to public budgets, given tax revenues are closely tied to economic growth.

Large increases in overall government spending will, therefore, be difficult to realise, despite the willingness of citizens for governments to spend more on health.

Policy lever 2: Increase allocation to health within existing government budgets

Dependent on political priorities, but more viable in countries with relatively low allocations to health

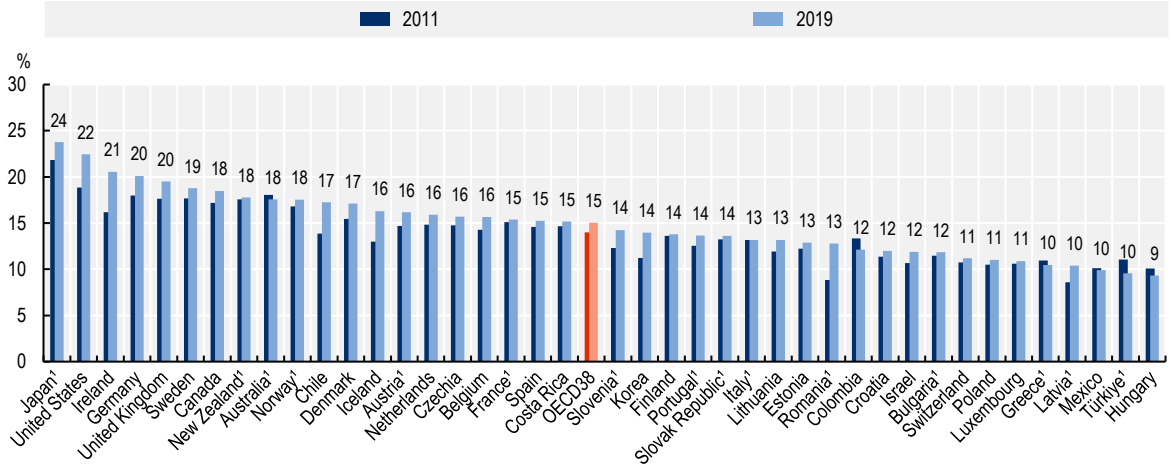
In contrast to the first policy lever, this option has a more neutral impact on the overall sustainability of public finance. Therefore, the extent to which this policy lever is viable depends more on political priorities than on fiscal sustainability concerns. Although the political landscape clearly is country-specific, in many OECD countries health is competing with some common new spending priorities. These include the rising direct costs of energy; government support for households and enterprises to (partially) protect them from rising costs; moves to invest more into the green transformation; and for some countries, a pressure for higher defence spending.

Historical trends provide some further insights. They show that the relative priority given to health in government budgets has, on average, seen a modest increase in 1 percentage point to 15% of total

government spending between 2011 and 2019. Even in 2020 and 2021, despite much higher public spending on health due to COVID-19 the share allocated to health did not increase significantly, due to increases in other government spending (see Chapter 2). Note that data include spending by social health insurance funds. Expecting large shifts in the relative priority afforded to health in government budgets therefore seems unlikely.

Nevertheless, in countries with comparatively low budgetary allocations to health, health authorities could use this as political leverage to push for increased budget allocations. This is most discernible for countries on the right-hand side of Figure 1.6 – Greece, Latvia, Mexico, Türkiye and Hungary – where health expenditure comprised around 10% or less of total government expenditure in 2019, an allocation substantially lower than the OECD average. Furthermore, Greece, Türkiye and Hungary also show some reduction in the relative allocation to health over the last decade.

Figure 1.6. Pre-pandemic trends in health expenditure from public sources as a share of total government expenditure



1. Public funding is calculated using spending by government schemes and social health insurance.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Looking ahead, whether countries are willing and able to increase budgets for health – either through increasing overall government revenues and allocating large portions of this to health and/or the share of public budgets allocated to health – and if so, to what extent, is ultimately a political choice. This political choice will be shaped by societal preferences and constrained by economic realities, and how rapidly each of these can change.

Policy lever 3: Reassess the boundaries between public and private spending

While this option can free up government resources, it also entails major risks

Over the last two decades, the ratio of private to public spending has remained relatively constant, on average across OECD countries. However, this average trend hides some different patterns – countries that have in recent decades moved to expand or deepen health coverage have increased public spending on health and reduced private out-of-pocket payments over time.

- In Chile, for example, public spending on health increased from 3.5% of GDP in 2010 to 5.7% in 2019. This largely reflected the AUGE reform, designed to increase health services covered by public funds (Aguilera et al., 2015[27]).

- Similar increases in public spending were observed in Korea, where the benefit package was extended and deepened for services related to cancer, cardiovascular and rare diseases (Lee, Oh and Kawachi, 2022[28]).
- Costa Rica, Mexico and Türkiye also saw big shifts from private out-of-pocket payments to government schemes or social health insurance. All these country examples had in common a political drive to deepen health coverage.
- In contrast, countries with well-established universal health systems have seen the relative share of private spending go up since 2011, most notably in Greece, Italy, Spain and Portugal.

While a shift to greater private spending could reduce fiscal pressures, it is unlikely to contain overall health spending growth. Further, such a shift risks reducing access to and the quality of publicly funded healthcare, and exacerbating health inequities, with knock-on effects to the wider economy. Blanket increases in cost-sharing will impede access and increase the risk of financial hardship, particularly for the less well off (WHO Regional Office for Europe, 2023[29]). Increases in certain co-payments that include exemptions could be considered. However, these are unlikely to generate substantive revenues or cost-savings.

Alternatively, more spending could be channelled through voluntary health insurance. Although it does not carry the same financial risks as out-of-pocket payments, voluntary health insurance is often not offered at an affordable price for lower-income families and for people with underlying health conditions (Sagan and Thomson, 2016[30]). It therefore risks exacerbating inequities within health systems.

Nevertheless, a debate on longer-term directions on the public-private boundary needs to be had, particularly in terms of what are the best buys for limited public budgets. Better use of Health Technology Assessments (HTAs) will help ascertain if existing and new services, medicines, and medical equipment offer good value-for-money at current prices (Auraaen et al., 2016[31]). Consequently, HTAs can be used as the basis to exclude cost-ineffective interventions from public financing. Moreover, the public and private sector will need to collaborate to overcome health system challenges, such as eradicating diseases through health research programmes, modelled on the COVID-19 vaccine effort (World Economic Forum, 2023[32]).

Policy lever 4: Find greater efficiency gains

Can be a politically appealing solution, but requires bold reforms to deliver substantial cost-savings

Much of the OECD's work on health is geared towards analysing how countries can enhance value-for-money within their health systems. For example, the OECD report on "Tackling Wasteful Spending on Health" showed that there are areas of spending that do not deliver better outcomes, with up to one fifth of spending ineffective or wasteful (OECD, 2017[5]).

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 (such as nurses and pharmacists) can produce cost savings with no adverse effects on quality of care (OECD, 2020[33]). For pharmaceuticals, price, market entry and prescribing regulations have all helped increase penetration of generics in the market, thereby saving costs. Digitalisation can support new care delivery models, notably in the form of telemedicine and robotic tools for some limited procedures, with better use of health data improving the management of critical care resources (OECD, 2023[34]). Reducing harmful clinical decision-making should also be a priority, with policies to reduce medical errors, the inappropriate use of antimicrobials, and unwarranted variation in medical practice all having a large impact on improving the effectiveness of health spending. Finally, from a tax policy perspective, countries with

subsidies for additional voluntary private health insurance could consider removing or reducing these subsidies and use these to help finance the health budget.

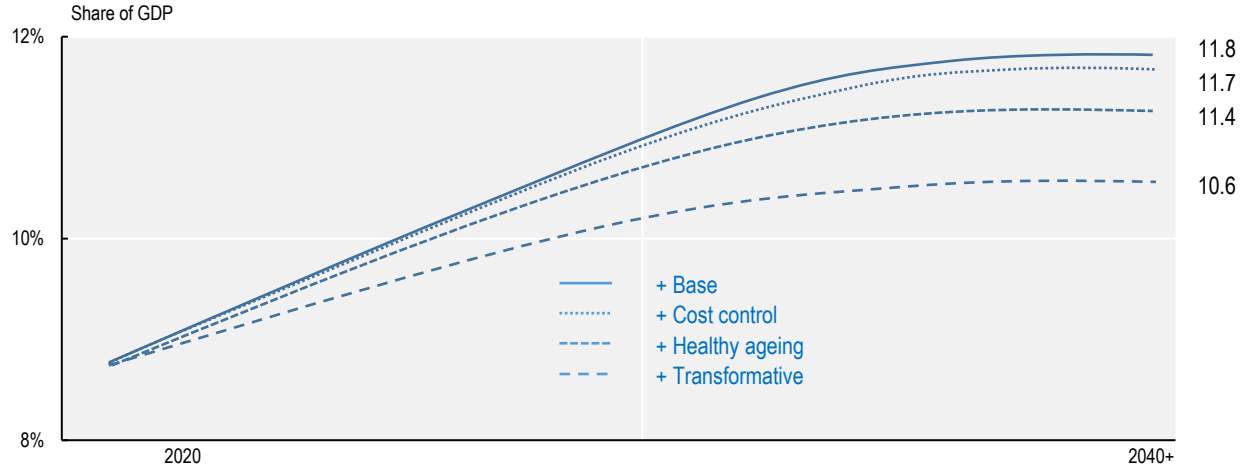
Such bold efforts to cut waste are required, since a conservative approach to improve efficiencies in the health sector is unlikely to yield sufficient savings. For example, when the latest OECD projections examine health spending growth under a 'cost control' scenario as compared to the 'base' scenario, only very modest savings are generated. This cost control scenario reflects effective policies to increase productivity and rein in some healthcare demand. Applying this to total health expenditure, on average these savings shave only 0.1 percentage point off the health-to-GDP ratio by 2040 of GDP. With additional spending on strengthening health system resilience, total health expenditure is therefore still projected to increase to 11.7% of GDP on average (as opposed to 11.8% of GDP) in 2040.

Policies that improve healthy ageing are expected to provide somewhat larger savings. Applied to total health expenditure, they are expected to cut just over 0.4 percentage points from the projected 2040 share of GDP. Such policies include actions to promote healthier lifestyles both within and beyond healthcare. For example, cost-effective alcohol prevention policies include taxation, regulations on opening hours, advertising and drink-driving, alongside primary care interventions within the health sector (OECD, 2021[35]). Many of these public health measures are included in the pinpointed smart investments to increase resilience, therefore these cost savings are expected to be realised as part of the roll-out of the additional spending. While welcome, these are not enough in themselves to fundamentally alter the upward trajectory of health spending. After additional spending on strengthening resilience, total health expenditure is projected to increase to 11.4% of GDP on average in 2040.

More ambitious and transformative policy changes are therefore needed to rein in health spending growth whilst still strengthening resilience and maintaining high quality, accessible care for all. If countries are successful in eliminating half of the ineffective and wasteful spending identified in earlier OECD analysis, then significantly larger cost savings can be realised – equivalent to 1.2 percentage points of GDP. This leads to a far more modest increase in total health expenditure, to an average of 10.6% of GDP in 2040.

Figure 1.7 shows the effect of these different scenarios on the trajectory of health spending, with Box 1.2 providing further details on the approach used to produce these results.

Figure 1.7. Financing more spending on resilience: the impact of different 'efficiency' scenarios



Note: Resilience spending is assumed to reach a maximum level by 2035 after which the annual ongoing spending on resilience is offset by a reduction in the underlying spending under each scenario, such that the resulting health-to-GDP ratio remains constant.
Source: Authors' calculations.

Box 1.2. Combining resilience spending and health spending projection scenarios

Projected health spending to 2040 is derived from the average projection of public spending based on 33 OECD countries (as detailed in Chapter 3) and expanded to cover total health spending (public and private) for all 38 OECD countries. That is, the private share of health spending is assumed to grow at the same rate as public spending for OECD countries as a whole over the period 2018-40. This assumption is based on a review of historical changes in which the overall public-private share of spending did not significantly change between 2003 and 2018.

The average projected annual growth rates in health spending (under each scenario) and GDP are assumed to be constant over the projection period up to 2040.

The increase in health spending is combined with an incremental linear increase in the additional investment expenditure to reach the maximum level equivalent to 1.25% of GDP by 2035, noting that the other 0.13% of GDP is attributed to capital spending and thus separate from recurrent spending.

From 2035 onwards, the additional spending on resilience is assumed to offset the underlying increase in health spending (under each scenario) such that the health-to-GDP ratio remains constant thereafter.

The 'cost control' scenario assumes an increase of 20% in productivity (compared to a 10% increase in productivity in the 'base' scenario) and a decrease of 10% in the income elasticity of health spending over the projection period. The 'healthy ageing' scenario assumes that all gains in life expectancy over time are spent in good health rather than in ill-health. Further details on these scenarios can be found in Chapter 3.

The final 'transformative' scenario assumes that countries are successful in eliminating half of the ineffective and wasteful spending identified in earlier OECD analysis in an incremental way, such that this reaches a reduction of 10% of total health spending by 2035 and remains at this level thereafter.

It is important to note, though, that even if some or all of these efficiency gains are realised, country experience indicates there is no guarantee that such gains will automatically feed back into additional budgetary space for health. The risk from a health system perspective is that efficiency gains are instead used to fund non-health government spending, thereby resulting in budget cuts for health (Barroy et al., 2021[36]). To avoid such an outcome, good budgeting practices for health – as discussed further in the following section – are essential, ensuring there are clear processes and an agreement between health and finance authorities on how any cost-savings are used.

These four policy levers are not mutually exclusive

The first two policy levers outlined above – increasing overall government spending and/or existing budgetary allocations to health – raise additional public funds for health. While the last two policy levers – reassessing public/private boundaries and seeking efficiency gains – can free up resources from existing health spending.

While each of these policy levers entail different economic and political risks, all four policy levers can be considered together. That is, they are not mutually exclusive. Rather, it is more about the extent to which each of these options are pursued to ensure sufficient resources for health, rather than being a binary decision-making process. Indeed, in discussions within the OECD Joint Network of Senior Budget and Health Officials, some participants noted how recent agreements on additional funding in priority areas were tied to structural reforms that aimed to find cost-savings. In Canada, for example, the federal government put forward a ten-year funding plan to increase healthcare investment by almost CAD 200 billion. Part of this new federal funding was provided through tailored bilateral agreements to

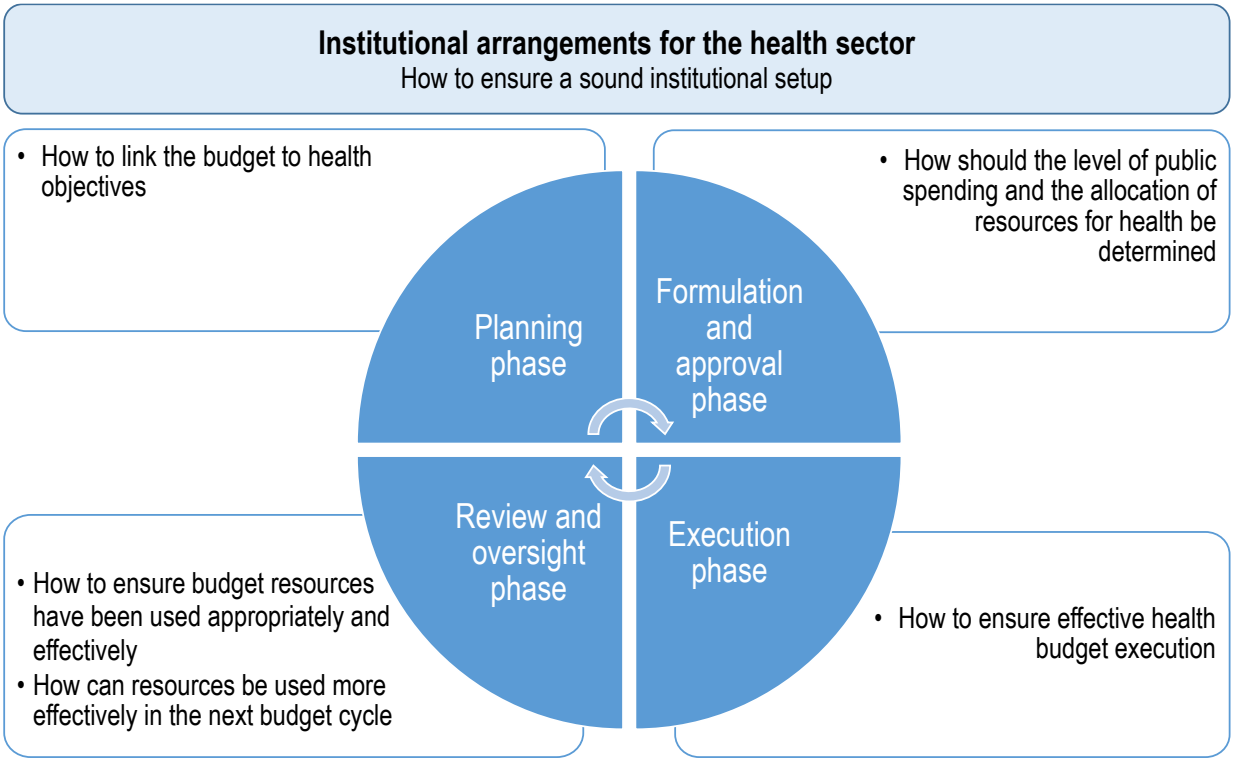
priority areas, which included commitments to efficiency-focused reforms, notably efforts to modernise health data collection and reporting (www.canada.ca/en/health-canada/services/priorities.html).

Ultimately, the choices made by policy makers will be influenced by the political and economic feasibility for change in their country, especially in the short to medium term.

1.4. Good budgeting practices facilitate a better dialogue between finance and health authorities on how to finance more resilient health systems

In this challenging context, an effective dialogue between finance and health authorities is critical, so that a fiscally sustainable solution to fund more resilient health systems can be agreed. Such a dialogue takes place within the budget process, from planning and negotiations for setting the upcoming budget, through execution of the budget, and to a review phase that then feeds into the next budget cycle (Figure 1.8). This includes decisions on government transfers to social health insurance funds, in countries where health insurance is the principal purchaser of health services.

Figure 1.8. Good budgeting practices for health throughout the budget cycle



Source: Vammalle, C., C. Penn and C. James (2023[37]), *Applying Good Budgeting Practices to Health*, https://doi.org/10.1787/b280297f-en.

Budgeting is not simply about controlling spending. Rather, good budgeting practices facilitate realising health policy objectives whilst respecting fiscal sustainability – with a focus on maximising the efficiency and effectiveness of spending.

High-level insights and recommendations are summarised below, with Chapter 4 analysing in detail budgeting practices for health in OECD countries, and Chapters 5 and 6 focusing on specific aspects (medium-term financial planning and programme/performance budgeting for health respectively).

An effective budget process improves decisions on whether, when and by how much public funding for health can increase

The pre-budget agreement stages of the budget process are important in reaching agreement on the budget for health. Within a 'planning' phase, the medium- and longer-term spending needs for health are set out. Building on this, in a 'formulation and approval' phase, the overall level of public spending on health for the upcoming budget year is set, and how resources will be allocated across different health policy areas and priorities. Good budgeting practices across these two phases help finance and health authorities decide together on how much to allocate to health. High-level recommendations include to:

- Develop medium-term health expenditure projections that are grounded to the budget process, reflecting baseline needs and the impact of policy decisions
- Develop medium-term revenue projections for health (when relevant), and compare with expenditure projections to assess the extent of any funding gap
- Specify the medium-term priorities for health in a way that is coherent with the budget by estimating their financial impact
- Use medium-term expenditure frameworks for health as a tool to link funding to medium-term priorities
- Ensure consistency with national fiscal constraints when developing estimates of budgets for health
- When evaluating health expenditure needs, distinguish between the baseline (the cost of maintaining current coverage and quality levels) and new policy proposals
- Consider using explicit criteria to facilitate discussion on the overall level of health expenditure

An effective budget process improves how well the health budget is spent

Good budgeting practices across the full budgetary cycle can help countries to realise efficiency gains for health. Pre-budget agreements help ensure allocation decisions reflect current priorities (rather than being solely based on a historical and incremental basis). Then once the health budget has been approved, timely execution and monitoring of health spending and appropriate review mechanisms help ensure funds are spent as planned and contribute to strategic health objectives. High-level good budgeting practices recommendations include to:

- Classify the health budget into programmes that align with strategic priorities of the health sector (avoid pure input-based budgeting). This includes incorporating performance information within or alongside the budget
- Release funds as allocated in the health budget, with a clear disbursement schedule
- Monitor health expenditures during the fiscal year in a timely manner, to allow for the early implementation of correction mechanisms to keep the budget on track
- Produce health accounts to provide a comprehensive and consistent view of health spending over time
- Provide independent fiscal and audit institutions with a mandate to review health expenditures, to promote greater transparency and accountability
- Integrate spending reviews as part of the budget preparation process, rather than on an ad hoc basis, ensuring that results of the review feed into formulation of the next budget

1.5. Conclusions

Finding sufficient resources to fund stronger, more resilient health systems is challenging both in the current economic climate and looking further ahead. In the short term, tight public finances, exacerbated by high inflation and fragile economic growth, limit the scope of governments to increase spending,

including on health. There are also many competing urgent priorities, including protecting vulnerable households from the cost-of-living crisis, and the need to invest more into the green transformation. Longer term, cost pressures from ageing societies and rising incomes and population expectations will continue to exact from public resources which themselves are expected to be subject to shrinking revenues.

This context does not mean that change is impossible. But it does require political leadership that balances the financial constraints with the need for additional funds. To this end, dialogue between health and finance authorities is critical. Finance authorities should set out clearly the fiscal constraints within which they are operating. Health authorities need to demonstrate the wider benefits – of good health and healthcare being a driver of economic growth, and resilient health systems critical to protecting society in the face of future shocks – alongside the intrinsic value of better health. Health authorities also need to reassure finance authorities that any additional funds will be spent effectively, and at the same time demonstrate their commitment to take bold action to cut wasteful spending. The rewards from the transformative power of AI and digital tools across the health sector need to be fully realised.

Health and finance authorities alike must be cognisant of the risks of governments not spending enough on health, including knock-on effects beyond the health sector. How much governments spend on health, though clearly shaped by economic constraints, is ultimately a political choice. But good budgeting practices for health informs the political debate, by showing what is fiscally feasible, where additional funds should be concentrated, and how efficiency gains can be part of the funding solution.

References

Aguilera, I. et al. (2015), *Implementation of the Universal Access with Explicit Guarantees (AUGE) reform*, World Health Organization. [27]

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. [31]

Barroy, H. et al. (2021), "Do efficiency gains really translate into more budget for health? An assessment framework and country applications", *Health Policy and Planning*, Vol. 36/8, pp. 1307-1315, https://doi.org/10.1093/heapol/czab040. [36]

Bundesrechnungshof (2021), *Advisory report on the audit of selected coronavirus-related expenditure items of departmental budget No. 15 and the Health Fund*, https://www.bundesrechnungshof.de/SharedDocs/Downloads/EN/Berichte/health_sector_programmes_volltext.pdf?__blob=publicationFile&v=3. [13]

Deutsche Krankenhausgesellschaft (2022), *Vorschläge zur Energiepreisbremse können die Insolvenzgefahr der Krankenhäuser nicht bremsen*, https://www.dkgev.de/dkg/presse/details/vorschlaege-zur-energiepreisbremse-koennen-die-insolvenzgefahr-der-krankenhaeuser-nicht-bremsen/#:~:text=Vorschl%C3%A4ge%20zur%20Energiepreisbremse%20k%C3%B6nnen%. [20]

Fujisawa, R. (2022), "Impact of the COVID-19 pandemic on cancer care in OECD countries", *OECD Health Working Papers*, No. 141, OECD Publishing, Paris, https://doi.org/10.1787/c74a5899-en. [15]

Gleißner, W., T. Günther and C. Walkshäusl (2022), "Financial sustainability: measurement and empirical evidence", *Journal of Business Economics*, Vol. 92/3, pp. 467-516, https://doi.org/10.1007/s11573-022-01081-0. [3]

Health Service Executive (2020), "Annual Reports and Financial Statements", https://www.hse.ie/eng/services/publications/corporate/hse-annual-report-and-financial-statements-2020.pdf. [11]

International Monetary Fund (2023), *World Economic Outlook*. [26]

Lee, H., J. Oh and I. Kawachi (2022), "Changes In Catastrophic Health Expenditures For Major Diseases After A 2013 Health Insurance Expansion In South Korea", *Health Affairs*, Vol. 41/5, pp. 722-731, https://doi.org/10.1377/hlthaff.2021.01320. [28]

Les Echos (2022), *Les hôpitaux réclament une rallonge pour faire face à l'inflation*. [19]

Morgan, D. and C. James (2023), "Investing in health system resilience", in *Ready for the Next Crisis? Investing in Health System Resilience*, OECD Publishing, Paris, https://doi.org/10.1787/648e8704-en. [14]

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. [22]

OECD (2024), *Rethinking Health System Performance Assessment: A Renewed Framework*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/107182c8-en. [7]

OECD (2023), *OECD Economic Outlook, Volume 2023 Issue 1*, OECD Publishing, Paris, https://doi.org/10.1787/ce188438-en. [25]

OECD (2023), *OECD Health Statistics*, https://doi.org/10.1787/health-data-en. [16]

OECD (2023), *OECD Sovereign Borrowing Outlook 2023*, OECD Publishing, Paris, https://doi.org/10.1787/09b4cfba-en. [24]

OECD (2023), *Ready for the Next Crisis? Investing in Health System Resilience*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/1e53cf80-en. [1]

OECD (2023), "The future of telemedicine after COVID-19", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/d46e9a02-en. [34]

OECD (2023), *The OECD Risks That Matter Survey*, http://www.oecd.org/social/risks-that-matter. [23]

OECD (2021), *Preventing Harmful Alcohol Use*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/6e4b4ffb-en. [35]

OECD (2020), *OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance*, OECD Publishing, Paris, https://doi.org/10.1787/eb61fd29-en. [8]

OECD (2020), "Public procurement and infrastructure governance: Initial policy responses to the coronavirus (Covid-19) crisis", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/c0ab0a96-en. [10]

OECD (2020), *Realising the Potential of Primary Health Care*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/a92adee4-en. [33]

OECD (2019), *The Heavy Burden of Obesity: The Economics of Prevention*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/67450d67-en. [21]

OECD (2017), *Tackling Wasteful Spending on Health*, OECD Publishing, Paris, https://doi.org/10.1787/9789264266414-en. [5]

OECD (2015), *Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives*, OECD Publishing, Paris, https://doi.org/10.1787/9789264233386-en. [2]

OECD (2010), "Health Care Systems: Efficiency and Institutions", *OECD Economics Department Working Papers*, Vol. 769, https://doi.org/10.1787/5kmfp51f5f9t-en. [6]

OECD/Eurostat/WHO (2017), *A System of Health Accounts 2011: Revised edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264270985-en. [4]

OTS (2022), *Österreichische Ärztekammer: Zusätzliche Energiekosten für Ordinationen müssen*, https://www.ots.at/presseaussendung/OTS_20220928_OTS0081/oesterreichische-aerztekammer-zusaetzliche-energiekosten-fuer-ordinationen-muessen-abgedeckt-werden. [18]

Partnership for Health System Sustainability and Resilience (2023), *Building Sustainable and Resilient Health Systems: Key Findings from Country Reports*. [9]

Sagan, A. and S. Thomson (2016), *Voluntary health insurance in Europe: role and regulation*, World Health Organization. Regional Office for Europe. [30]

Spiegel, P., P. Kovtoniuk and K. Lewtak (2023), "The war in Ukraine 1 year on: the need to strategise for the long-term health of Ukrainians", *The Lancet*, Vol. 401/10377, pp. 622-625, https://doi.org/10.1016/s0140-6736(23)00383-5. [17]

UK Parliament (2021), "COVID-19: Test, track and trace", https://publications.parliament.uk/pa/cm5801/cmselect/cmpubacc/932/93202.htm. [12]

Vammalle, C., C. Penn and C. James (2023), "Applying good budgeting practices to health", *OECD Journal on Budgeting*, https://doi.org/10.1787/b280297f-en. [37]

WHO Regional Office for Europe (2023), *Can people afford to pay for health care?*. [29]

World Economic Forum (2023), *Seizing the Momentum to Build Resilience for a Future of Sustainable Inclusive Growt*. [32]

Notes

[1] In this chapter, the term 'health authority' refers to the government agency/agencies that are primarily responsible for the health system. This is typically the ministry of health and/or social health insurance fund. 'Finance authority' refers to the government agency responsible for the overall government budget at the national level. This is typically the ministry of finance, treasury, or central budget authority.

[2] Of the 1.4%, 1.25% of GDP on average is allocated to an increase in annual recurrent spending and 0.13% of GDP as an annual increase in capital spending in the health system.

2 Examining the latest trends in health spending: Are we heading back to a time of austerity?

Michael Mueller, Caroline Penn, David Morgan

This chapter analyses how health expenditure has developed over the course of the pandemic and where countries stand in terms of spending as they have transitioned out of this health crisis. It examines to what extent OECD countries are on the path to making health systems more resilient and what leeway governments have in increasing the financial resources going to healthcare. This is discussed in the context of the current economic climate: how are OECD countries meeting the various challenges and what could be the implications for the trajectory of health spending in the coming years?

Key messages

- The pandemic saw unprecedented growth in countries' health spending. From 2019 to 2021, **public expenditure on health grew by an average of 17%** in real terms across OECD countries as governments were quick to mobilise financial resources to fight and tackle the health consequence of the pandemic. **Spending on prevention more than doubled** over the same period due to the widespread testing and vaccination campaigns. Health spending directly related to **COVID-19 accounted for an average of 9% of public spending on health** by 2021 and remained at around 6% in 2022.
- Economic and geo-political challenges are affecting countries' ability to fund any additional spending on health. OECD headline **inflation increased by nearly 10% in 2022**, in large part due to the war in Ukraine and the subsequent energy crisis, as supply chains and trade flows were disrupted and the hoped for post-pandemic economic recovery stalled. While down from its 2022 peak, inflation is expected to remain well above pre-pandemic levels in the short term.
- These developments in turn are affecting health budgets and the cost of care provision. Nominal increases in planned expenditures have been eroded by higher-than-expected inflation, while **higher input costs in health service delivery** continue to weigh heavily on the financial sustainability of health providers. Some governments have made additional resources available to adjust budgets and cover inflation-related costs.
- With **real wages dropping by an average of 4% in the first half of 2022**, the pressure to raise salaries has increased in the labour-intensive health sector. While making health professions more attractive was a key lesson of the pandemic, any additional staff costs need to be borne by public funds and healthcare providers. This in turn results in **increases in the costs of service delivery**.
- After the extraordinary increases in 2020 and 2021, real **health spending in 2022 dropped by 1.5% on average** across OECD countries. Although premature to conclude on a new spending trajectory, budget information from a selected number of countries suggest that nominal health spending may return to pre-pandemic growth rates. But with average **inflation expected to remain above 5% in 2024** compared with less than 2% in 2019, this will continue to significantly reduce any nominal increases.
- While **per capita health spending in 2022 stood at around 11% higher** than spending in 2019, on average in real terms, excluding direct COVID-19 spending suggests that 2022 spending levels may be below the expected levels based on pre-pandemic growth trends.
- Countries' current spending plans do not indicate substantial increases in spending in the short term. The **share of government spending going to health remained constant through the pandemic at 15% on average** and health is increasingly competing with other spending priorities such as social support to households to tackle the cost-of-living crisis, the green transition, energy costs and defence spending. The challenge to finance future health needs including the need to make health system more resilient remains.

2.1. Introduction

The last four years have seen OECD countries face a succession of crises. In early 2020, the pandemic presented an unprecedented challenge to the resilience of health systems, economies, and societies worldwide. Globally, nearly 7 million COVID-19 deaths were officially reported by September 2022, while the actual death toll is much higher.[1] The virus also had a deep indirect impact: primary care visits were cancelled, elective surgeries postponed, and cancer screening appointments delayed. Longer term, mental health care needs increased, and a significant number of people experienced and continue to suffer from long-COVID. All these developments have financial implications for health systems.

At the same time, the pandemic had significant economic implications, leading to one of the most severe economic downturns since the mid-20th century. And as countries transitioned out of the acute phase of the pandemic and towards economic recovery, Russia's war on Ukraine presented a new shock to the world economy. Inflation rates climbed to levels not seen in decades as prices for energy and commodities soared. Increasingly, public spending on healthcare has had to compete with new priorities such as support for households and business, the green transition, and defence spending. This comes at a time when health systems require further investment to improve resilience in the face of future crises.

Timely and comprehensive health financing and expenditure data has been crucial to evaluate the full impact of the pandemic and allows decision-makers to recalibrate priorities to better meet population needs. The latest figures provide an opportunity to build a comprehensive picture on how health spending developed over the pandemic period in OECD countries. The additional detail on COVID-19 specific health spending also allows to isolate the direct effect of COVID-19 on financial resource use in the health sector and understand the underlying trends in health spending.

The remainder of this chapter is structured as follows. Section 2.2 analyses how health spending developed through the pandemic. It also gives an indication of how spending is expected to have evolved in 2022 as countries started to emerge from the crisis. Section 2.3 discusses to what extent OECD countries are on the path to making health systems more resilient in the context of the ongoing macroeconomic challenges. Finally, Section 2.4 provides on overview of the actions being taken by governments across the OECD to address these challenges and explains how the current crisis – and its implication for health spending in the coming years – may differ from the global financial crisis of 2007-08.

2.2. Latest trends in health spending

The COVID-19 pandemic saw unprecedented growth in health spending across OECD countries as governments dedicated significant resources to address the virus outbreak. Resources were made available to track the virus, increase capacity in health systems, develop treatment options, and eventually roll out vaccines to the population. At the same time, health service utilisation was frequently disrupted during the various COVID-19 waves with patients often delaying or forgoing healthcare.

Most OECD countries transitioned out of the acute phase of the pandemic during 2022. However, the worsening macroeconomic climate, with a slowdown in economic growth and high inflation – amplified by Russia's war on Ukraine – dealt a blow to the global recovery and led to a change in priorities in public budgets. Trade flows, already under pressure from the pandemic, were further disrupted resulting in higher prices for essential commodities, such as food and energy, and exacerbated the inflationary pressures in many countries. These developments had an impact on health spending levels in 2022 with the effects continuing into 2023 and beyond. The most recent health spending data provides a first opportunity for a full assessment of the impact of the pandemic on health spending and an early indication of where countries are on the longer-term health spending.

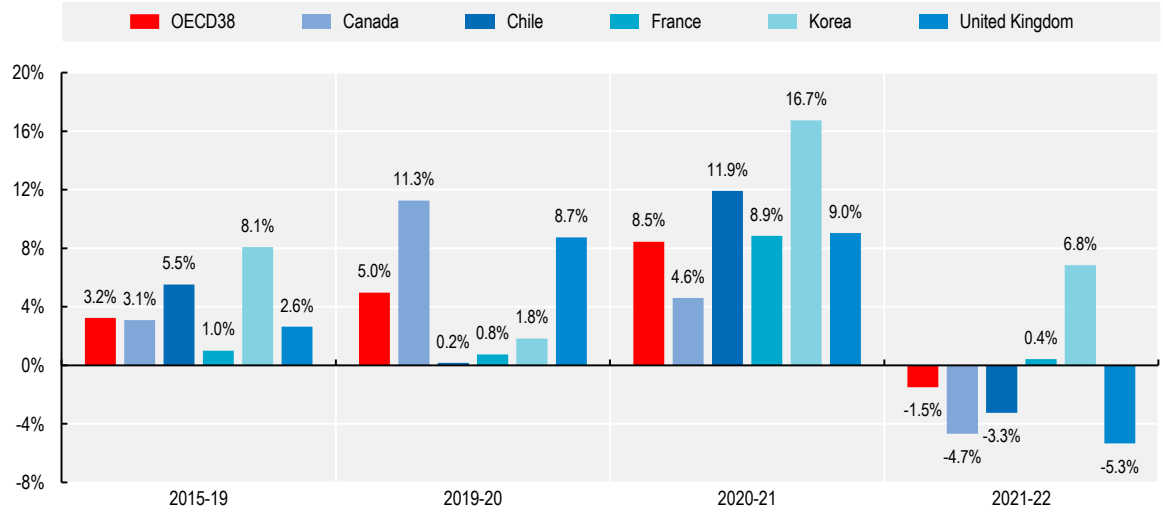
After exceptional growth in 2020 and 2021, health spending dropped sharply in 2022 as OECD countries transitioned out of the pandemic

In the five years preceding the pandemic, annual spending on healthcare grew by an average of 3.2%, in real terms, across OECD countries. The outbreak of COVID-19 in 2020 prompted a substantial increase in health spending, notably from governments as they mobilised resources to mitigate and address the impacts of the crisis. The call on public budgets intensified into 2021, as testing programmes increased, and population-wide vaccination campaigns were rolled-out. As a result, annual health spending grew by 5%, on average, across OECD countries in 2020 and accelerated in 2021 with 8.5% growth, in real terms. This was followed by a 1.5% contraction in health spending in 2022 (Figure 2.1).

Many European countries reported high health spending growth in both 2020 and 2021, reflecting successive waves of infection across the continent. The Czech Republic (hereafter Czechia), Hungary, Estonia, and Ireland all reported double-digit health spending growth in 2020. Slovak Republic, Austria and Portugal, on the other hand, recorded their highest growth in 2021. In Latvia, exceptional growth of 33% in 2021 was primarily a result of raising wages of healthcare workers as well as pandemic-induced expenses associated with higher volumes of care (Ministry of Finance -Republic of Latvia, 2022[1]).

Figure 2.1. Health spending growth peaked in 2021, before dropping in 2022

Annual average growth in current health expenditure, real terms, OECD average and selected countries, 2015-22



Note: 2020 growth in Canada is overestimated as the country records vaccination costs in the year that vaccines were procured (2020) rather than when they were administered (2021).
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

For Japan and Korea, where COVID-19 cases remained relatively low in 2020 (OECD/WHO, 2022[2]), health spending growth in 2020 was below the OECD average, and negative in the case of Japan, due in part to a reduction in activity in the health sector.[2] While health spending in 2021 sharply accelerated by 17% in Korea, growth in Japan remained moderate, at half the OECD average. At the same time, health spending growth in Australia and New Zealand averaged between 7% and 9% in both 2020 and 2021.

Chile, Colombia and Costa Rica experienced below-average health spending growth in 2020. However, spending in Chile and Colombia in 2021 surged, reaching 12% and 16% respectively as the year proved the deadliest year of the pandemic in Latin America (OECD/The World Bank, 2023[3]). In contrast, health spending growth in Canada and the United States peaked in 2020, growing by around 10%. Unlike many

OECD countries, health spending growth in both countries fell in 2021.[3] Part of this slower growth in the United States can be attributed to a decline in pandemic-related government spending, which more than offset the increased utilisation of healthcare services that rebounded due to delayed care and pent-up demand from 2020 (Centers for Medicare & Medicaid Services, 2023[4]).

Preliminary results for 2022 point to a contraction in health spending across OECD countries from its peak in 2021. As the pandemic moved towards the end of the acute phase in many countries, governments eased emergency health measures. In addition, emerging geo-political and economic conditions meant that other emergencies – such as the energy and cost-of-living crisis – weakened the position of health within government priorities. This resulted in OECD countries experiencing negative health spending growth of -1.5%, in real terms, on average in 2022. Denmark saw a drop of 8% in health spending compared to 2021, but Korea continued to see health spending grow by almost 7%.

Public spending on health soared during the pandemic, before retreating in 2022

The spending trajectory of government and compulsory health insurance schemes was disrupted following the emergence of the COVID-19 pandemic. While spending by these financing schemes grew by an average of 3.5% per year between 2015 and 2019 across OECD countries, this jumped to around 8% in 2020 and 2021 as significant resources were made available to track the virus, increase health system capacity, provide subsidies to health providers, and eventually roll out COVID-19 vaccination campaigns. This was followed by an average real term drop of 1.8% in 2022 (Figure 2.2).

Spending by government and compulsory schemes increased by 15% or more in 2020 in Canada, Czechia, Hungary and Ireland, while Colombia, Korea, Latvia and Türkiye saw growth of a similar magnitude in 2021. In Ireland, the COVID-19 pandemic resulted in an increased share of public spending in 2020, with high government spending on personal protective equipment, swab kits and ventilators, and with significant expenditure on treatment costs and testing costs (Central Statistics Office, 2021[5]).

Preliminary data indicates a decrease in spending by government and compulsory schemes by almost 2% in 2022 as governments returned to previous spending patterns after the historically high levels.

Private spending on health (household out-of-pocket and voluntary health insurance) showed the opposite trend (Figure 2.2). An overall decline of around 2.5% in 2020 was the consequence of postponed and reduced use of healthcare services and the partial non-availability of services. Out-of-pocket spending decreased by more than 10% in Belgium, Chile and the United Kingdom. Chile and the United Kingdom along with Ireland and Sweden also saw a similar drop in voluntary health insurance spending.

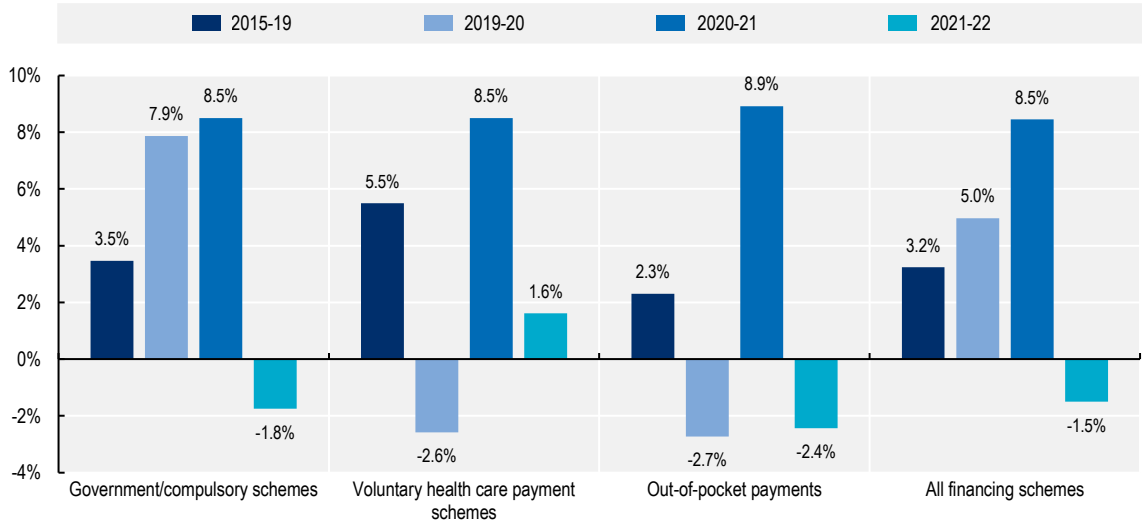
Private spending rebounded strongly in 2021. There were significant increases of 8% in household spending in Belgium and the United Kingdom, and 16% in Chile. Growth of out-of-pocket spending was even more pronounced with increases of 17-18% in Czechia, Lithuania, Korea and the Slovak Republic. This resurgence can be attributed to a ‘catch up’ effect in demand for healthcare services that were deferred during the peak of the pandemic.

Voluntary health insurance saw a similar rebound. Notably, Chile witnessed a huge 40% surge in voluntary health insurance spending in 2021. In Ireland, COVID-19 restrictions caused a 27% drop in claims to private insurance companies between April 2020 and March 2021. Demand for health insurance rebounded strongly by 12% in 2021, with an increased share of the population enrolled in private health insurance compared to 2020 (The Health Insurance Authority, 2021[6]).

Patterns diverged in 2022, as household spending on health fell while voluntary health insurance expenditure continued to grow albeit at a much slower rate. Estimates suggest that out-of-pocket payments are expected to have fallen by more than 2%, on average. Spending by voluntary health insurance schemes is expected to have increased in 2022, albeit below pre-pandemic rates.

Figure 2.2. Health spending by public schemes grew by around 8% in both 2020 and 2021

Health spending by financing scheme, average annual growth in real terms, 2015-22



Note: Voluntary healthcare payment schemes mainly refer to voluntary health insurance.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Governments picked up most of the additional spending during the pandemic

In countries with social or compulsory private health insurance the pandemic response led to a notable (albeit temporary) shift in the health financing architecture. In 24 OECD countries where social or compulsory insurance is the key purchaser of health services, the substantial increase in public spending can be explained by a hike in spending by general government (i.e. not insurance-based). In those countries, the share of current health expenditure financed by government schemes increased from 12% to 16% on average between 2019 and 2021, with the average share of compulsory insurance dropping over the same time period (from 61% to 59%). Average growth in government spending over the two years was 90% while compulsory insurance spending increased by a moderate 9%. In many insurance-based systems, COVID-19 related preventive activities were directly financed by central, regional or local authorities. Additionally, financial support to health providers tended to come from central or regional budgets and not directly from compulsory health insurers. Spending by government dropped by 10% on average in 2022, while compulsory insurance spending was flat.

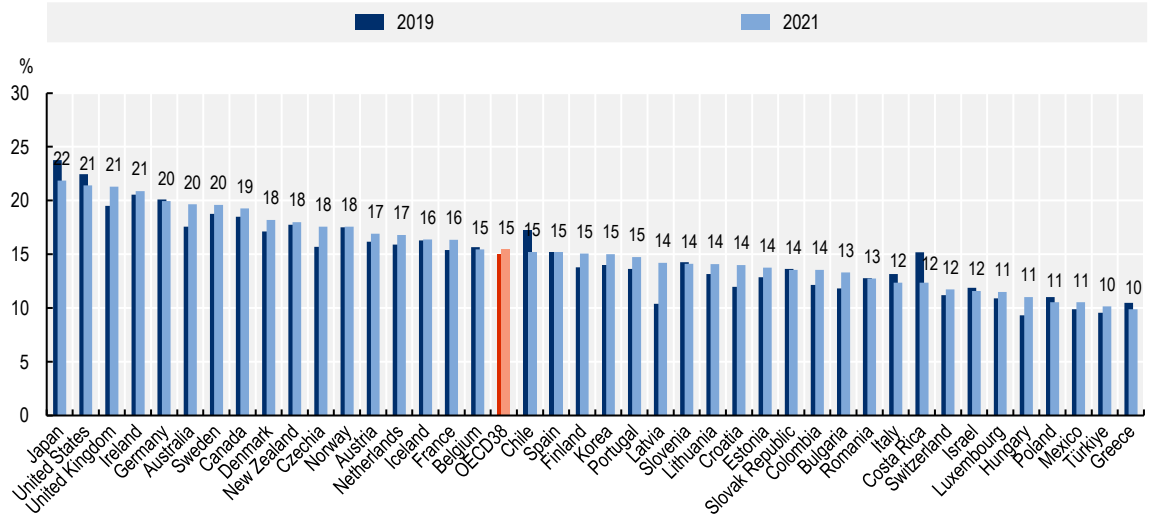
Governments not only increased their role in directly purchasing health services during the pandemic, but often provided additional funding for social and compulsory insurers. When analysing revenues for social health insurance or compulsory private insurance, the share from government transfers increased markedly in several countries between 2019 and 2021, either to provide financial support to balance operating losses of insurers or to cover social insurance contributions for specific groups of the population. In Belgium, Chile and Czechia the share of government transfers in compulsory insurance revenues increased by around 10 percentage points between 2019 and 2021. In Estonia, the proportion jumped by more than 15 percentage points.

The pandemic did not change the share of the government budget for healthcare

While OECD countries saw significant growth in health spending during the pandemic (Figure 2.1), this is only marginally reflected in the share of health spending in total government spending. Indeed, while the pandemic exerted major upward pressure on health budgets during 2020, similar pressures were felt in

other areas of public spending, as governments provided substantial support to firms and households. In 2021, health spending accounted for an average of 15% of total government spending (Figure 2.3), less than half a percentage point higher compared to 2019. Nevertheless, in Latvia and Australia, the share of health spending in total government expenditure climbed more than 2 percentage points between 2019 and 2021. Preliminary data based on two-thirds of OECD countries suggest that the average share will remain at the same level through 2022.

Figure 2.3. The share of government spending allocated to health did not increase substantially during the pandemic



Note: Public health spending is defined using data of revenues of financing schemes. If unavailable, spending of financing schemes is used.
Source: OECD Health Statistics, 2023. https://doi.org/10.1787/health-data-en and OECD National Accounts Database, 2023.

Spending on prevention more than doubled during the pandemic

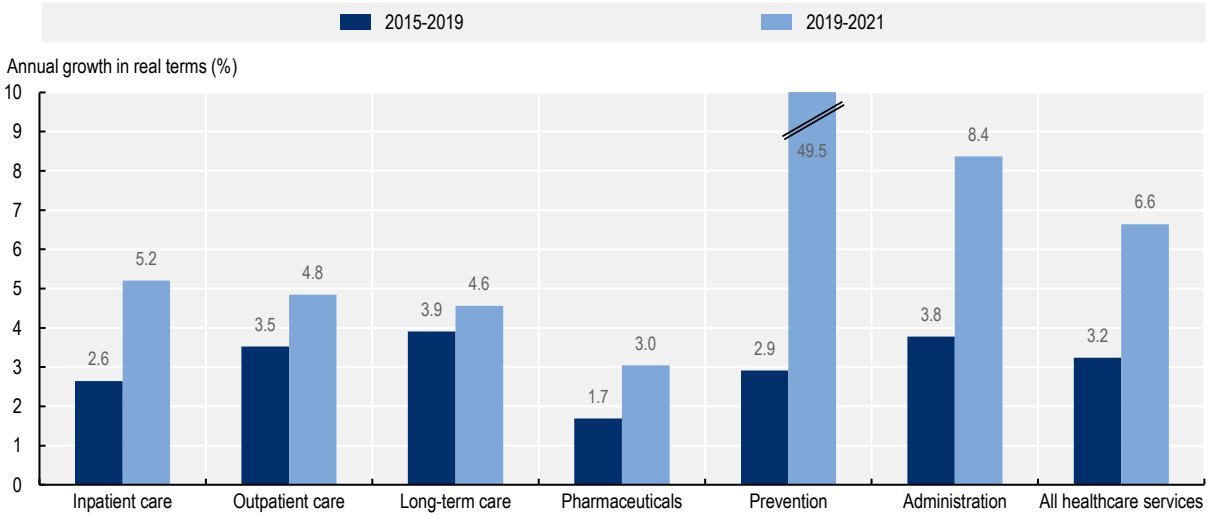
The pandemic triggered exceptional spending growth across all healthcare functions (Figure 2.4). Spending on preventive care increased by an average of 50% each year between 2019 and 2021 (up from a pre-pandemic 3% annual increase) as countries allocated significant resources to testing, tracing, surveillance, and public information campaigns. With the roll-out of vaccination campaigns, spending growth was concentrated in 2021, reaching 76% across OECD countries. For example, with the launch of the COVID-19 vaccination campaign in Korea in February 2021, prevention spending grew 140% in 2021 (compared to 24% in 2020). For a selection of OECD countries with preliminary data, prevention spending in 2022 dropped by nearly one-fifth on average from the 2021 high.

Between 2019 and 2021, there was a two-fold increase in the average annual spending growth on inpatient care (5.2%) across OECD countries compared to the pre-pandemic era (2.6%). A notable surge occurred in 2020, reaching 6.5% growth on average and more than 15% in the United Kingdom, Estonia and Hungary. This increase was mainly driven by additional staff and input costs (e.g. personal protective equipment) and substantial subsidies for hospitals in exchange for reserving capacity for COVID-19 patients or to cover operating losses. In the case of Hungary, where spending on inpatient care increased by more than 20% in 2020, this can be linked to the rise in volume of patients in intensive care. Hungary also awarded a one-off bonus to healthcare workers including those working in hospitals (OECD/European Observatory on Health Systems and Policies, 2021[7]).

Spending on health system administration grew by 8% per year over the same period between, more than double the pre-pandemic growth rate. Some of this increase can be explained by the additional resources required to manage national response strategies.

From 2019 to 2021, spending on outpatient care grew by 4.8% on average (up from 3.5% pre-pandemic), but concentrated in the second year. In 2020, spending only increased by an average of 1%, to be followed by 9.7% growth in 2021. Some of the low growth in 2020 can be attributed to a significant contraction in spending on dental care. Overall spending on outpatient care in Canada dropped 6.4% in 2020 as physicians provided in-person urgent care only and offered virtual care appointments where possible. Most services resumed in 2021, which contributed to a rebound in outpatient care spending of 11.3% (Canadian Institute for Health Information, 2023[8]).

Figure 2.4. Total spending on prevention more than doubled between 2019 and 2021



Note: The category "pharmaceuticals" includes medical non-durables such as personal protective equipment for final use.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Spending on pharmaceutical and medical non-durables also saw higher growth but less than for healthcare services. Average spending growth reached 4.1% in 2020 but slowed to 1.6% in 2021. High growth in 2020 can at least partially be explained by extra spending on facemasks and personal protective equipment. In the United States, the trend was reversed as pharmaceutical spending grew 2.7% in 2020, and 4.6% in 2021. The acceleration in 2021 was a result of a record level of prescription drug use as new prescription starts for both chronic and acute care rebounded (Centers for Medicare & Medicaid Services, 2023[4]).

Finally, long-term care spending was the least impacted. From 2015 to 2019, average annual spending on long-term care had grown nearly 4% across OECD countries. This increased slightly to 4.6% with the outbreak of the pandemic. Measures were introduced within the long-term care sector, emphasising infection prevention and control, as well as the testing and tracing of cases within these facilities. In some countries, including Poland, Hungary and Slovenia, spending on long-term care did see a substantial increase in 2020, by around 15% or more. Significant state budget resources were directed towards funding bonuses for long-term care workers and procuring tests, personal protective equipment (PPE), and disinfectants for use in long-term care facilities (Rocard, Sillitti and Llena-Nozal, 2021[9]).

Preliminary data for 2022 suggest that as countries transition out of the acute phase there was a sharp reversal of spending in many areas. For a subset of seven OECD countries, spending on prevention dropped by nearly 18%, albeit remaining well above pre-pandemic spending as spending on vaccination

and testing persisted. Spending on inpatient care declined by 2%, on average, and by 5% in Iceland and the Netherlands. Average spending on inpatient care in 2022 was only 5% higher in real terms compared to 2019. Spending on long-term care, pharmaceuticals, and administration all contracted in 2022. Only outpatient care spending showed a small increase in 2022, albeit at a modest rate (0.3%).

COVID-19 spending peaked in 2021, although such spending continued into 2022

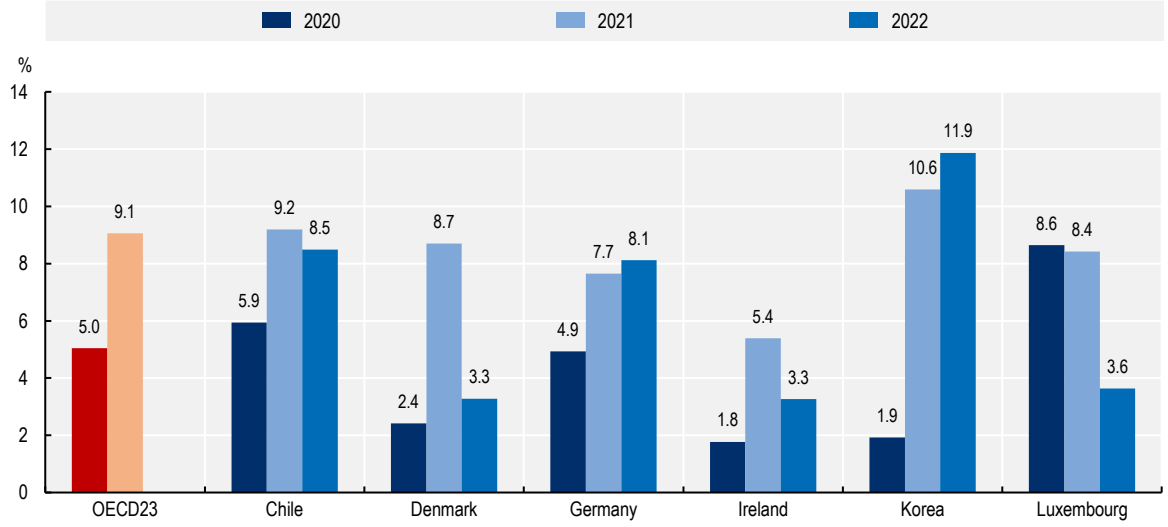
The pandemic resulted in increased levels of public spending on health, but the greatest impact was in 2021. Direct COVID-19 spending reached an average of 9% of total public health spending in 2021 across OECD countries with available data, compared to 5% in 2020 (Figure 2.5). In Korea the share of health expenditure directly linked to COVID-19 reached 11% in 2021 (up from 2% in 2020), in Austria it was 13% (up from 5% in 2020), and in Latvia more than a fifth of all health spending (22% up from 5% in 2020). For a subset of countries with preliminary estimates, COVID-19 spending in 2022 is likely to have still accounted for more than 6% of overall spending.

The increase in 2021 was triggered by several key items. Spending on COVID-19 related treatment costs and testing and contact tracing both jumped in 2021 compared to 2020. However, COVID-19 vaccination costs increased significantly to alone account for an average of 2% of public spending on health in 2021. In most OECD countries, COVID-19 vaccination campaigns only kicked off in December 2020 or January 2021 before gaining full momentum later that year.

Preliminary results suggest that COVID-19 spending remained a significant draw on healthcare resources in 2022 but down from the levels of 2021. For example, in Denmark and Luxembourg, spending on test and tracing dropped sharply in 2022. On the other hand, COVID-19 costs continued to increase in Germany and Korea in 2022, reaching 8% and 12% of public spending on health, respectively. In Korea, costs for COVID-19 treatment as well as for testing and tracing increased in 2022 as cases and mortality soared.

Figure 2.5. The share of public spending on health dedicated to COVID-19 peaked at 9% in 2021

Spending on COVID-19 as a share of total public spending on health, spending by government/compulsory insurance schemes only, 2020-22



Note: Direct spending on COVID-19 is identified using the five additional spending variables related to COVID-19 included under current health expenditure in the JHAQ collection. Comprehensiveness of reporting may differ across countries.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en, based on the 2023 Joint Health Accounts Questionnaire.

2.3. Are countries on track to strengthen health systems?

Recent health spending trends need to be seen in a broader context of increased investment needs in health – to address the lack of resilience and preparedness of health systems revealed during COVID-19 and megatrends such as population ageing and the associated increase in healthcare needs. As OECD countries started to transition out of the pandemic in 2022, a preliminary assessment can be made to see to what extent countries have embarked on a pathway to mobilise the additional financial resources needed to strengthen their health systems. Yet, improving the resilience of health systems, for example by increasing the number of available health workers, requires a medium to long-term financial commitment. However, in the current economic and geopolitical climate it seems to be challenging for many OECD countries to substantially increase public spending on health.

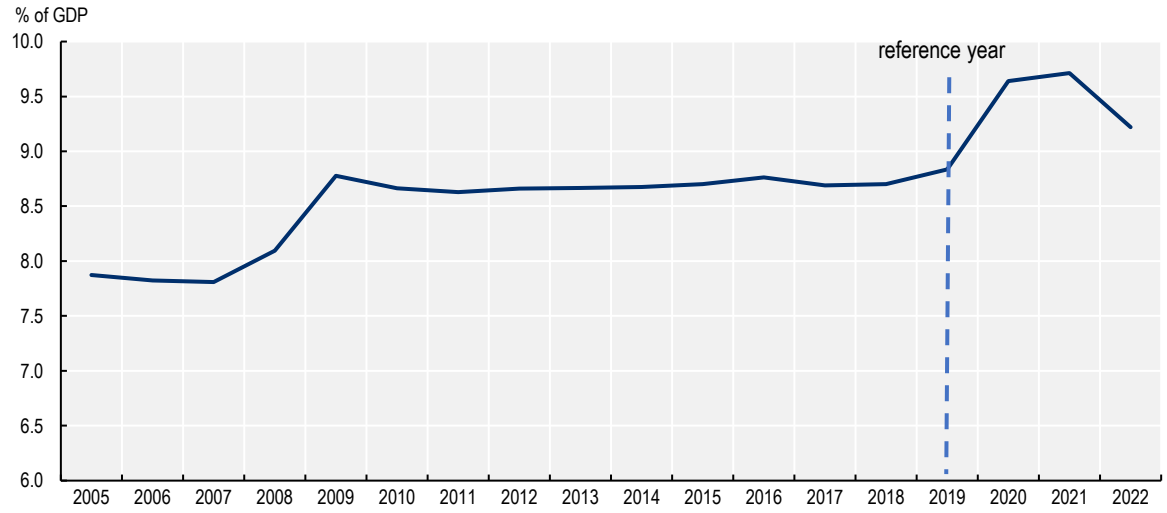
Funds for more resilient health systems remain to be mobilised

The pandemic revealed that health systems were not resilient enough to cope with health emergencies of this magnitude. Health systems were under-prepared, under-staffed and faced under-investment (OECD, 2023[10]). There is a need for smart investments to strengthen health system resilience – to *protect* underlying population health, *fortify* the foundations of health systems, and *bolster* health workers on the frontline – providing countries with the agility to respond not only to evolving pandemics but also to other shocks. The return from such investments extends far 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[11]).

Data for 2022 provides a first opportunity to evaluate where countries stand on the health expenditure trajectory after the pandemic-induced spending in 2020 and 2021. On average across the OECD, the proportion of the economy dedicated to health stood 0.4 percentage points higher in 2022 compared with the pre-pandemic level in 2019 (Figure 2.6). Compared with 2019, the health-to-GDP ratio increased by more than 1 percentage point in Portugal, Spain, Czechia, the United Kingdom and Korea while OECD estimates suggest a more than 2 percentage point jump in New Zealand and Latvia (Figure 2.7).[4] On the other hand, in 11 countries the proportion of the GDP allocated to health in 2022 was below 2019 levels, with the drop most pronounced in Norway (-2.5 percentage points). However, short-term economic volatility determines the development of this ratio, and the trend needs to be monitored over a longer time period.

Figure 2.6. The share of health spending in GDP peaked in 2021 before dropping again in 2022

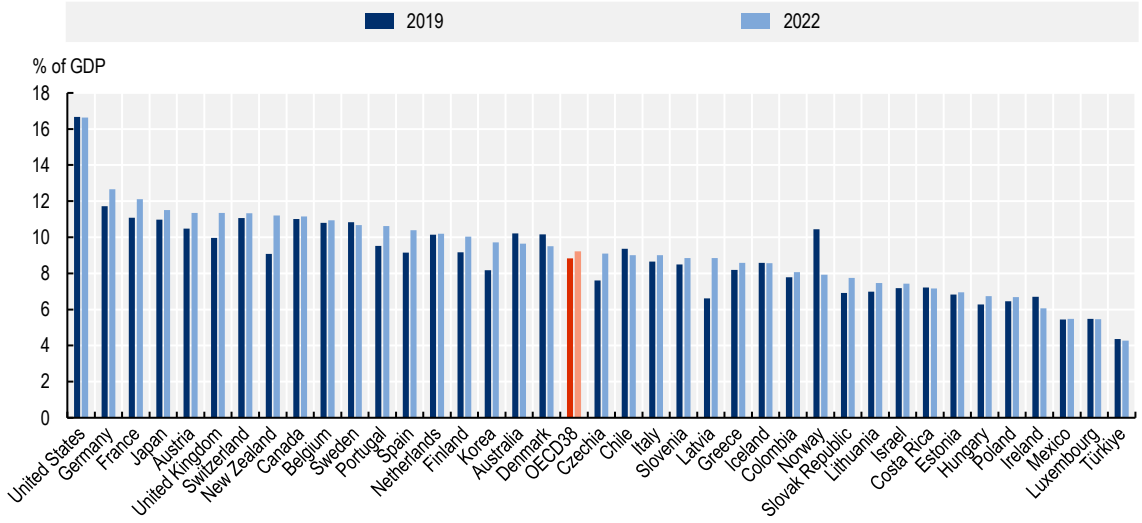
Current health expenditure as a share of GDP, OECD average, 2005-22



Note: 2022 data is preliminary, either estimated by countries or the OECD Secretariat.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Figure 2.7. Almost one in three countries saw the share of GDP on health in 2022 below 2019 levels

Current health expenditure as a share of GDP, 2019 and 2022, OECD countries



Note: 2022 data is preliminary, either estimated by countries or the OECD Secretariat.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

After stripping out spending on COVID-19, health spending growth in 2022 remained below the pre-pandemic trend

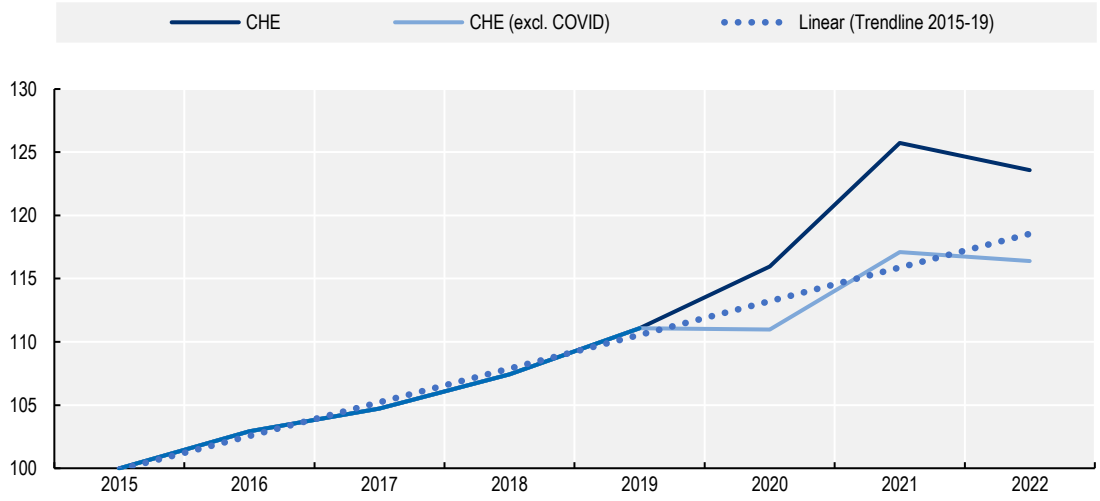
On a per capita level, the spending increase between 2019 and 2022 appears strong. On average across the OECD, per capita health spending in 2022 was estimated at around USD 350 (or 9%) above that in

2019 (in real terms). However, when excluding the pandemic emergency spending that occurred in 2020 and 2021 (and continued to an extent in 2022), the health spending growth rate is likely below the pre-pandemic trend (Figure 2.8). This suggests that countries have yet to make substantial progress in increasing investment to strengthen the resilience of their health systems. A similar conclusion can be drawn when examining preventive spending, which increased substantially during the pandemic: after excluding COVID-19 vaccination costs and spending on testing and tracing, the underlying trend remains unchanged.

Increased health spending does not automatically translate into improved health system resilience. In addition to targeting investment into the three key pillars, money needs to be spent wisely in line with best practices. Furthermore, returns from additional investment will take time to materialise. For example, increasing training capacity for nurses now would only have a material impact on the number of practicing nurses in 3 years. Thus a (much) longer time period needs to be analysed to see whether countries' investment in health systems strengthening go beyond the emergency measures needed in times of crises. Yet the current economic and geo-political environment limits the room for countries to increase their spending to address the identified needs.

Figure 2.8. After excluding spending on COVID-19, health expenditure in 2022 was below trend

Current Health Expenditure (CHE), spending in constant prices and constant PPPs, OECD average (2015 = 100)



Note: COVID-19 spending is estimated based on average COVID-19 spending reported for each year. Existing data gaps affect this estimate.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en, calculation by OECD Secretariat.

The current economic and geo-political climate makes it challenging for countries to increase investment in health

The drop in health spending in 2022 must be seen against the backdrop of a fragile economic and geopolitical climate. Russia's war on Ukraine, wide-spread disruptions in supply chains as well as the lingering impact of COVID-19 in some parts of the world impacted the path towards economic recovery. This has placed additional upward pressure on prices, above all for energy and food, leading to inflation running at levels not previously seen for decades in many OECD counties (OECD, 2022[12]). Moreover, healthcare has had to increasingly compete with new public spending priorities including social support to households facing cost-of-living crises, energy purchases, green transformation, defence spending and others. In the short to medium-term, these developments provide a challenge for countries that wish to allocate more public spending to health and are likely to impact the trajectory of health spending.

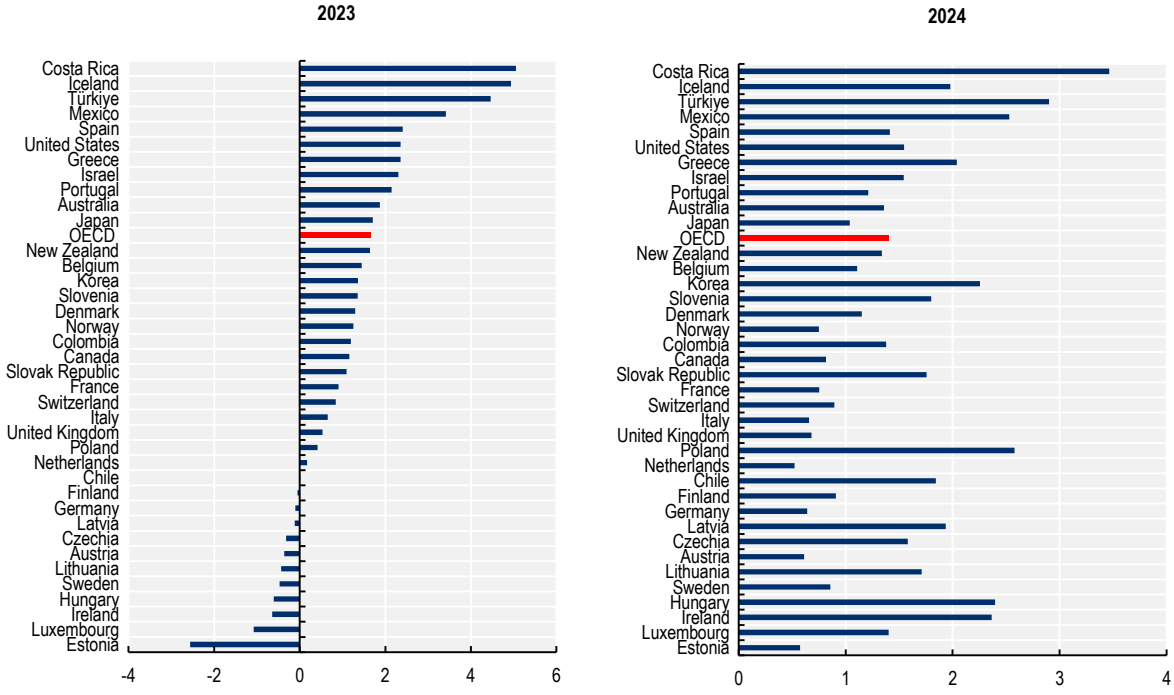
The economic recovery is fragile and inflationary pressures remain

As a result of these challenges, real GDP growth across the OECD dropped to 3% in 2022, only half the growth rate in 2021. For 2023 and 2024, latest forecasts suggest only modest growth of 1.7% (2023) and 1.4% (2024) in the OECD (Figure 2.9), around half the global growth (OECD, 2023[13]). This is generally below the growth rates in the years preceding the pandemic. For a number of countries, the economic outlook is particularly dire. For 2023, economic stagnation or recession is predicted in a dozen OECD countries including Estonia, Sweden, Chile, Hungary, Finland and Germany (OECD, 2023[13]).

Moreover, inflationary pressures remain elevated in the OECD. Headline inflation rose gradually since the first quarter 2021 with a marked acceleration in early 2022, as a consequence of Russia's war on Ukraine and the subsequent rise in energy prices. It peaked in the third quarter of 2022 at 10% on average in the OECD, before slowing to 6.5% in the third quarter 2023. While headline inflation has declined substantially again in 2023, core inflation[5] remained sticky, standing at 6.9% in the third quarter 2023 (Figure 2.10) (OECD, 2023[13]). Across the OECD, core inflation is projected to remain at 7% on average in 2023 before slowing down to 5.3% in 2024. In 2023, core inflation is expected to be around 10% or higher in Colombia, Poland, Hungary and Lithuania, and above 50% in Türkiye.

Figure 2.9. The economic outlook remains modest in 2023 and 2024

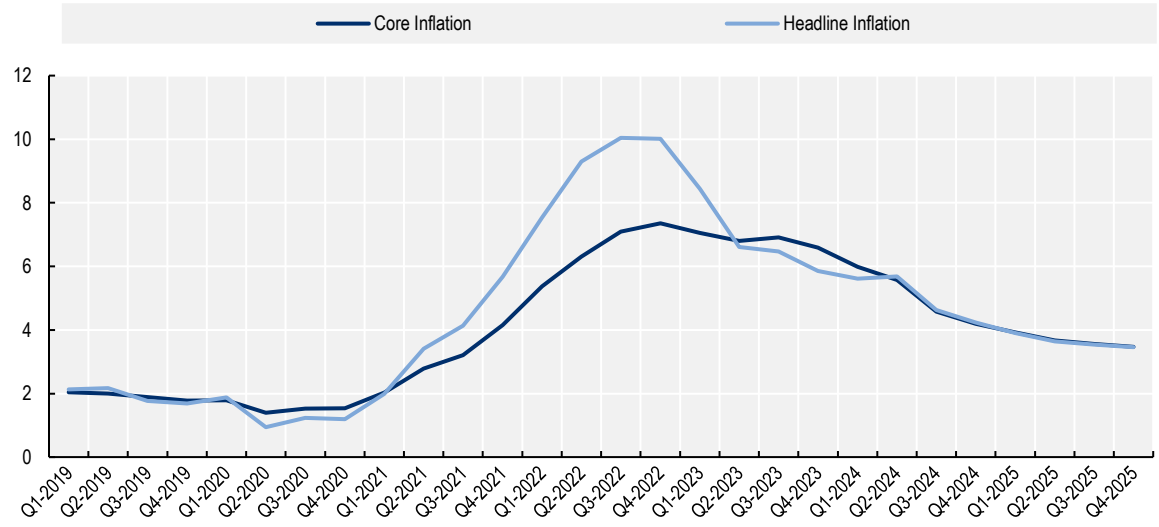
GDP growth in percentage in real terms, 2023 and 2024, OECD countries



Source OECD (2023[14]), *OECD Economic Outlook, Volume 2023 Issue 2,: Preliminary version*, https://doi.org/10.1787/7a5f73ce-en.

Figure 2.10. Headline inflation is falling but core inflation remains persistent

Headline and core inflation, year-on-year change



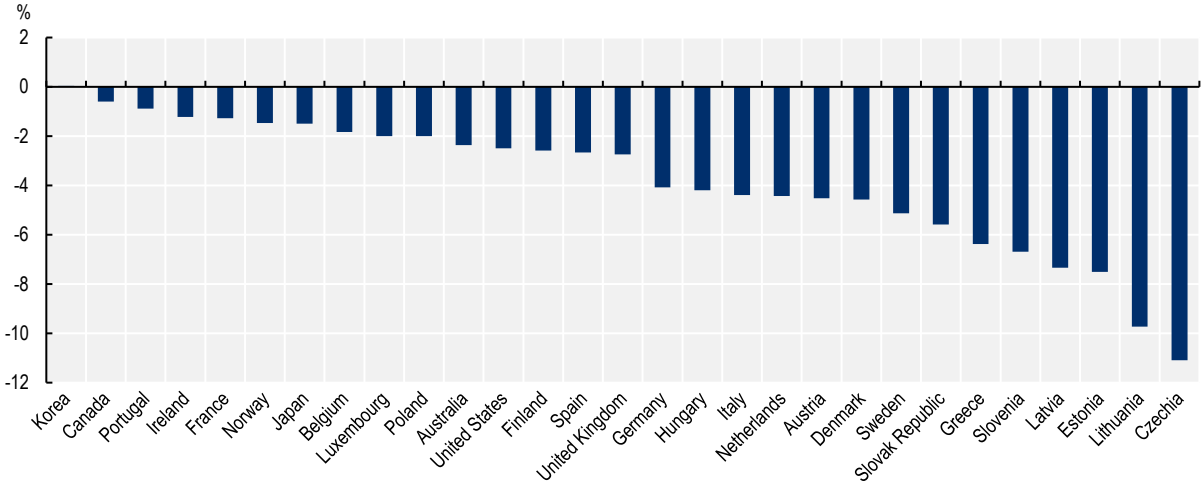
Note: Headline inflation concerns all commodities, services, and goods. Core inflation is headline inflation excluding food and energy.
Source: OECD (2023[13]) *OECD Economic Outlook, Volume 2023 Issue 2: Preliminary version*, https://doi.org/10.1787/7a5f73ce-en.

Inflation presents a huge burden to households with real wages falling

Wages did not keep up with inflation in 2022. Consequently, the combination of high inflation and limited salary increases led to wages falling in real terms in 2022 across the OECD (Figure 2.11). On average across 29 OECD countries, the reduction in real wages was nearly 4% over this period. Over the course of 2023, real wages are expected to stop declining in most OECD countries. Recent developments in real wages are a key determinant in ongoing wage negotiations, including in the health sector.

Figure 2.11. Real wages were dropping in nearly all countries in 2022

Growth of real wages, percentage, 1st half 2022 compared with 1st half 2021



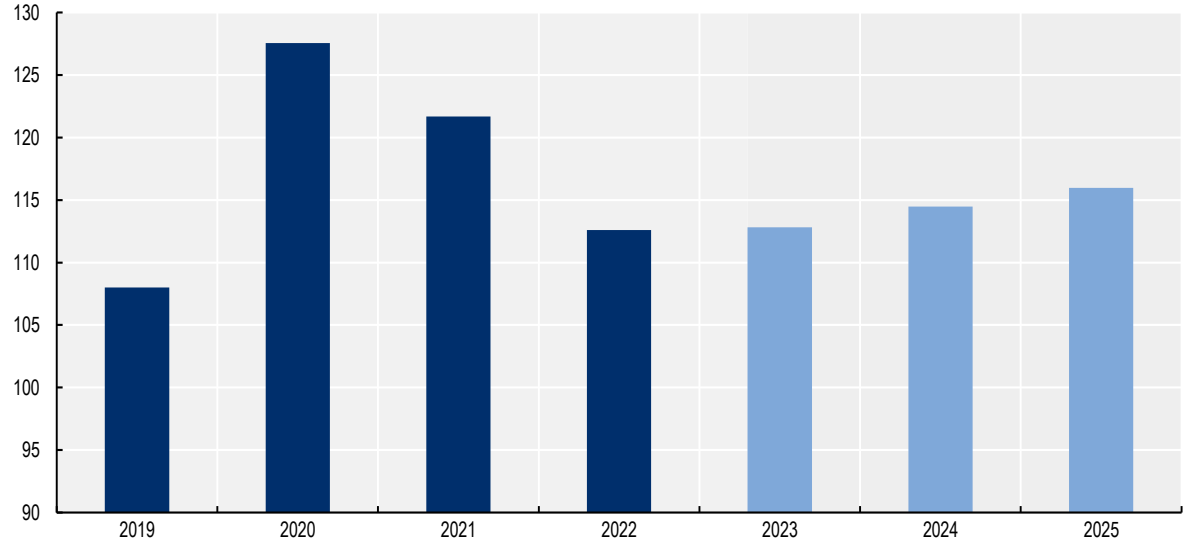
Note: Real wages are defined as compensation per employee deflated by the consumers' expenditure deflator.
Source: OECD Economic Outlook 113 database; and OECD calculations.

Elevated government debt levels continue to be a source of uncertainty

Government support measures to tackle the health and economic consequences of the pandemic but also the more recent initiatives to (partially) shield households from the full weight of the cost-of-living crisis have had consequences for the fiscal position of governments and the room for manoeuvre. After jumping from 108% in 2019 to 128% of GDP in 2020, the average debt-to-GDP ratio reduced in 2022 but at 113% it remained much above pre-pandemic levels (Figure 2.12). The short-term outlook does not predict significant improvement, tightening the fiscal space for governments which makes finding additional public spending for health or other purposes more challenging. Moreover, the economic climate and the war in Ukraine has seen a de-prioritisation of health issues in the public debate. In setting health budgets and other health policy decisions, countries have to take this new reality into account.

Figure 2.12. Government debt remains much above 2019 levels

General government gross financial liabilities, OECD aggregate, percentage of GDP



Source: OECD (2023[13]) *OECD Economic Outlook, Volume 2023 Issue 2: Preliminary version*, https://doi.org/10.1787/7a5f73ce-en.

2.4. How are OECD countries facing the current challenges?

The current economic outlook limits countries' room for manoeuvre. Yet, countries have been here before. The economic situation in the aftermath of the global financial crisis of 2007-08 left many countries taking difficult policy decisions in an attempt to balance public budgets which impacted health spending, leading in some cases to years of austerity. The first part of this Section 2.4 provides a preliminary overview of some of the ongoing discussions and actions taken by OECD government to address and factor in the current challenges, which will affect the health spending trajectory. The second part compares and contrasts the current situation with the global financial crisis and questions whether we can expect years of stagnating health spending growth or the increased investments needed to make OECD health systems more resilient.

The legacy of the pandemic, plus higher energy and input costs continue to erode any budget increases…

As countries strive to improve health system resilience, they face a number of challenges, related to the lingering impact of the pandemic and the unfavourable economic situation. While the magnitude of the challenges varies across countries, they include a shift in budget priorities away from health, as well as the financial sustainability of health providers due to high input costs including energy and salary increases for health workers. In several countries, the budget outlook does not suggest any significant increase in health spending in the short-term. While planned spending is set to increase in nominal terms, there is a likelihood that they could fall in real terms, at least in some years (Box 2.1).

Box 2.1. Health budgets are likely to stagnate or fall in real terms in the short-run in various countries

In ***Italy,*** current budget projections suggest that after years of exceptional spending increases in 2020 and 2021, there was a more moderate nominal increase in public spending on health in 2023 (2.8%) with a correction in 2024 before a return to annual nominal growth of between 2-3% expected for 2025-26 (Table 2.1). Considering the most recent inflation estimates for the country, this will most likely result in public spending declining *in real terms* over the next few years. Moreover, the proportion of GDP allocated to publicly financed healthcare is expected to be below the pre-pandemic level from 2024 onwards.

Table 2.1. Share of public expenditure on health of GDP in Italy 2024-26 expected to be below pre-pandemic levels

	2019	2020	2021	2022	2023*	2024*	2025*	2026*
Healthcare spending (absolute figures in millions)	115 663	122 665	127 451	131 103	134 734	132 946	136 701	138 972
% change per year		6.1	3.9	2.9	2.8	-1.3	2.8	1.7
In percentage of GDP	6.4	7.4	7.1	6.7	6.6	6.2	6.2	6.1

Note: * projections.
Source: Ministero dell'Economia e delle Finanze (2023[15]) Documento di Economia e Finanza 2023 – Sezione II Analisi e tendenze della finanza pubblica, https://www.rgs.mef.gov.it/_Documenti/VERSIONE-I/Attivit--i/Contabilit_e_finanza_pubblica/DEF/2023/DEF2023-Sez-II-AnalisiETendenzeDellaFinanzaPubblica.pdf and (2023[16]), Documento di Economia e Finanza 2023 – Nota di Aggiornamento, www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_it/analisi_progammazione/documenti_programmatici/nadef_2023/NADEF-2023.pdf.

In ***France***, the Social Security Financing Bill (PLFSS) for 2024 proposed to set the ONDAM ("*Objectif national de dépenses d'assurance maladie")*[1] at EUR 254.9bn, an increase of 2.9% in nominal terms compared with 2023, above the increase of 2023 (+0.2%) and in line with the 2022 growth rate (2.8%) but much below the growth rates in 2020 and 2021. However, when excluding additional costs related to the pandemic from the analysis, the 2024 growth objective is set at 3.2%, considerably below the growth of 2022 (+4.8%), 2021 (+6.0%) and 2020 (+6.2%) (Ministère de l'Economie, 2023[17]). Taking into account inflation estimates included in the PLFSS, the health budget remained flat in 2023 but is expected to grow moderately in 2024 in real terms.

In the ***United Kingdom***, multiple year budgets are set on a nominal basis. The budget for the English NHS and Social Care was fixed in nominal terms in 2021 for the three financial years on the basis of inflation as projected at the time. As such, the health sector has received frequent budget uplifts and

top-ups. Based on the spring 2023 budget, planned total healthcare spending will increase by GBP 1.9bn (1.1%) in 2023/24, and GBP 3.7bn (2.1%) in 2024/25 in cash terms (Table 2.2). Adjusting for expected inflation, planned total healthcare spending will decrease in 2023/24 (-1.4%), with a slight increase in 2024-25. However, real spending growth may be revised downward if inflation remains higher than expected.

Table 2.2. Health and social care spending in England saw drastic increases in 2020-21 but planned spending growth remains limited in coming years

Spending in million GBP, in nominal and real terms, 2018-25

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
	outturn	outturn	outturn	outturn	outturn	plans	plans
Health and Social Care Resource budget	125 279	134 184	181 441	183 548	176 631	178 578	182 252
% change per year		7.1%	35.2%	1.2%	-3.8%	1.1%	2.1%
Health and Social Care Resource budget in real terms	144 530	150 880	191 987	195 571	176 631	174 180	175 017
% change per year		4.4%	27.2%	1.9%	-9.7%	-1.4%	0.5%

Note: Data refers to resource DEL by departmental group.
Source: HM Treasury (2023[18]), Public Expenditure Statistical Analyses 2023, www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2023, Chapter 1 Tables.

After years of exceptional spending growth, health budget increases are also projected to normalise in ***New Zealand***. The unaudited actual spending growth for 2023 returned to 4.1% and is forecast to be negative in 2025 (Treasury of New Zealand, 2023[19]). Beyond this, budget increases are forecast at around 5% per year for 2026 and 2027. After a spike in 2022 and 2023, the share of health in all Core Crown expenses[2] is planned to return to 21% in 2024, the same level as in 2019. But since the government has opted for multi-year budgeting in health the health budget may benefit from additional funding out of budget operating allowances to cover heath cost pressures.

1. The ONDAM refers to the overall expenditure target for healthcare and is one of the most significant aspects of the Social Security Financing Law in France. It represents the total amount of health spending that the parliament sets as an objective for a calendar year. Once published, it gives all stakeholders a precise spending objective and defines specific savings objectives.
2. Core Crown expenses refers to current spending excluding investment. It is an accrual measure of expenses and includes non-cash items such as depreciation on physical assets.

…while the effects of the pandemic continue to be felt…

At the same time, many OECD countries are still grappling with legacy issues from the pandemic. During the various infection peaks in 2020 and 2021, elective interventions such as hip and knee replacements were frequently postponed to reserve capacity for COVID-19 patients. In some countries which already had noticeable waiting times for interventions or specialist appointments before the pandemic, this has created an ongoing backlog of patients seeking care that needs to be addressed (Box 2.2).

Box 2.2. Several countries are still addressing the backlog of patients from the pandemic

The number of people on waiting lists in **Ireland** increased by 24% for inpatient and day care procedures between January 2020 and 2023 and by 6% for outpatient care, with little improvement since (National Treatment Purchase Fund, 2023[20]). Addressing these issues remains on the agenda: around EUR 442mn of the total voted health budget in 2023 (EUR 23.4bn) are allocated to reduce waiting lists, including one-off funding, investing in GP diagnostic tests, community radiology diagnostics and to strength the National Treatment Purchase Fund (Department of Health, 2023[21]).

Waiting times also increased in **Denmark** during the pandemic, and the government has provided substantial additional funding to regions to support increased surgical activity to bring down waiting times for surgical operations to pre-pandemic levels by the end of 2024 (OECD/European Observatory on Health and Health Systems, 2023[22]).

The situation is similar in **Finland**, where the number of patients waiting more than six months for non-urgent specialist treatment increased substantially to reach 18 000 by the end of 2022, up from 3 000 end of 2019 (THL, 2023[23]). Additional funds to address this issue will be made available via the Finnish Recovery and Resilience Plan (OECD/European Observatory on Health Systems and Policies, 2023[24])

This is not only a European issue. In ***Canada***, the federal government announced in February 2023 an additional transfer of CAD 2bn to its provinces and territories to address immediate pressures on the healthcare system, especially in paediatric hospitals and emergency rooms, and long wait times for surgeries (Goverment of Canada, 2023[25])

...with some countries expanding coverage to ease the cost-of-living crisis

In addition to improve (or restore) access to service provision, some countries also decided to reduce or forgo co-payments in an attempt to ease the financial burden for households in a high inflation environment (Box 2.3).

Box 2.3. Expanding coverage and reducing co-payments eases some of the burden on households caused by high inflation

In ***New Zealand***, the budget 2023 has provided NZD 707mn over four years to remove a NZD 5 prescription co-payment that can present a financial barrier to patients (Ministry of Health, 2023[26]).

In ***Ireland***, the 2023 budget foresees measures costed at around EUR 107mn to ease the cost-of-living crisis (Department of Health, 2023[21]). This includes an extension of free GP visits to all those on or below the median income, a removal of the public hospital inpatient co-payment and a reduced monthly threshold for the Drug Payment Scheme.

High costs for energy and other inputs continue to exert pressure on providers

As in 2022, high energy and other input costs remain an issue for health providers in many countries. Yet, energy and other inputs are not the only cost factors that have increased; higher construction costs have made hospital planning much more expensive than anticipated and budgeted (Box 2.4).

Box 2.4. Soaring costs for energy, other inputs and construction led governments to provide additional funding for health facilities

In ***Germany***, the federal government decided to set up a dedicated fund of EUR 6bn to cover additional energy-related costs in hospitals between October 2022 to April 2024 (Deutsches Ärzteblatt, 2022[27]). However, the hospital association warned that this was not sufficient and German hospitals would accumulate a deficit of EUR 10bn by the end of 2023 due to inflation (Deutsche Krankenhausgesellschaft, 2023[28]).

In ***England***, a survey among NHS Trust hospitals in late 2022 predicted a substantial rise in energy costs, with most of respondents expecting at least a doubling in energy bills up to an additional GBP 2mn per month (The BMJ, 2022[29]). In response, the government set up the Energy Bill Relief Scheme (EBRS) – replaced later by the Energy Bill Discount Scheme (EBDS) – to provide discounts on gas and electricity prices to business and public sector organisation (including hospitals).

The hospital association in ***Latvia*** stated in January 2023 that they receive one-third less funding than necessary partly due to higher cost of energy but also other goods and services including catering, medicines, maintenance, and cleaning (Latvian Public Broadcasting, 2023[30]).

Reports for ***New Zealand*** identify substantial increases in costs for some hospitals projects due to construction inflation putting 15 out of the current 110 projects at high risk (NZ Herald, 2023[31]). Yet, insufficient planning and poor quality control also added to the problem.

In ***Ireland***, the expected costs to complete the National Childrens Hospital will go significantly over what was budgeted, which may also impact the wider capital plan of the Department of Health (Irish Examiner, 2023[32]; Irish Independent, 2023[33]). Soaring constructions costs, contingencies for additional claims payment but also increases in legal costs amid tensions with the contractor explain the additional costs.

Similar examples exist in many other countries. Adequate multi-year budgeting for large (public) infrastructure projects is very challenging, and hospitals and other health facilities are no exception. Keeping such projects within the budget is already difficult in “normal” times but unanticipated inflation adds to the complexity.

Better pay for health workers is crucial for job attractiveness but can weigh heavily on health budgets

The ***key cost factor in healthcare provision are salaries***. On average, staff costs account for 60-70% of overall health spending but there has been long-term pressure to increase salaries. On the one hand, making the careers in the field of medical, nursing or long-term care more attractive is a key lesson of the pandemic to build more resilient health systems (OECD, 2023[10]), but the problems preceded the health emergency (OECD, 2020[34]). In many countries, this clearly entails an increase in salaries and remuneration for health workers. Moreover, given high inflation, increases in health workers’ pay has frequently been considered necessary (at a minimum) to avoid a deterioration in their relative standing in real terms.

During the pandemic, many countries provided one-off financial bonuses to frontline workers following the first wave of the pandemic, in recognition of their elevated health risks, additional workload and commitment (OECD, 2023[10]). Rewards were especially common for health workers and long-term care workers. The magnitude of the rewards and the coverage of health and long-term care workers varied across countries. Beyond one-off bonuses, there had been few government-led initiatives up until November 2021 to permanently increase pay levels. Such initiatives existed, for example in Belgium, Chile,

Czechia, Hungary, Latvia, Slovenia, Switzerland for health and/or long-term care workers. However, in some countries where pay raises were offered, these were below-inflation increases or perceived as 'disappointing' by health professionals (e.g. United Kingdom and Denmark) (OECD, 2023[10]).

Adjustments for salaries and remuneration continue to be on the agenda in many OECD countries but negotiations can be difficult and agreed pay increases may be negative in real terms if inflation exceeds forecasts (Box 2.5)

Box 2.5. Salaries for health workers are currently being adjusted but pay raises may be negative in real terms

in ***France***, the outcome of the arbitration of the failed negotiations between social insurance and physician's organisations is that the tariff for a standard GP consultation has increased to EUR 26.50 from EUR 25 from November 2023 onwards. This represents a 6% increase, but critics note that since the old tariff has been in place since 2017, this increase will not have kept up with inflation (Les Echos, 2023[35]). Public sector employees including doctors and nurses in hospitals received a general 3.5% salary increase in July 2022 and a further 1.5% increase in July 2023. In addition, one-off benefits ("*prime de pouvoir d'achat*") have been distributed to most health workers, and bonuses for work at night and on Sunday raised. Finally, complementary pay increases are foreseen for health workers with the lowest pay levels, such as auxiliary nurses (infirmiers.com, 2023[36]).

In ***Finland***, several thousands of nurses and other health workers went on strike in April 2022, calling for better working conditions and better pay. A final pay agreement was reached in March 2023, which included a minimum pay increase of 20.9% over the period 2022-27 (OECD/European Observatory on Health Systems and Policies, 2023[24]).

In ***Spain***, public workers (which includes most workers in the health sector) agreed to a phased 8% pay increase for 2022-24 (2022: +3.5%; 2023: +2.5%; 2024: +2%) which can rise to 9.8% depending on some variable elements taking into account inflation and GDP growth (CCOO, 2022[37]).

In ***Belgium***, most salaries are automatically adjusted based on a complex indexation system taking into account inflation. This also applies to health workers whose salaries are increased by 2% whenever the index ("*indice santé lisse*") surpasses a pre-defined threshold ("*indice pivot*"). This can happen more than once a year – in fact, in 2022 the threshold was passed 5 times, each time triggering a pay increase with a short time lag. The threshold has been reached again in September 2023 and is expected to be surpassed in February and June 2024 (Bureau fédéral du Plan, 2023[38]). While this automatic salary adjustment mechanism protects workers from eroding real wages, it can be challenging for health providers and facilities to refinance this wage growth if prices for service delivery are sticky. For this reason, the government granted a one-off additional remuneration of EUR 207mn in 2022 to providers to compensate for rising costs (Wallonie Santé, 2022[39]).

On the other hand, ***upward salary adjustments can weigh heavily on operating costs of health facilities***, that need to finance them, either by reducing their profit margins (if they are allowed to generate any in health system), passing cost increases on to payers and/or patients (if they can), improve efficiency in service provision, or face solvency problems (Box 2.6).

Box 2.6. Salary increase can weigh heavily on health providers

In the ***United States***, the hospital association highlighted the ongoing rise of input costs, including staff expenses (American Hospital Association, 2023[40]). A key driver here is the soaring cost for temporary contract labour – required due to workforce shortages and increased demand – which was responsible for a large part of the 20.8% increase in overall hospital labour expenses between 2019 and 2022. During that time period, the growth in expenses was more than double the growth in Medicare Reimbursement, leading to AHA fears for the financial stability of hospitals.

In ***Latvia***, the raise of the minimum wage is mentioned by the hospital association as one factor in the total cost inflation of 19% (Latvian Public Broadcasting, 2023[30]).

In ***Norway***, the government committed to increase transfers to hospitals by NKK 4.7bn in 2023, of which NKK 2.5bn refer to a permanent budget increase and NKK 2.2bn to compensate price and wage increases in 2023 (Regjeringa.no, 2023[41]).

Faced with rising energy prices and wages the hospital association in ***Switzerland*** demanded a 5% increase in SHI reimbursement rates in 2023 to preserve service delivery and working conditions (H Plus, 2023[42]).

In ***Germany***, costs for nursing homes and community care grew substantially in the first half of 2023, as a result, inter alia, of higher wages, and increased costs for room and board (Deutsches Ärzteblatt, 2023[43]). One reason for the wage increase may be the new requirement (since September 2022) for nursing homes and community care providers to pay their care staff wages in line with collective bargaining agreements in order to be able to contract with long-term care insurance funds. Legislative action has been taken to shield nursing home residents from rising co-payments as a result of the higher cost of care delivery. Since 2022, additional financial support from long-term care insurance funds has been made available to residents to limit co-payments, with this support varying based on length of stay.

Policy makers are walking a delicate tightrope. One the one hand, better pay and conditions are crucial to attract and retain healthcare professionals, even more so in ageing populations where demand for healthcare can outstrip supply. On the other hand, high salary increases may compromise the solvency of health providers or the financial sustainability of the health system as a whole, if the fiscal space does not allow for substantial increases in health budgets. With limited additional public funding, the only two other options would be to shift more to private funding and find efficiency gains in the system. Indeed, it can be expected that a renewed focus will soon be on the latter, by making the most of digital health solutions, by moving care to the most appropriate setting and reducing and cutting low value care.

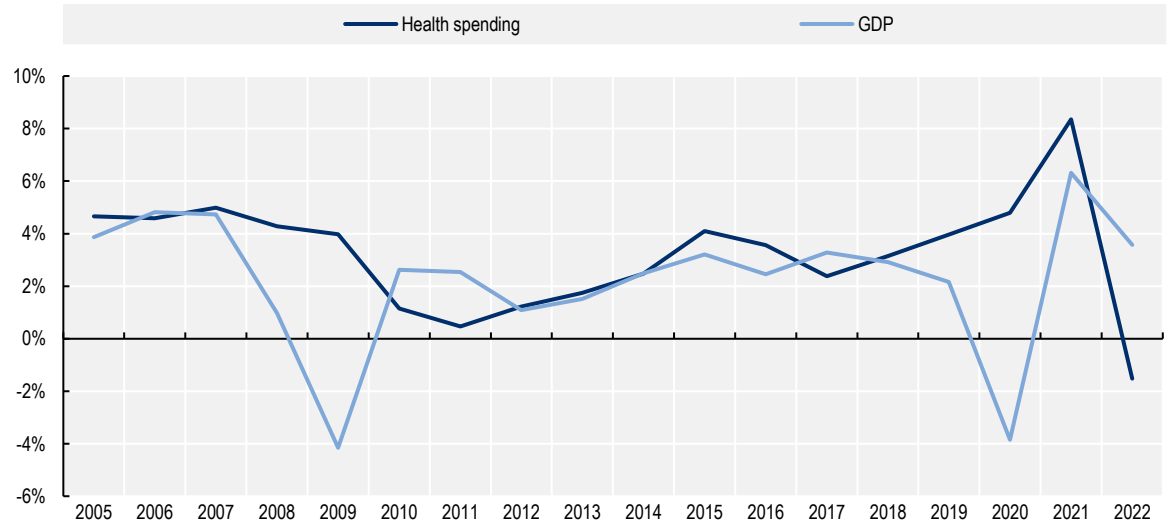
More investment in resilient health systems or a return to austerity?

In the aftermath of COVID-19 and the current economic climate, some comparisons might be drawn with the global financial crisis of 2007-08 and the resulting debt crisis, which had important economic implications in many OECD countries characterised by high unemployment and years of austerity. To balance budgets, many governments reined in public spending, including on health. In the health sector, a range of different measures were adopted by countries including increases in patient co-payments, delisting of publicly financed services and goods, postponement of capital spending, freezes in recruitment and salary cuts for public sector staff, negotiated price reductions for pharmaceuticals, alongside other initiatives to enhance efficiency (Morgan and Astolfi, 2014[44]). As the result, health spending growth in real terms slowed notably to around 1% or lower between 2010 and 2012, compared with annual increases of

4-5% pre-crisis (Figure 2.13). A number of countries were hit hard by the economic crisis, such as Greece, Italy, Portugal and Spain and saw consecutive years of declining health spending as a result.

Figure 2.13. Health spending slowed down markedly after the Global Financial Crisis

Health spending and GDP, annual changes in real terms, 2005-22, OECD averages



Note: Averages are unweighted.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en; OECD National Accounts 2023.

The pandemic and the subsequent cost-of-living crisis have some similarities with the 2007-08 financial crisis in terms of a global shock but also differ in important aspects. In both cases, the economic downturn was of a similar magnitude and the fiscal position worsened considerably in a number of OECD countries limiting the fiscal space for large public investments. On the other hand, the jump in unemployment was more of a temporary feature during the pandemic and while there remain uncertainties about the speed of economic recovery, the global outlook is generally more positive. One notable difference this time round is that monetary policy during the global financial crisis kept inflation low, while inflationary pressures became acute in the post-pandemic era.

That said, the impact of the speed of economic recovery and reduction in inflation rates on the short-term trajectory of health spending is difficult to forecast. Naturally, the situation will differ widely across countries. Yet, countries still have a way to go to make health systems more resilient. In many countries, there are few signs of a significant uplift in current and expected investment levels. On the other hand, there are no current indications that governments are ready to engage in a round of policy changes to reduce coverage or increase co-payments to bring down health spending in an attempt to balance public budgets. While annual health spending increases may be negative in real terms beyond 2022, this will be more likely linked to stubbornly high inflation rates and sluggish economic growth, and less to an era of new austerity measures.

References

American Hospital Association (2023), *The Financial Stability of America's Hospitals and Health Systems Is at Risk as the Costs of Caring Continue to Rise*, https://www.aha.org/system/files/media/file/2023/04/Cost-of-Caring-2023-The-Financial-Stability-of-Americas-Hospitals-and-Health-Systems-Is-at-Risk.pdf (accessed on 28 September 2023). [40]

Bureau fédéral du Plan (2023), *Indice des prix à la consommation - Prévisions d'inflation*, https://www.plan.be/databases/17-fr-indice_des_prix_a_la_consommation_previsions_d_inflation (accessed on 29 September 2023). [38]

Canadian Institute for Health Information (2023), *National Health Expenditure Trends, 2021 — Snapshot*. [8]

CCOO (2022), *Subida salarial para los empleados públicos*, https://feccoo-madrid.org/7644d9458a19a7a064b9819ed2144e63000063.pdf (accessed on 29 Septemeber 2023). [37]

Centers for Medicare & Medicaid Services (2023), *National Health Expenditures 2021 Highlights*. [4]

Central Statistics Office (2021), *System of Health Accounts 2019*. [5]

Department of Health (2023), *Health budget 2023*, https://www.gov.ie/pdf/?file=https://assets.gov.ie/243516/d2a4fe23-b7bf-4421-9706-952825c33049.pdf#page=null (accessed on 27 September 2023). [21]

Deutsche Krankenhausgesellschaft (2023), *P r e s s e m i t t e i l u n g - DKG zu Milliardenhilfen für die Krankenhäuser*, https://www.dkgev.de/fileadmin/default/Mediapool/1_DKG/1.7_Presse/1.7.1_Pressemitteilungen/2023/2023-05-26_PM_DKG_zu_Defizit_aller_Krankenhaeuser.pdf (accessed on 30 September 2023). [28]

Deutsches Ärzteblatt (2023), *Pflege im Heim immer teurer, Zuzahlungen nochmals gestiegen*, https://www.aerzteblatt.de/nachrichten/144692/Pflege-im-Heim-immer-teurer-Zuzahlungen-nochmals-gestiegen (accessed on 30 September 2023). [43]

Deutsches Ärzteblatt (2022), *Energiekosten: Bund legt fest, wie Krankenhäuser Hilfszahlungen erhalten*, https://www.aerzteblatt.de/nachrichten/138889/Energiekosten-Bund-legt-fest-wie-Krankenhaeuser-Hilfszahlungen-erhalten (accessed on 30 September 2023). [27]

Goverment of Canada (2023), *Working together to improve health care for Canadians*, https://www.pm.gc.ca/en/news/news-releases/2023/02/07/working-together-improve-health-care-canadians#:~:text=An%20immediate%2C%20unconditional%20%242%20billion,long%20wait%20times%20for%20surgeries. (accessed on 28 September 2023). [25]

H Plus (2023), *Une hausse des tarifs pour préserver la sécurité des soins et la paix du travail*, https://www.hplus.ch/fr/publications/h-palaisfederal/no-1/2023-fevrier (accessed on 28 September 2023). [42]

HM Treasury (2023), *Public Expenditure Statistical Analyses 2023*, https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2023 (accessed on 17 September 2023). [18]

infirmiers.com (2023), *Une revalorisation du point d'indice prévue en juillet 2023*, https://www.infirmiers.com/profession-ide/actualite-sociale/une-revalorisation-du-point-dindice-prevue-en-juillet-2023 (accessed on 29 September 2023). [36]

Irish Examiner (2023), *Children's hospital cost likely to pass €2bn amid tensions with contractor*, https://www.irishexaminer.com/news/arid-41182273.html (accessed on 17 September 2023). [32]

Irish Independent (2023), *Rising cost of new National Children's Hospital may derail part of wider health service building this year*, https://www.independent.ie/irish-news/rising-cost-of-new-national-childrens-hospital-may-derail-part-of-wider-health-service-building-this-year/a836597466.html (accessed on 17 September 2023). [33]

Latvian Public Broadcasting (2023), *Latvia's hospitals ask for substantial funding increase*, https://eng.lsm.lv/article/society/health/latvias-hospitals-ask-for-substantial-funding-increase.a493249/ (accessed on 17 Septemeber 2023). [30]

Les Echos (2023), *Le prix de la consultation chez le médecin généraliste va passer à 26,50 euros*, https://www.lesechos.fr/economie-france/social/la-consultation-chez-le-medecin-generaliste-bientot-revalorisee-a-2650-euros-1937457 (accessed on 17 September 2023). [35]

Ministère de l'Economie (2023), *Projet de loi de financement de la sécurité sociale pour 2024*, https://presse.economie.gouv.fr/27092023-dp-projet-de-loi-de-financement-de-la-securite-sociale-pour-2024/ (accessed on 29 Septemeber 2023). [17]

Ministerio dell'Economia e delle Finanze (2023), *Documento di Economia e Finanza 2023 - Nota di Aggiornamento*, https://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_it/analisi_progammazione/documenti_programmatici/nadef_2023/NADEF-2023.pdf (accessed on 8 December 2023). [16]

Ministero dell'Economia e delle Finanze (2023), *Documento di Economia e Finanza 2023 - Sezione II Analisi e tendenze della finanza pubblica*, https://www.rgs.mef.gov.it/_Documenti/VERSIONE-I/Attivit--i/Contabilit_e_finanza_pubblica/DEF/2023/DEF2023-Sez-II-AnalisiETendenzeDellaFinanzaPubblica.pdf (accessed on 17 September 2023). [15]

Ministry of Finance -Republic of Latvia (2022), *Implementation of the 2021 state budget*, https://www.fm.gov.lv/lv/media/11285/download?attachment. [1]

Ministry of Health (2023), *Vote Health*, https://www.health.govt.nz/about-ministry/what-we-do/vote-health#:~:text=Budget%202022%20has%20provided%20a,toward%20funding%20the%20health%20system. (accessed on 30 Septemeber 2023). [26]

Morgan, D. and R. Astolfi (2014), "Health Spending Continues to Stagnate in Many OECD Countries", *OECD Health Working Papers*, No. 68, OECD Publishing, Paris, https://doi.org/10.1787/5jz5sq5qnwf5-en. [44]

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. [11]

National Treatment Purchase Fund (2023), *National Waiting List Data*, https://www.ntpf.ie/home/nwld.htm (accessed on 26 September 2023). [20]

NZ Herald (2023), *Construction inflation, insufficient planning add to hospital project cost blow-outs*, https://www.nzherald.co.nz/nz/construction-inflation-insufficient-planning-add-to-hospital-project-cost-blow-outs/E7DXNJBSUBFMNCTQRMNZZPFS3U/ (accessed on 17 September 2023). [31]

OECD (2023), *Ready for the Next Crisis? Investing in Health System Resilience,*, OECD Publishing, https://doi.org/10.1787/1e53cf80-en. [10]

OECD (2023), *OECD Economic Outlook, Volume 2023 Issue 2: Preliminary version*, OECD Publishing, Paris, https://doi.org/10.1787/7a5f73ce-en. [13]

OECD (2023), *OECD Economic Outlook, Volume 2023 Issue 2: Preliminary version*, OECD Publishing, Paris, https://doi.org/10.1787/7a5f73ce-en. [14]

OECD (2022), *OECD Economic Outlook, Interim Report September 2022: Paying the Price of War*, OECD Publishing, Paris, https://doi.org/10.1787/ae8c39ec-en. [12]

OECD (2020), *Who Cares? Attracting and Retaining Care Workers for the Elderly*, OECD Publishing, https://doi.org/10.1787/92c0ef68-en. [34]

OECD/European Observatory on Health and Health Systems (2023), *Denmark: Country Health Profile 2023*, State of Health in the EU, OECD Publishing, Paris, https://doi.org/10.1787/e4f0bee3-en. [22]

OECD/European Observatory on Health Systems and Policies (2023), *Finland: Country Health Profile 2023*, State of Health in the EU, OECD Publishing, Paris, https://doi.org/10.1787/e7af1b4d-en. [24]

OECD/European Observatory on Health Systems and Policies (2021), *Hungary: Country Health Profile 2021*, State of Health in the EU, OECD Publishing, Paris, https://doi.org/10.1787/482f3633-en. [7]

OECD/The World Bank (2023), *Health at a Glance: Latin America and the Caribbean 2023*, OECD Publishing, Paris, https://doi.org/10.1787/532b0e2d-en. [3]

OECD/WHO (2022), *Health at a Glance: Asia/Pacific 2022: Measuring Progress Towards Universal Health Coverage*, OECD Publishing, Paris, https://doi.org/10.1787/c7467f62-en. [2]

Our World in Data (2023), *Explore the global data on confirmed COVID-19 deaths*, https://ourworldindata.org/covid-deaths. [45]

Regjeringa.no (2023), *Hospitals will receive larger budgets*, https://www.regjeringen.no/en/aktuelt/hospitals-will-receive-larger-budgets/id2975963/ (accessed on 28 September 2023). [41]

Rocard, E., P. Sillitti and A. Llena-Nozal (2021), *COVID-19 in long-term care: Impact, policy reponses and challenges*. [9]

The BMJ (2022), *Exclusive: Hospitals will be hit with "eye watering" energy bills this winter*, https://doi.org/10.1136/bmj.o2088 (accessed on 17 September 2023). [29]

The Health Insurance Authority (2021), *Covid sees Drop in Health Insurance Claims but Percentage of the Population with Insurance Continues to Rise according to the HIA*. [6]

THL (2023), "Hoitoonpääsy erikoissairaanhoidossa 31.12.2022", *TILASTORAPORTTI 14/2023*, https://www.julkari.fi/bitstream/handle/10024/146430/TR_14_2023_Esh%20hoitoonp%c3%a4%c3%a4sy.pdf?sequence=1&isAllowed=y. [23]

Treasury of New Zealand (2023), *Data - Core Crown Expense Tables - Pre-election Economic and Fiscal Update 2023*, https://www.budget.govt.nz/budget/forecasts/prefu2023.htm (accessed on 17 September 2023). [19]

Wallonie Santé (2022), *Un budget de 207 millions d'Euroe de plus pour les soins de santé*, https://www.walloniesante.be/fr/news/225_un-budget-de-207-millions-deuros-de-plus-pour-les-soins-de-sante (accessed on 30 September 2023). [39]

Notes

[1] Central estimate of global excess deaths between 1 March 2020 and 10 October 2022 was 23.5 million (Our World in Data, 2023[45])

[2] The growth in Japan, however, is underestimated as medical expenditure in Japan largely exclude almost all COVID-19 related spending.

[3] In both countries, some of this development is related to data issues. Most of their vaccination costs were recorded in the year that vaccines were procured (2020) rather than when they were administered (2021), which clearly leads to an overestimation in the 2020 growth rate (and an underestimation of 2021 growth rate).

[4] In both New Zealand and Korea, 2022 saw the peak of COVID-19 deaths.

[5] Headline inflation concerns all commodities, services, and goods. Core inflation excludes food and energy.

3 Long-term projections: Different paths to fiscal sustainability of health systems

Luca Lorenzoni, Pietrangelo De Biase, Sean Dougherty

This chapter presents projections for health spending from public sources and government revenues through 2040, to assess the fiscal sustainability of health systems across OECD countries. A health spending projection model incorporates the effects of income growth, constrained productivity in health relative to other sectors, demographic changes, and technology. Government revenue projections combine past revenue trends relative to GDP growth with changes in tax bases due to population ageing. Combining these approaches, health spending from public sources is projected to grow around twice as fast as government revenues, on average over 2019-2040. As a result, health spending is projected to reach 20.6% of revenues by 2040, on average across OECD countries, up 4.7 percentage points from 2018. Results show that addressing fiscal sustainability requires whole-of-government policies that target the multiple drivers of health spending growth and improve the robustness of government revenues to an ageing population.

Key findings

- Even before COVID-19, many OECD countries expected that the financing of their health systems would be put under severe pressure in the decades to come – reflecting both upward pressures on health spending and the negative impact of population changes on government revenues. The pandemic has made this outlook even more challenging, with the need for health systems and societies to be better prepared for health shocks.
- By coupling projections for health spending with those for government revenues, analysis shows how changes in population age-mix and income would result in changes in the share of health spending in government revenues in the long term.
  - The health spending projection model uses a component-based approach, which allows projections to be disaggregated by the main drivers of health spending – changing incomes, productivity constraints, demographic changes, and the impact of new technologies.
  - Government revenues are projected considering the revenue buoyancy to GDP and the impact of changes in the structure of the population on labour income, asset income, and private consumption.
- Projections show that over the next two decades, OECD countries are likely to face a dual challenge of upward pressures on health spending, and constraints on the revenues governments can expect to raise. Growth in health spending from public sources is projected to be twice the average growth in government revenues (2.6% and 1.3% respectively), on average across OECD countries between 2019-40. Consequently, health spending from public sources is projected to reach 20.6% of government revenues across OECD countries by 2040, an increase of 4.7 percentage points from 2018.
- Health spending from public sources is projected to reach 8.6% of GDP, an increase of 1.8 percentage points from 2018.
- Pressures on health spending are expected to be particularly substantial in Korea and Türkiye (+4% annual growth on average between 2019-40). On the revenue side, almost no increase in government revenues is projected for Greece, Italy and Japan between 2019-40.
- Changes in the age structure of the population are likely to have a smaller impact on determining health expenditure as compared to other supply-side factors, notably technological changes and rising incomes. Over the next 20 years, population ageing is expected to increase health spending by 0.2% per year, and to reduce government revenues by 0.2% per year, on average across OECD countries. Changes in the population age structure are projected to decrease government revenues in all OECD countries except New Zealand by 2040.
- Policies that support prevention and promote healthy lifestyles as well as policies that enhance efficiency may rein in projected growth in health spending. Policies to secure the future fiscal sustainability of health systems should also make government revenues more robust to an ageing demographic profile.

3.1. Introduction

Even before COVID-19, many OECD countries expected that the financing of their health systems would be put under severe pressure over the decades to come. The pandemic has made this outlook even more challenging. Health systems need to be more resilient, so that any future health shocks do not endanger the accessibility and quality of health services. This includes not only being responsive to several "mega-trends" emerging in OECD economies that will affect healthcare – such as population ageing, technological developments, changes in labour markets and family structure, and a more integrated global economy – but also potential health shocks in the future, which include repeated pandemics, anti-microbial resistance, the effects of climate change, disruptions to digital infrastructure, and others that cannot be foreseen.

In addition to these considerable challenges, COVID-19 has made abundantly clear that health system resilience must also be added as a necessary component to wider economic sustainability. In 2020, the pandemic contributed to a reduction of 3.4% in the size of the world economy (in GDP terms), with OECD countries experiencing reductions as large as 10.8% (OECD, 2021[1]). Looking ahead, repeated future health shocks have the potential to affect economic growth through cumulative impacts if they are not contained and mitigated effectively by health systems.

In this chapter, a new method is used to assess the longer-term fiscal sustainability of health systems. By coupling health spending projections with government revenue projections, the effects of population ageing and income growth on both government revenues and health spending can be simultaneously explored. Analyses that give equal attention to health expenditure and government revenues better capture the need for a whole-of-government set of policies, addressing in particular the consequences of ageing.

The chapter builds on and extends previous work of health spending by the OECD (de la Maisonneuve and Oliveira Martins, 2013[2]). This chapter develops the health expenditure modelling framework and incorporates additional countries into the analysis. It then adds accompanying analysis on the revenue side, drawing on the revenue buoyancy methodology of (Lagravinese, Liberati and Sacchi, 2020[3]), extending that approach and integrating policy-based revenue scenarios alongside health expenditure projections. Note that this revenue projections approach assumes that past changes to tax policies will persist into the future. The result is a comprehensive set of projections of the future fiscal sustainability of health systems of OECD countries.

To obtain an order of magnitude of the long-term fiscal sustainability of health systems, this chapter is organised as follows. First, it projects health spending from public sources through 2040, accounting for major cost drivers under different scenarios. It then projects government revenues to 2040. Finally, the share of health spending in government revenues is projected up to 2040.

3.2. Projecting health spending from public sources

This chapter focuses on future current health spending from public sources, defined as including spending by compulsory health insurance as well as by government schemes.[1] Health spending from private sources of out-of-pocket payments and voluntary health insurance is beyond the scope of this chapter. The projection model uses a component-based approach, which allows projections of five-year age groups to be disaggregated by the main drivers of spending (Box 3.7). Regression model results provide the value of the coefficients used to project the impact of income, productivity constraints and technological advancements on health spending over time.

Box 3.7. Drivers of health spending

The income effect is measured by the income elasticity of health spending, which captures the percentage change in health expenditure in response to a given percentage change in income. While early studies found income elasticity to be higher than one (health expenditure increasing faster than income), current evidence using international panel data and appropriate regression methods that account for other cost drivers largely find income elasticity of around 0.7-0.8 for OECD/high-income countries. Evidence generally shows that as countries become richer, income elasticity tends to decrease (Baltagi BH, 2017[4]). Intuitively this means that as countries achieve adequate levels of care and coverage for all, a relatively lower share of income will be allocated to health. However, it is important to note that when GDP is used as a proxy for income, this does not necessarily imply that health expenditure as a share of GDP will decrease, since the income effect does not factor in growth in health spending from other drivers of health spending.

Productivity constraints are measured by the "Baumol variable" (Baumol, 1967[5]), a proxy that captures the impact of lower productivity growth in the health sector relative to other sectors of the economy on health spending. Baumol posited that some sectors of the economy are 'non-progressive', meaning they do not benefit from technological advancements as much as other sectors do. Such sectors, including health and education, do not displace labour at the same rate (or at all) when new technologies are implemented, as compared to 'progressive' sectors of the economy. In other words, the health sector is labour-intensive and likely to remain so in the coming years. The Baumol effect states that as productivity and wages rise together in 'progressive' sectors of the economy, the health sector (being 'non-progressive' and thus remaining labour-intensive) will experience wage increases in line with the rest of the economy, but not commensurate productivity increases. In practice, the Baumol variable captures excess (to economy-wide) health price inflation.

Technological progress takes different forms – product, knowledge or process innovation – and represents the most complex driver of healthcare expenditure to model (Chernew and Newhouse, 2012[6]). The challenge technology poses as a driver is twofold: first, endogenous interactions with other drivers of spending are large. Technology affects demographic change, shapes productivity and to some extent reflects consumer demand as incomes rise. Second, such interactions, and indeed technology on its own, are difficult to account for at the macro level: proxies for technology are both scarce and inefficient, particularly for international panels (Marino et al., 2017[7]). In this chapter, the impact of technological progress on health spending is estimated through a time-specific coefficient, while also acknowledging that some of its effects might be endogenously captured by the income and Baumol effects.

The demographic effect is captured by changes in the population by five-year age groups over time. Furthermore, as expenditures are concentrated in the last years or months of life independently of the age at which death occurs – commonly referred to as the death-related costs (DRC) hypothesis (Lubitz and Riley, 1993[8]) – costs for non-survivors are assumed to be ten times higher than costs for survivors by five-year age groups. This expenditure ratio reflects the mid-point of values reported in the literature (Marino et al., 2017[7]). This value of ten is then adjusted over time to reflect country-specific gains in life expectancy. Such dynamic DRCs are used as a proxy to model healthy ageing. The healthy ageing assumption implies that survivors are ageing more healthily (as their health expenditure is lower than non-survivors) and morbidity is compressed towards later age groups (since mortality rates, and therefore expenditure, are higher in older age). Furthermore, death-related costs are adjusted over time to reflect country-specific gains in life expectancy. Given the importance of proximity to death in driving expenditure, the changing patterns of age at death and the increase in life expectancy, the health expenditure of older people falls relative to younger people over time (Cylus, Figueras and Normand, 2019[9]).

3.2.1. Specifications of the health spending projection model

The impact of income, productivity constraints and time-specific effects on healthcare expenditure is estimated through panel regressions run on historical data (2000-18) for 33 OECD countries. The base specification uses demography, GDP per capita,[2] productivity and a time factor to estimate health expenditure. The dependent variable is current health expenditure per capita from public sources, in real terms and in national currency. Additional controls for demography and technology, as measured by the share of people aged 65 or more in the total population and research and development (R&D) expenditure in the general economy respectively, are also included in the analyses. A dummy variable to account for negative real GDP growth is also used. The regression model uses log-differenced data for all variables, and the preferred specification uses random effects.

The income effect is measured by the income elasticity of health spending, which captures the percentage change in health expenditure in response to a given percentage change in income.[3] In the preferred specification, the estimate for the income elasticity of health spending from public sources is 0.767. For projections, this means a 1% increase in potential GDP brings about an average 0.767% increase in health spending, all else being equal. It is important to note this does not necessarily imply that health expenditure as a share of GDP will decrease, since the income effect does not factor in growth in health spending resulting from all other drivers.

Potential productivity constraints are measured by the "Baumol variable", a proxy that captures the impact of lower productivity growth in the health sector relative to other sectors of the economy on health spending. Historical, country-specific, average growth in wages in the overall economy in excess of productivity per worker in the overall economy was used as the projection proxy of the Baumol effect, and multiplied by the coefficient estimated in the panel regression for the Baumol variable (0.482). This implies a 1% increase in wage growth in excess of productivity growth is translated into a 0.482% increase in health spending from public sources, all else equal. The Baumol variable is capped at 0.01 to 2040. This means that the value of the Baumol variable would decrease linearly to 0.01 from 2018 to 2040 if the mean observed value from 2000 to 2018 for a country is higher than 0.01. If the average growth in wages in excess of productivity per worker is negative, then the Baumol variable equals the annual average productivity growth. This is the case for Greece, Italy, Japan, Portugal and Spain.

Lastly, two proxies for technological progress were used in the regression model. First, expenditure growth on R&D is included. This proxy variable was not significant in regressions for health spending from public sources – in line with the literature – but it did significantly affect other drivers in some of the specifications. Second, year dummies are included. These capture systematic growth that is not taken into account from all other parameters within the model, reflecting in part technological progress. The resulting variable is a year-specific growth for all years in the panel, which are subsequently averaged using a linear weighting that gives more weight to years closer to the base year of the projection and less weight to years further away. The coefficient for this time-specific effect is 0.004, implying a 0.4% increase in health spending for each year, all else equal. The impact of technological progress on health spending is therefore estimated through the time-specific coefficient, while also acknowledging that some of its effect might be endogenously captured by the coefficients for income and productivity.

The general equation is as follows:[4]

$$\Delta \ln HCE_{c,t} = \alpha + \quad Demo_{c,t} + \beta_2 \Delta \ln GDP_{c,t} + \beta_3 \left(\Delta \ln W_{c,t} - \Delta \ln Y_{c,t}\right) + \eta_c + \tau_t + \varepsilon_{c,t}$$

The dependent variable HCE is healthcare expenditure per capita in country c for year t; Demo refers to the demographic component; β_2 is the income elasticity of GDP; β_3 is the coefficient of the Baumol variable, measured as wages in the overall economy W in excess of productivity per worker Y; η_c and τ_t are country and time effects; $\varepsilon_{c,t}$ is the residual component of the regression.

3.2.2. Projections and scenario analysis

Projections can make an important contribution to better long-term planning. They combine information on well-understood determinants of healthcare spending such as demographic changes, with the impact of broader economic, technological, and social changes. Projections are not forecasts – they do not attempt to estimate what will happen in the future but explore what could happen if existing trends continue or certain events occur. Information on relatively predictable factors, such as the ageing of the population, is often combined with information on more uncertain factors to create scenarios. Scenarios[5] describe a range of possible future states of the world by combining different assumptions, for example around policy choices or cost drivers (e.g. new technologies).

In this chapter, a "base" policy scenario projects health spending under the assumption that policies remain similar to how they were before the COVID-19 pandemic, except for a linear increase of up to 10% in 2040 in the productivity in the health sector as compared to the general economy, which reflects historical trends. The base scenario also models healthy ageing through a reduction in expenditure, on average, for survivors. In the base scenario, a partial dynamic equilibrium is adopted, whereby only half of the gains in life expectancy translate into a reduction of future spending across all age groups.[6]

Three additional policy scenarios are analysed: "cost control", "cost pressure" and "healthy ageing". A "cost control" scenario estimates the extent to which effective cost containment policies can offset health spending drivers. In particular, it assumes a linear increase up to 20% in 2040 in productivity in the health sector (compared to 10% in the base scenario), and a linear decrease up to 10% in 2040 in the income elasticity of health spending (compared to no change in the base scenario) – reflecting that as countries become richer, health systems become more efficient and health outcomes improve. Harnessing new technologies through a better use of Health Technology Assessment, task-shifting and increased generics uptake are some policy examples that best reflect this scenario. A "cost pressure" scenario assumes a linear increase up to 10% in 2040 in income elasticity and constant productivity. Here, ineffective cost containment policies, combined with rising expectations on healthcare, lead to the introduction of expensive new technologies, with insufficient consideration of their cost-effectiveness. While in this scenario quality of care may increase, such gains will come with considerable cost pressures. Finally, a "healthy ageing" scenario assumes that all life expectancy gains translate into years in good health over time, therefore lowering healthcare expenditure for survivors compared to the base scenario. Here, an assumption of implementation of effective policies that strengthen prevention and promote healthy lifestyles is made.

Table 3.1 shows the value of the coefficient of the drivers of the model by scenario. The values of the base year (2018) coefficients of income elasticity, Baumol effect and time effect were estimated through panel regression analyses run on historical data (2000-18). Note that this chapter analyses projection scenarios that reflect relatively moderate assumptions about the direction of health policies. Chapter 1 analyses the spending implications of more ambitious transformational policies, both those designed to substantially increase health system resilience, and policies targeting radical cuts to ineffective and wasteful spending on health.

Table 3.1. Value of the coefficients of the driver by scenario

	Income elasticity		Baumol effect			
Scenario	2018	2040	2018	2040	Healthy ageing multiplier	Time effect
Base	0.767	0.767	0.482	0.434	0.5	0.004
Cost control		0.691		0.386	0.5	0.004
Cost pressure		0.843		0.482	0.5	0.004
Healthy ageing		0.767		0.434	1	0.004

Note: The coefficients of income elasticity, Baumol effect and time effect were statistically significant at 0.01 level.

3.3. Projecting government revenues

Government revenues can be distinguished between tax and non-tax revenues. Taxes are defined by the OECD as compulsory, unrequited payments to the general government. Taxes are calculated through the multiplication of a tax rate to a tax base (e.g. income, property, consumption, payroll, carbon emission, etc.). Whereas non-tax revenues encompass a large heterogeneity of revenue sources, such as intergovernmental grants, interest receipts, property rents, dividends and profits from state-owned enterprises, and charges and fees from services provided by governments to specific groups (e.g. toll roads, medical service charges).

Government revenues are projected considering two effects: the long-term buoyancy and the changes in the structure of the population. Buoyancy is a coefficient that captures the sensitivity of government revenues to economic activity or the economic cycle. It can be used to project government revenues based on future trends in economic activities as measured by GDP or the output gap. By multiplying the buoyancy coefficient by the expected growth of the proxy at hand, the projected change in government revenues associated with the change in economic activity is captured. Therefore, when using this projection method, it is implicitly assumed that the relationship between revenues and GDP observed in the past in each country is maintained in the future. This relationship includes tax policy reforms implemented in the past. That is, the model relies on past GDP and government revenue data to project government revenues in real terms. It does not account for emerging policy changes or macroeconomic factors, including recent fluctuations in interest rates and inflation, which can have an impact on specific tax bases (such as property values for property taxes).

Changes in the structure of the population refer to the impact of variations in patterns of labour income, asset income and private consumption over the life cycle as people get older. Those changes capture only the changes in the distribution of the population across age groups – and their income and consumption patterns –, whereas the buoyancy effect captures all changes in GDP, including those related to growth in population size.

3.3.1. Estimating government revenues buoyancy coefficients

The following government revenues model is estimated using ordinary least squares:[7]

$$\Delta ln(R_{c,i}) = \varphi_c + \alpha_c ln\,(R_{c,i-1}) + \beta_c\, ln\big(GDP_{c,i-1}\big) + \rho_c \Delta ln(GDP_{c,i}) + D_{c,i} + \epsilon_{c,i} \quad (1).$$

where *R*, *D*, *c* and *a* refer to government revenues, dummy for negative real GDP growth, country and time, respectively. φ is an intercept, ρ is the short-run buoyancy, α is the speed of adjustment and $-\beta/\alpha$ is the long-run buoyancy (the coefficient of interest). Variables are in real terms (deflated by the GDP implicit price deflator).

As changes in tax policies are not controlled for when estimating buoyancies, the easiest way to minimise the extent to which these effects are captured by the buoyancy coefficient and reproduced in the projections is by using total revenues, by and large the distribution with the least dispersion and whose values are closest to unity.

Government total revenue buoyancy coefficients vary from 0.41 (Greece) to 1.32 (Korea), with a median of 1.02. This proximity to one satisfies theoretical expectations and is in line with the results of other studies (Koster G, 2017[10]; Deli et al., 2018[11]; Belinga et al., 2014[12]; Dudine and Jalles, 2017[13]), but contrasts with the results found by (Lagravinese, Liberati and Sacchi, 2020[3]), in which buoyancy coefficients had a tendency to be below one.

3.3.2. Scenarios for buoyancy

As a robustness check, three scenarios for the buoyancy coefficients are used. First, a base scenario assumes that estimated buoyancy coefficients remain constant throughout the projection period. Second, a unitary buoyancy scenario posits that revenue growth is equal to GDP growth. Third, an intermediate scenario postulates that estimated buoyancy coefficients converge to one by 2060 (note that the projection period is through 2040). These three scenarios capture the uncertainty regarding the future value of revenue buoyancy coefficients.[8]

The rationale behind these three scenarios is that keeping buoyancy coefficients constant over the course of two decades may represent a too strong assumption as countries are expected to pursue the same policy path that they followed throughout the period that was used to estimate the buoyancy coefficients (1990-2018). As this assumption is unlikely, the goal of the first scenario is to provide an overall estimation of what would happen in case countries repeat the same policies. The second reflects the theoretical expectation that in the long-run tax buoyancies must be one, otherwise the government will outgrow the entire economy or will cease to exist, an extremely unlikely situation. The third scenario assumes that there is some inertia in policy paths and, therefore, buoyancies will gradually converge to their theoretical expectation of one by 2060.

3.3.3. Estimating the impact of changes in the population age structure on government revenues

Population ageing affects government revenues through at least two different mechanisms: by affecting overall economic activity (i.e. expected GDP growth), which is intrinsically linked to government revenues; and by affecting tax bases.

National Transfer Accounts (NTA) data from the UN provide age profiles for economic aggregates from the System of National Accounts. Thus, it is possible to estimate the impact of population ageing on certain taxes or tax bases through the following equation:

$$\Delta R_{c,i} = {\sum_a p_{c,i,a} r_{c,b,a}} \Big/ {\sum_a p_{c,b,a} r_{c,b,a}} - 1 \quad (2).$$

Where ΔR refers to the growth rate for a government revenue item or a proxy for it (e.g. a tax base in the case of taxes), p to the population and r to the respective revenue item or its proxy in per capita terms. The subscripts c, i, b and a refer to the country, the current year of the projection, the base year of the projection and the age group, respectively. It is worth noting that this equation has $r_{c,b}$ both in the numerator and denominator, which means that it assumes that the age profile remains constant over time, an assumption that seems to be plausible in relatively short periods of time.

It is worth noting that when using the tax base to project the impact of population ageing on tax revenues, it is implicitly assumed that tax rates are constant for different age groups. For instance, for income taxes this means that an increase in the income of a certain group of people will lead to the same increase in tax revenues, regardless of the age group of these people. As OECD countries tend to have progressive tax systems, such an assumption of constant tax rates across age groups will tend to generate smaller estimates of tax revenues when an age group with high earners is growing (e.g. people in their late 40s) and larger estimates of tax revenues when an age group with low earners is growing (e.g. the elderly).[9] In a similar vein, for consumption taxes this assumption means that tax rates applied to the basket of products consumed by each age group are the same.

Given data limitations, property tax revenues were considered to be invariant to population ageing.[10] Revenues under the heading of “non-tax revenues” and “other taxes” are also considered to be invariant to population ageing. That is because they encompass a large variety of revenue sources and, thus, neither a single variable nor a combination of variables in NTA could be used as a proxy for them.

3.3.4. Age profiles

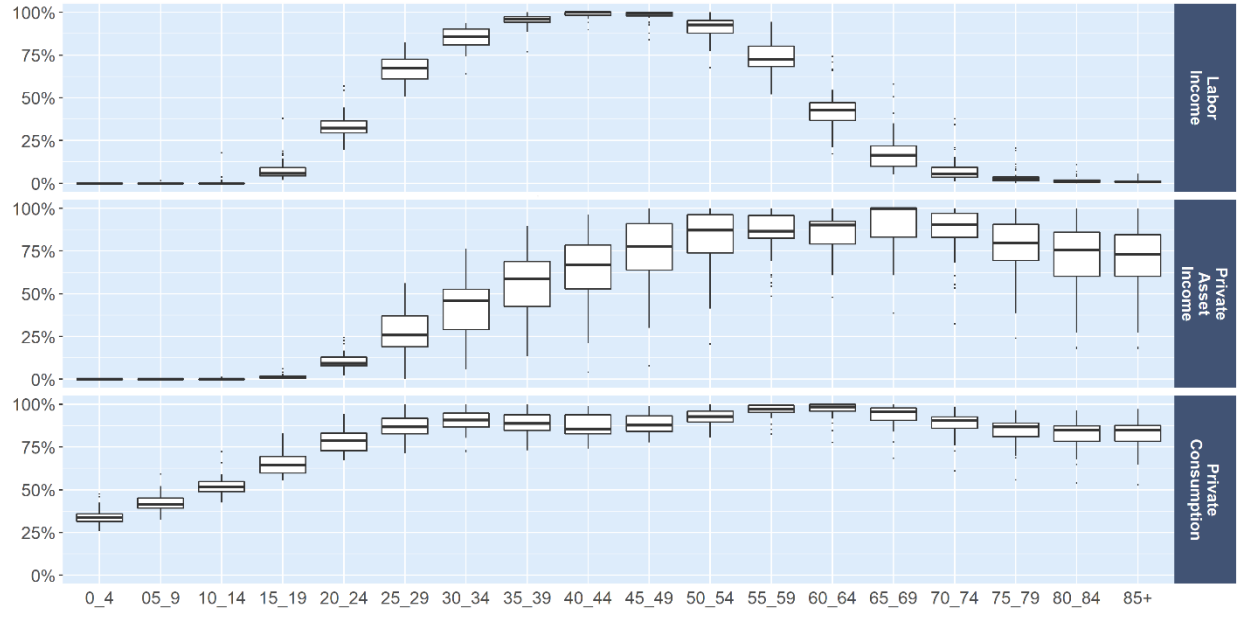
Figure 3.1 shows the age profile for the three tax bases used in the projections model, that is labour income, private assets income and private consumption.

Labour income[11] increases slowly when people are in their mid-teenage years (i.e. from the age of 15 onwards), peaking in their 40s and then decreasing rapidly from their 50s until their 80s. Dispersion across OECD countries is rather small, which shows that this pattern is similar across countries. Therefore, countries in which the expected average age of the population over the next 20 years is within the 40-54 age group are expected to show an increase in aggregate labour income. "Older" countries, on the other hand, are expected to experience a decrease in aggregate labour income due to an increase in the proportion of people aged 50 years and over.

Private asset income increases slowly when people are in their 20s, peaking in their 60s and decreases rather modestly until their 80s. People aged 85 years and over tend to have more private asset income than those under age 40 years. The dispersion is, though, rather large as there are countries in which people aged 85 years and over are in the age group with the highest private asset income while in other countries less than half of them are in the high earning group. As a result, the impact of population ageing on private asset income depends not only on how young the population is but also on the distribution of private assets across age groups.

Private consumption increases when people are born until their 30s and stays rather flat from there on. The dispersion is not large, which indicates that this pattern of consumption is similar across OECD countries. Projected changes in the size and structure of the population are, thus, the most important elements to estimate the impact of population ageing on private consumption.

Figure 3.1 Distribution of labour income, private asset income and private consumption by age group across OECD countries



Note: The y axis refers to the value of the respective age group as a percentage of the value of the group with the highest income/consumption while the x axis refers to the age group.

3.3.5. Combining the buoyancy and population age structure effects

To combine the buoyancy and the population age structure effects, the following equation was used:

$$TR_{c,i} = \left(1 + {\sum_{a=i}^{n} \Delta R_{c,i} * w_{a,l}} \Big/ {\sum_{a=1}^{n} w_a}\right) / (1 + \Delta Pop_{c,i}) * \left(1 + \Delta GDP_{c,i} * \theta_{c,i}\right) - 1 \qquad (3)$$

Where TR refers to total government revenues (real terms), ΔR refers to the population ageing effect (as calculated by equation 2), w refers to the portion of total revenues represented by the respective revenue item a, ΔGDP refers to GDP growth in real terms, θ refers to the buoyancy for government revenues[12] and ΔPop refers to population growth. The subscripts c and i refer to country and time, respectively. $\theta_{c,i}$ only changes with time in the third scenario of buoyancy converging to one in 2060.

The separation of the change in the structure of the population from the change in the size of the population avoids double counting the impact of population growth, as this variable is already captured by GDP growth. As a result, the blue equation (in bold) estimated the effect of changes in the structure of the population while the green equation estimated the total buoyancy effect, which includes population growth.

Another key point regards the fact that the projected potential GDP per capita growth rates were adjusted to consider effects from the expected variations in the share of the active population to the total population (for details see (Guillemette and Turner, 2021[14]). Therefore, both the potential GDP per capita used in the estimation of the GDP growth and the modelled relationship between government revenues and GDP are affected by population ageing. As equation 3 captures the effect of these two potential impacts of population ageing on government revenues, the results presented in the next section can be interpreted as an upper bound of the effect of population ageing on government revenues to 2040.

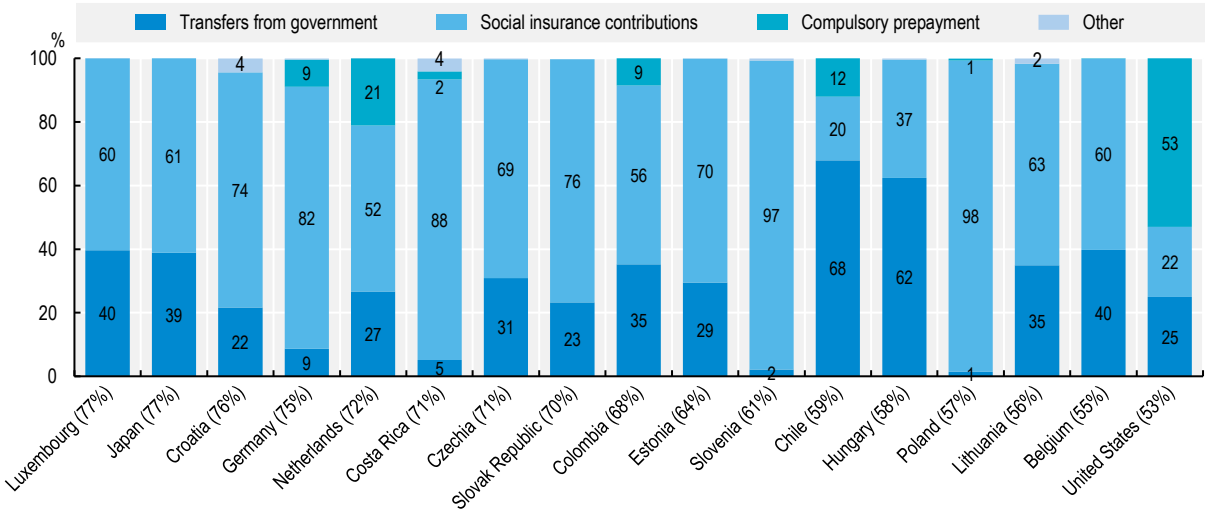
Lastly, it is implicitly assumed that population ageing affects government revenues only through changes in the tax base. In other words, the relationship between tax revenues and tax bases is assumed to be invariant to population ageing. This seems to be a reasonable assumption given that, in theory, this relationship is determined by the tax structure of a country[13] and that the main drivers of tax buoyancy are – depending on the type of tax – trade openness, population density, civil liberties, political rights, elements of tax policy, tax rate structure and importance of some industries (Dudine and Jalles, 2017[13]).[14]

3.3.6. Relevance of government revenue projections in countries where compulsory health insurance is the main financing source of health spending

In this chapter, health spending from public sources as a share of government revenues is used as a proxy to assess the future fiscal sustainability of health systems. In countries like Costa Rica and Germany where social insurance contributions finance a large part of health spending and transfers from government finance a relatively small share of compulsory health insurance spending (Figure 3.2), this proxy may be of less relevance. Further, a few health systems like that of the United States, rely more heavily on private contributions.

Figure 3.2. Financing sources of compulsory health insurance, 2021 (or nearest year)

OECD countries and accession countries with compulsory health insurance contributions representing more than half of total health expenditure



Note: Numbers in brackets indicate the contribution of compulsory health insurance to total health expenditure. Category "Others" includes other domestic revenues and direct foreign transfers.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

3.4. Results

3.4.1. Projections of health spending from public sources to 2040

Health spending from public sources across the OECD is projected to grow at an average annual rate of 2.6% for 2019-40 for the base scenario (all results in constant prices, accounting for inflationary effects) [15]. This compares with 2.5% for the 'cost control', 2.7% for the 'cost pressure' and 2.3% for the "healthy ageing" scenarios.

In per capita terms, health spending is projected to grow at an average annual rate of 2.3% for 2019-40 for the base scenario, 2.2% for the 'cost control', 2.4% for the 'cost pressure' and 2.1% for the "healthy ageing" scenarios. With an average historical annual growth of 3% for the period 2000-18, base projections indicate a slowdown in health spending growth compared to the past (Figure 3.3).

Nevertheless, growth in health spending is likely to be significantly higher than GDP per capita growth at 1.2% from 2019-40. Health spending generally trends GDP growth in terms of its shape, but other spending drivers push it above GDP growth, particularly in the 'cost pressure' scenario. This partial relationship between health spending and GDP is consistent with previous OECD analysis of historical spending, which found that cyclical fluctuations in the economy accounted for less than half of the slowdown in health spending during the 2005-13 period, with the remainder accounted for by policy effects (Lorenzoni et al., 2017[15]).

Given that public health spending is expected to grow faster than GDP, health spending from public sources is projected to reach 8.6% of GDP in 2040 in the base scenario, an increase of 1.8 percentage points compared to 2018, and with a range from 8.5% to 8.8% across the analysed projection scenarios (Table 3.2).

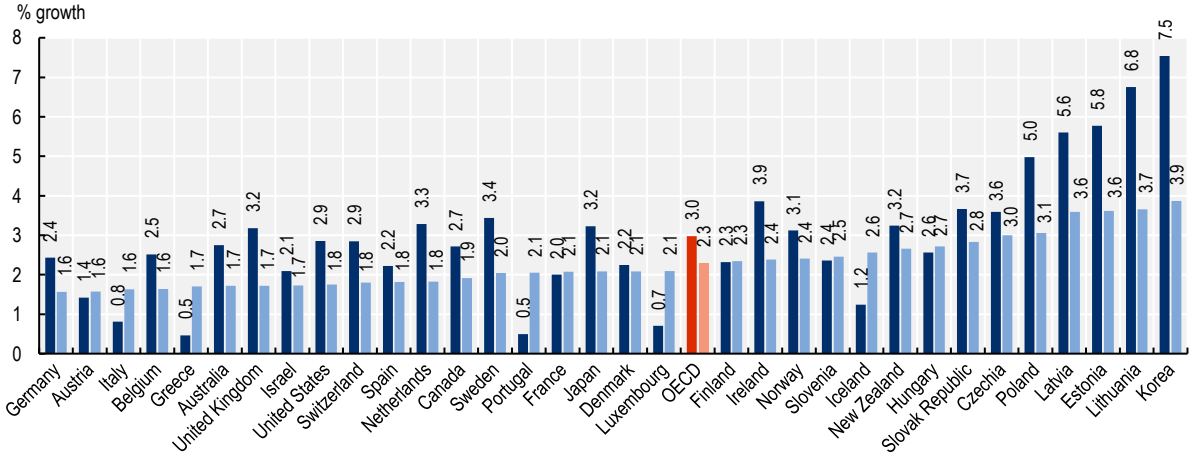
Table 3.2. Health spending from public sources in 2040 under different projection scenarios (OECD average)

Scenario	As percentage of GDP	Percentage point change compared to 2018 value	Average annual growth rate (real terms)	Average annual per capita growth rate (real terms)
Base	8.6%	1.8 percentage points increase	2.6%	2.3%
Cost pressure	8.8%	2 percentage point increase	2.7%	2.4%
Cost control	8.5%	1.7 percentage point increase	2.5%	2.2%
Healthy ageing	8.2%	1.4 percentage point increase	2.3%	2.1%

These results are broadly comparable with other international cross-country analyses. Findings from the Ageing Report (European Commission, 2021[16]), show an increase of 1.3 percentage points of expenditure in 2040 across EU countries in the base scenario (from 8.3% to 9.5%). Comparing the 23 EU members which are also OECD members, our projections show an increase of 1.2 percentage points of health spending as a share of GDP to 2040, whereas the Ageing Report shows an increase of 1.5 percentage points.

Health spending per capita for 2019-40 is projected to grow above 3.5% per year in Estonia, Korea, Latvia and Lithuania. These are all countries with relatively high GDP growth projections over the period studied. In contrast, the projected growth in Austria and Germany is around 1.5%.

Figure 3.3. Comparison of observed (2000-18) and projected (base scenario, 2019-40) average annual percent growth in per capita health spending in real terms by country

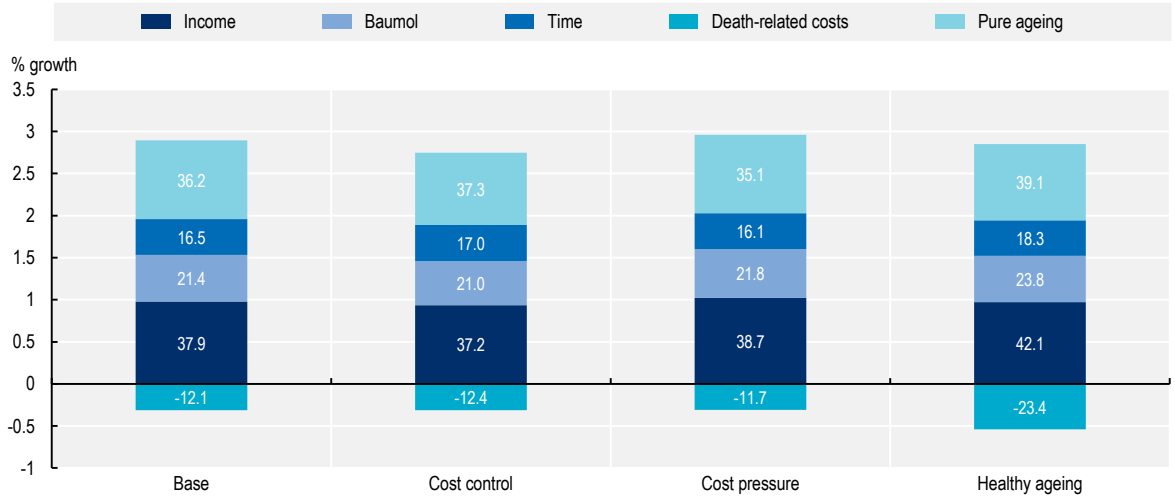


Source: OECD Health Statistics, https://doi.org/10.1787/health-data-en, and authors' compilation.

In the base scenario (Figure 3.4), the demographic effect[16] increases health spending by 0.6% per year, on average across the OECD. This amounts to a quarter of the overall projected growth. Note that the demographic effect comprises a "pure age" effect of 0.9% growth. This is moderated by a degree of healthy ageing which decreases spending growth by 0.3% (modelled through dynamic DRCs). Income is the most important driver, accounting for four tenths of annual health spending growth. Productivity constraints (the Baumol effect) account for about one fifth of overall spending growth. Time-specific effects account for one sixth of health spending growth.

Alternative policy scenarios illustrate the differential impacts spending drivers can have on health spending. For example, productivity constraints increase annual health spending by 0.5% and 0.6% in the 'cost control and 'cost pressure' scenarios respectively, equivalent to around one sixth of overall spending growth. A higher degree of "healthy ageing" means a smaller demographic effect (compared to the other scenarios). The income effect is most dominant in the "healthy ageing" scenario, accounting for 42% of overall spending growth.

Figure 3.4. Annual average percentage growth in health spending in real terms by driver by scenario, OECD, 2019-40



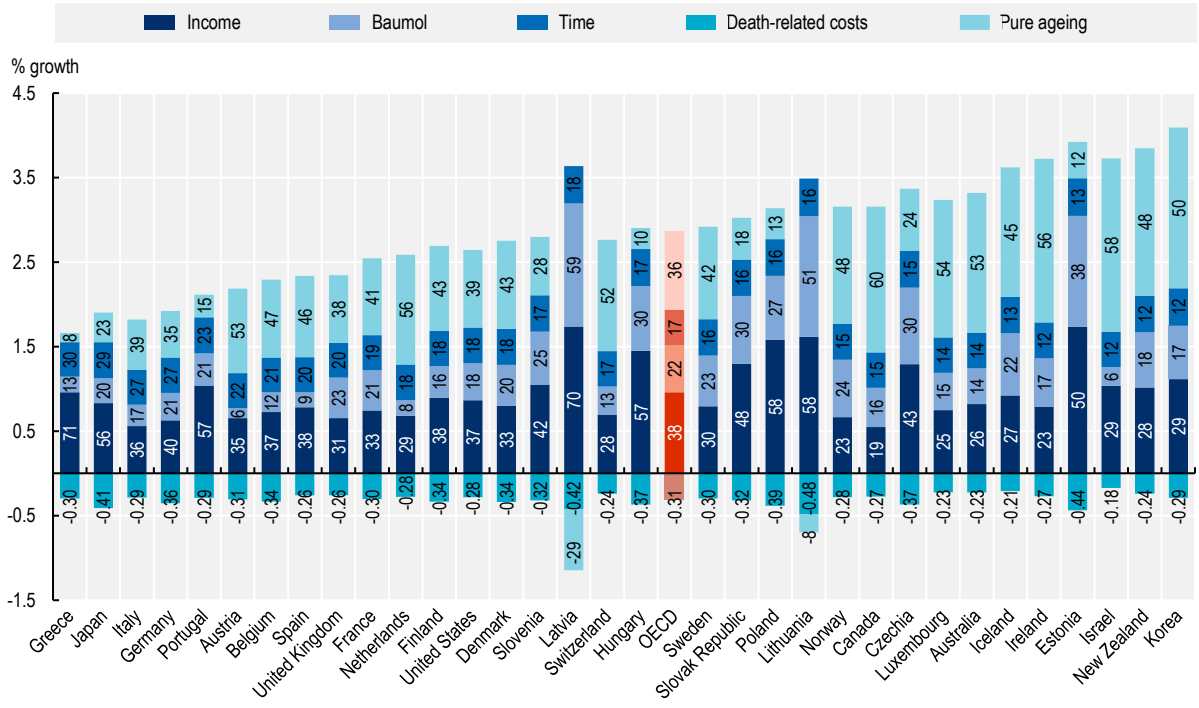
Note: The relative contribution of each driver to growth is reported in percentage within each bar.

Analysing the impact of drivers on spending on a country-by-country basis provides further insights (Figure 3.5). Income effects account for more than 1.5% average annual growth in Estonia, Latvia, Lithuania and Poland, whereas it accounts for less than 0.6% growth in Canada and Italy. Countries with the highest levels of projected GDP growth exhibit the largest income effects in absolute terms, but the relative share of the income effect is naturally dependent on the magnitude of all other effects in any given country.

The Baumol effect, which measures the effect of wages and productivity growth in the economy, is largest and accounts for more than 1% growth in Estonia, Latvia and Lithuania. In contrast, Austria, Greece, the Netherlands and Spain show effects of 0.2% growth or lower. Countries showing a large Baumol effect have experienced wage growth substantially in excess of productivity growth in the general economy – implying that a larger share of health expenditure would need to be allocated to wages in the health sector so as to be on par with wages in the general economy.

Demographic effects are largest in Israel, Korea and Luxembourg – all countries with an absolute growth of 1.5% or more. In contrast, in Latvia and Lithuania demographic change has a negative effect on spending of around 1%. This is largely explained by projected decreases in population numbers in these four countries.

Figure 3.5. Annual average percentage growth in health spending in real terms by driver by country, 2019-40. Base scenario



Note: The relative contribution of each driver to growth is reported in percentage within each bar.

3.4.2. Projection of government revenues to 2040

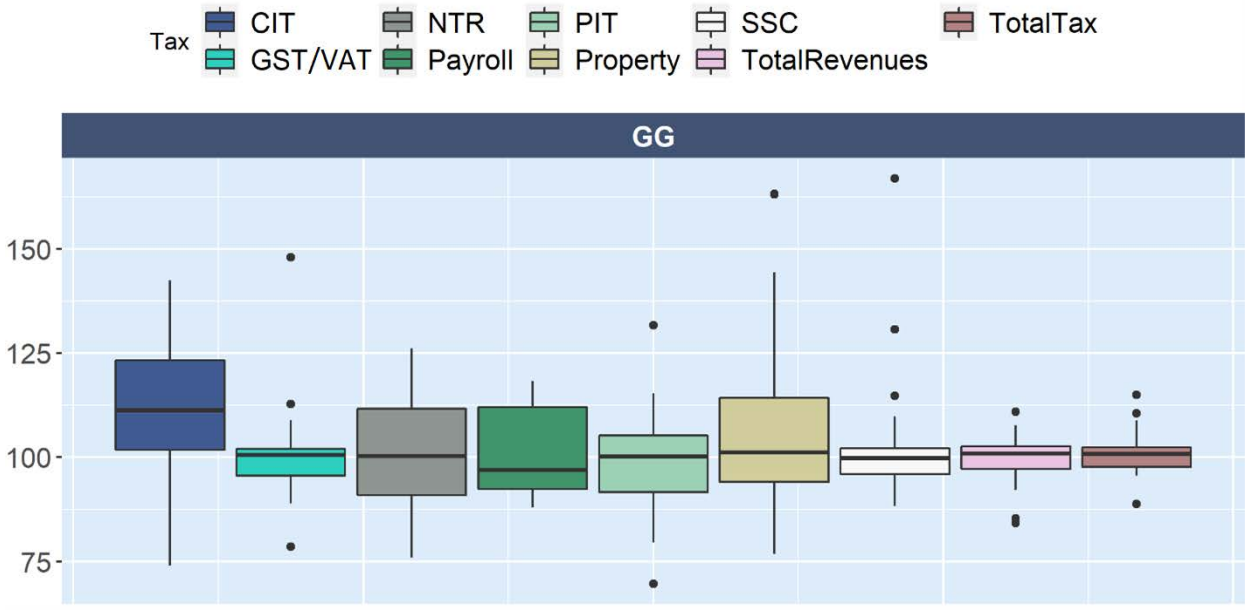
Buoyancy effect on government revenues in 2040

By applying buoyancy coefficients to the potential GDP growth, the cumulative effect of buoyancy on governments' revenues up to 2040 is estimated.

Figure 3.6 shows the projected government revenues-to-GDP ratios by revenue source in 2040. For all taxes except CIT, the median increase in tax revenues is in line with the increase in GDP growth – the expected change in this ratio varies from a 4% decrease (payroll taxes) to a 1% increase (property taxes), while the CIT revenues-to-GDP ratios are expected to grow by 11%.

It is worth noting that in case these overall trends in tax revenues do occur in the future, they will lead to a change in countries' tax composition. Revenues from taxes with a higher long-term buoyancy, such as CIT and property taxes, may represent a higher share of total revenues. In contrast, revenues from less buoyant taxes, such as SSCs and GST/VAT, may represent a lower share of total revenues.

Figure 3.6 Government revenues-to-GDP ratio growth through 2040 due to the buoyancy effect



1. PIT, CIT, SSCs, GST/VAT and NTR refer to personal income tax, corporate income tax, social security contributions, good and service tax (or value added tax) and non-tax revenues.
2. On the vertical axis, 100 indicates that the growth in revenues is the same as the growth in GDP.

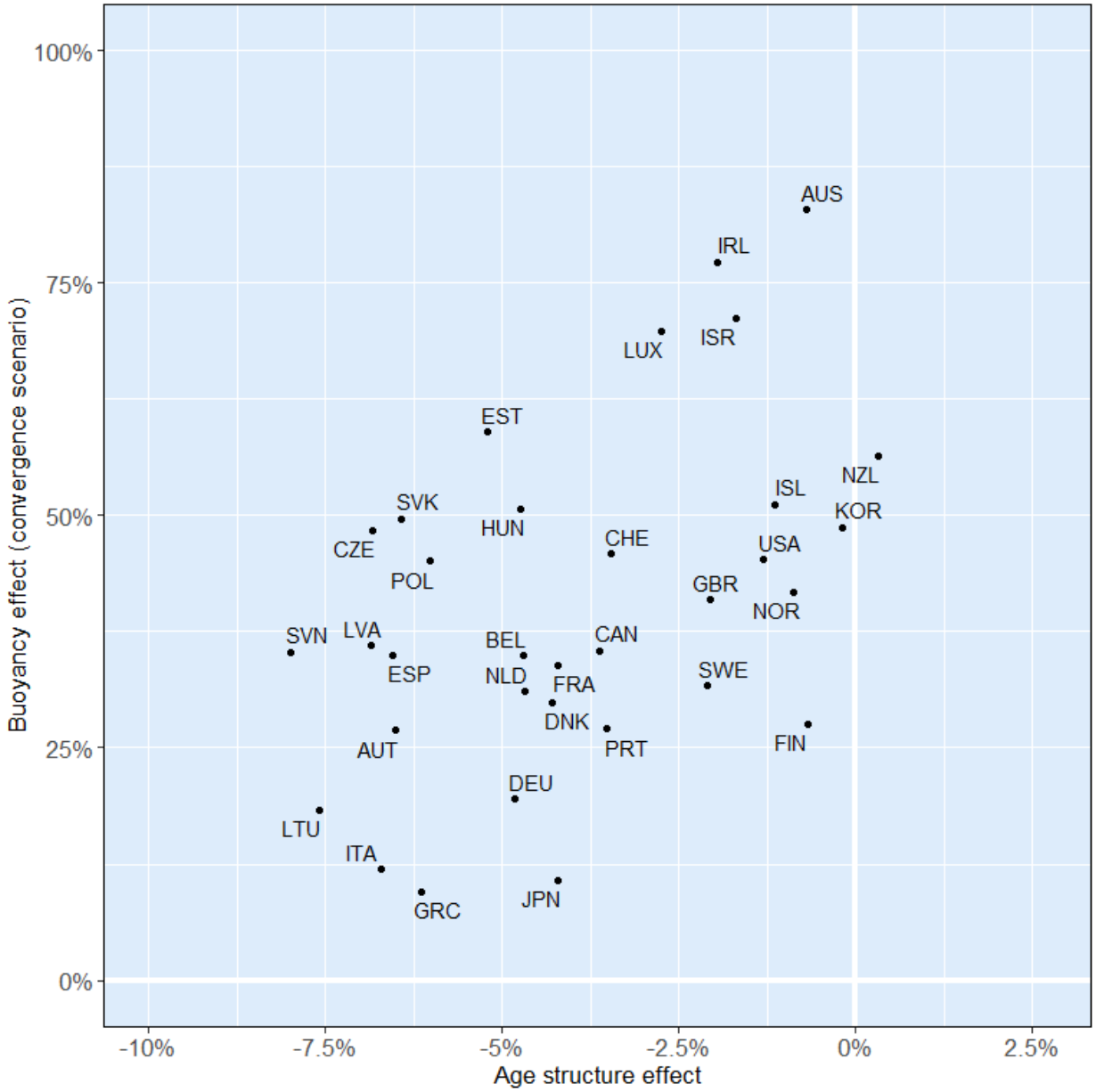
One important caveat is that projections assume that the relationship between government revenues and GDP between 1990 and 2018 will be the same through 2040. It is unlikely that this relationship will be precisely the same as there were tax reforms in the last decades that are probably not going to be repeated in the future. For instance, CIT revenues were impacted by rate reductions and base broadening over the last decades. Although rates could continue to decrease, the two-pillar solution to the tax challenges arising from the digitalisation of the economy agreed upon by 137 jurisdictions of the OECD/G20 Inclusive Framework on BEPS in October 2021, will be expected to attenuate the long-term trend of rate reductions, by introducing a multilaterally agreed floor on tax competition with a global minimum effective tax rate of 15%. On the other hand, while opportunities for tax base broadening remain, it is unclear whether the trend towards base broadening witnessed in recent decades will continue. In relation to taxes on goods and services, in the period after the Global Financial Crisis for instance, countries increased their value added tax rates (i.e. a component of taxes on goods and services) to raise more revenues. However, there are decreasing returns to this approach and countries have largely stopped raising their GST/VAT rates (see (OECD, 2020[17]) for an in-depth and recent analysis of tendencies in taxation across OECD countries).

The effect of population ageing on government revenues using NTA

Figure 3.7 breaks down the government revenue projections into two effects: the revenue buoyancy effect (including growth in the size of the population) and the change in the structure of the population. The buoyancy effect is always positive, which was expected given that the GDP growth rate is expected to be positive in all countries in this study. The buoyancy effect varied from 9.5% (Greece) to 82.8% (Australia), with an average of 40.6%.

In contrast, the age structure effect is only positive for New Zealand (a relatively “young” country) and is projected to be negative up to 8% in Slovenia. As a result of changes in the structure of the population, government revenues are expected to decrease – on average – by 4% through 2040.

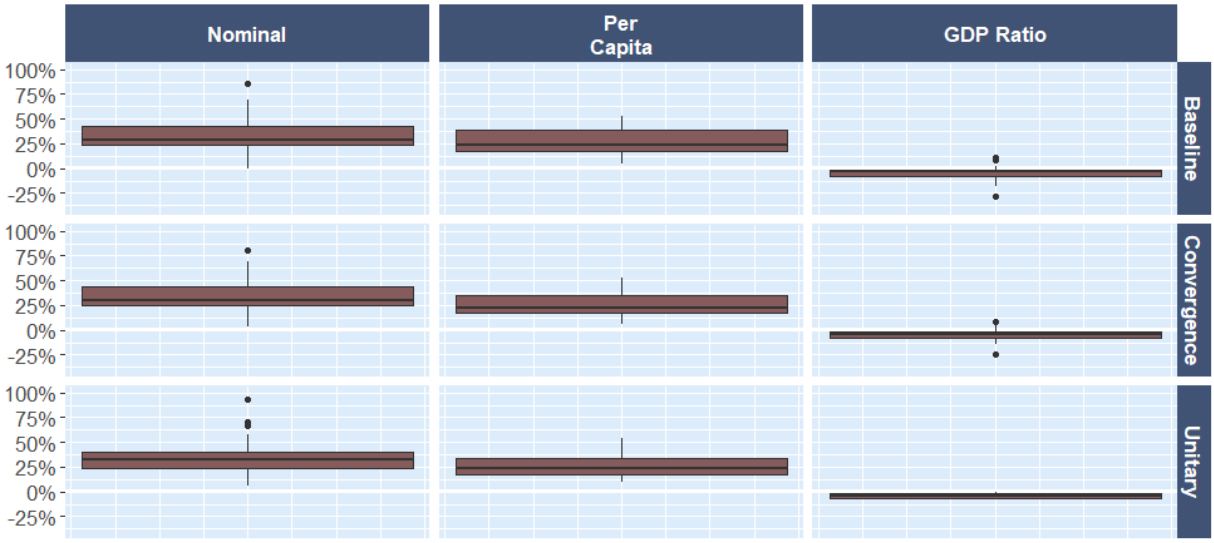
Figure 3.7. Government revenues cumulative growth rate in real terms due to change in the structure of the population and buoyancy, 2019-40



Source: Based on NTA UN, NTA EU. OECD population and GDP projections, *OECD Revenue Statistics* and SNA.

Figure 3.8 compares growth in government revenues to population growth and potential GDP growth across the three buoyancy scenarios. As many OECD countries are expecting an increase in population, the per capita growth in government revenues was slightly smaller than its growth in levels, in all three scenarios. In the convergence scenario, government revenues are projected to grow – on average – 1.3% per year, while they are expected to slightly decrease as compared to GDP growth (-0.2% per year).

Figure 3.8. Comparison of government revenues cumulative growth rate across buoyancy scenarios, 2019-40

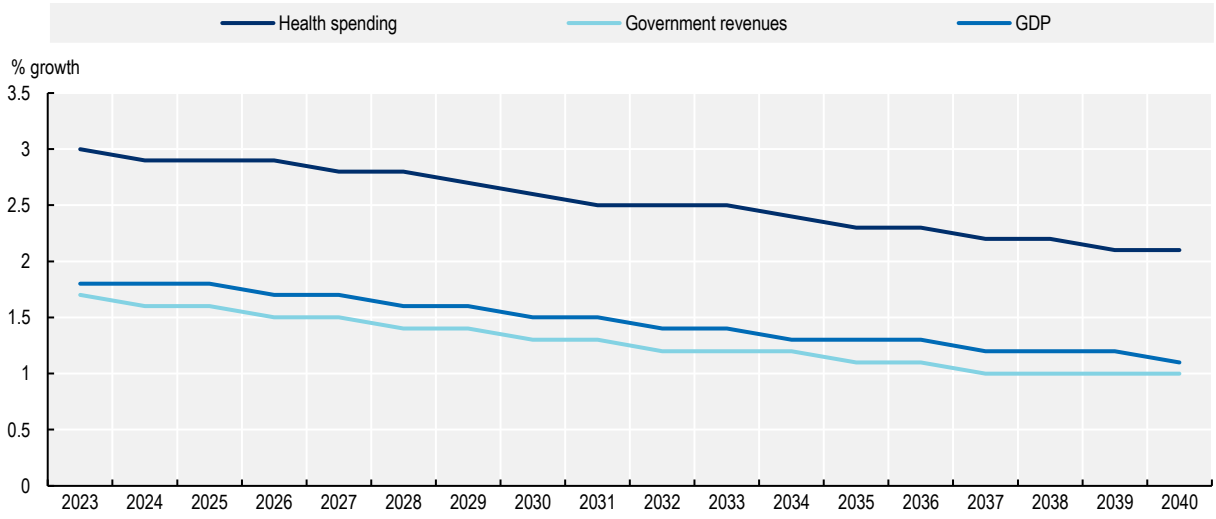


Note: Base scenario refers to the use of the estimated buoyancy throughout the whole projection period; the convergence scenario refers to the scenario in which buoyancy coefficients converge linearly to one in 2060; and the unitary scenario just assumes that buoyancies are unitary.

3.4.3. Fiscal sustainability of health spending

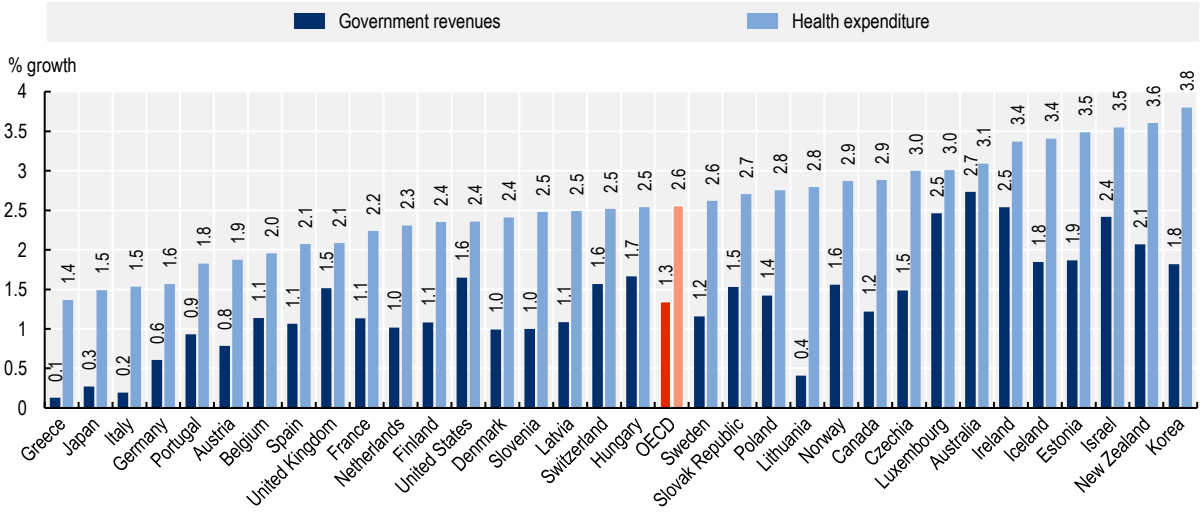
Across the OECD, the mean annual change in health spending in the base scenario is expected to be twice as high as the mean annual change in government revenues from 2023 to 2040 (2.6% versus 1.3%). From 2023 onwards, the growth in health spending is expected to decrease, whereas the decrease in the growth of government revenues is expected to begin in 2025 (Figure 3.9). As expected from model specifications, future trends of the growth in health spending and government revenues reflect the projected trend in GDP growth.

Figure 3.9 Average annual percentage growth in real terms of health spending (base scenario), government revenues (buoyancy convergence scenario) and GDP, OECD, 2023-40



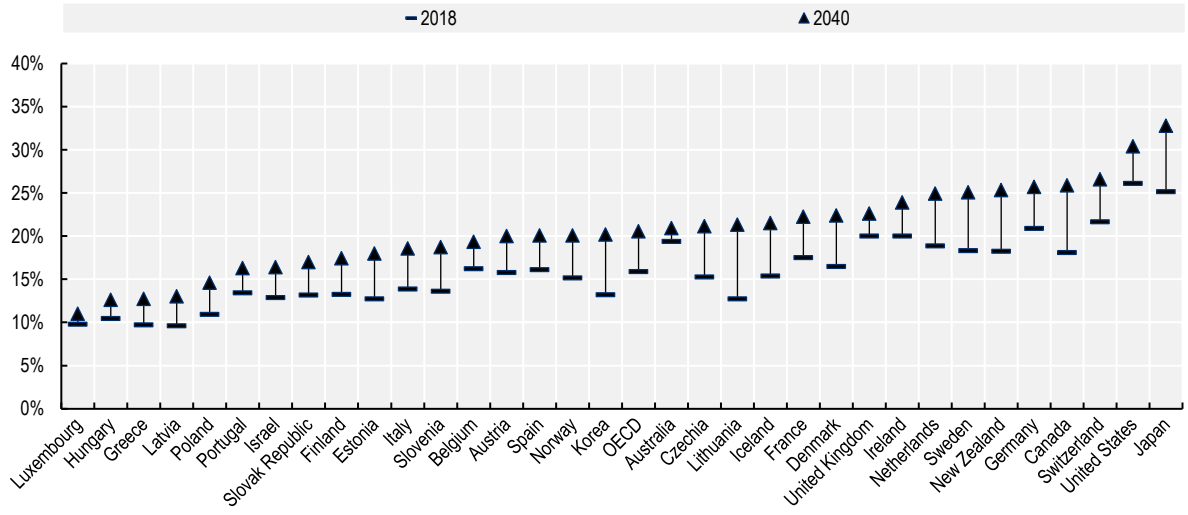
Health spending is expected to rise at a faster pace than government revenues in all OECD countries. The annual average percentage growth in government revenues is projected to be particularly low in Greece, Italy and Japan at less than 0.3%. In Australia, Ireland and Luxembourg, the annual average percentage growth in government revenues is projected to represent more than three fourths of the annual average growth in health spending (Figure 3.10).

Figure 3.10 Average annual percent growth in real terms of health spending (base scenario) and government revenues (buoyancy convergence scenario) by country, 2023-40



For all OECD reporting countries, health spending is projected to account for a larger share of total government revenues in 2040 as compared to 2018. On average across the OECD, health spending is projected to represent 20.6% of government revenues in 2040, an increase of 4.7 percentage points from 2018 (Figure 3.11).

Figure 3.11 Change in the percentage share of health spending (base scenario) in government revenues (buoyancy convergence scenario) by country, 2018 and 2040

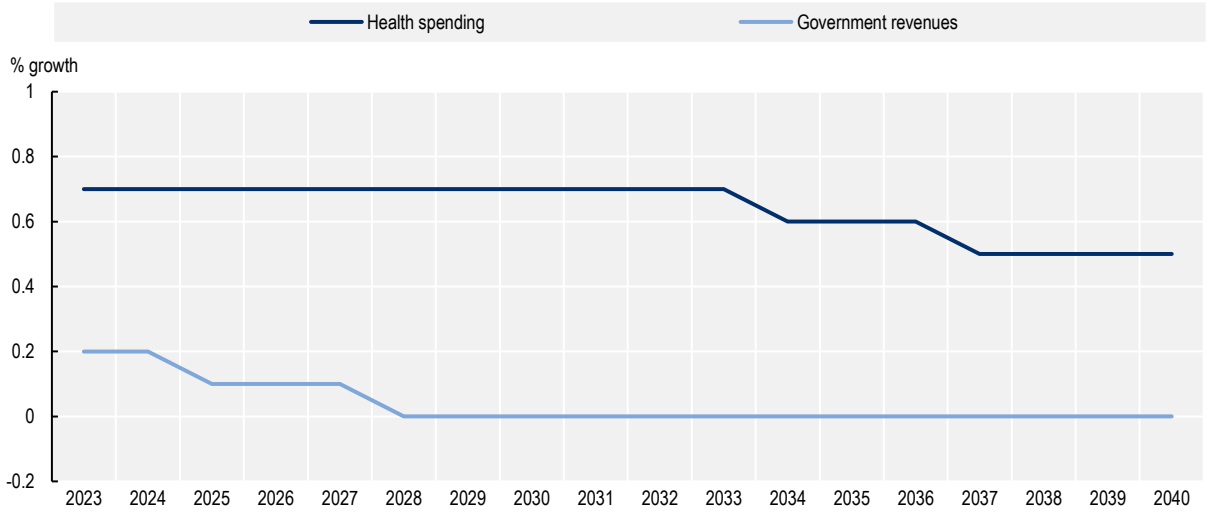


Based on scenario analyses, policies related to enhancing productivity and to improving healthy lifestyles can rein in health spending by 0.3 and 0.8 percentage points of revenues in 2040 respectively.

3.4.4. The impact of changes in the size and structure of the population on health spending and government revenues

Across OECD countries, a decrease in the growth of government revenues due to changes in the size and structure of the population is projected up to 2040. In particular, as from 2028 government revenues – on average – are projected to stabilise. Changes in the size and structure of the population are projected to account for 0.6-0.7% of health spending growth between 2023 and 2026. Afterwards, the growth in health spending due to the demographic effect is expected to decrease to 0.5%, mainly due to a reduction in the growth rate of the size of the population (Figure 3.12).

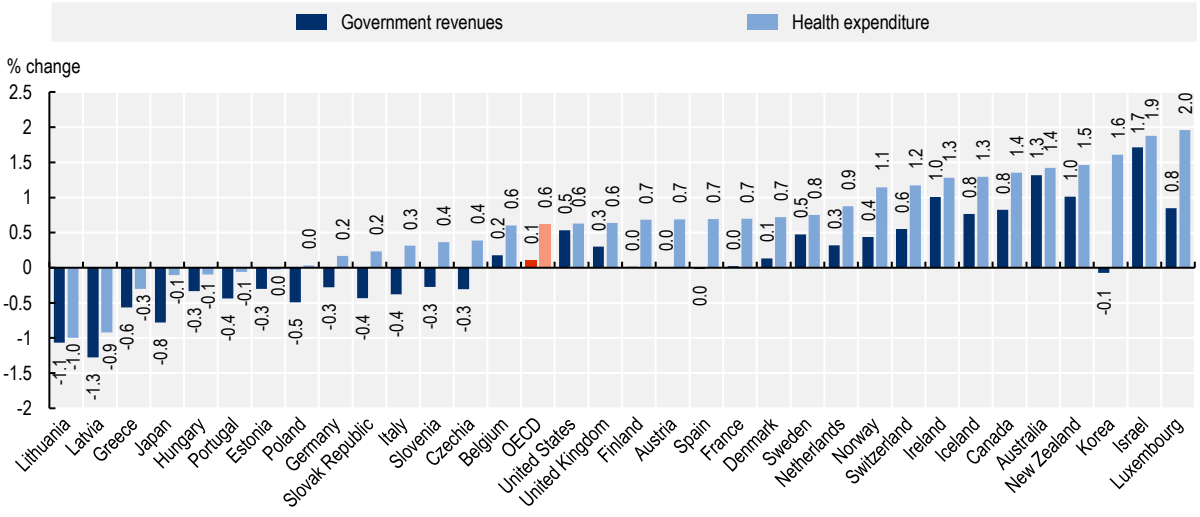
Figure 3.12 Average annual percentage growth in real terms of health spending (base scenario) and government revenues (buoyancy convergence scenario) due to change in the size and structure of the population, OECD, 2023-40



In 15 OECD countries, the change in the size and structure of the population is expected to result in a decrease in government revenues from 2023 to 2040 (Figure 3.13). In particular, 13 of those 15 countries are the countries for which a decrease in the size of the population is projected, whereas for the remaining two – Slovenia and Spain – a decrease in the tax base as a result of the change in the structure of the population is projected. In seven of these 15 countries, the highest decrease in the size of the population among the countries in this study is expected to result in a decrease in health spending too.

In two OECD countries – Australia and Israel – the change in the size and structure of the population is projected to result in a growth of government revenues close to the projected growth in health spending. This is due to the highest increase in the population size across OECD countries from 2023 to 2040, and to a share of the population aged 65 years and above lower than OECD average in 2040.

Figure 3.13 Average annual percentage change in real terms of health spending (base scenario) and government revenues (buoyancy convergence scenario) due to change in the size and structure of the population by country, 2023-40



3.5. Conclusions

This chapter presents a novel approach to obtain an order of magnitude of the future fiscal sustainability of health systems by coupling health spending from public sources projections with government revenue projections.

As the mean growth in health spending is projected to be twice the mean growth in government revenues (2.6% and 1.3% on average, respectively), health spending from public sources is projected to reach 20.6% of government revenues across OECD countries by 2040, an increase of 4.7 percentage points from 2018.

The findings of this chapter confirm that the role of age *per se* in determining health expenditure is likely to be small compared to other supply-side factors, such as technological changes and income. The findings of this chapter confirm also that the growth in government revenues slows as populations age. Changes in the size and structure of the population are projected to increase government revenues by 0.1% and health spending by 0.6% per year on average across OECD countries over the next 20 years. This accounts for less than one tenth of the projected growth in government revenues and for one fourth of the growth in health spending respectively. Changes in the structure of the population (i.e. the age-mix) are projected to decrease government revenues in all OECD countries (except New Zealand) by 2040.

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

Proven policies that can increase productivity include those on health workforce, pharmaceuticals and new technologies. For example, new laws and regulations that extend the scope of practice for non-physicians can produce cost savings with no adverse effects on the quality of care. For pharmaceuticals, price, market entry and prescribing regulations have all helped increase the penetration of generics in the market,

thereby saving costs. Health Technology Assessments have the potential to ensure cost-ineffective new technologies are not introduced, and existing cost-ineffective interventions are discontinued. More broadly, stronger price regulation can be effective in reducing health spending.

There is also considerable scope to better harness technological progress, focusing on those technologies that have the potential to increase productivity. Digitalisation can support new care delivery methods that save money, notably in the form of telemedicine and robotic tools for some limited procedures; as well as improving the quality and usefulness of health data.

As a result of GDP growth, government revenues are expected to increase in the long run but, in per capita terms, for most countries this increase will not be as pronounced as it was in the previous decades due to population ageing effects. Policies to make revenues more robust to population ageing may therefore be needed. In particular, reforms to eliminate early retirement pathways and strengthen labour market participation of individuals with a weaker attachment to the labour market could counterbalance future government spending pressures linked to ageing.

The results of projections presented in this chapter are a call to action to change the outcomes predicted by existing trends to secure the future fiscal sustainability of health systems. An important policy message is that addressing fiscal sustainability challenges requires a whole-of-government set of balanced policies that target both the main driver of health spending and the government revenue generation mechanisms.

References

Baltagi BH, L. (2017), "Health care expenditure and income: a global perspective", *Health Economics*, Vol. 26, pp. 863-874, https://doi.org/10.1002/hec.3424. [4]

Baumol, W. (1967), "Macroeconomics of unbalanced growth: the anatomy of urban crisis", *The American Economic Review*, Vol. 57/3, pp. 415-426. [5]

Belinga, V. et al. (2014), "Tax Buoyancy in OECD Countries", *IMF Working Papers*, Vol. 14/110, p. 1, https://doi.org/10.5089/9781498305075.001. [12]

Chernew, M. and J. Newhouse (2012), *Health care spending growth*, Elsevier BV, https://doi.org/10.1016/B978-0-444-53592-4.00001-3. [6]

Cylus, J., J. Figueras and C. Normand (2019), *Will population ageing spell the end of the welfare state?*, European Observatory on Health Systems and Policies, https://eurohealthobservatory.who.int/publications/i/will-population-ageing-spell-the-end-of-the-welfare-state-a-review-of-evidence-and-policy-options-study. [9]

de la Maisonneuve, C. and J. Oliveira Martins (2013), "A Projection Method for Public Health and Long-Term Care Expenditures", *OECD Economics Department Working Papers*, No. 1048, OECD Publishing, Paris, https://doi.org/10.1787/5k44v53w5w47-en. [2]

Deli, Y. et al. (2018), *Dynamic tax revenue buoyancy estimates for a panel of OECD countries*. [11]

Dudine, P. and J. Jalles (2017), "How Buoyant Is the Tax System? New Evidence from a Large Heterogeneous Panel", *Journal of International Development*, Vol. 30/6, pp. 961-991, https://doi.org/10.1002/jid.3332. [13]

European Commission (2021), *The 2021 Ageing Report*, https://doi.org/10.2765/84455. [16]

Guillemette, Y. and D. Turner (2021), "The long game: Fiscal outlooks to 2060 underline need for structural reform", *OECD Economic Policy Papers*, No. 29, OECD Publishing, Paris, https://doi.org/10.1787/a112307e-en. [14]

Koster G, P. (2017), *Revenue elasticities in euro area countries: an analysis of long-run and short-run dynamics*, https://doi.org/10.20955/r.85.67. [10]

Lagravinese, R., P. Liberati and A. Sacchi (2020), "Tax buoyancy in OECD countries: new empirical evidence", *Journal of Macroeconomics*, Vol. 63/C, https://doi.org/10.1016/j.jmacro.2020.103189. [3]

Lorenzoni, L. et al. (2023), "Assessing the future fiscal sustainability of health spending in Ireland", *OECD Health Working Papers*, No. 161, OECD Publishing, Paris, https://doi.org/10.1787/1f5fadbc-en. [18]

Lorenzoni, L. et al. (2017), "Cyclical vs structural effects on health care expenditure trends in OECD countries", *OECD Health Working Papers*, No. 92, OECD Publishing, Paris, https://doi.org/10.1787/be74e5c5-en. [15]

Lubitz, J. and G. Riley (1993), "Trends in Medicare Payments in the Last Year of Life", *New England Journal of Medicine*, Vol. 328/15, pp. 1092-1096, https://doi.org/10.1056/nejm199304153281506. [8]

Marino, A. et al. (2017), "Future trends in health care expenditure: A modelling framework for cross-country forecasts", *OECD Health Working Papers*, No. 95, OECD Publishing, Paris, https://doi.org/10.1787/247995bb-en. [7]

OECD (2021), *OECD Economic Outlook, Interim Report September 2021: Keeping the Recovery on Track*, OECD Publishing, Paris, https://doi.org/10.1787/490d4832-en. [1]

OECD (2020), *Tax Policy Reforms 2020: OECD and Selected Partner Economies*, OECD Publishing, Paris, https://doi.org/10.1787/7af51916-en. [17]

Notes

[1] That is, 'public' refers to spending by government and schemes of a mandatory nature – i.e. public in this sense indicates the decree of government regulation or control over the uptake of healthcare coverage. Therefore, arrangements in the Netherlands, Switzerland and the United States which are based on an individual obligation to purchase coverage (through private insurers) are included under 'mandatory' schemes. It is true that such spending in the case of Switzerland and the United States is not derived from tax revenues or social contributions, and therefore not considered under government spending. However, the discussions about policy options for governments can still apply to an extent given the government 'control' over mandates, minimum benefits, etc. while for most countries there is a direct linkage between 'public' spending and public sources.

[2] For Ireland, the modified GNI is used.

[3] Potential GDP is used as a proxy of income in this chapter. The use of this variable allows smoothing large cyclical patterns in GDP. As labour efficiency and trend employment are key components of potential output projections, investments to strengthen health system resilience can support countries reaching their potential output also during shocks. Potential GDP projections are from the OECD Economics Department (Guillemette and Turner, 2021[14]).

[4] The first difference of the natural log of all the variables is used to avoid the issue of cointegration.

[5] In this chapter, projections are not modelled based on alternative demographic scenarios. For an example of the impact of using alternative demographic scenarios on projecting health spending see (Lorenzoni et al., 2023[18]).

[6] The partial dynamic equilibrium coefficient does not have either a mathematical constraint or a largely consistent body of literature behind its estimation. While this means there is no clear recommendation on its plausibility range, it is also the parameter that can be most easily interpreted in terms of scenarios and sensitivity analysis. The parameter can either be estimated or assumed – in the case of 0.5, we assume that half of the gains in life expectancy are translated into DRC growth across all age groups.

[7] We allowed coefficients to vary freely across countries because tax policy – which varies significantly across countries – can affect buoyancy, a test for the poolability of observations suggested that we should not pool the revenues of most tax types, including total government revenues, and is consistent with the literature on this topic.

[8] We selected 2060 as the convergence year so that this scenario would be compatible with GDP projections from (Guillemette and Turner, 2021[14]).

[9] This report also disregards tax policies aimed at some specific age groups, for instance, tax credits targeted to older workers.

[10] This means that the age profile for all age groups is the same. This does not mean that $\Delta R_{c,i} = 0$ as equation 2 will still capture the effect of growth in the size of the population.

[11] As it does not include pensions, this might lead to an overestimation of the impact of population ageing on PIT revenues given that in some OECD countries pension income is taxed. In other words, the fact that in our model PIT revenues fully reflect labour income without considering pension income attenuates the drop in PIT revenues when people get older.

[12] For Japan, a buoyancy of one was used since the country has a relatively small number of observations (less than 15).

[13] It is possible to estimate different tax buoyancies for each age group, but for that purpose, specific tax structure data are needed, which are not available with the required level of detail in a comprehensive and harmonised manner across OECD countries.

[14] In addition, to test this assumption further, we regressed the share of population aged 65 years and above onto the buoyancy coefficients in two panel regression settings (with country fixed effects, and country and time fixed effects). In both regressions, the coefficient of the share of population aged 65 years and above was statistically not significant.

[15] Results presented in this chapter focus on 33 OECD countries as long-run projections of potential GDP from the OECD Economics Department are not currently available for Chile, Colombia, Costa Rica, Mexico and Türkiye.

[16] The demographic effect combines changes in the size and in the structure (i.e. age-mix) of the population.

4 Budgeting practices for health in OECD countries

Camila Vammalle, Caroline Penn, Laura Cordoba Reyes, Chris James

Maximising value for money is critical to the performance of health systems. Good budgeting practices in the health sector can help governments retain control over expenditure growth whilst also respecting health policy objectives. This chapter investigates budgeting practices for health across OECD countries, examining how the budget for health is determined, executed, monitored, and reviewed. This chapter is accompanied with five case studies of Belgium, France, Israel, New Zealand and the United Kingdom.

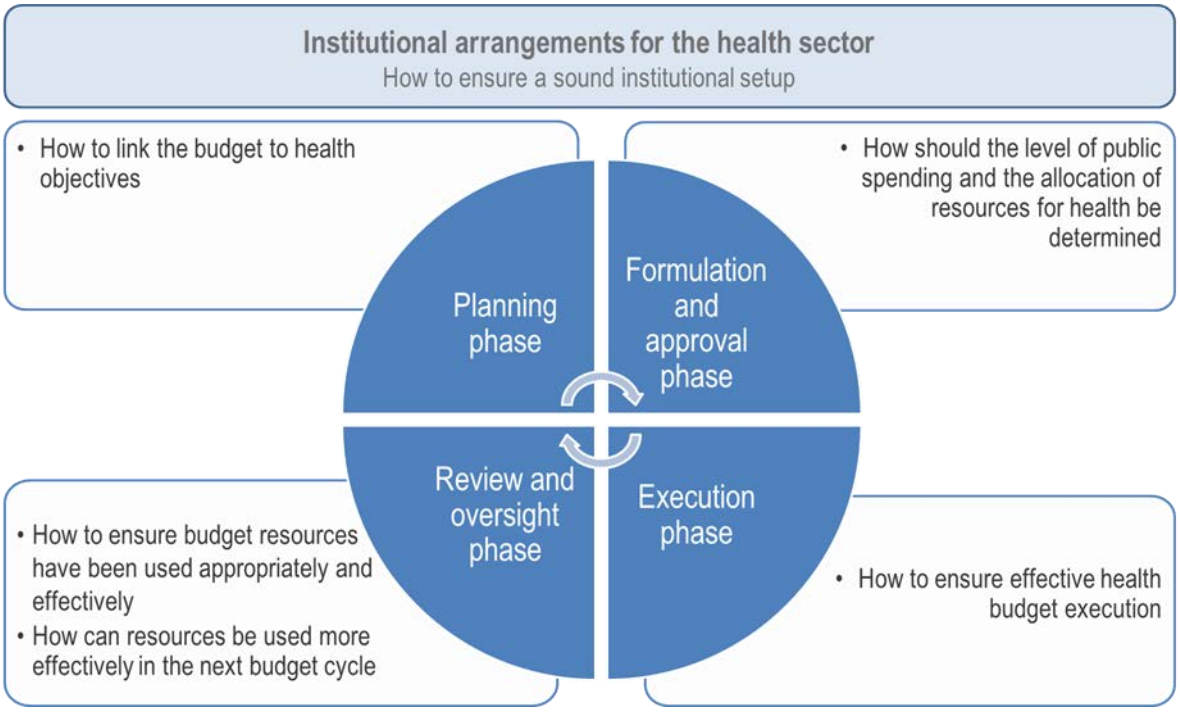
Key findings

- Robust budget formulation mechanisms set a clear total budget allocation for public spending on health, which provides predictability of fund availability as well as cost control. **A total budget or target for public health expenditures is set in most OECD countries** to provide control over health expenditure growth.
- Most surveyed countries (18 of 24) point to **cost drivers** as having a very strong or strong influence in determining the total budget or target for public health spending. The same share of countries found **public finance constraints and macroeconomic factors**, and **health policy objectives** as having a very strong or strong influence. Countries differ in the extent to which such criteria for setting of the total budget for health are explicit criteria, or instead are more implicit.
- Total budgets for health are typically derived from **baseline estimates** of the cost of maintaining existing services and coverage, with the cost of funding new health policy initiatives estimated separately.
- Almost all countries (about 90% of those surveyed) use **corrective mechanisms** to enforce spending objectives and improve budget compliance. In most cases, such corrective mechanisms are comprehensive, with systems in place to detect overspending risks and determine appropriate action.
- **In-year budget monitoring and ex-post budget reports** are commonly used to monitor health budget implementation. In just over half of surveyed countries, budget execution reports are produced monthly, with 9 of 22 countries producing reports less frequently (e.g. quarterly), and 2 countries not producing such in-year monitoring reports.
- Despite these budget control measures, **overspending** exists at various levels in most countries' health systems, creating deficits which are routinely bailed out by governments.
- Countries also use complementary **spending controls and incentive mechanisms** at different stages of budget implementation to try to keep health expenditure within total spending limits. This may include Health Technology Assessments, price regulation, volume controls and incentive mechanisms.
- **Multi-annual financial planning is undertaken in almost all (22 of 24) surveyed countries**. However, it is mostly used for informational purposes only, rather than as a minimum spending floor, maximum spending ceiling or binding budget allocation.
- **Capital expenditures** for health are separated from operating expenditures, using dedicated budget lines or programmes. Whilst the majority (17 of 24) of surveyed countries undertake multi-annual capital planning for health, less than a quarter have multi-annual capital budget envelopes.
- A **performance budgeting framework for health** can address the disconnection between strategic health objectives as determined by health officials, and resource allocation decisions as determined through the budget process. Such a link also provides a deeper understanding of what is being achieved with public spending. Yet, whilst many countries are looking to **better integrate health objectives** into the budget process, a third of surveyed countries had no performance budgeting framework for health.
- **Spending reviews** are commonly used (20 of 24 surveyed countries) as a strategic tool to analyse existing health expenditures and ensure they are aligned with government priorities.

4.1. Introduction

Applying good budgeting practices for health increases the performance of health systems by maximising the value-for-money of health spending. The findings of this chapter contribute to the *OECD Applying Good Budgeting Practices to Health* developed by the OECD Joint Network of Health and Finance Officials (2023) (Figure 4.1).

Figure 4.1. Applying good budgeting practices to health framework



Source: Vammalle, C., C. Penn and C. James (2023[1]), "Applying good budgeting practices to health", https://doi.org/10.1787/b280297f-en.

The chapter draws on the results of a survey carried out by the OECD Joint Network of Senior Budget and Health Officials in 2021, where 24 countries responded (Box 4.1), as well as the in-depth analysis of Belgium, France, Israel, New Zealand and the United Kingdom (see Annex 4.A). Note that for the United Kingdom, analysis is predominantly based on England.[1]

After a brief overview of health financing arrangements in OECD countries, analysis focuses on four key topics:

- **Setting the budget for health** – budget allocation mechanisms, including key stakeholders involved in setting a total budget or expenditure target; allocation of the health budget across categories and programmes (Section 4.3).
- **Budgetary tools to control health expenditure growth** – use of spending controls; budget monitoring and reporting; price regulation, volume controls and other incentive mechanisms; deficit management (Section 4.4)
- **Multi-annual financial planning for health** – multi-annual budgeting; capital budgeting for health (Section 4.5)
- **The budgetary process and links to strategic health objectives** – use of programme and performance budgeting, including key performance indicators (Section 4.6)

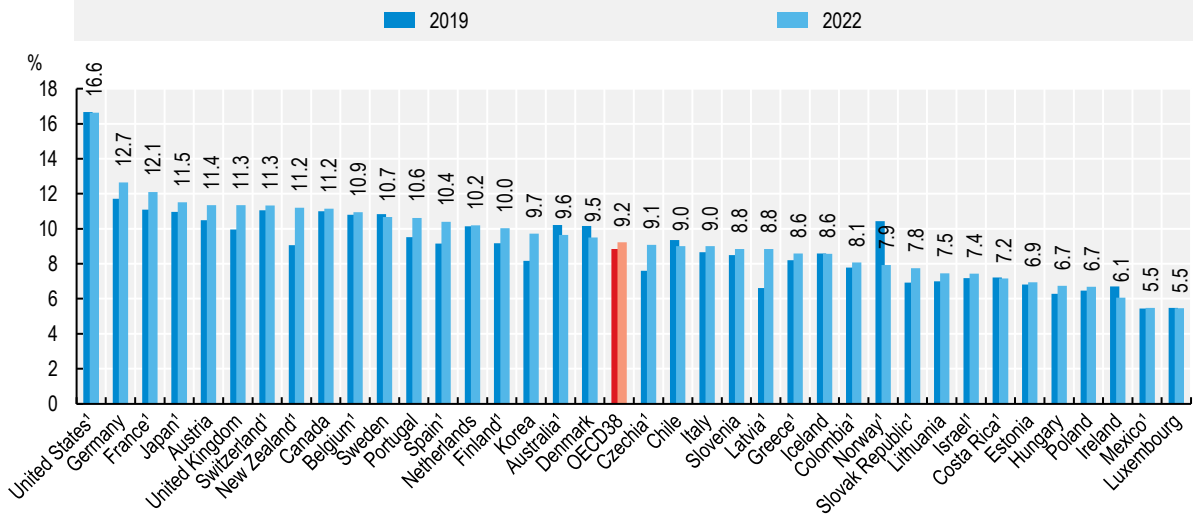
Box 4.1. OECD survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health

During 2021, the OECD Joint Network of Senior Budget and Health Officials conducted a survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health. The survey provides a horizontal perspective on management of health expenditure across member countries. Twenty-four countries responded to the survey, with a good balance between national health systems and health insurance systems: Eleven of the respondent countries are categorised as a government scheme at the central or subnational level (Australia, Finland, Greece, Iceland, Italy, Latvia, Mexico, New Zealand, Norway, Sweden and the United Kingdom), and 12 countries are categorised as compulsory health insurance scheme/s (Austria, Belgium, Chile, Colombia, Costa Rica, Czechia, Estonia, France, Israel, Japan, Korea, Luxembourg and the Netherlands).

4.2. Overview of health financing arrangements

In 2019, OECD countries spent on average 8.8% of their GDP on health each year, a figure relatively unchanged since 2013 (Figure 4.2). Health spending across OECD countries was significantly affected by the COVID-19 pandemic, and by 2021, this proportion had jumped to 9.7%, reflecting both increases in health spending and reductions in GDP due to the COVID-19 pandemic. For example, France, the United Kingdom and Israel saw health spending as a share of GDP increase by approximately 1 percentage point in 2021 compared to 2019. However, preliminary estimates for 2022 point to a significant fall in the ratio to 9.32% reflecting both a reduced need for spending to tackle the pandemic as well as the impact of inflation reducing the value of health spending.

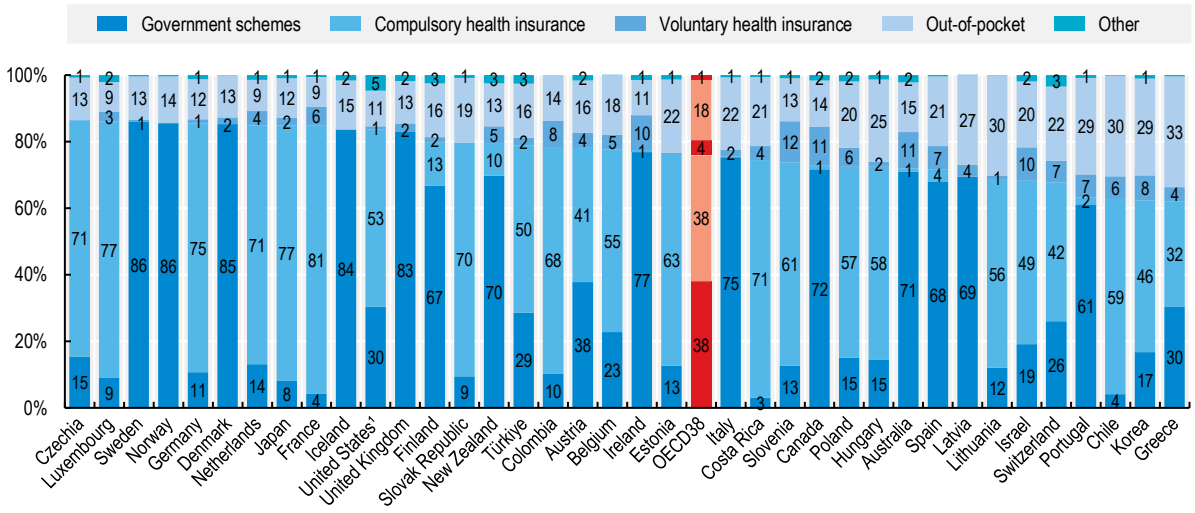
Figure 4.2. Current expenditure on health as percentage of GDP, 2019 and 2022



1. OECD Estimates.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

OECD countries use a variety of health financing arrangements through which individuals or groups of the population obtain healthcare,[2] with no one model providing 100% of funding for healthcare (Figure 4.3). Compulsory or automatic coverage, through government schemes or health insurance, forms the bulk of healthcare financing in OECD countries. Taken together, three-quarters of all healthcare spending in 2021 was covered through these types of mandatory financing schemes. Out-of-pocket payments financed just under one fifth of all health spending in 2021 in OECD countries, while voluntary health insurance financed 4%.

Figure 4.3. Health expenditure by type of financing, 2021 (or nearest year)



Note: The "Other" category refers to charities, corporations, foreign and undefined schemes.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

4.3. Setting the budget for health

4.3.1. Budget allocation mechanisms

Formulation of the total budget for health expenditure

Most OECD countries set a **total budget for health expenditure**.[3] Setting a total budget provides control over health expenditure growth, and by consistently anchoring a target for health expenditure, governments can uphold the fiscal sustainability of their health systems over time.

- Total budgets cover spending by the compulsory health insurance system for Belgium and Israel, and most public spending on health for New Zealand and the United Kingdom. In New Zealand, the budget excludes health spending by other government departments, and the Accident Compensation Corporation which is the compulsory provider of accident insurance. France sets an objective for social health insurance spending (the '*objectif national de dépenses d'assurance maladie*', or ONDAM). This is a target, rather than a hard cap.

Most countries set **annual budget allocations** for health. Budget allocations for health over multiple years are only set in a subset of countries (see Section 4.5.1 and Chapter 6).

- As the exception, England (United Kingdom) set a five-year budget allocation to the National Health Service in 2018.

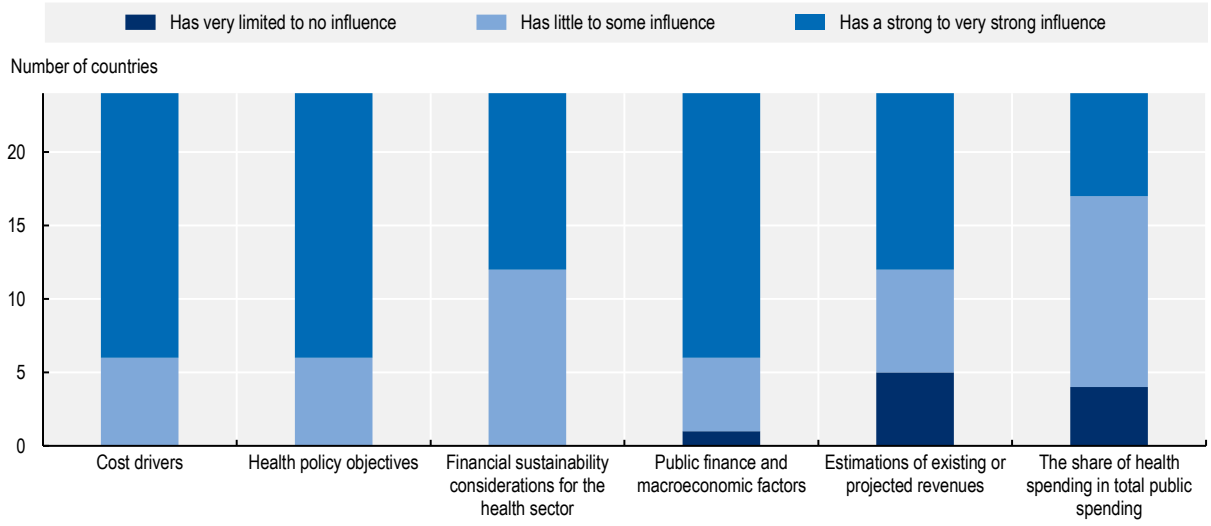
Estimates of the baseline are a key initial step in constructing the budget for health expenditure. Baseline estimates are used to understand the minimum increase needed to next year's health budget that will maintain the level and quality of service delivered, after accounting for the main cost drivers.

- Countries differ in how baseline estimates are constructed, in terms of the actors carrying out estimates, and how explicitly the assumptions are set. For example, assumptions about possible efficiency gains are built into the baseline analysis in England.
- Estimates of the baseline usually include supply-side factors such as existing wage agreements in the health sector, drug price agreements, and technological change. Estimations of healthcare demand are also accounted for to some extent, notably in terms of population growth and demographic change.
- Estimates must be based on realistic assumptions on the cost-drivers of health expenditure to accurately calculate pressures on baseline expenditure to avoid generating deficits or frequent budget top-ups, which undermine the credibility of the budget ceiling.

A broad **range of factors** influence the total budget allocation for health, with cost-drivers being more influential than estimations of health-specific resources. Factors may be implicitly considered during the budget formulation phase or considered as more explicit criteria.

- Country experience points to benefits from such explicit criteria, notably in terms of stability and predictability in future budgetary allocations to health, an absorption of changes in cost drivers, and a simplified annual process of negotiation. Although the criteria and assumption used to set the budget should be transparent and not regularly changed.
- Israel, for example, sets a total annual budget for the compulsory health insurance system. This budget includes automatic adjustment mechanisms reflecting three cost drivers: demographic growth, technological developments, and a price index. Belgium's Global Budget Objective (OBG) for health insurance automatically adjusts for inflation (Box 4.2).
- Most OECD surveyed countries (18 of 24) point to **cost drivers** (notably demographic factors, epidemiological factors, wages, new drugs, and technologies) as having a very strong or strong influence in determining the total budget or target for public health spending (Figure 4.4). The same share of countries found **public finance constraints and macroeconomic factors**, and **health policy objectives** as having a very strong or strong influence. In contrast, the existing share of health spending within total public spending was seen as much less influential, seen as having 'some', 'little' or 'very little/no' influence in 17 of 24 countries.

Figure 4.4. What factors have an influence on determining the total budget for health expenditure across OECD countries?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Budget allocations of new initiatives are discussed separately to the estimation of baselines (which cover existing and ongoing policies).

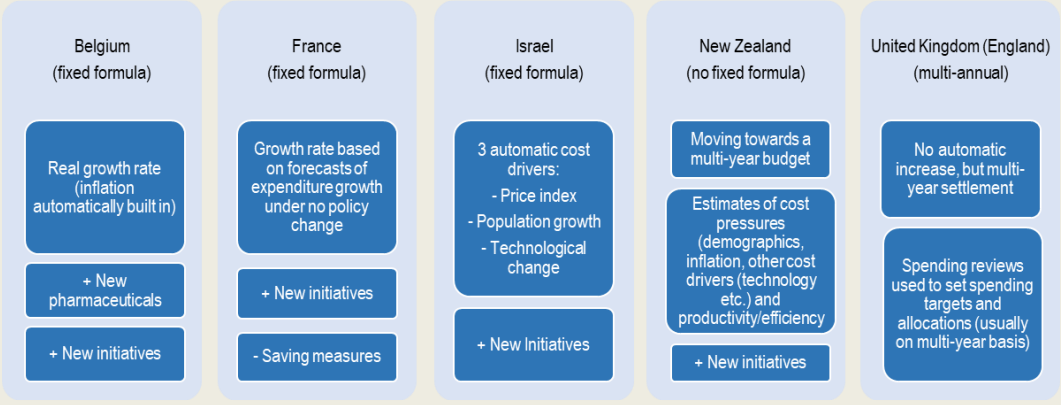
- Space for new initiatives is often a small share of the total health budget. New initiatives must compete with other areas of government spending or be financed through efficiency gains on existing initiatives. New initiatives are negotiated with the relevant stakeholders. Alongside new initiatives, saving measures are proposed during the budget preparation process.
- In Belgium and France**,** saving measures are proposed annually alongside new initiatives to keep expenditure growth on track. In England and New Zealand actors in the health system are expected to generate savings through incremental improvements to efficiency. In England, the extent of savings varies from year to year, while in New Zealand, this must only occur in some years.

Box 4.2. Country examples – the use of criteria in setting the total budget for health expenditure

Figure 4.5 summarises how the budget for health is set across selected countries. In Belgium, France and Israel, the budget for the following year is determined through a fixed formula. Israel uses three explicitly defined criteria to set the budget, consisting of a price index, population growth, and a component that allows for the adoption of new technologies into the health basket. In Belgium, inflation is automatically built into the budget, with the budget increasing each year predominantly based on a growth rate expressed in real terms. However, unlike in Israel, the criteria on which the growth rate or the real budget is set are not based on a formula linked to clearly defined indicators (such as population growth, price indexes, etc.), and instead is reached through government agreement, based on cost-pressures, fiscal objectives, and relative priorities of government. In France, a growth rate for social health insurance expenditure is applied to the previous year's health expenditure to fix the target for the current year.

In contrast, the budget process in New Zealand and England (United Kingdom) allows for no automatic increase in the health budget. However, in 2018, the United Kingdom announced its latest multi-year funding settlement, setting a legally guaranteed annual increase to the English NHS budget for the next 5 years. England (United Kingdom) also uses spending reviews, often on a multi-year basis to set allocations to the health sector. Similarly, in 2022, New Zealand provided a two-year budget for the health sector for the first time, to finance two-years' worth of cost pressures and new initiatives.

Figure 4.5. Setting the total budget for health expenditure, selected countries



Political influence in the formulation of the total budget for health expenditure

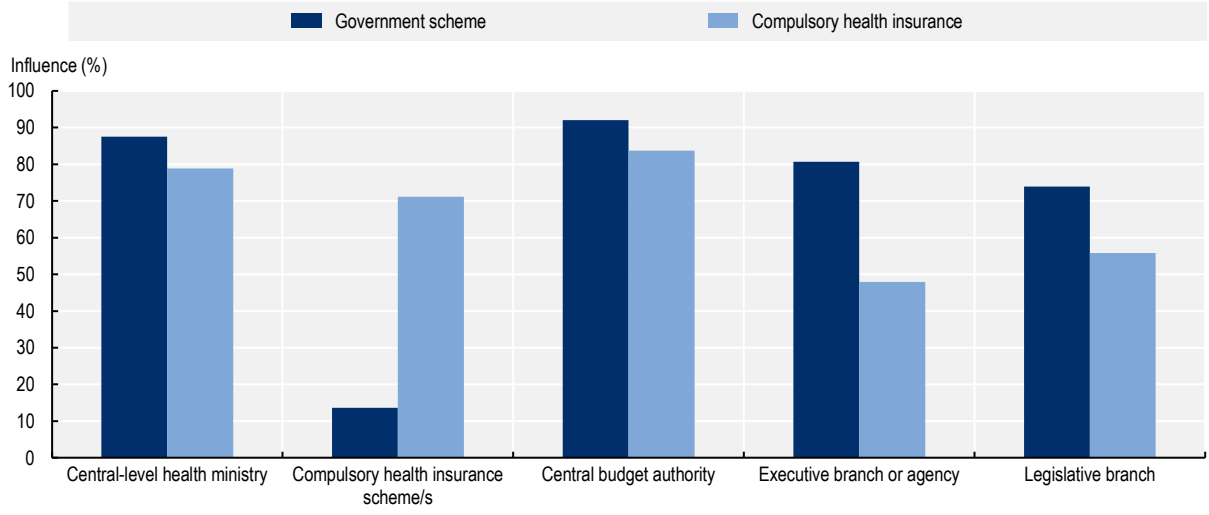
Both the **central-level health ministry and the central budget authority**[4] have considerable influence in determining the budget for health in countries with government schemes. For insurance-based systems, central government influence in determining the budget is weaker in comparison, and is jointly influenced with compulsory health insurance scheme/s.

Political choices also have a major influence on setting the budget for health (Box 4.3). In particular, the executive branch or agency (e.g. the Prime Minister's or President's Office), and the legislative branch (e.g. Parliament) have notable influence in determining the budget for health, particularly in countries with health systems organised around government schemes (Figure 4.6).

- While estimates of the baseline that account for cost drivers are considered, final decisions on the budget usually balance considerations of healthcare needs with other government priorities and the state of public finances.

- Countries that have a set formula increase for the health budget (such as Israel) find it simplifies the annual budget process, by reducing the scope of negotiations between health and finance ministries.
- Allocated budgets often do not fully reconcile with the baseline costs and pressures to deliver policy ambitions. Consequently, overspending is frequent, which requires annual budget top-ups or bailouts to health providers (discussed further in Section 4.4).

Figure 4.6. Which institutions influence the total budget for health expenditure across OECD countries?



Note: Influence is a weighted sum of scores (has a very strong influence=4, has a strong influence=3, has some influence=2, has little influence=1, has very limited to no influence=0), as a proportion of the potential maximum score.
Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.3. Country examples: Parliamentary approval of the health budget

Parliament has a strong engagement in the budget cycle in selected countries, even health insurance countries such as France (Table 4.1). Parliament votes on annual budgets for health expenditure to authorise spending across selected countries except in Belgium. Nevertheless, parliamentary vote is still required in Belgium on the real growth rate, which is the most influential component in determining the health budget.

Table 4.1. Approval of the total budget for health expenditure

Country	Element	Approval mechanism	Frequency
Belgium	Global Budget Objective	Voted on by representatives of health insurance funds, government, social partners, representatives of employers and employees	Annually
	Real growth rate	Voted by parliament	Periodically
	Global Budget Objective calculation (the following year is equal to that of the current year, increased by the real growth rate)	Voted by parliament	-
France	ONDAM target	Voted by parliament	Annually
Israel	Automatic cost drivers	Decided by government agreements	Every 3 years
	National Health Insurance budget	Voted by parliament	Annually
New Zealand	Vote Health (main source of funding for New Zealand's health)	Voted by parliament	Every 2/3 years
England (United Kingdom)	Department of Health and Social Care spending ceilings	Voted by parliament	Annually
	The 2019-24 NHS Funding Deal	Voted by parliament	One-off

4.3.2. Allocation of the health budget across categories/programmes

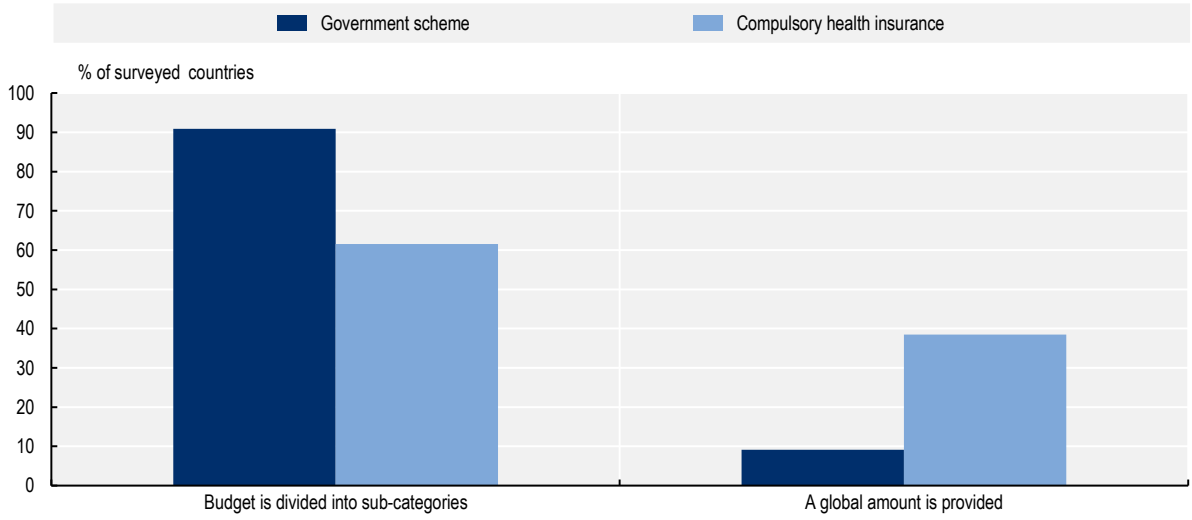
In most OECD countries, the **budget allocation corresponds to the organisational structure** of the health system, rather than the type of health service provided. Allocation of the budget by organisational unit (i.e. the ministry of health, a health insurance fund, a central purchasing body, or a local health authority) identifies the responsibility for major components of health expenditure, and the management of day-to-day operational expenditure. The method in which expenditures are allocated has a direct impact on policy decision-making, as well as accountability for performance results.

Total budgets/expenditure targets are broken down into **different degrees of aggregation,** reflecting the unique organisational structure of purchasing bodies or health system providers in each country (Figure 4.7). When allocating the budget, the level of aggregation has implications on the visibility of central authorities over spending decisions, and the flexibility of purchasing bodies or providers to make spending decisions.

A high level of aggregation (i.e. large lump-sum transfers) gives purchasing bodies autonomy over spending decisions, and the flexibility to redirect in-year spending as needs change. However, this results in less visibility over spending decisions and outcomes for central government authorities and parliaments. In particular, the ability to view whether prioritised initiatives are being implemented equally across local areas is often limited. In contrast, more detailed allocations improve visibility but give less flexibility over spending decisions, and less ability to adjust as spending needs change.

- Most OECD countries (nearly three-quarters of countries in the OECD survey) allocate the budget for health across sub-categories or programmes, rather than allocating a total amount (Figure 4.7). The nature of the sub-categories is very heterogeneous across OECD countries. A small number of countries use a consistent sub-categorisation across the health budget, dividing the entire budget by type of health service, or by the type of health provider. More commonly, however, countries use a mixed approach, containing different types of sub-categories within the budget, including the type of health provider, health service, or administrative entity, the purpose of expenditure, and the nature of expenditure (i.e. resource or capital expenditure).
- While there is flexibility for health authorities to allocate funds within sub-categories for many OECD countries, there is often limited flexibility to reallocate across sub-categories. In nearly all OECD countries this requires either approval of parliament or the ministry of finance or is prohibited during the budget year.
- In New Zealand, until the reform of 2022, most of the health budget was channelled through lump-sum transfers based on a capitation formula to the District Health Boards (DHBs), who had devolved responsibility to provide health services to their local populations. Similarly, in England (United Kingdom), a large share of the budget was allocated to Clinical Commissioning Groups who were responsible for local services, until they were dissolved in July 2022 (see Box 4.7).
- In Belgium, the compulsory health insurance budget is broken down into 39 subsectors or 'partial budgets', with little scope to reallocate across categories, causing rigidities. Belgium is considering implementing a more global and transversal approach that would allow for greater flexibility in the budget allocations between the different subsectors.

Figure 4.7. Breakdown of the budget for health across OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Across countries, a large part of the health budget is distributed to purchasing bodies through **funding formulas.** Such funding formulas are population-based and weighted according to cost-drivers; notably, age, gender, and socio-economic status (Box 4.4). They aim to allocate the budget equitably across purchasing bodies. However, as they depend on the total budget available to share, they do not necessarily ensure sufficient funding is provided to each, often leading to deficits at the purchasing body level.

Box 4.4. Country examples – allocation of the health budget and method of distribution

Table 4.2 shows the allocation of the health budget to the main health purchasing bodies, and the method of distribution. Funding formulas across selected countries are population-based, adjusted by sex and age. Other factors include socio-economic factors, ethnicity, and rural adjustments. The United Kingdom goes a step further and uses measures of unmet need and health inequalities to calculate funding needs.

Table 4.2. Allocation of the health budget and method of distribution

	Allocation of health budget to main purchasers	Method of distribution
Belgium	7 health insurance funds, and 39 subsectors or partial budgets corresponding to health providers	[for 7 health insurance funds] 70% retrospective, 30% prospective based on demographics, mortality socio-economic factors, environment, and morbidity
France	5 objectives and 2 sub-objectives for categories of spending corresponding to the way in which health services are contracted and regulated (ambulatory care hospital care, services for the elderly, regional activities for public health)	Based on an estimation of expenditure growth across different objectives
Israel	4 Health Maintenance Organisations (HMO's)	Weighted population adjusted by age, sex, place of residence
New Zealand	Until late 2022, allocated to 20 District Health Boards (DHBs). Allocative funding mechanisms are currently being reviewed.	Population-based funding formula (PBFF), weighted for age, sex, ethnicity, and socio-economic groups, and rural and overseas and refugee adjustments. New funding flow system under development.
England (United Kingdom)	42 Integrated Care Systems (prior to 2022, 106 Clinical Commissioning Groups)	Weighted population, adjusted for age and sex, unmet need and health inequalities, and unavoidably higher costs of delivering healthcare due to location

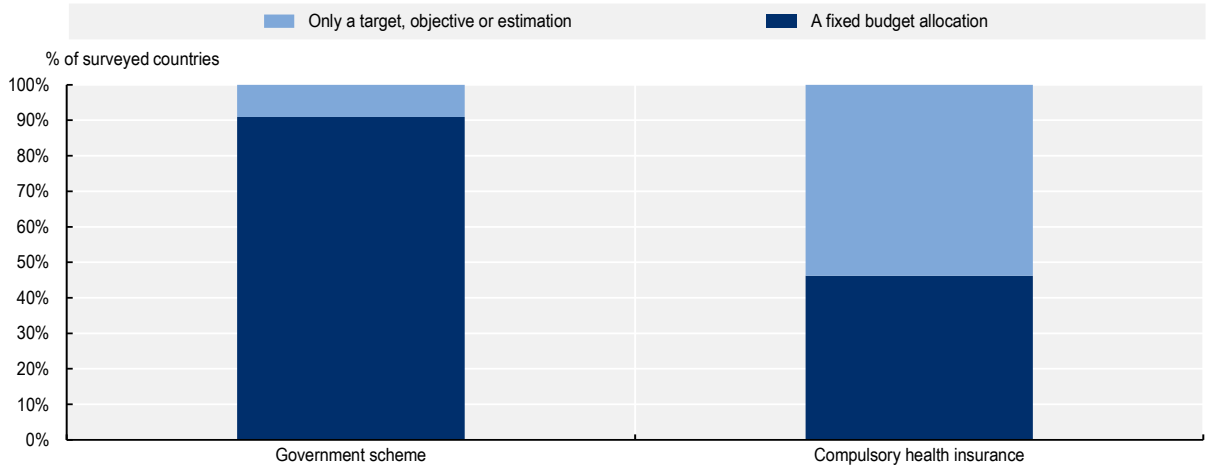
4.4. Budgetary tools used to control health expenditure growth

4.4.1. Spending controls and incentive mechanisms

Enforcement of spending objectives is achieved through hard constraints accompanied with strict rules on the overspending and breach of ceilings. Setting budget ceilings (or expenditure targets) for health can ensure that the overall health sector contributes to the national fiscal balance target. Hard budget ceilings can also be used to influence the volume, price, and rate of inclusion of new technologies. The threat of reputational damage also plays a part in the enforcement of budgets for health.

- Across 24 surveyed OECD countries, budget ceilings for health in countries with government schemes are commonly set as a fixed budget allocation, where fixed amount of funds are defined for the budget overall and any overspending requires a special amendment process (Figure 4.8). Meanwhile, countries with compulsory health insurance schemes, alongside fixed budget allocations, also set the budget for health as a target, objective, or estimation, where actual spending could be larger, without need for a budget amendment.
- In England, for example, overspending by the Department of Health and Social Care requires investigation into its cause, an examination of the financial procedures of the department, and potentially a reduction in the corresponding budget ceiling (Departmental Expenditure Limit) in the next fiscal year.
- In France, the ONDAM is an objective, rather than a hard cap and spending has historically frequently been above this objective.

Figure 4.8. Setting the budget for health in OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Corrective procedures and incentive mechanisms work alongside budget ceilings. Among countries there is pessimism around the extent to which budget ceilings for health are successful in containing overall health expenditure by themselves. Avoiding breaking budget targets is sometimes achieved only by providing top-ups to the annual budget, or through reallocation of funds between capital and operating budgets. Common complementary mechanisms to ensure that health expenditure stays within budgets include:

- **Health Technology Assessment** (HTA) is used to inform what services are included in the health benefit basket across many OECD countries. However, country approaches differ in the extent to which HTA results are linked with setting the total budget. In Israel, there is a direct link between HTA results and the annual budget process, since the committee who evaluates health technologies must consider the previously determined budget ceiling when making decisions on the inclusion of new services. On the other hand, while England has a well-established HTA process, there is not an explicit follow-through from new technologies approved to their budgetary impact.
- **Price regulation** (of tariffs and wages) is an important part of budgetary management to control health expenditure. Price regulation of health services can also be used as an incentive mechanism aimed at purchasers or providers to encourage efficiency gains by setting prices that encourages innovation into more efficient and less costly ways of providing care.
- **Volume controls** are also widely used. Israel has instituted tight control over volumes in the health sector, including a cap on public hospital income, consisting of a floor (lower cap bound) and a ceiling (upper cap bound) to control and incentivise the volume of hospital service delivery.
- Steps to control prices and volumes in the health sector may be taken in-year as pre-emptive corrective measures to prevent budget over-runs.

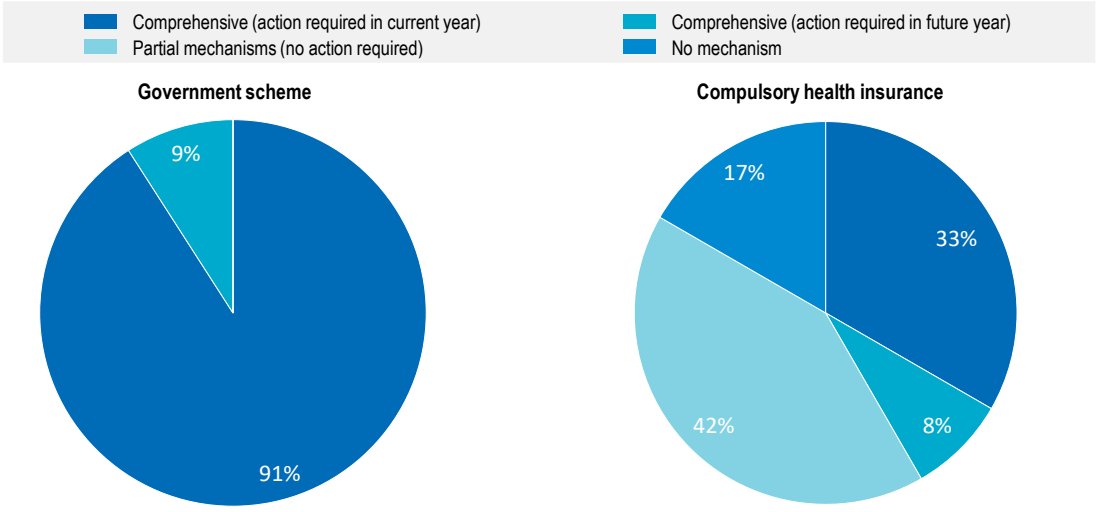
Early warning mechanisms associated with corrective measures are frequently used.

- A large majority of OECD countries (22 of 24 surveyed countries) use corrective mechanisms to enforce spending objectives and improve budget compliance, both where the budget is set as a fixed allocation and as a target (Figure 4.9). In most cases, corrective mechanisms are comprehensive, with a system in place that detects risks of overspending with actions required in the current year or future year. Partial mechanisms – systems that detect overspending, but where

an alert does not legally require action – are used less frequently (in 5 out of 22 countries with corrective mechanisms).

- France has introduced monitoring mechanisms with the aim of ensuring compliance of health expenditure within the ONDAM target. An Alert Committee (Comité d'alerte) is responsible for steering compliance with the ONDAM throughout the budget year and alerting the government, the parliament, and the health insurance funds if health expenditure risks exceeding the ONDAM by more than 0.5%. The Steering Committee monitors health expenditures covered by the ONDAM every month, implements all savings that have been decided to help meet the target, and prepares the ONDAM for the following year.

Figure 4.9. Use of corrective mechanisms to ensure budget compliance across OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.5. Country examples – budgetary tools used to improve compliance with budget ceilings for health expenditure

Health Technology Assessment	In **Israel**, decisions on the inclusion of new technologies are determined by a specialised committee, linking the results of health technology assessment to the budget impact.
Price regulation	In **France**, reimbursement rates for hospitals are set at the beginning of the year to be consistent with the target by forecasting growth for hospital activity. If planned activity has been underestimated, these rates are reduced during the year.
Incentive mechanisms	The **United Kingdom** sets an efficiency factor on prices to pay health providers, to encourage local commissioning bodies to find more efficient and less costly ways of providing care.

4.4.2. Budget monitoring and reporting

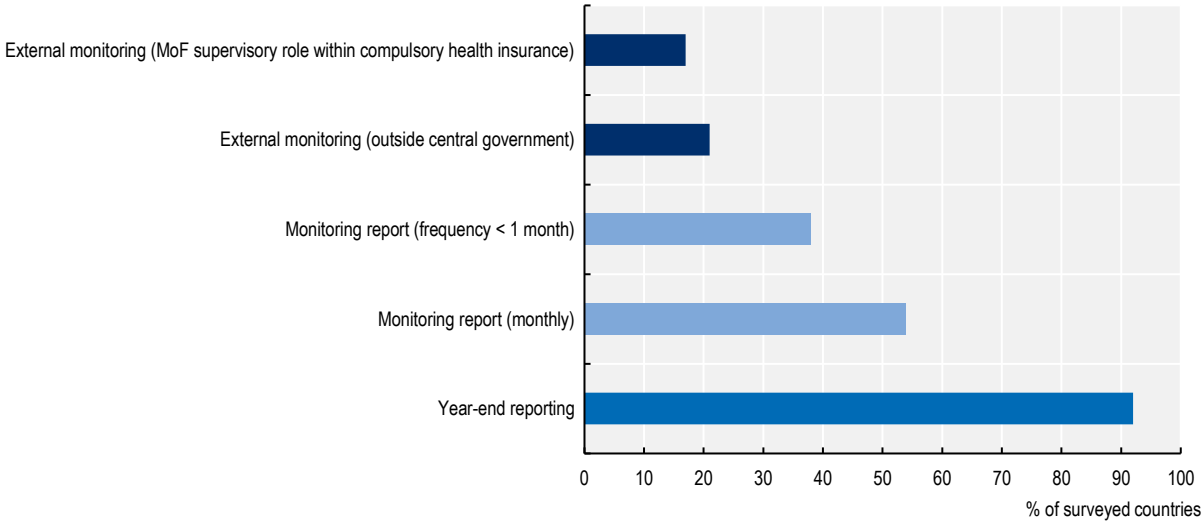
Across most surveyed OECD countries, **budget monitoring requires in-year reporting on health expenditures**. In-year budget monitoring is essential for supervising budget implementation and identifying significant deviations from planned expenditure to inform pre-emptive corrective actions to prevent over or under-spending during the year. Budget monitoring should cover all expenditure, including operating and capital expenditure, and provide information in a timely manner.

- In 13 of 24 surveyed countries, reports are produced monthly, with nine countries producing reports less frequently (e.g. on a quarterly basis). Such reports are typically released publicly for budget transparency (Figure 4.10).

Year-end reporting – reporting on actual execution of the health budget at the end of the budget year – is also an essential component of budget monitoring. Ex-post budget reports, when well designed and implemented, are fundamental to accountability and can yield useful findings on performance and value-for-money to inform future budget allocations.

- Over 90% of surveyed OECD countries include year-end reporting within the budget monitoring framework.
- Furthermore, in approximately a quarter of countries, independent government bodies, such as National Audit Offices or equivalent, are responsible for external monitoring of the budget alongside central governments. In addition, for countries with compulsory health insurance schemes, the ministry of finance (MoF) often takes a supervisory role to protect the financial interests of the central government. This takes place through the permanent or ad hoc representation of the ministry of finance in the supervisory boards of social health insurance agencies to oversee budget monitoring.

Figure 4.10. Nature of budget monitoring across OECD countries

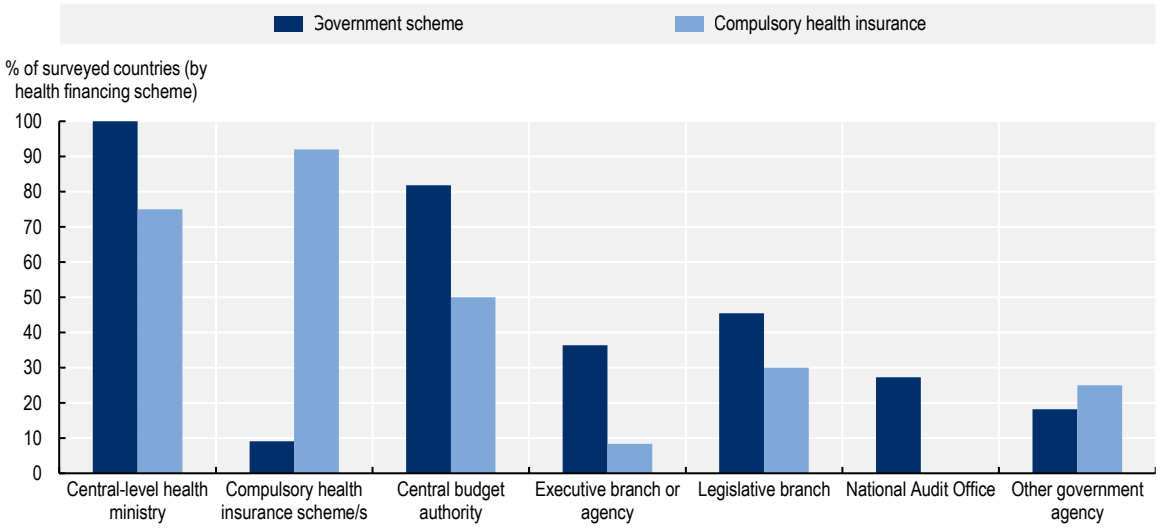


Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Across OECD countries, **the responsibility of budget monitoring** mostly lies with the central health ministry in countries with government schemes and with the compulsory health insurance scheme in insurance-based systems (Figure 4.11). However, in many countries – especially those with government-

based schemes – the central budget authority (CBA) has maintained a joint responsibility and control over the monitoring of the health budget.

Figure 4.11. Responsibility for monitoring of the health budget across OECD countries



Note: Proportion of countries that stated it was the responsibility of the institution to monitor the health budget.
Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.6. Country examples – monitoring and reporting mechanisms

Belgium	• Monthly monitoring of all health insurance reimbursements • System of 'permanent audit' used to detect any budget overruns and implement corrective mechanisms • Periodic (monthly, quarterly, and annual) reporting of financial results by INAMI
France	• Monthly monitoring social health insurance expenditure by an 'Alert Committee' and 'Steering Committee" • Annual report of compliance of health insurance spending with target
Israel	• Monitoring of HMO expenditure • Annual report of HMO expenditure
United Kingdom	• Monthly monitoring of DHSC spending • Annual report on financial accounts

4.4.3. Management of overspending in the health sector

Despite setting a total budget for health expenditure, **deficits exist at various levels in the health system across health purchasing bodies and health providers** across OECD countries. Drivers of overspending include rising healthcare costs, insufficient initial funding, as well as inefficient models of healthcare delivery. While short-term deficits can be corrected through cash injections, long-standing deficits can be detrimental to health system performance. Deficit reduction aims to introduce healthcare reform to slow the growth in healthcare costs, without reducing the quality of or access to care.

- In New Zealand, for example, 19 of the 20 District Health Boards were in deficit as of early 2021.[5] Deficits have been attributed to underfunding of the health sector, but also to a range of governance and performance-related issues. This was one of the drivers of the 2022 reform.

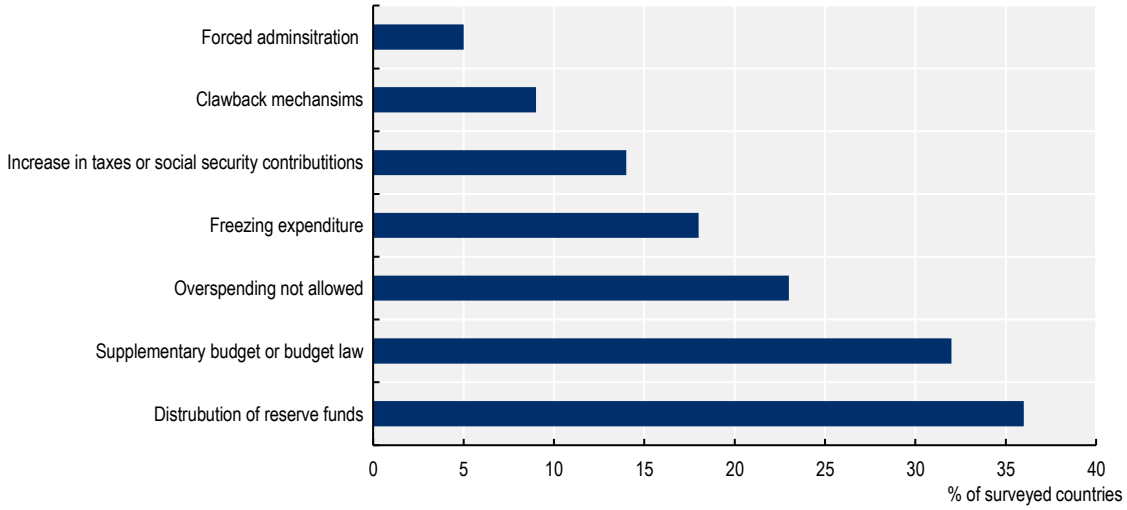
As a result of overspending, governments are obliged to **routinely bail-out deficits in the health sector**. Purchasers and providers of healthcare are often considered too vital to collapse, and therefore are consistently protected by governments. When this is mutually understood by both parties, incentives to institute tight financial control and avoid overspending are weakened.

- In Israel, it has become common practice for the government to provide additional funding for the four Health Maintenance Organisations at the end of the year. Consequently, HMOs tend to plan deficits into their spending, assured that these will be covered by government.
- New Zealand and England (United Kingdom) have recently carried out large organisational reform of their health systems, including the centralisation and merging of small healthcare purchasing bodies (Box 4.7).

To manage and prevent overspending, OECD countries employ various strategies.

- Overspending of the health budget is prohibited by law in approximately a quarter of surveyed OECD countries. In countries, where overspending is legally feasible, a common consequence – particularly for insurance-based systems – is the distribution of reserve funds or retained earnings of the fund from periods of surplus to cover overspending (Figure 4.12). Another frequent consequence is the approval of a supplementary budget or budget law to cover overspending. Often these must be accompanied with an ex-post or ex-ante explanatory report by the corresponding health authority justifying the overspending. Other consequences include the freezing of certain budget lines (for example for the ministry of health), expenditures or reserves, increasing taxes or social security contributions, clawback mechanisms, and – in extreme cases – the forced administration of health purchasing bodies or providers.
- Belgium introduced measures to shift some of the financial responsibility of deficits onto the health insurance funds. Since 1995, when the financial accounts for the year are closed, the health insurance funds are individually responsible for 25% of their financial result. If a fund has a surplus, 25% of the surplus can be added into its reserve fund. But if the fund runs a deficit, it must finance 25% of the deficit from its reserves. It is possible that insured members of the fund will have to contribute to the reserve. This has happened just once, but there is sufficient consciousness to prevent budget overruns by the health insurance funds.

Figure 4.12. Consequences of overspending of the health budget across OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.7. Country examples – organisational reforms in New Zealand and the United Kingdom

New Zealand and the United Kingdom have recently undergone large-scale reforms of their health systems (Table 4.3). The reforms focus on consolidating and merging of healthcare purchasing bodies into larger, more centralised bodies.

Table 4.3. Major organisational reforms of the health sector

	New Zealand	England (United Kingdom)
Why	Large number of DHBs covering small populations created variation and inequity between areas and populations. It also led to complexity and duplication of functions such as procurement, IT systems and asset management that could have been done more efficiently either nationally or regionally. Finally, there were large deficits in almost all DHBs.	Poor financial performance and management among Clinical Commissioning Groups (CCGs). There was also a need to improve collaboration between hospitals, GPs, social care, and other providers to improve local services and better meet population needs.
What	Disestablish all 20 District Health Boards and merge functions to create a new national health system.	Dissolve the 106 Clinical Commissioning groups and integrate primary and specialist care, physical and mental health into joined up health and care services.
How	Create a new organisation, Te Whatu Ora, which leads the day-to-day running of the system for the whole country. Te Whatu Ora manages all health services, including hospital and specialist services, and primary and community care. In addition, New Zealand created the Māori Health Authority (Te Aka Whai Ora) with shared responsibility for decision-making, planning and delivery for Māori.	From July 2022, England was formally divided into 42 Integrated Care Systems (ICSs), covering populations of around 500 000 to 3 million people. ICSs are made up of organisations involved in planning and providing health and care in a particular geographical area. This can include hospitals, GPs, local authorities, social care services, primary care providers, and independent and voluntary sector providers.
When	July 2022	July 2022

4.5. Multi-annual financial planning for health and capital budgeting

4.5.1. Multi-annual budget perspective

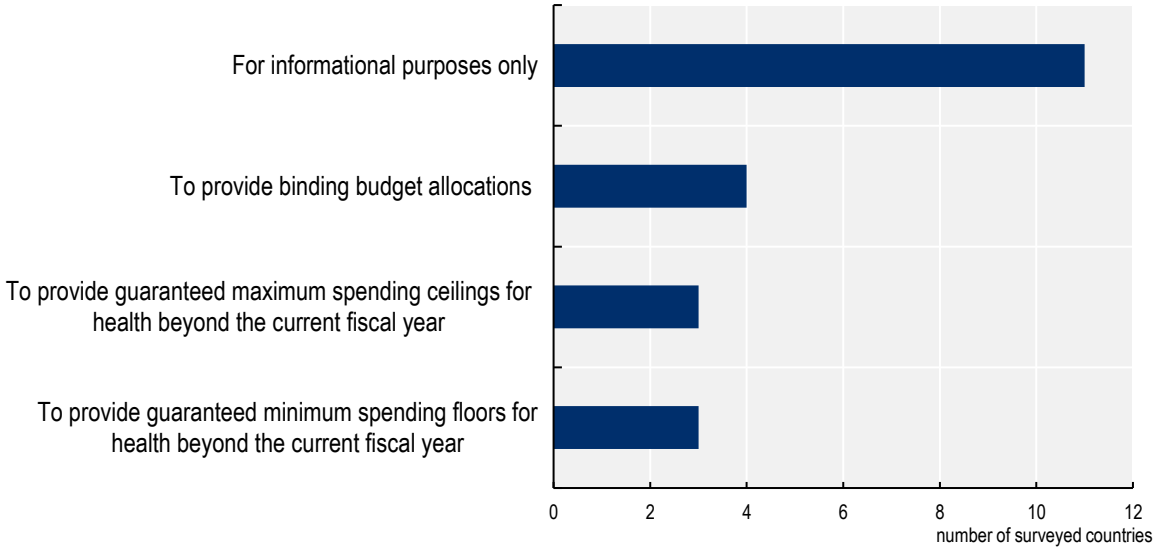
The benefits and challenges of integrating a multi-annual dimension into the budget process for health

Across OECD countries, ministries of health, and actors in the health sector, have been calling for an approach that provides greater **predictability and certainty** over budget allocations to the health sector in the medium-term. This would enable longer-term planning and prioritisation and could establish incentives for ministries of health to identify efficiency savings. Planning over a multi-annual horizon must be based on high-quality projections of expenditure estimates and ceilings. Multi-annual allocations for health should be set at a level that prevents the need for annual top-ups that reduce credibility.

However, finance ministries warn about the possible **trade-off with flexibility**. By committing to credible medium-term budgeting ceilings, health officials have greater budgetary predictability. For finance ministries, committing takes away the flexibility to set allocations to the health sector as the fiscal environment changes, creating a sustainability risk. Therefore, flexibility instruments (such as contingency funds) are needed within multi-annual frameworks to deal with unexpected shocks.

- Across the OECD, multi-annual financial planning in the health sector generally only provides informational input to the budget process in surveyed OECD countries. Multi-annual financial planning provides binding minimum or maximum budget allocations in only a subset of countries. Guaranteed maximum spending ceilings for health beyond the current fiscal year or guaranteed minimum spending floors are only set in 6 of 24 countries, and binding budget allocations are set in a further 4 countries.
- In 2018, the United Kingdom set binding multi-annual commitments for the health sector, and in 2022, New Zealand set a two-year budget for health.

Figure 4.13. Purpose of multi-annual financial planning of health expenditure in OECD countries



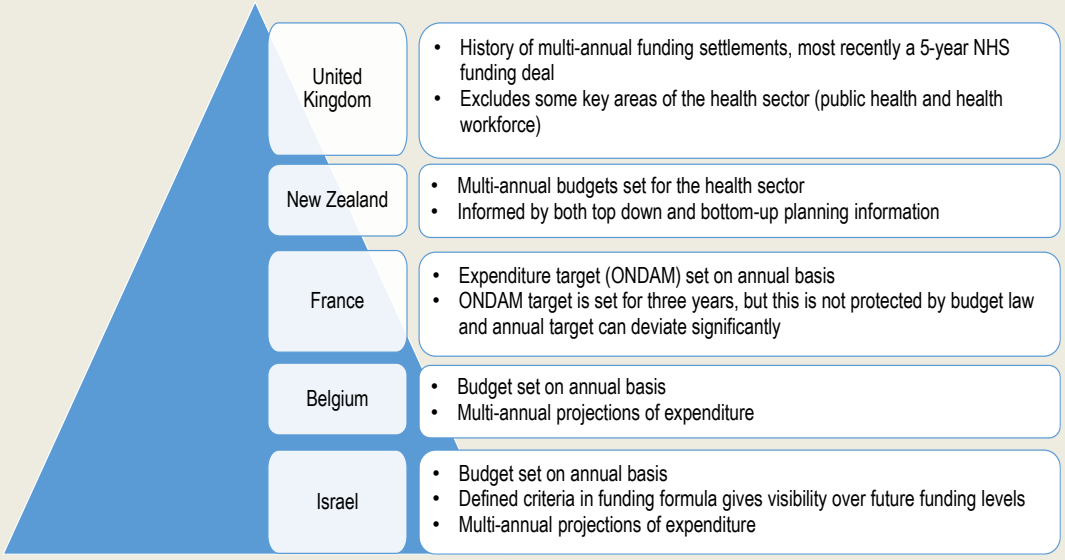
Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.8. Multi-annual financial planning for health in selected countries

Out of selected countries, the United Kingdom and New Zealand currently set the budget for the health sector beyond the current year. In England (United Kingdom) multi-annual funding takes the form of a 5-year funding deal for the NHS for the years 2019/20-2023/24, excluding key areas such as public health and health workforce planning and training. New Zealand set a two-year budget for health in 2022, thus including two-years' worth of cost pressures and new initiatives. The intention is to move towards a three-year funding arrangement from 2024, subject to adequate system settings to support improved planning and financial control being in place. This was based on a top-down funding model developed by Treasury and the Ministry of Health, including factors for demographics, inflation (combination of wages and consumer price index), other health cost drivers (such as technology) and productivity/efficiency measures.

A multi-annual perspective is integrated in France, Israel and Belgium. In Israel, the formula-increase for the health budget provides some visibility over future funding levels. France sets an expenditure target for a three-year period, but this does not constrain decisions when setting the target for the current year. Belgium projects health expenditure up to 10 years ahead, which is used by INAMI to support baseline estimates, as well as model the implications of alternative policy scenarios.

Figure 4.14. Extent of multi-annual planning for health in selected countries



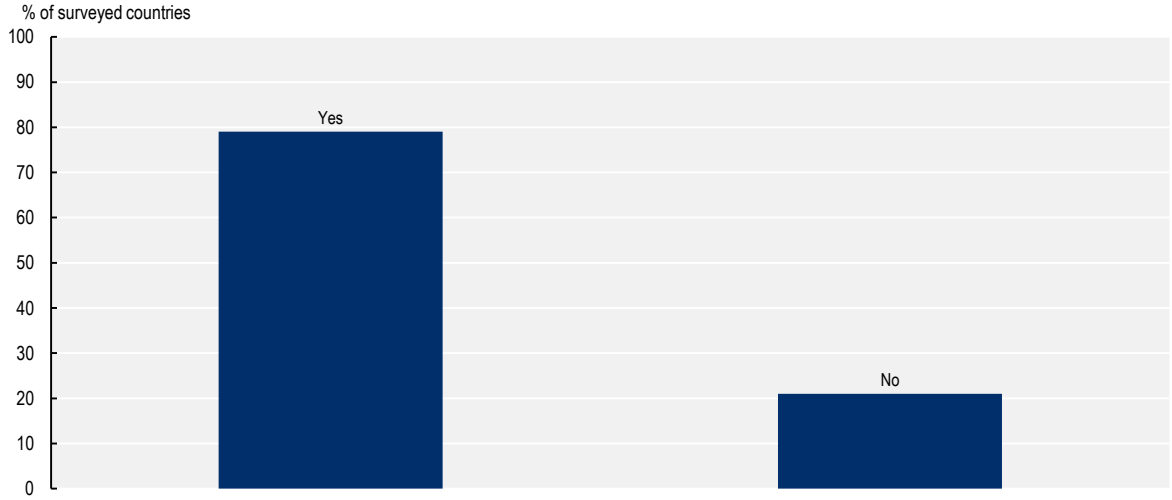
Design issues when implementing multi-annual frameworks for health

Short- and medium-term projections of health expenditure can be used to support the formulation of budgets for health beyond the annual budget year. Nearly all surveyed OECD countries project health expenditure to the short term (i.e. three to five years). For most countries, projections are revised on an annual basis to coincide and provide informational input into the annual budget process, rather than revised on a more frequent basis.

In addition, the coronavirus pandemic has shown that **flexibility instruments** are needed in the design of multi-annual financial frameworks to account for unforeseen and large expenditure needs.

- Expressing the total budget for health growth rate in real terms – such as in Belgium – rather than nominal terms, can help absorb unexpected changes in inflation but can have negative effects on fiscal sustainability. Existing budgets for health may also need to be re-adjusted according to new healthcare demands and cost-structures.
- Contingency funds or supplementary budgets are useful tools for major unexpected events such as COVID-19. Contingency funds exist in over half of surveyed OECD countries. Funds exist either specifically for the health sector or are available across the whole of government.
- Changes to multi-annual financial agreements – i.e. changes to budget allocations and/or prices within multi-annual financial agreements – are allowed across most surveyed OECD countries (Figure 4.15). In some instances, changes are allowed exclusively during an emergency, such as the COVID-19 pandemic. For others, multi-year financial agreements are reviewed and adjusted annually.

Figure 4.15. Are changes to multi-annual financial agreements in the health sector allowed?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.9. Country examples – short-term projection models of health expenditure

Countries vary in the depth and coverage of their short-term projection models of health expenditure (Table 4.4). Belgium has developed a microsimulation model to project health expenditure up to 10 years ahead. The model projects health expenditure for 25 sub-groups of health expenditure and includes seven individual characteristics for healthcare consumption (such as age, sex, health status, and social situation).

Table 4.4. Short-term projection models for health expenditure

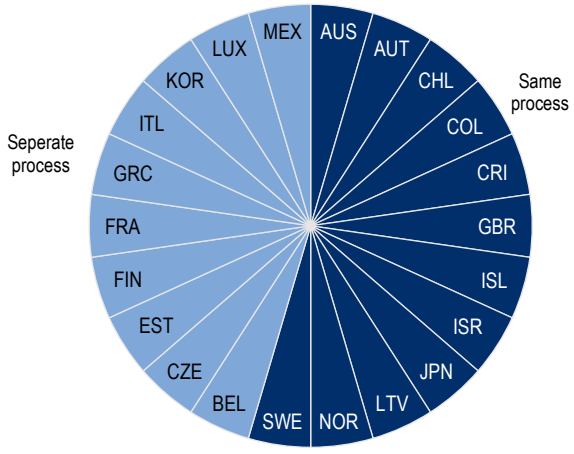
Country	Responsibility	Time horizon	Projection model
Belgium	Bureau Fédéral du Plan and INAMI	10 years	The micro-simulation model PROMES projects health expenditures to the medium-term
France	Ministry of Health, Ministry of Finance, CNAM	4 years	The model projects expenditure by applying a growth rate to social health insurance spending using a time series model.
Israel	Ministry of Finance	3 and 5 years	The Ministry of Finance carries out 3- and 5-year projections of health expenditure. These projections are centred on the automatic drivers of the health budget – price index, technological change, and demographic change.
New Zealand	Ministry of Health and the Treasury	3 years	The Ministry of Health and the Treasury developed a top-down funding model. The model includes the following components on demographics, inflation (both wage and non-labour costs), productivity/efficiency and other health cost drivers (e.g. technological advancements).
England (United Kingdom)	Department of Health and Social Care (DHSC)	Usually between 3 and 5 years.	The DHSC produces health expenditure projections. These are input into the spending review process, in which multi-annual settlements are agreed.

4.5.2. Capital budgeting for health

Across surveyed OECD countries, capital expenditures **follow the same budget process** as operating expenditures in slightly over half of countries (Figure 4.16). In the remaining countries, capital expenditure either follows a centralised budget process for all central government investments, or follows a process led by the investing institution itself, such as large hospitals or regional health authorities.

- Capital expenditures follow the same budget process as operating expenditures in Israel, and the United Kingdom. However, capital expenditure is contained within separate dedicated budget lines or programmes. Despite separate budgets lines, transfer of funds from the capital to recurrent budget during the year can occur, to prevent overruns in the operating budget. This has, for example, been common in the United Kingdom, causing a regular reduction of the capital budget.
- In Belgium and France, capital expenditure follows a separate budgetary process than operating expenditure. A tailored framework for capital expenditure aims to ensure an appropriate total budget for health expenditure, an effective prioritisation of capital projects aligned with national strategic priorities, and an efficient execution of capital projects.

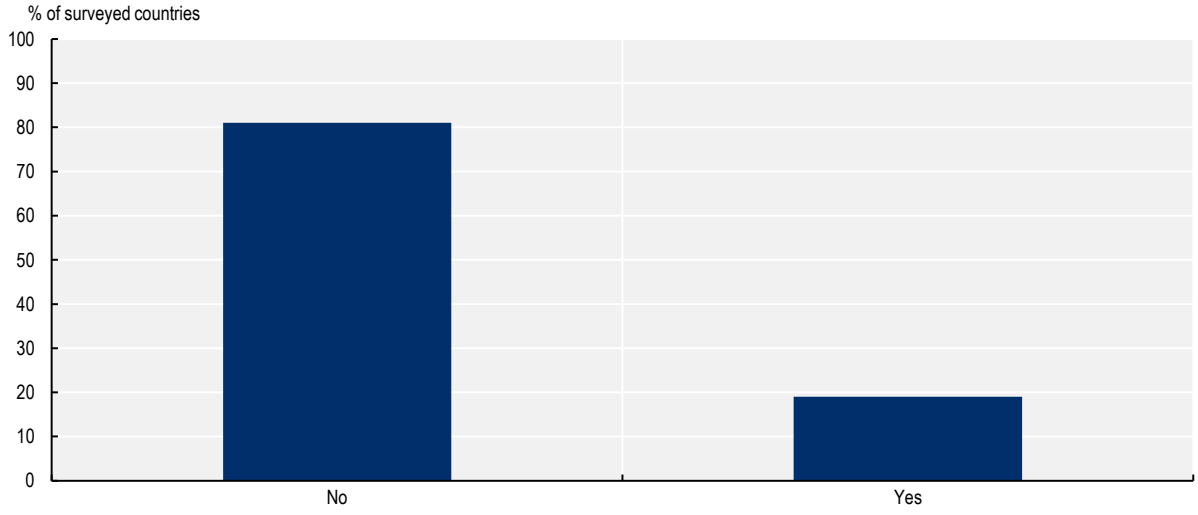
Figure 4.16. Separation of capital and operating health expenditure in the budget process across OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Mechanisms to **safeguard planned capital expenditures** are rare across surveyed OECD countries (Figure 4.17). Mechanisms in place include the separation of capital budget from operating budgeting.

Figure 4.17. Do any mechanisms exist to safeguard planned capital expenditures for health across OECD countries?

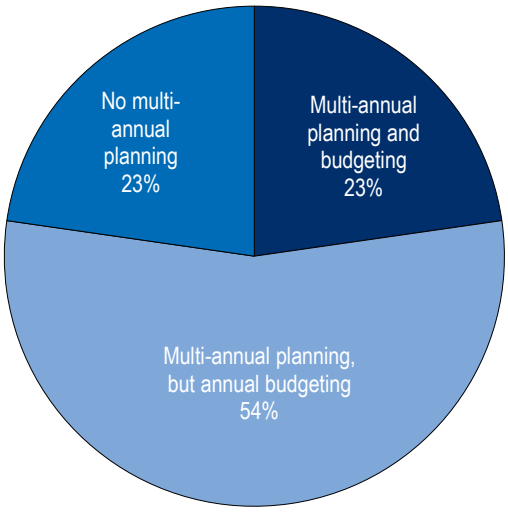


Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Some countries have developed frameworks for the prioritisation of resources to different capital projects for health, often on **a multi-annual basis**. Frameworks consist of the analysis of capital investment proposals, including cost-benefit analysis for larger projects, as well as links to a public investment committee or the ministry of finance (Box 4.10).

- Over three-quarters of surveyed OECD countries have a multi-annual planning framework for capital expenditure (Figure 4.18). Among them however, only a third set their capital budget on a multi-annual basis. Countries should further develop medium-term capital plans for the health sector that go beyond the annual budget, to assess capital capacity, development needs, and priorities.

Figure 4.18. To what extent does the capital budget have a multi-annual perspective?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 4.10. Country examples – capital budgeting expenditure and budget frameworks

Capital budget frameworks for health differ across countries. For example, in Belgium and France, most of the capital expenditure is the responsibility of the regions. Table 4.5 gives an overview of the capital budgeting frameworks in the United Kingdom.

Table 4.5. Capital budgeting frameworks in the United Kingdom

Setting the capital budget	Three-year capital settlement provided through the Spending Review process, and managed by the Department of Health and Social Care (DHSC).
Prioritization and ensuring value for money	DHSC approves provider capital expenditure when it is greater than GBP 15m, and Treasury must approve expenditure greater than GBP 50m.

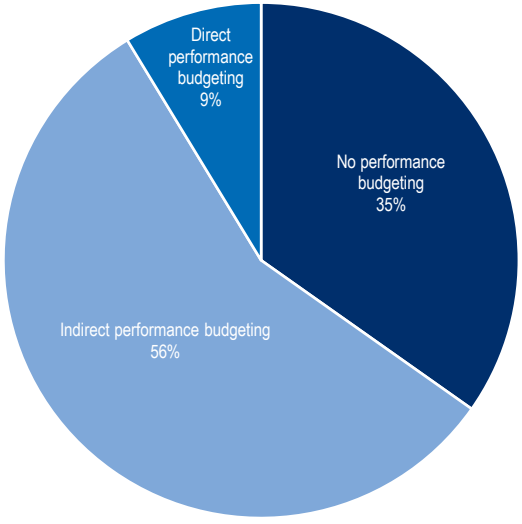
4.6. Budgets and links to strategic health objectives

4.6.1. Programme and performance budgeting, and use of KPIs

OECD countries are looking to better **integrate health objectives** into the budget process through programme or performance budgeting frameworks. These frameworks make an explicit link between the financial allocations as outlined in budget law, and the expected purpose or results, measured through key performance indicators (KPIs).

- Currently, a third of surveyed countries have no form of performance budgeting framework in the health sector, with no link between health objectives and the health budget (Figure 4.19). Under 10% of surveyed countries have a direct form of performance budgeting – where indicators for strategic health objectives are incorporated within budget documents and there is a direct link between results and resources – however, this is often limited to a small proportion of the health budget. The majority of countries have an indirect form of performance budgeting, where indicators for strategic health objective are presented within or alongside budget documents, but there is no direct link between funding and resources.
- Belgium intends to integrate healthcare goals into the budget process for its compulsory health insurance system. From 2022, the budgetary process allows for the allocation of resources to healthcare objectives. The intention is not to achieve cost-savings, but to use resources in the most effective way to improve health system performance.

Figure 4.19. Type of performance budgeting for health in OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Long term health sector strategic plans are important for outlining the long-term vision for the health sector, and ensuring systems are fit for the future. Plans are also a means to link expenditure allocations to policy priorities. Without the link, plans can be unrealistic.

- To support longer term strategic planning, Belgium, France, New Zealand and the United Kingdom project health expenditure beyond a 10-year time horizon.
- In the United Kingdom, the NHS Long Term Plan was developed to link the NHS five-year funding deal and the long-term strategic objectives and priorities in the health sector.

There is recognition that strategic health objectives often require **cross-cutting** actions across areas of government. For example, on objectives such as improving mental health, the impact of health policies is constrained.

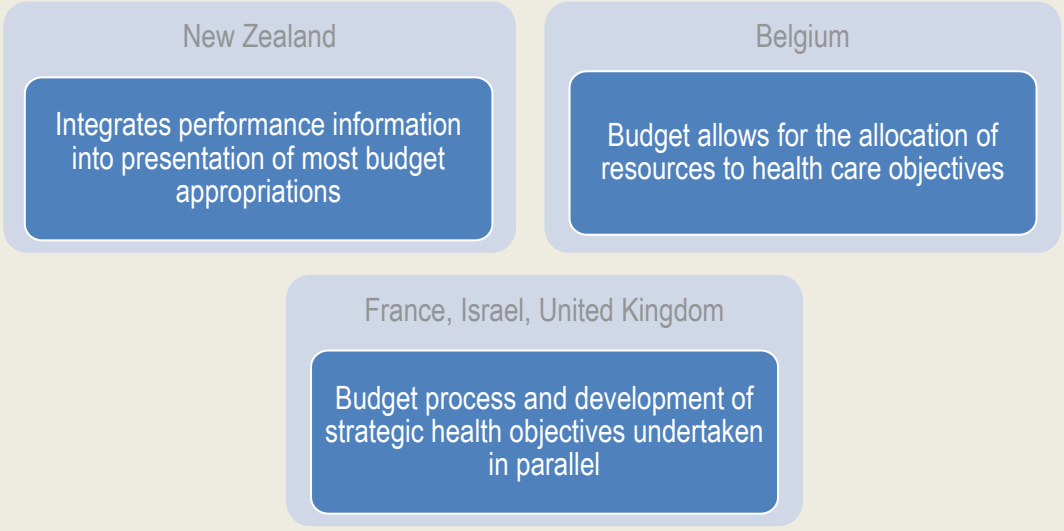
- New Zealand aims to address this through their well-being budget, a new approach to budgeting by integrating measures of well-being in the budget process. The approach aims to break down agency silos and encourage cross-government policies to tackle complex health objectives.

Box 4.11. Country examples – integration of strategic health objectives

Countries vary in the degree that strategic health objectives are integrated into the budget process (Figure 4.20). New Zealand integrates performance information into the presentation of most budget appropriations. In Belgium, from 2022, the budget included the allocation of resources to healthcare objectives.

In France, Israel and the United Kingdom, the budget process and development of strategic health objectives are undertaken in parallel, albeit some efforts to align the two. For example, Israel has developed a performance budgeting system, where a minor share of HMO financing is dependent on the results of key performance indicators.

Figure 4.20. Integration of strategic health objectives into the budget process



4.6.2. Use of spending reviews for health

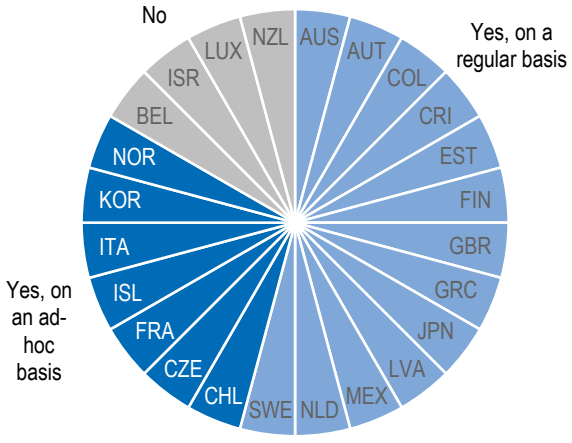
Budgets are annual processes and usually focus mainly on incremental changes and expenditure. However, it is often necessary to analyse existing expenditures, to ensure their effectiveness, and that spending is still aligned with government priorities.

Spending reviews are an effective instrument to do this. In the health sector, health ministries can opt to implement a spending review to identify areas of wasteful, inefficient, or ineffective spending. A spending review can also be used to demonstrate the extent to which expenditures align to government priorities. Doing so can increase the profile and priority of implementing health policies and bring awareness to the budgetary constraints and sustainability challenges facing ministries of health. Spending reviews should be integrated as part of the budget preparation process, on a regular, rather than ad hoc basis. The frequency should depend on the regularity with which government sets budget allocations for the health sector.

- Across the OECD, spending reviews are widely used as a strategic budgeting tool in the health sector across surveyed countries (Figure 4.21).

- In over half of surveyed countries, spending reviews are used on a regular basis as part of the budget process. However, countries differ in the extent to which the results of spending reviews influence future budget allocations for health. For example, in Austria, Colombia and Czechia, spending reviews are perceived as having little or no impact on determining future budget allocations. Meanwhile, in the Netherlands, spending reviews are seen as having a strong influence. As spending reviews are a resource-intensive activity, all aspects of the process need to be designed to deliver the best possible return.
- The United Kingdom carries out spending reviews in the health sector every 2-4 years. Spending reviews are used to determine medium-term targets and spending limits, to ensure allocations of public resources are in line with government priorities.
- France carries out spending reviews in the health sector on an ad hoc basis, focusing on the components that drive spending growth and provide analysis of the causes and target specific populations or diseases.

Figure 4.21. Use of Spending Reviews for health across OECD countries



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

4.7. Conclusions

Applying good budgeting practices for health increases the performance of health systems by maximising the value-for-money of health spending. This chapter demonstrates how good budgeting requires a coherent and effective budget strategy, beginning with a robust budget formulation mechanism. Experience from OECD countries points to the use of high-quality estimates of baseline expenditure, clearly identified cost drivers, and transparent assumptions to successfully set a total budget for health expenditure. Looking forward, improved collaboration with the ministry of finance during budget formulation can help to identify additional budgetary space for new policy initiatives in the health sector, while ensuring the consistency of budgets to the broader government fiscal constraints.

Secondly, the analysis stresses that good budgeting practices for health require the appropriate spending controls and active budget monitoring. This informs both short-term and pre-emptive actions to keep the budget on track, as well as yielding important messages on value-for-money to support effective future decision-making. Country experience also signals to health officials to undertake in-depth investigations into persistent overspending when spending controls and tools provide diminishing returns in their ability to contain health expenditures.

Furthermore, the chapter highlights how good budgeting practices for health requires on-going innovation in budgetary practices in the health sector. Country experience of incorporating a multi-annual perspective into budgetary management showcases the benefits of providing assurance over resource availability in the medium term and, in turn, providing incentives for effective forward planning. In addition, many countries are seeking to integrate health objectives into the budget process through deepening programme or performance budgeting. This provides a framework to better understand what health services are being delivered, and to what standards of quality and efficiency.

Finally, given the pressures on health systems from COVID-19, spending reviews are a readily available strategic budgeting tool to demonstrate the challenges and effectiveness of the existing allocation of resources in governmental budgets. The results from spending reviews are instrumental in helping to create fiscal space, improving a government's control over aggregate expenditure, prioritising health expenditure, and managing potential risks.

References

Chevreul, K. et al. (2015), "France: Health system review", *Health Systems in Transition*. [4]

Clarfield, A. et al. (2017), "Health and health care in Israel: an introduction", *The Lancet*, Vol. 389/10088, pp. 2503-2513, https://doi.org/10.1016/s0140-6736(17)30636-0. [8]

FIPECO (2022), *L'objectif national de dépenses d'assurance maladie (ONDAM)*, https://www.fipeco.fr/fiche/L%E2%80%99objectif-national-de-d%C3%A9penses-d%E2%80%99assurance-maladie-(ONDAM). [7]

HCAAM (2021), "Rapport du HCAAM sur la régulation". [6]

Lambert, L. (2020), "Budget des soins de santé, un vent d'espoir après la tempête?", http://www.revue-democratie.be/index.php?option=com_content&view=article&id=1467:budget-des-soins-de-sante-un-vent-d-espoir-apres-la-tempete&catid=30&Itemid=130. [3]

Lomax, N., S. McLoughlin and B. Udy (2016), "The New Zealand Fiscal Management Approach", https://www.nzae.org.nz/wp-content/uploads/2016/10/3228152_FINAL-Conference-Paper-Guide-to-NZs-FMA.pdf. [10]

NHS (2022), *Capital guidance 2022 to 2025*, https://www.england.nhs.uk/wp-content/uploads/2021/12/B1256-capital-guidance-for-2022-25.pdf. [11]

OECD (2023), *Health at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/7a7afb35-en. [2]

OECD/WHO/Eurostat (2011), *A System of Health Accounts: 2011 Edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264116016-en. [12]

Senat (2022), *Sur l'objectif national de dépenses d'assurance maladie*, https://www.senat.fr/rap/r19-040/r19-0404.html. [5]

Vammalle, C., C. Penn and C. James (2023), "Applying good budgeting practices to health", *OECD Journal on Budgeting*, https://doi.org/10.1787/b280297f-en. [1]

Waitzberg, R. et al. (2019), "The 2010 expansion of activity-based hospital payment in Israel: an evaluation of effects at the ward level", *BMC Health Services Research*, Vol. 19/1, https://doi.org/10.1186/s12913-019-4083-4. [9]

Annex 4.A. Budgeting practices for health in OECD countries: Country case studies

Key findings

- In **Belgium**, since 1995 a Global Budget Objective (OBG) has been established to determine the overall budget of the compulsory health insurance system, thereby providing a more predictable level of health expenditure. The OBG is largely driven by a real growth rate, one that automatically adjusts for inflation and is set in law. Beyond inflation, the real growth rate is not based on explicit criteria, but rather reflects a political decision, one that balances considerations of healthcare needs and relative government priorities.
- Systems exist to detect and control budget overruns and implement corrective mechanisms to ensure compulsory health insurance spending adheres to the OBG. In this sense, the OBG is best understood as a 'hard' rather than 'soft' health expenditure target.
- In **France,** an annual target for health expenditure has been set since 1996, known as the 'Objectif national de dépenses d'assurance maladie', or ONDAM. This target aims to control the growth of social health insurance expenditure. The ONDAM target (and sub-targets) set by Parliament are based on the forecasted growth of health expenditure, political objectives, and wider fiscal considerations.
- France has over time introduced monitoring and stricter corrective mechanisms, with the aim of ensuring compliance with the ONDAM target. As a result, the ONDAM has been largely respected since 2010 (excluding 2020 due to the pandemic).
- **Israel** sets a total annual budget for its compulsory health insurance system. This budget includes automatic adjustment mechanisms reflecting three cost drivers: demographic growth, technological developments, and a price index.
- **Israel** has established tight regulation over resources and expenditures in the health sector. For hospitals, there are rigorous controls on important supply factors, such as hospital beds and expensive medical equipment. In addition, the government sets maximum reimbursement rates and revenue caps on hospitals' income.
- Struggling with inequities and variation in access to the health system across the country, in 2022 **New Zealand** undertook a large-scale reform of their national health system. The new system disestablished the 20 local health organisations and merged their functions into a new national body which now leads the day-to-day running of the system for the whole country.
- Under this new reform, **New Zealand** is moving towards a multi-annual budget for health sector. For the first time, the 2022 budget took a multi-year approach towards funding the health system, providing health entities with certainty about the funding available for the next two years. From the 2024 budget onward, the intention is to move to a three-year funding cycle when the system is ready.
- The **United Kingdom** has a history of multi-year allocations for the health sector. In 2018, the government announced its latest multi-year funding settlement in the form of the NHS five-year deal for England. This was unique in that the funding for the next five years was protected by legislation.
- The **United Kingdom** carries out comprehensive spending reviews every 2-4 years to allocate funding across the health sector in line with government priorities under the five-year deal.

Budgeting Practices for Health in Belgium

Overview of health financing arrangements

Health financing in Belgium is organised predominantly around a compulsory health insurance system. This is overseen by the National Institute for Health and Disability Insurance (INAMI), with people free to choose between seven non-profit health insurance funds. These insurance funds are closely regulated, and must reimburse all services in the nationally established fee schedule (called the nomenclature).

INAMI is primarily financed through social security contributions (60%), but with a sizable amount funded through government transfers (40%) (OECD, 2023[2]). Such government transfers aim to cover the difference between revenues (as calculated by the National Office of Social Security), and expenditures (as calculated by INAMI). INAMI divides a global budget among the seven health insurance funds, using a mixture of prospective and retrospective payments: 70% of the division is based on historical expenditure, with the remaining 30% allocated using a standard formula reflecting demographics, mortality, socio-economic factors, the environment (such as the degree of urbanisation), and morbidity. This is intended to cover the full cost of reimbursements to their affiliated members.

Preparation of Belgium's global budget for the compulsory health insurance system involves a range of stakeholders. These stakeholders are grouped into three bodies – the General Board of INAMI, the Insurance Committee of INAMI, and the Budget Control Committee.

Annex Box 4.A.1. Core health expenditure data

- Belgium spent 11% of its GDP on health in 2021, higher than the OECD average of 9.7%, and equivalent to USD 6 022 per capita (adjusted for purchasing power).
- Compulsory health insurance accounts for 55% of total health spending, with government schemes a further 23%. Voluntary health insurance comprises 5% of health expenditure, with household out-of-pocket (OOP) payments accounting for the remaining 18%.

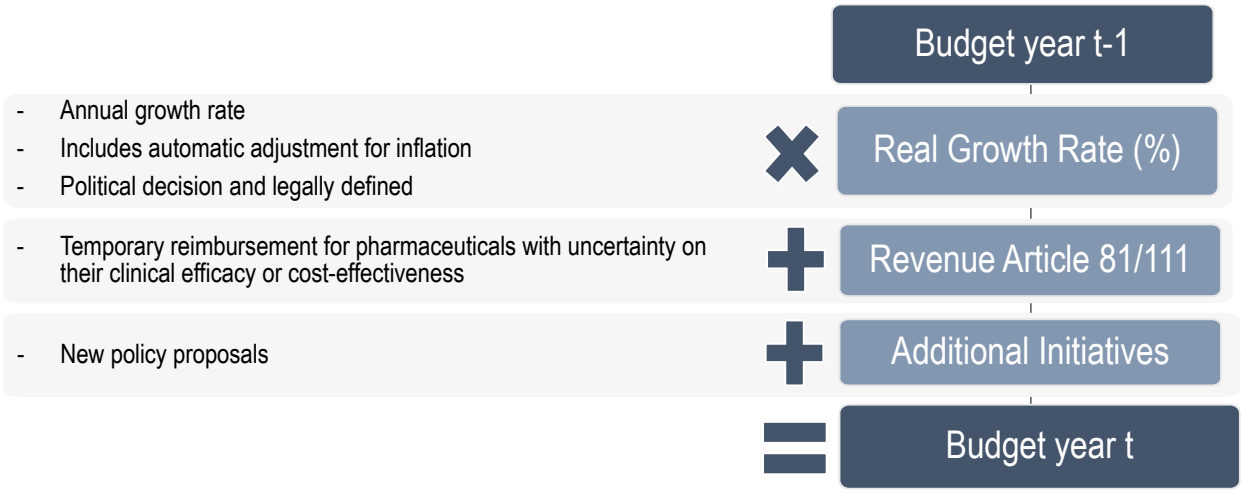
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Setting the budget for health

Since 1995, **an overall annual budget is set for the compulsory health insurance system**. This 'global budget objective' ('Objectif Budgétaire Global' or OBG) covers all reimbursements made by the health insurance funds. It excludes certain healthcare expenditure covered by the regions and communities (discussed further below), as well as spending by the private health sector.

Calculation of the OBG is legally fixed. The OBG for the upcoming year is equal to that of the current year, increased by three factors: a real growth rate, expenditure related to the revenue act 81/111 and agreed funding for additional policy initiatives (Annex Figure 4.A.1).

Annex Figure 4.A.1. Global Budget Objective (OBG) calculation



Source: INAMI.

Of these three factors, the ***real growth rate*** is the most important factor driving the budget, typically accounting for 70-90% of the increase. As with the overall OBG, it is legally defined, meaning it can only be changed at the initiative of the government. It includes an automatic adjustment for inflation, based on a health price index.

- Other than accounting for inflation, the criteria on which the growth rate is set are not explicitly specified. As a first step, INAMI estimates a 'natural' growth rate of health expenditure. This is the expected increase in compulsory health insurance expenditure with constant legislation – a baseline scenario of no policy change. This natural growth rate estimate is based on historical trends, along with the impact of key cost drivers such as demographic and epidemiological factors.
- Medium-term expenditure estimates by the Federal Planning Bureau are also considered. Such estimates of health expenditure 'needs' are used as a starting point for discussions, which also consider competing government priorities and fiscal constraints.
- Ultimately, the real growth rate, and therefore the OBG, is a *political decision*, one that balances considerations of cost pressures and relative government priorities. It is realised through a series of dialogues between key stakeholders – INAMI and the health insurance funds, health providers, and the government. After these consultations, a final decision on the real growth rate is made by the federal government.

Assessing the evolution of the real growth rate reveals significant differences over time. Since 1995, while the natural growth rate has been typically around 2.2%, the real growth rate has varied between 1.5% and 4.5%. Notably, in 2005 the real growth rate increased from 2.5% to 4.5%. This rate allowed for surpluses, which were transferred into a special fund to finance the future impact of ageing. From 2012-14, the growth rate was set at levels closer to the natural growth rate. In 2015, soon after a change in government, the growth rate was cut to 1.5%, to create fiscal space for other government priorities. This was insufficient to keep up with the evolution of baseline healthcare needs, so savings had to be found to maintain a balanced budget. In 2022, the growth rate increased to 2.5%, to finance the higher demand for healthcare services due to COVID-19. It is also close to medium-term projections by the Federal Planning Bureau.

In addition to the real growth rate, ***Revenue Article 81/111*** was created in 2010 as a managed entry agreement for new pharmaceuticals. It offers temporary reimbursement for pharmaceuticals where studies of clinical efficacy or cost-effectiveness are not conclusive enough to ensure permanent reimbursement.

Medicines under Revenue Article 81/111 convention grew by an average of 32% between 2015 and 2018, while all other medicines experienced negative growth (-0.6%) over the same period (Lambert, 2020[3]).

Finally, ***additional initiatives*** can be included to reflect new policy proposals. Various committees for healthcare providers communicate their policy needs, ranked in order of priority. The adoption of new measures requires a strong rationale and political buy-in. Historical examples include funding for a new mental health package, strengthened hospital care, and new agreements with health professionals. Note that within-year adjustments to the budget require a change in law.

Once fixed, **the overall health budget for compulsory health insurance (OBG) is allocated across different categories and programmes through 'partial budget objectives'**.

- Partial budget objectives are currently set for 39 sub-sectors, reflecting the organisation of health professionals and institutions (e.g. medical fees, dental fees, pharmaceuticals, hospitalisations, medical centres).
- Partial budgets form the basis for negotiations on the tariff conventions and agreements between health insurance funds and healthcare providers. National fees and reimbursement tariffs are set across health insurance funds for medical services and specific conditions related to content, quantity, and quality of care.
- In principle, partial budgets may exceed their budgeted amount, if overall health spending is within the OBG. However, in practice partial budgets are regarded as the property of each subsector, with subsectors incentivised to introduce new resource needs to maintain their partial budget objective. Reallocations between partial budgets is difficult without strong political support.
- Belgium is considering a more global, transversal approach that allows for greater flexibility in budget allocations between different subsectors.

Beyond compulsory health insurance, the three regions are responsible for some public health functions (such as vaccinations, screening campaigns), hospital investments and nursing homes. These regional health services are financed mainly through personal income tax, and unlike compulsory health insurance, integrated into the general government budget.

There are also budgeted expenditure outside the yearly budget process. This covers specific and exceptional circumstances, not related to day-to-day expenditure. Notably, additional costs of COVID-19 measures were outside of the OBG in the 2020 and 2021 budgets.

Budgetary tools used to control health expenditure growth

Historically, INAMI suffered from financial deficits. Therefore in 2017, Belgium introduced a law obligating the federal state to intervene if there is insufficient revenue from social security contributions to finance the compulsory health insurance system. This means that INAMI can never be in deficit.

However, **systems exist to detect and control budget overruns and implement corrective mechanisms** to ensure compulsory health insurance spending adheres to the OBG (Annex Figure 4.A.2). In this sense, the OBG is best understood as a 'hard' rather than 'soft' health expenditure target.

Annex Figure 4.A.2. Budgetary tools to control health expenditure growth

Budget monitoring	- System known as permanent audit monitors and controls expenditure - Monthly, quarterly, and half-yearly reports detail the evolution of expenditure and volumes of health care usage
Corrective measures	- The Minister of Social Affairs and the General Council of the INAMI can propose corrective measures at any time - Measures include the revision of tariffs fees or prices, changes to the nomenclature of health services, and new techniques for financing health services
Financial responsibility of the health insurance funds	- Since 1995, health insurance funds are partially responsible for any discrepancy between actual spending and their budget - An insurance fund can keep 25% of any surplus, however, if a fund overspends, it must finance 25% of the deficit from its reserves.
Control of the pharmaceutical budget	- There are multi-annual expenditure targets for the pharmaceutical budget - Based on short-term projections on the impact of new entrants, losses of market exclusivity, and policy changes - Part of the International Horizon Scanning Initiative

Multi-annual financing planning and capital budgeting for health

There is no formal medium-term financial framework for health. However, a medium-term perspective is integrated through multi-annual projections of health expenditure carried out by the Federal Planning Bureau (BFP). Since 2018, projections come from the PROMES model. Developed in collaboration with INAMI, it aims to align federal planning with the INAMI budget process. PROMES provides a detailed analytical view of the determinants of health expenditure for the next ten years. It has been used to support INAMI short-term recurrent estimates, negotiations of multi-annual deals for the pharmaceutical sector, and analyse different policy alternatives.

Most capital expenditures for health are the responsibility of the regions. Each region is responsible for financing investments in infrastructure and most medico-technical services ('investment charges'), with the federal government responsible for financing short-term credit burdens (capital loans).

Links between the budgeting process and strategic health objectives

Recent reform in Belgium aims to create a formal link between the budgeting process and strategic health objectives. From 2022, the budget for the compulsory health insurance system includes the allocation of resources to healthcare objectives. A new budget line within the Global Budget Objective was introduced to commit resources to actions that fall within the scope of healthcare objectives. The aim is to eventually develop a multi-year allocation to healthcare objectives.

Four healthcare objectives were defined in 2022 and will be achieved through 15 projects (Annex Table 4.A.1).

Annex Table 4.A.1. Healthcare objectives, 2022

	Secondary and tertiary prevention, including care pathways and integrated care
1	Care pathway for patients at risk of diabetes and follow-up of diabetic patients
2	Care pathway for obese children
3	Prenatal and postnatal care for vulnerable women
4	Care pathway before and after abdominal organ transplant
5	Psychiatric care for young people
6	Reduce readmissions by through better pulmonary rehabilitation
7	Projects in the field of secondary and tertiary prevention on the front line
	Improving quality of life
8	Integrated care planning
	Appropriate care
9	Physiotherapy care adapted to the needs of patients with cerebral palsy
10	Optimising the use of medication
11	Expand day hospitalisation
	Financial accessibility
12	Reduce maximum bill ceiling
13	Extension of third-party payment system
14	Accessible dental care
15	Transportation costs

Source: Budget 2022, INAMI.

Budgeting Practices for Health in France

Overview of health financing arrangements

France's health system is based on a social health insurance system, covering almost 100% of the population. Health insurance is predominantly provided through the general scheme 'Caisse nationale d'assurance maladie des travailleurs salaries (CNAM)', covering nearly 90% of the population. There are separate schemes covering the self-employed and the agricultural sector.

The social health insurance system is predominately financed through social security contributions (50%), and state transfers from national taxes and duties (25%). Each year the Ministry of Health, in conjunction with the Finance Ministry, prepares the annual Social Security Financing Act (PLFSS) containing a target for social health insurance expenditure for Parliamentary approval. The Ministry of Health sets a target for the different sectors (hospitals, ambulatory care, mental health care, social and health sector for disabled persons) and, with respect to hospitals, among the different regions (Chevreul et al., 2015[4]).

At the regional level, 26 regional health agencies (Agence régionale de santé, ARS) are responsible for ensuring that the delivery of health services meets the needs of their local populations by implementing regional health policy while respecting the expenditure target.

Annex Box 4.A.2. Core health expenditure data

- France spent 12.3% of its GDP on health in 2021, higher than the OECD average of 9.7%, and equivalent to USD 6 106 per capita (adjusted for purchasing power).
- Compulsory health insurance accounts for 81% of total health spending, with government schemes a further 4%. Voluntary health insurance comprises 6% of health expenditure, with household out-of-pocket (OOP) payments accounting for the remaining 9%.

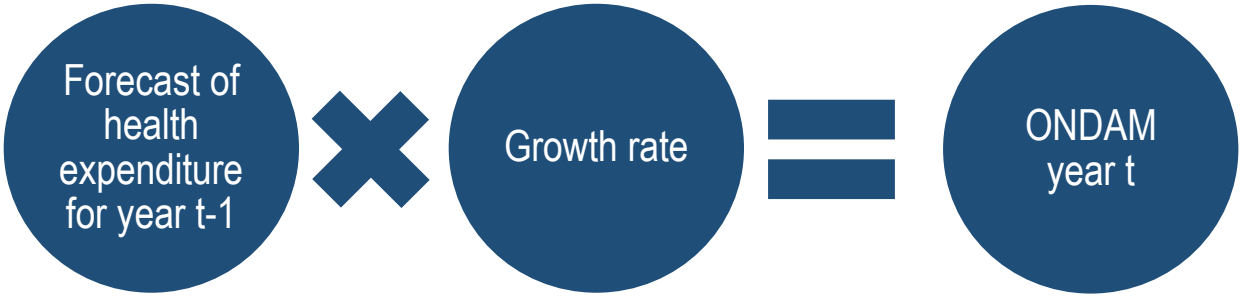
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Setting the budget for health

Since 1996, **France sets a health expenditure target, known as the 'Objectif national de dépenses d'assurance maladie', or ONDAM.** The ONDAM is an objective for the total amount of health expenditure for a given budget year financed through the Social Security Financing Act (PLFSS). This covers most public expenditure on health in France but excludes state expenditure on areas such prevention, medical care in schools, and expenditure by local authorities.

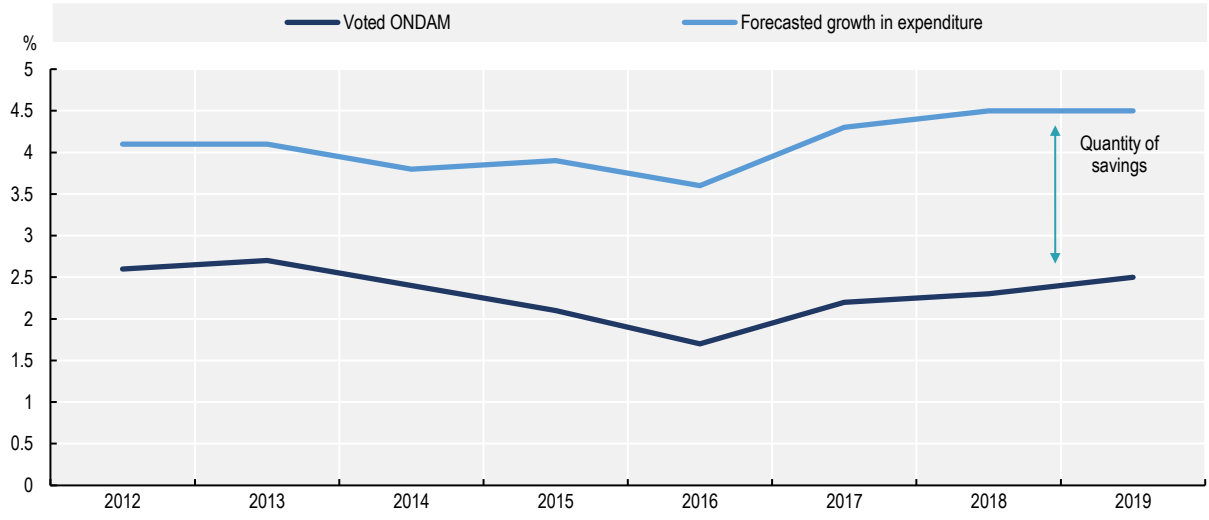
The ONDAM is set through the annual process for the Social Security Financing Act (PLFSS). Each year, the Ministry of Finance produces a draft PLFSS in collaboration with the Ministry of Health. The PLFSS proposes a growth rate for social health insurance expenditure for the coming year. This growth rate is applied to the current year's actual health expenditure to fix the ONDAM (Annex Figure 4.A.3). The proposal for the growth rate takes into consideration the forecasts of the evolution of social security spending, political objectives, and wider fiscal objectives, but is not set based on explicit criteria. Following the submission of the draft PLFSS, Parliament votes on the ONDAM target.

Annex Figure 4.A.3. Calculation of the ONDAM target for year t



Alongside the voting of the ONDAM, **there is an annual forecast and adjustment process to keep the ONDAM on track**. Within the PLFSS, the Ministry of Health must propose a package of saving measures to contain social health insurance expenditure growth. The extent of the saving measures corresponds to the difference between the voted ONDAM and the forecasted growth in health expenditure in the absence of new measures (the trend growth) (Annex Figure 4.A.4). This phase makes it possible to identify efficiency margins and priorities for action to control health expenditure. However, the focus on savings gives the false impression that the government wants to make cuts to health expenditure, although the target for health expenditure grows each year.

Annex Figure 4.A.4. Forecasted growth in health expenditure versus voted ONDAM 2012-19



Source: Senat (2022[5]), *Sur l'objectif national de dépenses d'assurance maladie*, https://www.senat.fr/rap/r19-040/r19-0404.html.

The ONDAM target is broken down into 5 objectives and 2 sub-objectives. These correspond to specific categories of expenditure, which are predominately defined by the way in which health services are contracted and regulated.

- The two main objectives (covering approximately 85% of total expenditure) are related to 'Soins de Ville' (ambulatory care) and healthcare establishments (hospitals, rehabilitation, long-term care etc.).
- The remaining objectives cover medico-social establishments (services for the elderly and disabled), regional health agencies expenditure (for public health activities), and other support (care for French resident abroad, specialised drug addiction centres etc.).
- France has recognised the current breakdown of the ONDAM target does not favour care integration and does not enable Parliament and the public to understand how much money goes for what. As such, there are proposals for a breakdown by destination of care, for example by primary care (including local care specialties), acute hospital care, rehabilitation care, old age care, and disability and dependency (HCAAM, 2021[6]).

Budgetary tools used to control health expenditure growth

The ONDAM is an objective, rather than a hard cap. Between 1996 and 2010 the ONDAM target was never respected, with social health insurance spending always exceeding the target.

As such, France has gradually introduced monitoring and corrective mechanisms with the aim of ensuring compliance of health expenditure within the ONDAM target. As a result, the ONDAM has been respected since 2010.[6]

- *An Alert Committee* (*Comité d'alerte*) is responsible steering compliance with the ONDAM throughout the budget year and alerting the government, Parliament, and the health insurance funds in the event the evolution of health expenditures risks exceeding the ONDAM by more than 0.5%

- *The Steering Committee* monitors health expenditures covered by the ONDAM every month, implements all savings that have been decided to help meet the target, and prepares the ONDAM for the following year.
- *Reimbursements to hospitals are adjusted in line with the ONDAM*. Health insurance schemes finance hospitals primarily based on activity and on the mix of patients (referred to as activity-based financing). Reimbursement rates are set at the beginning of the year to be consistent with the ONDAM target by forecasting growth for hospital activity. If planned activity is underestimated, these rates are reduced during the year. Other payments from health insurance schemes to hospitals are independent from activity, and instead are lump sum allocations to fulfil tasks of general interest, such as medical research. Part of these allocations (around EUR 600 million in 2020) is placed in reserve at the start of the year and is only paid to hospitals at the end of the year if health expenditure is compliant with the ONDAM (FIPECO, 2022[7]).

Multi-annual financing planning and capital budgeting for health

The budgeting process in France is legally grounded to the principle of annuality. However, France has made several efforts to introduce a multi-annual perspective into the budgeting process for health:

- The Social Security Financing Act (PLFSS) contains forecasts for the next four years of revenue and expenditure of the ONDAM.
- The PLSS also includes an assessment of the financial consequences of new discretionary spending measures in terms of additional savings or costs over several years.
- Under the Public Finance Programme Law introduced in 2008 the ONDAM is set for at least three years. However, these are not enshrined in budget law and cannot constrain either the Government or Parliament in the annual procedure for preparing and adopting the budget.

Most capital expenditures are included within the ONDAM target. Capital budgeting in France occurs mainly at the regional level, with the 26 regional health agencies (ARS) overseeing capital expenditure, including the purchasing of major medical equipment. Every 5 years, the ARSs produce a regional health project (Projet régional de santé). The regional health project defines multiannual priorities for large capital investments and the objectives for the provision of expensive medical equipment based on an assessment of local population need and taking into consideration national health strategies. Authorisation for the purchase of expensive medical equipment by providers is granted for five years, according to objectives defined in the regional health projects.

Links between the budgeting process and strategic health objectives

A link between the setting of the ONDAM and strategic health objective is reflected through the Social Security Policy Evaluation Reports (REPSS) annexed to the PLFSS. The REPSSs aims to provide transparent reporting on the quality and outcomes of the social health insurance scheme, improve the clarity of public policies, and contribute to policy evaluations by measuring the performance of health policies. The REPSSs are used during debates in Parliament to provide context for discussions related to the success of public policies.

The REPSS prescribes the provision of performance information, including objectives, policy strategies, results, and performance indicators for the health system. The REPSSs also aim to judge the adequacy of the measures proposed in the PLFSS for the year in the economic, demographic, health, and social context, using quantitative indicators. REPSSs are produced each year by the social security department of the Ministry of Health.

However, the aim to compare health objectives with the resources voted in the ONDAM has so far failed. The indicators have no legal force, or great visibility, and there is question over the optimal number

of indicators with concerns there are too many. There is also a gap between budget-setting and indicators, as the indicators do not reflect directly budgetary choices and trade-offs (HCAAM, 2021[6]).

Budgeting Practices for Health in Israel

Overview of health financing arrangements

Health financing in Israel is organised predominantly around a compulsory health insurance system. People are free to choose among four competing non-profit Health Maintenance Organisations (HMOs). These HMOs must provide all insured persons with a mandated health basket as defined in law.

The Ministry of Health is responsible for managing an overall budget set for 'national health insurance' (NHI). This budget is divided amongst the four HMOs using a capitation formula that adjusts for age mix, gender, and place of residence. NHI is financed through an earmarked payroll tax and government transfers. The payroll tax is equal to 5% of income for individuals aged 22 and over. Married women, children, and certain population groups excluded from the national health insurance system (such as soldiers) are exempt from the tax. The government funds the difference between the payroll tax collected and the overall NHI budget (through general taxes), equivalent to around 50% of NHI funding in 2019.

Preparation of Israel's global budget for NHI is formally based on discussions between the Ministries of Health and Finance, who together define the yearly increase. The HMOs participate in the budget process, and though not having an official role in setting the budget, they have strong political power and influence.

Annex Box 4.A.3. Core health expenditure data

- Israel spent 7.9% of its GDP on health in 2021, lower than the OECD average of 9.7%, and equivalent to USD 3 258 per capita (adjusted for purchasing power).
- Compulsory health insurance accounts for 49% of total health spending, with government schemes a further 19%. Voluntary health insurance comprises 10% of health expenditure, with household out-of-pocket (OOP) payments accounting for the remaining 20%.

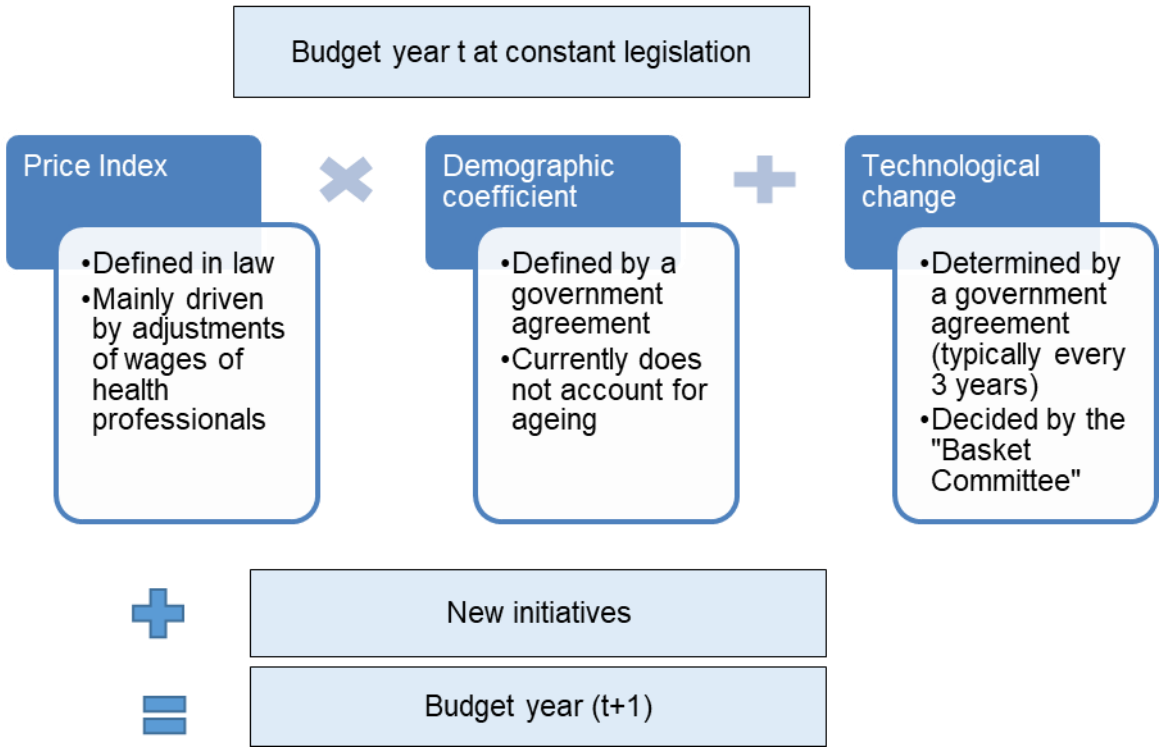
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Setting the budget for health

Three automatic drivers determine the majority of the NHI budget: a price index, a demographic coefficient, and an adjustment for new technologies. Each year the budget is adjusted according to these automatic drivers, increasing the budget by predictable amounts. Beyond these automatic increases, the government decides each year on funding for new policy initiatives – through negotiations between the Ministries of Health and Finance (Annex Figure 4.A.5).

The **price index** is defined in law and reflects the changing prices of health sector inputs. It is determined retrospectively, based on data from the Central Bureau of Statistics. A formula is used to specify the index's components, and these components respective weights. The index is primarily based on adjustments in health professionals' wages (a weight of 62%), followed by changes to the consumer price index (27%). Changes in other wages and the construction price index are also included. Health sector wages are determined at the national level. The Ministry of Finance leads wage collective bargaining negotiations with healthcare labour unions, such as the Israel Medical Association.

Annex Figure 4.A.5. Health budget automatic drivers



The price coefficients included in the index only partially reflect the true increase in the inputs required to provide the basket of services. For example, the formula does not include the cost of hospitalisations, which make up around 40% of health expenditures. This has been a source of controversy between the Ministries of Health and Finance, and the HMO's. Reviews of the price index aim to reduce the gap between the rise in the index and the actual rise in prices. But the formula is not frequently reviewed, with the last revision occurring in 2016.

The **demographic coefficient** is currently set at the population growth rate in the previous year. Unlike the price index, it is not defined in law, but reached through government agreement. Prior to 2014, the demographic coefficient rate was calculated according to a predetermined rate for three years, with rates lower than population growth. The demographic coefficient does not account for ageing. While Israel has a relatively young population, its fertility rate is falling. Israel is therefore considering adjusting the demographic coefficient to account for ageing populations.

The component for **technological change** compensates HMOs for the absorption of new medical technologies. A "Basket Committee" decides on which new technologies are included, usually every three years. This committee is appointed by the Ministry of Health, and includes representatives from the Ministry of Finance, HMOs, hospitals, doctors, and the public (Clarfield et al., 2017[8]). All proposed new technologies are considered together, integrating HTA assessments with pre-defined criteria, and subject to a budget constraint. Increases in funding due to technological additions have represented between 0.65%-1.69% of the total health budget since 2008.

Once fixed, the **overall health budget for NHI is distributed among the four HMOs**, using a capitation formula that adjusts for age mix, gender, and place of residence. Clalit, the largest HMO, received 54% of the budget in 2019, with Maccabi receiving 25%, Meuhedet 12% and Leumit 8%.

Budgetary tools used to control health expenditure growth

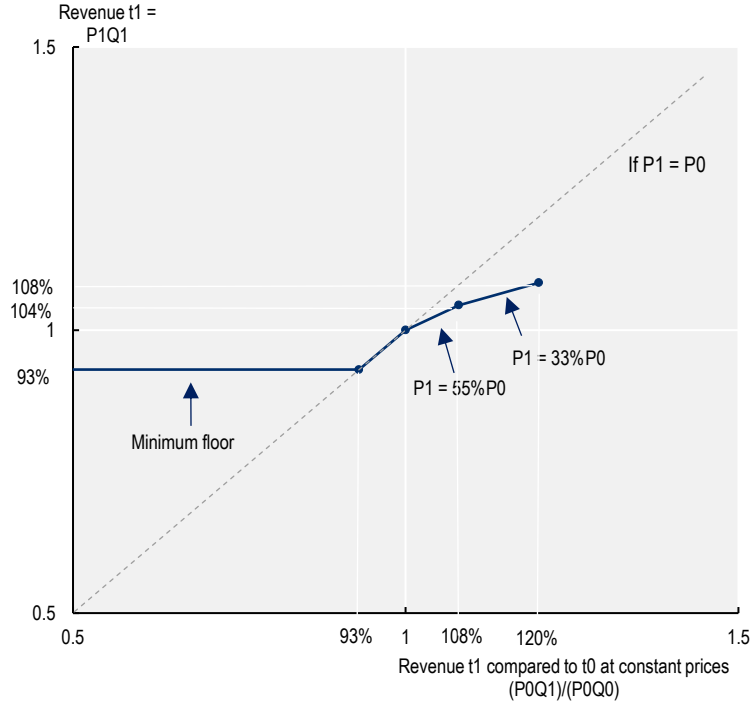
Israel has tight control of resources and expenditures in the health sector. For hospitals, the Ministries of Health and Finance have a mixed set of **policy levers designed to limit hospital expenditures with little or no marginal benefit**.

In terms of physical inputs, the **supply of hospital beds is closely regulated**, along with their geographical distribution, ownership, and speciality. The government also regulates hospital licensure and oversees the authorisation process for opening a new hospital or department. Further, a **'certification of needs'** regulates public and private hospitals purchase of costly medical equipment or devices, notably those that need highly specialised professionals (e.g. MRI scanners). Such items require approval from the Ministry of Health before they can be purchased. The Ministry of Finance can also veto approvals of such items. National ceilings are set for each of these devices in terms of units per million population, with the Ministry of Health determining how to allocate national quotas across providers and localities.

If a hospital repeatedly ends the financial year in deficit, the Ministry of Health can limit the certification of new hospital beds, medical equipment and/or devices.

Maximum price lists for public hospitals, determined by a joint Ministry of Health and Finance pricing committee, are mandated by law. In addition, a **'cap mechanism'** regulates the expenditure of public hospitals, consisting of a minimum floor (lower cap bound) and a maximum ceiling (upper cap bound) on hospital incomes (Annex Figure 4.A.6). If an HMO purchases fewer services at list prices with an aggregated cost below the floor, the HMO must still pay the floor to the hospitals. Conversely, for services purchased over the ceiling, the HMO pays less than 100% of the full price. In 2016, for example, due to discounts related to the ceiling, hospital income was 15% lower than the potential income (Waitzberg et al., 2019[9]).

Annex Figure 4.A.6. Hospital income capping mechanism



Source: Adapted from Waitzberg, R. et al. (2019[9]), "The 2010 expansion of activity-based hospital payment in Israel: an evaluation of effects at the ward level", *BMC Health Services Research*, Vol. 19/1, https://doi.org/10.1186/s12913-019-4083-4.

The predominant aims of these floors and ceilings are to contain expenditure and ensure financial viability of hospitals. Still, the Ministry of Finance and Health have utilised the incentives inherent within the cap mechanism to achieve specific policy objectives. For instance, a 2017 reform removed the cap on hospital emergency room visits. For HMOs this meant paying full price for all emergency room visits by their insured patients. Consequently, HMOs were incentivised to provide alternative modalities to provide care. They opened more community-based centres to treat patients that would have otherwise attended the more costly, and sometimes less effective, emergency room at the hospital (Waitzberg et al., 2019[9]).

Nevertheless, **budgetary deficits** for both HMOs and health providers are major concerns (Annex Box 4.A.4).

Annex Box 4.A.4. The fiscal sustainability challenge in Israel

Budgetary deficits for both HMOs are providers are a major concern in Israel. For HMOs, capitated financing from the government covers approximately 95% of HMO actual expenditure. The remaining 5% must be funded through other means. For example, it has been common practice in Israel for the government to subsidise HMO deficits. Between 2017-20, this amounted to approximately 2 billion Shekels additional spending per year, or 500 million Euros.

Due to the routine subsidising of deficits, there is a potential incentive for HMOs to plan for deficits, based on the assumption that these will be covered by the Ministry of Health. To counteract this perverse incentive, the government has the power to designate a representation to run HMOs' finances. However, in practice this has only happened once to date (in 2003).

For hospitals, there is limited accountability for managers to end the financial year in balance. Similar to the situation with HMOs, there is a tacit expectation that any deficits will be covered by the Ministry of Health. The Ministry of Health is currently exploring a new capitation mechanism to replace deficit funding, directly allocating additional resources to hospitals depending on objective measures reflecting costs (such as the number of hospital beds and location of the hospital) and performance based on national indicators.

Looking at the wider health financing context, Israeli authorities are concerned with the declining share of financing from public sources, and the risk of a growing burden of private expenditure on households. When the NHI system was introduced in 1995, public funding accounted for 70% of total health expenditure. By 2021, public sources had declined to 64% of total health expenditure on health.

Multi-annual financing planning and capital budgeting for health

There is no formal medium-term financial framework for health. However, various medium-term financial planning exercises exist. The Ministry of Finance's 3-year macroeconomic plan contains a forecast for the social budget including health. The Finance Ministry also carries out three and five-year projections of health expenditure, centred on the automatic drivers within the annual budget. Separately, the Ministry of Health has a medium-term strategic plan for the health sector, which takes a five and ten-year horizon. This plan integrates some limited financial information but makes no direct link to the medium-term financial planning exercises carried out by the Ministry of Finance.

The capital budgeting approach for the health sector in Israel is highly centralised, with the central level having tight control over the volume and nature of capital expenditure. The capital budget is allocated on a yearly basis. The government has direct decision-making power for major capital projects, such as the construction of new hospitals, whether private or public. To finance major projects, the government sets aside a share of the pooled funds available for the health sector. Israel also receives substantial international donations for various capital projects.

Links between the budgeting process and strategic health objectives

A small proportion of the NHI budget is connected to national objectives and performance results. The Ministry of Health creates specific programmes where financing depends on the performance results of each HMO. Programmes are defined by their objective, with specific criteria and conditions to be met by HMOs receiving the funds, and how these funds will be distributed across HMOs. For example, a specific objective to reduce waiting times for publicly funded surgeries has a budget line and is tied to public sector surgery volumes by HMO. Nevertheless, for most health expenditure, there is no formal link between the budget and strategic health objectives.

Budgeting Practices for Health in New Zealand

Overview of health financing arrangements

New Zealand has a national health system predominately financed through general taxation. Some financing comes from private insurance schemes and out of pocket payments by individuals accessing health services, but these sources are relatively small. Additionally, there is a no-fault social insurance scheme, providing income support and health services for people with accidental injury.

Prior to 2022, most health services in New Zealand were provided by 20 District Health Boards (DHBs), defined by their geographical area. However, a 2018 review of the health system found that over time the system had become too fragmented and complex. Moreover, in July 2022, New Zealand disestablished the DHBs and moved to a new, more centralised national health system.

Annex Box 4.A.5. Core health expenditure data

- New Zealand spent 10.1% of its GDP on health in 2021, in line with the OECD, and equivalent to USD 4 921 per capita (adjusted for purchasing power).
- Government schemes account for 70% of total health spending, compulsory health insurance schemes a further 10%. Voluntary health insurance comprises 5% of health expenditure, with household out-of-pocket (OOP) payments accounting for the remaining 13%.

Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Setting the budget for health

New Zealand is moving towards a new approach for setting the budget for health. Each budget cycle, the Ministry of Health prepares the "Vote Health", the main source of funding for the health system. Previously, the starting point for budget negotiations in New Zealand was "fixed nominal baselines", meaning there are no automatic adjustments to the health budget (Lomax, McLoughlin and Udy, 2016[10]). However, New Zealand has traditionally uplifted health funding each year to maintain current policy settings, using estimates of projected inflation, demographics, and other cost drivers. Moreover, each year, the government sets a cap on its expenditure growth by deciding on the pool of new funding available given its fiscal objectives.

Recent reforms to the health budget process are shifting away from this approach. New Zealand is making efforts to understand and estimate the cost of maintaining current policy settings in health and reflect this in the budget documents. The approach to setting the budget for health will be informed by a top-down model developed by the Treasury and the Ministry of Health and bottom-up planning information including

factors for demographics, inflation (combination of wages and the consumer price index), other health cost drivers (e.g. technology) and productivity. Moreover, the intention is to move towards a three-year funding arrangement from 2024, subject to adequate system settings to support improved planning and financial control being in place.

The budget negotiation process for health will continue to distinguish between two types of expenditure initiatives:

- **Initiatives related to cost pressures of existing programmes**.
- **New initiatives** (which often create new cost pressures for the future budgets).

The budget for the health sector, Vote Health, is allocated to 19 appropriations which form the basis of appropriations. Around 50% of the budget is allocated to deliver hospital and specialist services, and a third of the Vote is allocated to deliver primary, community, public and population health services. Other appropriations finance capital investment, the purchase of pharmaceuticals, and the Māori Health Authority to deliver Māori services.

Budgetary tools used to control health expenditure growth

Prior to the health system reform in 2022, the health sector in New Zealand was suffering from poor financial performance. Previous health system arrangements were causing issues, including variation in fiscal management and financial performance across the District Health Boards (DHBs). This was demonstrated in that 19 of the 20 DHBs in deficit as of early 2021 (while COVID-19 pandemic has worsened the financial situation of DHBs, deficits precede the pandemic).

Several reasons explained the poor fiscal situation of District Health Boards:

- **Governance** – District Health Boards (DHBs) were governed by a board of up to 11 members. Six members were appointed by the Minister of Health, and local communities elected seven board members every three years. The 2020 review of the health system concluded that semi-elected DHB boards led to blurred accountabilities. Elected members focused on local priorities and issues rather than on guidance from the Ministry of Health. Although it is argued that this conflict can encourage DHBs to tailor local responses to national policy directions, others questioned the degree to which elected leaders reflected local priorities due to low-turnout elections.
- **The size and number of DHBs** – 20 DHBs covered a population of approximately 5 million, meaning that for some, their defined populations were small, consisting of around 50 000 people. The number of DHBs also caused unnecessary duplication, with DHBs replicating functions such as procurement, IT systems and asset management.

As a result, **in 2022 New Zealand moved to a new national health system**. The previous system posed a significant affordability challenge. The new health system aims to address major structural issues and reorientate the system towards sustainable health expenditure growth. Key changes to the health system include:

- The 20 DHBs were disestablished, and their functions were merged into Te Whatu Ora (Health New Zealand), which now leads the day-to-day running of the system for the whole country.
- The Te Aka Whai Ora (Māori Health Authority) was established alongside Te Whatu Ora, and has shared responsibility for decision-making, planning and delivery.
- A new Public Health Agency within the Ministry of Health now leads population and public health policy, strategy, regulatory, intelligence, surveillance, and monitoring functions across the system.

Within the new health system, accountability measures, reporting and monitoring, and intervention powers when specific risks or issues are identified, will form the full set of arrangements to support financial control.

Multi-annual financial planning and capital budgeting

Until recent reforms, multi-annual exercises were limited in New Zealand. Under the fixed nominal baseline approach in New Zealand, multi-annual exercises were not seen as a priority. Projections reflected best estimates of future cost pressure allocations or any new investment decisions (Lomax, McLoughlin and Udy, 2016[10]). There was growing pressure in New Zealand to reform the health financing system to give greater visibility on the future allocations to help effective planning in the health sector.

New Zealand has transitioned towards a multi-annual budget for health sector. For the first time, the 2022 budget took a multi-year approach towards funding the health system. A two-year budget was provided for health in 2022, covering 2 years' worth of cost pressures and new initiatives. In addition, the budget included sufficient funding to remediate historic District Health Board deficits and gave the certainty for health entities to share resources, support new models of care, and invest for the longer term.

From the 2024 budget onward, the intention is to move to a three-year funding cycle, subject to adequate system settings to support improved planning and financial control being in place. The three-year commitment would be set as a strongly enforced upper limit on health spending, where health entities would be expected to manage all wage and other costs pressures, including setting aside an appropriate level of reserves to manage risks. Only in the case of genuinely unforeseeable shocks – such as a pandemic – would adjustments or addendums to the ceiling be permitted. The multi-year funding arrangement aims to provide certainty for long-term planning and incentivise decision-makers to manage cost-pressures.

Alongside the three-year funding commitment, Te Whatu Ora (Health New Zealand) and Te Aka Whai Ora (Māori Health Authority) must jointly develop a New Zealand Health Plan – a three-year costed plan for the delivery of publicly funded services to align funding and planning.

The arrangements for allocating capital funding for the health sector are under review as part of the current reforms.

Budgetary regulation of health expenditure and links to health objectives

Within the Vote Health, a **comprehensive performance budgeting system is in place.** Performance information is integrated into most appropriations, except for budget appropriations under NZD 5 million, or where information for the appropriation is not likely to be informative in the light of the nature of the expenditure (e.g. payment of loans for residential care facilities).

Each appropriation must define:

- The scope establishing the limits of what an appropriation can be used for i.e. its legal boundary.
- What is intended to be achieved with this Appropriation?
- How performance will be assessed and end of year Reporting Requirements. This includes the set of performance indicators specific to each appropriation. Around 200 indicators were included in the Vote Health document for 2023/24.

Budgeting Practices for Health in the United Kingdom

Overview of health financing arrangements

Since 1999, healthcare is a devolved responsibility in the four nations of the United Kingdom, however each nation has retained a National Health System (NHS). The UK Government allocates a budget for healthcare in England, and a comparable population-based total to Scotland, Wales and Northern Ireland. In England, the Department of Health, and Social Care (DHSC) has overall responsibility for the health

system, with equivalent departments existing in the devolved nations. This study focuses mainly on the health system of England, but many of the policies discussed are consistent with those in the other three nations.

The National Health System in England is primarily tax-funded, with a smaller proportion (20%) coming from national insurance, a payroll tax paid by employees and employers. The central budget authority, HM Treasury, sets spending limits for the Department of Health and Social Care (DHSC), which forms the basis of the annual budget to be approved by Parliament. The DHSC implements the health budget, operating with a substantial degree of freedom, but it must function within its financial limits.

The majority of the DHSC budget is allocated to NHS England, the body responsible for the budget, planning, delivery, and day-to-day operation of the NHS. In turn, around three-quarters of the NHS budget is allocated to the 42 Integrated Care Boards,[7] the bodies arranging the provision of health services in a geographical area.

Annex Box 4.A.6. Core health expenditure data

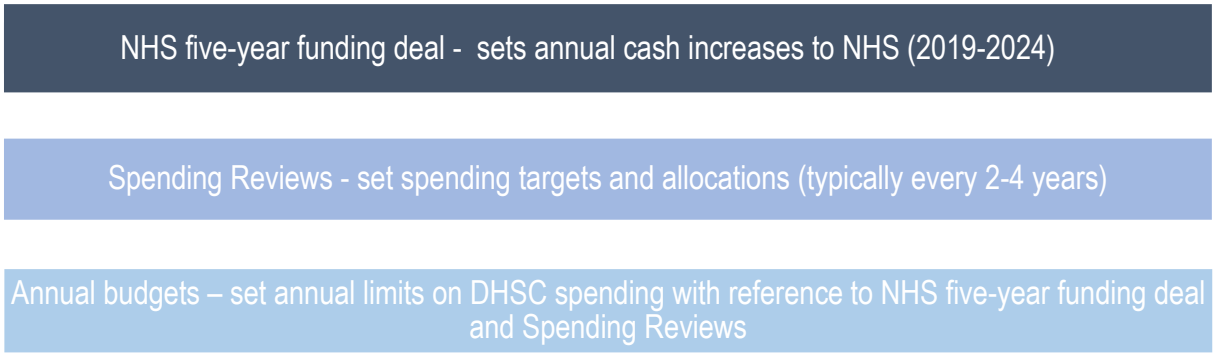
- The United Kingdom spent 12.4% of its GDP on health in 2021, higher than the OECD average of 9.7%, and equivalent to USD 5 467 per capita (adjusted for purchasing power).
- Government schemes account for 83% of total health spending. Voluntary health insurance comprises 2% of health expenditure, with household out-of-pocket (OOP) payments accounting for the remaining 13%.

Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Setting the budget for health

The specific budget mechanisms for setting the DHSC budget are not defined in law, instead **budgetary policy is influenced by various government funding agreements and cycles of spending reviews** (Annex Figure 4.A.7).

Annex Figure 4.A.7. Budgetary mechanisms in the health sector (2019-24)



Source: Adapted from the UK Central Government Public Financial Management System, ICAEW.

The new **NHS five-year funding deal** was announced in July 2018, setting multi-year allocations to the NHS protected by legislation covering the timeframe 2019-24, after which it is still to be decided if such a five-year funding deal will be repeated.

Another integral element of the budget process across the United Kingdom are **comprehensive spending reviews:**

- Spending reviews are used to determine multi-annual spending limits and to ensure the allocation of public resources is in line with government priorities. The amounts determined through spending reviews are not legal limits; operational and capital spending must still be authorised by the Treasury through the annual budget process.
- The main input into the spending review process are expenditure estimates produced by the DHSC. The DHSC estimates baseline cost pressures at constant policy. During the process, governments also announce new policy ambitions and their projected cost. The outcome of the review will balance the costs (baseline pressures, policy ambitions, and efficiency assumptions), weighed against the macroeconomic context and fiscal space. The process for holding a spending review is not set out in legislation and Parliament has no official role. There is also no agreed methodology to carry out a review.

The Treasury **allocates the DHSC budget** across the main areas of spending in England.

- The bulk of expenditure is allocated to the NHS (90% for 2022-23). Within this, the largest expenditure item is the NHS providers pay bill. The rest of the NHS budget is allocated to NHS England, who in turn allocate expenditure to Integrated Care Boards.
- Other expenditure is allocated to the DHSC for administration expenditure, to Local Authorities for public health, and Special Health Authorities, Public Health England, and Health Education England.

Budgetary tools used to control health expenditure growth

To control health expenditure throughout the budget year, limits on Department of Health and Social Care annual spending are set during the annual budget process. DHSC expenditure is broken down into different budgetary limits.

- **Annually Managed Expenditure (AME)** covers large and volatile demand led elements of expenditure, such as litigation provisions for clinical negligence cases, which the Treasury doesn't expect departments to control within budgetary limits.
- **Departmental Expenditure Limits (DEL) are strict expenditure limits**, meaning the DHSC cannot end the year in deficit. Most of the DHSC day-to-day running costs falls within the DEL category. During the financial year, if the DHSC approaches its legal limit, Treasury has two options to prevent overspending. The first is to transfers funds between budgets, i.e. from capital to resource budgets (as has happened in recent years). Alternatively, Treasury can agree on budget in-year top ups.

With most of the NHS budget allocated to Integrated Care Boards (ICBs), (the local purchasing bodies), **strategies for containing costs within the English health system often rest with the ICBs.** This includes applying a so-called efficiency factor to the National Tariff:

- National tariffs are the prices and rules to pay providers of healthcare services commissioned by ICBs and are adjusted by an efficiency factor. The efficiency factor is the government estimate of the efficiency savings providers can expect to achieve. Over time, providers are expected to treat patients at a lower cost, for example by introducing innovative healthcare pathways, technological changes, or better use of the health workforce.
- Setting an efficiency factor aims to incentivise providers to improve their use of resources and achieve cost-savings. Providers with below-average costs are incentivised to keep them below average as they will retain the marginal difference. Providers with above-average costs are incentivised to reduce them to ensure they are adequately reimbursed.

Multi-annual financial planning and capital budgeting for health

In 2018, the government announced its latest multi-year funding settlement in the form of the NHS five-year deal for England. This was unique in that the funding for the next five years was protected by legislation. Under law, the government commits to increase NHS funding up until the year 2024 (Annex Table 4.A.2). Funding under the five-year deal is allocated through the spending review process.

Annex Table 4.A.2. Five-year deal for NHS England

	NHS Cash Budget (GBP billion)	Real growth rate
2019/20	121	3.5%
2020/21	127	3.1%
2021/22	133	3.1%
2022/23	140	3.0%
2023/24	149	4.1%

Source: GOV.UK.

The Treasury defined a narrow baseline for the five-year funding deal, covering services within the scope of NHS England's mandate. This includes day-to-day operational expenditure of the NHS. Annual funding settlements remain for other areas of the health system, such as capital investment, public health, and investments in the health workforce. Local authority public health spending and social care are also excluded.

The **budgeting process in the United Kingdom separates resource and capital expenditure**. The Spending Review process provides the NHS with a multi-year capital settlement. The NHS capital allocation is split into three categories:

- A system-level allocation (system-driven) – to cover day-to-day operational investments
- Nationally allocated funds (nationally-driven) – to cover nationally strategic projects already announced and in development or construction, such as hospital upgrades and new hospitals.
- Other national capital investment – including national programmes such as elective recovery, diagnostics and national technology funding and the mental health dormitory programme.

To provide assurance on value for money, new investments must be approved at different levels of authority. DHSC approves provider capital expenditure when it is greater than GBP 15m, and Treasury must approve expenditure greater than GBP 50m (NHS, 2022[11]).

Budgetary regulation of health expenditure and links to health objectives

In England, there is no explicit link between the health budget and strategic health objectives. However, to strengthen these links, the government introduced Single Departmental Plans (SDP) for health and other sectors in 2015. More recently, the NHS Long Term Plan was developed to link the NHS five-year funding deal and the long-term strategic objectives and priorities in the health sector (Annex Figure 4.A.8).

Annex Figure 4.A.8 Links to strategic health objectives

Single Departmental Plans	• Single Departmental Plans (SDPs) are the foundation for the government's planning and performance framework. • SDPs describe each department's objectives, how they will use public resources to achieve them, and how performance can be measured. • Department's performance relative to each objective is measured through key performance indicators.
NHS Long Term Plan (2019)	• To unlock the five-year funding deal, and to establish a link between the funding and the long-term strategic objectives and priorities in the health sector, the NHS developed the NHS Long Term Plan. • Among other objectives, the Long-Term Plan outlines a vision for the NHS service model, the NHS digital strategy, and a plan to support the health workforce, • The plan serves as a non-binding commitment to improve service delivery in exchange for the long-term certainty from the funding agreement

Notes

[1] In the United Kingdom, healthcare is a devolved responsibility to England, Ireland, Scotland and Wales. Although each nation has retained the tax-funded National Health Service model.

[2] The financing of healthcare can be analysed from the point of view of financing schemes (financing arrangements through which health services are paid for and obtained by people, e.g. social health insurance), financing agents (organisations managing the financing schemes, e.g. social insurance agencies, and types of revenues of financing schemes (e.g. social insurance contributions). Here "financing" is used in the sense of financing schemes as defined in the System of Health Accounts (OECD/WHO/Eurostat, 2011[12]) and includes government schemes, compulsory health insurance as well as voluntary health insurance and private funds such as households' out-of-pocket payments, NGOs, and private corporations. Out-of-pocket payments are expenditures borne directly by patients.

[3] A total budget for health expenditure refers to a fixed amount of funds defined for health expenditure over an annual or multi-annual period (any overspending would require a special amendment/approval process). A total budget for health expenditure is sometimes referred to as a global budget for health by Ministries of Health and other health officials.

[4] The Central Budget Authority (CBA) is a public entity, or several co-ordinated entities, located at the central level of government, which is responsible for budget formulation and oversight. In many countries, the CBA is often part/division/unit found within the Ministry of Finance or Economy.

[5] COVID-19 related spending was channelled through other budget instruments.

[6] Excluding 2020 due to exceptional expenditure related to the COVID-19 pandemic.

[7] Note Integrated Care Boards replaced clinical commissioning groups (CCGs) in the NHS in England from 1 July 2022.

5 Medium-term budgeting for health: Looking beyond the annual focus of the budget

Caroline Penn, Chris James, Camila Vammalle

Medium-term budgeting for health involves taking a strategic, multi-annual approach to budgeting, looking beyond the one-year focus of the annual budget. This chapter explores how OECD countries carry out medium-term budgeting for health, including the extent to which this relates to the regular annual budget cycle. It examines how such a forward-looking approach to setting priorities and budgets can help improve allocation decisions in light of emerging needs in the health sector, and what are the essential preconditions to realise the benefits of a medium-term perspective.

Key findings

- Medium-term budgeting for health involves taking a forward-looking approach to budgeting, **usually over a three-to-five-year time horizon**. OECD countries have taken steps to build such a medium-term perspective into the budget process for health, with about 90% of surveyed country governments **estimating health spending for future years**. This provides visibility on emerging spending requirements for the health sector and the underlying cost drivers.
- Governments in OECD countries **consider a range of factors** when estimating health spending for future years, notably cost drivers – such as demographic indicators and wage growth – have the greatest influence on future health expenditure estimates. Macroeconomic factors, including indicators for economic growth and annual health spending in recent years, are also important to estimate spending over the medium-term.
- However, the link between these multi-annual budget plans and the annual budget process is often lacking. Only just under half of surveyed OECD countries (11 of 24) use medium-term budgeting for health as the basis for **future budget allocations**. For countries where multi-annual allocations are set, these generally cover expenditure on most publicly funded health services (including most curative and preventive health services).
- More commonly, medium-term budgeting for health is limited to being used only for informational purposes. That is, it is used to highlight the future costs of current policies and signal the direction of future financing but does not bind future decisions on policies.
- In general, medium-term budgeting for health is **not an isolated activity**. In three-quarters of OECD countries, medium-term budgeting for the health sector forms part of governments' broader medium-term expenditure frameworks (MTEF).
- Designing a medium-term financial plan for health is complicated by the need to balance predictability and flexibility. That is, such a medium-term plan should allow health agencies to plan based on a reasonable assumption of the financial resource envelope available, while preserving the government's flexibility to adjust to the public finance and macroeconomic climate. This challenge has been highlighted by the unexpected high inflation during 2022 and 2023.
- Successful medium-term budgeting depends on some preconditions to realise its full benefits. Notably, it requires strong baseline estimates that capture a comprehensive list of cost drivers. Further, designating clear lines of responsibility for carrying out such estimates avoids inconsistent models across different government agencies. More generally, such multi-annual planning requires buy-in from key stakeholders across ministries of finance, ministries of health and (when relevant) health insurance agencies.

5.1. Introduction and key policy findings

Traditionally, the annual budget process for health begins with the previous year's budget as a starting point, adding incremental amounts for the new budget period. This is known as incremental budgeting. While offering a pragmatic approach to public budgeting, with incremental budgeting, budget allocations become rooted to existing policies, and risk not reflecting changing health needs.

The introduction of medium-term budgeting for health involves taking a strategic forward-looking approach and addressing the short-sightedness of annual budget. This means defining priorities and allocating resources for health beyond the annual budget year, so that spending decisions are driven by emerging

health needs. The specific budgetary instrument used for multi-annual planning is generally referred to as a Medium-Term Expenditure Framework (MTEF).

Successful medium-term planning offers substantial benefits for the health sector. A multi-year perspective to allocating resources gives predictability in the resource envelope for health agencies, in turn providing incentives for effective forward planning and the confidence to change the direction of policy to improve efficiency. In addition, planning over the medium-term term improves the budget formulation process, allowing ministries of health opportunities to allocate and reprioritise funds to better meet medium-term priorities.

Analysis in this chapter draws on results of the OECD survey 'Macro-level management of health expenditure, with a special focus on multi-annual financial planning for health', conducted by the OECD Joint Network of Senior Budget and Health Officials during 2021. Twenty-four countries responded to the survey, comprising 11 countries where the majority of health spending is through government schemes at the central or subnational level (Australia, Finland, Greece, Iceland, Italy, Latvia, Mexico, New Zealand, Norway, Sweden and the United Kingdom), and 13 countries where compulsory health insurance scheme(s) make up the majority of health spending (Austria, Belgium, Colombia, Costa Rica, Chile, Czechia, Estonia, France, Israel, Japan, Korea, Luxembourg and the Netherlands.

This analysis in the chapter identifies two broad preconditions for successful implementation of a medium-term budget framework for health based on experiences among OECD member countries. These findings contribute to the *OECD Applying Good Budgeting Practices to Health (2023)*.

First, effective medium-term budgeting for the health sector depends on **reliable medium-term estimates of the baseline expenditure for health**:

- Medium-term health expenditure baselines should be revised at least on an annual basis to incorporate the latest available data on actual health expenditures, and the budgetary impact of recent health policies and cover the next 3-5-year period.
- Medium-term estimates require an understanding of the core cost drivers of health expenditure, and their impact on baselines.
- Assumptions and methodologies used to forecast health should be transparent and stable. These assumptions (such as for GDP growth, wage growth, and demographic factors) should be consistent with those used in other areas of central government and line ministries.
- Medium-term baseline estimates should include most health expenditure funded through public budgets for health (including health insurance, and by sub-national governments – depending on a country's institutional arrangements).
- Responsibility for making medium-term estimates of health expenditure baselines should be clearly established, to avoid competing models across ministries of health and finance.

Secondly, effective medium-term planning for health relies on well-formulated **resource allocations to the health sector** over a multi-year period:

- Allocations should be set for a reasonable number of out-years (3-5 years).
- Medium-term allocations should be set at a credible level that prevents the need for annual adjustments.
- Allocations beyond the budget year could be provided at a higher level of aggregation than the annual budget, to allow flexibility in allocating funds to the top priorities.

5.2. Strengthening the medium-term financing perspective for health

5.2.1. Estimating health expenditure beyond the current year

Estimating health expenditure beyond the current year can be decomposed in two elements: first, estimating the cost of existing policies (projecting baselines), and second, taking into account new policies.

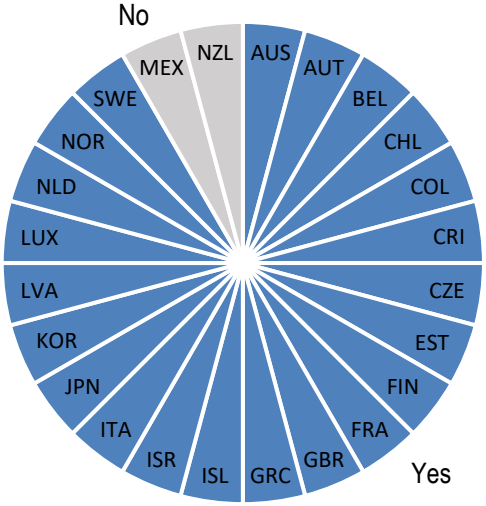
Even without implementing new policies, the cost of delivering the same goods and services changes from one year to the next (for example due to evolutions of staff in salary grid, or changes in the demand for services). This is captured in the estimations of health budget baselines (i.e. future health expenditure under the assumption of unchanged policy).

Moving towards a forward-looking perspective for the health system thus requires:

- **Estimating health budget baselines beyond year *t*.** This provides visibility on emerging spending requirements for the health sector and the underlying cost drivers.
- **Developing a medium-term plan for health, identifying medium-term objectives for the health sector, required policies to achieve these, and costing these policies**. New policies can include providing a new type of health service (e.g. adding telehealth services to the list of reimbursements) or a significant change to existing policies (e.g. expanding publicly funded dental services to adults over 65).

Most OECD countries estimate the health budget for the following three to five years. Except for Mexico and New Zealand, all surveyed OECD countries make official medium-term estimates of health spending (Figure 5.1). These are done by public bodies, or by independent bodies on request of government. Prior to 2022, New Zealand had no formal mechanism for projecting the health budget beyond the annual year. However, the intention in New Zealand is to move towards a three-year funding arrangement from 2024, subject to adequate system settings to support improved planning and financial control being in place.

Figure 5.1. Do public bodies in OECD countries make official estimations of health expenditure for future years?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Medium-term public health spending estimates always include spending by government schemes or compulsory health insurance. A third of countries also disaggregate health expenditure by type of service. Health expenditure by age group, and private health expenditure are rarely included in estimations. Future health expenditure estimates are revised on an annual basis to coincide with the budget cycle.

5.2.2. Capturing the main factors influencing health expenditure in future years

Governments in OECD countries consider a range of factors when estimating health spending for future years. These include cost drivers, public finance and macroeconomic factors, and health policy indicators.

Cost drivers – cost changes due to movements in prices and or quantities – have a strong influence on official estimates of medium-term health expenditures across OECD countries (Figure 5.2).

- Demographic indicators have the greatest influence on estimates of the future health budget. For example, medium-term projections of social health insurance spending in the Netherlands consider the size and composition of the population (Box 5.2).
- Salaries of health professionals, which represent the large share of health expenditure, also have considerable influence on estimates of the future health budget.
- Drug and pharmaceuticals costs – that are susceptible to frequent price changes and are often uncertain due to expensive new entrants – also influence estimates, but to a lesser extent.
- Other costs also influence health expenditure. For example, recent increases in energy prices affected the cost of providing healthcare.
- During the pandemic, several countries introduced indicators specific to COVID-19 to estimate the budget for future years. Uncertainty around the evolution of pandemic created challenges in forecasting future expenditure needs. In many OECD countries, expenditure related to COVID-19 measures were often contained within dedicated budget programmes, codes, or funds, separate from the general budget for health (OECD, 2021[1]).

Public finance and macroeconomic factors: beyond key cost drivers**,** estimates of future health spending incorporate the broader criteria used when setting the budget for health.

- OECD countries usually include the growth rate of health spending in recent years, and a desired future rate of health spending balanced against the government's policy objectives for the health sector.
- Estimating the health budget also calls for assumptions on the state of public finance and the macroeconomic outlook. This includes parameters such GDP growth and the government's fiscal position, indicating how much public health expenditures can feasibly grow in practice, given the overall macro-fiscal outlook. These parameters are often estimated by the ministry of finance and communicated across all line ministries to ensure consistency in the underpinnings of the baseline. Indicators annual health spending in recent years are important to estimate spending over the medium-term, along with financial sustainability considerations, and the overall fiscal position, while less frequently used is the share of health spending in total government spending.
- Efficiency dividends. Some countries apply a charge to the baseline when setting the target for health expenditure future spending to provide incentives to increase public sector productivity. This is referred to as an efficiency dividend (Box 5.1).

Health policy indicators, such as policies to extend coverage and improve accessibility, or initiatives to improve quality of care, are also considered by governments when producing medium-term health expenditure estimates.

Box 5.1. Applying an efficiency dividend

When developing the health budget, some countries apply a charge against the baseline forecast, known as an efficiency dividend. This aims to encourage agencies to find efficiency gains by automatically reducing baseline budgets in coming years. Putting line ministry in charge of identifying efficiencies should improves ownership and increase likelihood of implementation.

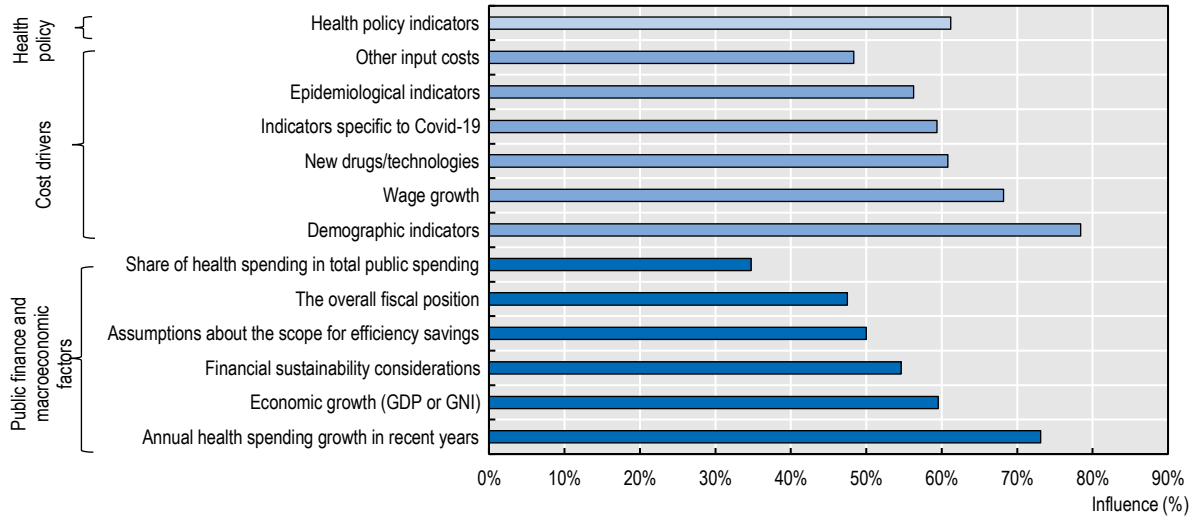
The rationale for introducing an efficiency dividend is to:

- Give public agencies an incentive to find efficiencies within their baseline before taking requesting additional budget;
- Redirect these efficiency gains to higher priority activities;
- Demonstrate a commitment to find efficiency gains in the public sector resulting from improved practices.

Australia, Sweden, the United Kingdom and have introduced an efficiency divided on central government spending, including health. While in New Zealand, there is an expectation of an efficiency dividend in some years. The Australian Government applies a dividend to the operating expenses of government agencies including those responsible for health. The scale of efficiencies agencies must find has varied over time from between 1% and 4% of their operating budgets, with the 2022 budget including a dividend of 1%. In the United Kingdom, the government announces the efficiency dividend during the Spending Review process (which in the United Kingdom is the start of the budget process). The 2021 Spending Review announced that departments must identify at least 5% efficiencies from their day-to-day budgets for reinvestments over a three-year period.

Source: Van Eden, H., D. Gentry and S. Gupta (2017[2]), *Chapter 4. A Medium-Term Expenditure Framework for More Effective Fiscal Policy*, https://doi.org/10.5089/9781513539942.071.

Figure 5.2. Types of indicators used to estimate the health budget for future years – assessment of influence on the budget (across surveyed OECD countries)



Note: Influence is a weighted sum of scores (has a very strong influence=4, has a strong influence=3, has some influence=2, has little influence=1, has very limited to no influence=0), as a proportion of the potential maximum score.
Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 5.2. Medium-term health expenditure projections in the Netherlands

The Bureau for Economic Policy Analysis carries out medium-term projections of health expenditure in the Netherlands for a three-year period. This includes expenditure under the three schemes that provide universal health coverage in the Netherlands (the Health Insurance Act (Zvw), the Long-Term Care Act (Wlz), and the Social Support Act (Wmo)) as well as publicly funded youth care expenditure.

The projection model estimates health expenditure under the assumption of unchanged policy. For each scheme, the model increases health expenditure recorded in the previous year by a growth rate and then adjusts for existing policies that have a cost-implication in future periods.

The growth rate consists of five components:

1. General inflation
2. The relative increase in health sector wages and other prices of health inputs
3. Demographics (size and composition of the population)
4. Income growth (per capita)
5. Other growth (e.g. new technology, new pharmaceuticals)

Source: Bureau for Economic Policy Analysis (CPB) (2019[3]), Middellangetermijnverkenning zorg 2022-2025, https://www.cpb.nl/sites/default/files/omnidownload/CPB-Middellangetermijnverkenning-zorg-2022-2025-nov2019.pdf.

5.2.3. The importance of co-operation among different public institutions

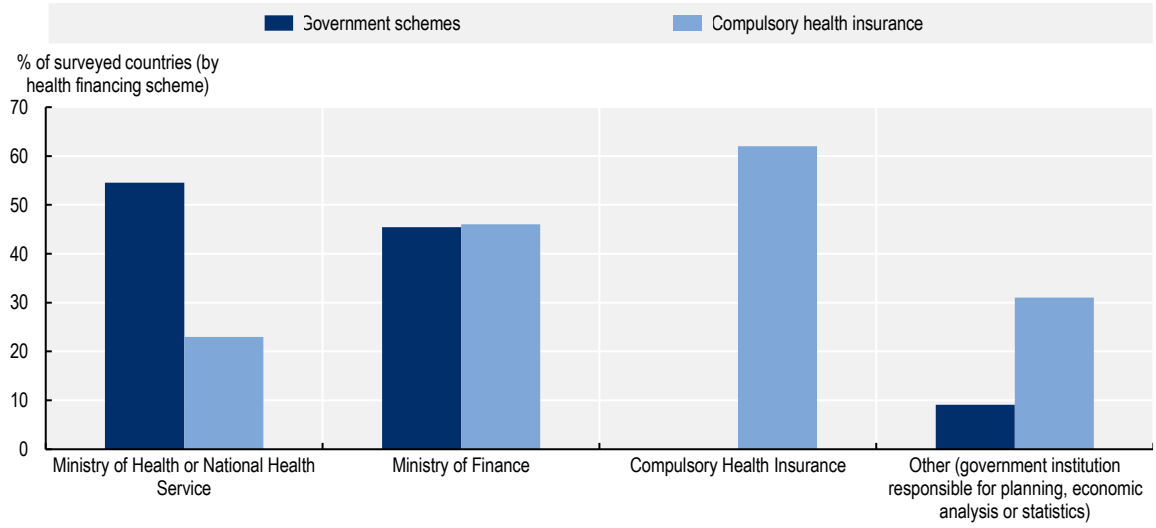
The ministry of health has strong ownership over forward estimates of the health budget. Ministries of Health have full insight to identify the cost drivers of budget items or programmes. At the same time, Finance ministries have strong buy-in to ensure consistency and accuracy in the preparation of estimates across different areas of government. Ministries of finance may also provide a common set of parameters such as macroeconomic forecasts and population projections.

Across OECD countries, the institutions responsible for preparing medium-term estimates of health expenditure depend in part on the health financing arrangements of a country (Figure 5.3). Among countries where health financing is organised predominantly around government schemes, the ministry of health or the national health service is responsible for preparing medium-term health expenditure estimates in just over half (55%) of the countries.

In contrast, among countries organised predominantly around compulsory health insurance, the ministry of health is less likely to have such responsibility (in 23%, or 3 of 12 countries). Rather, agencies implementing the compulsory health insurance scheme (e.g. social health insurance agency) are more likely to have this responsibility (in 62%, or 8 of 13 countries).

In both types of health financing arrangements, the ministry of finance is responsible for medium-term health expenditure estimates in just under half of the surveyed countries. Other institutions responsible for estimates include national government agencies in charge of government planning, those carrying out national economic analyses, and those producing national statistics. For example, this includes the Bureau for Economic Policy Analysis (CPB) in the Netherlands, and the National Statistics Office in Italy. Finally, in just under half of surveyed countries, the responsibility for producing medium-term estimates is shared across multiple institutions.

Figure 5.3. Institutions responsible for medium-term estimations of health expenditures



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

5.2.4. From medium-term to longer-term projections

A forward-looking perspective for health should incorporate longer-term projections of health budget (i.e. over 10 years) (see Chapter 2 on long-term projections). Given the current share of health spending within public budgets and rising cost pressures, longer-term projections of health expenditure provide a picture on the sustainability of healthcare costs in the absence of reform. This provides valuable support to policy makers to modify the long-term trajectory of health spending growth.

The choice of forecasting model changes with the time horizon of projections. Longer-term projections of health expenditure often require a different type of projection model than medium term projections, as they need to acknowledge the many uncertainties and assumptions such as the impact of changes in government policy. Box 5.3 outlines common forecasting models for health spending.

Box 5.3. Forecasting models for health expenditure

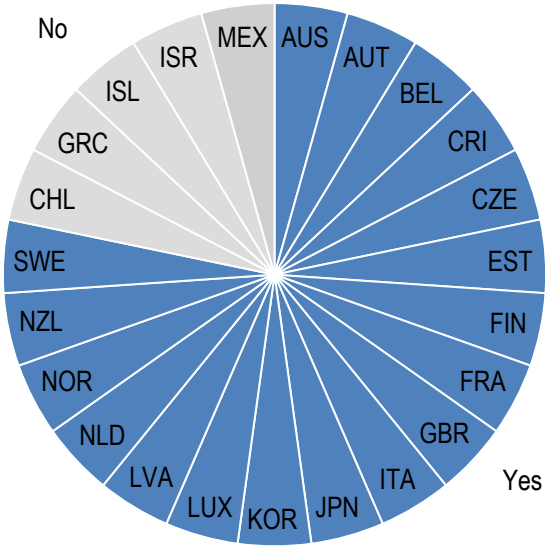
The OECD has identified three main classes of forecasting models for health spending:

- **Micro simulation models** simulate entire populations and offer flexibility to test a range of "what if" policy scenarios related to prevention, treatment and the organisation and financing of care; and to examine forecasted results by different characteristics included in the model, such as by diseases, age-groups, providers, or treatments.
- **Component-based models** forecast health expenditure by component, such as by financing agents or providers of care, or by age group. Component-based models are typically more demanding in terms of data requirements as they use several drivers to project health spending.
- **Macro-level simulation models** focus on forecasting total health and include analysis of time-series and cross-sections of aggregate indicators. Macro-level models are typically the least demanding projections models in terms of data requirements, as very often include just a few explanatory variables.

Source: Astolfi, R., L. Lorenzoni and J. Oderkirk (2012[4]), "A Comparative Analysis of Health Forecasting Methods", https://doi.org/10.1787/5k912j389bf0-en.

Most surveyed countries project health expenditure over the longer term (Figure 5.4). In nearly all these countries, longer-term projections for health expenditure use a different methodology than medium-term projections. For example, Australia uses a component-based model for medium-term projections, and a macro-level model for long-term projections (Box 5.4).

Figure 5.4. Are separate longer-term projections made for health expenditure?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 5.4. Long-term projections of health expenditure in Australia

Every 5 years, Australia produces The Intergenerational Report, projecting government expenditure for the next 40 years. The Treasury is responsible for longer-term projections, using the following methodologies:

- For forward estimates from t+4 to t+11, health expenditure is projected based on an individual component model for public hospitals, pharmaceutical benefits, medical benefits, and private health insurance rebates
- For estimates from t+12 to t+40, a macro-level model is used to project total central government health spending. The model is based on an alignment of spending to demographic factors, supplemented by assumptions around growth in unit cost such as technological change.

The use of component models for the short term and a macro-level model for long term projections seeks to balance the desire for more detailed projections against the uncertainty as to whether recent trends in individual components of government health spending will be representative of longer-term trends.

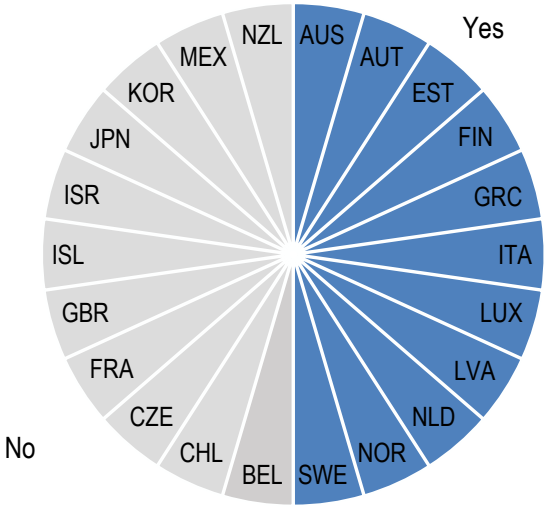
Source: Commonwealth of Australia (2021[5]), *2021 Intergenerational Report*, https://treasury.gov.au/sites/default/files/2021-06/p2021_182464.pdf.

5.3. Improving the link between multi-annual budget plans and the budget process

5.3.1. Integrating health spending projections into annual budget documents

The results of medium-term budgeting for health should feed into the annual budget process. As a starting point, health spending projections can be integrated into government budget documents. This informs Parliament and other stakeholders of the emerging spending requirements for the health sector. Only half of surveyed OECD countries include such estimates of the health budget for future years within government budget documents (Figure 5.5). For countries with a compulsory health insurance scheme – such as France and Belgium – projections are integrated into separate budget documents for social health insurance institutions.

Figure 5.5. Are medium-term health spending estimates included within budget documents?



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

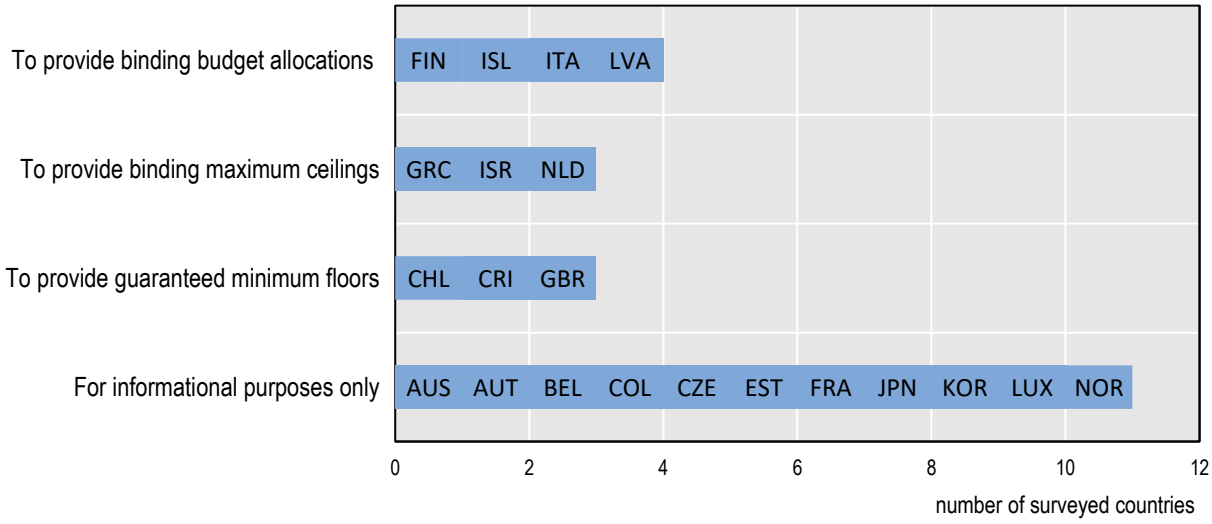
Medium-term spending projections for the health sector are translated into multiyear budget allocations through the annual budget process. Medium-term expenditure frameworks (see following section) are the main instrument for setting medium-term budget allocations to the health sector.[1] Future budgets may be set as an approved hard expenditure target with the only adjustments allowed for exceptional circumstances. A less developed approach may include soft or indicative budget ceilings. While these provide valuable information on expected future budgetary decisions, the credibility of such financial planning is lower, and serves more as an outlook rather than a framework.

Medium-term expenditure allocations to health can be defined in either nominal or real terms. Forward allocations expressed in nominal terms are simpler to interpret and monitor and ensures tight financial discipline. However, price and wage shocks are not absorbed within nominal frameworks, which can come at the disadvantage of the health sector if real budgets shrink to accommodate inflationary pressures. On the other hand, expenditure allocations set in real terms are adaptable to changes in wages and prices but are less transparent in nature and deliver less predictably as projections are routinely updated (Van Eden, Gentry and Gupta, 2017[2]).

Medium-term budgeting for health provides binding future budget allocations in just under half of surveyed OECD countries (Figure 5.6). In four surveyed countries (Finland, Iceland, Italy and Latvia), medium-term budgeting for health is used as the basis for binding budget allocations. Further, binding spending ceilings for health beyond the current fiscal year are set in Greece, Israel and the Netherlands; with guaranteed minimum spending floors set in Chile, Costa Rica and England (United Kingdom).

For the remaining countries, medium-term budgeting for health is limited to being used only for informational purposes in just over half (11 of 20) of those surveyed countries that produce medium-term expenditure estimates (Figure 5.6). Here, medium-term expenditure projections are intended to highlight the future costs of current policies and signal the direction of future financing, but do not bind future decisions on policies. For example, France, sets the target for health expenditure (objectif national de dépenses d'assurance maladie) for three years, but these are not enshrined in budget law, and cannot constrain either the government or parliament in the annual procedure for preparing and adopting the budget.

Figure 5.6. The purpose of medium-term financial planning for health



Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health. No information available for Sweden.

Multi-year binding budget allocations generally cover most publicly funded health services. Table 5.1 provides information on the medium-term budget allocations for health in place across selected OECD countries. In Italy and England (United Kingdom), expenditure ceilings are set for the National Health System budget; in Greece, Latvia and Finland, expenditure ceilings are set at the ministry level, for the ministry responsible for health.

Time horizon of medium-term budget allocations varies across OECD countries, ranging from three to five years. Budget allocations are set for a three-year horizon in Italy and Latvia. In Italy, the Pact for Health is produced typically every three years, determining a set level of funding and related objectives for the National Health Service for the duration of the Pact. Budget allocations are set on a longer time horizon in Finland and England (United Kingdom). In Finland, binding ceilings for expenditure are set for the whole parliamentary term of four years, with the annual budget updated to reflect changes in the level of prices and costs. In 2018, England (United Kingdom) established a five-year funding deal for the National Health Service for the period 2019-2024. However, it is still to be decided if such a five-year funding deal will be repeated after 2024.

Table 5.1. Medium-term budget allocations for the health sector in selected OECD countries

Country	Expenditure area	Time frame	Note
Medium-term budgeting provides binding allocations			
Finland	The Ministry of Health and Social Affairs	Four years	Binding limits on expenditure are set in real terms for the whole Parliamentary term. The Ministry of Health and Social Affairs makes a budget proposal decided in the multi-sectoral ministerial workgroup, chaired by the Ministry of Finance.
Iceland	Health sector (National Health Service)	Five years	The Minister of Finance presents a medium-term expenditure framework to parliament each year. This sets an expenditure ceiling for the health sector including ceilings for hospital services, primary care, nursing and rehabilitation, pharmaceuticals and medical products, and public health.
Italy	National Health Service	Typically three years	The Pact for Health (*Patto Per La Salute*) agreed between central and regional governments sets the level of funding for the National Health Service
Latvia	Ministry of Health (National Health Service)	Three years	The Ministry of Health participates in calculation and review of baseline expenditures, prepares proposals for priority measures, and submits budget request. Based on these, the Ministry of Finance prepares medium-term allocations.
Medium-term budgeting provides binding maximum spending ceilings for health beyond the current fiscal year			
Greece	Ministry of Health	Four years (binding for two years)	Medium-term expenditure ceilings are set for the Ministry of Health for four years and are binding for the first two years.
The Netherlands	Compulsory health insurance	Four years	Bureau for Economic Policy Analysis (CPB) expenditure estimates provide input for fixed maximum caps for expenditure for the expenditure area 'healthcare'. Expenditure ceilings are expressed in real terms and updated each year according to inflation.
Medium-term budgeting provides guaranteed minimum spending floors for health beyond the current fiscal year			
England (United Kingdom)	National Health Service (NHS)	Five years	In 2018, the government announced a five-year funding deal for the English NHS, setting multi-year allocations to the NHS protected by legislation. The funding agreement covers the timeframe 2019-2024.

Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

5.3.2. Medium-term budgeting for health as part of a broader medium-term expenditure framework

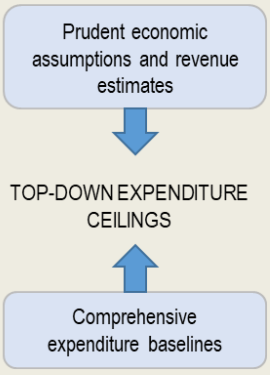
In general, medium-term budgeting for health is not an isolated activity. Medium-term allocations to the health sector often form part of governments' broader medium-term budgeting through instruments such as medium-term expenditure frameworks (MTEF) (Box 5.5). These feed into the budget formulation process.

Box 5.5. Medium Term Expenditure Frameworks

Medium term expenditure frameworks (MTEFs) are a tool for linking the budgetary process to broad fiscal policy goals beyond the annual budgetary cycle. Most OECD countries have MTEFs in place although their coverage and design vary significantly. At their core, MTEFs consist of four elements:

- **Clear fiscal objectives** are typically set in fiscal rules, which provide ceilings for public debt, deficit of expenditure growth.
- **Credible estimations of resource availability** for the medium term, consisting of economic projections and revenue forecasts, need to be prepared. This is based on the government's current tax policy and any agreed changes over the period.
- **Updated expenditures baselines** provide an estimate of all government expenditure over the medium term. This comprises existing policies and any agreed changes over the period.
- **Expenditure ceilings** set the total amount of expenditures over the medium term. In the purest form, there would be one ceiling for each ministry and the responsible minister given flexibility to reallocate within the ceiling. In practice, the ceilings are generally more detailed. They may be divided by the type of expenditure – personnel, other operating expenditure, transfer payments and capital expenditures are common categories. There may be ceilings for specific programmes or areas of expenditures – "ring-fencing." There may be flexible ceilings for certain categories of expenditures – including unemployment benefits and other cyclical expenditures. The degree of detail in the ceilings tends to be more specific in the near years than the out years.

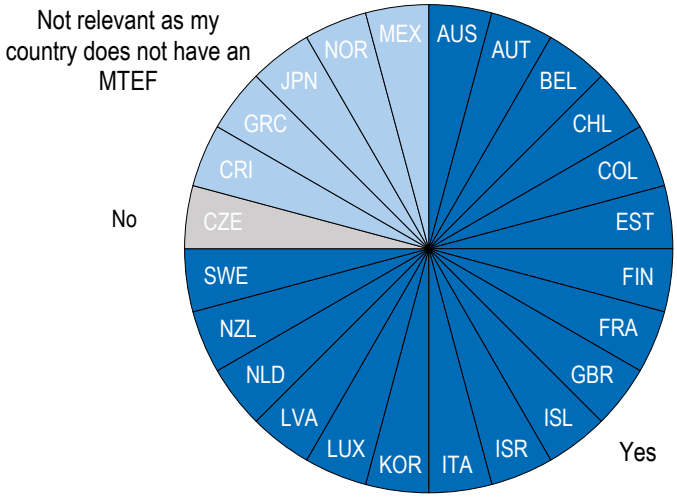
Figure 5.7. Medium-term expenditure framework



Source: OECD (2022[6]), Medium term expenditure frameworks, https://www.oecd.org/gov/budgeting/medium-term-expenditure-frameworks/.

Across the OECD, over three-quarters of surveyed OECD countries integrate health expenditures within their central government's medium-term expenditure framework (MTEF) (Figure 5.8). This includes both countries heath systems funded through government schemes and compulsory health insurance schemes. For example, the MTEF in Latvia includes the budget of the Ministry of Health – the main source of finance for the national health system – among other sector such as education, defence, and welfare (Box 5.6).

Figure 5.8. Is health included in your government's medium-term expenditure framework (MTEF)?

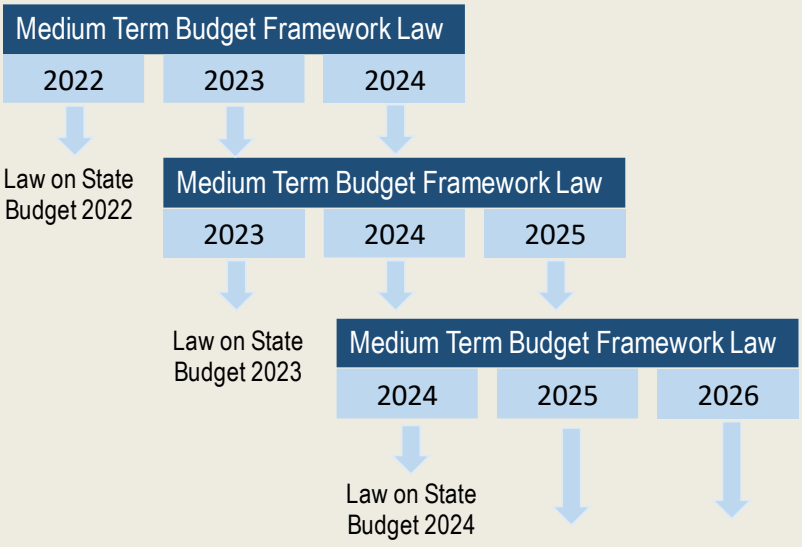


Source: OECD (2021), Survey on macro-level management of health expenditure, with a special focus on multi-annual financial planning for health.

Box 5.6. Medium Term Budget Planning in Latvia

In 2012, Latvia introduced the Medium-Term Budget Framework Law. This covers the state budget, including expenditure on education, social protection, and defence. Under the framework, a three-year budget is prepared every year on a rolling basis. Year t+1 of the medium-term budget serves as a basis for the preparation of annual budget of that year (Figure 5.9). The medium-term budget is also linked to development planning documents in Latvia, to ensure the allocation of available financial resources is in accordance with government policy priorities for the medium term.

Figure 5.9. Medium Term Budget Planning System



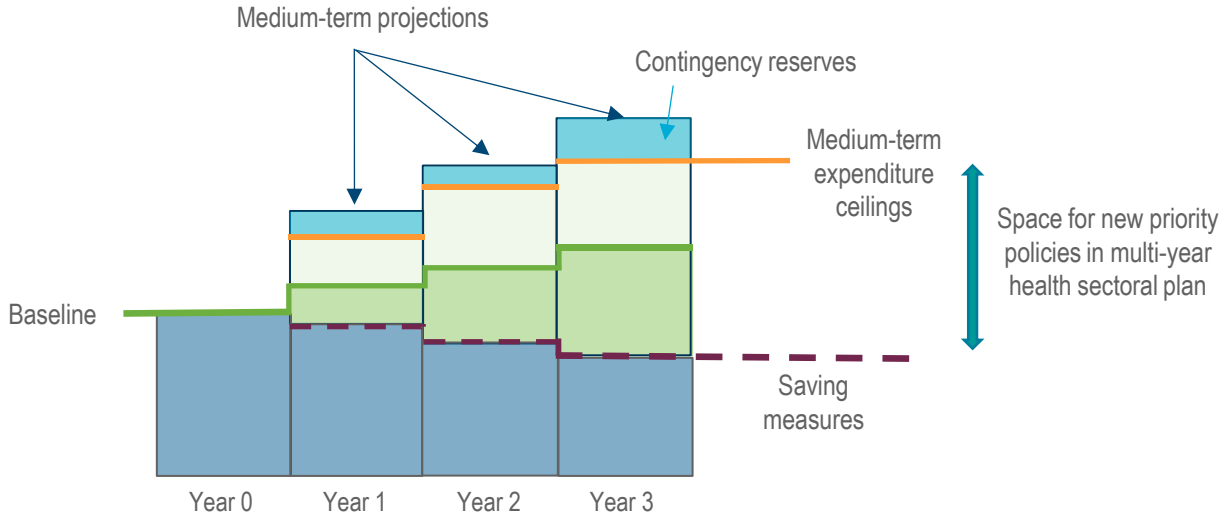
Source: Ministry of Finance, Latvia.

5.4. The benefits and challenges of medium-term budgeting

Successful medium-term planning for health can offer substantial benefits for the health sector. Preparing an annual budget by taking the previous year's budget and adding incremental amounts for the new budget period discourages policy debate and creates rigidities in the budget. A forward-looking approach to setting priorities and budgeting means spending decisions are determined in light of emerging needs, as medium-term budgeting implies that the ministry of health or equivalent has developed a medium-term plan based on an assessment of priorities. (Figure 5.10). For example, the NHS Long Term plan in the United Kingdom defines the future direction for the health sector given the multi-annual funding settlement for the National Health Service (Box 5.7).

Extending the time horizon of policy analysis means saving measures are more easily identifiable. Extending the budget horizon provides an opportunity for health agencies to examine the composition of baseline spending and the allocation of resources across different programmes or services. This allows for greater opportunities to reallocate resources to better meet medium-term priorities.

Figure 5.10. Translating health sector priorities into budget allocations



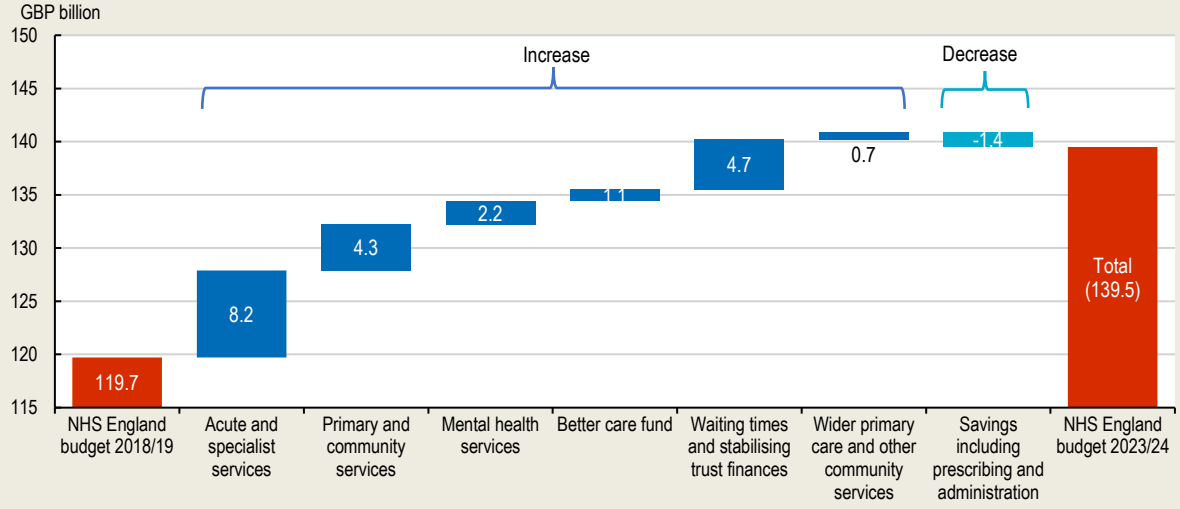
Box 5.7. Medium-term budgeting: United Kingdom

In 2018, the United Kingdom announced a multi-year funding settlement for NHS England. Under law, the government committed to increasing NHS funding for a 5-year period until 2024.

Accompanying the multi-year settlement, the NHS Long Term plan sets out the medium to long term strategic objectives and priorities for the health sector. This includes a vision for the NHS service model, such as moving towards a greater focus on out-of-hospital care and redesigning and reducing pressure on emergency hospital services.

Funding is allocated through the Spending Review process. Planned and assumed allocations are shown in Figure 5.11, based on commitments outlined in the NHS Long-Term plan and NHS accounts. Primary care, community services, and mental health are set to grow as a share of overall NHS spending, with a third of the funding growth ring-fenced for these services. The Better Care Fund initiative requires local health providers to work together by pooling budgets to deliver more integrated care. The plan also requires the NHS to deliver savings from administrative costs of more than GBP 700 million by 2023/24.

Figure 5.11. Planned and assumed allocation of the NHS England funding growth 2018/19 to 2023/24



Note: This is based on assumption over future allocations, actual spending may differ.
Source: Adapted from The Health Foundation (2020[7]), *Spending Review 2020: Managing uncertainty*.

Medium-term budgeting improves predictability and certainty for the health sector. Health budget managers feel annual budgets do not provide enough planning certainty. Moving towards a multi-year perspective signals the direction of health policy and gives more predictability in the resource envelope. This in turn provides incentives for effective forward planning and the confidence to change the direction of policy to improve efficiency.

Medium-term budgeting highlights the value of spending in the short term to avoid facing costs in the future. Planning over the medium term demonstrates that tackling long-standing issues now can produce cost-savings down the line. This raises important questions about health system capacity and provides a framework within which multi-annual policy proposals can be assessed. This can help to highlight and lock

in the impact of various savings measures that accrue over time, such as upgrading or modernising capital infrastructure, or investing in the health workforce or prevention.

Medium-term budgeting can also show the future increases in health expenditure due to present policies. In particular, some investment projects (such as building a new hospital) have a long-term impact on operational expenditure.

However, finance ministries warn about the possible trade-off with flexibility. Committing to credible medium-term budget allocations gives health officials greater budgetary predictability. For finance ministries, committing reduces the flexibility to set allocations to the health sector as the fiscal environment changes, creating a sustainability risk. The challenge is to design the medium-term framework that allows health agencies to plan based on a reasonable assumption of availability of financial resources, while preserving the government's flexibility to adjust to policy changes.

There is also a risk that the medium-term budget allocation is seen by ministries of health as a minimum spending floor for starting the budget negotiation in coming years, rather than a fixed ceiling constraining expenditure growth.

Implementing a medium-term budgeting framework for health is arguably more complex than for other expenditure areas. Medium-term budgeting inherently loses value as soon as it cannot be upheld. Strong baseline estimates capturing an inclusive list of all the cost-drivers of health expenditure are difficult to produce, due to inherent uncertainties of certain health expenditures. Multi-annual reforms also require broad support and participation from stakeholders. In the health sector, where there is often many stakeholders, pushing through reform can be challenging.

5.5. Conclusions

OECD countries have taken steps to build a medium-term perspective into the budget process for health, with most OECD countries estimating the public budget for health for future years to provide visibility on emerging spending requirements for the health sector and the underlying cost drivers. However, the link between this multi-annual budgeting and the annual budget process is often weak, with less than half of surveyed OECD countries using medium-term budget plans for health as the basis for future budget allocations. More commonly, medium-term budgeting for health is limited to being used only for informational purposes. That it, it is used to highlight the future costs of current policies and signal the direction of future financing but does not bind future decisions on spending levels or policies. This reduces the potential benefits of implementing a medium-term budget for health. Well-functioning medium-term budget frameworks for health should be based on reliable baseline forecasts and integrate flexibility instruments to ensure a balance between increasing certainty whilst maintaining flexibility.

References

Astolfi, R., L. Lorenzoni and J. Oderkirk (2012), "A Comparative Analysis of Health Forecasting Methods", *OECD Health Working Papers*, No. 59, OECD Publishing, Paris, https://doi.org/10.1787/5k912j389bf0-en. [4]

Bureau for Economic Policy Analysis (CPB) (2019), *Middellangetermijnverkenning zorg 2022-2025*, https://www.cpb.nl/sites/default/files/omnidownload/CPB-Middellangetermijnverkenning-zorg-2022-2025-nov2019.pdf. [3]

Commonwealth of Australia (2021), *2021 Intergenerational Report*, https://treasury.gov.au/sites/default/files/2021-06/p2021_182464.pdf. [5]

OECD (2022), *Medium term expenditure frameworks*. [6]

OECD (2021), "Adaptive Health Financing: Budgetary and Health System Responses to Combat COVID-19", *OECD Journal on Budgeting*, https://doi.org/10.1787/69b897fb-en. [1]

The Health Foundation (2020), *Spending Review 2020: Managing uncertainty*. [7]

Van Eden, H., D. Gentry and S. Gupta (2017), *Chapter 4. A Medium-Term Expenditure Framework for More Effective Fiscal Policy*, International Monetary Fund, https://doi.org/10.5089/9781513539942.071. [2]

Notes

[1] Note in most countries, while appropriations law only covers a single budget year, governments prepare an annual budget for each year covered by the MTEF.

6 Programme and performance budgeting for health: Linking budgets to results

Chris James, Caroline Penn, Ivor Beazley, Camila Vammalle, Andrew Blazey

Strengthening budgetary governance is fundamental to relieve pressure on public budgets for health. An important focus has been on budget classification, defined as the criteria used to formulate, present, and report on the budget. Programme budgeting – a type of budget classification grouping expenditures with related objectives – is increasingly common across OECD countries and within the health sector. The move towards programme budgeting reflects increased government interest in making health budgets more performance oriented, focusing on the outcomes of public expenditure rather than the inputs. This chapter examines OECD country experiences in programme and performance budgeting for health, highlighting key lessons learned. In the Annex 6.B, accompanying case studies of Chile, Latvia and New Zealand further detail programme and performance budgeting practices in the health sector.

Key messages

- In recent decades, there has been a trend in OECD countries towards classifying budgets for health around programmes. This type of budget classification groups expenditures with related policy objectives and outcome targets.
- **Programme budgeting improves upon traditional forms of budgeting** by aligning health sector objectives and financial resources. Furthermore, by shifting the focus away from inputs (e.g. salaries, medicines, and other supplies) towards the outcomes of health spending, this offers greater flexibility for ministries of health (and other actors with responsibility for health budgets such as social health insurance agencies) in the use of public resources, while improving transparency and accountability of the results.
- **The COVID-19 pandemic brought to light the importance of budget structure.** At the outset, several countries with programme budgeting used the inherent flexibility of frameworks to allocate or redirect expenditures to COVID-19 response measures.
- The impact of programme budgeting on improving the alignment of public spending with health sector priorities depends on the **scope of health expenditures included within programmes**. In Chile, Latvia and New Zealand, programme budgeting covers most health expenditure. While the scope is much more limited in France, Italy, the Netherlands and Sweden, with health expenditure mostly financed through social health insurance schemes or subnational governments with separate budgets for health.
- The **design of programme budgets** for health is unique to each country. Amongst OECD countries, the number of programmes defined in the budget ranges from two programmes in France to over 25 in Mexico. In addition, programmes are aggregated and disaggregated in a variety of ways, using sub-programmes, actions or activities, or a variation of both.
- Notwithstanding country specificities in how expenditures are mapped to programmes, most OECD countries **organise budgets around broad health policy objectives**. This gives health ministries flexibility in the input mix they use. Common broad objectives include programmes aimed at core functions of public health such as health promotion and disease prevention, digital health, and medical education and training.
- In countries **where the scope of programme budgeting is greater, programmes are also typically organised around the type of health services** (Latvia and New Zealand), such as primary care, hospital services and long-term care.
- Much less common are **disease-specific programmes** or those aimed at specific population groups. These are instead typically organised as sub-programmes, to avoid creating budget silos and consequently reduce flexibility.
- In nearly all OECD countries, **the programme budget structure is aligned with health sector structures.** Programmes are allocated to a single government entity which is responsible for the budget line. This helps ensure budget allocations map to day-to-day management of governmental departments and health provider networks.
- The move towards programme budgeting forms part of the interest of governments to ensure **budgets are more performance oriented**. The most common approach – in over two-thirds of analysed countries – is to include performance metrics for health within budget documents, but with no direct link between funding and results.

6.1. Introduction and key policy findings

Strengthening budgetary governance – the laws and procedures that guide the budgetary process – helps to address pressure on public budgets by focusing resources on priority areas and eliminating rigidities in the budget, thereby improving efficiency in spending. An important focus has been on budget formulation and ensuring budget structures better reflect performance. Consequently, many OECD countries have reoriented their budgets to focus on programmes – groups of activities with related objectives and key performance indicators (Kraan, 2008[1]). This approach aims to direct spending towards the achievement of policy objectives and create a clearer link between funding and results.

A move towards programme budgeting forms part of the aim of OECD countries to transition towards performance-based budgeting. Performance budgeting refers to the use of performance information to inform budget allocations, and to encourage greater transparency and accountability throughout the budget process, by providing information to on the purposes of spending and the results achieved. The use of performance frameworks continues to increase over time and are the norm across the OECD, and in particular the health sector (OECD, 2018[2]).

The complex nature of health systems, though, has implications on how programme budgeting is introduced and managed. Countries with social health insurance systems typically raise funds from a mix of insurance contributions and government budgetary transfers. This means health insurance funds often have a budget process that is only partly linked to the government budget. Additionally, the trend towards decentralisation in health systems in OECD countries means that key budget decisions are split across central and sub-national governments (James et al., 2019[3]). The consequence is that health expenditure is defined across central and sub-national government budgets.

This chapter builds on analytical work carried out in conjunction with the World Health Organization on programme budgeting in the health sector. This analytical work is published in *How to make budgets work for health: a practical guide to designing, managing, and monitoring programme budgets in health*, *World Health Organization, 2022.*

This chapter highlights lessons learned from OECD country experiences in the implementation of programme budgeting for health. From these experiences, five key policy findings can be summarised. These findings contribute to the *OECD Applying Good Budgeting Practices to Health (2023)* (Vammalle, Penn and James, 2023[4]).

6.1.1. Design and number of programme budgets:

The number of programmes varies from 2 to 25 in the 13 OECD countries studied. Whilst there is no ideal number, some practical recommendations and observations from these experiences include:

- Budgets should not be dominated by a single large programme, to improve accountability. Conversely, too many budget programmes can put flexibility constraints onto ministries of health (as well as increasing reporting requirements).
- Budgets should follow a clear hierarchal structure to breakdown programmes – such as into sub-programmes or activities – to improve transparency on how funds are spent. However, excessive detail below the programme level should be approached with caution if this leads to an excessive administrative burden on external reporting requirements.

6.1.2. Type of programmes used within budgets:

The exact choice will be country-specific, but OECD country experiences highlight some useful categorisations and good practices:

- Most OECD countries organise budgets around broad health policy objectives (i.e. improving public health, ensuring the accessibility of services). Designing programme budgets around objectives gives ministries of health flexibility in the input mix they use to achieve these objectives. Health objectives should reflect government priorities and responsibilities, allowing for better assessment of the trade-offs between spending decisions.
- Mapping expenditures to programmes by type of service delivery (i.e. primary care, secondary care, home care) is a common approach across OECD countries where the scope of programme budgeting is greater. Separate programmes for each service type can help protect funding for priority services, although it is important to consider the impact on care integration.
- Disease-specific programmes (i.e. prevention and care of HIV/AIDS) or population-based programmes (i.e. improved well-being for senior populations) are less common. These are instead typically organised as sub-programmes to maximise flexibility and reduce silos.

6.1.3. Control and accountability:

Programme budgeting increases flexibility for health and other line ministries, which means a loss of control for finance ministries over the use of specific inputs. However, OECD country experiences show that:

- A loss of control does not have to mean less accountability. Indeed, programme budgeting increases accountability in the sense that it links spending to actual results. That is, it substitutes input control with control over outputs or outcomes. Further, other types of budget classification remain alongside programme budgets for monitoring and evaluation purposes, such as data on input costs for a given programme.
- Ministries of finance still often retain input control for certain costs, such as administrative overheads and the salaries of ministerial staff. Administrative-based programmes such as legal and IT services are common – a pragmatic approach to avoid having to allocate shared costs across policy programmes.
- As far as possible, programme structures should align with the administrative responsibilities and service delivery functions of ministries and agencies. This helps ensure budget allocations map to day-to-day management of governmental departments and specific health providers. Although, programmes should not be organisational units under a different name.
- Cross-cutting programmes should be allowed but used less frequently due to accountability issues and budget complexities. Strong inter-governmental co-ordination mechanisms must be in place to manage risks related to supervision of the budget and ensure accountability.

6.1.4. Links between programme and performance budgeting:

Most OECD countries use performance indicators to monitor budget programmes, and these are either presented alongside budget documents, an annex or another supporting document. The choice of indicators is country-specific, but OECD country experiences suggest that:

- Performance indicators should be limited to a small number of relevant indicators for each policy or programme area.
- The performance budgeting framework must be robust to support the differing nature of expenditure programmes. The nature of expenditure programmes should be reflected in the type of indicators used.
- Performance indicators should ideally be linked to government-wide objectives, often outlined in national health plans. This can help align and focus the programme structure and associated indicators with government priorities.

- Targets for indicators are frequently used to set formal expectations about what is expected to be achieved.
- There is a trade-off between creating indicators to measure and monitor performance, and administrative burden. Some OECD countries have chosen to reduce the number of indicators.

6.1.5. Need for buy-in from both health and finance policy makers:

OECD country experiences show that for programme budgeting to work:

- Finance policy makers need to entrust health ministries to deliver on specified programmes (rather than micromanage what inputs they use to achieve programme objectives and associated performance indicators).
- Health policy makers should take ownership of the greater operating discretion afforded to them. This should begin during the initial stages of programme budgeting reforms, to define programme boundaries and responsibilities.
- Both finance and health policy makers should use programme budgeting as an instrument of policy analysis and as a tool to focus on desired outputs.
- Monitoring capabilities of programme outputs and outcomes is critical, whilst still avoiding excessive detail in reporting requirements.

6.2. Benefits and challenges to move towards programme and performance budgeting

6.2.1. Programme budgeting: Budget classifications and their implications for public spending

The budget process involves the preparation of detailed budget proposals by line ministries in negotiation with the central budget authority. This leads to an appropriation bill that is approved by legislature, providing the legal authority for making expenditures. Itemised on an appropriation bill are *budget lines*, specifying the most detailed and lowest level of spending that is used for authorised expenditure. Critically – given the legal status of budget lines – Ministers cannot easily reallocate resources between budget lines, except in special circumstances as defined in the budgetary legislation.

One fundamental element of budgeting is how these budget lines are classified. This refers to the criteria used to formulate, present, and report on the budget. The classification of expenditures in the budget law directly impacts how spending is carried out, and consequently the efficiency of resource allocation. Moreover, budget classification provides a framework for accountability of public spending and policy formulation.

In recent decades, there has been a trend in OECD countries towards a *programmatic classification* for budgets. This type of classification groups expenditures with related policy objectives.

Compared to alternative types of budget classification (Box 6.1), programme budgeting offers many benefits:

- Improves flexibility: budgeting around programmes often leads to a reduction in the number of line items and increases flexibility for ministries or programme managers. That is, resources can be redistributed within a programme, without managers having to return to parliament for authorisation, as long as overspending does not occur. Flexibility for reallocating funds across programmes tends to be more limited.

- Strengthens link between objectives and funding: by shifting the focus away from inputs towards the outcomes of public spending, programme budgeting aims to strengthen the link between government objectives and financial resources. This allows for clearer analysis of the trade-offs between expenditure items, so that resources can be directed towards the achievement of priority objectives by ministries.
- Increased transparency and accountability: programme budgeting improves understanding of what is being spent with public money, thereby inherently improving transparency and accountability over outputs.

In the health sector in particular, programme budgeting is important because:

- Health ministries can actively engage in the definition of programmes, this shifts the focus away from inputs required to provide health services, towards the objectives, this means budgetary decisions will more closely align with health sector priorities.
- Rather than rigid input controls, health ministries have greater flexibility over programme funds, so that spending can be redirected as health needs change. Greater control over the choice of inputs for health officials can also increase the efficiency of health spending.
- Programmes provide a framework for accountability and performance. Programme classification of the budget facilitates measuring performance, and thus holding programme managers accountable for results. This is important for the health sector, where many actors exist. Programmes can also help increase the transparency of how public funds are spent.

Box 6.1. Budget classifications

Table 6.1 defines the different types of budgeting classifications. Traditionally budgets have been classified around inputs: inputs of similar nature are grouped together in defined economic categories, for example wages, the purchase of goods and services, and capital expenditure. This is known as an *economic classification* or *input-based budgeting*[1]).

A second common form of budget classification is where expenditures are organised around units responsible for administration of expenditures (known as *organisational* or *administrative classification*). Here, budgets reflect the structure of government and the distribution of responsibilities for delivering services across ministries, agencies, and levels of government.

A *functional classification* groups expenditures according to the purpose for which the funds are used, such as health, justice, and defence. One example includes the COFOG (Classification of Functions of Government), a general classification of expenditure which can be used for international comparisons.

Table 6.1. Types of budget classification

Economic	Groups expenditures according to economic categories
Organisational	Groups expenditures by organisational entities
Functional	Groups expenditures according to purpose
Programmatic	Groups expenditures with related policy objectives and outcome targets

Source: Jacobs, D., J. Hélis and D. Bouley (2009[5]), "Budget Classification", https://blog-pfm.imf.org/files/fad-technical-manual-6.pdf.

1. Input-based budgeting is also sometimes referred to as traditional line-item budgeting. However, line-item budgeting can be confused with the related but not identical term, line items, which refers to the lowest level of classification within a budget – whether or not line items are based on inputs. Hence why in this chapter the terms input-based budgeting and budget lines are used instead.

However, programme budgeting also requires careful design to mitigate against risks. Programme budgeting reduces the number of budget lines, and consequently control over the inputs used. That is, the increased flexibility for line ministries should help to achieve policy objectives, but it also means that there is a risk of the misuse of public funds.

Programme budgeting also raises the question as to whether programme structure should incorporate all types of expenditures. One area of particular concern for ministries of finance is the relaxation of input controls on the administrative budgets of line ministries. The administrative budget refers to the overall running costs of the ministry, including staff salaries and material expenses such as office equipment. Such costs are less easily attributable to a specific outcome or policy objective since they are by nature applicable to the ministry. Therefore, relaxation of input controls for these items opens the risk that too many resources are spent on such administrative items, as compared with activities that contribute directly towards programme objectives.

These risks, though, can be mitigated through additional monitoring efforts. For example, ministries of finance can require that budget estimates contain information regarding the cost calculations of programmes derived from inputs and economic items. Although inputs do not form the basis of appropriations in countries adopting programme budgeting, sufficient cost information can help finance ministries assess budget requests for a programme.

6.2.2. Performance frameworks within programme-based budgets

The move towards programme budgeting forms part of the interest of governments to ensure budgets are more performance oriented. Performance metrics include outcomes, outputs, and inputs associated with programmes and constitute a performance budgeting framework. A strict definition of performance budgeting implies a direct relationship between performance results and allocated funds to programmes. However, in practice, it is more likely that performance indicators are used solely for presentational purposes or to inform decisions in an indirect manner (Table 6.2). This can be as contextual information to inform budget planning, and to instil greater transparency and accountability throughout the budget process.

While measuring and monitoring performance is easier when the budget is structured around programmes rather than inputs, it is still possible to measure performance when budgets are based on inputs.

Table 6.2. Types of performance budgeting

Presentational	Performance information (goals, outputs, outcomes, and performance indicators) is shown separately from the main budget document.
Performance-informed	Performance information is included within the budget document alongside financial information and performance information is used to inform budgetary decisions.
Direct	A direct link between results and resources is established, usually implying contractual-type mechanisms that directly link budget allocations to the achievement of results, with budgetary responses to over or under-achievement of performance objectives.

Source: OECD (2023[6]), OECD Performance Budgeting Framework, https://one.oecd.org/document/GOV/SBO(2023)1/en/pdf.

6.3. Programme and performance budgeting initiatives in the health sector in a selection of OECD countries

The health sector is often at the forefront of programme and performance budgeting reforms. The design and structure of budget programmes within health differ substantially across OECD countries, reflecting the objectives and priorities of governments as well as the characteristics of the healthcare system. To understand programme budgeting practices in the health sector, this chapter focuses on in-depth analysis

of practices in 13 OECD countries: Australia, Canada, Chile, Estonia, France, Italy, Latvia, Mexico, the Netherlands, New Zealand, Norway, Spain and Sweden. The selection reflects countries at different stages of programme budgeting and varying health financing arrangements.

6.3.1. Overview of health financing arrangements in the selected countries

To analyse the 13 aforementioned OECD countries, it is important to understand their type of health financing arrangements. Health financing arrangements are commonly classified into three main types: national health systems (including those with decentralised local services), single health insurance funds or multiple health insurance funds/companies. Table 6.3 summarises the main financing arrangements in the selected countries.

Table 6.3. Overview of health financing arrangements

National health system (including those with decentralised local services)	Australia, Canada, Italy, Latvia, New Zealand, Norway, Spain, Sweden
Single health insurance fund (single payer)	Estonia, France
Multiple health insurance funds or companies	Chile, Mexico, Netherlands

Source: OECD Health Systems Characteristics Survey, authors' analysis of survey results.

In national health systems, a large proportion of overall spending on healthcare comes from the national government budgets. By contrast, in healthcare systems financed by compulsory health insurance schemes (whether organised by single or multiple funds), government expenditure on healthcare as defined in the budget may represent a small proportion of overall public healthcare expenditure. Social insurance systems may have budgets separated from the central government budget, that may not be subject to legislature review, may occur on a different timeline, or follow different budgeting procedures to the central government budget. In the Netherlands, the budget for the compulsory health insurance scheme is determined through a process led by the government but separated from the general budget process. Similarly, in France, parliament votes on two separate budgets: the central government budget, and the social security budget (containing revenues and expenditure of the single payer health insurance fund).

Nevertheless, many social health insurance systems rely on transfers from central government budgets. For example, in Chile, 68% of the revenues of the social insurance system come from government transfers (OECD, 2023[7]). Moreover, the ministry of health usually defines the benefits package and sets health policy goals and may still be involved to some extent in the management of resources.

In addition, in many OECD countries, sub-national governments play a significant role in the health system. The consequence is that health spending is distributed across central and sub-national budgets. Budget procedures at the sub-national level operate with a varying degree of autonomy from national budgeting procedures. Thus, national budget reforms – such as programme and performance budgeting – may not always translate in similar procedures being adopted in sub-national governments. Sub-national spending on healthcare is low in Estonia, France, Latvia, the Netherlands and New Zealand. In contrast, health is decentralised in countries such as Australia, Canada, Italy, Norway, Spain and Sweden.

6.3.2. History of programme and performance budgeting initiatives

Across the 13 OECD countries, programme budgeting initiatives are at various stages of development. Australia, Canada, New Zealand, Spain and Sweden have long established programme budgeting frameworks in place. In Spain, the change in budget classification came through legislature, from the introduction of a Budget Act in 1977 requiring line ministries to formulate the budget by programmes. Australia began a process of budget reform in 1984 to remove the tight controls on the management of

public resources. Sweden's budget formulation process underwent fundamental change in the late 1990s, with all government appropriations re-grouped into expenditure areas and programmes.

Latin American countries Chile and Mexico also have a long history of programme and performance budgeting**.** In Chile, reforms date back to 1993 when the National Direction of Budgeting (DIPRES) of the Ministry of Finance implemented a pilot with performance indicators in five public institutions. From 2001, DIPRES has in place a results-based budgeting process covering all the major institutions across the public sector. The budget in Chile is divided into entities ("partidas"), sub-entities ("capítulos") and within each sub-entity, budget lines are grouped into programmes. Mexico also has a long history of programme budgeting, with programmes initially introduced in the 1970s. Further reforms took place in 2008 to develop a performance budgeting system with a new programme structure, requiring that the budget includes objectives, goals, and indicators for programmes and performance evaluations to confirm the achievement of these goals.

During the early 2000s, European countries such as France, the Netherlands, Latvia and Italy also undertook budget reform. In 2001, the Netherlands used a 'big bang' approach to move towards programme budgeting, focusing heavily on performance information. France introduced a new organic budget law 'Loi organique relative aux lois de finances' (LOLF) in 2006, which included a restructuring of the budget around programmes. In Latvia, the Cabinet of Ministers approved a new programme-based budget format with a three-year perspective in 2006. A wave of reform in Italy in 2009 led to a new budget structure based on missions and programmes. This was an attempt to reduce the number of line items, which previously stood at around 7 000, to 181 programmes across government in 2015.

Finally, in Estonia, the Ministry of Social Affairs, as part of 2014 reforms transitioned towards an activity-based budget, which includes presentation of the budget by programmes. The change was triggered by several challenges, including concerns that planning and budgeting process existed as separate worlds, a strong focus on inputs and lack performance and evaluation, and significant pressure on budget costs.

6.4. Design of programme-based budgets for health across OECD countries

6.4.1. Scope of programme budgeting for health

Table 6.4 shows the analysed OECD countries and the focal budget of analysis, which is predominantly the budget for the ministry responsible for health. However, areas outside this containing budget lines for health were also considered. Analysis includes some sub-national governments in Australia, Canada and Spain, where sub-national government have extensive responsibilities for delivering health services and have also re-classified budgets by programme.

The scope of programme budgeting in the health sector varies considerably across OECD countries. Table 6.4 classifies countries based on the degree to which public expenditure on health is included in programme budgets. With sub-national governments and social insurance institutions playing a significant role in some health systems this can limit the scope of programme budgeting, as expenditure is contained in a separate budget with a different classification (e.g. line-item, entitlement-based).

In four OECD countries – Chile, Latvia and New Zealand – programme budgeting covers most health expenditure. In New Zealand and Latvia, this includes expenditure of the national health system. In Chile, the programme budgeting framework includes the financing for FONASA, the health insurer for the public health system.

For Australia, Canada, Mexico, Norway and Spain, programme budgeting covers some health expenditure, including national level health agencies and central ministries, and has been implemented by some or all sub-national governments.

In the remaining countries, the scope of central government programme budgeting in the health sector is more limited, only including core expenditure of the ministry of health, focusing on public health and stewardship functions (monitoring, regulation, and supervision). This is the case in France, Italy, the Netherlands and Sweden, Instead, most health expenditure is included in the budgets of sub-national governments (Italy, Sweden), or through single or multiple health insurance funds (Estonia, France, the Netherlands). In Estonia, the Estonian Health Insurance Fund (EHIF) is responsible for most expenditures on health. There is no direct connection between the central government programme budget and the EHIF budget. This has raised accountability concerns regarding how funds are used to achieve the strategic objectives outlined in the programme budget.

Table 6.4. Overview of programme budgeting design in selected OECD countries

Country	Budget/s for healthcare	Coverage of budget	Number of programmes on budgets for health
High – programme budgeting covers most health expenditure			
Chile	Ministry of Health	National health fund (FONASA) and national agencies responsible for health	6 programmes
Latvia	Ministry of Health	All expenditure of the national health system	13 programmes
New Zealand	Vote Health – Ministry of Health	Most expenditure of the national health system	20 outputs
Medium – programme budgeting covers some health expenditure (including at sub-national level, or by social security institution)			
Australia	The Health Portfolio	National agencies responsible for health	21 Outcomes
	New South Wales Health	All public health expenditure in New South Wales	5 Outcomes
Canada	Health Portfolio	National agencies responsible for health	13 programmes
	Ministry of Health, Alberta	All public health expenditure in Alberta	15 programmes
	Ministry of Health, Ontario	All public health expenditure in Ontario	9 votes
Mexico	Secretary of Health	Secretary of Health	25 programmes
Norway	Ministry of Health and Care Services	Some expenditure of the national health system	10 programme areas
Spain	Ministry of Health, Social Services and Equality	Ministry of Health, Social Services and Equality	8 programmes
	Department of Catalonia	All public health expenditure of the autonomous region of Catalonia	7 programmes
Low – programme budgeting covers limited health expenditure			
Estonia	Ministry of Social Affairs	Ministry of Social Affairs	3 programmes
France	Health Mission – Ministry of Solidarity and Health	Ministry of Solidarity and Health (excludes SHI expenditure)	2 programmes
Italy	Ministry of Health	Ministry of Health (excludes SNG expenditure)	16 programmes
The Netherlands	Ministry of Health, Welfare and Sport	Ministry of Health, Welfare and Sport (excludes SHI expenditure)	6 policy articles
Sweden	Expenditure area – Healthcare, medical care, and social services (Ministry of Social Affairs)	Ministry of Social Affairs (excludes SNG expenditure)	18 policy areas

Note: This table relates to the number of health programmes at the central government level. In this chapter, a programme refers to the level defined in the budget appropriations bill and where the authorisation of spending takes place. See Annex 6.A for inventory of programme budgets for health. SNG refers to sub-national government, SHI refers to Social Health Insurance system.
Source: From an analysis of 2021/22 budgets for health expenditure.

6.4.2. Number and size of budget programmes for health

The number of budget programmes in health varies markedly across OECD countries (Table 6.4). The budgets for health in Estonia and France contain a very low number of programmes, while in Mexico, the budget contains over 25 programmes for health.

While it is difficult to prescribe the exact number and size of budget programmes, some observations can be made:

- A budget dominated by large programmes makes it difficult to compare trade-offs when costs and objectives vary extensively. For example, in Mexico, the budget is dominated by a two large programmes, with the remaining programmes being significantly smaller, which poses a challenge for spending prioritisation (Lakin, 2018[8]). This was also the case in Latvia, where a change to the programme budgeting structure saw a breakdown of a major programme into smaller sub-programmes to help the transparency of expenditures (see Annex 6.B).
- A budget containing many small programmes can also present challenges by complicating the budget process, and creating rigidities meant to be eliminated by programme budgeting. Except for Mexico, this has been avoided by OECD countries. Even in countries with a high number of total budget programmes, these are split among different agencies (e.g. Australia).
- Several countries with the most experience of performance budgeting have steadily reduced the number of health programmes over time, such as Australia, Canada, France and New Zealand (OECD, 2019[9]). 2022 reforms in New Zealand significantly reduced the number of appropriations from over 50 to 20 for health, with the hope that a smaller set will provide for Parliamentary authorisation at a more meaningful level (Department of the Prime Minister and Cabinet, New Zealand, 2022[10]).

6.4.3. The breakdown of budget programmes improves transparency

Programme structure is unique to each country, meaning that programmes are defined, and aggregated and disaggregated in a variety of ways (Table 6.5).

Table 6.5. Programme hierarchical structure across selected countries

Australia	Outcome, Programme
Australia – New South Wales	Outcome, Programme
Canada	Core Responsibility, Programme
Canada – Alberta	Programme, Sub-programme
Canada – Ontario	Votes, Items
Chile	Programme
Estonia	Programme, Measure, Programme Activity, Service
France	Mission, Programme, Action
Italy	Mission, Programme, Administrative Unit, Action
Latvia	Programme, Sub-Programme
Mexico	Programme
The Netherlands	Policy Articles, Instruments
New Zealand	Output, Category
Norway	Programme Area, Programme Category, Chapter
Spain	Programme Group, Programme
Spain – Catalonia	Programme
Sweden	Expenditure Area, Policy Area, Sub-Policy Areas

Source: From an analysis of 2021/22 budgets for health expenditure.

Many countries include more than one level of hierarchy. Some disaggregate their budget using sub-programmes, actions or activities, or a variation of either. This aids with transparency and gives greater insight into the intended programme outputs or outcomes. France, for example, uses actions to break down the low number of programmes (Box 6.2). Estonia has one of the more complex programme hierarchies, containing four levels on budget documents, with an additional higher level for strategic planning, and two

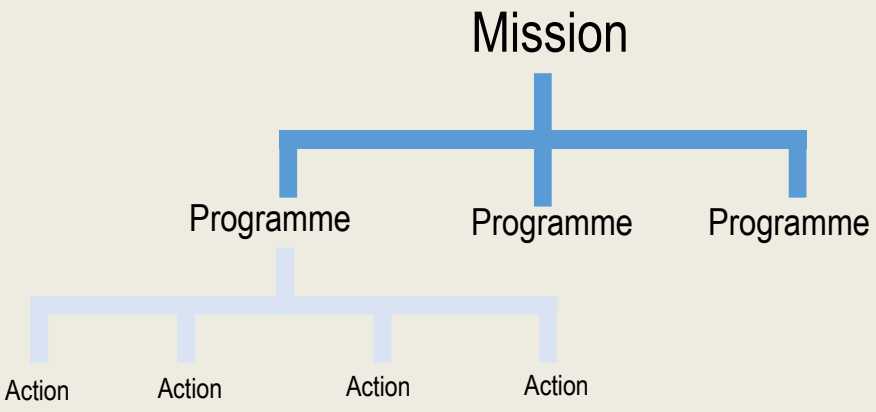
lower levels for agency management. Although more complicated, initial findings from the Estonian reform suggest the programme hierarchy is clear and has given transparency and a strong accountability system.

In contrast, only Chile, Mexico, and the autonomous region of Catalonia in Spain, include only one level of programmes. In Mexico, although there are no sub-programmes, a detailed four-tier indicator structure exists for each programme (see Box 6.13).

Box 6.2. Programme hierarchy: France

In 2001, France enacted a new Organic Budget Law, marking a shift to a programme-based budget. According to this new approach, the entire central government budget is divided into a consistent hierarchy of missions, programmes, and actions (Figure 6.1).

Figure 6.1. Programme hierarchy



Source: Loi organique relative aux lois de finances 2001.

- A **mission** covers a series of programmes designed to contribute to a specific public policy. A mission can involve a single ministry or several ministries. The parliament cannot change or adjust the missions. The health mission covers state health expenditures.
- A **programme** covers a set of activities of a single ministry targeted to a specific public policy objective. A programme director is appointed for every programme, and resources allocated to a particular programme cannot be spent by the ministers for another programme. The Ministry of Solidarity and Health has responsibility for the health programmes.
- An **action** covers a set of operational means to implement the programme. The budget breaks down resources allocated to each action, however, this breakdown is indicative and not binding. There is a high degree of freedom for expenditure choices for ministers to meet the programme's forecasted performance. There is one exception to this, which is that appropriations for personnel are binding in an asymmetrical way: personnel appropriations can be used for other purposes, but appropriations for other purposes cannot be used for personnel costs.

Source: Moretti and Kraan (2018[11]), *Budgeting in France*.

6.5. Types of budget programmes used for health in OECD countries

Programmes are defined as groups of expenditures with related policy objectives. However, health spending varies in nature, with some spending not neatly fitting into a single priority area. Therefore, health programmes also commonly include service-based programmes (at a given level of care or type of service); and support programmes related to general administration expenditures (Table 6.6).

Table 6.6. Common types of health programmes

Programme type	Description	Examples
Policy based	Aimed at a particular health policy objective	Improved access to healthcare, reduced maternal mortality, child health
Service based	Defines the level of service or type of care	Primary healthcare, hospital inpatient care, dental services
Administrative based	Cover general running costs of the ministry or management services	Operating expenses, personnel costs

Source: Constructed from an analysis of 2021/22 budgets for health expenditure.

Across OECD countries there is a wide divergence in the types of programmes used for health. Many countries (11 out of 18) use a hybrid approach to programme budgeting, using a mix of programme types (Table 6.7). Almost all countries (16 out of 18) use a health policy-based programme classification at the top hierarchical level (countries also often break this down into lower-level sub-programmes or equivalent). No country uses only an administrative based programme structure, only one country, Norway, uses exclusively a service-based programme structure.

The following sections provide a detailed analysis of the practices of countries in each of the three types of top-level programme types for health.

Table 6.7. Overview of top-level programme types for health

	Health policy-based	Service-based	Administrative based
Australia	X		
Australia – New South Wales	X		
Canada	X		X
Canada – Alberta	X	X	X
Canada – Ontario	X	X	X
Chile	X	X	
Estonia	X		
France	X		
Italy	X		
Latvia	X	X	X
Mexico	X		X
Netherlands	X		X
New Zealand	X	X	X
Norway		X	
Spain	X		
Spain – Catalonia		X	X
Sweden	X	X	

Note: See Annex 6.A for inventory of programme budgets for health.
Source: From an analysis of 2021/22 budgets for health expenditure.

6.5.1. Policy-based programmes are the most common programme type

Policy-based programmes group spending items which aim at achieving a common health objective together. There are four main types of policy-based categories: public health, disease specific, population-group specific and health system strengthening (Table 6.8). Almost all countries have a programme for public health (17 out of 18), and most countries have a programme for health system strengthening (13 out of 18). Most countries (11 out of 18) use two policy-based programmes, only five countries use more than 2, and none uses only one.

Table 6.8. Categories of policy-based programmes

	Public health	Disease specific[1]	Population-group specific	Health system strengthening
Australia	X	X	X	X
Australia – New South Wales	X			X
Canada	X			X
Canada – Alberta	X	X		X
Canada – Ontario	X			X
Chile	X		X	
Estonia	X			X
France	X		X	
Italy	X		X	
Latvia	X			X
Mexico	X	X	X	X
Netherlands	X		X	X
New Zealand			X	X
Spain	X			X
Sweden	X	X		X

1. Excluding programmes for COVID-19 response measures.
Source: From an analysis of 2021/22 budgets for health expenditure.

Public health programmes

Nearly all countries have programmes specifically aimed at improving public health through health promotion and disease prevention policies. Ministries assume this role not only to improve well-being, but to reduce the burden on the health systems and pressure on public budgets. Often programmes are targeted at promoting healthy behaviours and protecting citizens from public health threats, such as infectious diseases or environmental risks. Vaccination and immunisation campaigns were often included as sub-programmes or activities, along with tobacco control and promoting cancer screenings.

For example, the budget in Latvia contains a programme to implement public health promotion policy through disease prevention and health promotion activities. In 2021, this programme represented 0.4% of the publicly funded health budget. France has a budget programme for “prevention, health security and healthcare”. The programme aims to improve population health status, reduce territorial inequalities, and prevent and control health risks. The budget for the state of New South Wales, Australia contains programmes based around high-level outcomes, with an outcome focused on “keeping people healthy through prevention and health promotion” (Box 6.3).

Box 6.3. Outcome budgeting: New South Wales, Australia

Since 2017, New South Wales, Australia has followed the "Outcome Budgeting" approach with the aim of allocating resources based on the outcomes achieved for people, not the amount spent, and shifting decision-making away from increments. Budget appropriations are in the form of high-level Outcomes and Programmes:

- Outcomes articulate the primary purpose for which public resources are being spent, and the goals that government is seeking to achieve for its citizens and businesses across all its activities.
- Delivery of each Outcome is supported by Programmes that are a collection of Government activities, tasks, divisions, or functions to deliver specific objectives towards the Outcome.

The 2020/21 budget contained five Outcomes for health (Table 6.9).

Table 6.9. States Outcomes for Health, New South Wales

State Outcomes	Example Programs
1. People receive high-quality, safe care in our hospitals	Acute Services Sub-Acute Services Mental Health Services Aged Care Services
2. People can access care in out of hospital settings to manage their health and well-being	Community Based Services Mental Health Community Based Services Aged Care Community Services Drug & Alcohol Services Non-Admitted Services
3. People receive timely emergency care	Emergency Departments Ambulance Emergency Services
4. Keeping people healthy through prevention and health promotion	Dental Services Health Protection Services Health Prevention Services Specific Health Screening Service
5. Our people and systems are continuously improving to deliver the best health outcomes and experiences	Teaching, Training & Research Medical Research Support Program Research and Commercial Capacity Building Initiatives Healthcare Complaints Commission Mental Health Commission of New South Wales

Source: New South Wales (2020[12]), *Budget Paper No. 2.*

Disease specific programmes

Disease-specific programmes less common across OECD countries. Disease-specific programmes are groups of expenditures aimed at a specific disease, and include activities such a disease prevention, diagnosis, treatment, and research. The budget in Mexico, for example, includes programmes for the prevention and care of HIV/AIDS, as well as prevention and control of obesity and diabetes. In addition, Australia has a programme to minimise the impacts of cancer, through national leadership in cancer control with targeted research and clinical trials, evidence informed clinical practice, strengthened national data capacity, and community information and support.

Disease-specific actions are often built into programmes as sub-programmes or activities. For example, in Estonia disease-specific activities are integrated into the "healthy choices" programme of the Ministry of Social Affairs (Box 6.8). Similarly, in Canada, departmental plans contain expenditures for each appropriated department, and outline disease-specific sub-programmes, such as cancer control.

Box 6.4. Incorporating disease-specific activities: Estonia, Ministry of Social Affairs

In Estonia the "healthy choices programme", includes disease-specific activities, such as reducing HIV/AIDS and tuberculosis infection (Table 6.10). These activities are not specified on budget documents, but rather included within the budget management documents of Ministry of Social Affairs.

Table 6.10. Healthy choices programme, Estonia

Programme	Healthy Choices
Measure	To promote health, reduce risky behaviours and improve health outcomes, ensure people have the support networks, opportunities, and skills they need to make health-promoting choices regardless of age, income, education, and location. There is easy to understand health information and the services and products they need are accessible to all.
Activity	Prevention and control of communicable diseases (HIV, tuberculosis, and hepatitis)
Service	1) HIV prevention, treatment, and mitigation 2) Tuberculosis prevention and treatment

Source: Ministry of Social Affairs, Estonia, 2021.

With the onset of the COVID-19 pandemic in 2020, several countries utilised their programme budget framework to flexibly incorporate pandemic-related expenditures. Countries redirected spending within programmes towards the emergency response measures or created new COVID-19 expenditure programmes.

In New Zealand, the Vote Health 2021/22 contained new budget appropriations dedicated to the COVID-19 response including the "national health response to COVID-19", "minimising the health impacts of COVID-19", and "implementing the COVID-19 vaccine strategy". In Latvia, the programme budgeting structure incorporates a programme for the implementation of unforeseen measures, titled "contingency funds". The programme financed the response to the COVID-19 pandemic. France created new budgetary programmes as a means of allocating expenditures to the COVID-19 response. Following the framework of the annual budget, the supplementary budget contained a new budgetary mission "Contingency plan for the health crisis", divided into two new programmes and related actions.

Population-group programmes

Population-group programmes aim at addressing the health needs of a specific population group. Typically, these programmes target population groups with below-average health outcomes, or specialised health needs.

For example, Australia has a programme for aged and ageing care, aimed at "improved well-being for senior Australians through targeted support, access to appropriate, high quality care, and related information services". The health protection programme in France covers the healthcare costs of the most vulnerable populations, including destitute foreigners who cannot access universal health protection as they do not meet the conditions for regular residence. The budget in the Netherlands contains a programme with the policy objective of improving youth healthcare. While New Zealand has a budget programme for

providing Māori health services and ensuring that all health services are delivered in a way that promotes equity and is in line with the original treaty with Maori (The Treaty of Waitangi).

Health system strengthening programmes

Most countries have programmes targeted at health system strengthening. Often ministries of health assume a leadership role within the health system, ensuring all citizens have access to health services. Therefore, countries frequently include programmes organised around policies for a better performing health system. Policy objectives include increasing access, improving the quality, or ensuring the sustainability of health services. These objectives are often achieved through sub-programmes or activities such as digital health initiatives including investing in health information systems, funding health research and training, and measures to improve the quality and distribution of the health workforce.

For example, in Canada, the "Healthcare System" programme aims to ensure Canada has a modern and sustainable healthcare system, and that Canadians have access to appropriate and effective healthcare services. The programme is delivered through activities such as digital health and health information initiatives. The Ministry of Health works in close co-operation with regional and territorial governments to deliver the programme. The Ministry of Social Affairs in Estonia has a programme on people-centred healthcare, to ensure "the availability, quality and safety of health services, and public awareness and satisfaction with health services". In the Netherlands, the budget contains a programme for care-wide policy, to "further optimise the health system so that the quality, accessibility and affordability of care remain guaranteed for citizens". (Box 6.5). The budget in Sweden contains a programme on "performance-based efforts to reduce waiting times". The programme objective is to reduce waiting times by providing performance-based government grants to the regions to work continuously to shorten queues and waiting times and to improve accessibility in healthcare.

Box 6.5. Policy-based programme budgeting: Netherlands

Programme budgeting reforms in the Netherlands were introduced nearly two decades ago. The budget focuses on policy objectives i.e. the results of budget programmes. Instruments for each programme detail how the policy objective will be achieved. Each programme, known as policy articles, must follow a reporting template, this includes:

- Policy objective
- Role and responsibility of government
- Policy changes since previous years
- Budgetary impact of policy (including budgetary flexibility)
- Explanation of financial instruments

The budget for the Ministry of Health, Welfare, and Sport is organised around eight policy articles (with six related to health) (Table 6.11). There are further non-policy articles, which contain costs that cannot be meaningfully allocated across policy articles.

Most of the budget is allocated to the curative care programme, which covers the health insurance premiums over children under 18, and to the long-term care programme. The care-wide policy programme aims to improve the quality, accessibility, and affordability of healthcare through actions such as strengthening patient involvement in healthcare decision making, upgrading ICT systems, and increasing opportunities for health workforce training.

Table 6.11. Policy articles and objectives for the Ministry of Health, Welfare and Sport

Policy article:	Policy objective:
1. Public health	Good public health, where people are exposed as little as possible to health threats and live in good health
2. Curative care	A high-quality, accessible, and affordable range of curative care
3. Long-term care and support	A system for long-term care that 1) enables every person to live independently for as long as possible, 2) when necessary, provides good quality care at home or in an institution. Long-term care is offered in conjunction with informal care, and the complexity of the care required, and the resilience of the patient are central in providing appropriate care. The aim is to promote well-being and reduce dependency on care. All this is done at a socially acceptable cost.
4. Care-wide policy	Further optimise the health system so that the quality, accessibility, and affordability of healthcare is guaranteed for citizens.
5. Youth	Children in the Netherlands grow up healthily and safely, develop their talents and participate in society.
8. Allowance for specific costs.	Keep healthcare financially accessible.

Note: Policy Article 6 and 7 are not shown as they relate to non-health articles.
Source: *Rijksbegroting* (State Budget) 2021.

6.5.2. Service-based programmes are also frequently used across OECD countries

In countries where the scope of programme budgeting is greater, programmes are also typically organised around the type of health service. Service-based programmes are groups of expenditures organised around the type of health service provided or by the level of care, for example primary, secondary, or tertiary care. For example, the budgets in Chile, Latvia, New Zealand, Norway, and the autonomous region of Catalonia contain service-based programmes (Table 6.12).

Table 6.12. Examples of health service-based programmes

Country	Programme
Chile	Primary healthcare programme
	Hospital financing by diagnosis-related group
Latvia	Provision of primary outpatient healthcare
	Provision of laboratory tests in outpatient care
	Provision of other outpatient health services
	Provision of scheduled in-patient healthcare services
New Zealand	Delivering hauora Māori services
	Delivering Hospital and Specialist Services
	Delivering Primary, Community, Public and Population Health Services
Norway	Public health
	Specialist services
	Dental health
Spain – Catalonia	Primary healthcare
	Specialised healthcare
	Public health

Source: From an analysis of 2021/22 budgets for health expenditure.

The budget for Chile contains service-based programmes for primary and secondary care financed through the national health fund (FONASA). A dedicating programme for primary care can create greater visibility and protect resources for primary healthcare (Hanson et al., 2022[13]), although only a small number of OECD countries include central level programme dedicated to primary healthcare (Box 6.6).

Box 6.6. Primary healthcare and programme budgeting

The COVID-19 pandemic brought into the light the need for a well-functioning primary healthcare system. The government budget is the primary instrument for allocating funds to primary healthcare. Establishing an appropriate programme-based budget can make financial allocations to primary healthcare more visible and better protected from transfers to other services such as hospitals. Budget rules and statutory appropriations, which mandate minimum budget shares for specific services, can also help to ensure sufficient allocations to primary healthcare (Hanson et al., 2022[13]).

Chile, Latvia and New Zealand have dedicated primary healthcare programmes at the national level. New Zealand has separate appropriations for primary care and for hospital services, with the aim to control funding transfers between services and protect funding for primary care. In addition, sub-national governments in Australia, Canada and Spain that have moved towards a programme-budget also have distinct primary healthcare programmes.

For other countries, such as Italy, allocations to health are made at the central level through a single line for each geographical area, with little or no visibility of the allocation to primary healthcare. Alternatively, primary healthcare spending is included in a separate budget for the social health insurance fund (France and the Netherlands). Mostly commonly at the central level, there are targeted programmes for specific public health policies, such as vaccination, disease prevention, or child health, but these are not the main source of financing for primary care services.

In Latvia, health services are organised into specialised and non-specialised healthcare provision, where the sub-programmes follow the “level of care” logic. In Norway, the budget for the Ministry of Health and Care services is organised around programme areas and categories. The largest programme area is for “specialised health services”, which finances the regional health authorities to provide diagnostics, treatment, and follow-up of patients with acute, serious, and chronic diseases and health problems. Primary care, social care and mental health services are predominantly financed and delivered at the municipal level. However, the programme “municipal services” provides central government grants for the development of municipal services, acting as a secondary source of finance. Finally, the budgets for health of the provincial governments of Alberta and Ontario, Canada are organised around service-based programmes at the sub-programme level (Box 6.7).

Box 6.7. Service-based programme budgeting at the sub-national level: Canada

In Canada, the federal budget includes expenditures of the Health Portfolio. The Health Portfolio is comprised of five government agencies, aiming to improve and maintain the health of Canadians. However, heath care is predominantly delivered through the 13 provincial and territorial systems, through a public system known as Medicare, which accounts for around 90% of public spending on health (Canadian Institute for Health Information, 2016[14]).

Each provincial or territorial government has a ministry of health or equivalent and subsequent budget for health. Provincial governments have autonomy over the adoption and implementation of fiscal management practices and processes; however, these practices and processes must be in line with generally accepted principles of good governance (including transparency and integrity) (Paul-Émile Arsenault, 2011[15]). The three territorial governments have less autonomy in public financial management.

In Ontario, health spending for parliamentary approval is presented as programmes (known as Votes), and sub-programmes (known as items). These are primarily defined by the type of services delivered. Seventy percent of the of projected health spending is contained in just two programme votes, the Health Services and Programs and the Ontario Health Insurance Program. The Ontario Health Insurance Program funds coverage for over 6 000 healthcare services provided by physicians, optometrists, dental surgeons and podiatrists, and drug programmes. The Health Services and Programs Program covers the operation of hospitals, community care, and mental health and addictions.

Similarly, Alberta presents appropriations by programme and sub-programme. The health Vote contains 15 programmes. Programmes are primarily service-based, organised around the type of health service provided (Table 6.13). For example, the largest programme – “Alberta Health Services” – includes sub-programmes for community care (health services provided in a community setting, such as group homes), acute care (hospital-based acute inpatient services to provide necessary treatment for a disease or severe episode of illness or injury), and continuing care (facility-based continuing care such as designated supportive living, long-term care, hospice and end-of-life care, delivered by Alberta Health Services or contracted providers).

Table 6.13. Programme budget, Alberta, Canada

Programme:	Alberta Health Services
Sub- programmes:	Continuing Care Community Care Home Care Acute Care Ambulance Services Diagnostic, Therapeutic and Other Patient Services Population and Public Health Health Workforce Education and Research Information Technology

Source: Budget 2021, Government of Alberta.

6.5.3. Administrative based programmes help overcome some of the challenges of programme budgeting

A common issue faced when transitioning towards a programme budget structure is whether all costs should be incorporated into the programme framework. Ideally, programmes should group all resources contributing to the achievement of objectives, including salaries, goods and services, subsidies and transfers, and investments (gross budgeting) (OECD, 2019[9]). However, ministries of finance often want to maintain partial control on the choice of inputs to prevent the misuse of resources. Therefore, some countries that have moved towards a programme budget have maintained separate line items for certain costs, to ensure that spending is used to directly contribute towards achieving programme outcomes, rather than, for example, increasing wages. These separate line items can include large-scale investments, infrastructure maintenance and salaries of staff (either all civil servants or limited to those in general oversight roles).

Other countries may choose to allocate costs to programmes that support the health system rather than directly provide health services. This can avoid the burden of trying to meaningfully allocate costs across programmes, or to creating a mechanism to share the costs. Examples of different approaches are given in Box 6.8.

Box 6.8. Approaches to administrative based programmes

- In **Canada**, the federal budget contains a programme for “internal services”. This programme consists of groups of related activities and resources that the federal government considers to be services in support of programmes and/or required to meet corporate obligations of an organisation. Examples of these services include legal services, human resources management services, financial services management, and information technology services.
- **Latvia** has a programme for sector management programmes, including programmes for payments to international organisations, and programmes for the implementation of EU programmes.
- The programme budget in **Mexico** contains a programme for administrative support activities in the health sector, covering operating costs. This mainly includes payroll for personnel in the administrative areas, as well as basic operating costs for the health administration such as electricity, water, gas, telephone, taxes, property insurance, surveillance, cleaning, leasing of computer equipment for buildings and vehicles.
- **The Netherlands** defines its programmes into policy articles and non-policy articles. Spending included in non-policy articles contains expenditure that is viewed as not being able to be meaningfully allocated in a specific policy article, such as spending on staff and material expenses of the ministry, expenses related to international co-operation, and unforeseen expenses to account for changes in prices or wages.
- **New Zealand** includes an appropriation for “other expenses”. These expenses are a residual type of expense appropriation that covers expenditure that is not readily classified into programmes. For the health sector, this includes subscriptions for memberships of international organisations and legal expenses for funding the defence and settlements of health-related or disability related legal claims.

6.6. Aligning responsibilities for programme-based budgets with organisational structure

A key question when transitioning towards a programme budget is how the programme structure should be aligned with the existing organisational and administrative responsibilities in the health sector. Some programmes cut across the organisational structure, requiring several departments to work together. In health systems where fragmentation exists due to decentralisation and insurance agencies, co-ordination across a wide range of agents may be needed to achieve policy objectives.

The programme budget structure is aligned with health sector structures in all OECD countries except Mexico and Spain. Programmes are allocated to a single government entity which is responsible for the budget line.[1] However, in most cases, entities are responsible for multiple programmes, and therefore must be able to control the direction of resources between programmes. This is the occurrence in Australia, Canada, Latvia, the Netherlands and New Zealand. In contrast, government agencies in Italy and institutions in Chile, are typically responsible for a single programme. While it is preferable that programmes align with the existing administrative structure, programmes should not be organisational units under a different name (Box 6.9).

Box 6.9. Organisational structure of programmes: Italy

A reform in 2009 in Italy led to the restructuring of the budget around missions and programmes. The budget was re-organised into 42 missions and 165 programmes. For the most part, administrative entities are only responsible for a single programme. As a result, the new missions and programmes are simply an "overlay", with little relevance or impact for budgeting (Blöndal, von Trapp and Hammer, 2016[16]). The table below shows part of the budget for the Ministry of Health, and the breakdown of programmes into administrative units and actions.

Table 6.14. Ministry of Health Budget, Italy

Mission	Programme	Administrative Unit
Health protection	Planning of the national health service for delivery of essential levels of care	Director-general for Health Planning
	Regulatory and supervision of pharmaceutical and other health products for human use	Director-General for Medical Devices and Pharmaceutical services
	Food safety and nutrition	Directorate-General for Hygiene and Food Safety and Nutrition

Source: Ministry of Finance and Economy, Italy, 2021.

The total budget of the National Health System, and most of the expenditure on health, however, is determined through budget law and allocated to regional governments using a capitation-based formula. This expenditure is not included within the mission and programmes framework.

In Mexico and Spain (including the autonomous region of Catalonia), the programme budgeting structure does not fully align with the organisational structure of the health sector. In Mexico, budgetary programmes in the health sector are the joint responsibility of up to 34 different administrative units to meet objectives and goals. However, for the purpose of simplicity, only a single administrative entity is required to report on performance. In Spain, budget programmes are the responsibility of multiple health agencies (Box 6.10.).

Box 6.10. Executing budget programmes: Spain

In Spain, the state budget is divided into expenditure policies, programme groups, and programmes. The 'health' expenditure policy contains three programme groups and eight programmes. Budget programmes are multi-annual and are defined as the expenditure considered necessary for the activities to achieve pre-established objectives.

Budget programmes are executed by multiple health agencies. However, budget documents specify the detailed actions of each agency. Programmes also demonstrate a line of collaboration with different areas of government to meet their objectives.

Table 6.15. Health policies and professional regulation programme, Spain

Programme name: Health Policies and Professional Regulation
Actions financed financing from this budget programme: Secretary State for Health: i) Strengthening the National Health System to face current and future health challenges. ii) Co-ordinate, propose and promote actions aimed at controlling the pandemic caused by COVID-19 and the transition to a new normality. General Directorate of Professional Regulation: i) Recertification of health professionals ii) Promote the improvement of the working conditions of health professionals iii) Encourage the return of health professionals working outside Spain - Line of collaboration with the Ministry of Foreign Affairs to co-ordinate the actions to promote the return of health professionals in the government's Return to Spain Plan.

Source: Ministry of Finance, Spain, 2021.

Although OECD countries generally avoid cross-cutting programmes, many demonstrate how programmes work together across policy areas to achieve cross-cutting goals. This approach recognises that health objectives have determinants that are outside of the control of the Ministry of Health. As with many health outcomes, only a proportion of the intended result may be attributable to healthcare. Various social and economic factors also contribute strongly to health outcomes, including income, unemployment, and education. In New Zealand, for example, all new spending initiatives are required to demonstrate how they have engaged across agencies and portfolios. In Australia, budget outcomes are linked to other programmes from all government entities that contribute to their achievement. In Estonia, programmes have a principal programme manager, however, other agencies are designated 'co-responsible' for programmes.

6.7. Performance frameworks within programme-based budgets

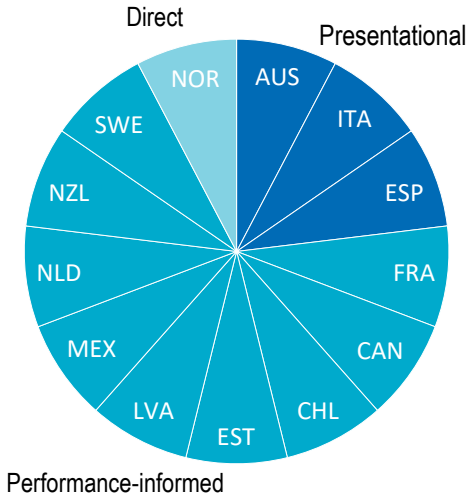
All analysed OECD countries include performance indicators to monitor the progress of budget programmes, as part of a performance budgeting framework. For ministries of health, performance budgeting can improve internal decision-making and contribute towards a stronger case for funding requests. Introducing performance information can also improve transparency and accountability in terms of understanding how public resources are spent and what are the results.

Performance-informed budgeting is the most common approach (Figure 6.2) i.e. performance metrics for health are included within budget documents, but there is no direct link between funding and results. For example, the Organic Budget Law in France prescribes an extensive performance reporting process for the Ministry of Solidarity and Health to integrate performance information into the budget system through

the two types of mandatory budget documents: annual performance plans (projets annuels de performances) and annual performance reports (rapports annuels de performances). In Latvia, performance metrics are included within budget documents in the form of a performance scorecard for each health policy area. Each year, the results of the performance scorecard are analysed, and can be used as a justification for increasing or decreasing funding during the budget formulation stage. In Canada, Departmental Plans describe the mandate, mission and strategic objectives for each department and agency under the health portfolio.

Presentational performance budgeting for health – where performance metrics are presented separately from the main budget document – exists in three countries. In Australia, Portfolio Budget Statements (PBS) are separate documents detailing annual appropriations and include the set of outcomes, programmes, and key performance indicators for the health portfolio. In Italy, the "Integrative Note" is attached to the state budget and contains spending objectives and key performance indicators for each budget programme of the Ministry of Health.

Figure 6.2. Approaches to performance budgeting for health in analysed OECD countries at the national level



Note: Refers to the central-level health budget as defined in Table 6.4. See Section 6.2.2 for the definitions of the different approaches to performance budgeting.
Source: OECD Survey (2021) Macro-level management of health expenditure, with a special focus on multi-annual financial planning for health, OECD Survey (2018) Performance Budgeting Survey.

Only in Norway is there a direct link between programme funding and performance results, however, this only covers a very small proportion of the health budget (Box 6.11).

Box 6.11. Quality-based financing: Norway

The health system in Norway is divided into four Regional Health Authorities, responsible for providing secondary care to their population areas. Previously, Regional Health Authorities were funded using a mixture of block grants and activity-based financing. However, in 2014, Norway introduced a performance-based financing scheme known as quality-based financing. The financial incentive aims to increase overall quality and patient care.

Quality-based financing consists of a redistribution of the block grant based on a set of performance indicators and quality criteria for hospitals from the Norwegian National Quality Indicator System. Indicators are categorised into three types:

- Outcome indicators
- Process indicators
- Patient satisfaction indicators

The redistribution is made based on the achievement of indicators. The quality-based financing represents around NOK 500 million or approximately 0.5% of the health regions' total block grant budgets.

Source: Beck Olsen, C. and G. Brandborg (2016[17]), *Quality Based Financing in Norway*.

Sub-national governments and social health insurance agencies have also moved towards more performance-orientated budgeting. For example, in 2012, Alberta initiated a Results Based Budgeting Act, requiring the Government of Alberta to review the relevance, effectiveness, and efficiency of all government programmes and services. Since 2012, the results-based budgeting process has reviewed over 500 programmes, including primary care and health benefits, and acute and continuing care. The process produces a set of recommendations, which are used to make programmes and services more cost-effective and aligned with the priorities and needs of Albertans (Government of Alberta, 2016[18]). Similarly, New South Wales, Australia integrates indicators into budgets to facilitate performance-informed decision making and promote transparency on the performance of Government agencies.

6.7.1. Performance indicators measure the progress towards programme goals and outcomes

Performance information is at the core of performance budgeting frameworks to inform and provide context for budget allocations. The volume of performance information included within budget documents varies substantively across OECD countries (Table 6.16). Spain tracks over 400 performance indicators alongside health budget programmes. In comparison, the volume of performance indicators in budget documents is lowest in Estonia, France, Latvia and Norway.

Table 6.16. Number of performance indicators included in performance budgeting frameworks for health at central level

Very High (400+)	Spain
High (100-300)	Australia, Mexico, New Zealand,
Medium (50-100)	Canada, Italy, the Netherlands, Sweden
Low (<60)	Estonia, France, Latvia, Norway

Note: The health budget refers to the central health budget as defined in Table 3.2.
Source: From an analysis of 2021/22 budgets for health expenditure.

Some OECD countries are choosing to reduce the number of performance indicators included in budget documents. This is true in Chile, France, Italy, Mexico, New Zealand and Norway. Early efforts to move towards a performance-based budget in the Netherlands resulted in a high number of performance indicators being tracked in budget documents. This led to high administrative burden for line ministries, and budget documents that contained lengthy and often irrelevant information. Reform in 2011 reduced the number of performance indicators in budget documents (Kooij, 2017[19]). Between 2011 and 2021, France reduced the number of indicators for Ministry of Health programmes from 23 to 9. Indicators chosen must be relevant, auditable, and useful, and they must give priority to measures that can be used to improve services or reduce costs. Indicators that do not respond to strategic goals or large budget items should no longer be reported. In New Zealand there needs to be strong justification for the inclusion of new performance indicators, and these generally replace existing indicators, to ensure that the number does not increase over time.

6.7.2. Using a mix of indicator types

A common way to classify different types of indicators is by different stages of programme implementation. Indicators can be used to measure the inputs, activities, outputs, or outcomes of a programme (Table 6.17). Indicators are also commonly classified into those that measure quality or those that measure efficiency.

Table 6.17. Types of performance indicators

Inputs	Measures of the units of labour, capital, goods, and services (or the costs of such units) utilised by government organisations or government-financed organisations to produce public goods and services.
Activities	Actions taken or work performed through which inputs, such as financial other types of resources are mobilised to produce specific outputs.
Outputs	Outputs are defined as goods and services produced and/or provided by government (or government financed) organisations.
Outcomes	Outcomes refer to what is ultimately achieved by an activity. Outcomes reflect the intended and/or unintended results of government actions (e.g. policies, programmes, and other activities).

Source: 2018 OECD Performance Budgeting Survey Glossary.

Outcome indicators are the most commonly used indicator in performance frameworks across analysed OECD countries. Examples include measures of life expectancy, and population risk factors such as smoking, alcohol consumption and obesity rates. Outcomes are a broader performance measure than outputs and their measurement is therefore generally harder since factors outside the health sector also play a role in influencing outcomes. In Australia, the central budget is structured around the intended outcomes of government spending by entities. However, the government has struggled ensuring that budget outcomes are attributable to the government entities responsible for them (Box 6.12).

Box 6.12. Outcome budgeting: Australia

In Australia, the central budget is structured around the intended outcomes of government spending. In the earlier years of outcome budgeting, concerns were raised over the specificity of outcomes, with many being too broad. This led to confusion over how public money had been spent, and the problem that outcomes could be attributable to the work of other government sectors. There were also concerns that spending could be shifted between outcomes for political purposes without parliamentary approval. A review in 2008 of the outcome framework concluded that budget outcomes must be more detailed and meaningful and must report an additional sub-level of detail (Australian Government, 2008[20]). Table 6.18 shows the evolution of outcomes for the Department of Health. Outcomes became tighter with more binding descriptions, along with improved reporting on measurable targets and performance indicators.

Table 6.18. Outcome framework in Australia

2008-09	2009-10
Population health – The incidence of preventable mortality, illness and injury in Australians is minimised	*Population Health* – A reduction in the incidence of preventable mortality and morbidity in Australia, including through regulation and national initiatives that support healthy lifestyles and disease prevention.
Access to Pharmaceutical Services – Australians have access to cost-effective medicines	*Access to Pharmaceutical Services* – Access to cost-effective medicines, including through the Pharmaceutical Benefits Scheme and related subsidies, and assistance for medication management through industry partnerships
Access to Medical Services – Australians have access to cost-effective medical services	*Access to Medical Services* – Access to cost-effective medical, practice nursing and allied health services, including through Medicare subsidies for clinically relevant services.
Primary Care – Australians have access to high quality, well integrated and cost-effective primary care.	*Primary Care* – Access to comprehensive, community-based healthcare, including through first point of call services for prevention, diagnosis, and treatment of ill-health, and for ongoing management of chronic disease.
Rural Health – Improved health outcomes for Australians living in regional, rural, and remote locations	*Rural Health* – Access to health services for people living in rural, regional, and remote Australia, including through health infrastructure and outreach services.
Hearing Services – Australians have access through the Hearing Services Program to hearing services and devices.	*Hearing Services* – A reduction in the incidence and consequence of hearing loss, including through research and prevention activities, and access to hearing services and devices for eligible people.

Source: Australian Government, Portfolio Budget Statements archived.

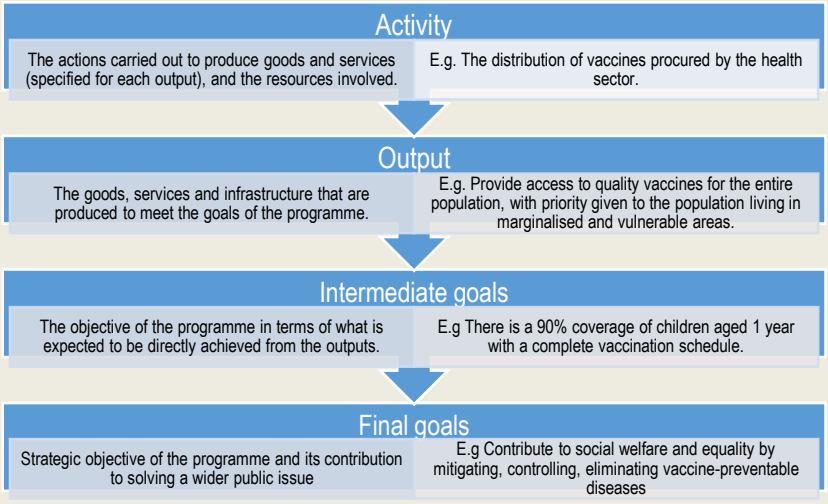
Many countries track different types of performance indicators to help to ensure that both short term progress and long-term goals are captured. For example, the performance framework in Mexico includes four levels of performance indicators (Box 6.13). Latvia's performance framework includes input, performance, quality indicators, and outcome indicators. Performance indicators in Canada measure programme inputs such as expenditure and workforce numbers, as well as high-level outcomes such as unmet need for healthcare.

Box 6.13. Performance indicator structure: Mexico

In 2007, Mexico developed the Performance Evaluation System (Sistema de Evaluación del Desempeño, SED), an instrument to measure the performance of budget programmes. This covers all Ministry of Health programmes, such as prevention of diseases and addictions, vaccination, training of medical professionals, protection against sanitary risks, and epidemiological surveillance.

Performance indicators are reported through the Matrices of Indicators for Results (MIR), a four-tiered indicator structure for each programme. The indicators follow a vertical logic, in that there is a causal relationship from the activities up to the final goal (Figure 6.3).

Figure 6.3. Indicator hierarchy



Source: Lakin (2018[8]), "Program Budgeting for Health Within Mexico's Results-Based Budgeting Framework", https://internationalbudget.org/wp-content/uploads/case-study-health-budget-programs-in-mexico-ibp-2018.pdf; Secretaría de Hacienda y Crédito Público, (2022).

6.8. Conclusions

Many OECD countries have had a long history of programme budgeting – both across government and applied to the health sector – whereby programmes form the basis of budget appropriations. Isolating the impact of programme budgeting reforms on the efficiency and effectiveness of health spending is difficult. However, countries commonly cite programme budgeting reforms as a critical driver for relaxing tight spending controls for health agencies, and for improving transparency over how public resources are spent. At the same time, the operationality of programme budgeting for health can still be improved. In several OECD countries, despite programmes becoming the basis for budget appropriations, this is only an overlay – with budget execution still operating on the basis of more detailed inputs or institutional units.

References

Australian Government (2008), *Operation Sunglight: Enhancing Budget Transparency*, https://www.finance.gov.au/sites/default/files/operation-sunlight-enhancing-budget-transparency.pdf. [20]

Beazley, I. and A. Ruiz Rivadeneira (2021), "Chile: Review of DIPRES' programme evaluation system", *OECD Journal on Budgeting*, https://doi.org/10.1787/a0f4eba0-en. [24]

Beck Olsen, C. and G. Brandborg (2016), *Quality Based Financing in Norway*. [17]

Blöndal, J., L. von Trapp and E. Hammer (2016), "Budgeting in Italy", *OECD Journal on Budgeting*, Vol. 15/3, https://doi.org/10.1787/budget-15-5jm0qg8kq1d2. [16]

Bloomfield, A. (2019), "What Does a Wellbeing Budget Mean for Health and Health Care?", *The Milbank Quarterly*, Vol. 97/4, pp. 897-900, https://doi.org/10.1111/1468-0009.12428. [26]

Canadian Institute for Health Information (2016), *National Health Expenditure Trends,1975 to 2016*, CIHI, https://secure.cihi.ca/free_products/NHEX-Trends-Narrative-Report_2016_EN.pdf. [14]

Cuadrado, C. et al. (2022), "Financing Primary Health Care in Chile: An Assessment of the Capitation Mechanism for Primary Health Care", *Lancet Global Health Commission on Financing Primary Health Care*. [21]

Department of the Prime Minister and Cabinet, New Zealand (2022), *Health and Disability System Reform – national budget and funding*. [10]

DIPRES (2018), *Evaluación de la Gestión Financiera del Gobierno Central en el año 2017*, Dirección de Presupuestos, Ministerio de Hacienda de Chile, http://www.dipres.cl (accessed on 17 February 2019). [23]

Government of Alberta (2016), *Results-based Budgeting Report to Albertans*, https://open.alberta.ca/dataset/afaede67-1469-4d54-a091-573a0aa6aa64/resource/a4d1311b-86d6-46fb-85a7-bbb967443c63/download/2016-1121-results-based-budgeting-report-to-albertans.pdf. [18]

Government of Latvia (2021), "Distribution and use of allocated funds", https://covid19.gov.lv/atbalsts-sabiedribai/ekonomika/finansu-ieguldijums-krizes-parvaresanai/pieskirto-lidzeklu. [25]

Hanson, K. et al. (2022), "The Lancet Global Health Commission on financing primary health care: putting people at the centre", *The Lancet Global Health*, Vol. 10/5, pp. e715-e772, https://doi.org/10.1016/s2214-109x(22)00005-5. [13]

Jacobs, D., J. Hélis and D. Bouley (2009), "Budget Classification", https://blog-pfm.imf.org/files/fad-technical-manual-6.pdf. [5]

James, C. et al. (2019), "Decentralisation in the health sector and responsibilities across levels of government: Impact on spending decisions and the budget", *OECD Journal on Budgeting*, Vol. 19/3, https://doi.org/10.1787/c2c2058c-en. [3]

Kooij, W. (2017), *Case study of Netherlands - performance management and indicators*, https://www.mk.gov.lv/sites/default/files/editor/niderlande_wim_kooij.pdf. [19]

Kraan, D. (2008), "Programme Budgeting in OECD countries", *OECD Journal on Budgeting*, https://doi.org/10.1787/budget-v7-art18-en. [1]

Lakin, J. (2018), "Program Budgeting for Health Within Mexico's Results-Based Budgeting Framework", https://internationalbudget.org/wp-content/uploads/case-study-health-budget-programs-in-mexico-ibp-2018.pdf. [8]

Moretti, D. and D. Kraan (2018), *Budgeting in France*. [11]

New South Wales (2020), *Budget Paper No. 2*. [12]

OECD (2023), *OECD Health Statistics 2023*, https://doi.org/10.1787/health-data-en. [7]

OECD (2023), *OECD Performance Budgeting Framework*. [6]

OECD (2019), *OECD Good Practices for Performance Budgeting*, OECD Publishing, Paris, https://doi.org/10.1787/c90b0305-en. [9]

OECD (2018), *OECD Performance Budgeting Survey*. [2]

Paul-Émile Arsenault, B. (2011), *Fiscal Governance in Canada: A Comparison of the Budget Practices and Processes of the Federal Government and the Governments of the Provinces and Territories*, http://etatscanadiens-canadiangovernments.enap.ca/etatscanadiens-canadiangovernments/docs/Budget-Report-ENG_FINAL.pdf. [15]

The New Zealand Treasury (2019), "The Wellbeing Budget", https://www.treasury.govt.nz/sites/default/files/2019-05/b19-wellbeing-budget.pdf. [27]

Vammalle, C., C. Penn and C. James (2023), "Applying good budgeting practices to health", *OECD Journal on Budgeting*, https://doi.org/10.1787/b280297f-en. [4]

Vammalle, C. and A. Ruiz Rivadeneira (2017), "Budgeting in Chile", *OECD Journal on Budgeting*, https://doi.org/10.1787/budget-16-5jfw22b3c0r3. [22]

Annex 6.A. Programme budgets for health

Annex Table 6.A.1. Programme budgets for health

Australia (Department of Health)	Australia (New South Wales)	Canada
1. Health Policy, Access, and Support: Better equip Australia to meet current and future health needs of all Australians through the delivery of evidence-based health policies; improved access to comprehensive and co-ordinated healthcare; ensuring sustainable funding for health services, research and technologies; and protecting the health and safety of the Australian community. 2. Individual Health Benefits: Ensuring improved access for all Australians to cost-effective and affordable medicines, medical, dental and hearing services; improved choice in healthcare services, through guaranteeing Medicare and the Pharmaceutical Benefits Scheme; supporting targeted assistance strategies and private health insurance. 3. Ageing and Aged Care: Improved well-being for senior Australians through targeted support, access to appropriate, high quality care, and related information services. 4. Sport and Recreation: Improved opportunities for community participation in sport and recreation, excellence in high-performance athletes, and protecting the integrity of sport through investment in sport infrastructure, co-ordination of Commonwealth involvement in major sporting events, and research and international co-operation on sport issues.	1. People receive high-quality, safe care in our hospitals 2. People can access care in out of hospital settings to manage their health and well-being 3. People receive timely emergency care 4. Keeping people healthy through prevention and health promotion 5. Our people and systems are continuously improving to deliver the best health outcomes and experiences	*Health Canada* 1. Healthcare Systems 2. Health Protection and Promotion *Internal Services* 1. Canadian Food Inspection Agency 2. Safe Food and Healthy Plants and Animals 3. Internal Services *Public Health Agency Canada* 1. Infectious Disease Prevention and Control 2. Health Security 3. Health Promotion and Chronic Disease Prevention 4. Internal Services *Canadian Institute of Health Research* 1. Funding Health Research and Training 2. Internal Services *Patented Medicine Prices Review Board* 1. Regulate Patented Medicine Prices 2. Internal Services

Source: From an analysis of 2021/22 budgets for health expenditure.

Annex Table 6.A.2. Programme budgets for health

Canada (Alberta)	Canada (Ontario)	Chile
1. Ministry Support Services	1. Ministry Administration Programme	1. Primary healthcare
2. Alberta Health Services	2. Health Policy and Research Program	2. Programme of institutional benefits
3. Physician Compensation and Development	3. Digital Health and Information Management Program	3. Hospital Financing by DRG
4. Drugs and Supplemental Health Benefits	4. Ontario Health Insurance Program	4. Under-Secretariat of Public Health (USPH)
5. Addiction and Mental Health	5. Population and Public Health Program	5. Under-Secretariat of Healthcare Networks (USHCN)
6. Primary Healthcare	6. Provincial Programs and Stewardship	6. Health sector investment
7. Population and Public Health	7. Information Systems	
8. Allied Health Services	8. Health Services and Programs	
9. Human Tissue and Blood Services	9. Health Capital Program	
10. Support Programs		
11. Out-of-Province Healthcare Services		
12. Information Technology		
13. Cancer Research and Prevention Investment		
14. Infrastructure Support		
15. COVID-19 Pandemic Response		

Estonia	France
1. Healthy Environment	1. Prevention, Health Security and Healthcare
2. Healthy Choices	2. Health Protection
3. People-centred Healthcare	

Source: From an analysis of 2021/22 budgets for health expenditure.

Annex Table 6.A.3. Programme budgets for health

Italy	Latvia	Mexico
1. Prevention and health promotion for aircrew	1. Medical education	1. Education and Training of Human Resources for Health
2. Veterinary public health	2. Culture	2. Research and Technological Development in Health
3. Planning of the national health service for delivery of essential levels of care	3. Provision of healthcare	3. Healthcare
4. Regulatory and supervision of pharmaceuticals and other health products for human use	4. Ensuring the fulfillment of international obligations and contracts	4. Addiction Prevention and Care
5. Supervision of institutions and safety of care	5. Provision of specialised healthcare	5. Vaccination Program
6. Communication and promotion for the protection of human health and veterinary public health and international activities and co-ordination	6. Administration of healthcare financing	6. Comprehensive Social Assistance Services
7. Supervision, prevention and enforcement in the health sector	7. Monitoring of the health sector	7. Protection and Restitution of the Rights of Children and Adolescents
8. Food safety and nutrition	8. Implementation of European Regional Development Fund (ERDF) projects and measures	8. Care Programme for People with Disabilities
9. Advisory activity for the protection of health	9. Implementation of European Social Fund (ESF) projects and measures	9. Strengthening Healthcare
10. Information systems for the national health service	10. Implementation of European Community initiative projects	10. Quality in Healthcare
11. Regulation and supervision of health professions	11. Implementation of cross-border co-operation programmes, projects, and activities under the European territorial co-operation goal	11. Prevention and Control of Overweight, Obesity and Diabetes
12. General co-ordination on health protection, innovation, and international policies	12. Implementation of projects and activities of other European Union policy instruments	12. Epidemiological Surveillance
13. Research for the health sector	13. Sector management and planning of health policies	13. Strengthening State Health Services
14. Research for zoo prophylactic		14. Free Healthcare and Medicines for the Uninsured Population
15. Political guidance		15. National Reconstruction Programme
16. General services and business for the administrations		16. Real Estate Projects (Administrative offices)
		17. Infrastructure Maintenance
		18. Stewardship in Health
		19. Social Assistance and Patient Protection
		20. Prevention and Care of HIV/AIDS and Other STIs
		21. Maternal, Sexual and Reproductive Health
		22. Protection against Health Risks
		23. Regulation and Monitoring of Health Care Facilities and Services
		24. Activities in Support of the Civil Service and Good Governance
		25. Administrative Support Activities

Source: From an analysis of 2021/22 budgets for health expenditure.

Annex Table 6.A.4. Programme budgets for health

Netherlands	New Zealand	Norway
1. Public Health	1. Ministry of Health – Capital Expenditure PLA	1. Ministry of Health and Care Services
2. Curative Care	2. Aged Care Commissioner	2. Public Health
3. Long-term Care and Support	3. Delivering hauora Māori services	3. Specialist Health Services
4. Care-wide Policy	4. Delivering Hospital and Specialist Services	4. Central Health Management
5. Youth	5. Delivering Primary, Community, Public and Population Health Services	5. Health and Care Services in the Municipalities
6. Sport and Exercise	6. Monitoring and Protecting Health and Disability Consumer Interests	6. Dental Health
7. War Victims and World War II Remembrance	7. National Management of Pharmaceuticals	7. Knowledge and Competence
8. Allowance for Specific Costs	8. National Pharmaceuticals Purchasing	8. Specialist Health Services (National Health Insurance)
	9. Problem Gambling Services	9. Medical Care and Medicines
	10. Strengthening International Health Systems	10. Other Health Measures
	11. International Health Organisations	
	12. Legal Expenses	
	13. Capital investment in Health New Zealand	
	14. Remediation and resolution of Holidays Act 2003 historical claims	
	15. Residential Care Loans – Payments	
	16. Standby Credit to Support Health System Liquidity	
	17. Health Capital Envelope	
	18. Implementing the COVID-19 Vaccine Strategy MCA	
	19. Stewardship of the New Zealand health system	
	20. National Response to COVID-19 Across the Health Sector	
	21. Health Capital Envelope	

Spain	Spain (Catalonia)	Sweden
1. Recovery and Resilience	1. General management and administration	1. The Swedish National Agency for Medical and Social Evaluation
2. Recovery Aid for Europe's Cohesion and Territories (REACT-EU)	2. Primary healthcare	2. National Board of Health and Welfare
3. Directorate and General Health Services	3. Specialised healthcare	3. The Swedish Dental and Pharmaceutical Benefits Agency
4. Health Policies and Professional Regulation	4. Public health	4. Dental care benefits
5. Health Benefits and Pharmacy	5. Internal transfers for health services	5. Subsidies for pharmaceutical benefits
6. Public Health, External Health and Quality	6. Other health services	6. Subsidies for public health and medical care
7. Donation and Transplantation of Organs, Tissues and Cells	7. Biomedical and health sciences R+D	7. Healthcare in international relations
8. Digital Health, Information and Innovation of the National Health System		8. Subsidy for psychiatry
		9. Medical Products Agency
		10. The e-Health Authority
		11. Performance-related measures to reduce waiting times
		12. Health and Social Care Inspectorate
		13. Public Health Authority
		14. Vaccine preparedness measures
		15. Contribution to WHO
		16. Measures to combat HIV/AIDS and other communicable diseases
		17. Measures concerning alcohol, drugs, doping, tobacco and gambling
		18. The Swedish Agency for Health and Care Analysis

Source: From an analysis of 2021/22 budgets for health expenditure.

Annex 6.B. Programme and performance budgeting for health: Country case studies

Key findings

- **Chile** has a long history of programme budgeting reforms. However, budget programmes are rarely specified in terms of related objectives of public spending. Instead, budget programmes typically correspond to the different institutions in the health sector.
- Nevertheless, **Chile** has a robust evaluation system, providing an abundance of relevant performance information. This performance budgeting structure in Chile has contributed to an increase in public transparency and accountability, both in terms of demonstrating to the public the objectives and activities that each public institution pursues, and the main results or measures of progress in relation with those objections and actions.
- **Latvia** has a well-developed programme budgeting structure in place for the health system. The budget contains varying programme types, reflecting the various roles of the Ministry of Health. Most programmes and sub-programmes are service-based, organised around the level of care provided in the National Health System.
- **Latvia** has a clear reporting framework in place for programmes and sub-programmes, outlining the aims and activities within the scope of the programme. While there is no direct relationship between performance and funding, the results can be used as a justification for increasing or decreasing funding during the budget formulation stage.
- Health system reforms in 2022 in **New Zealand** led to a large restructuring of the programme budget structure. The new structure is predominantly organised around service-based programmes for primary care, hospital and specialist services, and pharmaceuticals. An important new programme provides Māori health services and ensures that all health services are delivered in a way that promotes equity and is in line with the original treaty with Maori (The Treaty of Waitangi). New Zealand intends that the new programme structure will contribute to the rebalancing of the system away from hospital and specialist services towards primary and community care, prevention, and health promotion.
- New Zealand has a clear and comprehensive performance framework, including a statement of what is intended to be achieved, and a performance assessment for each appropriation. This sets the expectations and directions for the health system and holds health entities accountable for result, within a wider accountability framework for whole-of-government.

Programme Budgeting for Health in Chile

Overview of health financing arrangements and budget process for health

Chile has a dual health system, with both significant public and private health insurance schemes. Public healthcare is provided by the government via the National Health Fund (FONASA) covering around 78% of the population. The public system is financed mainly through general taxation plus a compulsory contribution from a 7% payroll tax, which is pooled and managed by FONASA. Private healthcare is

delivered through the Institutions of Health Insurance (ISAPRE) covering 18% of the population. The following analysis covers the public health system in Chile.

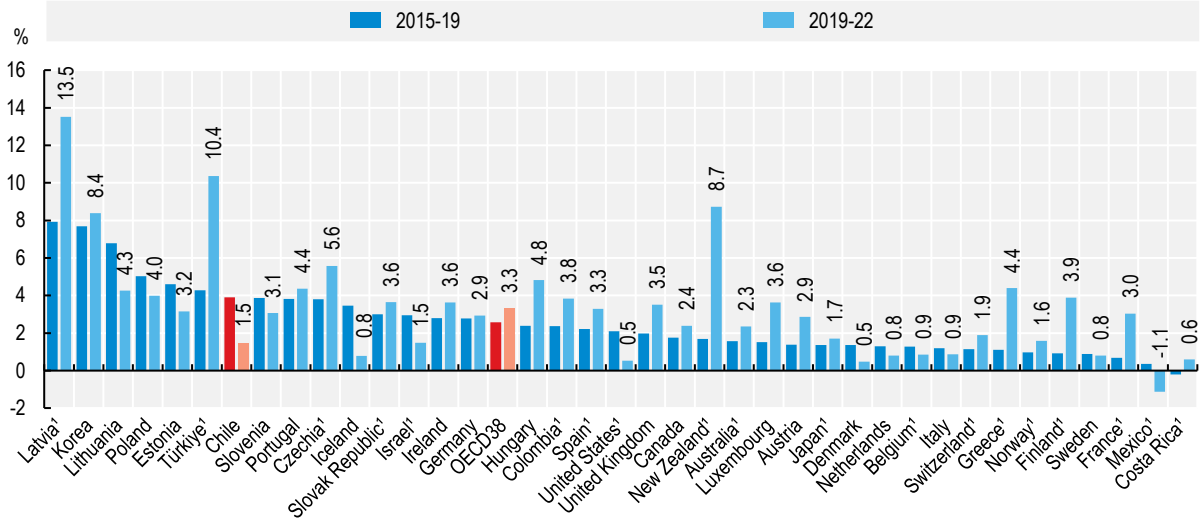
The Ministry of Health has a stewardship role, responsible for formulating and setting health policies, and is supported by a network of public institutions (Annex Table 6.B.1). The delivery of healthcare services is relatively decentralised, with primary care services mainly provided by 345 municipalities. Hospital and specialist services are delivered by 29 Health Care Districts (HCD), which operate between the national and municipal level.

Annex Table 6.B.1. Institutions in the Chilean health sector

Agency	Responsibility
National Agency of Procurement for the Health Services / Central Nacional de Abastecimiento (CENABAST)	Manages the purchasing process for pharmaceuticals and other medical supplies
Superintendence of Health / Superintendencia de Salud (SIH)	Oversees and controls both FONASA and ISAPRE and supervises public and private healthcare providers
Institute of Public Health / Instituto de Salud Pública (IPH)	Promotes and protects the health of the population, and strengthens health controls through surveillance and research and development
Under-Secretariat of Health Care Networks / Subsecretaría de Redes Asistenciales (USHCN)	Leads budget planning and monitoring and works closely with FONASA to transfer resources and oversee the healthcare districts and municipalities. It provides directions to CENABAST to orientate the purchase of medicines and supplies
Under-Secretariat of Public Health / Subsecretaría de Salud Pública (USPH)	Provides public health interventions aimed at the general population

In recent years, Chile has put a particular emphasis on the health sector. Between 2015 and 2019, annual average per capita public expenditure on health grew by 3.9%, above the OECD average of 2.6% (Annex Figure 6.B.1). Despite this, in 2021, Chile spent 2 675 USD PPP per capita on health, just over half of the OECD average. Moreover, nearly third of all health expenditure in 2021 was financed through out-of-pocket payments by households compared to the OECD average of 18%.

Annex Figure 6.B.1. Average annual growth in per capita health expenditure (real terms), 2015-19 and 2019-22



1. Based on OECD estimates for 2022. Growth rates and time periods may have been adjusted to take account of breaks in series.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Chile has a strong top-down budgetary process led by the Direction of Budgeting (DIPRES) of the Ministry of Finance. Each year, institutions in the health sector are responsible for preparing their budget for the coming year. The Ministry of Health co-ordinates budget planning, execution, and monitoring across the institutions.

Programme budgeting in Chile dates to 1993, when DIPRES implemented a pilot of programme budgeting in five public institutions. From 2000, DIPRES designed a standard form for submitting requests for funding new programmes or increasing funding for existing programmes, to separate baseline and new expenditure. Alongside programme budgeting, in 1994, DIPRES launched a system of evaluation and performance information to improve resource allocation and performance in the public sector.

Programme budgeting structure for health

The national budget law in Chile is divided into portfolios (partidas), which correspond to Ministries and the Treasury. National health spending is under the Ministry of Health portfolio. Each portfolio is divided into chapters (capítulos), which are the different institutions in the health system. There are 39 chapters for the health sector. This includes the five institutions in the health sector (see Annex Table 6.B.1.), the 29 Health Care Districts, as well as an independent hospital and several health centres.

Each chapter is broken down into programmes (programas) (Annex Table 6.B.2). The programmes signalled in budget law have little flexibility and the resources must be used for the specific programme unless a special procedure can be agreed with DIPRES. Descriptions of programmes are not accompanied with any statement of expected outcomes or objectives of the resource allocation. Moreover, institutions are responsible for additional programmes not defined within budget law.

Annex Table 6.B.2. National budget law, Ministry of Health portfolio, 2023

Chapter	Programme
01 National Health Fund (FONASA)	National Health Fund programme
	Primary healthcare
	Programme of institutional benefits
	Hospital financing by DRG
04 Institute of Public Health (IPH)	
05 National Agency of Procurement for the Health Services (CENABAST)	
09 Under-Secretariat of Public Health (USPH)	USPH programme
	National complementary food programme
	Expanded programme of immunisation
	Complementary food programme for the elderly
	Medical and maternity leave payment
	Emerging diseases programme
	National fund for health research and development
	Health promotion primary care programme
10 Under-Secretariat of Health Care Networks (USHCN)	USHCN programme
	Winter campaign programme
	Primary healthcare bonus for quality in user service
	Comprehensive child protection system
	New-born support programme
	Adult diapers for the elderly and people with disabilities
	Digital hospital programme
	Health sector investment programme
11 Superintendence of Health (SIH)	
19-47 Health Care Districts	Special programme on Indigenous health

Chapter	Programme
50 Hospital Padre Alberto Hurtado	
51 Maipú Health Centre	
52 Peñalolén Cordillera Oriente Health Centre	

Note: The programmes included in this table are the ones explicitly mentioned in the documents per each institution in the National Budget 2023 at the programme level.
Source: National Budget Law 2023, Chile.

Most of the budget under the health portfolio is allocated to the National Health Fund (FONASA) – the health insurer for the public health system. Programmes under FONASA are organised by the type of care to be delivered. Approximately 25% of the FONASA budget is allocated to the primary healthcare programme to finance the Family Health Plan delivered by municipalities (Annex Box 6.B.1).

Annex Box 6.B.1. Primary Healthcare programme

The Family Health Plan is an explicit benefits package designed by the central government. It provides most of the explicit guarantees for primary care. The primary healthcare programme under FONASA finances the delivery of the Family Health Plan by municipalities. In addition, municipalities finance a part of primary care themselves through their own revenues, which represented about 10% of the expenditures in 2019. Health districts operate between the national and municipal levels – overseeing the implementation of primary healthcare, approving municipal plans and organising staffing and resources within geographical areas (Cuadrado et al., 2022[21]).

Financing from the primary care programme is transferred to municipalities through a mix of mechanisms:

- Around 65% of resources are transferred through a capitation system that allocates resources for each person assigned to a respective municipality catchment area in reference to the Family Health Plan. The per capita amount is adjusted according to the characteristics of the municipality's population and geography, such as poverty, age structure, proportion of rural population, and areas classified as being difficult to work in.
- Other resources are transferred to finance specific programmes (e.g. urgent care centres) or through specific primary healthcare laws (e.g. pay-for-performance). An important pay-for performance-mechanism is the Primary Health Care Strengthening Programmes (PRAPS). The PRAPS is a payment to finance specific programmes that are not included in the Family Health Plan. Each programme is delivered through agreements between the Health Care districts and the corresponding municipality. The agreement stipulates the objectives of the programme that must be fulfilled along with deadlines and rules for the allocation. In 2022, PRARPS included programmes for rural emergency services, diagnostic imaging, and dental care.

The largest share of the FONASA budget (approximately 60%) is organised around two programmes for the financing of secondary and tertiary care. Two-thirds of financing is allocated to hospitals through Health Care Districts through the "Diagnostic Related Groups (DRG)" programme. The remainder is allocated through the "Programme of Institutional Benefits (PPI)". Under the PPI, resources are allocated to Health Care Districts based on the historical evolution of expenditures, covering the fixed costs of operation and activities not covered under the DRG mechanism. In addition, the 2021 budget for FONASA contained a new programme, to fund the emergency COVID-19 response (Annex Box 6.B.2).

Annex Box 6.B.2. The COVID-19 Transitory Emergency Fund

Chile created the COVID-19 Transitory Emergency Fund to address the economic effects of the pandemic and finance emergency measures in response to the COVID-19 pandemic. The fund covered additional health expenditure, protected the income of families and workers, provided additional resources for municipalities, contributed to social organisations, and promoted economic recovery. The Minister of Finance was responsible for the administration of the Fund, supplementing the 2021 budget of the Ministry of Health by 268 billion Chilean pesos. This included 153 billion for costs related to the COVID-19 vaccination campaign, and 115 billion associated with the costs of dealing with postponed care.

For other institutions beyond FONASA, budget programmes reflect the policy mandate of each institution and the interventions it must provide. Here, programmes are directed towards a specific population group or public health intervention. For example, budget programmes under the Under-Secretariat of Public Health (USPH) fund several interventions, including the national complementary food programme, the expanded programme of immunisations, the complementary food programme for the elderly, and the emerging diseases programme (which works on the preparedness and response to outbreaks). Similarly, the Under-Secretariat of Health Care Networks (USHCN) receives resources to manage programmes such as the new-born support programme.

However, much of the health budget does not correspond to traditional budget programmes – defined in terms of expenditures with related outputs of outcomes. Many of chapters, which correspond to the various institutions, contain just one programme for all expenditure with no corresponding statement of objectives (outcomes) or key services (outputs) for the programme. This is the case for the Institute of Public Health (IPH), National Agency of Procurement for the Health Services (CENABAST), Superintendence of Health (SIH), and the 29 Health Care Districts. Therefore, these programmes correspond to organisational criteria, rather than to the objectives of public spending. In addition, the programmes of many of the institutions include large amounts of money which represent transfers that are paid by the institution to other institutions to commission services. This blurs the transparency of the allocations of resources to policy objectives.

Use of budget restrictions within programmes

The budget law in Chile is very detailed compared to other OECD countries (Vammalle and Ruiz Rivadeneira, 2017[22]). Within programmes, expenditure is classified along the following broad economic categories which restricts the use of expenditure:

- Personnel expenditure
- Purchase of goods and services
- Current transfers: all contributions or subsidies, without consideration of goods or services, which are not included in the operational expenditures.
- Purchases of non-financial assets (subdivided into vehicles, machines and equipment, computer equipment and software)
- Capital transfers
- Debt service and liquidity

In addition to the above-mentioned restrictions, Chile's budget law has an important number of annotations (glosas). These are restrictions for specific appropriations, or earmark part of a larger appropriation for specific projects. For example, the programme for the Institute of Public Health (IPH) in 2023 included six

annotations, including restrictions on the maximum number of staff within the institution, overtime per year, and authorisations for per diem expenses.

Performance frameworks within programme-based budgets

Chile has a robust evaluation and control system, providing an abundance of performance information. In 2000, DIPRES created a "System of Evaluation and Management Control" that delivers information about the performance of public institutions. It disseminates performance information to contribute to greater transparency through the publication of documents that show methodological aspects and/or improvements under the system (DIPRES, 2018[23]). The system consists of different instruments, including the monitoring and follow up of performance indicators, programme evaluations, and wage incentives mechanisms. In relation to the health sector, the key instruments are the following:

- The Management Improvement Programme (PMG) is a reward system for central government employees in which bonuses are determined by organisational performance. It aims at improving management processes within agencies, against a pre-established benchmark. For the health sector, this includes central government employees of FONASA, National Agency of Procurement for the Health Services (CENABAST), Superintendence of Health (SIH), Institute of Public Health (IPH), Under-Secretariat of Health Care Networks (USHCN), and the Under-Secretariat of Public Health (USPH). Indicators are grouped into those that measure effective management, institutional efficiency, or quality of service. Examples of indicators include measures of the use of electronic systems, workplace accident rates, gender equity measures, measures of efficient procurement, and number of complaints. The monetary incentive corresponds to 7.6% of the remunerations if the institution reached a degree of compliance equal to or greater than 90% of the committed annual objectives, and of 3.8% if compliance was equal or greater to 75%.
- The Medical Law sets a bonus payments related to collective performance for around 12 000 workers in the health sector. Under the law, the Ministry of Health, in conjunction with the Ministry of Finance, defines a set of priority areas, objectives, and indicators with related targets for the 29 Health Care Districts. In March of each year, an evaluation of compliance to the indicators is carried out. Based on the evaluation and the available budget, directors of each Health Care District set pay bonuses to professionals within their network, up to a maximum of 10% of their total annual salary.
- DIPRES requests performance indicators through a single standard format (form H) associated with the delivery of products (goods or services) by public institutions. In the health sector, indicators measure performance across seven institutions, including FONASA, the Institute of Public Health (IPH), and Under-Secretariat of Health Care Networks (USHCN), and the National Agency of Procurement for the Health Services (CENABAST). Indicators are classified into either process, intermediate results, or output indicators that cover quality, efficiency, or economic dimensions. In 2023, there were 32 indicators across the seven health institutions.
- Chile also has a system of ex ante and ex post evaluations developed by DIPRES. Ex ante analysis of new spending programmes follows a well-developed methodology, involving co-operation between DIPRES, the Ministry of Social Development, and the Ministry of Health. The main objective of this type of assessment is to improve the quality of spending through systematic analysis of programme design, including the use of logical frameworks and indicators to create a strong basis for programme monitoring and evaluation. Ex-post evaluation considers programme design, processes, resource use, short and medium-term results, and whether programmes have achieved their intended outcomes. Evaluations are mainly used to modify programme design and management, rather than for budget allocation purposes. (Beazley and Ruiz Rivadeneira, 2021[24]). In 2022, Chile carried 11 ex ante programme evaluations, and 1 ex post programme evaluation for the health sector, both for programmes specified in budget law and for programmes not in the budget law.

Chile credits the performance budgeting system in realising several benefits. The performance budgeting initiatives have enhanced the collaboration between Ministry of Finance and Ministry of Health Officials, creating bridges for dialogue and project building among them. The performance budgeting structure in Chile has also contributed to improving public transparency and accountability, both in terms of showing the objectives and activities that each public institution pursues, and to release the main results or measures of progress in relation with those aims and actions.

While Chile has a long history of using budget programmes and performance indicators, some issues could still be improved. Although there is an abundance of performance information, the performance framework does not directly relate to programmes as specified in budget law. Instead, performance information focuses on performance management of the various institutions in the health sector, and wage-based incentive mechanisms for public-sector workers. Most programmes that undergo evaluation to not correspond to the programmes specified on budget law, undermining the value of evaluations as an instrument for supporting allocative choices. There has been an increase in the number of indicators collected for managerial and budgetary purposes, which overburdens the system and creates somewhat excessive bureaucracy. In addition, many of these schemes remained to be formally evaluated. This would provide relevant information to improve the system and, ultimately, enhance the value gained from their use.

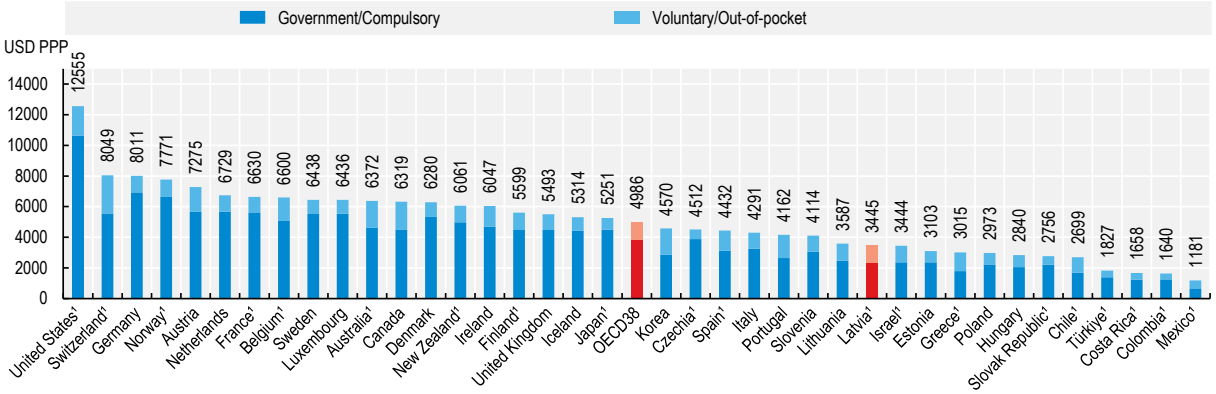
Programme budgeting for Health in Latvia

Overview of health financing arrangements and budget process for health

Latvia has a National Health Service, financed primarily from general tax revenues. The Ministry of Health has overall responsibility for developing national health policy and manages the overall organisation and functioning of the National Health System (NHS). The NHS acts a single purchaser of care services from national and local providers and is responsible for implementing policies developed by the Ministry of Health.

The health sector in Latvia is relatively under-resourced in comparison to OECD countries, with Latvia spending 3 445 USD PPP on health in 2022, compared to the OECD of 4 986 (Annex Figure 6.B.2). Public funding sources accounted for 69% of health expenditure in 2021, while nearly 30% of health expenditure was financed through out-of-pocket payments by households, considerably above the OECD average of 18%.

Annex Figure 6.B.2. Health expenditure per capita, 2022 (or nearest year)



1. OECD estimates for 2021.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

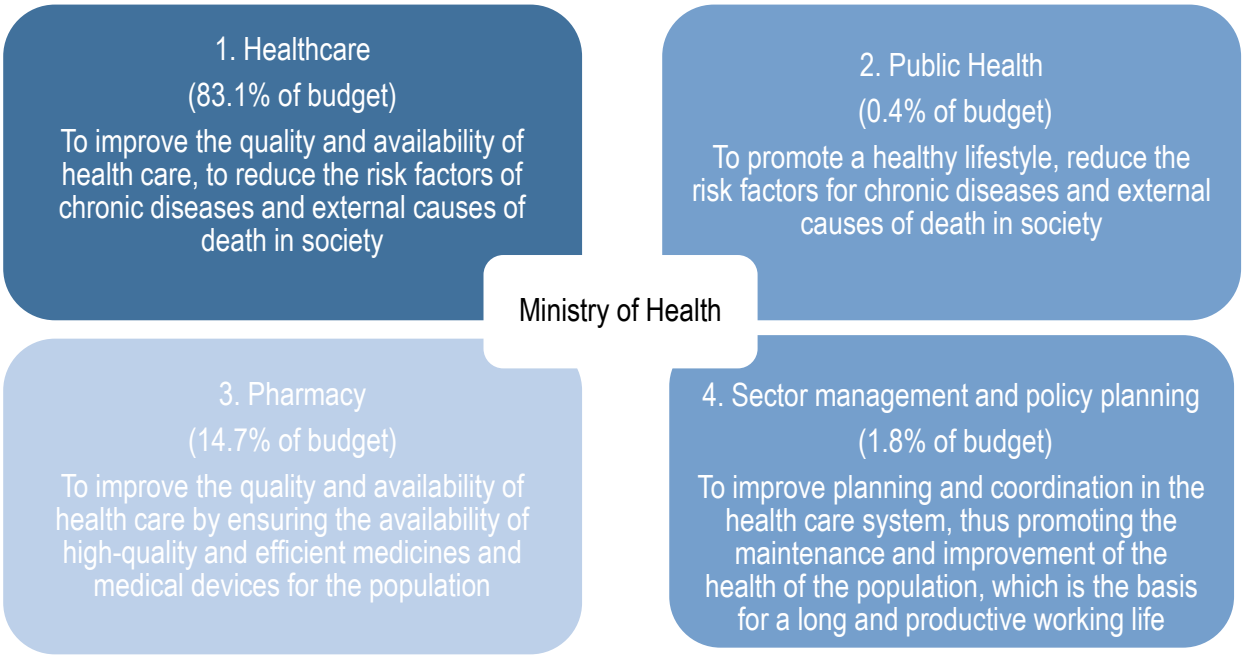
The responsibility for setting the budget for health in Latvia lies with the Ministry of Finance, the Ministry of Health, and the Cabinet of Ministers. The Ministry of Finance is responsible for gathering budget requests for submission and approval by the Cabinet of Ministers. The budget for the health sector is under the Ministry of Health, with the majority allocated to the National Health Service through programmes and sub-programmes. The national budget is the primary source of funds for the NHS. Other sources of financing include co-payments, EU funds, local government budgets, and the own revenue of state and municipal medical institutions.

In 2006, the Cabinet of Ministers in Latvia approved a new programme-based budget format with a three-year perspective.

Programme budgeting structure for health

For the Ministry of Health, budget appropriations concentrate on four policy targets. Most expenditure allocations fall under the "Healthcare" target (83.1% of the health budget in 2022). Under this target, appropriations cover the provision of core health services, including primary, secondary, and emergency care. The other policy targets include Public Health, Pharmacy and Sector Management and Policy Planning (Annex Figure 6.B.3). The policy targets represent the different roles of the Ministry of Health, and therefore their direction is stable over political changes and objectives.

Annex Figure 6.B.3. Policy targets for the Ministry of Health



Source: Budget 2022, Ministry of Finance of the Republic of Latvia.

Within each policy target, expenditure allocations are categorised into programmes and sub-programmes (Annex Table 6.B.3). Latvia defines programmes as '*mutually connected measures or services that are oriented to a common objective, and that are planned, implemented, recorded and controlled by bodies financed from the budget*'.

The budget of the Ministry of Health contains 34 sub-programmes, grouped in 13 programmes. Each sub-programme is the responsibility of a unique executor, and to a lesser extent, multiple sub-programme executors, in which case a separate financing plan is created for each executor. The details of sub-

programmes are contained within the Annex of the Draft Annual State Budget Law submitted to the Cabinet of Ministers.

There is close alignment between the sub-programme structure and the existing organisational structure of the health system. The NHS is the executor for most sub-programmes of the budget of the Ministry of Health. If the NHS wishes to reallocate between spending programmes or sub-programmes, it must submit proposals, including detailed calculations and explanations, to the Ministry of Health for evaluation. In addition, the proposal must also be approved by the Ministry of Finance or by the Cabinet of Ministers. Other agencies responsible for programmes include the Centre for Disease Prevention and Control, the National Centre of Forensic Medicine Expertise, the Health Inspection, the State Blood Donor centre, the Emergency medical Service, the Latvian Anti-Doping Bureau, and the Pauls Stradiņš Medicine History Museum.

Annex Table 6.B.3. Budget of the Ministry of Health

Policy target	Programme/sub-programme
	Medical education
1. Healthcare	Higher medical education
	Training of residents
	Culture
2. Public health	Museum of the History of Medicine
	Provision of healthcare
1. Healthcare	Provision of primary outpatient healthcare
	Provision of laboratory tests in outpatient care
	Provision of other outpatient health services
	Provision of emergency medical care in inpatient facilities
	Provision of scheduled in-patient healthcare services
	Healthcare for military pensioners of the Russian Federation
	Implementation of the population genome database project
	Provision of education in Children Clinical University Hospital
	Repayment of state-guaranteed loans
3. Pharmacy	Reimbursement of medicines and materials
	Centralised procurement of medicines and materials
	Medical treatment of rare diseases
	Ensuring the fulfilment of international obligations and contracts
4. Sector management and policy planning	Payments to international organisations
	Provision of specialised healthcare
1. Healthcare	Provision of blood and blood components
	Emergency medical assistance
	Forensic medical examination
	Implementation of anti-doping policy
	Administration of healthcare financing
1. Healthcare	Administration and economic evaluation of healthcare financing
	Ensuring the operation of the medical risk fund
	Monitoring of the health sector
1. Healthcare	Monitoring and control
2. Public health	Disease prevention
	Health promotion
4. Sector management and policy planning	**Sector management and planning of health policies**

Note: Excludes programmes associated with European Union projects.
Source: Budget 2022, Ministry of Finance of the Republic of Latvia.

The arrangement of programmes and sub-programmes across the budget of the Ministry of Health do not follow a consistent typology across the whole budget. This is a common trend across OECD countries.

Many sub-programmes are for direct service delivery and are organised by the type of service provided. Examples consists of “provision of primary outpatient healthcare”, and “provision of emergency medical care in inpatient facilities”. Expenditure baseline calculations derive from the established objectives and the associated resources expected to meet those objectives, calculated from a set of output indicators. However, regulations issued by the Cabinet of Ministers state that a minimum 45% of the healthcare budget is allocated to outpatient care, and a maximum of 53% to inpatient healthcare.

Other budget programmes resemble economic activities, rather than specifying the objectives of budget resources. For example, “Payments to international organisations” are transfer payments to ensure participation within various international health and pharmaceutical networks in accordance with international agreements”.

As is common across health budgets in OECD countries, the aggregation of programmes and sub-programmes aims to group expenditure that works towards achieving a common health objective. For example, the sub-programme “health promotion” is not associated with the provision of a single level of care, but the overall implementation of policies to achieve better public health. For such policy-based programmes, there is greater necessity for a link between resources and intended objectives, and for accountability mechanisms to be in place.

Latvia also uses several administrative or support programmes. Such programmes contain activities that are not for the provision of health services, but rather for activities that support a well-functioning health system. Separating such costs avoids the burden of allocating across programmes. The programme “administrative and economic evaluation of healthcare funding” for example contains expenditure for health service planning and managing e-health projects.

Lastly, the programme budgeting structure incorporates a programme to ensure the implementation of unforeseen measures, titled “funds for unforeseen events”. Funds are allocated to the programme for the prevention of disasters, and the compensation of losses caused by them. The response to the COVID-19 pandemic was included in this programme (Annex Box 6.B.3). Other uses of the programme include for the delivery of public sector services in case of non-fulfilment of existing contractual agreements with third parties, and other foreseen events of special national importance.

Annex Box 6.B.3. Financing the COVID-19 health sector response in Latvia

Measures related to the COVID-19 pandemic were primarily financed from the state and local government budgets. Upon the request from line ministries, the Cabinet of Ministers took decisions on measures for the prevention and management of COVID-19, as well as on the allocation of funding from the state budget programme "Funds for Unforeseen Events". The inclusion of a budget programme for contingency funds allowed for the rapid distribution of funds for response measures during the COVID-19 pandemic.

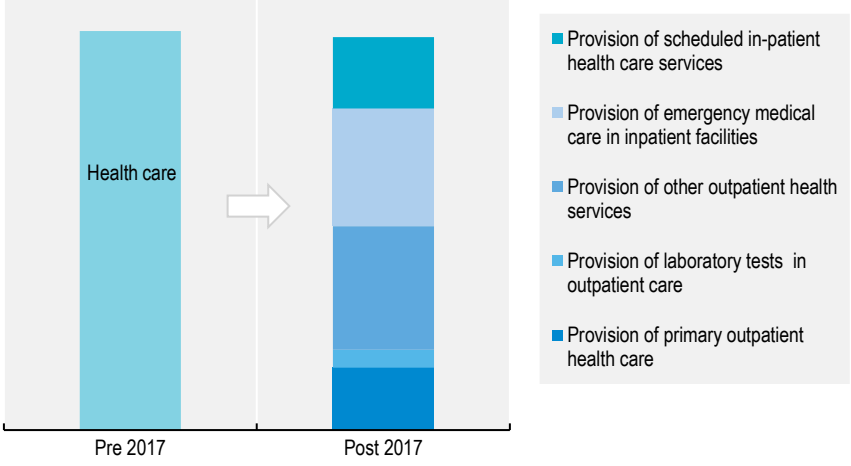
Up until January 2022, EUR 533 million was allocated to the Ministry of Health from the budget programme "Funds for Unforeseen Events" to finance response measures to COVID-19. This included:

- EUR 83 million to develop COVID-19 testing
- EUR 23.5 million for the purchase of medical equipment and supplies
- EUR 27.9 million for allowances for observation beds and intensive care beds
- EUR 63.3 million for outpatient and inpatient healthcare services, and for laboratory examinations
- EUR 54 million for the purchase, logistics and administration of COVID-19 vaccines
- EUR 155.4 million for bonuses and overtime for medical practitioners and other employees for work in high-risk and stressful situations in a situation of danger to public health in connection with the prevention of COVID-19 outbreaks and consequences.

Source: Government of Latvia (2021[25]), Distribution and use of allocated funds, https://covid19.gov.lv/atbalsts-sabiedribai/ekonomika/finansu-ieguldijums-krizes-parvaresanai/pieskirto-lidzeklu.

The programme budgeting structure in Latvia has developed over time, with a notable change occurring in 2017, when the "healthcare" programme was divided into smaller sub-programmes (Annex Figure 6.B.4) based on the type of healthcare service provided. This has improved the traceability and transparency of health expenditures.

Annex Figure 6.B.4. Change to the Ministry of Health programme structure 2017



Source: Ministry of Finance of the Republic of Latvia.

The programme budget structure includes spending controls

A fundamental benefit of programme budgeting is to increase flexibility for managers on the choice of inputs. Allowing managers to make spending decisions, rather than facing restrictions by detailed line-item controls should bring about efficiency in public spending.

However, as with other OECD countries that have moved towards programme budgeting, Latvia still maintains some expenditure controls. This helps mitigate the risk incurred by the Ministry of Finance by allowing programme managers more flexibility in the management of budget resources. The total expenditure for the Ministry of Health, along with programmes and sub-programmes, is broken down further by economic classification (Annex Table 6.B.4).

During the execution stage of the budget, reallocations between large economic categories, such as remuneration, goods and services, and capital expenditure require approval from the Ministry of Finance, the Cabinet of Ministers, or Parliament Budget committee. However, no permission is required for reallocating expenditure within lower economic categories.

Annex Table 6.B.4. Economic classification of expenditure groups

1.0 Maintenance costs
1.1 Current expenditure (remunerations, good and services)
1.2 Interest expenditure
1.3 Subsidies, grants, and social benefits
1.4 Current payments to the EU budget and international co-operation
2.0 Capital expenditure
3.0 Other

Source: Ministry of Finance of the Republic of Latvia.

The economic classification system for expenditure is used in planning, execution, and financial reporting of the budget. It also allows for analytical and statistical analysis of expenditure to provide the Ministry of Finance with informative data. During the financial year, if there are justified differences between the actual and planned expenditure, these can be corrected by a reallocation, increase, or decrease to programmes. This changes the lines approved in the annual budget but without amending the annual budget law.

Performance frameworks within programme-based budgets

Latvia has a national performance framework covering the publicly funded health budget. Along the change in budget structure towards programmes, the Cabinet of Ministers also committed to increasing the use of performance information within the budget. Performance information is integrated at multiple hierarchies, including policy targets and sub-programmes. Performance information is contained within the explanations to the budget bill discussed by the Cabinet of Ministers each year.

For each policy target, performance metrics are included in the form of a “Policy and Resource Management Scorecard” (Annex Table 6.B.5). The scorecards are the core framework for linking expenditure and other inputs with policy goals and results scrutiny by Parliamentary and budgetary analysis. Each policy target is associated with a performance target and performance indicators across four categories: policy, input, performance, and quality indicators. Updating of the indicators for specific policy targets takes place on a regular basis in response to political objectives.

Annex Table 6.B.5. Policy and Resource Management Scorecard

Healthcare					
Policy objective/ *Reference to policy planning document* To improve the quality and availability of healthcare. to reduce the spread of risk factors for chronic diseases and external causes of death in society/ *Latvia's National Development Plan for 2021-2027*					
Policy indicators	Source reference			Actual value (2020)	Target value (2024)
Deaths from HIV infection (number)	Public health guidelines for 2021-27			50	60
Death by suicide per 100.000population (number)	Public health guidelines for 2021-27			15.7	15.2
Infant mortality per 1.000 live births (number)	Public health guidelines for 2021-27			3.5	3.2
	2020	2021	2022	2023	2024
Input indicators					
Total Expenditure	1 064 043 223	1 188 960 198	1 251 396 024	1 245 952 740	1 246 764 02
Total Employees	4 341.9	4 332	4 331	4 332	4 332
Performance indicators					
Average duration of inpatient treatment (days)	7.7	8.1	8.1	8.2	8.2
Outpatient visits to secondary outpatient care specialists (number)	9 365 030	9 939 088	9 939 088	9 939 088	9 939 088
Emergency hospitalisations (number)	183 597	226 000	226 000	226 000	226 000
Quality indicators					
Reimbursements paid from the Medical Risk Fund for damage to the patient's life or health. as well as reimbursements for medical expenses(euro)	892 170	1 871 386	1 871 386	1 421 386	1 421 386

Source: Budget 2021, Ministry Finance of the Republic of Latvia.

Policy targets as defined on budget documents are closely linked to the general national government strategic plans, as well as with detailed strategic plans of the Ministry of Health. Policy targets align with the National Development Plan (NDP) of Latvia for 2021-27. The National Development Plan is the national-level medium term planning document for Latvia, setting medium-term priorities, and outlining the areas of action, objectives, and indicators for implementation. The policy target "Pharmacy" is associated with the Public Health Policy Guidelines 2014-20. The guidelines also help planning the medium-term public health policy and align with the National Development Plan. This ensures that policy decisions centre on the key issues within Latvia, in particular death from non-communicable diseases, which is the leading cause of avoidable death in Latvia.

The use of performance information extends to the sub-programme level (Annex Table 6.B.6). The framework outlines the purpose of the sub-programme, along with the main activities and the sub-programme executor. Each sub-programme is linked to performance indicators which detail the annual plan and 2-year future forecasts. Latvia mainly uses output indicators, with an average of four indicators per sub-programme.

Annex Table 6.B.6. Example of performance reporting for sub-programmes

Sub-programme	33.14.00 Provision of primary outpatient healthcare				
Purpose of the sub-programme	To provide primary outpatient healthcare services paid from the state budget in accordance with the tariffs and payment conditions specified, including services provided by family doctors, dental services for children under 18 age and persons exposed to radiation as a result of the Chernobyl accident, home healthcare services for patients with chronic diseases and mobility impairments, and other primary care services.				
Main activities	The payment of primary outpatient healthcare services paid from the state budget to medical institutions is ensured in accordance with the tariffs and payment conditions specified in Cabinet Regulation No. 555 of 28 August 2018 "Procedure for Organization and Payment of Healthcare Services", as well as compensation of patient contributions for those categories of the population which, in accordance with the provisions of regulatory enactments, are exempt from the patient contribution.				
Sub-programme executor	National Health Service				
Operating results and their performance indicators for 2019-23					
Improved availability and quality of primary healthcare services					
	2019 execution	2020 plan	2021 plan	2022 forecast	2023 forecast
GPs who provide healthcare services from the state budget (in contractual relations with the NHS) (number)	1 287	1 287	1 287	1 287	1 287
Average number of registered patients per GP practice (number)	1 557	1 513	1 569	1 569	1 569
Outpatient visits to GPs per year, publicly paid services (number)	5 816 493	5 976 776	5 976 776	5 976 776	5 976 776
Service providers in paediatric dentistry (number)	270	258	258	258	258
Dentistry visits (number)	506 265	503 234	503 234	503 234	503 234
GP practices with a second nurse (number)	787	766	792	792	792
Coverage of preventive examinations performed by patients registered with the GP (patients aged 18 years) (%)	31	30	30	30	30
Home health visits (number)	361 128	384 974	384 974	384 974	384 974

Source: Budget 2021, Ministry Finance of the Republic of Latvia.

Despite this effort to create a rounded performance system, some indicators lack relevance to the policy objective, and are only partially attributable to the actions carried by the programmes and sub-programmes. For example, it is difficult to measure the success of the policy target 'Pharmacy' from an indicator of years of potential life lost, as it can be attributable to many government activities and external determinants. Moreover, the repetition of policy performance indicators, such as years of potential life lost and average life expectancy of new-borns, across multiple policy targets emphasises the lack of ability to measure the success of each policy target using broad outcome measures.

The results of performance scorecards influence spending allocations for the following budget year. While there is no direct relationship between funding and results, each year, the results of the performance scorecards for policy targets and sub-programmes are analysed. In the case of unfulfilled performance objectives, assessment takes place to determine the causes. While there is no direct relationship between results and funding, the results can be used as a justification for increasing or decreasing funding during the budget formulation stage.

Programme budgeting for Health in New Zealand

Overview of health financing arrangements and budget process for health

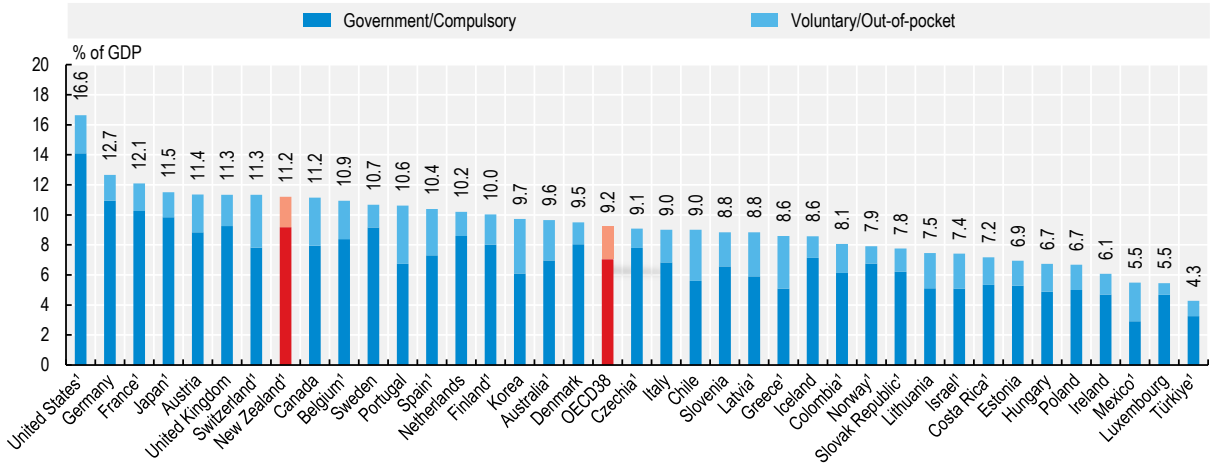
New Zealand has a national health system predominately financed through general taxation. Until 2022, 20 District Health Boards (DHBs) were responsible for managing and providing healthcare services to the population in each district. A 2018 review of the health system, however, concluded that over time, the setup of many distinct local bodies made the health system too fragmented and complex. As a result, in

2022, New Zealand disestablished the 20 DHBs and merged their functions into a new organisation Te Whatu Ora – Health New Zealand.

Te Whatu Ora manages all health services in New Zealand, including hospital and specialist services, and primary and community care. Hospital and specialist services are planned nationally, while primary health, well-being and community-based services are planned and purchased through four new regional divisions of Te Whatu Ora. The Ministry of Health will continue its role as strategic advisor and steward of the health system. A new, statutory entity, Te Aka Whai Ora – Māori Health Authority, in partnership with the Ministry of Health and Te Whatu Ora, is responsible for ensuring the health system works well for the Māori population.

Health expenditure is a major item in the budget of the New Zealand Government, accounting for around a fifth of total government expenditure. New Zealand spent 11.2% of its GDP on health in 2021, above the OECD average of 9.2% (Annex Figure 6.B.5).

Annex Figure 6.B.5. Health expenditure as share of GDP, 2021 (or nearest year)



1. OECD estimates for 2021.
Source: OECD Health Statistics 2023, https://doi.org/10.1787/health-data-en.

Each budget cycle, the Ministry of Health submits the budget for the health sector, known as the "Vote Health". The Ministry of Health is responsible for administering Vote Health, the primary source of funding for New Zealand's health service. New Zealand was one of the first countries to implement programme budgeting reforms, with the transition to 'output-based' appropriations in the late 1980s.

Programme budgeting structure for health

Recent reforms to the health system organisation in New Zealand have led to a restructuring of the output-based budget. Prior to the health system reform in 2022, Vote Health was organised around 54 'programmes', which included 20 appropriations for each one of the District Health Boards, and several appropriations for services nationally commissioned by the Ministry of Health. This mix of geographic and service-focused appropriations did not provide sufficient transparency to Parliament about how the Ministry of Health intended to use public money, created barriers for the integration of care, and caused an administrative burden to reallocate funding (Department of the Prime Minister and Cabinet, New Zealand, 2022[10])

From 2022, the Vote Health appropriation structure has shifted to a smaller but more consistent set of programmes to support a more meaningful authorisation by Parliament. The shift in the number of programmes mirrors the change to the health system from fragmented District Health Boards to a more centralised national health system.

As of 2022, Vote Health is organised into 20 programmes (Annex Table 6.B.7) that fit into one of the seven types of appropriations, as outlined by the Public Finance Act 1989. Individual appropriations are defined by their scope that establishes the legal boundary for what the appropriation can be used for.

The most common type of appropriation is output expenses. These group together goods and services of similar nature. Output expenses can be departmental (supplied by the Ministry of Health) or non-departmental (output produced by a supplier other than the Ministry of Health).

Most output expenses are organised around the type of health service to be delivered. Approximately half of the Vote is allocated to hospital and specialist services. A third of the Vote is allocated to the programme to deliver primary, community, public and population health services. Other output expenditures include the “delivering hauora Māori services” programme, financing the Māori Health Authority to deliver Māori services and support the development of Māori providers. A separate programme contains pharmaceutical expenditure. The implications of separate programmes for different health services were carefully considered during the health system reform (Annex Box 6.B.4).

Capital expenditure is contained within separate programme types and is also categorised into departmental and non-departmental. Departmental capital expenditure consists of the capital expenditure of the Ministry of Health. Non-departmental appropriations authorise capital expenditure on behalf of the government. This includes appropriations for the Health Capital Envelope, a multi-year funding envelope for new debt from which capital requirements in the health sector must be financed.

Annex Table 6.B.7. Titles of Appropriations for Vote Health programmes

Non-Departmental Output Expenses	Aged Care Commissioner
	Delivering Hauora Māori services
	Delivering Hospital and Specialist Services
	Delivering Primary, Community, Public and Population Health Services
	Monitoring and Protecting Health and Disability Consumer Interests
	National Management of Pharmaceuticals
	National Pharmaceuticals Purchasing
	Problem Gambling Services
	Strengthening International Health Systems
Non-Departmental Other Expenses	International Health Organisations
	Legal Expenses
Departmental Capital Expenditure	Ministry of Health – Capital Expenditure PLA
Non-Departmental Capital Expenditure	Capital Investment in Health New Zealand
	Remediation and resolution of Holidays Act 2003 historical claims
	Residential Care Loans – Payments
	Standby Credit to Support Health System Liquidity
Multi-Year Appropriations	
Non-Departmental Capital Expenditure	Health Capital Envelope
Multi-Category Expenses and Capital Expenditure	Implementing the COVID-19 Vaccine Strategy MCA
	Stewardship of the New Zealand health system
	National Response to COVID-19 Across the Health Sector

Source: Vote Health Estimates 2023/24, Government of New Zealand.

A multi-category appropriation covers the Ministry of Health's functions, including monitoring and advisory, and stewardship. Multi-category appropriations are used to provide financial flexibility across different categories of expenditure that contribute to a single overarching purpose, while preserving transparency about what is achieved. The appropriation stewardship finances activities including health research, policy advice, public health leadership, regulation and enforcements, and sector performance and monitoring. From 2021, the budget also contains new multi-category programmes dedicated to the national response to COVID-19 across the health sector and implementing the COVID-19 vaccination strategy.

Programmes classified as other expenses are a residual type of expense appropriation that cover expenditure that is not readily classified as one of the other appropriation types. This includes a programme for financing international health organisations, and the settlement of health sector legal claims.

Annex Box 6.B.4. Designing the new programme budget structure

A key motivation of the 2022 reform of the New Zealand health system was to balance the system away from hospital and specialist services towards primary and community care, prevention, and health promotion. In addition, the centralisation away from a high number of local bodies aims to address the opacity around financial performance and outcomes achieved at the local level.

The new programme structure is designed to support these objectives through:

- A narrowly defined programme for hospital and specialist services and a separate programme primary, community, public and population health. This adds control for any transfers of funding between these programmes. Under the previous organisation set-up, District Health Boards had single appropriation for both hospital and primary care. While creating separate programmes for hospital and primary may hinder service integration, New Zealand views that hospital and specialist care continuing to dominate over public health, primary and community care a greater risk. The new planning document – The New Zealand Health Plan – will provide guidance on collaboration between hospital and specialist care, as well as primary and community care.
- A separate programme for the new Māori Health Authority (MHA) enforces financial accountability and reporting responsibilities with the role of the MHA in the new system, and providing greater transparency to Parliament and public.
- A separate programme for pharmaceuticals under the responsibility of Pharmac – the New Zealand entity responsible for decisions on which medicines and pharmaceutical products are subsidised for public use. This aligns funding and reporting responsibilities with accountability for managing the pharmaceutical budget. This in turn aims to improve transparency and support a more optimal use of the budget, in particular for high-cost medicines. While a separate pharmaceutical programme risks creating a barrier in substituting pharmaceutical and non-pharmaceutical treatments in the face of new emerging evidence, New Zealand intends to overcome this barrier through joint oversight and planning arrangements for the health sector.

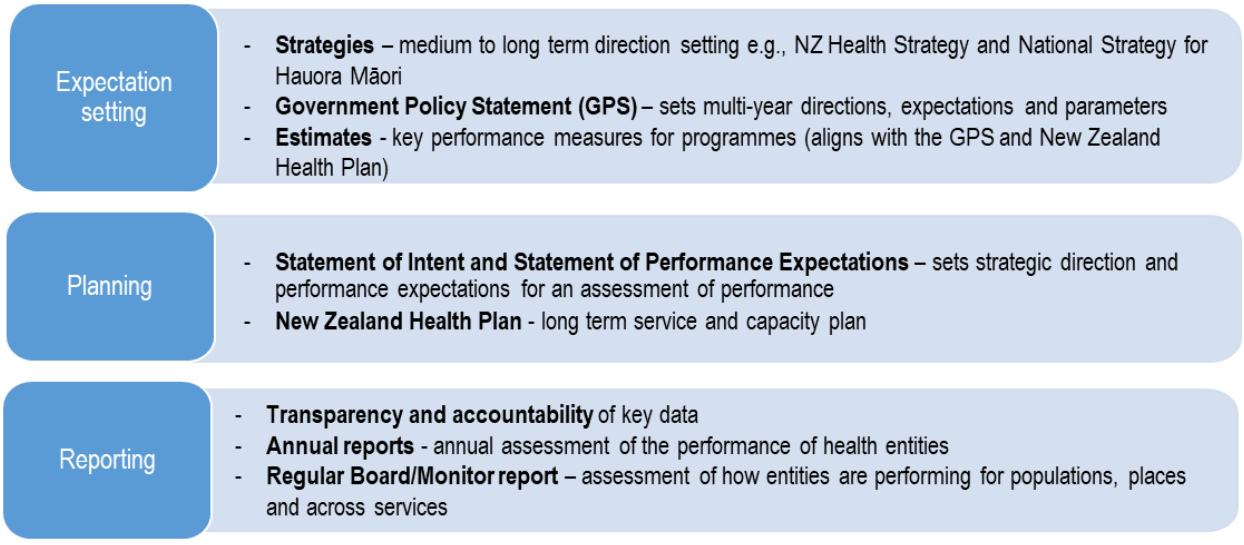
Source: Department of the Prime Minister and Cabinet, New Zealand (2022[10]), Health and Disability System Reform – national budget and funding.

Performance frameworks within programme-based budgets

Performance monitoring framework

The new budget structure in New Zealand is combined with accountability measures to support health sector planning and financial control. Mechanisms include expectation setting, planning, and reporting (Annex Figure 6.B.6).

Annex Figure 6.B.6. Overview of accountability mechanisms



Source: Department of the Prime Minister and Cabinet, New Zealand (2022[10]), Health and Disability System Reform – national budget and funding.

As part of expectation setting, performance information is integrated into the presentation of each appropriation approved by Parliament within budget documents (known as Estimates). Programmes are supplemented by a description of the scope of the appropriation, what should be achieved, and an explanation of how performance will be assessed and reported. Annex Table 6.B.8 shows an example of the performance assessment framework for the programme “delivering hospital and specialist services”.

Annex Table 6.B.8. Performance assessment framework

Delivering hospital and specialist services			
Scope of appropriation This appropriation is limited to hospital and specialist health services (including mental health services). **What is intended to be achieved with this appropriation** This appropriation is intended to secure hospital and specialist services for the eligible New Zealand population in line with existing service coverage expectations and operating policy requirements and to ensure service and system improvements are continuously progressed as set out in the interim New Zealand Health Plan.			
How performance will be assessed and end of year reporting			
Assessment of performance	2022/23		2023/24
	Final budgeted standard	Estimated actual	Budget standard
Percentage of patients are waiting over four months for first specialist assessment	0%	31%	0%
Percentage of patients who are waiting over 120 days for treatment	0%	46%	0%
Percentage of patients with accepted referrals for CT scans who receive their scan, and the scan results are reported, within 6 weeks (42 days)	95%	95%	95%
Percentage of patients with accepted referrals for MRI scans who receive their scan, and the scan results are reported, within 6 weeks (42 days)	90%	90%	90%
Percentage of patients (both acute and elective) who receive their cardiac surgery within the urgency timeframe based on their clinical urgency	100%	100%	100%
Percentage of patients admitted, discharged or transferred from an emergency department (ED) within six hours	95%	95%	95%

Source: Vote Health Estimates 2023/24, Government of New Zealand.

The 'standard' refers to the intended level of performance within a stated timeframe and therefore acts as a target. Indicators are specific to each appropriation, usually in the form of output indicators. Other indicators often included are activity indicators, with actions that are intended to be achieved with the appropriation. Over 200 indicators were included in the Vote Health document for 2023/24. As with other OECD countries with experience in performance budgeting, over the last five years the trend has been towards a decrease in the number of performance indicators used, as to reduce the administrative burden.

New Zealand identifies as having a performance-informed approach to performance budgeting, where performance information plays a role in spending decisions. However, this is in an indirect way, and there is no automatic link between resource allocations and performance. In the New Zealand budget system, performance indicators are closely linked to national outcome goals and government policy priorities. The Treasury, which is responsible for the budget process, sets quality standards for the selection and approval of performance indicators (OECD, 2018[2])..

The Well-being Budget

In 2019 the government delivered its first Well-being Budget (Annex Box 6.B.5), to help understand the impact of budget initiatives on the living standards of New Zealanders. The Living Standards Framework helps to analyse and measure the policy impact on inter-generational well-being of New Zealanders.

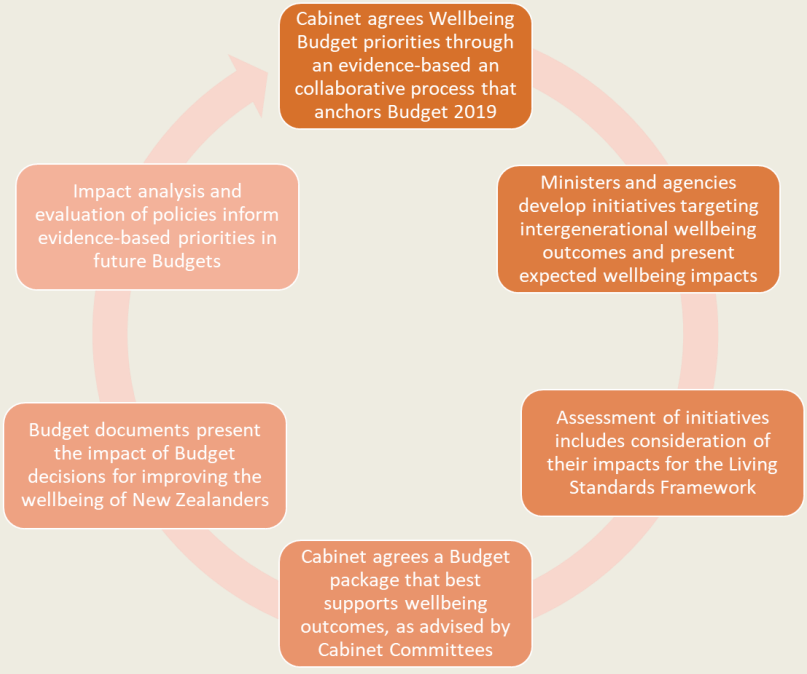
This affected the health sector in two ways:

- As health is one of the domains incorporated in the Living Standards Framework, health outcomes are considered by a wider range of government departments beyond the Ministry of Health. For example, the government investment in mental health was not concentrated only on the health sector but includes initiatives in the justice and education system as well (Bloomfield, 2019[26]).
- The adoption of the Well-being budget led to a substantial investment in mental health, as this was one of the five priorities of the 2019 budget.

Annex Box 6.B.5. New Zealand's well-being budget

The aim of the well-being budget is to look beyond normal fiscal and economic data as measures of success, by including measures of well-being. The idea is to deliver a budget that comments on the current well-being status of New Zealanders, as well as the impact of policy decisions for future well-being (Annex Figure 6.B.7).

Annex Figure 6.B.7. Well-being Budget Process



Source: The New Zealand Treasury (2019[27]), The Well-being Budget, https://www.treasury.govt.nz/sites/default/files/2019-05/b19-wellbeing-budget.pdf.

Some key changes to the budget process have occurred because of the Well-being budget:

- The Living Standards Framework, developed by the New Zealand Treasury, provides a wider approach for developing the budget strategy. The framework helps to analyse and measure the policy impact on inter-generational well-being of New Zealanders. The framework includes 12 domains of well-being outcomes, four capital stocks that support well-being now and, in the future, (natural capital, human capital, social capital and financial and physical capital), and elements of risk and resilience. Data from the Living Standards Framework is used to select the Well-being Budget priorities that would make the most difference to the well-being of New Zealanders.
- Secondly, the approach requires a well-being analysis of each bid for funding to make sure that funding would address these priorities. Agencies must identify expected impacts of the initiative across the Living Standards Framework domains and capitals. The approach also aims to break down agency silos and encourage cross-government policies for improving well-being.

Source: The New Zealand Treasury (2019[27]), The Well-being Budget, https://www.treasury.govt.nz/sites/default/files/2019-05/b19-wellbeing-budget.pdf.

Notes

[1] Note that programme implementation may ultimately lie with a large number of administrative units (hospitals, primary care facilities etc.), but this section refers to the allocation of programmes on budget appropriations.

Fiscal Sustainability of Health Systems

HOW TO FINANCE MORE RESILIENT HEALTH SYSTEMS WHEN MONEY IS TIGHT?

Finding sufficient funds to pay for more resilient health systems is challenging in the current economic context. COVID-19 has shown the need for additional targeted spending on public health interventions, the digital transformation of health systems, and bolstering the health workforce. Rising incomes, technological innovation and changing demographics put further upward pressure on health spending. This could result in health spending reaching 11.8% of GDP across OECD counties by 2040.

This publication explores the policy options to finance more resilient health systems whilst maintaining fiscal sustainability. It finds that the scale of the additional health financing needs requires ambitious and transformative policy changes. Robust actions to encourage healthier populations and policies to reduce ineffective spending can put future health expenditure on a far gentler upward trajectory. These would enable spending to reach a more sustainable 10.6% of GDP in 2040.

Better budgetary governance is critical. It improves how public funds for health are determined, executed and evaluated. Therefore, a focus of this report is on how good budgeting practices can increase the efficiency of current public spending, and also enable more ambitious policy changes in the medium to longer-term. Findings of this report are targeted at health and finance policy makers, with improved dialogue between health and finance ministries especially important when governments are operating in a constrained fiscal setting.

PRINT ISBN 978-92-64-47608-0
PDF ISBN 978-92-64-39487-2

9 789264 476080