Global spending on health

Emerging from the pandemic

World Health Organization

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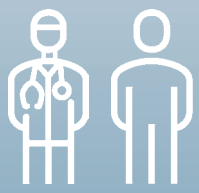

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Abbreviations

AGE	Age (classification in SHA 2011)
AU	African Union
COVID-19	Coronavirus disease
DIS	Diseases and conditions (classification in SHA 2011)
Eurostat	Statistical Office of the European Union
FA	Financing agents (classification in SHA 2011)
FP	Factors of provision (classification in SHA 2011)
FS	Revenues of health care financing schemes (classification in SHA 2011)
G20	Group of 20
GDP	Gross domestic product
GEN	Gender (classification in SHA 2011)
GHED	Global Health Expenditure Database
GHER	Global Health Expenditure Report
HAPT	Health Accounts Production Tool
HC	Health care functions (classification in SHA 2011)
HF	Financing schemes (classification in SHA 2011)
HP	Health care providers (classification in SHA 2011)
JHAQ	Joint Health Accounts Questionnaire
OECD	Organisation for Economic Co-operation and Development
OOPS	Out-of-pocket spending
PHC	Primary health care
SHA	System of Health Accounts
SHI	Social health insurance
USAID	United States Agency for International Development
VHI	Voluntary health insurance
WHO	World Health Organization

Key messages

The pandemic surge in health spending—will it continue?

- After surging early in the COVID-19 pandemic, aggregate global health spending fell in 2022, to US$ 9.8 trillion, or 9.9% of global gross domestic product (GDP), the first decline in global health spending in real terms since 2000.
- Across all country income groups, except lower-middle income countries, average health spending per capita in 2022 fell in real terms from 2021.
  - Domestic public spending on health per capita declined in all income groups in 2022. In most income groups, this occurred against a backdrop of rising government spending, implying that health's share of general government spending—a measure of health priority—fell. The exception was in high income countries, where health priority remained close to 2021 levels, but general government spending declined.
  - External aid for health continued to rise in low and lower-middle income countries in 2022 following a sharp increase in 2021. Aid is particularly important in low income countries, accounting for a larger share (31%) of total health spending than domestic public spending (22%).
  - In 2022, average out-of-pocket spending (OOPS) on health per capita remained close to its 2021 level in all income groups, except in lower-middle income countries, where it increased.
- Across all income groups, health spending per capita in 2022 was above 2019 levels in real terms and close to long-term rising trends from 2000 to 2019.
  - Domestic public spending on health remained 6%–7% above prepandemic levels in most income groups and 11% higher in upper-middle income countries. In upper-middle and high income countries, health priority in 2022 remained above prepandemic levels, whereas in low and lower-middle income countries, it was at prepandemic levels.
  - OOPS per capita was 3%–4% higher than before the pandemic in low and upper-middle income countries and 11% higher in lower-middle income countries but remained close to the prepandemic level in high income countries.
  - It is still too early to assess whether the COVID-19 pandemic has continued (or altered) the long-term trends in health spending. In particular, it remains unclear whether governments can sustain elevated health spending per capita amid such economic headwinds as slowing economic growth and rising debt service costs as well as competing priorities.

The evolution of health financing systems

- Between 2000 and 2019, the share of health spending channelled through government schemes (mainly health budgets) and compulsory health insurance (mainly social health insurance) to health financing systems increased steadily, except in low income countries, where it remained mostly unchanged.
- The number of countries with out-of-pocket spending (OOPS) as the main health financing mechanism declined. However, in 2022, OOPS was still the main financing scheme in 30 low and lower-middle income countries; in 20 of these, OOPS accounted for more than half of total health spending.
- In a majority of countries, financing schemes with automatic or compulsory participation accounted for the largest share of health spending, primarily because of government schemes. But the number of countries with social health insurance (SHI) schemes rose—particularly middle income countries.
- The increase in the share of total health spending flowing through SHI schemes between 2000 and 2019 was driven mainly by government budget transfers, even when insurance contributions were the main funding source.
- During the COVID-19 pandemic, public spending on health channelled through government schemes responded to the emergency faster than other schemes. The rise of budget transfers in funding SHI schemes appears to have continued.
- Most countries had voluntary health insurance (VHI) but on a small scale, at less than 5% of total health spending, on average, in 2022, and only 20 countries had it financing more than 10%.

Financing health services during the COVID-19 pandemic

- Government schemes were more flexible than social health insurance (SHI) in scaling up financing and adapting to the higher demand for preventive care during the COVID-19 pandemic, regardless of the country's main health financing scheme.
- Most countries boosted spending on outpatient care and inpatient care during the pandemic, with the changes financed mainly by a country's main health financing scheme.
- Out-of-pocket spending (OOPS) on medical goods increased during the pandemic in most countries where SHI dominated health financing but mostly declined where government schemes dominated.
- Government schemes were crucial in increasing primary health care (PHC) spending, regardless of whether government schemes or SHI dominated financing during the pandemic. In 27 of 35 high and middle income countries with data, PHC spending financed by government schemes rose from 2019 to 2022, making it the primary driver of growth in PHC spending.

Better data for better policy

- **Milestone achievement:** Celebrating 25 years, the World Health Organization's (WHO) Health Expenditure Tracking programme has been pivotal in setting global standards for health accounting. It maintains the Global Health Expenditure Database (GHED), with annual updates since 2000 for more than 190 countries, and produces the annual Global Health Expenditure Report (GHER). These global public goods drive informed policy-making, transparency and accountability worldwide.
- **Institutionalization for sustainability:** Institutionalizing health accounts is vital for generating reliable and timely health spending data. This requires stable funding, routine data access and skilled staff. WHO, in collaboration with partners, has supported countries in building capacity, enhancing data quality and promoting the use of data for effective policy-making.
- **The path forward:** The programme will address emerging data needs, leverage digital tools for data production and management and strengthen institutional support to ensure reliable health spending data, enabling better policies to build resilient health systems for universal health coverage and health security.

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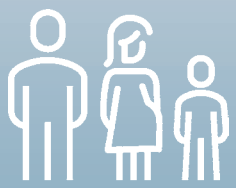

OVERVIEW

Emerging from the pandemic

The 2024 Global Health Expenditure Report focuses on health spending in 2022, the third year of the COVID-19 pandemic. It shows how countries around the world responded to the health and economic shocks of the pandemic from a financial perspective. It also considers what the future may hold as countries emerge from the pandemic.

While health spending remained elevated in 2022, it declined from its peak during the COVID-19 pandemic. Aggregate global health spending in 2022 was US$ 9.8 trillion, or 9.9% of global gross domestic product, down from 2021 and the first decline in real terms since 2000—but still well above that in 2019.

Across all country income groups, except lower-middle income countries, average health spending per capita fell in 2022. But health spending remained above its pre–COVID-19 pandemic level—by 5% in high income countries, 8% in upper-middle income and low income countries and 12% in lower-middle income countries.

Domestic public spending on health led health spending per capita down in 2022—and declined from its COVID-19 pandemic peak for all income groups. But the declines followed surges early in the pandemic, as governments shifted health priorities in their budgets. So, domestic public spending on health per capita in 2022 remained well above its prepandemic level in all income groups—11% higher in upper-middle income countries and 6%–7% higher in low, lower-middle and high income countries.

By the COVID-19 pandemic's third year, health's share of government spending (a measure of its priority) remained nearly 1 percentage point above the prepandemic level in upper-middle and high income countries. The elevated domestic public spending on health per capita in 2022 relative to its prepandemic level in upper-middle and high income countries thus resulted from growth in general government spending and the higher priority for health. In contrast, the priority of health in government spending returned to around prepandemic levels in low and lower-middle income countries by 2022, implying that the elevated domestic public spending on health per capita in 2022 almost entirely reflected governments' large fiscal footprint.

External health aid continued to complement domestic public spending in low and lower-middle income countries, rising again in 2022 after a sharp increase in 2021. In low income countries, aid accounted for a larger share (31%) of total health spending than domestic public spending (22%). Out-of-pocket spending (OOPS) on health rose in low and lower-middle-income countries in 2022 and declined in upper-middle and high income countries, though in all income groups, it remained smaller as a share of total health spending than before the COVID-19 pandemic.

The end of the COVID-19 pandemic presents an opportunity to review how countries channelled funding through different schemes

within health systems. Most of the increase in public spending on health was channelled through government schemes (mainly budgets) to fund the pandemic response. Government schemes responded more swiftly than compulsory health insurance. This was the case across all types of health financing systems, even where compulsory insurance ordinarily plays a large role in financing health services.

The greater responsiveness of government schemes likely reflected their inherent flexibility during emergencies. It also likely reflected the nature of the COVID-19 pandemic response. Government schemes typically funded higher preventive care spending. Indeed, government schemes fund most essential public health functions aimed at avoiding and detecting diseases (which are generally population-based interventions) in ordinary times and can rapidly expand budget allocations during emergencies. Accordingly, government schemes played an essential role in financing preventive care across all types of health financing systems before the pandemic. In contrast, spending on individual services, such as inpatient care and outpatient care, before and during the pandemic tended to be financed either by government schemes or by social health insurance (SHI), depending on how countries fund their health system.

In the two decades before the COVID-19 pandemic, all income groups experienced a long-term decline in the OOPS share of total health spending—an inherently inequitable form of financing that links people's access to health care to their capacity to pay. This mostly reflected a shift to channelling more health spending through government schemes (mainly health budgets) and compulsory health insurance (mainly SHI), with the latter particularly prominent among middle income countries. Notably, the rise in spending by SHI schemes was underpinned largely by government budget transfers to SHI schemes.

Low income countries were a notable exception—their domestic public spending on health per capita stagnated at around US$ 8 in real terms between 2000 and 2019. Their spike in domestic public spending during the COVID-19 pandemic thus defied historical trends. Development partners played a greater role in financing health through external aid, which rose considerably as a share of total health spending.

What next?

It is still too early to gauge whether the COVID-19 pandemic has continued or altered long-term trends in health spending. Numerous questions remain. Will domestic public spending on health per capita remain higher in real terms or return to its prepandemic level? Can low income countries sustain domestic public spending substantially above its long-term stagnating prepandemic trend? Will spending on preventive care revert to its prepandemic level? Early signs suggest that spending has peaked and is now at or below its long-term rising trend in most income groups *(1, 2)*. In the meantime, the need for public funding to strengthen health systems has never been greater. Emerging from the pandemic, health systems face considerable challenges: becoming more resilient to prepare for future pandemics and improving responses to increasing and evolving health needs—such as ageing populations, the growing burden of noncommunicable diseases and health risks linked to climate change and other environmental issues.

Against this backdrop, governments face mounting macroeconomic challenges. Weak income growth will likely strain their ability to sustain or increase domestic public spending on health. On top of this, rising debt servicing costs, fuelled by higher debt stocks and higher interest rates, are likely to squeeze the already shrinking budgetary space for health and other social spending. Even before the COVID-19 pandemic, debt servicing costs were on par with domestic public spending on health in low and lower-middle income countries. Countries are at a crossroads in determining both the level of investment and the best approaches to financing their health systems. Every government faces tough choices ahead.

The key to making better choices is sound evidence. Timely and reliable health spending data are essential for guiding future health investment. To mark the 25th anniversary of the World Health Organization's (WHO) Health Expenditure Tracking Program, the report reviews the program's achievements and envisions a path forward. It highlights the importance of institutionalizing health accounts through a systematic and country-led process, supported by sufficient government funding and enhanced technical capabilities. Harnessing digital innovations to boost the efficiency of data production and coordination

across stakeholders is also critical. High-quality trend data on health accounts can create virtuous cycle, driving increased use and further demand for better quality data. As the program's lead technical agency, WHO is committed to working closely with partners to support countries in tracking health spending and sustaining the Global Health Expenditure Database and the Global Health Expenditure Report as global public goods.

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2. Health at a glance 2023: OECD Indicators. Paris: OECD Publishing; 2023 (https://doi.org/10.1787/7a7afb35-en).

1. All references were accessed on 16 November 2024.

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The COVID-19 pandemic surge in health spending—will it continue?

Key messages

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- Across all country income groups, except lower-middle income countries, average health spending per capita in 2022 fell in real terms from 2021.
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  - OOPS per capita was 3%–4% higher than before the pandemic in low and upper-middle income countries and 11% higher in lower-middle income countries but remained close to the prepandemic level in high income countries.
- It is still too early to assess whether the COVID-19 pandemic has continued (or altered) the long-term trends in health spending. In particular, it remains unclear whether governments can sustain elevated health spending per capita amid such economic headwinds as slowing economic growth and rising debt service costs as well as competing priorities.

2022 was yet another turbulent and challenging year for the global community. Countries continued to grapple with the COVID-19 pandemic. Simultaneously, global macroeconomic conditions worsened following a brief recovery in 2021, as the combined effects of supply disruptions, the start of the war in Ukraine and climate shocks among the world's biggest food producers caused global economic growth to fall below its long-term historical average—and inflation to surge to a multidecade high *(1)*.

This chapter examines how health spending levels and patterns (by source of funds) evolved during the COVID-19 pandemic, as countries responded to emergency needs while maintaining routine health services, and highlights variations across income groups. To mark the 25th anniversary of the World Health Organization's (WHO) health accounts program (see Chapter 4), it also takes advantage of the availability of data for 2000–2022 to examine how health spending has evolved since the turn of the century (see Box 1.1 for data sources).

BOX 1.1

Health spending data sources

Data on health spending for this report were collected from and validated by World Health Organization (WHO) Member States for the Global Health Expenditure Database (GHED) with a two-year lag (the latest year with data in the 2024 GHED update is 2022), except for a small set of countries reporting data with a one-year lag (for 2023 in the 2024 GHED update). Data reported by countries identify health financing flows using the System of Health Accounts 2011 (SHA 2011) international framework.

Depending on the context, country health accounts teams compiled information on health spending from several data sources, including countries' national accounts, non-SHA 2011 health accounts, government records (such as ministry of health budgetary information and regional government data) and social security data (see Web Annex). This information was complemented with other data from dedicated surveys (for example, of facilities and households), insurance umbrella organizations, trade associations and nongovernmental organization accounts *(2)*.

This chapter uses data on current health spending organized by source of funds (SHA 2011 classification FS) collected from countries. When information on specific financing sources was unavailable for a country, WHO estimated the value using the following approaches *(3)*.

Domestic public spending on health. When a country did not report domestic public spending on health, estimates were based mainly on budget information. If no budget information was available, the estimates assumed the same share of health spending in general government spending as in the previous year.

External aid on health. When a country did not report external aid spending on health, disbursement amounts from donor reports were used. The primary source for donor reports was the Organisation for Economic Co-operation and Development's Creditor Reporting System database, which includes disbursements for current expenditure and capital investment. Because the database does not report actual expenditure, estimates used a one-year lag to account for recipient capacities to absorb and consume the funds received.

Out-of-pocket spending (OOPS) on health. When a country did not report household OOPS, estimates were based on OOPS on health in national accounts. Where such disaggregated information was not available, the growth rate of private final consumption from the previous year was applied to OOPS.

Note: The metadata of the health expenditure series in the GHED provide further details on the WHO estimation method for each country.

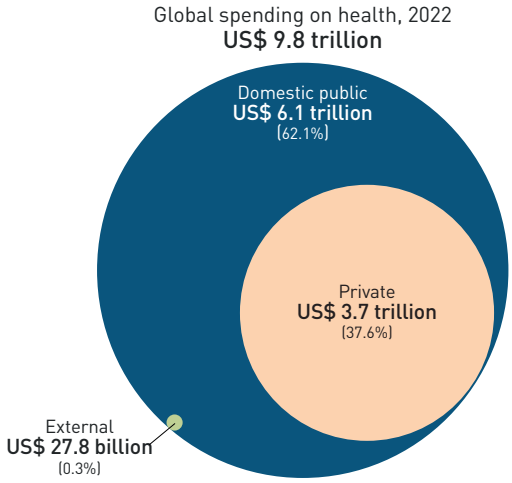
Health spending during the COVID-19 pandemic

Global spending on health[1] in 2022 was US$ 9.8 trillion, or 9.9% of global GDP (Fig. 1.1).[2] This was a decline from 2021—the first in real terms since 2000.[3] However, it follows a surge in health spending during the first two years of the COVID-19 pandemic. So, while global spending on health in 2022 was off its peak, it remained above its 2019 level, the year immediately preceding the pandemic. In 2022, global spending on health returned to a similar share of global GDP as in 2019.

Between 2000 and 2022, global spending on health rose substantially, but the unequal distribution of health spending across countries persisted. Global spending on health more than doubled from US$ 4.5 trillion in constant prices in 2000 to US$ 9.8 trillion in 2022. Over the same period, global GDP increased by 87%, implying that overall health spending grew faster than global GDP. Domestic public spending on health[4] more than doubled in real terms, to US$ 6.1 trillion, while private spending increased by 85%, to US$ 3.7 trillion.

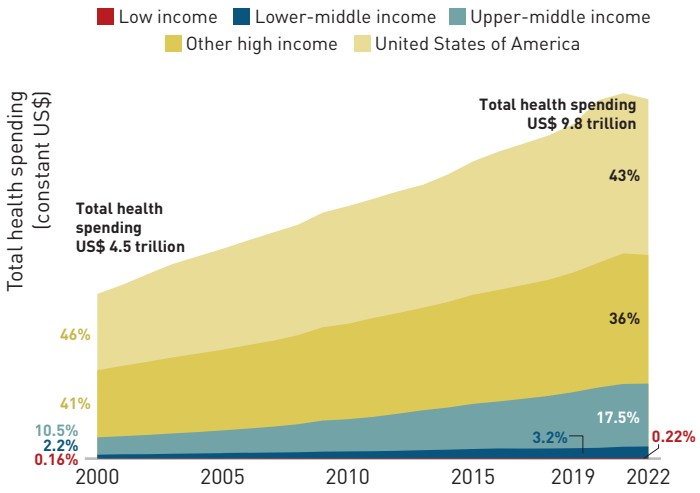
Health spending remains uneven. In 2022, high income countries[5] accounted for 79% of global health spending (with the United States of America alone accounting for 43%) (Fig. 1.2). Average health spending per capita[6] in high income countries was US$ 3 731, seven times the US$ 540 in upper-middle income countries, 28 times the US$ 132 in

FIG. 1.1 Global spending on health was US$ 9.8 trillion in 2022



Note: Data are the sum of total health spending in US dollars across 190 countries. The conversion from national currency units to US dollars is based on country-specific exchange rates in 2022.
Data source: WHO Global Health Expenditure Database, 2024.

FIG. 1.2 The distribution of health spending across country income groups has been highly unequal since 2000



Note: Each country is categorized for the entire period according to its 2022 World Bank income group classification. Includes only countries with complete data from 2000 to 2022. The conversion from national currency units to US dollars is based on country-specific exchange rates in 2022.
Data source: WHO Global Health Expenditure Database, 2024.

1. The terms "health spending" and "total health spending" in this report are used synonymously with "current health expenditure." Capital expenditure on health is not included *(4)*.

2. The data in Figs. 1.1 and 1.2 and the accompanying discussion are the sum of total health spending in US dollars across 190 WHO Member States. The conversion from national currency units to US dollars is based on the exchange rate in 2022. Country-specific GDP deflators were used to convert current values to constant (2022) values. The statistics in the rest of the chapter are unweighted cross-country averages (for example, the average of government spending on health per capita in low income countries). Cuba is excluded because international agencies did not report its exchange rate, Lebanon is excluded because it was reclassified from an upper-middle income country to a lower-middle income country in 2021 and Ukraine is excluded because no data are available for 2022.

3. "Constant prices" and "real terms" are used interchangeably because they refer to the same concept: they both adjust monetary values to eliminate the effects of inflation, allowing for a comparison of consistent value over time.

4. The term "domestic public spending on health" refers to health expenditure funded by domestic sources, including general taxation, nontax revenue and social health insurance contributions. It excludes health aid from external sources. The term is used interchangeably in this report with "government spending from domestic sources" and "domestic government spending on health."

5. Income groups in this report correspond to the classification of countries by the World Bank for 2022.

6. The per capita values in this chapter refer to average spending per capita in constant (2022) US dollars by income group. Country-specific GDP deflators were used to convert current values to constant (2022) values. The conversion from national currency units to US dollars is based on the exchange rate in 2022.

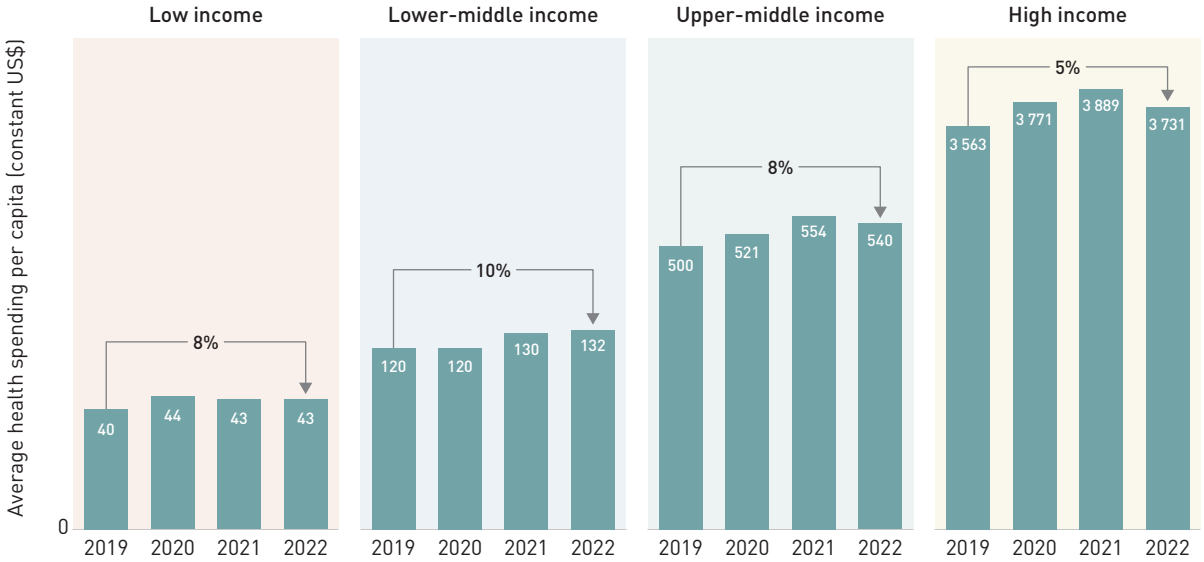
lower-middle income countries and 87 times the US$ 43 in low income countries.[7]

Health spending per capita in 2022 remained above pre–COVID-19 pandemic levels in all country income groups. Health spending was volatile throughout the pandemic, as countries responded in different ways to the evolution of the virus (including its prevalence and variants) and began transitioning from the emergency phase at different speeds (Fig. 1.3). In high income countries, average health spending per capita fell by 4% in 2022 in real US dollar terms compared with 2021 but remained about 5% higher than before the pandemic in 2019. In upper-middle income countries, health spending per capita fell by 3% from 2021 to 2022 but remained 8% higher than in 2019. In lower-middle income countries, health spending per capita rose by 2% in 2022, to be 10% higher than in 2019. In low income countries, health spending per capita was unchanged in 2022 compared with the previous year, remaining 8% higher than before the pandemic, albeit with an average increase of only US$ 3.

Average health spending as share of GDP was also higher in 2022 than before the COVID-19 pandemic.[8] Average health spending across all countries as a share of GDP in 2022 was 6.7%, slightly less than in 2020 and 2021 but above the 6.3% in 2019.[9] In high income countries, average health spending as a share of GDP was 8.3% in 2022, down from its pandemic peak in 2020, in large part reflecting the recovery of the economy and a return to growth, but 0.2 percentage point above its prepandemic level in 2019 (Fig. 1.4). Similarly, in upper-middle income countries, health spending as a share of GDP declined slightly in 2022, to 6.5%, from 2021 but remained 0.3 percentage point higher than its prepandemic level because health spending grew faster than GDP during the pandemic.

Lower-middle income countries reported small consistent increases in health spending as a share of GDP throughout the COVID-19 pandemic. In 2022, average health spending as a share of GDP was 5.3%, 0.4 percentage point higher than in 2019. In low income countries, health spending remained unchanged in 2022, at 6.6% of GDP, or 0.7 percentage point higher than in 2019.

FIG. 1.3 In all country income groups, average health spending per capita was higher in real terms in 2022 than before the COVID-19 pandemic



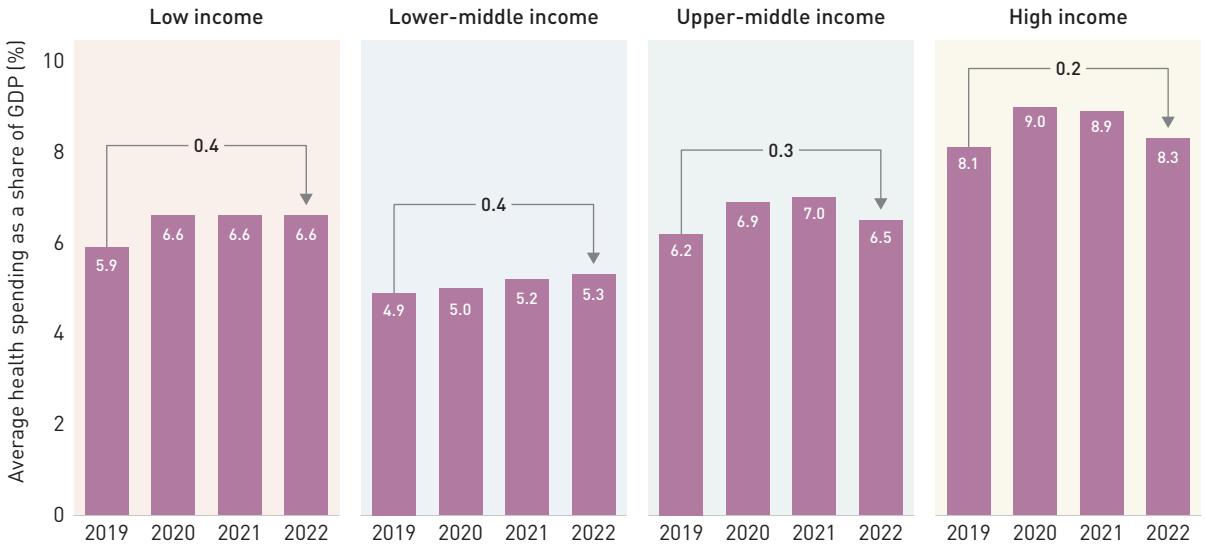
Note: Each income group is presented on a different scale.
Data source: WHO Global Health Expenditure Database, 2024.

7. Group averages in this chapter exclude countries with fewer than 600 000 people in 2022.

8. Averages are calculated as the average value of each indicator across all the countries in the relevant income group.

9. Average health spending as a share of GDP differs from global spending on health as a share of global GDP. The former is health spending as share of GDP averaged across all countries, while the latter is the sum of health spending at the global level divided by the sum of GDP at the global level.

FIG. 1.4 In all country income groups, health spending as a share of GDP in 2022 remained above pre–COVID-19 pandemic levels



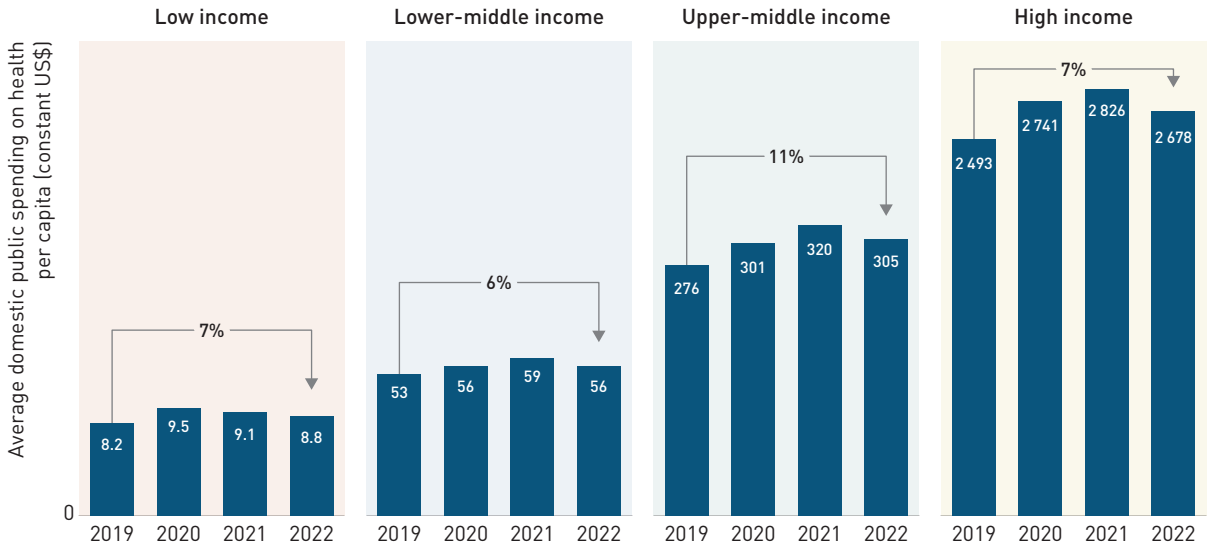
Data source: WHO Global Health Expenditure Database, 2024.

Domestic public spending on health

Domestic public spending on health per capita declined in real terms in all country income groups in 2022 but remained above pre–COVID-19 pandemic levels (Fig. 1.5). In 2022, both high and upper-middle income countries saw similar average decreases in domestic public spending on health per capita, 5% in real terms, after large increases in both 2020 and 2021 as the pandemic worsened. Accordingly, domestic public spending on health per capita remained 7% above its prepandemic level in high income countries and about 11% above its prepandemic level in upper-middle income countries.

Similarly, lower-middle income countries experienced a modest 5% decline in average domestic public spending on health per capita in 2022, though it remained 6% above its

FIG. 1.5 In all country income groups, domestic public spending on health per capita was higher in real terms in 2022 than before the COVID-19 pandemic



Note: Each income group is presented on a different scale.
Data source: WHO Global Health Expenditure Database, 2024.

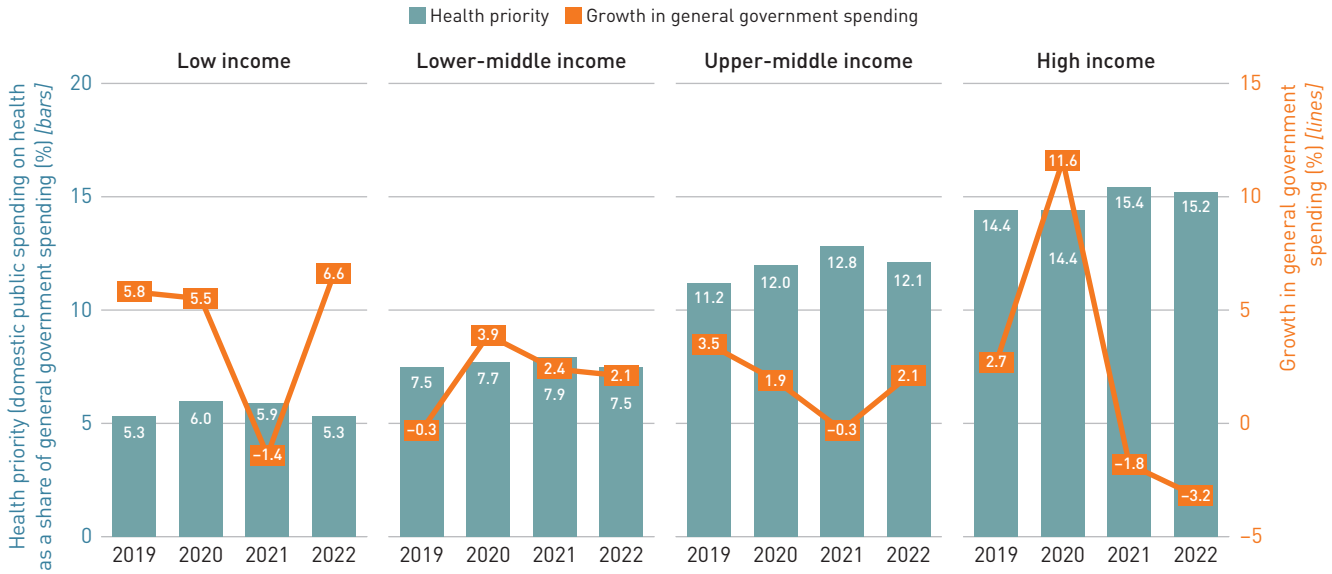
2019 level. In low income countries, domestic public spending on health per capita remained broadly unchanged between 2019 and 2022, at a bit more than US$ 8 per capita and 7% higher.

Domestic public spending on health as a share of general government spending—a measure of health priority—declined in most country income groups in 2022 but generally remained at or above pre–COVID-19 pandemic levels. Health priority increases with income, averaging 5.3% of general government spending in low income countries in 2022, 7.5% in lower-middle income countries, 12.1% in upper-middle income countries and 15.2% in high income countries. While each income group had a different pattern, a common feature early in the pandemic was that growth in domestic public spending on health was the result of higher health priority in government spending (Fig. 1.6). By 2021, the share of health in general government spending had risen by 1.6 percentage points from its prepandemic level in upper-middle income countries and by 0.4–1 percentage point in other income groups.

In 2022, health priority declined in all country income groups. In most, this resulted in lower domestic public spending on health, even against a backdrop of rising general government spending. But in high income countries, average health priority fell as general government spending declined (see Box 1.2 for a description of the macro-fiscal trends in each income group through the pandemic). In both upper-middle and high income countries, average health priority remained around 1 percentage point above pre–COVID-19 pandemic levels. In low and lower-middle income countries, average health priority fell close to prepandemic levels. However, there are variations in the patterns of health priority between 2019 and 2022 within each income group (Fig. 1.7).

The implication is that the increase in domestic public spending on health per capita in 2022 compared with 2019 in upper-middle and high income countries resulted from growth in general government spending and the higher health priority. In contrast, in low and lower-middle income countries, the increase almost entirely reflected higher general government spending.

FIG. 1.6 Health priority declined in 2022 as general government spending rose, except in high income countries



Note: Growth rates are based on per capita values in constant (2022) national currency units. Country-specific GDP deflators were used to convert current values to constant values.
Data source: WHO Global Health Expenditure Database, 2024.

BOX 1.2

The macro-fiscal context

While all country income groups experienced a sharp economic decline in 2020 and a subsequent recovery, the fiscal responses through the COVID-19 pandemic and recoveries have been uneven.

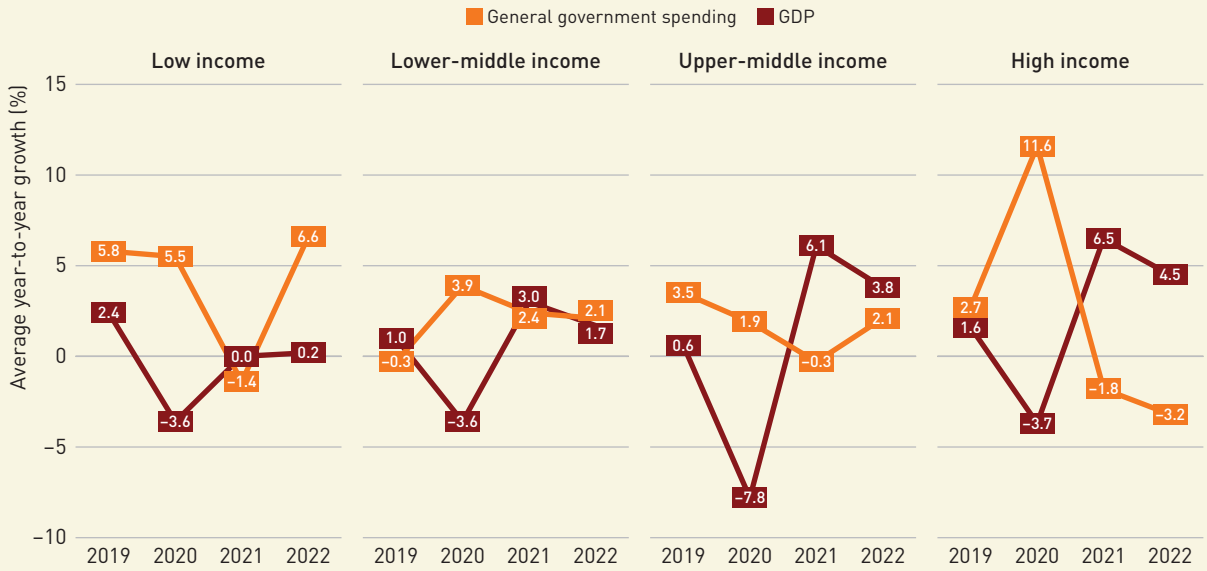
High income countries, which had the greatest capacity to quickly mobilize funds, often through borrowing, responded to the initial demands of the COVID-19 pandemic with the sharpest fiscal response (Box Fig. 1). General government spending spiked in 2020 as they implemented a fiscal stimulus to support health systems and the economy. In parallel, high income countries experienced the fastest recovery in economic activity, with average income per capita surpassing its prepandemic level by 2021 and continuing to grow in 2022. Fiscal stimuli were sharply wound back through 2021 and 2022.

Upper-middle income countries' trajectory of GDP growth during the COVID-19 pandemic was similar to that of high income countries, though the fiscal trajectory differed. Following a relatively muted fiscal response in upper-middle income countries in 2020 as GDP declined sharply, general government spending fell, on average, in 2021 as economies returned to growth. In 2022, average general government spending increased once again alongside ongoing economic growth.

In lower-middle income countries, there was no fiscal consolidation during the COVID-19 pandemic: general government spending per capita rose each year, on average, supported by a return to economic growth in 2021 and 2022.

Low income countries saw little in the way of a recovery following the initial decline in GDP at the start of the COVID-19 pandemic, with GDP per capita remaining at a similar level in 2000 and 2022—and thus lower in 2022 than in 2019. General government spending declined, on average, in 2021 before growing slightly faster in 2022 than before the pandemic.

BOX FIG. 1 **Patterns of income and general government spending growth varied by country income group through the COVID-19 pandemic**



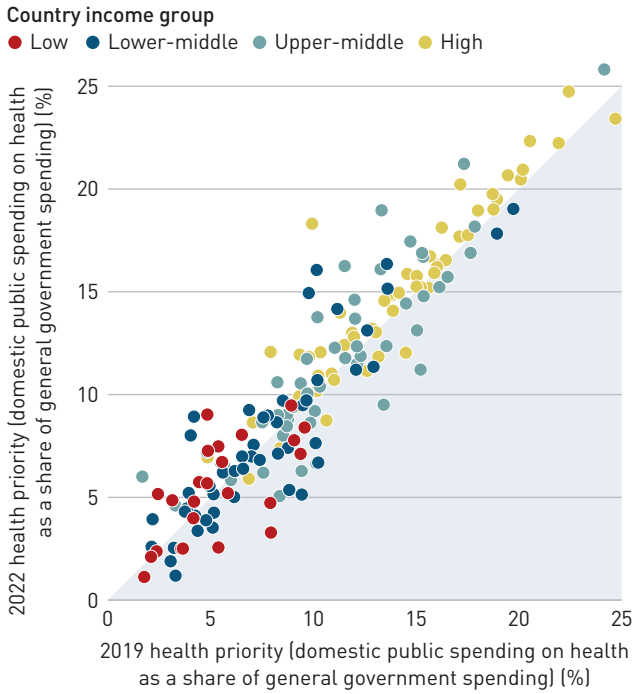
Data source: WHO Global Health Expenditure Database, 2024.

External aid for health

External aid for health channelled to low and lower-middle income countries[10] increased further in 2022, following a sharp rise in 2021 (Fig. 1.8). Aid to low and middle income countries exceeded US$ 27.1 billion in 2022, up US$ 2.4 billion from 2021, which was an increase of US$ 9.7 billion from 2019 (in current US dollars), as development partners responded to emergency needs associated

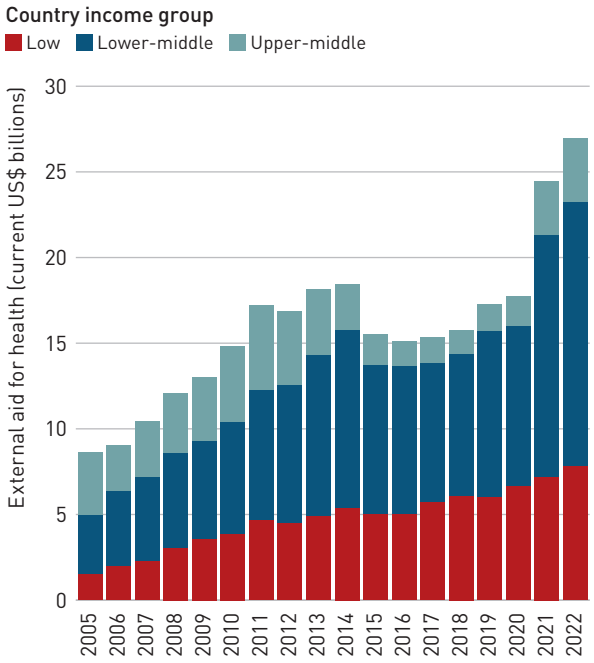
10. "External aid for health channelled to countries" refers to total current health spending from external aid, including aid channelled through recipient countries' governments and nongovernmental organizations. It excludes health capital investment from external aid.

FIG. 1.7 Rises in health priority between 2019 and 2022 varied across countries



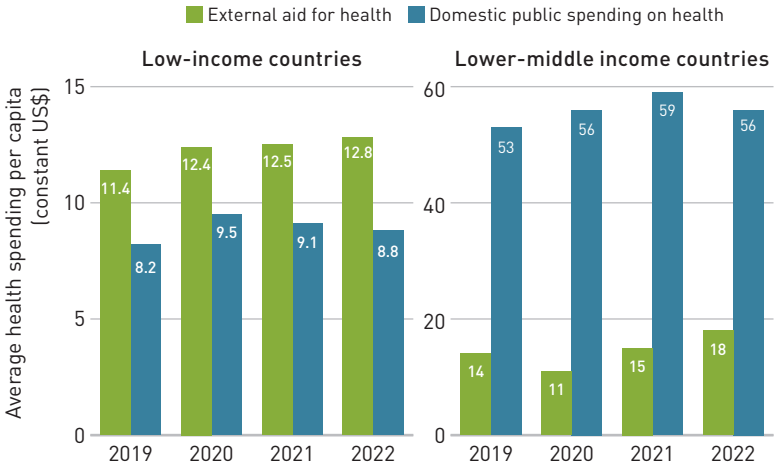
Note: San Marino, where health priority was above 30% in 2019, is excluded from the graph for better visualization.
Data source: WHO Global Health Expenditure Database, 2024.

FIG. 1.8 Total external aid for health channelled to countries climbed further in 2022



Data source: WHO Global Health Expenditure Database, 2024.

FIG. 1.9 In low income countries, average external aid for health per capita exceeds domestic public spending on health per capita



Data source: WHO Global Health Expenditure Database, 2024.

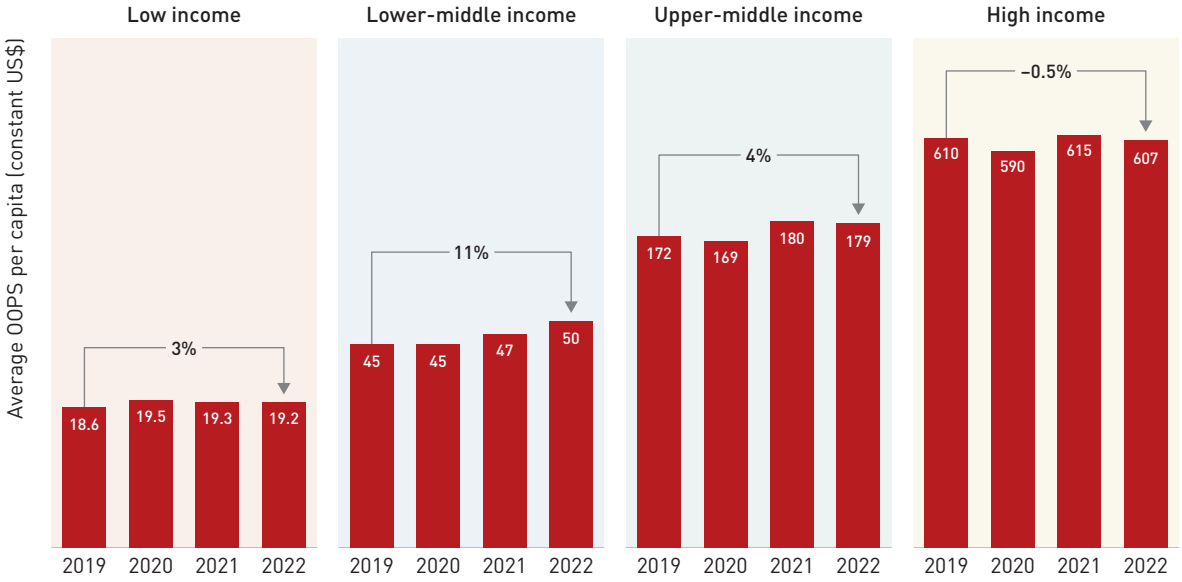
with the COVID-19 pandemic. In the first two years of the pandemic, aid to lower-middle income countries jumped 45% (with most of the rise in 2021) and aid to low income countries jumped 20%. In 2022, aid to both low and lower-middle income countries rose by 8%–9%.

Despite rising dramatically in lower-middle income countries, external aid for health is still more important in low income countries. In low income countries, average aid received per capita in constant US dollars in 2022 was considerably higher than average domestic public spending on health per capita. Moreover, the relative importance of aid in low income countries increased during the COVID-19 pandemic, as average aid per capita rose in real terms and domestic public spending on health per capita fell after the initial surge. In contrast, in lower-middle income countries, aid remained dwarfed by domestic public spending on health in 2022, despite large aid increases (Fig. 1.9).

Out-of-pocket spending

By 2022, OOPS on health per capita in real terms was higher than before the COVID-19 pandemic in most country income groups. After falling in most income groups at the outset of the pandemic, average OOPS per capita rebounded to above prepandemic levels as restrictions on service availability and economic activity abated (Fig. 1.10). In 2022, average OOPS per capita was 3% higher than before the pandemic in low income

FIG. 1.10 In all income groups except high income countries, OOPS per capita was higher in 2022 than before the COVID-19 pandemic

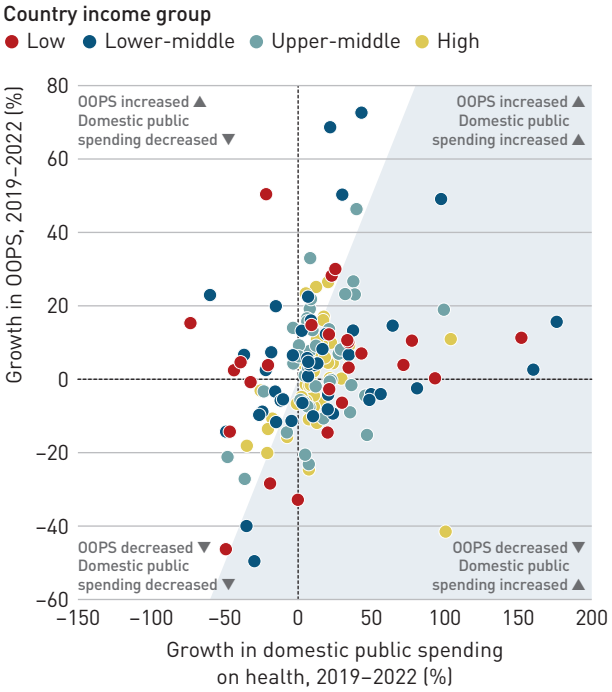


Note: Each income group is presented on a different scale.
Data source: WHO Global Health Expenditure Database, 2024.

countries and 11% higher in lower-middle income countries. Similarly, in upper-middle income countries, average OOPS per capita was 4% higher in real terms than before the pandemic, despite a slight drop in 2022. The exception was high income countries, where average OOPS per capita in real terms in 2022 was similar to that in 2019.

Overall, during the COVID-19 pandemic, domestic public spending on health typically grew faster than OOPS. Nearly two-thirds of countries worldwide reported that growth in OOPS per capita in real terms between 2019 and 2022 was lower than average annual growth in domestic public spending per capita (Fig. 1.11). This trend was especially prevalent in high income countries (where nearly four-fifths of countries experienced it) and upper-middle income countries (where nearly three-fifths of countries did).

FIG. 1.11 Growth in domestic public spending on health was generally greater than growth in OOPS between 2019 and 2022



Note: In countries in the blue area, growth in domestic public spending on health was faster than growth in OOPS. The growth rate from 2019 to 2022 was calculated based on constant national currency units per capita. Bhutan and Fiji, where OOPS nearly doubled between 2019 and 2022, are excluded from the graph for better visualization.
Data source: WHO Global Health Expenditure Database, 2024.

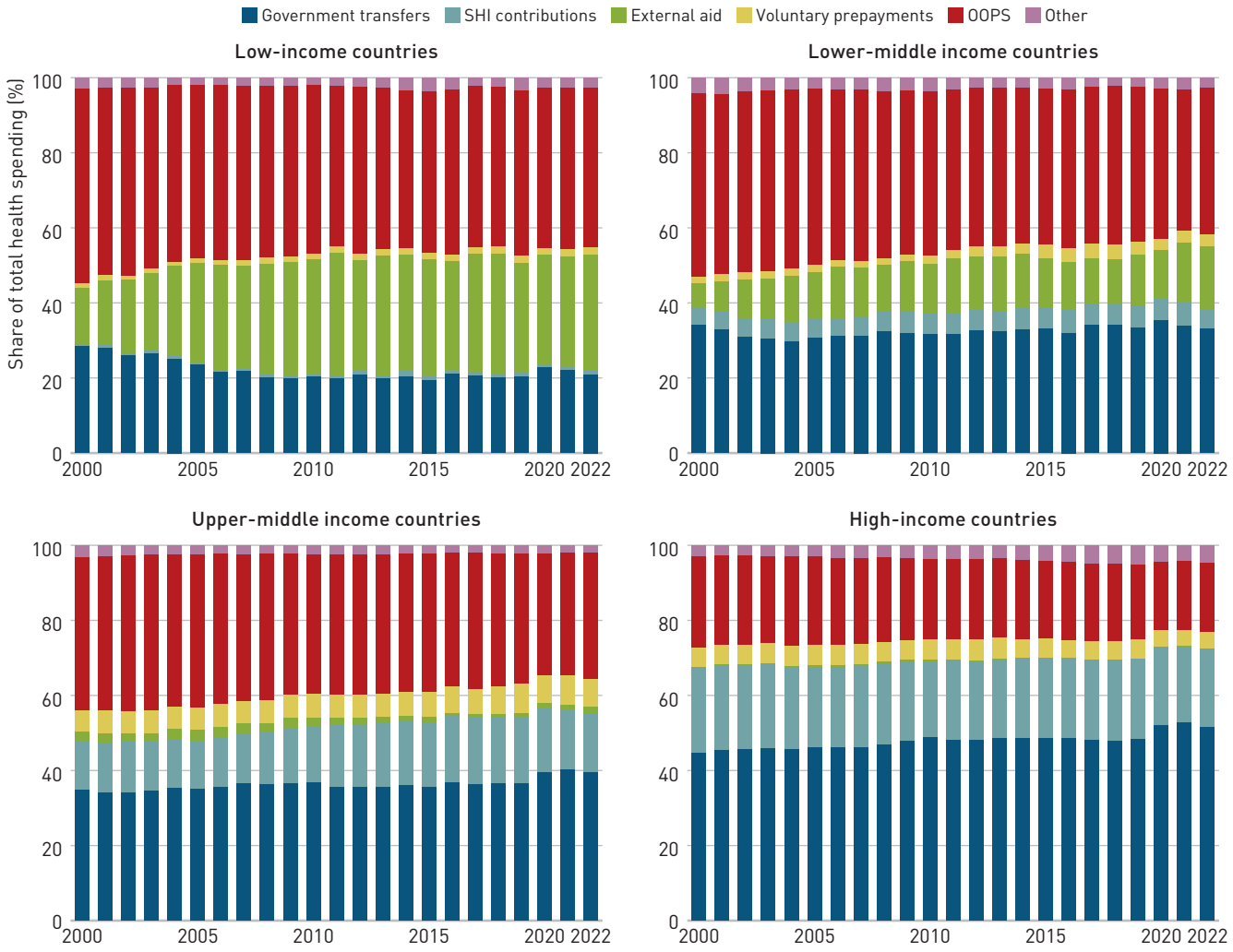
Longer term trends in health spending

In the two decades before the COVID-19 pandemic, all country income groups had experienced a long-term decline in the share of OOPS in total health spending (Fig. 1.12). Between 2000 and 2019, the share declined by 4–6 percentage points in upper-middle and high income countries and by 7–8 percentage points in low and lower-middle income countries. In its place, domestic public spending on health (from both government transfers—mainly budgets—and compulsory social health insurance contributions) as a share of total spending rose in upper-middle and high income countries. While domestic public spending on health stagnated in lower-middle income countries and fell in low income countries, the share of external aid rose in both low and lower-middle income countries.

These trends continued through the COVID-19 pandemic, with the share of OOPS in total health spending declining further from prepandemic levels. In upper-middle and high income countries, the share dropped by almost 1.5 percentage points, due most likely to reduced service utilization, to 34% and 19%, respectively. In lower-middle income countries, it fell by 2 percentage points, to 39%, while in low income countries, it fell by 1.2 percentage point, to 43% *(5)*.

Correspondingly, in high income countries, the share of domestic public spending on health in total health spending increased by nearly 3 percentage points between 2019 and 2022, to 72%. Over the same timeframe,

FIG. 1.12 The COVID-19 pandemic accelerated the long-term trend towards government financing of health spending, complemented by external aid in low and lower-middle income countries



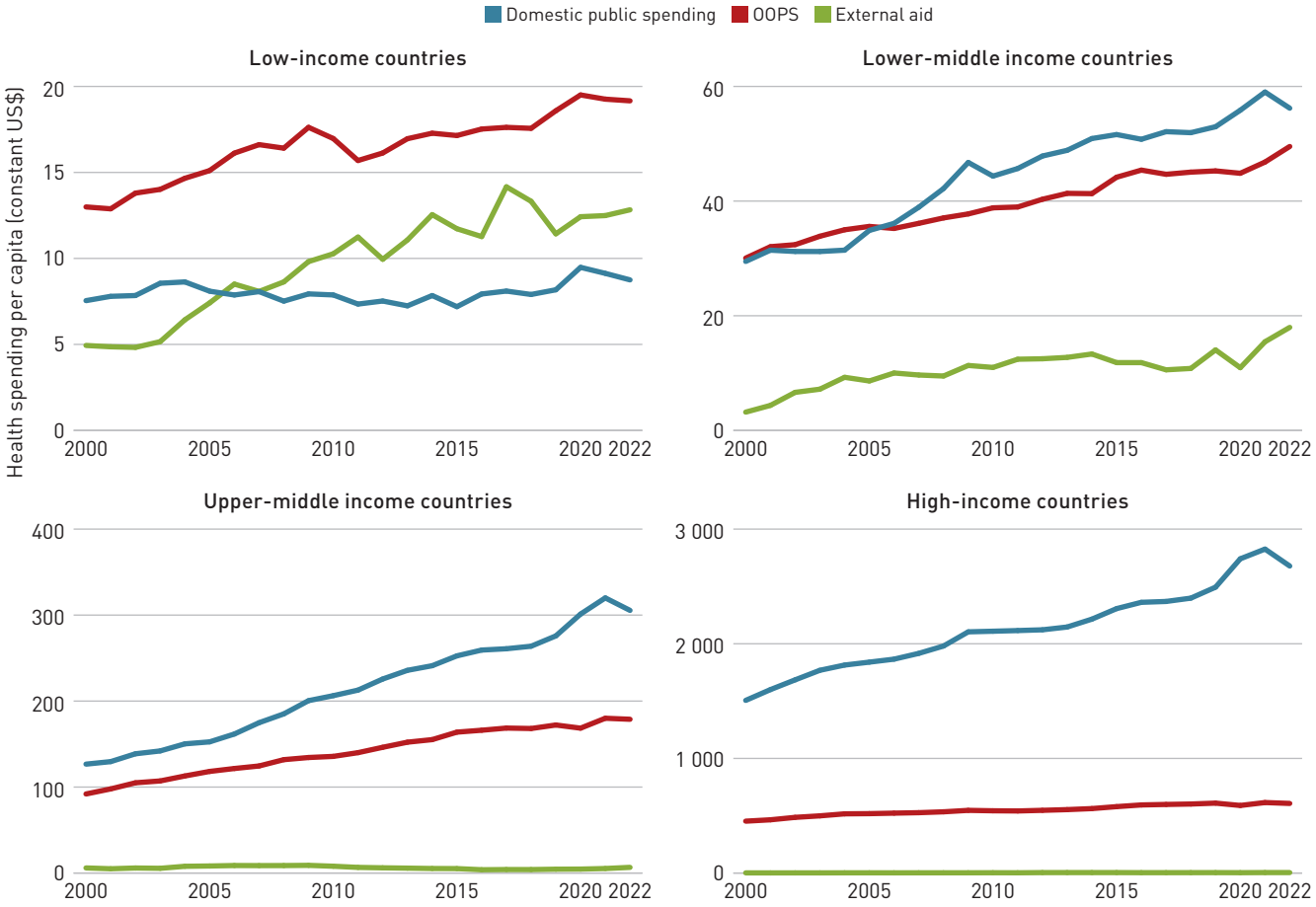
Data source: WHO Global Health Expenditure Database, 2024.

the share rose by 1 percentage point, to 55%, in upper-middle income countries. In most upper-middle and high income countries, the share of total health spending financed by social health insurance contributions fell during the COVID-19 pandemic, implying that these increases were driven by government budgets.[11]

In low and lower-middle income countries, external aid continued to complement domestic public spending on health. In low income countries, the share of domestic public spending in total health spending remained stable, at 21%–22%, while the share of aid in total health spending increased from 29% to 31%. In lower-middle income countries, the share of government spending on health in total health spending fell from 39% to 38% between 2019 and 2022 despite the boost in general government spending. However, the sharp spike in aid received meant that the share of external aid in total health spending increased from 14% to 17%.

The COVID-19 pandemic underscored the continued and rising prominence of domestic public spending on health in high and upper-middle income countries. In high and upper-middle income countries, domestic public spending (both from government transfers and from compulsory social health insurance contributions) was already the dominant source of health spending in 2000 (Fig. 1.13). In both income groups, domestic public spending per capita rose steadily in real terms. In contrast, growth in OOPS remained low and

FIG. 1.13 In low income countries, strong increases in external aid complemented the longer term stagnation of domestic public spending on health per capita; in other income groups, domestic public spending on health per capita has grown faster than OOPS per capita over the longer term



Note: Voluntary prepayment and other funding sources are not shown because they are very small.
Data source: WHO Global Health Expenditure Database, 2024.

11. See Chapter 2 for a detailed discussion of the schemes used to finance the rise in health spending during the pandemic.

stable in high income countries, while in upper-middle income countries, growth in OOPS flattened around 2015.

The COVID-19 pandemic also heightened the combined importance of domestic public spending on health and external aid in lower-middle and low income countries. In lower-middle income countries, domestic public spending on health has risen steadily since 2005, surpassing OOPS in 2006 and remaining the dominant source of health spending since. In low income countries, both external aid and OOPS have increased, with OOPS being the largest component of total health spending and external aid per capita being larger than domestic public spending on health per capita since 2006. In contrast to the ongoing growth in external aid and OOPS, in low income countries, domestic public spending on health stagnated at US$ 8 during 2000–2019, with a noticeable spike only in 2020. The implication is that for much of the period since 2000, OOPS per capita in low income countries has been drifting away from public spending on health per capita, in stark contrast to other country income groups.

Since 2000, most external aid for health has been provided to low and lower-middle income countries, with more spent in lower-middle income countries than in low income countries. During the COVID-19 pandemic, this pattern reversed as aid grew more in lower-middle income countries than in low income countries. The difference may relate to the number of COVID-19 cases and the capacity to absorb additional aid during the pandemic. More in-depth reviews would help to better understand the pattern.

Whether the COVID-19 pandemic has altered long-term trends in health spending remains to be seen. It is difficult to assess the pandemic's full impact on long-term trends in health spending with the available data. However, examining health spending and funding sources in 2022 relative to long-term trends is valuable because it helps place the pandemic in its historical context for each country income group.

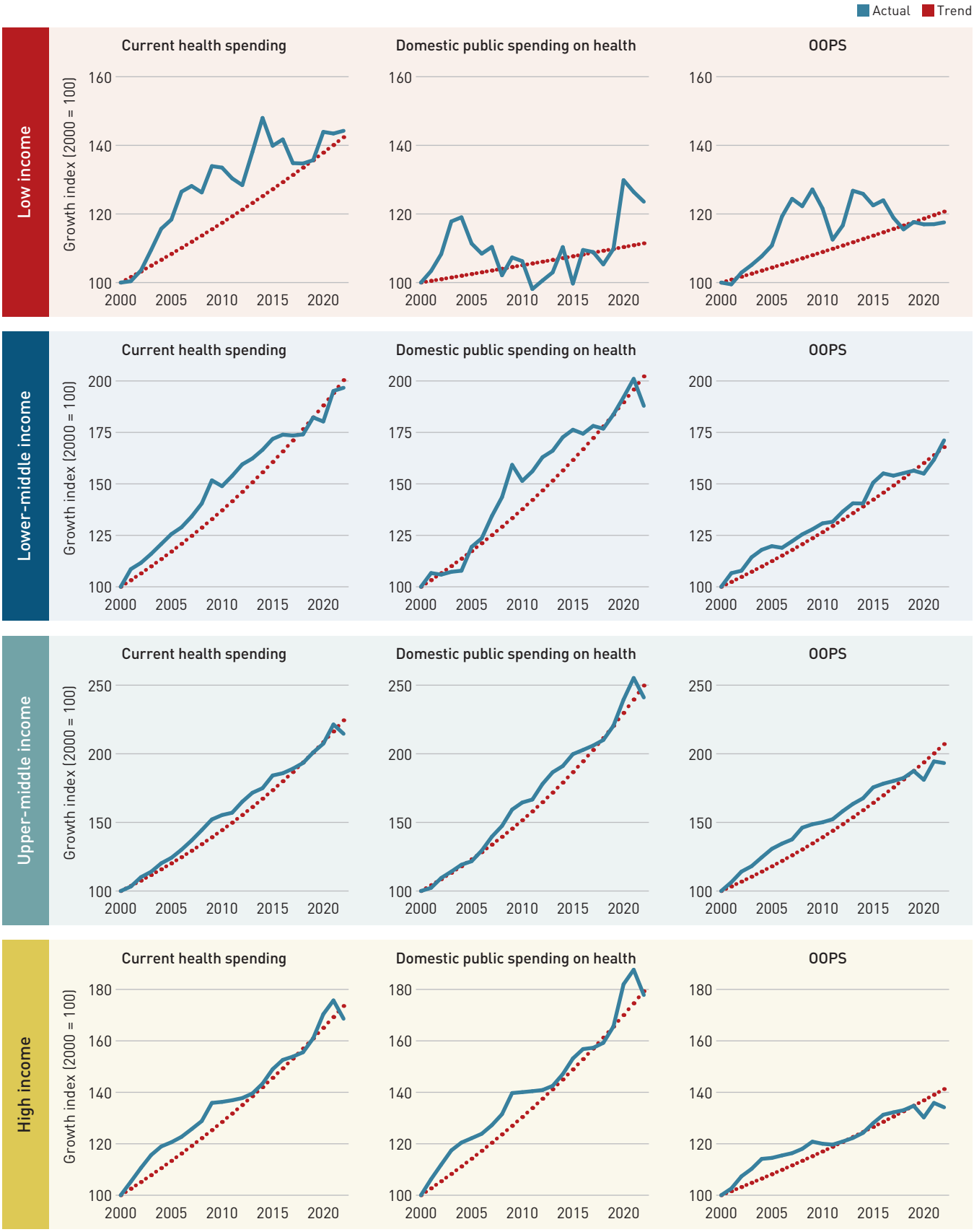
In low income countries, health spending per capita in real terms in 2022 exceeded the value expected if it had continued its 2000–2019 trajectory. Domestic public spending on health in 2022 was well above an extrapolated long-run trend, due primarily to higher domestic public spending and external aid (Fig. 1.14). This reflected the large spike in domestic public spending on health in 2020, which followed an extended period of stagnation, with only slight downward adjustments in real terms in 2021 and 2022. OOPS per capita was close to its long-term trend during the COVID-19 pandemic. Ongoing growth in health aid during the pandemic also helped lift health spending above its expected value based on long-run trends.

In lower-middle income countries, health spending per capita in 2022 converged with its long-term trend, with below-trend growth in domestic public spending on health offset by above-trend growth in OOPS and external aid for health. The initial rises in domestic public spending at the outset of the COVID-19 pandemic were only slightly stronger than expected if it had continued its 2000–2019 trajectory. So, when domestic public spending declined in 2022, it also dipped below its long-term trend value in real terms. In contrast, OOPS per capita, which dipped slightly below trend in the early phases of the pandemic, rose, passing its long-term trend in 2022. Health spending was also mostly boosted by the historically large increase in aid during the pandemic.

In upper-middle income countries, health spending per capita in 2022 dipped below the pre–COVID-19 pandemic trend, with both domestic public spending on health and OOPS below trend. Initially, domestic public spending on health per capita surged above its long-term trend in 2020, while OOPS per capita declined. However, a sharp drop in 2022 brought domestic public spending on health below its prepandemic trend. OOPS per capita, however, remained below trend throughout the pandemic, leading to health spending per capita falling below its long-term trend.

In high income countries, health spending per capita in 2022 was slightly below its long-term trend, while domestic public spending on health returned to its long-term trend and OOPS remained below trend. Domestic public spending on health per capita surged well above its anticipated long-term trend in 2020 and 2021 (see Fig. 1.14). However, the drop in 2022 brought domestic public spending on health back to its pre–COVID-19 pandemic trend. OOPS per capita, which initially fell

FIG. 1.14 **Has the COVID-19 pandemic altered long-term trends in health spending?**



Note: Actual values are calculated as the growth index (2000 = 100) of average spending per capita for each year. Trend values are calculated as the annualized growth rate of average spending per capita between 2000 and 2019 and extended to 2020–2022. Both actual and trend values are based on per capita values in constant (2022) US dollars by income group, including only countries with uninterrupted panel data between 2000 and 2022.
Data source: WHO Global Health Expenditure Database, 2024.

below trend, rebounded in 2021—still below trend—before declining again in 2022. These offsetting dynamics between domestic public spending on health and OOPS left total health spending slightly below its long-term trend in 2022.

Whether high domestic public spending on health in per capita terms and as a share of general government spending can be sustained remains unclear (see Fig. 1.14). For most country income groups, the fiscal expansion during the COVID-19 pandemic and a rising health priority have been key factors in increased domestic public spending on health as a share of GDP compared with before the pandemic.[12] However, the economic environment has become considerably more challenging for countries: in October 2024, the International Monetary Fund rated the near-term economic outlook subdued by historical standards *(6)*.[13] Weak income growth will considerably strain countries' ability to sustain or increase domestic public spending on health. On top of this, rising debt service costs, fuelled by higher debt stocks, are likely to further squeeze the budgetary space for health and other social spending (Box 1.3). Even before the COVID-19 pandemic, debt service was comparable to domestic public spending on health in low and lower-middle income countries.

Implications

Domestic public spending on health is crucial for achieving universal health coverage. The COVID-19 pandemic revealed that domestic public spending is the most reliable and responsive form of health financing during

BOX 1.3

Debt service and domestic public spending on health

Public debt service is the cash required to cover the repayment of interest and principal on a government debt for a particular period. It is linked to domestic public spending on health because previous debt incurred by governments must be serviced at the prevailing rate of interest before government spending can be allocated to other priorities. Accordingly, as debt service rises[a] as a share of government spending, the available resource envelope for health and other social spending diminishes.

Debt service on external public debt (borrowed from foreign lenders) has risen as a share of government spending across low and middle income countries since around 2010. In low income countries, servicing of external debt reached a level equivalent to domestic public spending on health during the COVID-19 pandemic, while in lower-middle income countries, it has consistently surpassed domestic public spending on health since 2018 (Box Fig. 1).

To the extent that these data show servicing of external debt only and exclude servicing of debt from domestic lenders, this may understate the true magnitude of countries' debt service obligations. Nevertheless, in both low and lower-middle income countries, external debt service costs continued to increase as a share of government spending during the COVID-19 pandemic. This partly reflects the rising public debt in the early phases of the pandemic, as countries sought to maintain government spending in the face of collapsing revenue.[b]

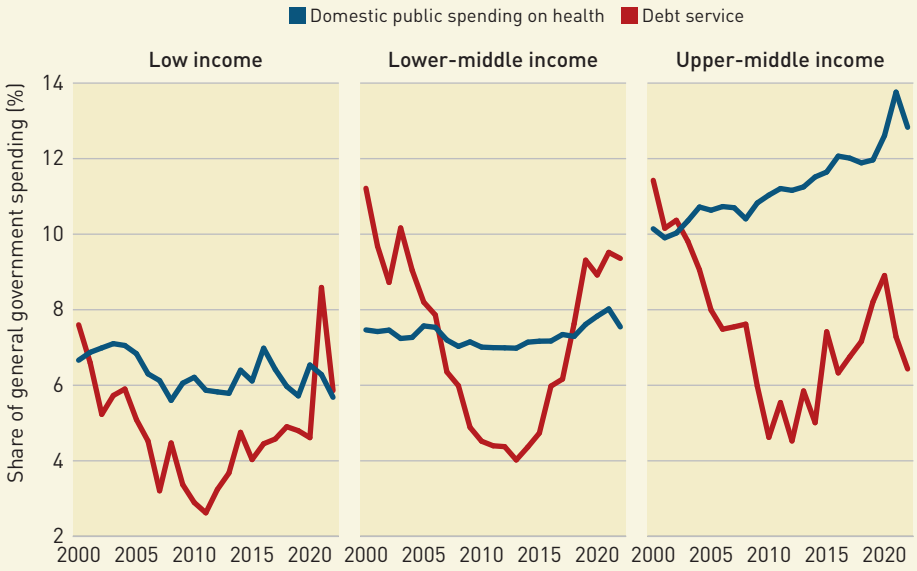
The outlook for debt service remains uncertain. However, the latest International Monetary Fund projections are not optimistic, with public debt and associated debt service expected to continue rising through the end of the 2020s in most country income groups and to remain well above pre–COVID-19 pandemic levels *(6)*. Moreover, in the wake of the pandemic, rising interest rates and sharp depreciations of national currencies against the US dollar have raised the costs of servicing debt, particularly debt denominated in foreign currencies. Larger fiscal consolidation to stabilize or reduce public debt would likely reduce countries' ability to sustain the share of health spending in general government expenditure and the level of domestic public spending on health per capita, with concurrent spending pressures stemming from the green transition, population ageing or security concerns.

12. The only exception is in high income countries, where sharp fiscal consolidation in 2021 and 2022 meant that rising health priority was most responsible for higher government spending on health as a share of GDP in 2022 compared with before the pandemic.

13. The International Monetary Fund attributed this to tight monetary conditions, geopolitical tensions and weak productivity in the wake of the pandemic all weighing on income growth and, by implication, government revenue *(6)*.

BOX 1.3 (continued)

BOX FIG. 1 In low, lower-middle and upper-middle income countries, debt service on external debt has risen sharply since 2010



Note: Refers to debt service on external debt from the general government sector. Sudan, where the share of debt service on general domestic public spending was 50% in 2021, is excluded from the graph for better visualization. Excludes servicing of domestic debt.
Data source: WHO Global Health Expenditure Database, 2024, and World Bank *(7)*.

Notes

a. Global public debt is projected to exceed US$ 100 trillion in 2024, a historical peak, and is expected to rise over the medium term *(6)*.

b. Data from the International Monetary Fund indicate that across both advanced and emerging economies, gross debt as a share of GDP rose 15–30 percentage points in 2020, adding to already high debt stocks.

a crisis. So, it is welcome that governments across all country income groups sustained health spending per capita above prepandemic levels in 2022, despite challenging macroeconomic conditions of slowing growth and rising inflation.

In upper-middle and high income countries, higher domestic public spending on health over the course of the COVID-19 pandemic was driven largely by rising health priority in government spending, even in the context of broader fiscal consolidation. In low and lower-middle income countries, growth in domestic public spending on health was initially underpinned by modest rises in health priority but was largely boosted by governments' higher overall spending and complemented by sharp increases in external aid. It remains unclear whether external aid to low and lower-middle income countries constrained growth in health priority or simply filled critical gaps, though historical evidence suggests that aid growth in low income countries coincides with stagnating domestic public spending on health. More in-depth country-level analysis would be required to clarify this dynamic during the pandemic.

It is also unclear whether the COVID-19 pandemic has continued (or altered) the long-term trends in domestic public spending on health—that is, whether health priority and domestic public spending on health per capita will remain higher in real terms or return to or go below prepandemic levels. In particular, it remains to be seen whether low income countries can sustain domestic public spending on health that is substantially above its long-term prepandemic stagnating trend.

Looking ahead, there is considerable risk that budget pressures from slowing economic growth, higher inflation and increasing debt-service costs could reduce general government spending or deprioritize the health sector when governments reassess competing priorities. In light of these headwinds, health spending in most countries is

at a critical juncture. Achieving global health goals in the coming years will demand strong political commitment and closer collaboration between ministries of health and finance to ensure adequate public funding for health (Box 1.4). Coordination among development partners will also be essential to support low- and lower-middle income countries in strengthening their health systems, making them more sustainable and resilient.

BOX 1.4

Health and finance collaboration to avert the next global crisis

The upcoming transition of the Group of 20 (G20) Presidency from Brazil to South Africa in December 2024 presents a critical opportunity for ministers of health and finance to further strengthen regional and global coordination on several pressing issues. The key focus over the past year has, understandably, largely been pandemic preparedness and response.a However, this report, alongside the recent updates of the World Bank's Double Shock Double Recovery series, makes a strong case for focusing the ministers' agenda on what is becoming a broader health financing emergency *(8)*. If unaddressed, this emergency, coupled with a possible reduction in external assistance, will exacerbate health workforce and supply shortages, undermining countries' ability to provide essential services and to prevent and contain future pandemics. In turn, this would erode human capital development, which is the foundation of long-term economic growth and revenue generation, and may fuel social unrest.

From these analyses, 60 low and lower-middle income countries emerge where challenges in health financing will continue to affect overall health systems as well as their ability to mount a proper pandemic response. They can be categorized into the following three nonexclusive sets of countries:

- The first group includes 35 low- and lower-middle income countries, home to more than 2.5 billion people, where government health spending or the share of government budgets allocated to health declined during the COVID-19 pandemic response and recovery (2019–2023). Rising debt and interest payments on public debt have further strained fiscal resources, limiting investments in productive sectors, including health *(9)*.
- The second group includes 42 countries, mainly in Africa and South Asia, where domestic public spending on health remains below US$ 30 per capita a year, which is substantially below the estimated US$ 90–112 (in 2014 US dollars) per capita that is required to support health system stability and expand service coverage in low income countries *(10)*.
- The third group includes 20 low and lower-middle income countries that have not yet begun their health financing transition and whose health systems remain financed predominantly by out-of-pocket spending. This most inequitable form of health financing is typically associated with high catastrophic health expenditure, low universal health coverage scores and poor health outcomes.

The recent Lancet Commission on Investing in Health outlines a plan to reduce global premature mortality by 50% by 2050 *(11)*. It highlights the need to scale up investment targeting priority diseases and conditions, while ensuring that countries reach at least a basic level of government health financing. This investment will strengthen health systems, including human resources, supply chains and laboratory capacities—essential prerequisites for effective pandemic preparedness. The roles of the global and regional coordinating bodies such as the Africa Centres for Disease Control and Prevention, the G20, the Organisation for Economic Co-operation and Development, the United Nations and many more remain important in improving coordination between health and finance ministries to continue to chart the way forward for a more equitable, effective and sustainable global health system.

Note

a. These focus areas include deepening the tools used to measure country risk and preparedness, strengthening the financial architecture for pandemic funding, examining inequities in social determinants of health and exploring the role of debt swaps as one of several potential solutions, considering that many countries now spend more on debt service than on health.

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2

The evolution of health financing systems

Key messages

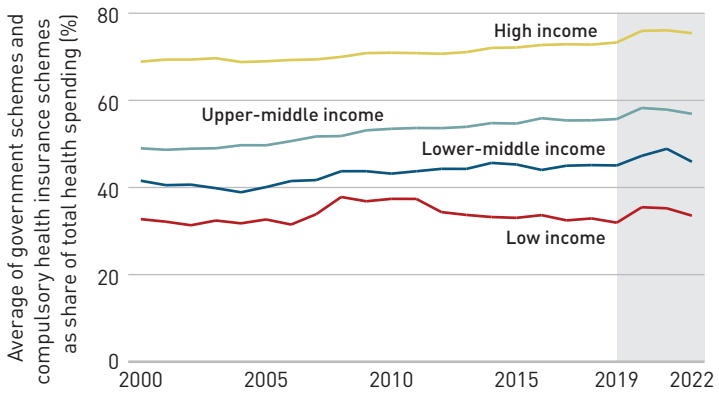
- Between 2000 and 2019, the share of health spending channelled through government schemes (mainly health budgets) and compulsory health insurance (mainly social health insurance) to health financing systems increased steadily, except in low income countries, where it remained mostly unchanged.
- The number of countries with out-of-pocket spending (OOPS) as the main health financing mechanism declined. However, in 2022, OOPS was still the main financing scheme in 30 low and lower-middle income countries; in 20 of these, OOPS accounted for more than half of total health spending.
- In a majority of countries, financing schemes with automatic or compulsory participation accounted for the largest share of health spending, primarily because of government schemes. But the number of countries with social health insurance (SHI) schemes rose—particularly middle income countries.
- The increase in the share of total health spending flowing through SHI schemes between 2000 and 2019 was driven mainly by government budget transfers, even when insurance contributions were the main funding source.
- During the COVID-19 pandemic, public spending on health channelled through government schemes responded to the emergency faster than other schemes. The rise of budget transfers in funding SHI schemes appears to have continued.
- Most countries had voluntary health insurance (VHI) but on a small scale, at less than 5% of total health spending, on average, in 2022, and only 20 countries had it financing more than 10%.

The organization of health financing systems is crucial for meeting people's health care needs, and the way funds are channelled and pooled shapes the efficiency and sustainability of health spending. It also determines how equitably funds are allocated and whether people can access health services without financial hardship. And it influences how health systems can respond to challenges, particularly in times of crisis, such as the COVID-19 pandemic.

Health financing systems can be complex. All countries rely on domestic public budgets channelled through ministries of health to some extent, but no country finances all its health spending through a single type of financing scheme. Complementing government schemes are various pooled insurance schemes (compulsory and voluntary) and household OOPS, each with implications for risk-sharing and access to services. Funding can originate from various public, private and external sources, and the mix of schemes and their funding reflect historical, institutional, legal and social context.

This chapter examines how different health financing schemes have evolved since 2000. It goes beyond Chapter 1's analysis of the sources of funds and focuses on the way funds are channelled through different types of financing schemes (Box 2.1), classified in the System of Health Accounts 2011 (SHA 2011) based on common characteristics. The chapter also analyses how government schemes and SHI schemes responded during the COVID-19 pandemic and the role of budget transfers in funding compulsory health insurance and VHI schemes.

FIG. 2.1 Higher income countries finance a larger share of health spending through government and compulsory health insurance schemes than lower income countries do



Data source: WHO Global Health Expenditure Database, 2024.

Overview of health financing schemes

Higher income countries generally rely more on government and compulsory insurance financing schemes than lower income countries do, with considerable variation within income groups. Higher income countries generally finance a larger share of health spending through financing schemes with automatic or compulsory participation, including government schemes, SHI schemes and compulsory private health insurance schemes (see Box 2.2 for definitions of each type of scheme).[1] Between 2000 and 2022, government schemes, SHI schemes and compulsory private health insurance schemes accounted for more than 70% of health spending, on average in high income countries.[2] But the share was only 40%–60% in middle income countries and less than 40% in low income countries (Fig. 2.1).

As a consequence, household OOPS—an inherently inequitable form of health financing that links people's access to health care to their capacity to pay—tends to finance a much larger proportion of health spending in low and middle income countries. Low income countries rely mainly on government schemes and on nongovernmental organization schemes in addition to household OOPS to finance health spending. In comparison, lower-middle income countries rely less on nongovernmental organization schemes and finance more health spending through SHI schemes and VHI schemes than low income countries do, though these generally account for a smaller share than in higher income countries. In upper-middle income and high income countries, government schemes and SHI schemes tend to be the main health financing schemes, complemented by VHI schemes and, mostly in high income countries, compulsory private health insurance schemes (Fig. 2.2).

1. The broader SHA 2011 category of government and compulsory contributory health financing schemes includes government schemes, SHI, compulsory private health insurance and compulsory medical saving accounts. The rest of health spending is financed through voluntary schemes, schemes of the rest of the world and household OOPS.

2. In this chapter, means and medians are unweighted cross-country measures of the relevant indicators.

BOX 2.1

The methodology and availability of data on financing schemes

This chapter uses data on current health spending as categorized by the System of Health Accounts 2011 (SHA 2011) classification of health care financing schemes *(1)*. Internationally comparable, the categories are the main building blocks of health financing systems, indicating the financing mechanisms through which people access health care. They refer to the rules for accessing health services, not the institution managing the scheme.

The main categories of funding sources can be related to the main categories of health financing schemes (Box Fig. 1). But note the overlaps and distinctions. Domestic public spending on health, analysed in Chapter 1, includes government internal transfers for health channelled to government schemes (mainly through the budget) and government transfers to other financing schemes. It also includes the contributions of employers, employees or others to social health insurance schemes.

In contrast, government schemes receive funding from the government budget (not contributions), including external aid for health channelled through governments. Social health insurance (SHI) schemes usually receive only domestic public funding, through SHI contributions and transfers from the general health budget. Households, a domestic private source, can also provide revenue to financing schemes, such as prepayments to voluntary health insurance (VHI), but only their direct payments for health care are considered out-of-pocket spending (OOPS).

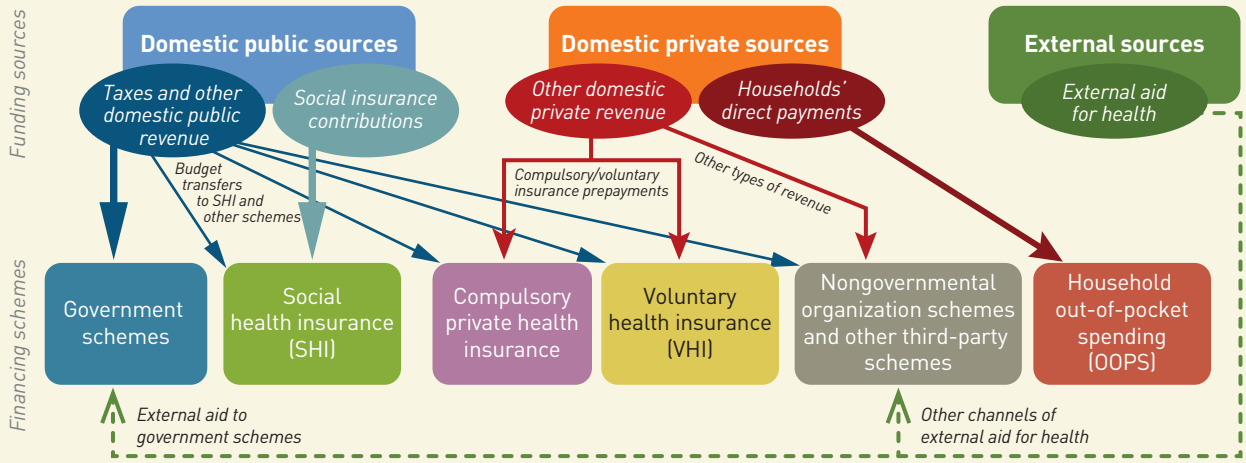
The World Health Organization (WHO) collects data from countries on current health spending classified by financing scheme. When information on a type of scheme was not reported by a country, WHO estimated the corresponding health spending together with funding sources, using different methods that usually combine alternative sources of information available in countries and macroeconomic indicators.

Estimates for governments schemes were based mainly on general budget information, and estimates for SHI, on reports from SHI agencies. If such information was not available, the estimates assumed the same share of government scheme or SHI scheme health spending in total government spending as the previous year.

Estimates of household OOPS were based mainly on national accounts data. When such information was not available, the estimates assumed the same share of OOPS in total private final consumption as the previous year—that OOPS grew at the same rate as overall private final consumption. This method was also used for other financing schemes when there was no alternative information available, such as national accounts data, compulsory private or voluntary insurance reports, or nonprofit institution and external donor reports *(2)*.

The analysis in this chapter includes 163 countries with more than 600 000 inhabitants in 2022 and with data on financing schemes in the WHO Global Health Expenditure Database in December 2024.

BOX FIG. 1 The relationship between the main funding sources and financing schemes in health spending



Note: Includes only the main categories of funding sources from Chapter 1 and of financing schemes and the main funding flows between them, according to each scheme's type of revenue. Financing schemes and their source of funding at country level can differ from this schematic view.

BOX 2.2

Definitions and categories of financing schemes in the System of Health Accounts

The System of Health Accounts 2011 (SHA 2011) defines health financing schemes as the main financing arrangements for channelling and pooling revenue and paying for health services. They include direct payments by households (out-of-pocket spending, or OOPS) and third-party financing arrangements for pooling resources from multiple funding sources *(1)*. The financing arrangements in a country are classified into broader categories in SHA 2011,[a] according to critical characteristics, notably the basis for participation (automatic, mandatory or voluntary), the nature of service entitlement (contributory or noncontributory[b]) and whether funds are pooled. The main categories of health financing schemes analysed in this chapter are:

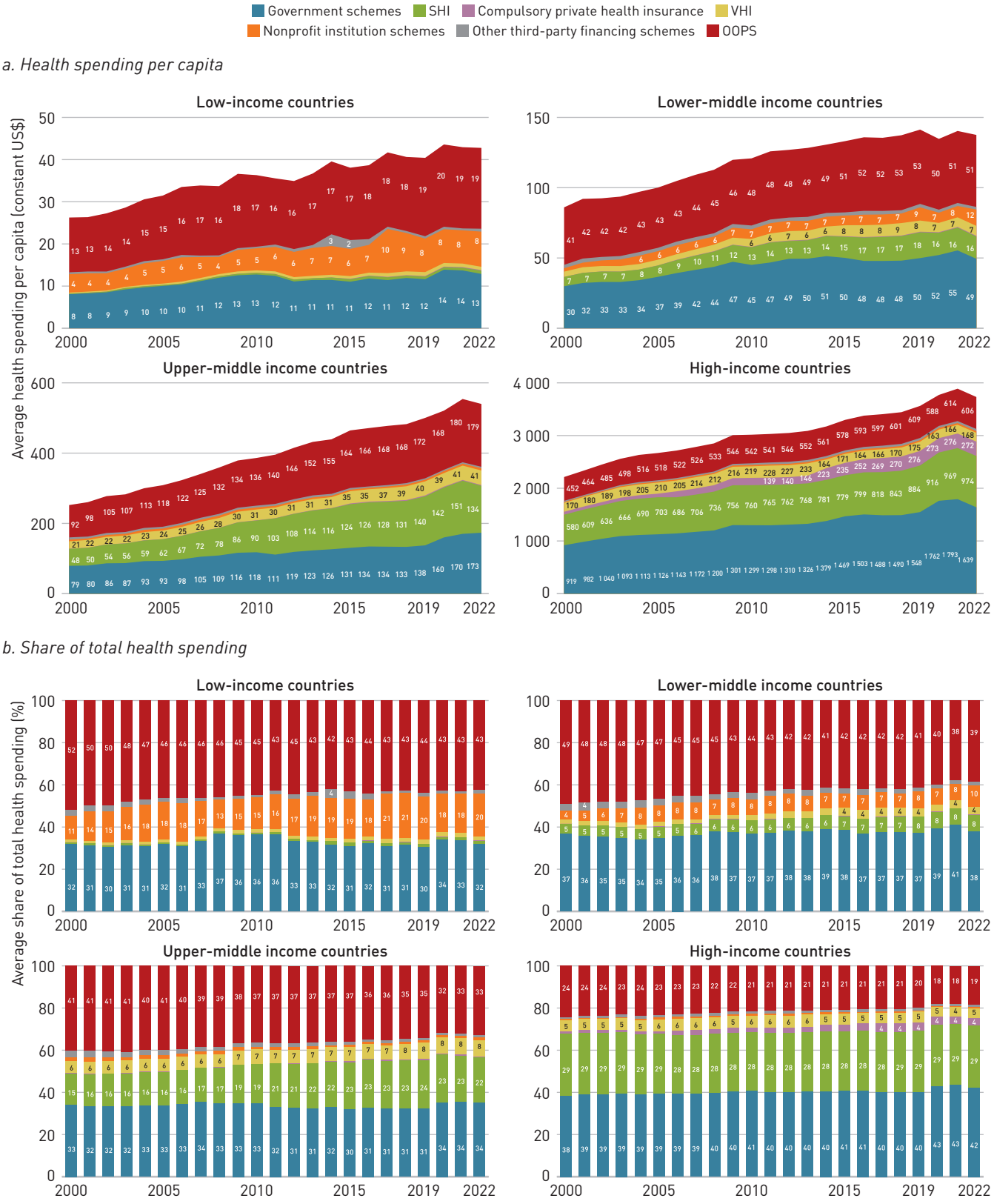
- **Government schemes**—are financing schemes with a noncontributory basis for entitlement, with automatic participation of the whole population or specific population groups, as defined by law or government regulation. These schemes are typically managed by government entities, involving government budgets for health, funded by domestic public sources (primarily tax and nontax revenue) and, in low and middle income countries, by external aid for health.
- **Compulsory health insurance schemes**—are financing schemes with a contributory basis for entitlement and with compulsory participation of the whole population or population groups, as defined by law or government regulation. Usually funded by compulsory prepayments and sometimes government budget transfers, as general subsidies or contributions on behalf of some population groups. Compulsory health insurance schemes include:
  - **Social health insurance schemes**—usually funded by non-risk-related compulsory social contributions from employers, employees or others, and government budget transfers and often managed by public entities such as social health insurance agencies.
  - **Compulsory private health insurance schemes**—funded by compulsory health insurance premiums from individuals, employers or others and sometimes government subsidies and usually managed by private entities such as insurance companies.
- **Voluntary health insurance (VHI) schemes—**are schemes with voluntary participation (not compulsory by law) and a contributory basis for entitlement through the purchase of a voluntary insurance policy, including VHI in primary, complementary or supplementary roles. These schemes are funded by VHI premiums and sometimes government subsidies and are usually managed by private entities such as insurance companies. Micro-insurance and community-based health insurance schemes are also usually voluntary and fall in this category.
- **Nongovernmental organization schemes—**are schemes with a noncontributory basis for entitlement determined at the discretion of the nonprofit entity managing the scheme. Such schemes are thus considered voluntary in SHA 2011. They are usually funded through external aid for health, donations from the general public or government transfers and are usually managed by nonprofit institutions such as domestic and international nongovernmental organizations or external donor agencies.
- **Household OOPS—**are direct payments from households to health providers for health care goods and services not paid by a third-party financing scheme, including household direct payments for the total cost of the services, cost-sharing (copayments) and informal payments. OOPS is an SHA 2011 category for financing schemes because it is used to access and pay for health services. However, from a health policy perspective, OOPS is not pooled and thus is not considered a financing scheme in policy analysis.

Notes

a. This chapter uses the SHA 2011 terminology for the categories of health financing schemes. Countries may use different names for their national schemes. For instance, several countries refer to their national schemes as "health insurance," but these schemes are classified as government schemes under the SHA 2011. Tax-funded schemes that benefit some segments of the population are also included in this category (see Box 2.5 for examples).

b. The contributory nature of a financing scheme's entitlement refers to whether its benefits are conditioned on a contribution by or on behalf of the beneficiary (contributory) or not (noncontributory). A noncontributory scheme does not necessarily have no user fees or copayments paid by the patient when accessing health care services. However, the part paid by the patient is considered OOPS.

FIG. 2.2 Per capita health spending financed through all major types of schemes generally rose in real terms between 2000 and 2019 across all country income groups



Note: Other third-party financing schemes include compulsory medical saving accounts, enterprise (voluntary) schemes, rest of the world schemes (nonresident compulsory or voluntary schemes), and unknown or not elsewhere classified health financing schemes. Health spending per capita is reported in constant (2022) US dollars. Country-specific GDP deflators were used to convert national current values to constant values with 2022 as the base year. Constant national currency values were converted to constant US dollar values using 2022 currency exchange rates.
Data source: WHO Global Health Expenditure Database, 2024.

In the 20 years before the COVID-19 pandemic, the profile of spending by financing scheme evolved in all country income groups. Average per capita spending channelled through most financing schemes increased in real terms between 2000 and 2019 (see Fig. 2.2). OOPS per capita generally grew more slowly than total health spending, resulting in the OOPS share declining.[3] Variations in the pace of growth in government scheme and compulsory health insurance scheme spending had different implications for the distribution of overall health spending by financing scheme in each country income group.

In low income countries, government scheme spending per capita between 2000 and 2019 grew at the same rate as household OOPS and slower than nongovernmental organization scheme spending (which is funded primarily by external aid not channelled through government budgets). As a result, the government scheme share of total health spending fell by 2 percentage points.

In middle income countries, compulsory health insurance scheme spending (mainly by SHI) grew rapidly—and much faster than government scheme spending. Between 2000 and 2019, the SHI share of total health spending rose by 3 percentage points in lower-middle income countries and by 8 percentage points in upper-middle income countries. In lower-middle income countries, government scheme spending per capita still grew faster than OOPS, and the government scheme share of total health spending remained stable (at 37% in 2000 and 2019) despite slower growth than SHI, VHI and nongovernmental organization scheme spending. In contrast, in upper-middle income countries, the growth in SHI spending, OOPS and VHI spending was faster than that of government scheme spending, and the government scheme share fell by 2 percentage points.

In high income countries, government scheme spending rose faster than SHI scheme spending and OOPS between 2000 and 2019, increasing the government scheme share of total health spending by 2 percentage points, while the SHI share remained stable at 29%. The compulsory private insurance share of total health spending also increased (high income countries are the main income group where this type of scheme exists).

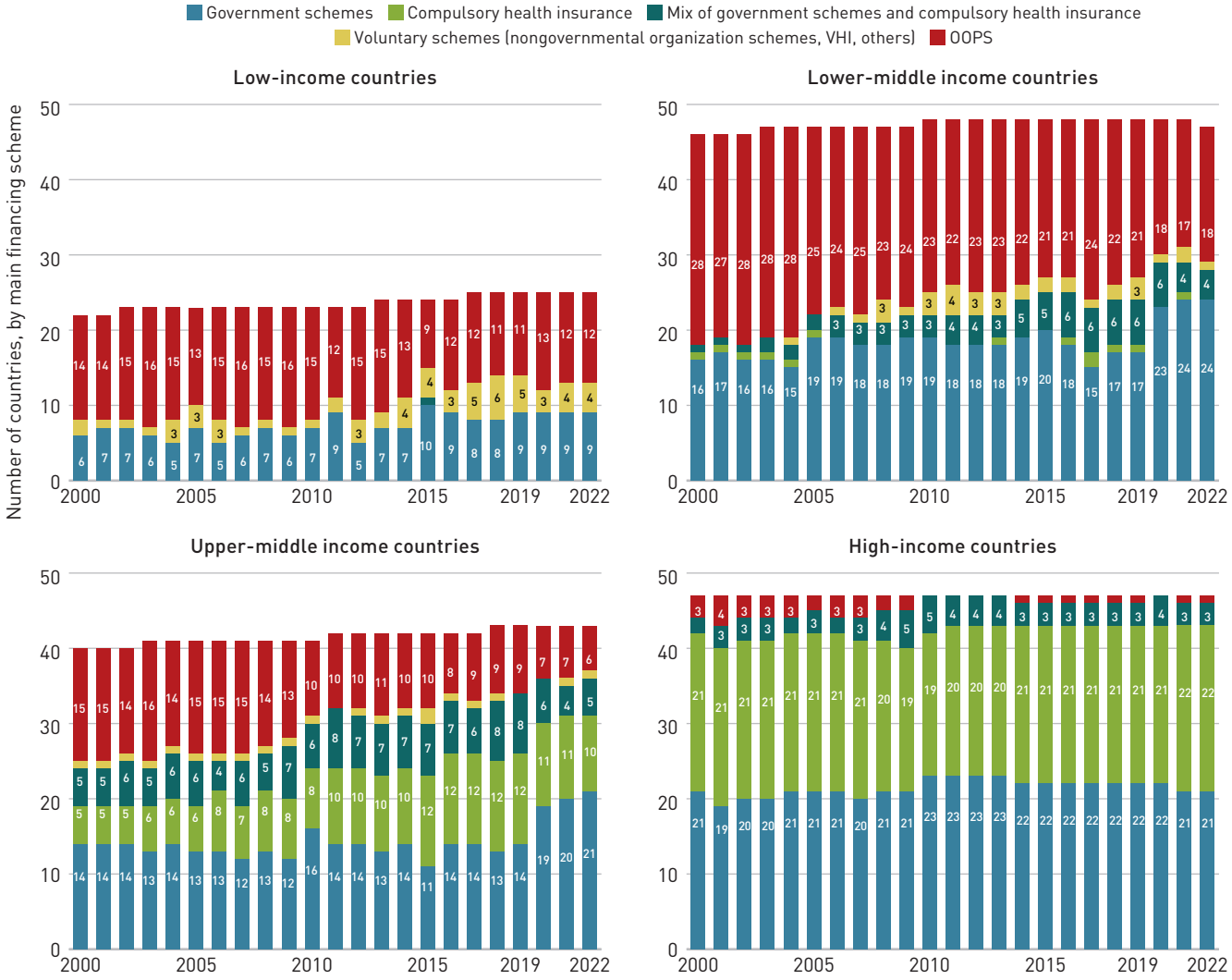
The number of countries where government schemes or compulsory health insurance schemes were the main financing scheme rose between 2000 and 2019. Although no single type of schemes can finance all health spending, most countries rely on one or two main types of schemes. To examine how health financing systems changed over time, countries are grouped according to their main financing scheme (the type of scheme that accounts for the largest share of spending) each year among OOPS, voluntary and other schemes, or compulsory schemes (government schemes and compulsory health insurance schemes). When compulsory financing schemes account for the largest share of total health spending, countries are further grouped into three subcategories of compulsory schemes: government schemes, compulsory health insurance and mix of both.[4]

Between 2000 and 2019, the number of countries with government schemes, compulsory health insurance or a mix of both as the main financing scheme rose from 92 to 113. The number with government schemes as the main scheme rose from 57 to 62, and the number with compulsory health insurance as the main scheme rose from 27 to 34 (Fig. 2.3). Of those 34, 31 had SHI as the main scheme in 2019, and only 3 high income countries (Netherlands (Kingdom of the), the United States of America and Switzerland) had a larger share of spending financed by compulsory private insurance than by SHI. Upper-middle income countries accounted for most of the increase in countries with SHI as the main scheme between 2000 and 2019 (from 5 to 12), though more high income countries had compulsory health insurance as the main scheme than in other income groups (21 in both 2000 and 2019). The number of countries with a roughly even mix of government scheme and compulsory health insurance spending also rose, from 8 to 17, while the number with OOPS as the main scheme declined from 60 to 42, most of them middle income. Finally, in a small group of low and middle income countries (8 in 2019), voluntary and other schemes financed

3. For more discussion on long-term trends in OOPS, see Chapter 1.

4. The subcategories of compulsory schemes are defined according to the share of total compulsory scheme health spending: the government schemes group (when government schemes account for more than 60% of compulsory scheme spending), the compulsory health insurance group (when compulsory health insurance accounts for more than 60% of compulsory scheme spending) or mixed (when both government and compulsory health insurance schemes account for 40%–60% of compulsory schemes spending). Because the main financing scheme of a country is based only on spending, it might not correspond to the scheme with the highest population coverage in the country.

FIG. 2.3 The number of countries—particularly middle income countries—with OOPS as the main financing scheme decreased considerably between 2000 and 2019



Note: The total number of countries each differs because some countries did not exist or did not report data for some years.
Data source: WHO Global Health Expenditure Database, 2024.

the largest share of health spending in 2019, driven mainly by nongovernmental organization schemes.

Most countries where OOPS ceased being the main financing scheme were middle income, mainly because of higher SHI scheme spending. In general, shifts in the main financing scheme between 2000 and 2019 reflected a continuing increase in an existing scheme (government or SHI) that outpaced growth in OOPS. However, there were notable shifts in mechanisms and structure of health financing systems. These included shifts away from government schemes to compulsory health insurance as the main financing scheme (such as the Republic of Moldova from 2004, Suriname from 2015 and Cyprus from 2019). By contrast, some countries stopped relying on SHI schemes (such as Georgia from 2004 and Montenegro from 2022).

However, in 2022, OOPS was still the main financing mechanism in 30 low and lower-middle income countries; in 20 of these, OOPS accounted for more than half of total health spending. The number of countries with OOPS as the main financing scheme decreased slightly, from 42 in 2019 to 37 in 2022. Most of these are low and lower-middle income countries.

It remains to be seen whether the increased government scheme spending during the COVID-19 pandemic will be sustained (Box 2.3). In all country income groups,

BOX 2.3

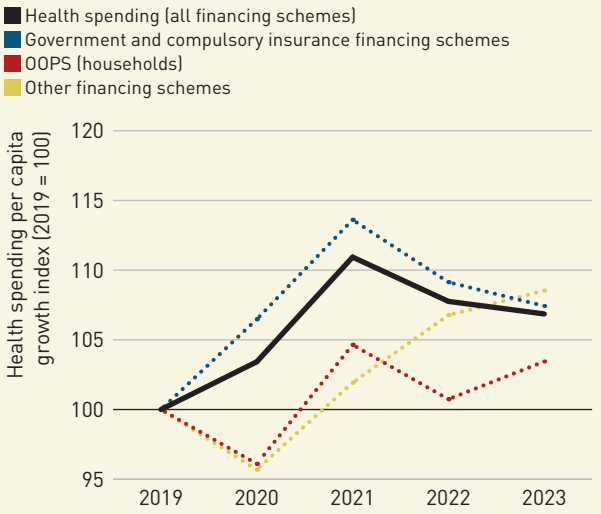
Health spending in 2023 for a small set of countries

Preliminary data on health spending and financing schemes for 2023 are available for 12 countries, most of them high income. Due to the limited number of countries and their composition, these patterns are not internationally representative or generalizable beyond this group. However, the data provide insights into the evolution of health spending beyond 2022.

In these 12 countries, health spending per capita fell slightly, by an average of 1% in real terms in 2023, compared with a 3.2% decrease in 2022. Health spending as a share of GDP remained nearly unchanged, averaging 9.2% in 2023.

Government and compulsory insurance health spending per capita (reported by eight countries) fell by an average of 1.7% in real terms, less than the 4.5% decrease in 2022. Conversely, OOPS per capita rose by 2.7% in real terms, and spending by other financing arrangements per capita rose 1.8% (Box Fig. 1).

BOX FIG. 1 Health spending declined slightly in 2023 in 12 countries with data



Note: Other financing schemes include voluntary health care payment schemes (voluntary health insurance, nongovernmental organization schemes and enterprise schemes), rest of the world financing schemes (nonresident) and unspecified financing schemes.
Data source: WHO Global Health Expenditure Database, 2024.

government and compulsory health insurance scheme spending per capita rose considerably from 2020 and was higher in real terms in 2022 than immediately before the pandemic (2019) (see Fig. 2.2). The increase during the pandemic was driven mainly by higher government scheme spending, particularly in 2020. Indeed, the number of countries with government schemes as the main financing scheme rose from 63 in 2019 to 75 in 2022. Most of the change occurred in middle income countries. Whether the increased use of government schemes will be maintained after 2022—or was a temporary departure from existing trends—will become evident only as more data become available.

Government schemes

Government scheme spending is usually determined in budgeting processes, with the health sector budget allocated by the ministry of health to health facilities or, in decentralized settings, channelled through subnational health authorities or subnational governments to purchase health services. Government schemes often have automatic participation for the whole population or population groups, as defined by law or government regulation. Setup and operation in practice vary by country (Box 2.4). Government schemes can be limited to providing population-based public health interventions and health system governance and administration in countries with SHI, while in many other countries, automatic entitlement of government schemes can also include a range of preventive and treatment services for the whole population—for example, the UK National Health Service—or for targeted population groups.

In all country income groups, government schemes responded most quickly to the COVID-19 pandemic. In 2020, government scheme spending per capita rose in real terms in 132 of 163 countries, and 93 of those countries saw a growth rate above 10% (Fig. 2.4). In 2021, government scheme spending per capita continued to rise, on average, in all income groups except in low income countries, where it declined but remained historically elevated in real terms. In 2022, in line with the general decline in domestic public spending on health, government scheme

BOX 2.4

Approaches to providing specific health service coverage in government schemes

A growing group of countries allocates government funds to provide explicit health coverage through government schemes, often for selected population groups that are usually outside the formal sector. Since service entitlement for these groups is noncontributory, these arrangements are classified as government schemes. In many cases, the basis for entitlement is a measure of socioeconomic vulnerability, such as living below the poverty line or not being in formal employment. This is similar to the strategy in numerous countries that provide government budget transfers to compulsory health insurance schemes, often for vulnerable population groups that do not make direct contributions themselves or that contribute at a much lower rate (see Box 2.5). These government schemes show institutional design features similar to those of compulsory health insurance schemes, including a separate and explicit purchasing agency, enrolment or affiliation of the selected population groups and an explicit benefits package.

Several countries in Eastern Europe—for example, Georgia, Latvia, Montenegro (since 2022) and Ukraine—exclusively use government revenue channelled through a separate purchasing agency to fund a health coverage scheme for the whole population, which then has access to a defined benefits package. No contributions are collected.

Another group of countries with such arrangements and noncontributory benefits, despite large differences in scale and scope, includes, for example, Argentina (Sumar programme) *(3)*, Cambodia (Health Equity Fund) *(4)*, India (Ayushman Bharat Pradhan Mantri Jan Arogya Yojana) *(5)*, Pakistan (Sehat Sahulat Programme) *(6)* and Thailand (Universal Coverage Scheme) *(7)*. Most of these countries also operate separate compulsory health insurance schemes for formal sector employees.

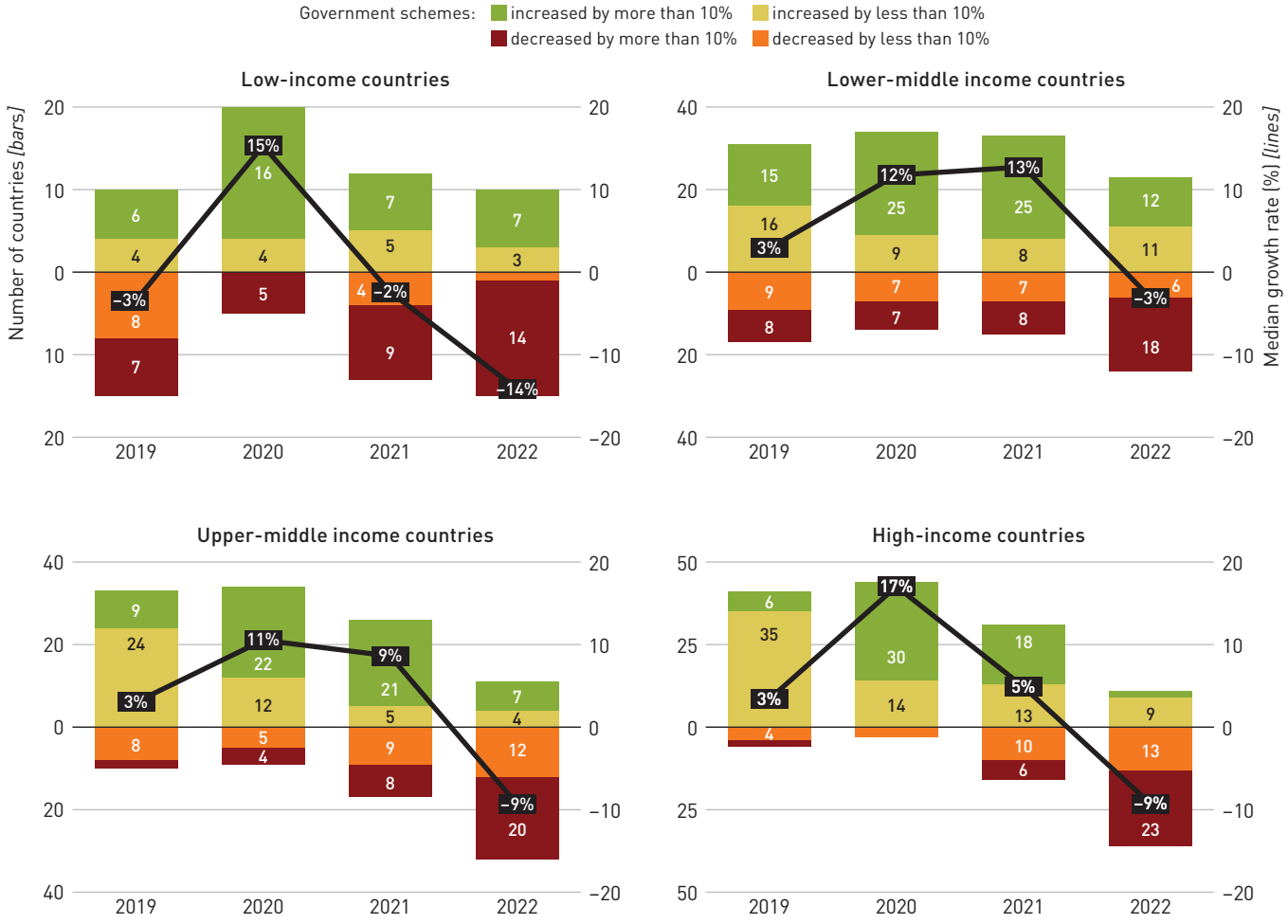
Countries with "free" health care policies that provide specific health services to defined population groups for which providers are explicitly reimbursed also fall into this group, except that the population group is more narrowly defined and the range of covered health services is much smaller. Burkina Faso and Niger *(8)*, as well as Benin's policy for free caesarean sections *(9)*, are examples. In some countries, such as Bolivia *(10)*, these free health care policies have gradually expanded to wider health coverage schemes. In contrast, in another group of countries, defined vulnerable population groups (such as poor people) are also targeted and entitled to exemption schemes, but there are no transfers to a purchasing actor and no explicit reimbursement to providers—and ultimately no real explicit coverage.

Another form of government scheme is coverage for civil servants, who may receive a wider benefits package (including access to private sector providers) than the rest of the population. The government sometimes operates as a third-party payer, reimbursing patients who send claims. These types of government schemes usually disproportionately benefit those who are better off.

Countries often have two or more of the above arrangements. These schemes with widely varying institutional design features and benefits show that progress towards universal health coverage can also be pursued through government schemes and that countries seeking to expand coverage should not think that compulsory health insurance (social health insurance) where contribution payments can be coupled with government budget transfers is the only way to achieve this. What ultimately matters is covering as many people as possible, particularly poor people and vulnerable population groups, with a comprehensive set of essential services explicitly purchased from prepaid pooled resources, with as little fragmentation and administrative inefficiency as possible.

Yet, aggregated System of Health Accounts 2011 data typically cannot capture these critical differences in government schemes. Country-specific analysis identifying each institutional setup is needed.

FIG. 2.4 In all country income groups, government scheme spending declined in 2022 after sharp increases early in the COVID-19 pandemic



Note: The percentage increase or decrease by country and the median growth rate of government scheme spending were calculated using spending per capita in constant national currency units. Because of missing 2022 data for Ukraine, the total number of countries for 2022 is 162, and the number of lower-middle income countries is 47.
Data source: WHO Global Health Expenditure Database, 2024.

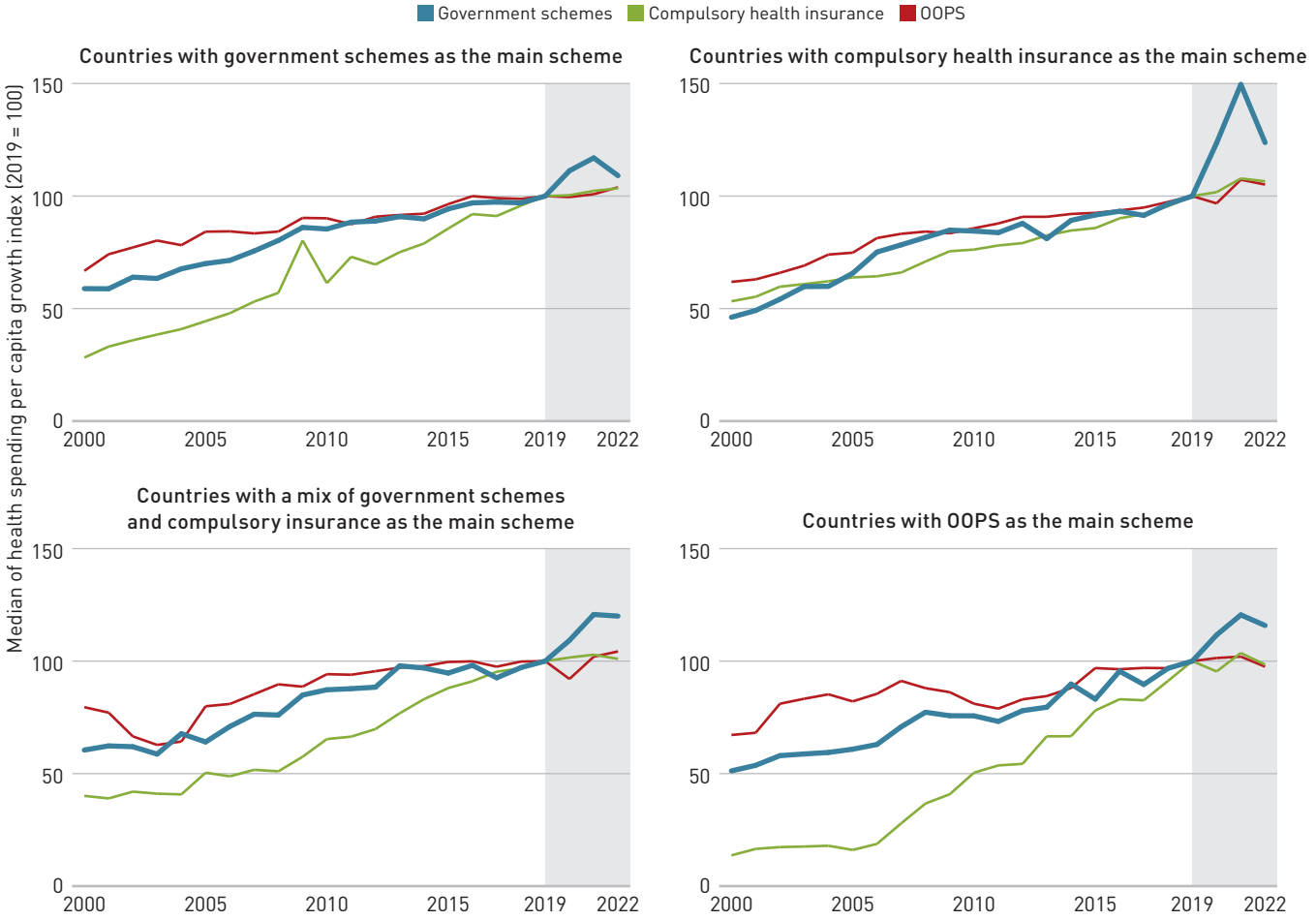
spending fell by 7% (median across the countries analysed): 107 of 162 countries had lower spending than in 2021, and 75 of them recorded a decline of more than 10%. But in 116 countries, government scheme spending per capita remained higher in real terms in 2022 than in 2019, before the COVID-19 pandemic.

Government budget allocations dominated the response to the COVID-19 pandemic. Across all types of health financing systems, government scheme spending per capita rose much more in real terms during the pandemic than compulsory health insurance scheme spending or OOPS (Fig. 2.5). This reveals that governments primarily used government schemes to channel funds for the pandemic response (for spending on COVID-19 treatment, testing, vaccination and the like), even in countries where compulsory insurance schemes ordinarily played a large role in financing services. For example, numerous countries with SHI as the main financing scheme used dedicated COVID-19 emergency response funds channelled through government schemes (such as Chile, Colombia and Germany). However, the strong growth in government scheme spending in countries with compulsory health insurance as the main financing scheme should be put in perspective, since it accounts for only a small share of total health spending.

Social health insurance schemes

SHI schemes have become more widespread globally since 2000. Of 163 countries

FIG. 2.5 The increase in government scheme spending per capita during the COVID-19 pandemic was considerable, even in countries with compulsory health insurance as the main financing scheme



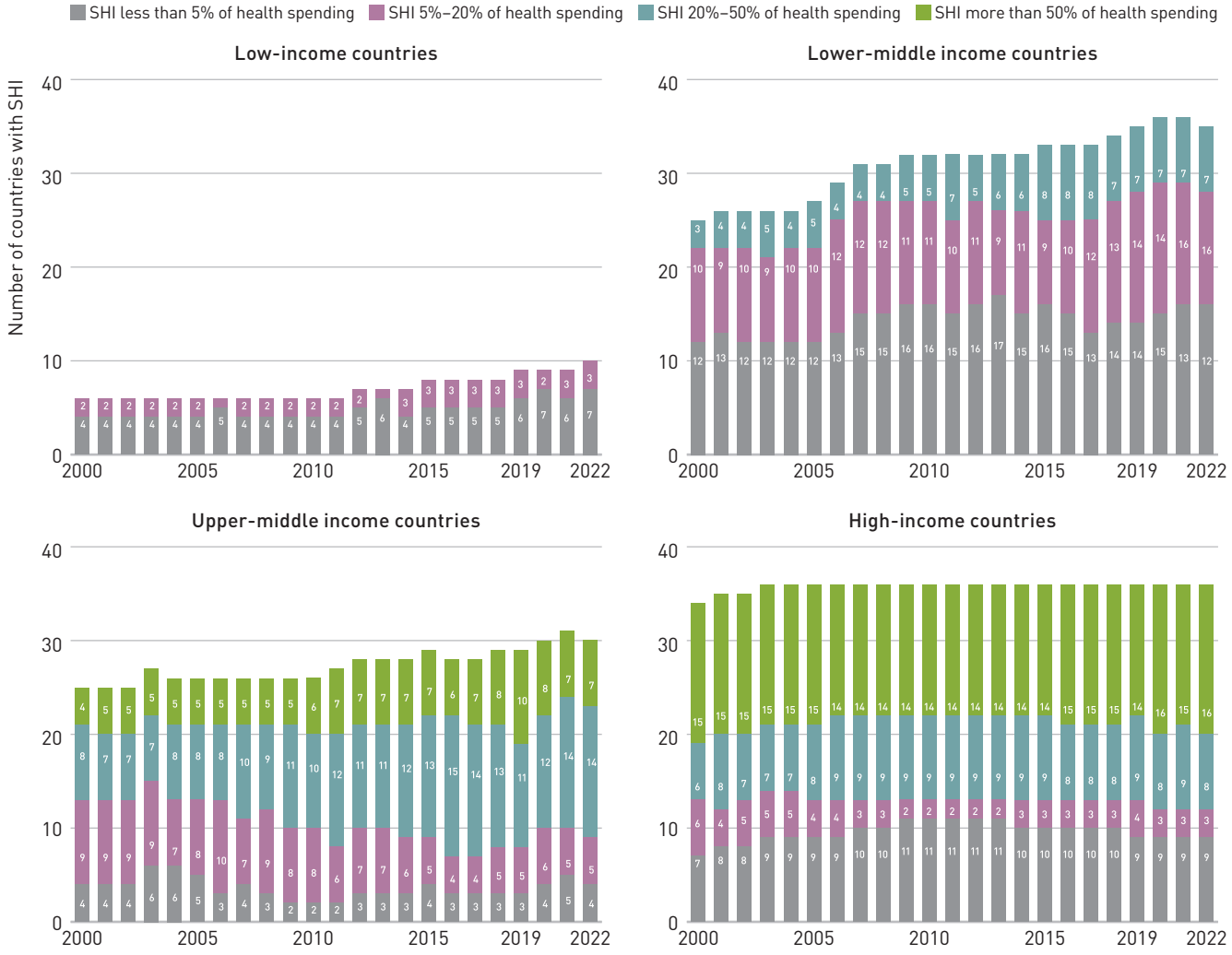
Note: The cumulative growth index was calculated using spending per capita in constant national currency units.
Data source: WHO Global Health Expenditure Database, 2024.

analysed, 111 (68%) financed some health spending through SHI schemes in 2022—21 more than in 2000 (Fig. 2.6).[5] Most of the growth in the prevalence of SHI since 2000 has occurred in middle income countries, with the number staying stable in high income countries. But several of these middle income countries were in the low income group when they introduced SHI; meanwhile only a few low income countries now have SHI schemes, despite the overall increase in prevalence. Moreover, among the 111 countries with SHI, the relationship is strong between country income group and the SHI share of total health spending. All the countries that finance more than half of total health spending through SHI in 2022 are upper-middle or high income. A minority of lower-middle income countries with SHI financed more than 20% of total health spending through SHI, while most low income countries with SHI financed 5% or less. SHI schemes financing less than 5% of total health spending generally provide entitlement to small population groups or provide coverage only for certain types of health services (such as work injury SHI schemes).

Between 2000 and 2019, SHI scheme spending also grew in countries that already had SHI. SHI spending increased by an average annualized rate of 7% in real terms in middle income countries and by 3% in low and high income countries with SHI. This growth boosted the SHI scheme share of total health spending in these countries. The largest

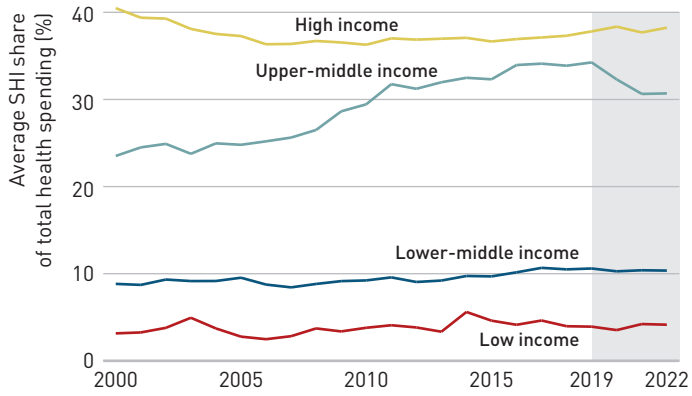
5. A small number of these countries may have had SHI in place before reporting it.

FIG. 2.6 While more than two-thirds of countries had a SHI scheme in 2022, all the countries that financed more than half of total health spending through SHI were upper-middle or high income



Data source: WHO Global Health Expenditure Database, 2024.

FIG. 2.7 In countries with SHI schemes, the SHI share of total health spending rose in middle income countries between 2000 and 2019



Note: Includes only countries with SHI schemes.
Data source: WHO Global Health Expenditure Database, 2024.

increase was in upper-middle income countries, 11 percentage points (from 23% to 34%). In lower-middle income countries with SHI, the increase was only 2 percentage points (from 9% to 11%), despite high growth in SHI spending per capita. In the few low income countries with SHI, the share rose by 1 percentage point but remained small (4% of health spending in 2019). In the 36 high income countries with SHI, the SHI share of total health spending fell by more than 2 percentage points, from more than 40% to 38% (Fig. 2.7).

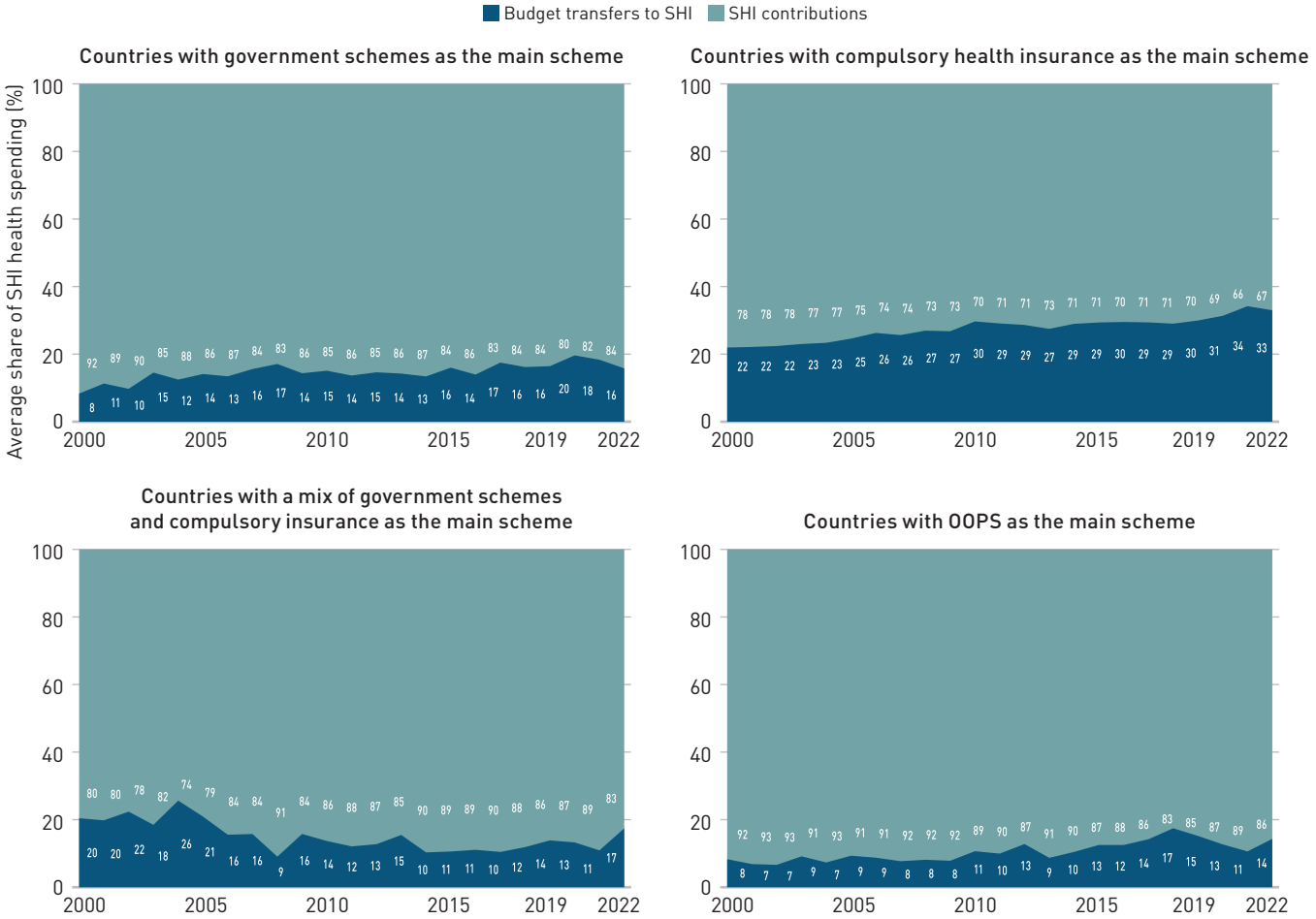
The increase in the SHI share of total health spending since 2000 was driven mainly by government budget transfers, though insurance contributions remain the main funding

source for SHI in most countries.[6] The number of countries using budget transfers to fund SHI schemes rose from 45 in 2000 (50% of the countries with SHI) to 69 in 2019 (63%). But variation across countries is considerable, with budget transfers funding more than 30% of SHI spending in 2019 in 35 countries and more than 50% in 14 countries. In contrast, only 35 countries with SHI received no budget transfers to fund SHI spending between 2000 and 2019.

Among all countries with SHI schemes, government budget transfers per capita increased by 6.6% a year, on average, between 2000 and 2019. This was faster than the growth in SHI contributions per capita (2.6% a year). As a result, the average share of SHI spending funded by budget transfers rose from 14% to 20%. Budget transfers to SHI schemes generally played a larger role in countries with compulsory health insurance as the main financing scheme, averaging 30% of SHI spending in 2019, up from 22% in 2000 (Fig. 2.8).[7]

In countries with SHI schemes, government budget transfers to SHI as a share of total health spending also rose between 2000 and 2019, by more than 2 percentage points,

FIG. 2.8 The share of SHI spending funded by government budget transfers rose between 2000 and 2022, particularly in countries with SHI as the main financing scheme



Note: Averages do not include Nepal and Sudan, where the totality of SHI schemes spending is reported as funded through government budget transfers from 2013 and 2015, respectively.
Data source: WHO Global Health Expenditure Database, 2024.

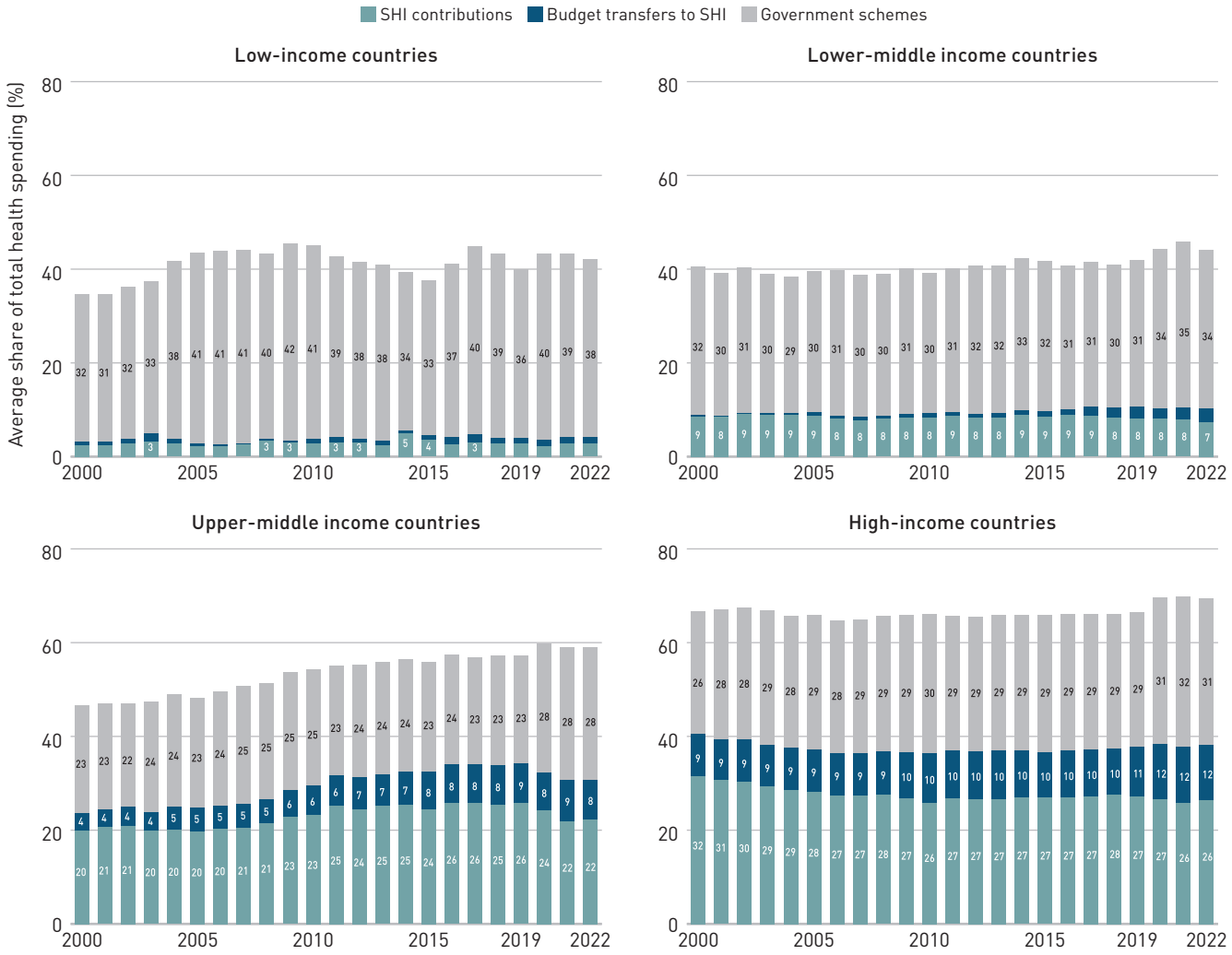
6. In this chapter, government budget transfers to SHI are calculated as the difference between the total SHI scheme spending and the spending funded by compulsory social contributions. For some countries, other types of SHI revenue can therefore be included in budget transfers. Social contributions from the government in its role as employer are not included in the government budget transfers category.

7. All 32 countries with compulsory health insurance as the main financing scheme in 2022 used government budget transfers.

from 4.5% to 6.6%, on average. By contrast, SHI contributions as share of health spending, which grew more slowly than budget transfers, fell by more than 1 percentage point. This trend was even more marked in countries with SHI as the main financing scheme. The slower growth occurred in all income groups, except in upper-middle income countries with SHI, where the SHI share of total health spending rose by 11 percentage points, split almost evenly between contributions (increase of 6 percentage point) and government transfers (5 percentage points). In high income countries with SHI, the decline in the SHI contribution share of health spending, 4 percentage points, was partially compensated for by higher budget transfers, which rose from 9% of total health spending to 11%. Together, financing mechanisms through general budgets, including government schemes (including domestic and external revenue) and budget transfers to SHI, increased their contribution to total health spending between 2000 and 2019 (Fig. 2.9).

During the COVID-19 pandemic, spending from SHI schemes continued to play an important role in health spending, supported by growth in government transfers. SHI scheme spending per capita increased in all income groups during the pandemic, except in lower-middle income countries. However, SHI as a share of total health spending declined in the early phases of the pandemic in all

FIG. 2.9 In countries with SHI schemes, public spending on health as a share of total health spending rose between 2000 and 2019—but with different financing modalities across country income groups



Note: Includes only countries with SHI schemes. SHI scheme spending is the sum of spending funded by SHI contributions and budget transfers to SHI. Government scheme spending (including domestic public and external funding) is added to visualize the total contribution of general budgets for health (the sum of budget transfers to SHI and government schemes).
Data source: WHO Global Health Expenditure Database, 2024.

country income groups because of strong growth in government scheme spending. By 2022, the SHI share of total health spending had returned to its prepandemic level globally, though it remained about 3 percentage points below its prepandemic level in upper-middle income countries (see Fig. 2.7).

Growth in SHI spending per capita during the COVID-19 pandemic was underpinned by budget transfers, which grew faster than SHI contributions. Accordingly, the SHI contribution share of total health spending fell in all country income groups during the pandemic. The largest drops were in upper-middle income countries with SHI schemes, where the SHI contribution share declined from 26% of total health spending in 2019 to less than 22% in 2021. In most country income groups, the increase in budget transfers to SHI occurred later than the surge in government scheme spending, usually in 2021. High income countries were the exception: the increase in budget transfers to SHI occurred in 2020, alongside the surge in government scheme spending (see Fig. 2.9).

The longer term increase in government budget transfers to fund SHI schemes highlights the growing importance of hybrid financing to achieve universal health coverage. Budget transfers complement SHI contributions. Most countries with SHI as the main financing scheme do not segment the population—that is, SHI schemes cover all population groups, including people who do not have a formal sector job. Under these schemes, budget transfers are pooled with contributions to increase the scheme's redistributive capacity, cross-subsidize those in need and cover potential deficits. However, further examination is required to determine whether budget transfers to SHI schemes systematically benefit disadvantaged groups *(11, 12)* (Box 2.5).

BOX 2.5

The role of government budget transfers to social health insurance schemes

The main rationale of government budget transfers to social health insurance (SHI) in most countries is to cover people working outside the formal sector, poor people and other vulnerable population groups and to respond to a changing demography that includes an increasing share of elderly people. These population groups contribute less to SHI schemes or do not or cannot directly contribute at all. Budget transfers also address the fact that collecting direct contributions from groups outside the formal sector is difficult, though many countries still try to do it.

However, it is important to rigorously assess in each context whether the benefits from these transfers effectively accrue to the intended population groups. Different scenarios can unfold where budget transfers are not spent on the intended target groups (for example, the vulnerable). In addition, budget transfers may have a pro-rich effect if nonsubsidized groups have higher utilization rates and higher health care spending than subsidized groups—for example, due to better geographical access to health services and higher demand. Yet, because vulnerable population groups often have higher health care needs, the share of transfers that SHI receives on their behalf should be at least as high as their share among all scheme members.

Empirical analyses have shown different redistributive effects in different contexts. For various countries and years, the total subsidy amount is lower than the spending incurred by the subsidized groups, suggesting that some cross-subsidization took place from the contributors towards the subsidized. However, in other years or settings, it was the opposite. Budget transfers were effectively used to cover the higher spending of contributing members, benefiting those who are usually better off, suggesting a pro-rich effect *(12, 13)*.

In the few countries with population-segmented insurance schemes—for example, with different schemes for formal sector employees and for other population groups outside the formal sector—government budget transfers are critical to finance the coverage of population groups that do not or cannot directly contribute themselves. In segmented systems, harmonizing benefits and provider payment rates is important to ensure equitable spending across schemes *(14)*.

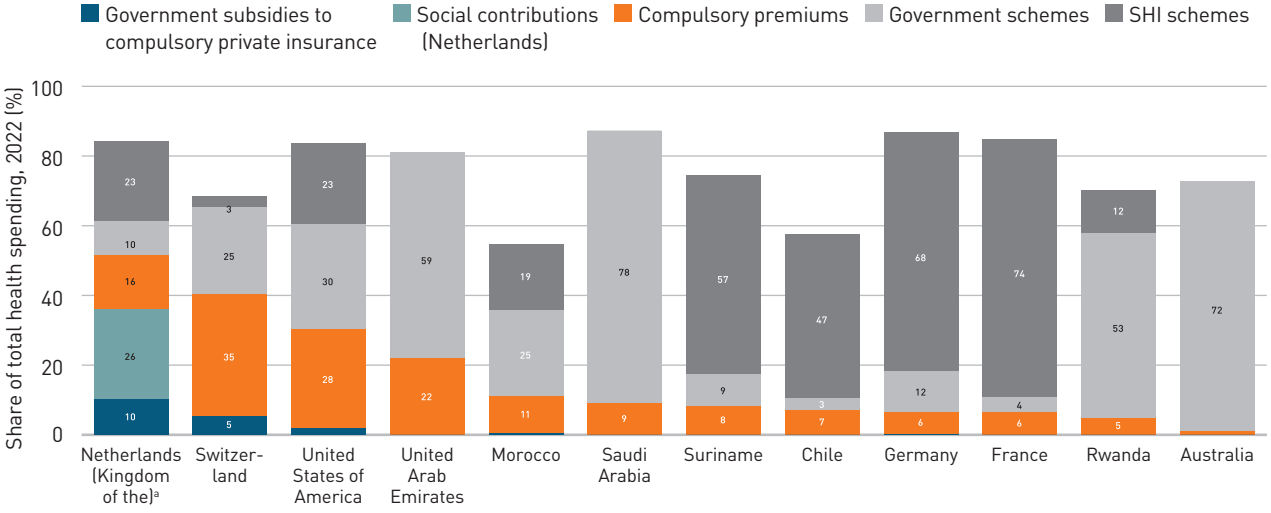
Finally, there is another small group of countries with compulsory health insurance for formal sector employees only that receive considerable government budget transfers. These budget transfers thus serve as direct subsidies for formal sector employees, reducing the contributory payments of both employees and employers. In this case, government funds are thus explicitly spent for employers and households of (assumingly) better-off population groups, suggesting a pro-rich effect.

Compulsory private health insurance schemes

Compulsory private health insurance exists in only a few countries: in 2022, the compulsory private health insurance share of total health spending exceeded 1% in only 12 countries (Fig. 2.10).[8] Eight of these countries are high income, three are middle income and one is low income. Compulsory private health insurance plays varied roles in different countries. It covers the majority of the population in only two countries, the Kingdom of the Netherlands and Switzerland. In Chile, Germany, Morocco, Saudi Arabia and, after the Affordable Care Act—also known as Obamacare—came into effect, the United States, it serves as primary coverage for some of the population *(15, 16, 17, 18)*. In other countries, it provides complementary coverage, often to reduce OOPS and improve financial protection. A few countries provide government budget transfers to compulsory private insurance for households with low incomes, such as the Kingdom of the Netherlands and Switzerland *(19)*. In France, premiums for complementary compulsory health insurance for people with very low incomes (around 10% of the population in 2021) are fully subsidized by the government *(20)*. Over the past decade, several countries have shifted parts of VHI coverage to compulsory private health insurance—as in France, Saudi Arabia and the United States, with the Affordable Care Act—or integrated it into SHI schemes—as in Slovenia since 2024 *(21)*.

In a few countries, people can opt out of the SHI scheme and buy coverage from compulsory private health insurance—as in Chile, or in Germany for civil servants and people above a certain income. Opting out of SHI (into compulsory private health insurance or VHI in a substitutive role) attracts younger and healthier individuals, leading to fragmentation, which reduces the redistributive capacity of SHI because it ends up pooling higher health risks. Allowing opting out, especially when coupled with differences in provider payment rates and benefits, results in inequitable health spending per capita across different schemes.

FIG. 2.10 Compulsory private health insurance is funded mostly by compulsory premiums but also by government budget transfers in some countries



Note: Coloured areas represent compulsory private health insurance and their respective types of revenue. Grey areas represent government schemes and SHI and indicate the importance of compulsory private insurance relative to other compulsory financing schemes.
a. In the Kingdom of the Netherlands, social contributions are a revenue of compulsory private health insurance because they correspond to income-related contributions from employers and self-employed individuals, pooled through a public entity before being redistributed to the health insurers managing the scheme.
Data source: WHO Global Health Expenditure Database, 2024.

8. In total, 22 countries of 163 reported spending by compulsory private health insurance in 2022, but for 10 of them, data refer only to health claims from mandatory car insurance. From 2013 to 2022, the number of countries in which compulsory private health insurance accounted for more than 1% of total health spending rose from 6 to 12.

Voluntary health insurance schemes

Between 2000 and 2022, the VHI share of total health spending increased slightly in all income groups, except in high income countries, though it remains small overall. Globally, the average VHI share of total health spending was 4.8% in 2019, up from 3.9% in 2000. Growth trends have varied by income group. The VHI share of total health spending rose by 1.7 percentage point in upper-middle income countries and by 1.6 percentage point in lower-middle income countries (Fig. 2.11). In low income countries, the increase was smaller, 0.8 percentage point, and in high income countries, the share declined 0.2 percentage point, driven in part by the aforementioned shift to compulsory private health insurance in a few countries. During the COVID-19 pandemic, the VHI share of total health spending fell by 0.3 percentage point but remained around 4.5%, on average, in 2022. By 2022, the largest drops as a share of total health spending from 2019 were in high income countries (0.6 percentage point) and low income countries (0.3 percentage point).

While VHI is generally widespread globally, few countries have a large VHI share of total health spending. Overall, 149 of 163 countries reported VHI spending in 2019, up from 122 in 2000. In 2022, only 20 countries had VHI accounting for more than 10% of total health spending, down from 23 in 2019 (Fig. 2.12). Few countries had a share above 25%, and only South Africa had VHI as its main financing scheme for most of the years analysed. The specific role of VHI varies: substitutive, complementary or supplementary to government and compulsory contributory health financing schemes.[9]

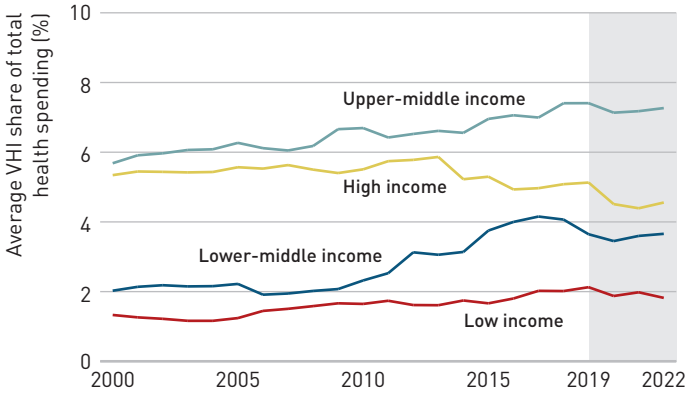
Government budget transfers to VHI exist in only a few countries (Box 2.6). Whether the budget transfers make VHI more affordable and thus improve financial protection across the population depends on both the beneficiaries of the budget transfers and the specific role of VHI in the health system.

VHI is often purchased by better-off population groups who benefit from having additional coverage and financial access to health care. Because of VHI's potentially distorting and spillover effects—affecting prices and health worker distribution, as well as fragmenting and segmenting the health system with inequities in access—regulatory measures that align VHI with government schemes and SHI are needed to ensure equitable access and comprehensive coverage and to avoid coverage gaps *(27)*.

Several low and lower-middle income countries have tried to expand community-based health insurance, which is also a form of VHI, for lower income population groups. But the population coverage and VHI share of total health spending remained marginal for community-based health insurance schemes, often below 5% *(28)*. More detailed evidence on trends in community-based health insurance spending and how it has affected OOPS will also help countries better assess the actual potential of community-based health insurance.

VHI spending trends generate additional critical questions. Foremost is whether VHI spending grows more slowly in countries with clear regulation or with a well-defined complementary or supplementary role. Equally important is generating evidence on the impacts of (targeted) budget transfers to VHI, particularly the impacts on OOPS across household income groups.

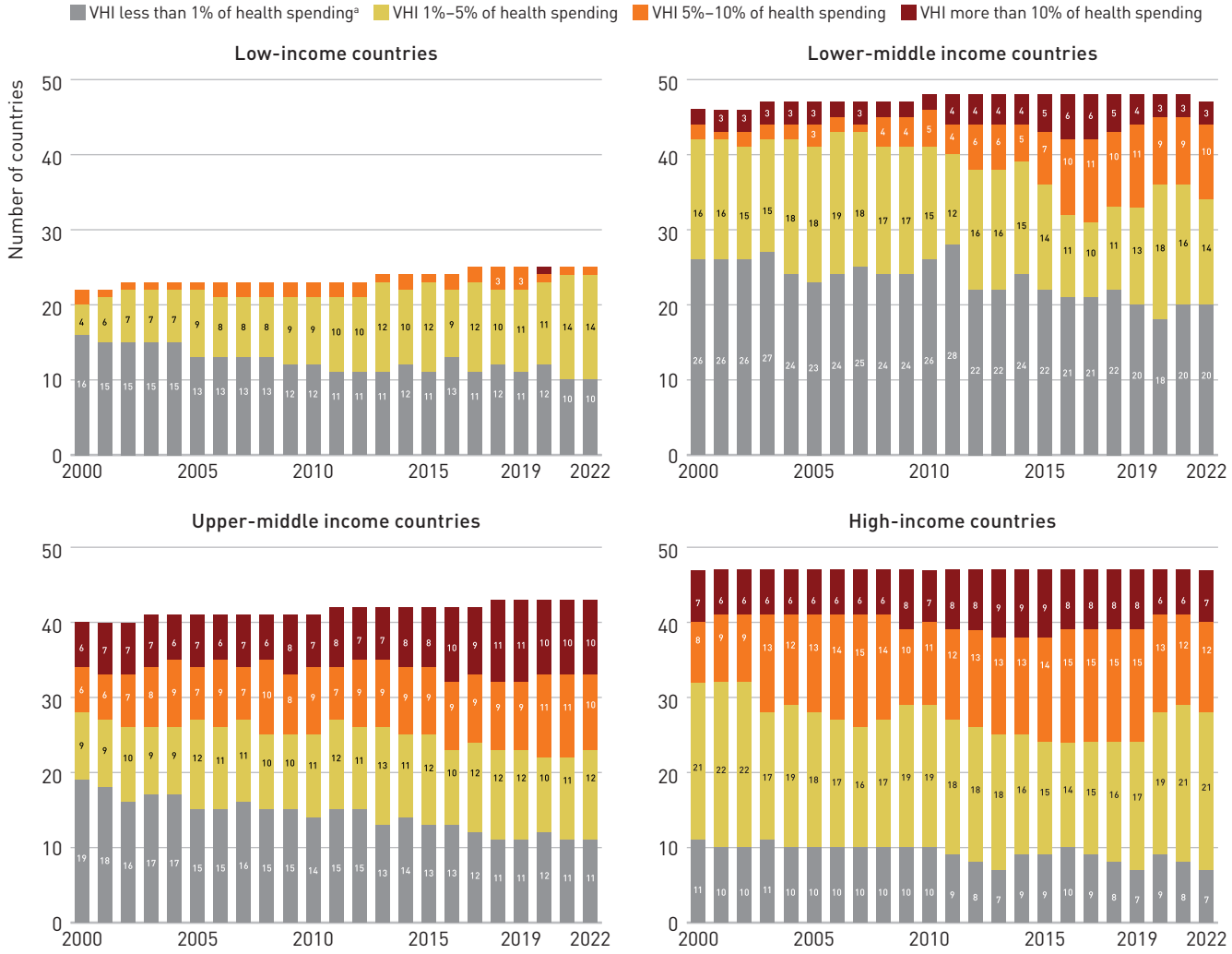
FIG. 2.11 The VHI share of total health spending in 2022 was largest in upper-middle income countries, where grew rapidly until 2019



Note: Excludes for visualization purposes the Bolivarian Republic of Venezuela, which has data in the GHED only from 2018 and thus creates an artificial spike in the upper-middle income country average due to its high share of VHI.
Data source: WHO Global Health Expenditure Database, 2024.

9. For example, VHI can be supplementary for one benefits package (to have better choice, skip waiting lists and the like) and complementary to cover co-payments to benefits covered by government or SHI schemes. Aggregated SHA data do not reveal these different roles.

FIG. 2.12 **Globally, only 20 countries had a VHI share of total health spending above 10% in 2022**



a. Includes countries with no reported VHI spending.
Data source: WHO Global Health Expenditure Database, 2024.

BOX 2.6

Government budget transfers to voluntary health insurance schemes

Across all countries, South Africa had the largest share of voluntary health insurance (VHI) schemes in total health spending, at 46% in 2022, and the largest share of VHI schemed funded by government transfers (representing a third of VHI spending, or 16% of total health spending). But it provided primary coverage for only about 16% of the population (largely better-off income quintiles from the formal sector) *(22)*, whereas the majority of the population is covered by government schemes with a much smaller share of total health spending. The very high VHI share reflects massive inequality in the distribution of health system resources; budget transfers to VHI schemes presumably have a pro-rich effect.

In Australia, as well as Croatia, Georgia, Malaysia, Portugal *(20, 23, 24, 25, 26)* and several other countries where VHI plays a supplementary or complementary role, government budget transfers to VHI are used to create incentives to buy a VHI policy. In Croatia, budget transfers provide financial support to low income households, war veterans and disabled individuals to help them afford complementary coverage, with the goals of reducing inequities and making health care more accessible for these groups *(20)*. France and Slovenia took a similar approach of providing budget transfers to low income employees until 2016 and 2023, respectively, when complementary VHI was transformed into mandatory insurance. This implied reclassifying this spending under compulsory private health insurance in France and under social health insurance in Slovenia *(20)*.

Implications

An overall positive message for global health appears to be that the reliance on health spending channelled through government schemes and compulsory health insurance schemes (mainly SHI) has increased since 2000. As a consequence, the reliance on OOPS, as measured by its share of total health spending, has declined, even though OOPS per capita has generally increased in real terms. Before the COVID-19 pandemic, spending channelled through SHI schemes grew rapidly, underpinned by the increasing number of countries using it and its rising share of total health spending. There has also been a distinct trend towards larger government transfers to SHI schemes, which points to growing hybrid financing from different public funding sources. VHI spending has been increasing, though it is still small in scale. During the pandemic, growth in government scheme spending was particularly strong, underscoring its flexibility during emergencies.

Whether these spending trends have resulted in a more sustainable and equitable form of financing is unclear. On the face of it, the shift towards government schemes and SHI should support higher service coverage and better financial protection and move countries towards universal health coverage. However, what ultimately matters are the size of OOPS and the segments of society that bear it *(29)*. Have these shifts actually led to lower OOPS, better financial protection and less unmet need? And has the higher SHI scheme spending also come with an increased share of population coverage and expanded benefits? Further exploration is needed to answer both.

In-depth analysis on, for example, benefit incidence, distributions of financial hardship and unmet health needs would provide a fuller picture of whether the revenue and spending have effectively improved equity in financial protection and access to health services. The analysis in this chapter is only from the health spending perspective. A full picture of system performance should also consider population coverage, service coverage and other aspects. Moreover, detailed understanding of the health financing policies and country institutional, legal and social context is also necessary to gauge the impacts of policy on population groups.

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3

Financing health services during the COVID-19 pandemic

Key messages

- Government schemes were more flexible than social health insurance (SHI) in scaling up financing and adapting to the higher demand for preventive care during the COVID-19 pandemic, regardless of the country's main health financing scheme.
- Most countries boosted spending on outpatient care and inpatient care during the pandemic, with the changes financed mainly by a country's main health financing scheme.
- Out-of-pocket spending (OOPS) on medical goods increased during the pandemic in most countries where SHI dominated health financing but mostly declined where government schemes dominated.
- Government schemes were crucial in increasing primary health care (PHC) spending, regardless of whether government schemes or SHI dominated financing during the pandemic. In 27 of 35 high and middle income countries with data, PHC spending financed by government schemes rose from 2019 to 2022, making it the primary driver of growth in PHC spending.

The early phases of the COVID-19 pandemic altered health service delivery across all country income groups. Hospitals pivoted towards inpatient care and away from outpatient care, while preventive care spending also increased sharply across a host of providers.

To meet these new demands, health financing arrangements also had to adapt. This chapter draws on data from 44 middle and high income countries to explore how the financing of health care services changed through the COVID-19 pandemic (Box 3.1). It compares the way that health services were financed in 2019, before the pandemic, with the way they were financed in 2022 (or the latest available year). A specific focus is the response in two different types of health financing systems: those where government schemes (mainly budgets) play the main role in financing services (referred to as "government systems") and those where SHI plays the main role ("SHI systems").[1]

The COVID-19 pandemic also affected the provision of PHC services *(1)*. Accordingly, this chapter also focuses on the way that financing

BOX 3.1

Data and methodology used in this chapter

This chapter compares the spending structure by type of service and health financing scheme between 2019 and 2022 for 44 middle and high income countries.[a] For 6 countries without 2022 data, data for the most recent available year are used: 2020 for 2 countries and 2021 for 4 countries (see the Annex for the year used for each country). The analysis excludes low income countries due to lack of data and excludes countries with noncomparable data between the two years due to methodology changes or data quality issues.

Health care functions

Health spending by type of health care function uses the health care functions (HC) classification in the System of Health Accounts *(2)*. This provides information about spending and distribution by type of health care good and service.[b] Functions relate to the purpose of a health service or product consumption:

- **Inpatient care (HC.1.1)** involves a formal admission to a health care facility and an overnight stay. In this chapter, it refers to inpatient curative care only and excludes inpatient rehabilitative and long-term care.
- **Outpatient care (HC.1.3)** involves health services delivered on the premises of a health care provider without formal admission or overnight stay. In this chapter, it refers to outpatient curative care only and excludes outpatient rehabilitative and long-term care.
- **Long-term care (HC.3)** consists of a range of medical and personal care services that are consumed with the primary goal of alleviating pain and suffering and reducing or managing the deterioration in health status in patients with a degree of long-term dependency.
- **Medical goods (HC.5)** are mainly pharmaceuticals but also therapeutic appliances and other durable and nondurable medical goods. They include medical goods bought outside a service package but consumed during service provision. Medical goods that are provided within service packages, such as during an outpatient consultation or inpatient treatment, are excluded from this category and are instead included in the respective services, such as inpatient or outpatient care.
- **Preventive care (HC.6)** is limited to primary and secondary prevention, which includes interventions aimed at avoiding diseases and risk factors and detecting diseases. It includes information and promotion programmes, immunization, early disease detection and healthy condition monitoring programmes, epidemiological surveillance and risk and disease control programmes, and programmes to prepare for disasters and emergency responses.
- **Other services** include rehabilitative care; ancillary care, including laboratory and imaging services and patient transportation; day and home-based curative care; governance; and unclassified health services.

Health financing systems

The analysis of health financing systems uses data on 2019 health spending categorized by the System of Health Accounts 2011 classification of health care financing schemes (HF). Countries are categorized into

(continued)

1. "Government systems" and "SHI systems" refer to the entire health financing system in each country rather than the breakdown of government health financing schemes and SHI within each country.

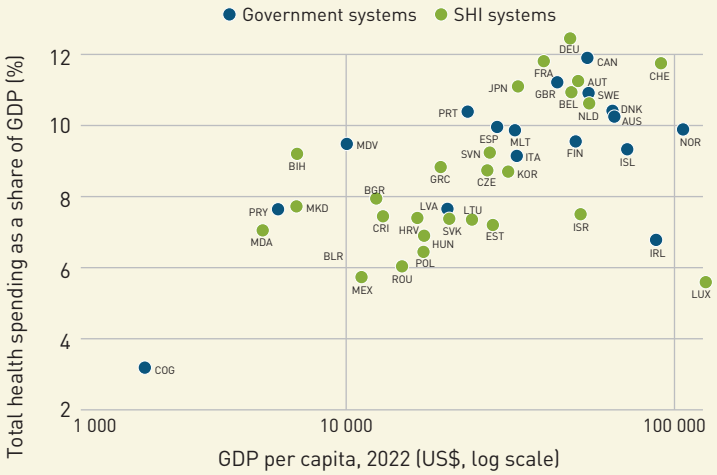
BOX 3.1 (continued)

two groups: government systems and SHI systems. This classification is based on the financing scheme that accounted for the largest share of health spending in 2019 (see footnote 5 in Chapter 2). The second part of the chapter analyses changes in health spending in different health financing systems relative to gross domestic product rather than in absolute or per capita terms to make them comparable across countries with vastly different levels of spending.

There is no clear relationship between a country's income level and its type of health financing system. The mix of middle and high income countries is broadly the same across each type of financing system (Box Table 1 and Box Fig. 1). This suggests that income level and the relative size of the health sector are unlikely to have confounded the results presented in the chapter.

To make full use of available data, three countries that had mixed financing systems—Austria, Mexico and Greece—were assigned to the SHI systems group because the share of SHI in total health spending exceeds that of government schemes.

BOX FIG. 1 **Higher total health spending is associated with higher gross domestic product per capita, regardless of the type of health financing system**



Data source: WHO Global Health Expenditure Database, 2024.

The analysis of PHC spending examines a subset of 35 countries (Box Table 2).

BOX TABLE 1 **Number of countries with data on health spending by health care function and health financing scheme for 2019 and 2022, by country income group**

Type of health financing system	Middle income	High income	Total
Government system	4	14	18
SHI system	6	20	26
Total	10	34	44

Data source: WHO Global Health Expenditure Database, 2024.

BOX TABLE 2 **Number of countries with data on PHC spending by health care function and health financing scheme for 2019 and 2022, by country income group**

Type of health financing system	Middle income	High income	Total
Government system	3	11	14
SHI system	5	16	21
Total	8	27	35

Data source: WHO Global Health Expenditure Database, 2024.

Note

a. The data used in this chapter are published as "Supplementary data - Global Report (2024)" on the Global Health Expenditure Database website.

b. This chapter uses "health care functions" and "types of services" interchangeably.

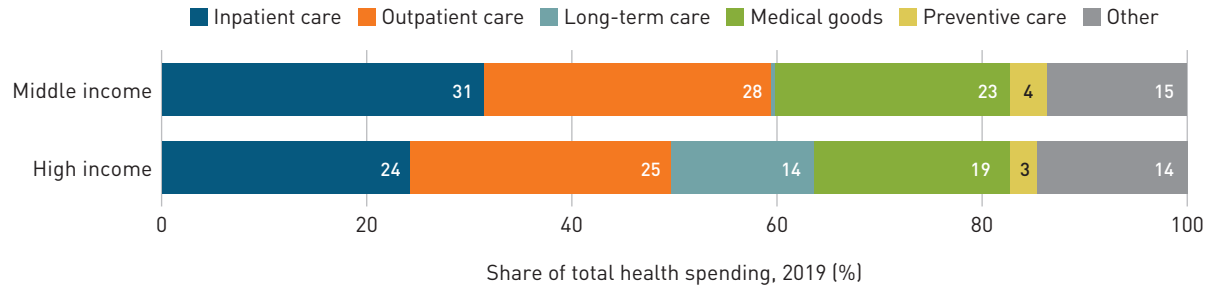
of PHC services changed during the pandemic in 35 countries. Once again, the focus is on the differences between government systems and SHI systems.

Composition of health spending, by type of service

In 2019, before the COVID-19 pandemic, outpatient care, inpatient care and medical goods accounted for most health spending in both high and middle income countries. Collectively, these three services accounted for an average of 68% of total health spending in high income countries (Fig. 3.1). Long-term care[2] also accounted for a sizable share of spending in high income countries (average of 14%). In middle income countries, the three main types of services were the same as in high income countries but accounted for an even larger share—82%. The primary difference between the two income groups was that

2. In this chapter, long-term care refers to the health components only; the social care components are excluded.

FIG. 3.1 Before the COVID-19 pandemic, the majority of health spending in middle and high income countries went to inpatient care, outpatient care and medical goods



Data source: WHO Global Health Expenditure Database, 2024.

long-term care accounted for a much smaller share of spending in middle income countries.

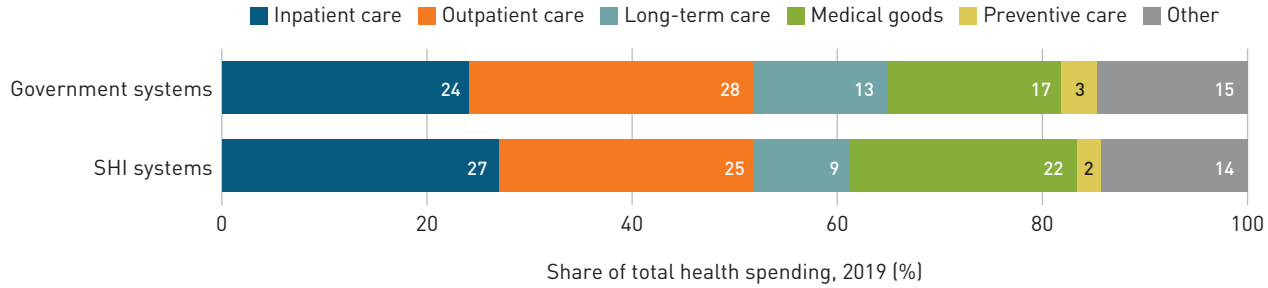
Preventive care accounted for a small share of total health spending in both middle and high income countries. In middle income countries, it accounted for 4% of spending in 2019, on average, slightly higher than the 3% in high income countries. This may be related to the difference in service delivery systems, such as the extent to which preventive care is integrated into outpatient and inpatient services. Additionally, health interventions with high technology in high income countries usually lead to higher costs, resulting in higher total spending—and thus a larger denominator for calculating spending shares.

Before the COVID-19 pandemic, there was little difference in spending by function between the two types of health financing systems (Fig. 3.2). Given the small difference in the spending by service mix in middle and high income countries, it is perhaps unsurprising that the mix was similar between government systems and SHI systems. Differences—for instance, the larger shares of spending on outpatient care, long-term care, preventive care and "other services" in government systems and the larger share of spending on inpatient care in SHI systems. SHI systems also had a larger share of spending on medical goods. Before the pandemic, the share of spending on preventive care, though small, was slightly larger in government systems (3%) than in SHI systems (2%).

Before the pandemic, the composition of health care financing by type of service varied depending on a country's main scheme (Fig. 3.3). In government and SHI systems, the main financing scheme greatly influenced spending on individual services such as inpatient care and outpatient care in 2019. In both systems, a larger share of spending from the main scheme was allocated to inpatient care than to outpatient care, though spending was substantial for both types of services.

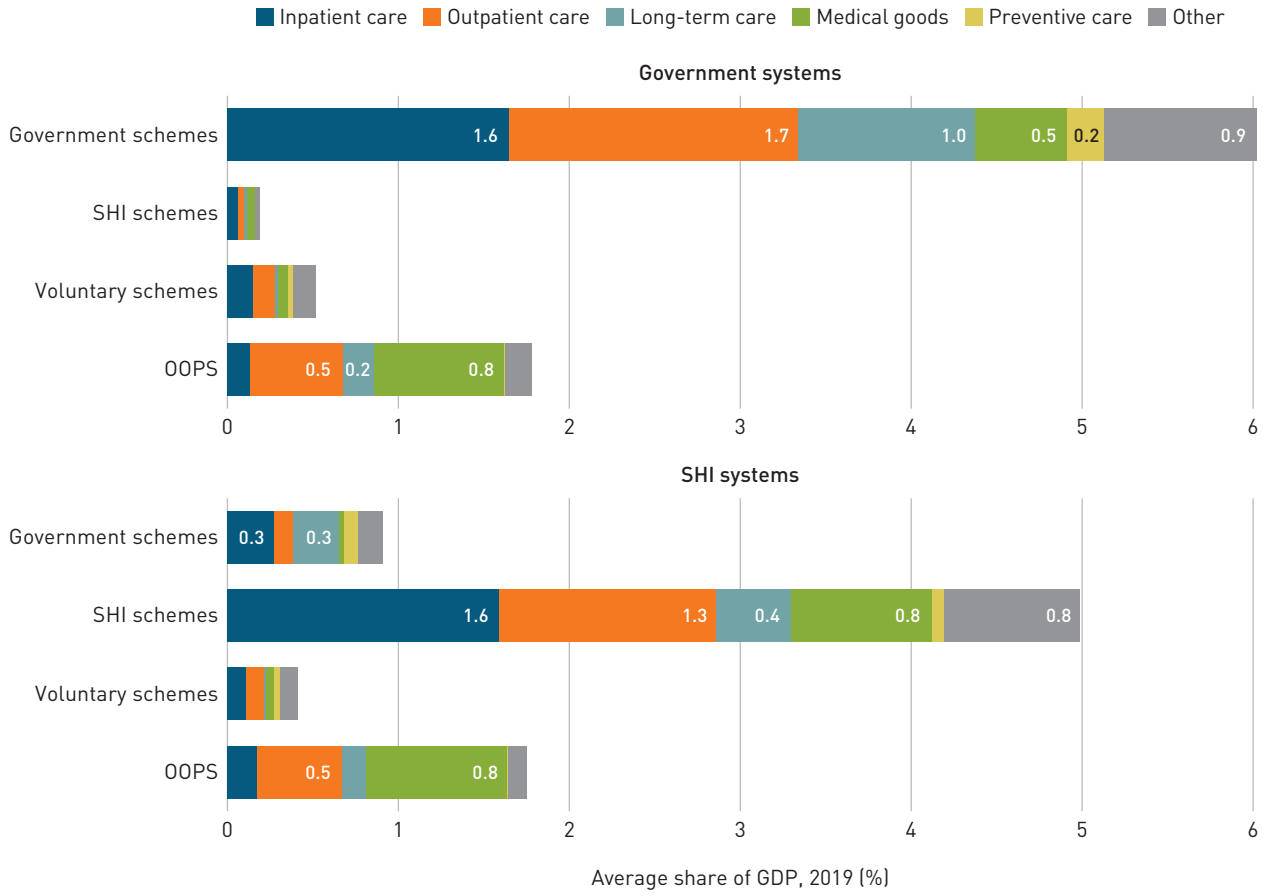
In government systems, government scheme spending accounted for an average of 70% of total health spending, or roughly 6% of gross domestic product (GDP). Nearly half went to inpatient care and outpatient care, while a notable share went to long-term care. In SHI systems, SHI schemes played a comparable role but allocated an even larger share

FIG. 3.2 Before the COVID-19 pandemic, government systems and SHI systems had similar spending patterns by type of service



Data source: WHO Global Health Expenditure Database, 2024.

FIG. 3.3 In both types of health financing systems, government schemes were essential in financing preventive care in 2019, and OOPS accounted for a majority of medical goods spending



Data source: WHO Global Health Expenditure Database, 2024.

to medical goods (0.8% of GDP, on average) than government schemes in government systems (0.5% of GDP, on average) and a smaller share to preventive care (0.07% of GDP).

Voluntary health insurance spending accounted for a similar share of total health spending (0.5% of GDP, on average) in government systems and SHI systems. In both systems, voluntary schemes (which mainly reflect voluntary health insurance in high income countries and a combination of insurance and nonprofit institution schemes in middle income countries) purchased mostly inpatient care, outpatient care and long-term care.

Before the COVID-19 pandemic, OOPS accounted for the largest share of medical goods spending in both types of health financing systems. Overall, there was little difference in OOPS as a share of GDP in government systems and SHI systems, around 2% in both systems. The composition of health services that OOPS funded was also comparable, with the largest portion allocated to medical goods (0.8% of GDP in both systems), followed by outpatient care (0.5% of GDP in both systems).

In government systems, OOPS funded most medical goods spending, with government schemes accounting for a much smaller share (0.5% of GDP on average). In contrast, in SHI systems, OOPS and SHI schemes funded similar shares of medical goods spending (0.8% of GDP in both).

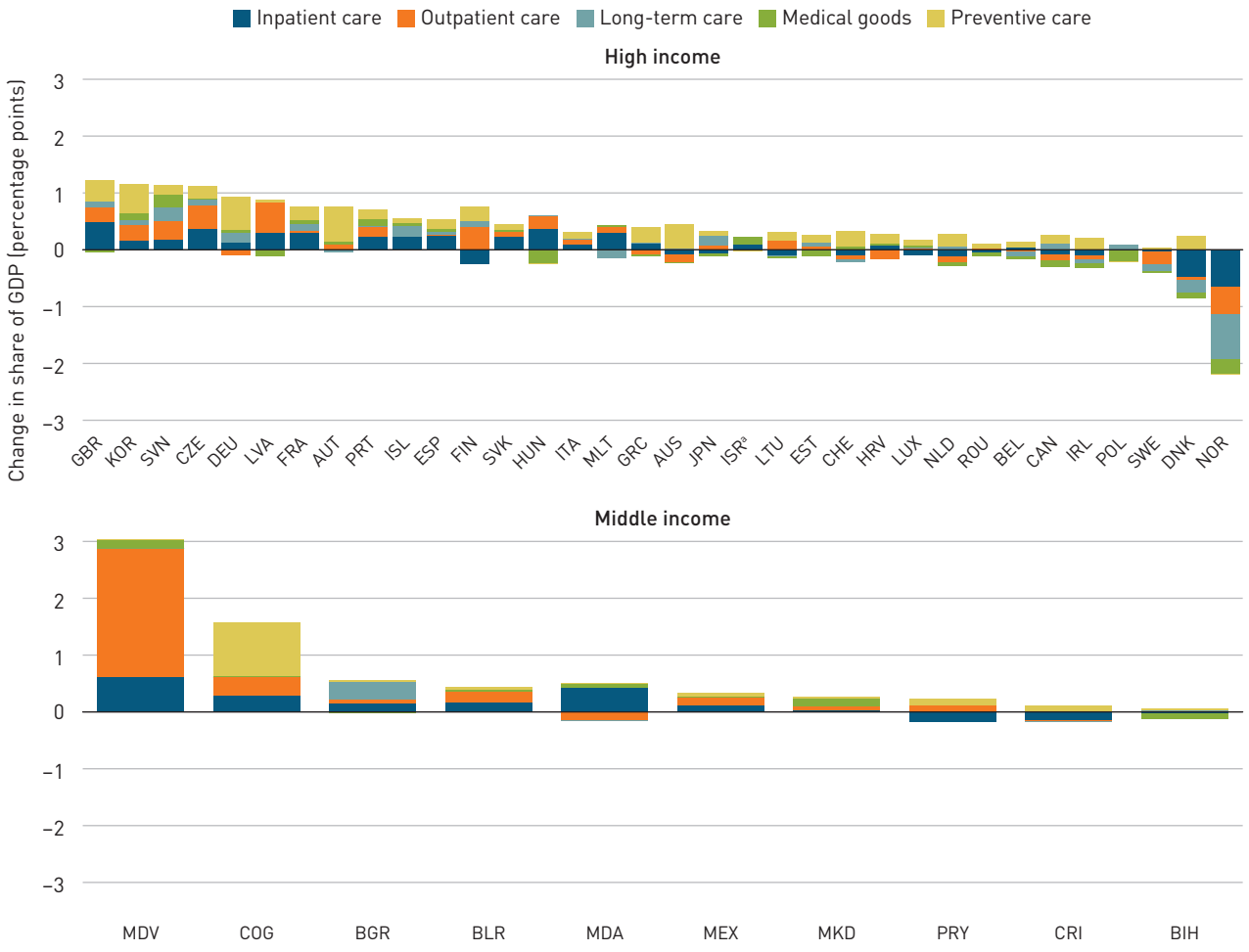
Government schemes are important in financing preventive care in both types of health financing systems. In government systems, government scheme spending accounted for the largest share of preventive care spending (0.2% of GDP, on average), while voluntary scheme spending accounted for a smaller share (0.03% of GDP). In SHI systems, government schemes and SHI financed similar shares of preventive care spending (0.08% of GDP), while voluntary schemes financed 0.04%. The prominent role of government

schemes undoubtedly reflects that preventive care, particularly disease prevention, has aspects of a public good with broad positive spillovers for society. In addition, many preventive care activities are population-based, making them well-suited for government schemes to finance. In contrast, SHI is typically used to finance services linked to individuals. To be effective, immunization campaigns must achieve full coverage of at-risk populations, a goal that cannot be attained with SHI systems that fail to include the entire population.

How financing of health care services changed during the COVID-19 pandemic

Most high and middle income countries (33 of 44) in the analysis reported higher total health spending as a share of GDP in 2022 than in 2019. During the COVID-19 pandemic, spending across all types of services generally increased as a share of GDP. There was, however, considerable variation at the country level, with changes in total health spending as share of GDP ranging from a 2.2% decline to a 1.2% increase in high income countries and from a 0.1% decline to a 3.0% increase in middle income countries. The rise was particularly notable for preventive care, with nearly all countries reporting growth in this area (Fig. 3.4). In more than half of high income countries and four out of 10 of middle income countries, preventive care saw the largest increase among all types of services. On average, preventive care spending rose by 0.19% of GDP in high income countries, much more than the 0.14% in middle income countries. In addition, most high income countries reported higher inpatient care spending. A majority

FIG. 3.4 Preventive care spending and inpatient care spending as shares of GDP rose in most countries from 2019 to 2022



Note: "Other services" are not presented to simplify the graph presentation.
a. Israel's spending on COVID-19-related activities in 2021 is recorded under governance (HC.7), leading to an underestimation of preventive care spending.
Data source: WHO Global Health Expenditure Database, 2024.

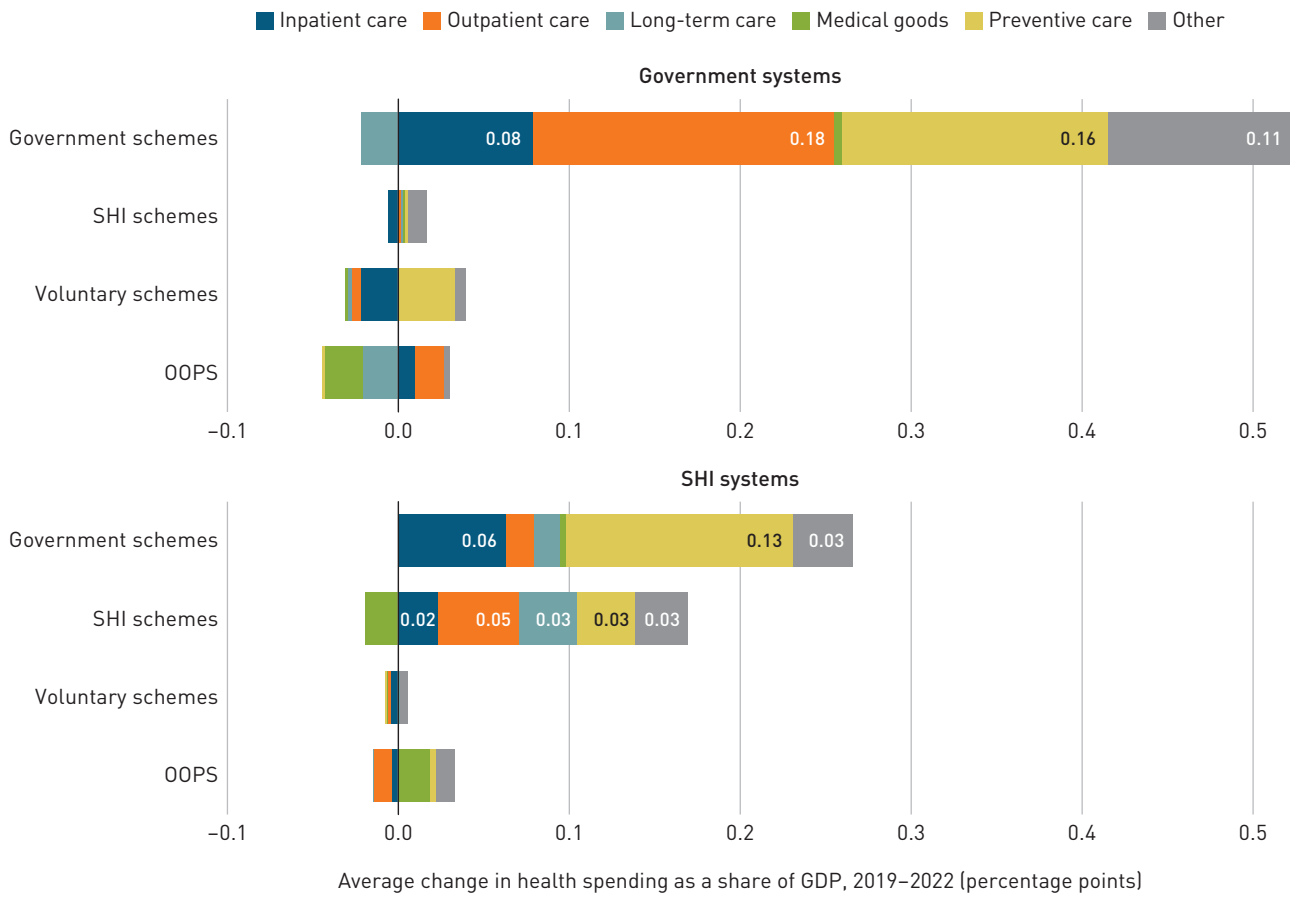
of middle income countries reported higher spending on all types of services.

Growth in health spending during the COVID-19 pandemic was underpinned by solid growth in government scheme spending on preventive care in both types of health financing systems. In both types of systems, government schemes boosted health spending (by 0.5% of GDP in government systems and 0.27% of GDP in SHI systems, on average) (Fig. 3.5). One of the largest contributors to the rise in total health spending financed by government schemes was preventive care, likely related to vaccine rollouts and other preventive measures introduced during the pandemic. In government systems, government schemes financed almost all the increase in preventive care spending (0.16% of GDP, on average), supplemented by voluntary schemes (0.03% of GDP, on average), whereas in SHI systems, government schemes financed the majority of the increase (0.13% of GDP, on average).

Inpatient care also posted a large increase in government systems (0.06% of GDP, on average), as did outpatient care (0.19% of GDP). In SHI systems, growth in outpatient care was lower (0.05% of GDP, on average), but growth in inpatient care was higher (0.08% of GDP, on average). In both types of systems, the main health financing scheme was the primary driver of growth in outpatient care.

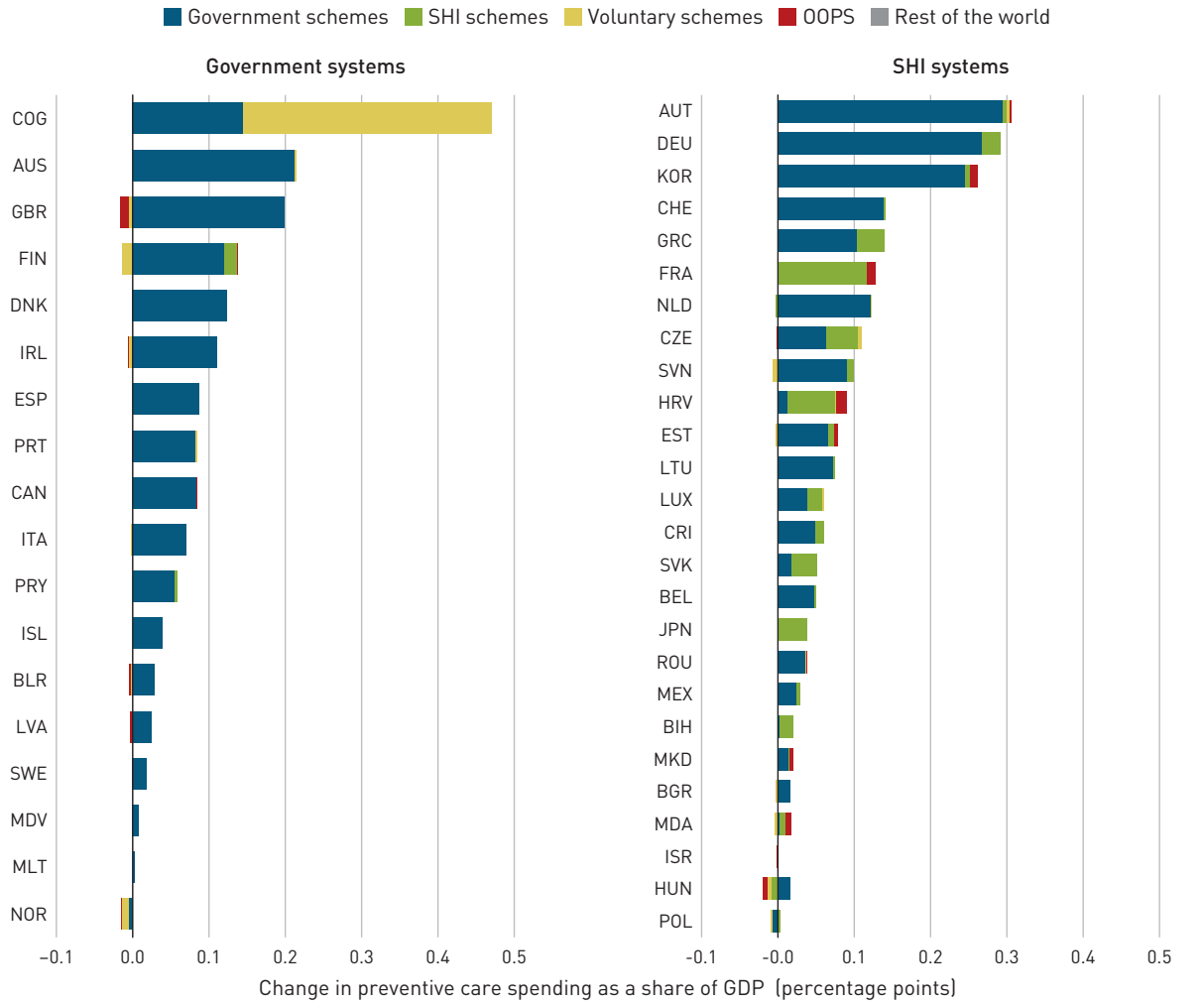
Government schemes were consistently important in financing preventive care during the COVID-19 pandemic across countries. The majority of countries analysed (40 of 44) reported higher spending on preventive care, with growth in preventive care spending from 2019 to 2022 as a share of GDP of up to 0.5%. The substantial rise in government scheme spending on preventive care during the COVID-19 pandemic was reflected in most countries. In some SHI systems, a combination of schemes, including government schemes, SHI and OOPS, financed the

FIG. 3.5 Government schemes showed increases in health spending in both types of systems, especially for preventive care



Data source: WHO Global Health Expenditure Database, 2024.

FIG. 3.6 In both types of health financing systems, government schemes financed most of the growth in preventive care spending between 2019 and 2022



Data source: WHO Global Health Expenditure Database, 2024.

increase in preventive care spending (Fig. 3.6). However, the increase was financed mainly by government schemes, illustrating their importance in financing preventive care, particularly during pandemics.

As countries emerged from the COVID-19 pandemic in 2022, many continued to invest in preventive care, such as early disease detection, epidemiological surveillance, and disaster and emergency preparedness. This shift highlights that, in addition to being a shock to health systems, the pandemic created an opportunity for countries to review and adjust their systems towards a more prevention-oriented, less curative-focused approach. However, it is unclear whether this level of preventive care spending will continue after the pandemic. While preventive care spending in 2022 is well above that in 2019 in most countries, it has already fallen from 2021 in most countries (Box 3.2).

Unlike the rise in preventive care spending, the increase in inpatient care spending during the COVID-19 pandemic was financed by the main financing scheme. In government systems, the growth in inpatient care spending ranged from −0.7% to 0.6% of GDP, driven mostly by government schemes. Only a few countries in this group reported higher inpatient care spending financed by OOPS or SHI (Fig. 3.7). In the few countries where inpatient care spending fell, government scheme spending also led the decline.

In SHI systems, the results were more mixed. The growth in inpatient care spending ranged from −0.1% to 0.4% of GDP). In some countries, SHI drove the increase, and

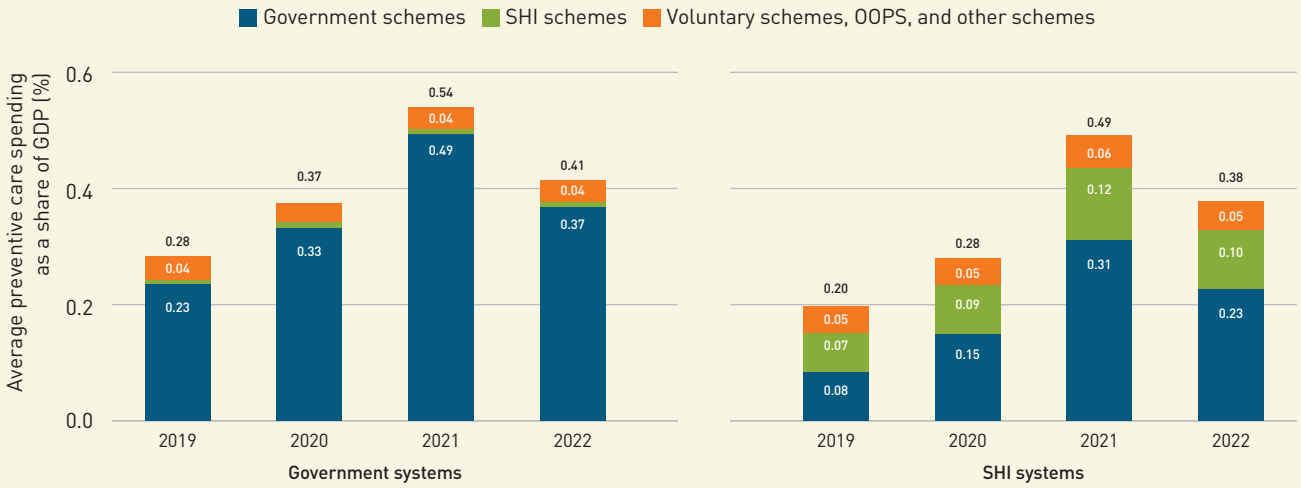
BOX 3.2

The evolution of preventive care spending during the COVID-19 pandemic

Data on health function spending by scheme for each year of 2019–2022 were available for 38 countries (14 government systems and 24 SHI systems). Examining these countries' annual spending patterns can provide insights into the evolution of preventive care spending during the COVID-19 pandemic, the type of service with the largest spending increase.

In 2022, preventive care spending as a share of gross domestic product (GDP) declined from its peak in 2021, to 0.41% in government systems and 0.38% in SHI systems, on average. This marked a considerable narrowing of the difference between the two compared with before the COVID-19 pandemic, when the average share was 0.28% in government systems and 0.2% in SHI systems (Box Fig. 1). Average preventive care spending as a share of GDP increased substantially during the pandemic, to 0.54% in government systems and 0.49% in SHI systems in 2021. In both types of systems, the change in preventive care spending throughout the pandemic was driven largely by government schemes. The peak in 2021 mainly reflects the availability of COVID-19 vaccines, which were generally funded by government schemes *(4)*. Many countries were in their most intensive phases of the pandemic in 2021, but for some, the phase extended into 2022.

BOX FIG. 1 **The difference in preventive care spending as a share of GDP between government systems and SHI systems narrowed from 2019 to 2022**



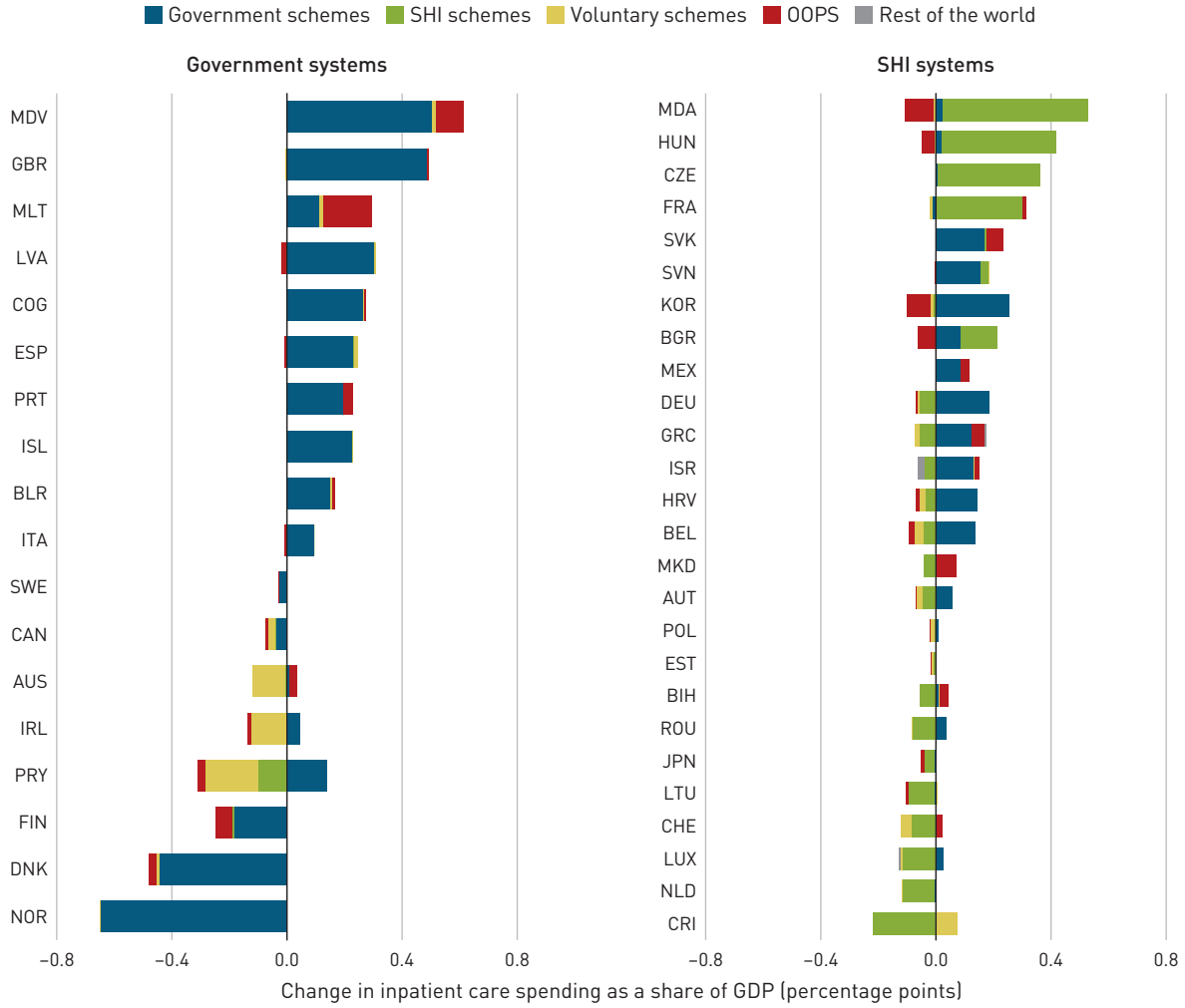
Data source: WHO Global Health Expenditure Database, 2024.

in others, government schemes did. In more than half of the SHI systems, SHI spending on inpatient services fell, but in some of these countries, the drop was more than offset by higher government scheme spending, indicating a slight recalibration during the COVID-19 pandemic. This may reflect the use of government subsidies in many countries to help hospitals meet the expenses associated with the increased workloads since the pandemic *(3)*.

In contrast to inpatient care, growth in outpatient care spending as a share of GDP was driven by the main financing scheme in both types of financing systems. In government systems, the growth in outpatient care spending ranged from –0.5% to 2.3% of GDP, which government schemes financed most of (Fig. 3.8). Higher SHI and OOPS also played a role in some countries. Declines in outpatient care spending were due mainly to lower spending by government schemes or voluntary schemes. In SHI systems, the growth in outpatient care spending ranged from –0.2% to 0.4% of GDP, most of which SHI schemes financed, supplemented in some countries by OOPS and government schemes. In countries where outpatient care spending decreased, it was due mainly to lower SHI spending.

The growth in outpatient care spending in many countries from 2019 to 2022 was likely due to deferred demand, or the care backlog resulting from COVID-19 pandemic lockdowns. Empirical analysis has shown that during the acute phase of the pandemic, when most

FIG. 3.7 Growth in inpatient care spending was financed mainly by government schemes in government systems but by multiple types of schemes in SHI systems



Data source: WHO Global Health Expenditure Database, 2024.

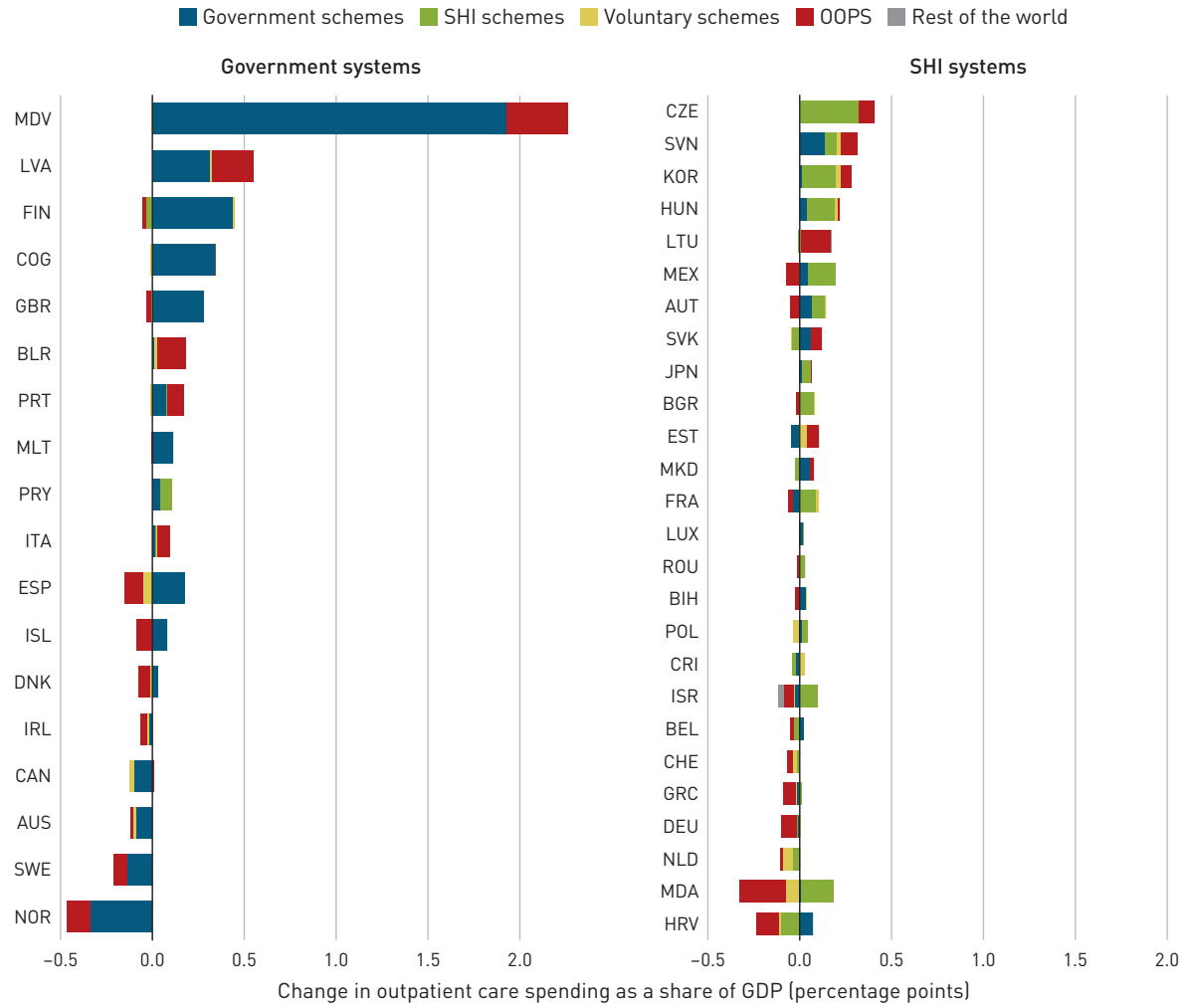
countries implemented lockdowns, routine outpatient care services were often postponed as health systems reallocated resources to inpatient care to combat the spread of COVID-19. As lockdowns eased and economies began to recover in 2022 (and in 2021 for some countries), this deferred outpatient care became apparent in higher outpatient care spending *(3)*. At the same time, higher service costs during the pandemic also played a role in driving up total health spending.

Medical goods spending changed marginally between 2019 and 2022 in most countries (Fig. 3.9). Although medical goods spending accounted for a substantial portion of total health spending in the countries analysed, it remained relatively stable between 2019 and 2022, with growth ranging from –0.3% to 0.2% of GDP. While changes in total medical goods spending were observed in both directions among the countries analysed, the shifts were driven by the main schemes and OOPS. This pattern reinforces the persistent role of OOPS in medical goods spending and highlights the lack of coverage of medical goods in many prepaid schemes. Overall, OOPS on medical goods as a share of GDP declined in government systems.

Financing PHC services before and during the COVID-19 pandemic

PHC is essential to building an equitable and efficient health system. It provides the best platform for delivering crucial health interventions and public health functions, forming a critical foundation for universal health coverage *(5)*. To improve health financing for PHC, it is crucial to understand how PHC services

FIG. 3.8 The growth in outpatient care spending in 2022 was financed primarily through the main scheme



Data source: WHO Global Health Expenditure Database, 2024.

are financed in different health financing systems.

In the context of the COVID-19 pandemic, collective PHC services such as epidemiological surveillance and emergency committees to prepare for disaster and emergency response also became especially critical. However, the pandemic also disrupted the provision of PHC services, including care continuity for people with chronic conditions, especially during lockdowns, and backlogs of PHC services accumulated as a result *(3)*.

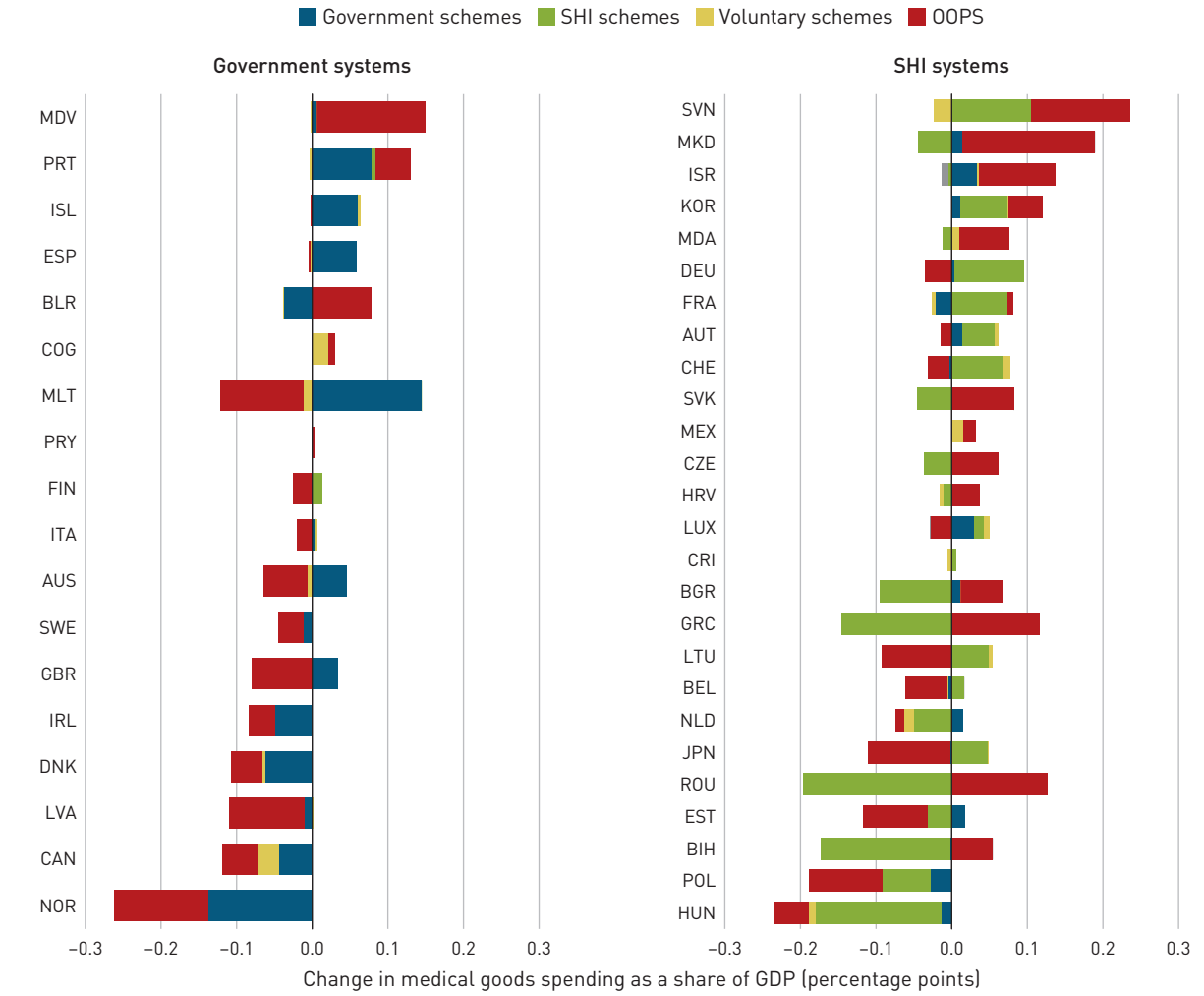
This section examines PHC spending using a proxy measure based on spending by functional classifications in the System of Health Accounts 2011.[3] This measure focuses on first-contact personal health services, population-based interventions and system coordination.

PHC spending as a share of total health spending is independent of the type of health financing system (Fig. 3.10). In both government systems and SHI systems, PHC spending as a share of total health spending was 40% in 2019 and rose slightly to 41% in 2022. No clear pattern indicates which system allocated more funds to PHC in either 2019 or 2022. However, PHC spending as a share of total health spending shows less variation in SHI systems than in government systems.

In government systems, SHI schemes played a small role in financing PHC, but in

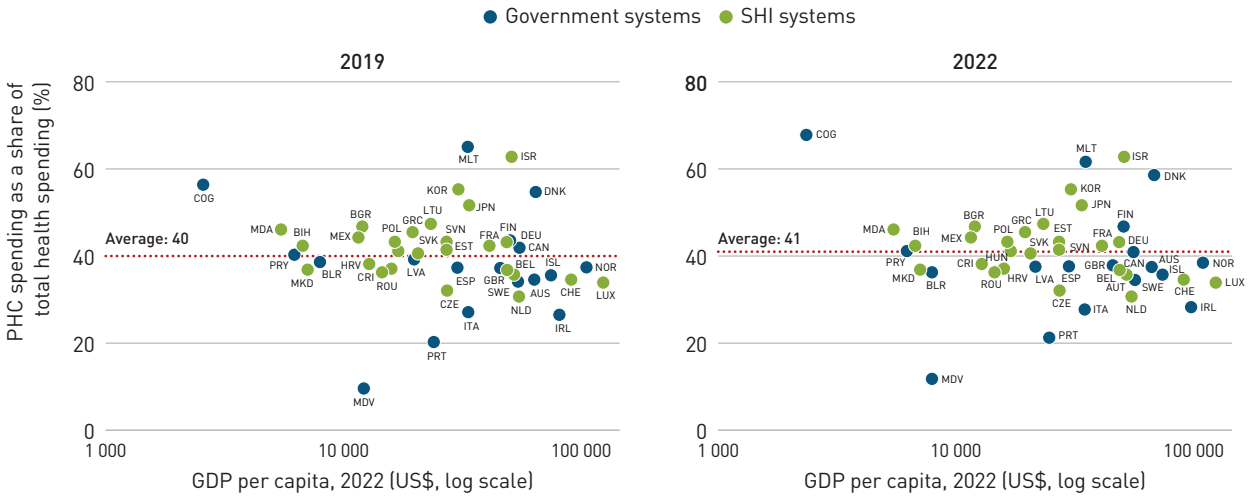
3. Global PHC spending includes unspecialized outpatient care (including general and dental outpatient curative care), home-based curative care, outpatient and home-based long-term health care and unclassified outpatient care), 80% of spending on medical goods purchased as a result of consultation and self-treatment and 80% of spending on health system governance and administration.

FIG. 3.9 **Between 2019 and 2022, OOPS on medical goods fell in most government systems but rose in more than half of SHI systems**



Data source: WHO Global Health Expenditure Database, 2024.

FIG. 3.10 **There is no apparent difference in PHC spending as a share of total health spending between government systems and SHI systems**



Data source: WHO Global Health Expenditure Database, 2024.

SHI systems, government schemes play an important supporting role. Of the 14 countries with government systems for which PHC spending data were available (see Box 3.1), only five had SHI spending on PHC in 2019, though the number increased to six[4] in 2022. In government systems, SHI schemes financed only 2% of PHC spending, on average, in both 2019 and 2022 (Fig. 3.11). In contrast, in SHI systems, despite relying primarily on SHI schemes, government schemes made considerable contributions, averaging 10% of PHC spending in 2019 and 14% in 2022.

This pattern suggests that even in SHI systems, government schemes still play a crucial role in financing PHC. Their contribution is likely pronounced for specific PHC services, such as population-based preventive services and other public health functions. Government schemes can be instrumental in managing collective health services in SHI systems. In addition, the increase in spending financed by government schemes during the COVID-19 pandemic reaffirms their role in responding to the surge of services (especially prevention) during the period, even when they are not the main financing scheme.

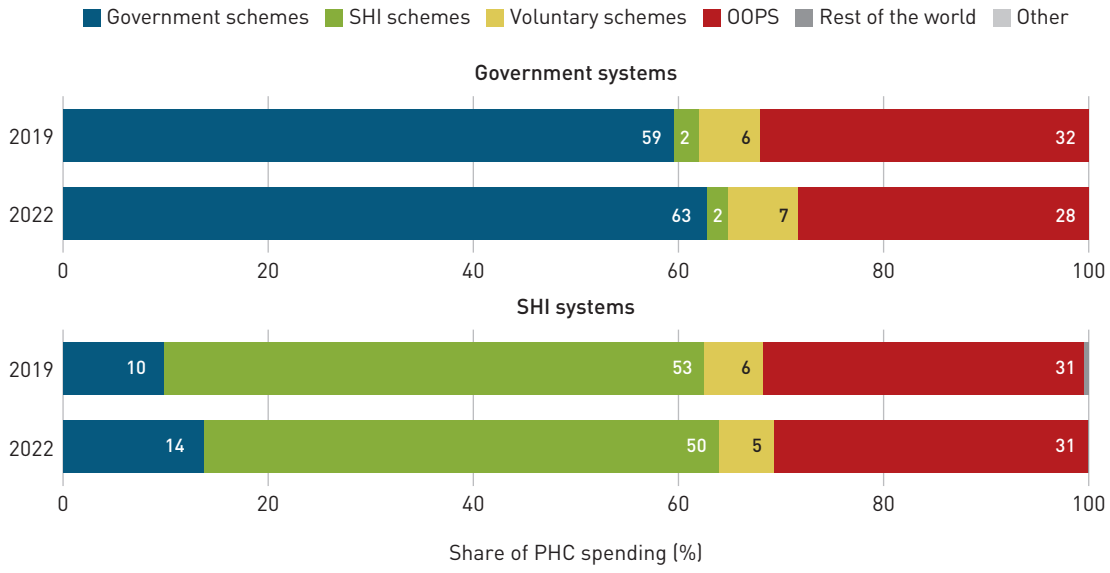
Across both types of systems, OOPS is important in financing PHC, making up around a third of PHC spending. This is likely due to high OOPS on medicine and outpatient care, which are included in PHC spending. However, OOPS as a share of PHC spending declined in government systems, from 32% to 28% from 2019 to 2022, and stayed the same, 31%, in SHI systems.

The extent to which PHC spending increased during the COVID-19 pandemic varied considerably between countries. (Fig. 3.12). Although PHC spending as a share of total health spending remained stable in most countries between 2019 and 2022 (see Fig. 3.10) across both types of financing systems, PHC spending as a share of GDP rose in most countries, up to 1.4% of GDP (Fig. 3.12). Government schemes financed much of the higher PHC spending. These trends were widespread across countries, with higher government scheme spending on PHC in 31 of 35 countries. OOPS on PHC also increased in some countries (13 of 35), independent of financial system type.

Implications

This chapter provides important insights into the way services are financed in countries with different financing systems. Overall, the choice of system—relying mostly on government schemes or SHI—appears to influence most the financing of individual services.

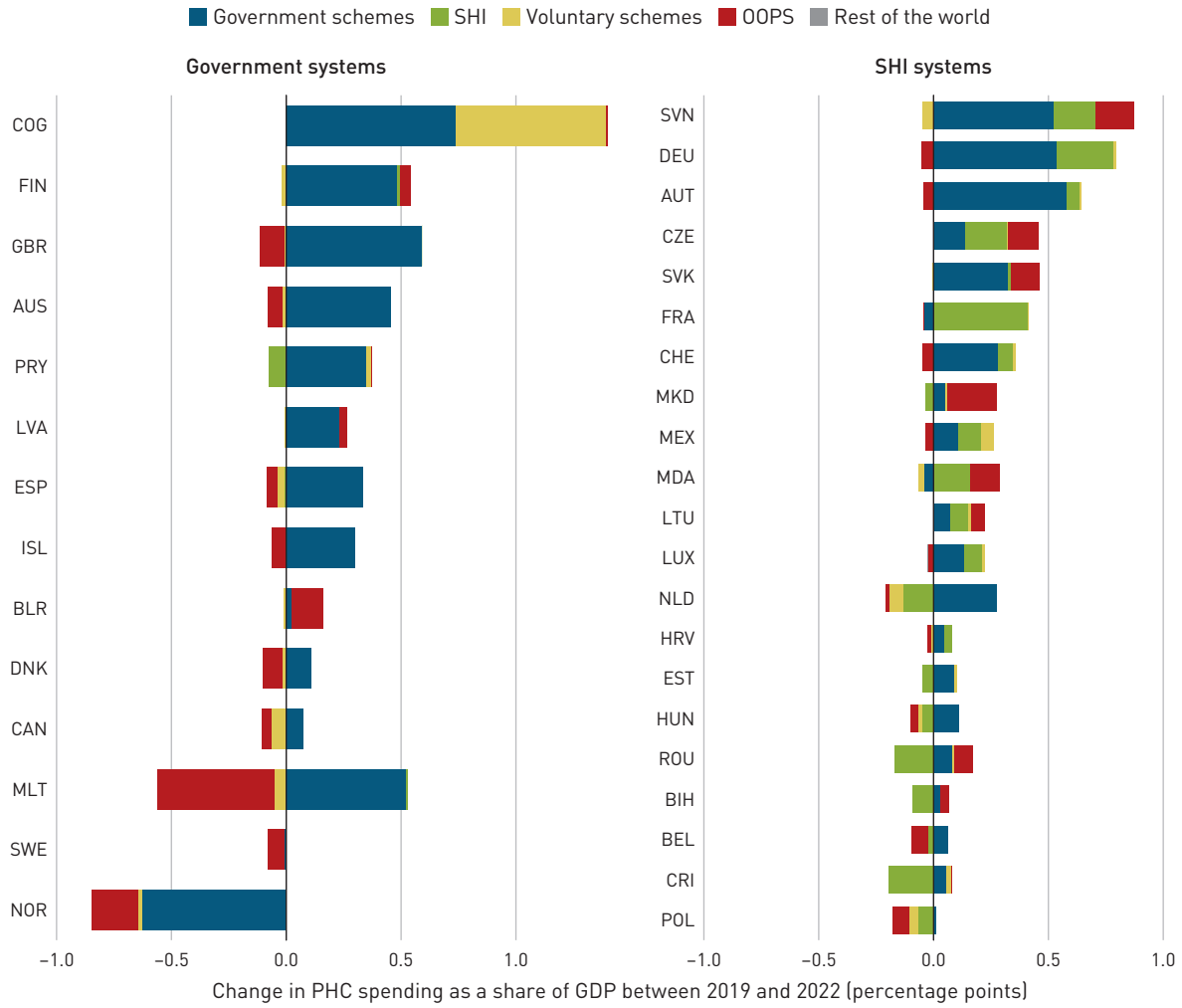
FIG. 3.11 **In both government and SHI systems, both types of schemes finance PHC spending**



Data source: WHO Global Health Expenditure Database, 2024.

4. The government schemes in Malta started to finance health condition monitoring programmes during the COVID-19 pandemic.

FIG. 3.12 Government schemes played an essential role in financing higher PHC spending during the COVID-19 pandemic in both government and SHI systems



Data source: WHO Global Health Expenditure Database, 2024.

Consistent across systems is that government schemes finance essential public health functions such as surveillance, health protection and promotion, disease prevention and management, and emergency response—likely for several reasons. Public health agencies generally have the mandate and ability to react to health emergencies with preventive activities. Governments are best placed to purchase in bulk and store essential medical equipment and supplies emergencies. And such functions require stable and predictable sources of financing and sometimes rapid exceptional budget allocation during emergencies.

The COVID-19 pandemic revealed these features in real time. Regardless of the type of financing system, almost all countries used government schemes to swiftly respond to pandemic demands—particularly for preventive care but also for the surging demand for inpatient care. The flexibility in allocating funding underscores the government schemes' importance in responding quickly to public health emergencies.

OOPS remains a substantial source of financing for medical goods, even in government systems and SHI systems. This highlights a gap in financial protection, especially in middle income countries, as individuals bear high costs for essential items such as pharmaceuticals and medical supplies. Strategies to reduce OOPS on medical goods require further investigation into the root causes. Increasing insurance coverage for medicines or supplementing medicine purchases through the government budget may be only part of the solution.

While the chapter mainly examined countries with mature health systems, the experiences from these countries provide

invaluable insights into systems that are still in transition. Indeed, while there is no universal model for organizing the health financing system, the absence of strong government schemes or SHI means that households carry a large burden in paying for most health services, and there is considerable potential to strengthen health financing arrangements to address this.

The question of whether the surge in health spending, particularly on preventive care during the pandemic, will be sustained remains critical. The COVID-19 pandemic has highlighted the importance of investing in emergency preparedness, demonstrating that prevention is just as valuable as response. While most countries allocated additional government budget resources to combat the pandemic, it is equally essential to prioritize systemwide preparedness to address future health shocks.

Health spending data, particularly on prevention, can offer valuable insights into whether countries have integrated and normalized some of the ad hoc preventive measures implemented during the COVID-19 pandemic and how they are investing in pandemic preparedness. Better data availability and quality are also essential to understanding how household systems finance spending on various health care services, especially in low income countries. Establishing reliable health spending data by institutionalizing health accounts is a critical step towards gaining insights into a country's health service utilization patterns and the sensitivity of health consumption to policy changes.

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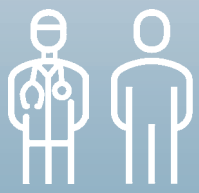


4

Better data for better policy

Key messages

- **Milestone achievement:** Celebrating 25 years, the World Health Organization's (WHO) Health Expenditure Tracking programme has been pivotal in setting global standards for health accounting. It maintains the Global Health Expenditure Database (GHED), with annual updates since 2000 for more than 190 countries, and produces the annual Global Health Expenditure Report (GHER). These global public goods drive informed policy-making, transparency and accountability worldwide.
- **Institutionalization for sustainability:** Institutionalizing health accounts is vital for generating reliable and timely health spending data. This requires stable funding, routine data access and skilled staff. WHO, in collaboration with partners, has supported countries in building capacity, enhancing data quality and promoting the use of data for effective policy-making.
- **The path forward:** The programme will address emerging data needs, leverage digital tools for data production and management and strengthen institutional support to ensure reliable health spending data, enabling better policies to build resilient health systems for universal health coverage and health security.

2024 marks the 25th anniversary of the WHO Health Expenditure Tracking programme. Established in 1999, the programme was a leap forward in an ongoing process to better understand how resources are used in country health systems. It has since had a major influence on how critical information on health spending is compiled and reported at the country level and globally. This quarter-century milestone provides a valuable opportunity to reiterate the programme's purpose, reflect on its achievements and impact on global health governance and consider the challenges that lie ahead.

Among the most notable achievements of the programme is its involvement in creating, in 2011, the System of Health Accounts (SHA 2011). This framework, which has become the global standard for measuring health spending in countries, encompasses comprehensive data on health spending, including the way health spending is financed, the types of health services consumed and where services are provided. Flexible enough for any health system worldwide, SHA 2011 has been fundamental to systematically tracking and analysing country health spending and resources and facilitating international comparisons.

Additionally, the Health Expenditure Tracking programme has been instrumental in creating several global public goods. These include the GHED, the world's richest source of health expenditure data, and the GHER. Both are used extensively for analytical and policy purposes by a wide audience, such as governments, development partners (including Gavi, the Vaccine Alliance; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the International Monetary Fund; WHO; the World Bank; regional development banks; and other multilateral and bilateral agencies and global health initiatives), academia and civil society *(1, 2, 3, 4)*.

WHO also collaborates with its Member States to support the production and institutionalization of health accounts at the global and country levels. This work focuses on five interconnected areas: methodological guidelines and tools; data reporting, quality control and publication; data analysis and use for policy; technical support and institutionalization; and global data governance and coordination. The results of these efforts are evident in countries' strengthened capacity to produce timely and high-quality data on health accounts and are reflected in ongoing methodological advances for tracking health resources and in continuous enhancements to the GHED *(5, 6)*.

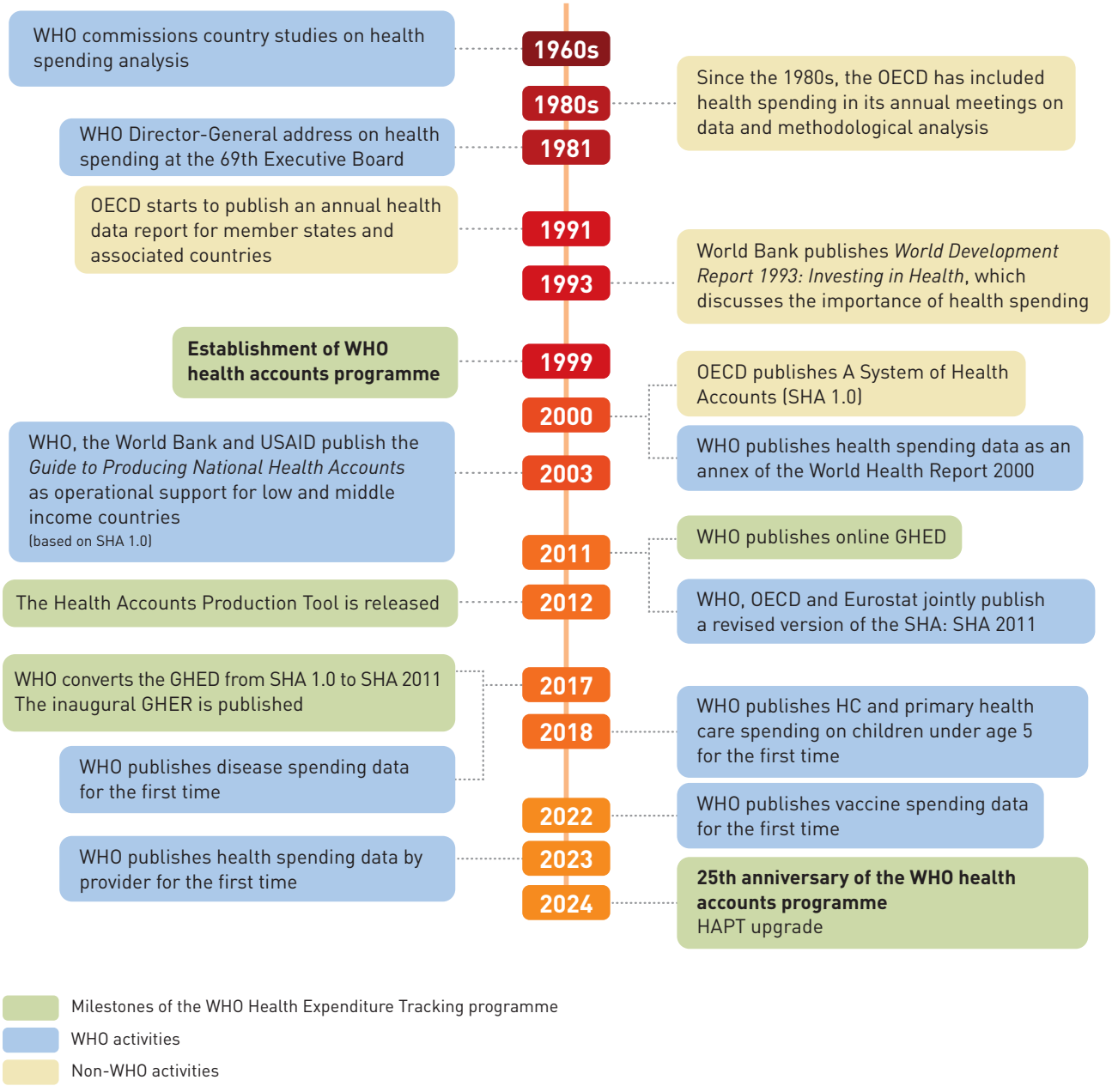
A potted history of tracking health spending

The earliest efforts to track health spending

The first documented efforts to measure health spending date back to the early 1930s in the United States of America. In response to concerns about citizens' access to health care, the American Medical Association established the Committee on the Costs of Medical Care, which published the cost of medical care as a proportion of national income. In what would become the antecedents of key health account classifications, the committee divided health spending across four groups of payers: patients, government, philanthropy and industry. In 1937, the Bureau of Research and Statistics launched an annual survey of social security provision in other countries. This was the first attempt at compiling and presenting comparable data on health spending across countries. These efforts continued until the United States Government established the National Health Expenditures in 1964, which improved on the Committee on the Costs of Medical Care's basic model and produced a time series of back-estimates of health spending to 1929 *(7)*.

From the 1950s to the 1980s, several ad hoc studies on country health spending were conducted, but a systematic and regular data collection and reporting process remained elusive *(8, 9)*. In the 1960s, WHO commissioned a series of analyses of country health spending as part of its efforts to understand and improve health financing systems *(10)*. In 1981, a landmark study compared health spending in 10 industrialized market economies using data from the early 1960s to 1976–1977. That study, which revealed a strong correlation between country income and health spending as a share of GDP, as well as the epidemiological and economic drivers of spending growth, involved laborious data compilation and concluded with a plea to harmonize health data *(11)*. This reiterated the earlier calls of a WHO-convened study group in 1977 for regular submission and publication of health spending data, as well as for creation of an agreed chart of accounts to suit all countries, including developing countries (Fig. 4.1). That same year, the WHO Director-General addressed the 69th Executive Board with a report on health expenditures, financial needs of the strategy for health for all by the year 2000 and the international flow of resources for the strategy *(12)*.

FIG. 4.1 **The history of health accounts**



Note: HC refers to the health care functions classification.
Source: WHO Health Expenditure Tracking programme.

Growing demand for a global systematic approach to track health spending

These important early efforts pushed systematic tracking of health spending onto the international agenda. However, a common set of tools still took time to develop. In the 1980s, the Organisation for Economic Co-operation and Development (OECD) started discussing health accounting at its annual meetings on data and methodological analysis, and in 1991, it started publishing annual reports on health data for member states and associated countries. The World Bank's *World Development Report 1993: Investing in Health* emphasized the critical role of health spending in promoting economic development and improving overall societal well-being, urging policy-makers to prioritize health spending as a vital component of national development strategies *(13)*. In 1998, the United States hosted a conference to discuss the future directions of national health accounting, where institutions such as the European Union, the OECD, the United States

Agency for International Development (USAID) and the World Bank highlighted the need for a standard instrument to compare national health systems globally. However, by the late 1990s, health policy-makers and researchers still faced considerable challenges due to fragmented and inconsistent data *(14, 15)*.

Establishment of the WHO Health Expenditure Tracking programme

In 1999, WHO established the Health Expenditure Tracking programme[1] to address the lack of reliable data on health spending. Separately, in 2000, the OECD published the initial SHA (later known as SHA 1.0) after an extensive consultation process with its member countries and partners *(16)*. This represented the first manual designed to produce comprehensive and consistent data on health accounts. That same year, WHO included health spending data as an annex in *World Health Report 2000*, marking the beginning of a more structured approach to tracking health spending *(17)*. In 2003, WHO, in collaboration with the World Bank and USAID, published *Guide to Producing National Health Accounts, with Special Applications for Low-Income and Middle-Income Countries*, which provided detailed guidelines for collecting and reporting health spending data for these countries *(18)*.

Development of the SHA and global public goods

In 2011, the OECD, the Statistical Office of the European Union (Eurostat) and WHO jointly released a revised SHA framework (SHA 2011), which further refined the methodologies for tracking health spending *(19)* (see Box 4.1 for a description of the transition from SHA 1.0 to SHA 2011).

That same year, WHO launched the GHED as an annually updated publicly available web resource (https://apps.who.int/nha/database). It offers comparable data on health spending for more than 190 WHO Member States since 2000 (Box 4.2). The most recent reporting year for data is generally two years prior, reflecting the time required to access published audited government spending data, though data with a one-year lag are also published for some countries. Data were converted from the SHA 1.0 framework to the SHA 2011 framework in 2017, considerably improving consistency and comparability of health spending information across countries and over time.

WHO, working with countries and partners, has improved the GHED's scale and scope by continuously integrating countries and indicators. Notable additions include spending by disease and programme in 2017 and spending

BOX 4.1

The shift from SHA 1.0 to SHA 2011

In 2011, after a four-year collaborative effort jointly led by the Organisation for Economic Co-operation and Development, the Statistical Office of the European Union (Eurostat) and the World Health Organization, a revised version of the System of Health Accounts (SHA 2011) was published; it is now the global standard for health accounting. The shift from SHA 1.0 to SHA 2011 aimed to make health accounting more coherent and more applicable to a wide range of health systems, facilitate international comparisons and increase the relevance of health spending data for policy analysis and decision-making *(16, 19)*. It was also an attempt to better align health spending data with existing economic and statistical frameworks. Notable features of the revision include:

- **A clearer scope of what constitutes health spending.** In SHA 2011, the key variable for international comparisons is current health expenditure, which refers to the final consumption of health care goods and services plus subsidies to health providers. SHA 1.0 focused on aggregate total health expenditure, which refers to the sum of current health expenditure and investment by health providers, but some countries were unable to report investment or could report it only for public providers or investment grants from public sources. Focusing on current health expenditure has improved the international comparability of high-level spending data. However, data on capital formation are still collected where available. Furthermore, SHA 2011 is concerned primarily with the health care goods and services consumed by resident units only, irrespective of where

(continued)

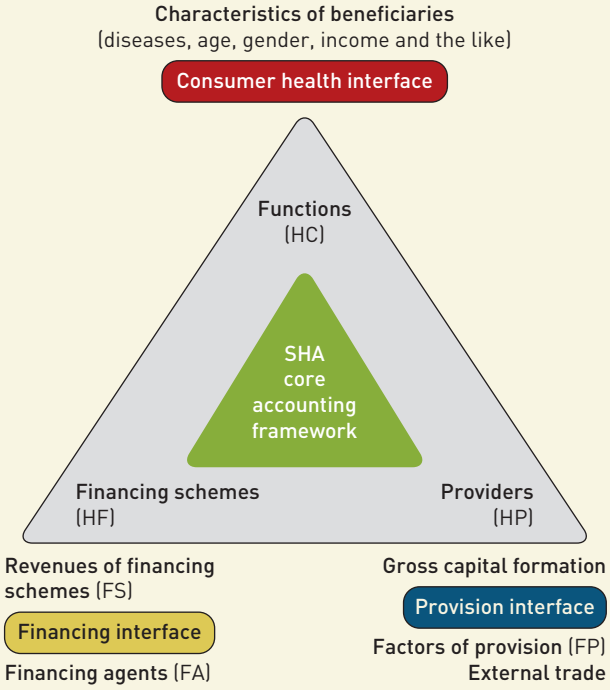
1. At its inception, the programme was known as the National Health Accounts programme.

BOX 4.1 (continued)

they are consumed (within the economic territory or elsewhere in the world) or of who is paying. Therefore, it excludes exports of health care goods and services (provided to nonresident units) but includes imports of health care goods and services for final use—for example, goods and services consumed by residents while abroad.

- **A more detailed view of health financing.** The biggest changes in SHA 2011 involve the financing dimension. Under SHA 1.0, the financing dimension classified the financing agents (or institutional units) purchasing health services into different categories—the highest level of which indicated whether the agent belonged to the public or private sector. Under SHA 2011, the financing dimension classifies financing schemes (HF), defined as the body of rules under which a person obtains health care. The key distinction is now whether spending is made by schemes with compulsory/automatic or voluntary participation. The public-private split of health spending can still be generated under SHA 2011, but it is based on a new classification of the revenues of financing schemes (FS), which refers to how schemes mobilize resources. Additionally, SHA 2011 classifies financing agents (FA), defined as the entities implementing financing schemes. Overall, the new coverage of the financing dimension improves understanding of country health financing arrangements, which has also increased the relevance of health financing data from health accounts.
- **A comprehensive framework for additional analysis.** SHA 1.0 focused on a core framework for health accounting along the three dimensions (health financing, health provision and health consumption), but SHA 2011 extends health accounting beyond that core framework (Box Fig. 1). It pursues a financing interface by complementing the financing schemes classification (HF) with the financing agent's classification (FA) and the revenues of financing schemes classification (FS). And it pursues a provision interface by extending the health care provider dimension (HP) to include investment by health care providers, the input types of health care providers (FP) and exports for each health provider. Finally, the consumption interface defined by the health care function classification (HC) takes account of patient characteristics such as age (AGE) and gender (GEN) and of diseases or conditions (DIS). This conceptual approach has laid out health accounts as a flexible toolkit; it is built around a core framework to ensure international comparability of health spending and financing data but can be adapted to reflect country needs and provides consistent information reflecting country priorities.
- **Clarification on the role of long-term care.** The scope of long-term care as a component of total health expenditure was limited under SHA 1.0, where it essentially referred to professional nursing care. Accounting for important long-term care components—including help with activities of daily living such as getting out of bed, moving or personal hygiene for people with long-term care dependency—was left in a grey zone and resulted in substantial variation in the reporting of long-term care spending across countries. SHA 2011 provides a comprehensive view on long-term care spending and proposes a consistent split into activities that should be considered long-term care (health) and are included under current health expenditure and activities that should be considered long-term care (social) as a memorandum item outside of the core framework. While data availability remains a challenge in some countries, the international reporting and comparability of data on long-term care spending has improved under SHA 2011.

BOX FIG. 1 The core and extended accounting framework of SHA 2011



Source: Adapted from OECD, Eurostat, World Health Organization *(19)*.

BOX 4.2

Functions of the Global Health Expenditure Database portal

The Global Health Expenditure Database (GHED) portal (https://apps.who.int/nha/database) comprises three core sections: Data Explorer, Visualisations and Documentation Centre.

The Data Explorer section, whose interface is in English, includes a set of key aggregate indicators; data on health spending distributed by financing scheme (HF classification), the revenues for these schemes (FS), spending by provider type (HP), the use of resources by health care function (HC), spending on diseases and conditions (DIS), COVID-19 health spending and spending on children under age 5 (AGE), as well as information on capital expenditure (HK); and macro data such as gross domestic product (GDP), exchange rates and population. Data can be expressed in multiple ways: million national currency units, US dollars, international dollars (purchasing power parity), current values, constant values, total, per capita and as a share of GDP, general government expenditure or current health expenditure. Users can download the complete database (in .xlsx format) or view data and metadata in the web browser. They can build tables for selected countries, years and specific categories of spending and indicators, which can be exported in different formats (.xlsx, .rtf, .pdf).

The Visualisations section includes country health spending profiles, dashboards with key indicators and graphs that portray national financing structures, as well as time series, offering an overview of national patterns and trends.

The Documentation Centre section includes additional information, including all previously published Global Health Expenditure Reports, methodology and guidelines, a list of all published indicators, countries focal point information, country notes and the like.

by health care function[2] in 2018. These expansions have provided major insights into how countries allocate resources across health conditions and have improved the capacity to monitor spending across health services, including primary health care (PHC). To date, more than 60 countries have reported on disease and programme spending for at least one year, and more than 100 countries have reported data on PHC spending for at least one year. In 2023, spending by health care provider type was published for the first time. Further expansion and improvements to the GHED are in the pipeline, with the addition of spending by factor of provision envisioned soon.

Notably, 2017 also marked the release of the inaugural GHER by WHO, which outlines trends and patterns in global health spending and monitors specific areas of spending based on GHED and other data. The report represented a further advancement for analysis of global health spending and for global public goods *(20)*.

Supporting tracking of health spending at the global level

To achieve the broader objectives of producing routine data, enhancing quality and boosting use of health spending data, the WHO Health Expenditure Tracking programme is organized into five interconnected focus areas: methodological guidelines and tools, data reporting, quality control, and publication; data analysis and use for policy; technical support and institutionalization; global data governance and coordination.

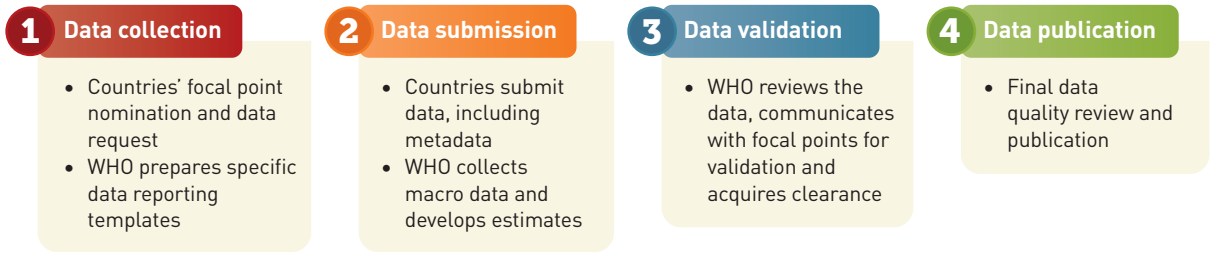
Methodological guidelines and tools

WHO, working with partners, has published a wealth of methodological guidelines and tools to enhance countries' technical capacity for collecting, mapping and analysing health spending data. Guidelines often supplement and refine the standard classifications in SHA 2011 and provide additional technical rigor for tracking health spending. Focus areas include those of particular interest to countries and international agencies, such as global health initiatives, those with outstanding methodological issues and those with new demand for information. Examples include:

- **Guidance for integrating country data on spending on diseases and conditions into a single efficient platform using the SHA 2011 framework.** Countries, international agencies and global health initiatives have a clear interest in tracking financial

2. Health care function categories include preventive care, outpatient curative care, inpatient curative care, and administration and governance of the health system, among others.

FIG. 4.2 The annual update process for the WHO GHED entails four phases



Source: WHO Health Expenditure Tracking programme.

resources for specific areas, such as HIV/AIDS, tuberculosis, malaria, reproductive health and family planning. However, despite the many overlapping data sources, these efforts often involve separate data collection and measurement, resulting in inconsistent estimates or totals that may exceed a country's overall health spending. Guidance notes show country teams how to ensure proper harmonization and cross-walking with other more disaggregated resource tracking efforts, sometimes down to the intervention or beneficiary level —for example, counselling and testing for key populations in National AIDS Spending Assessments *(21, 22, 23, 24)*.

- **Guidance on tracking COVID-19 health spending**. At the onset of the pandemic, the OECD and WHO released critical guidance to countries on systematically measuring and reporting health spending related to COVID-19 within the SHA framework *(25)*. The guidance clarified what to exclude,[3] such as non-health-related COVID-19 spending, and provided instructions on where to search for the relevant data. The guidance was crucial for country teams to generate consistent, comparable data, especially during the early days of the pandemic, when forecasting scenarios and cost estimates were rapidly evolving.
- **Guidance on tracking PHC spending.** Prompted by the 40th anniversary of the Alma-Ata declaration and a revival of the topic, WHO developed methodological guidance for PHC spending tracking, for which there is no readymade classification in SHA 2011. This guidance, the result of thorough consultation with key partners and experts, has helped shape the production of PHC spending data based on the health care function classification *(26, 27)*. Additionally, a frequently asked questions document is available to address further questions and concerns *(28)*.
- **The Health Accounts Production Tool (HAPT).** In addition to mapping health spending data to the various SHA 2011 classifications, HAPT processes, validates, analyses and reports health accounts data. Originally developed by Abt Associates with USAID funding and technical input from WHO, it was later adopted by WHO, which introduced advanced data mapping capabilities and made it available as an online platform. By helping countries move away from error-prone and cumbersome spreadsheet-based methods, HAPT streamlines and simplifies the generation of health accounts, and its logical error validation functions improve reliability and quality.[4]

Data reporting, quality control and publication

An important aspect of data reporting in the WHO calendar is the annual update of the GHED. Working across the three internal structural levels (country offices, regional offices and headquarters), WHO guides the annual GHED update, which entails four phases, each discussed below (Fig. 4.2).

Data collection. The primary source of data for the annual GHED update are the health

3. Economic measures, such as financial support targeted at industries to maintain their business or to keep employees on the payroll with the aim of quickly returning to normal production after the pandemic, were excluded from COVID-19 health spending. Despite being for health, spending on research and development in the race to develop a vaccine was also excluded because it was not considered final consumption of health care. The handling of spending on surgical and homemade masks and other personal protective equipment was also key to delineate.

4. For example, HAPT would flag the crossing of a funding source and a financing scheme that cannot be crossed on a conceptual basis, such as voluntary health insurance (a scheme) spending funded by contributions to mandatory health insurance (a source).

BOX 4.3

The Joint Health Accounts Questionnaire process

The Statistical Office of the European Union (Eurostat), the Organisation for Economic Co-operation and Development (OECD) and the World Health Organisation (WHO) have been jointly collecting data on health spending and financing through the Joint Health Accounts Questionnaire (JHAQ) since 2006.[a] Before that time, data collection was based primarily on the framework developed in the first edition of *A System of Health Accounts (16)*, published by OECD in 2000, and complemented with classifications (and categories) developed in *Guide to Producing National Health Accounts, with Special Applications for Low-Income and Middle-Income Countries (18)*, published by WHO, in collaboration with the World Bank and the United States Agency for International Development, in 2003. Since 2016, the JHAQ has been based on the System of Health Accounts 2011 *(19)*, and the framework is now widely applied in OECD countries.

The JHAQ submission request includes an Excel template with six worksheets, each covering key categories of two of the major health spending dimensions under SHA 2011. The request also includes a metadata file and explanatory information to guide data compilers in preparing their submissions.

Data requests are sent out annually in January to country focal points and are expected to be returned by the end of March. OECD countries are expected to submit the three core tables defining current health expenditure (HCxHF, HCxHP, HPxHF) at a minimum and are strongly encouraged to provide information on the revenues of financing schemes (FS).

Once countries have submitted their data, Eurostat handles validation for non-OECD EU members and candidate countries, and OECD handles validation for all other countries. The reviewed data are shared among the three agencies for feedback before being transmitted to countries. In parallel, WHO calculates estimates of the revenues of financing schemes for countries that do not submit that information.

A total of 23 countries (20 OECD countries and 3 non-OECD EU members) responded to the first JHAQ submission request in 2006. The success of the first collection and feedback from countries led to an enhanced 2007 questionnaire being sent out in December 2006 that was completed by 27 countries (23 OECD countries and 4 non-OECD EU members). Participation has since increased to 50 countries (37 OECD countries and 13 non-OECD EU members) in 2024.

Note

a. Together these three agencies constitute the International Health Accounts Team, which collaborates to develop and refine methodologies for tracking and analysing health spending globally. It provides guidance and support to countries in implementing the SHA framework, ensuring that health spending data are comparable and consistent across countries.

accounts produced at the country level. Each year, WHO requests data from Member States' officially nominated health accounts focal points.[5] Through official communication, WHO invites country focal points to submit health spending data each year. The focal points also participate in data validation later in the process.

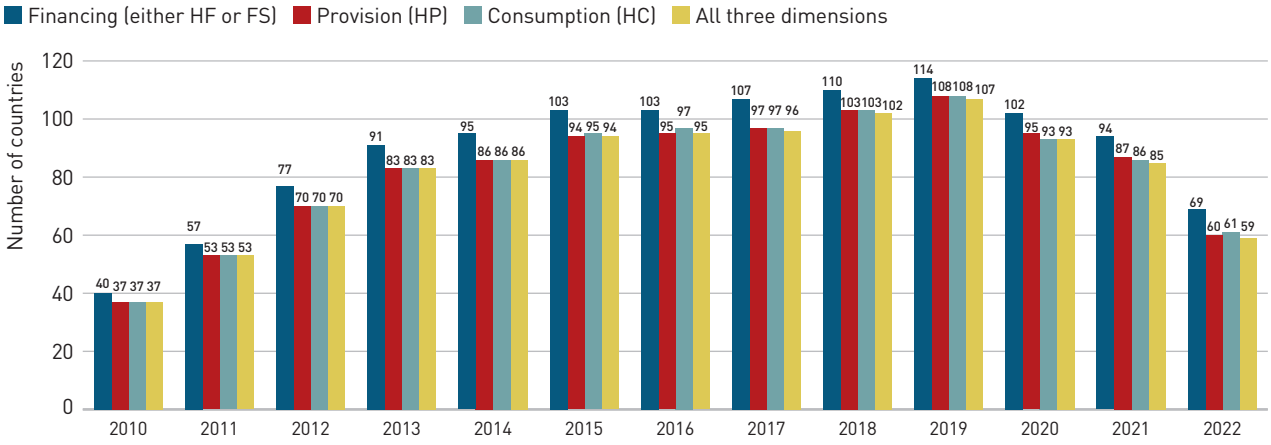
Data submission. Since the level of reporting of health spending information differs by country, WHO uses three broad data submission modalities:

- Countries are requested to provide granular data across the different dimensions of SHA 2011, including data on the spending classifications between which funds flow (for example, financing scheme by their revenues).[6] Most commonly, the data are submitted through HAPT, which is the recommended option because it enables data reporting with multiple crossed dimensions and supports a standardized process with possible automation for health accounts production and data validation, reducing the likelihood of errors before reporting.

5. Focal points can be any nominated expert deemed fit by Member States; they are usually civil servants from the ministry of health or the national statistical agency. They must be technically knowledgeable and have access to data. A minimum of one focal point is required, but some countries nominate two: one managerial, at the decision level (for example, a director or cabinet chief), and one technically sound person with hands-on data knowledge. In at least 2 OECD countries, they are from academia or research institutes.

6. Cross-tables (also referred to as "crosses") are noted with "x" between two classifications—for example, HFxFS shows categories for financing schemes (HF) in rows and categories for revenues of health care financing schemes (FS) in columns.

FIG. 4.3 The number of countries reporting health spending data to WHO consistently increased until the COVID-19 pandemic, when it decreased



Note: Values refer to the number of countries submitting data using the SHA 2011 framework through the 2024 GHED update. Years refer to the reference year of data; data are usually submitted with a two-year lag (for example, data submitted in 2024 are for the reference year 2022). HF refers to the financing schemes classification of SHA 2011, FS refers to the revenues of health care financing schemes, HP refers to health care providers and HC refers to the health care functions classification.
Data source: WHO Health Expenditure Tracking programme.

- Data can also be submitted through the Joint Health Accounts Questionnaire (Box 4.3), which is a template jointly developed and coordinated by Eurostat, the OECD and WHO, or the Health Accounts Questionnaire, which is a template introduced by WHO in 2020 that is derived from the Joint Health Accounts Questionnaire and collects additional data.[7] Both templates include built-in options for basic data control, allowing for checks on data consistency and the detection of atypical entries and negative values.
- The final option is one-dimension tables (single classification), which are used when a country lacks the capacity to produce a full set of health accounts (including cross-tables with minimum required information). These one-dimensional tables also serve an important function in gaining countries' confirmation and clearance of data in the data publication step.

Across all three modalities, data are generally submitted with a two-year lag, though countries can also submit preliminary data for the previous year if they are ready. In addition to submitting spending data, countries submit metadata and may also share revised versions of previously submitted data.

When country data are missing, WHO estimates health spending using a systematic process and secondary information that are shared with country focal points for validation before publication. The estimation process is detailed in a GHED update methodology document *(29)*.

The number of countries reporting health spending data was trending upward before the COVID-19 pandemic. Since the publication and adoption of SHA 2011,[8] WHO and a wide range of development partners have made huge efforts to train and build the technical capacity of country teams for data production. These efforts have resulted in more countries submitting data, from around 40 for 2010 to more than 110 for 2019 (Fig. 4.3). Reporting on the financing dimension and on the classification of revenues and of financing schemes (40 countries for 2010 and 114 for 2019) is generally higher, while reporting on the other dimensions of the SHA 2011 triangle (consumption and provision) is usually lower (37 countries for 2010 and 107 for 2019).

The decline in the number of countries reporting health spending data during the COVID-19 pandemic (2020–2022) may indicate that country teams lacked access to the underlying data or faced disruptions due

7. Specifically, the Health Accounts Questionnaire includes additional cross-tables, such as health care functions by revenues of health care financing schemes (HCxFS) and diseases and conditions by revenues of health care financing schemes (DISxFS).

8. The values cited in this paragraph do not include countries that still reported data using the SHA 1.0 framework. The comparison begins with 2010 because some countries converted their data to the SHA 2011 format from that year onwards.

to lockdowns or redeployments. The lower country count for 2022, around 60 for the three dimensions, reflects delays in reporting as countries catch up rather than a lack of interest. Postponement of peer reviews and face-to-face data validation meetings, used to boost the timeliness of reporting, is also a factor, particularly for countries in the WHO African Region. Those countries have largely adopted SHA 2011 and are reporting on its three dimensions thanks to the introduction of the HAPT and are now struggling with timely data reporting (Box 4.4).

In parallel with country submissions, WHO obtains macro indicators (gross domestic product, exchange rates, private final

BOX 4.4

Uptake of the SHA 2011 framework in the WHO African Region

Uptake of the System of Health Accounts 2011 (SHA 2011) framework in non–Organisation for Economic Co-operation and Development countries has been highest in the WHO African Region, where 42 of 47 (89%) countries have adopted the framework and produced at least one year of data (see Box Fig. 1). Regular data collection is crucial, and the relative success in West Africa is due largely to the subregion's political environment, willingness, partner support and the push from the West African Economic and Monetary Union.

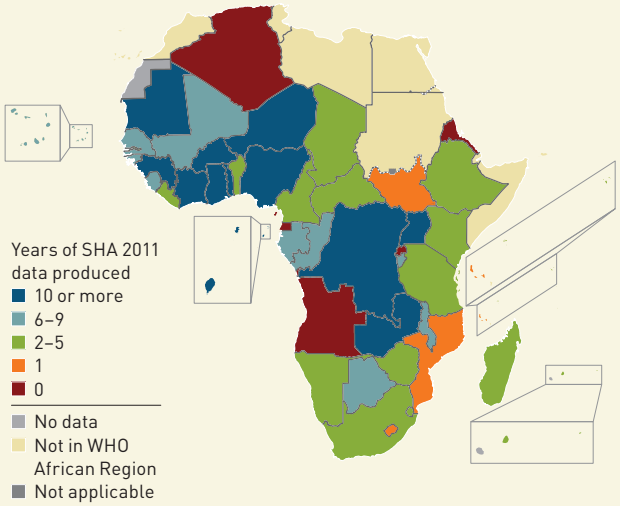
In collaboration with partners, the WHO African Regional Office and country offices have promoted the production and use of health accounts data to inform policy. The technical capacity in regional and country offices has played a critical role in supporting country health accounts teams through training and annual meetings on data peer review, strengthening the region's ability to produce data more regularly.

The West African Economic and Monetary Union funds a summer course dedicated to the SHA 2011 and health accounts production at Centre Africain d'Etudes en Gestion in Dakar, Senegal, targeting civil servants from ministries of health and finance. It also requires its eight member states to produce and release a set of health spending data annually *(30)*. The data are summarized in *Bulletin sur les dépenses de santé de la zone UEMOA*, the first edition of which was released in December 2023 *(31)*.

Additionally, major continental actors such as the African Development Bank and the African Union (AU) play a key role in raising data awareness, dissemination and use. For example, the Scorecard on Domestic Financing for Health (https://score-card.africa/) is an annual AU-led effort, supported by partners such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and WHO. By answering the question "How much does government spend on health?" in three ways—per capita, as a share of gross domestic product and as a share of government budget, the scorecard's section on country performance provides useful benchmarking information based on Global Health Expenditure Database data. Trend data are also available, as well as disaggregated data by source and a fiscal space analysis.

More recently, the African Union Institute for Statistics held an inaugural workshop on tracking health spending, convening national statistical office and ministry of health representatives for a week in Accra. It has scheduled similar events in the future and in languages other than English to continue building capacity in this area and developing synergies at the country level, particularly links for better access to data on out-of-pocket spending. The vision is that, as part of the AU's 2063 Agenda and Strategy for the Harmonization of Statistics in Africa, its 55 member states will routinely produce key statistics without hurdles.

BOX FIG. 1 **West Africa leads the WHO African Region in uptake of SHA 2011, as of December 2024**



Note: The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
Source: WHO Health Expenditure Tracking programme.

consumption, general government expenditure and population size, among others) from publicly available data sources, mainly the IMF, the OECD, the United Nations and the World Bank. These data are used to produce indicators and calculate estimations where needed (for example, external spending calculated using data from the OECD Development Assistance Committee database) *(32)*.

Data validation. Maintaining high data quality is a cornerstone of the WHO Health Expenditure Tracking programme. Several quality control mechanisms ensure the integrity of submitted data.[9] They are summarized in a quality control guidance document describing the process, which consists of four main parts *(33)*:

1. **Methodological soundness.** This checks the mapping of health spending data between different classifications under the SHA 2011 framework. It entails cross-references between financing schemes and its revenues, health functions and financing schemes, health functions and health providers, and disease spending and several other classifications.[10] It identifies cross-tables that should be confirmed.
2. **Compliance with accounting and statistical standards.** Compliance tests include mathematical quality checks, which are usually the most straightforward and rudimentary criteria for data quality validation, and checks for comprehensiveness of coverage, negative or atypical values, internal and external consistency, timing and double counting.
3. **Metadata quality.** Metadata provides information about how data were collected, processed and produced. It informs users about the validity, quality and reliability of the data and is equally important as the data themselves. It is crucial to fully understanding and correctly interpreting health accounts data.
4. **Alignment with policy.** An important lens through which a country's estimates are viewed is consistency. When sudden and unexplained changes are observed in values of cross classifications, country focal points are asked whether the changes reflect changes in health policy or the system or methodological changes in the production of country health accounts (for example, a new data source or different estimation method).

As part of the validation process, country teams may be asked to revise the submitted data and perform quality improvements, both in the data and in the metadata, and resubmit.

Data publication. Making data publicly available in a timely manner is essential for promoting data use. Every December, ahead of Universal Health Coverage Day, the WHO releases an update to the GHED. Before the release, WHO undertakes a final internal data quality review. External experts and stakeholders provide an independent assessment and recommendations for improvement, and since 2018, the data have been shared with the World Bank health financing teams at the global and country levels for a plausibility check based on their knowledge of the health policy context. All data to be published are then cleared by country focal points.

Data are published for calendar years. For countries in which the fiscal year begins after 30 June, data are allocated to the later calendar year (for example, data for a fiscal year beginning 1 March 2021 are allocated to 2021, and data for a fiscal year beginning 1 July 2021 are allocated to 2022).

Key indicators are also published in the WHO Global Health Observatory data platform (https://www.who.int/data/gho) and in the World Bank's World Development Indicators database (https://data.worldbank.org/). The integration of health spending data from the WHO GHED into the World Bank database and other WHO platforms underscores the importance of the data in shaping global health policies and strategies.

Data analysis and use for policy

In addition to publishing data in the GHED, the WHO conducts detailed analyses of trends and patterns in global health spending to inform policy decisions and promote evidence-based policy-making.

9. Quality checks and data validation are inherent parts of producing health account estimates and should be performed by country teams before data are submitted to WHO. Quality checks are applied at multiple stages of the process, such as during data collection, when data are uploaded to HAPT and after data are mapped to the SHA 2011 classifications.

10. Examples of data that would require further review are spending reported for maternal conditions in either the under 5 population or in the male population, spending reported for sexually transmitted diseases other than HIV in the under 5 population and no spending from external sources reported for immunization programmes or for family planning in an aid-recipient country.

The Global Health Expenditure Report

The GHER presents a global-level analysis. This annual flagship report summarizes the data on health spending worldwide and provides valuable insights into trends, patterns and resource allocation across regions and countries. Each edition has an initial chapter that summarizes key trends and changes in health spending and spending by source (from domestic government, private and external aid), followed by thematic chapters that focus on specific areas of interest *(34, 35, 36, 37)*.

By offering a clear picture of how health resources are used, the GHER identifies gaps, informs policy adjustments and promotes transparency and accountability in health financing. The report serves as an essential tool for policy-makers, researchers and health professionals, promoting evidence-based decision-making at the global, regional and national levels.

Regional and thematic reports

WHO also produces regional and thematic reports that provide detailed analyses of trends and patterns in health spending specific to regions and thematic areas *(38, 39, 40, 41)*. These reports are crucial for understanding the unique health financing challenges and opportunities in various geographical contexts and topics. They offer tailored insights that help policy-makers, researchers and health professionals make informed decisions and develop strategies to address local and thematic needs. The reports complement the GHER by providing more granular and focused analyses, enabling targeted policy interventions and resource allocation to address specific health financing needs effectively *(42, 43)*.

Technical support and institutionalization

WHO, along with partners, has made substantial progress over the past 25 years in building the countries' technical capacity to produce health accounts.

Since the release of SHA 2011, WHO and its partners have facilitated in-country technical assistance visits for data production and mapping, regional workshops for data validation and global-level peer meetings for technical discussions.

Development partners have also provided considerable support for capacity building, particularly for data collection in systems that do not routinely have the necessary underlying information for the timely production of health accounts. Other examples include the annual peer learning biregional workshop jointly organized by the OECD and WHO for Asia–Pacific countries. WHO is also contributing to meetings of other organizations where health accounts data and methodological developments are regularly discussed, such as the OECD Working Party on Health Statistics. The origins of these meeting can be traced back to the early initiatives to implement health accounts regional networks—such as the Asia Pacific Health Accounts Network (early 2000s), Red de las Américas de Cuentas de Salud in the Americas (2008) and African subregional efforts *(44)*.

Global data governance and coordination

Depending on the end goal and the policy questions of interest, health resource tracking initiatives can take several shapes and forms. For example, costing studies at the facility level focus on resource identification and technical efficiency, while tracking of spending on core indicators informs annual health sector reviews or provides in-depth insights as needed (for example, National AIDS Spending Assessments and Family Planning Spending Assessments) to evaluate accountability, linking resources to results. Additionally, future flows reporting informs annual planning and budgeting processes, addressing allocative efficiency and sustainability (for example, the Global Financing Facility's Resource Mapping and Expenditure Tracking process).

Global health initiatives and development partners often tap into the same source in countries in an uncoordinated manner, inefficiently using scarce resources on frequent requests for the same data. WHO provides a platform for partners to streamline their objectives and, where relevant, pool resources to achieve more. At the country level, governance and coordination, often called the "harmonization process," aim to boost administrative efficiency and prevent donor fatigue *(45)*. In-depth analysis can still be carried out as needed but ideally as part of a concerted and well-planned effort.

Since 2020, WHO has convened biannual virtual meetings for partners in tracking health resources (before 2020, annual in-person global meetings were held). Participants collaborate to advocate for resource tracking at the country level by engaging partners' country representatives, harmonizing reporting requirements and advocating for additional funding to support activities at the country level. Additionally,

participating organizations commit to providing data on their own health investment at the country level.

Outstanding challenges in institutionalizing health accounts in countries

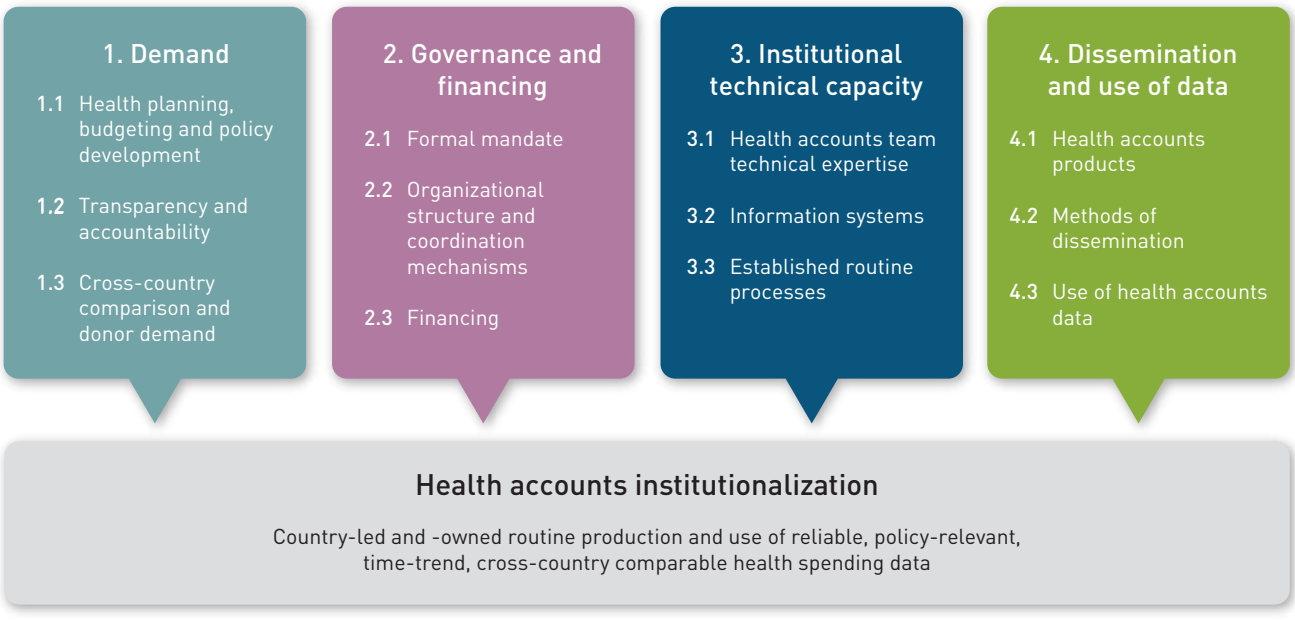
Despite the considerable progress in building country capacity for producing health accounts and enhancing tracking of health spending globally over the 25-year lifespan of the WHO Health Expenditure Tracking programme, there remains room for continuous improvement on data quality, availability, timeliness and use for policy. In particular, there is considerable scope for further institutionalizing health accounts within countries as a country-led and systematic process. In 2012, the World Bank released a report on institutionalization *(46)* that provided practical guidance for countries seeking to institutionalize health accounts, through a synthesis of lessons drawn from country experiences.

In 2024, WHO undertook a global assessment of health accounts institutionalization, based on a survey across all WHO regions and income groups *(47)*. Fig. 4.4 details the framework on which the survey was based *(48)*. The survey, to which 97 countries responded, revealed several aspects of country-level institutionalization, which are summarized below.

Institutionalization improves the quality of health accounts data and can reveal the extent to which countries have integrated health accounts information into their broader data management and use. Institutionalizing health accounts as a country-led and systematic process is correlated with a greater likelihood of regularly producing reliable, time-trended and cross-country comparable data on health spending, in line with SHA 2011. Countries can then regularly and sustainably integrate this information into their health and financial surveillance systems and submit it for publication in the GHED. Institutionalization of health accounts is not automatic and does not necessarily increase with income. Instead, whether a country progresses along the institutionalization pathway depends on deliberate budgetary and administrative choices.

Government funding for health accounts teams is crucial for institutionalizing and ensuring health accounts production. Allocating domestic public resources for health accounts teams is a key indicator of whether governments prioritize health accounts and whether the dedicated resources are sustainable. Nearly half the countries surveyed (including all responding low income countries and most lower-middle income countries) relied on external aid for staff salaries

FIG. 4.4 Framework for assessing the maturity of health accounts institutionalization



Source: Adapted from WHO *(48)*.

or activity costs (or both).[11] Dependence on donors can be driven by a lack of domestic technical and financial capacity, but it could lead a government to take more of a hands-off approach to health accounts than might be the case if the mandate or demand came from within government agencies.

The production of health accounts tends to be more comprehensive, systematized and timely when teams can use records from established and regular data sources. Health accounts typically use two types of information: routine statistics and specific-purpose surveys. Routine statistics are produced and presented regularly, with set data requirements. These include financial statements, audit reports and ledgers directly obtained from governments and other health system financing agents, as well as nationally representative household and business surveys. In addition, routine nonspending data, such as health service utilization, complements the production of health accounts. Specific-purpose surveys include those targeting government agencies, development partners, nongovernmental organizations and health care providers. While specific-purpose surveys can be important when routine data sources are unavailable or insufficient, they are often costly, time-consuming and complex to implement. There is a strong correlation between routine access to essential data on health spending—often facilitated by digital information systems and coordinated with various data providers—and the regular, systematic production of health accounts. Conversely, relying on primary data collection and specific-purpose surveys is linked to less systematized and less consistent production of health accounts.

Persistent data coverage gaps negatively impact the comprehensiveness and accuracy of health accounts. Two major coverage gaps that affect low and middle income countries in particular involve household out-of-pocket spending on health and external funding from donors. Out-of-pocket spending on health is rarely directly observed; instead, it is estimated from the national accounting process (which has a different boundary from the one used in health accounts) or from nationally representative, but often dated, surveys, including Household Income and Expenditure Surveys (scaled each year using macroeconomic variables, such as private final consumption). Capturing data on external funding is complicated by various challenges, including the preponderance of individual donors and fragmentation between aid that is channelled through government financial systems and aid that is managed separately from these systems.

Technical capacity requires both expertise and continuity. Producing health accounts at the country level is technically complex and involves integrating multiple data sources and classifying health spending along the three core dimensions of SHA 2011: financing, provision and consumption. In addition to a stable data infrastructure, maintaining a skilled workforce is essential. Key competencies include health economics, statistics, accounting, health policy and public finance, along with a deep understanding of the health system and the accounting framework underpinning SHA 2011.

High staff turnover threatens technical capacity, as valuable institutional knowledge is lost when critical personnel leave. The learning curve for producing health accounts is often steep, with the initial rounds requiring substantial time and effort to establish data connections and estimation methods. Once established, subsequent rounds become more efficient, barring major changes to the data structure or the teams involved. Staff turnover also complicates knowledge transfer and training. The countries with the most systematized processes for producing health accounts typically experience lower staff turnover and have formal procedures to ensure smooth transitions when personnel changes occur.

Even when routine data are available and teams can map spending, delays in the flow of information can still affect the timeliness of health accounts. In most countries, health accounts are reported with a two-year lag. Holdups in accessing the underlying needed information delay health accounts production. In this context, donors' willingness to share financial information is important for timely production in countries with high donor funding to the health system.

High-quality, policy-relevant data stimulate demand, and reliable data build user

11. Support from external partners for health accounts in these countries is correlated with a larger reliance on external funding for health (see Chapter 1).

confidence. Health accounts inform a broad range of users—including governments, donors and civil society—about the organization and financing of health systems to answer specific policy questions around the allocation and use of health resources. This information can promote a more accountable, transparent and responsive model of health system governance and its financing and foster more evidence-based policies and reform. Increased use of health accounts data can create a positive feedback loop, where greater demand for better data leads to improved data quality, which in turn increases data use. For example, when the ministry of health and other government agencies rely on health accounts for decision-making, it strengthens country ownership of the process and can increase resources for producing high-quality information.

Survey data reveal that while most countries produce general reports on health accounts for a wide audience, including the public, targeted briefs for specific government users, such as health ministries, are less common. Additionally, many countries, regardless of their level of institutionalization, do not systematically track health accounts use or collect user feedback. This may reduce the potential benefits of health accounts for improving health system governance because the communication of results is not tailored to users' specific needs.

The way forward for health resource tracking

The vision of WHO and its partners for health resource tracking is to provide a time trend database with increasingly accurate, comprehensive, policy-relevant, comparable and timely data on health spending as a global public good. This involves bolstering the institutionalization of health accounts in countries to enhance their capacity to consistently produce comprehensive and accurate data. It also involves improving the understanding and use of health spending information to support better policy development, implementation, transparency and accountability at the national, regional and global levels. Key priorities to achieve this vision include:

- **Broadening the scope**—for example, by creating a budget repository and collecting other qualitative information on funding flows. This information, together with health spending data, provides a much more comprehensive picture for policy discussion and formulation.
    - **Budget information** is essential for effective planning and budgeting. When combined with health spending data, it provides a more comprehensive picture of national health priorities and associated spending. Since budget structures vary across countries, the goal is to compile a budget repository alongside country profiles and analyses.
    - **Funding flow information** is also vital. It describes the paths of funds through the health system, from source to health care facilities, including from the central government to the local level and health care facilities, as well as subsidies from government funds to health insurance and the flow of external aid from donors to schemes, providers and beneficiaries.
- **Addressing emerging data needs in the post–COVID-19 pandemic era, as countries reorient health systems** towards universal health coverage and stronger health security.
    - **PHC** is widely recognized as key to universal health coverage, pandemic preparedness and health system resilience. It is critical to assess how health system resources are allocated to different PHC components and from which funding sources—domestic public, private or external. This is particularly important for essential services, primary care providers and public health functions. Yet, half the world's countries still lack information on this crucial area.
    - **Pandemic preparedness and response** is another area in urgent need of financial data to guide investment, ensure transparency and accountability and build resilient health systems. Pandemic preparedness and response activities often involve multiple sectors, making resource tracking challenging, although a substantial share of spending is in the health sector. Innovative approaches for designing spending measures and data collection are required to accurately reflect resources and link them to key performance indicators.
    - **Pharmaceutical spending** represents a critical element of health service provision and greatly affects health system efficiency. Many studies also show that medicines outside the service package are often paid for out of pocket, leading to financial hardship and barriers to accessing care. In most countries, the portion of public and out-of-pocket

resources allocated to pharmaceuticals, and the sources of this funding, remains unknown.

- **Strengthening tracking of health resource for country-level policy dialogue and development.** SHA 2011 provides a standardized classification of health spending, while health systems are structured differently in each country. While contributing to global reporting, countries are encouraged to record spending details based on their specific context. For instance, when reporting on hospital spending according to SHA 2011 health care provider classification categories, countries could also collect more detailed breakdowns on spending items, such as data for public hospitals, private hospitals and other relevant groups.
- **Harnessing the power of digital technology innovations in countries' production of health accounts data** to enhance the efficiency, accuracy and timeliness of data collection, estimation and analysis. Linking health accounts to financial management systems and leveraging digital tools such as automated data processing and streamlined compilation of complex financial information from multiple sources can facilitate more reliable and up-to-date reporting. Furthermore, integrating digital technology into health accounts production can improve transparency, reduce human error and improve collaboration among stakeholders, boosting institutionalization of health accounts. At the global level, information and communications technology should be taken advantage of to build a more user-friendly data portal to provide easy access to the data, flexible visualization according to user needs and a platform for feedback and discussion on tools, methodologies, and data collection and estimation challenges and solutions.
- **Advancing tracking of health resources through renewed efforts from countries and partners.** These efforts should focus on strengthening technical capacity, improving governance structures and ensuring that sufficient resources and mechanisms are in place. At the country level, the process should be country-led, with staff and activities funded by sustained domestic government resources. Teams should access routine financial and other related data, ideally through digital systems, and coordinate with various data-providing stakeholders. Considerable gains could be made in understanding health spending and its policy importance by replicating GHER-type analyses and disseminating them at the regional and country levels.

At the regional and global levels, partners —including donors and supranational bodies—play a key role in promoting the institutionalization of health accounts. By advocating for the regular production and dissemination of health spending statistics, promoting evidence-informed policy-making and investing in local technical capacity and information systems, external partners can support the development of health accounts and contribute to a global public good.

As a technical agency, WHO is committed to working closely with partners in supporting the institutionalization of health accounts in countries and sustaining and enhancing the GHED. WHO will continue to coordinate the development of practical guidance and tools to support countries in enhancing institutional capacity in data production, quality improvement and data use while maintaining the GHED and GHER as valuable global public goods.

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Annex

Country list for Chapter 3

ISO-3 code	Country name	Baseline year	Latest year	Four years of data available	PHC data available
	High income countries				
	Government systems				
AUS	Australia	2019	2021	No	Yes
CAN	Canada	2019	2022	Yes	Yes
DNK	Denmark	2019	2022	Yes	Yes
FIN	Finland	2019	2022*	Yes	Yes
ISL	Iceland	2019	2022	Yes	Yes
IRL	Ireland	2019	2021	No	No
ITA	Italy	2019	2022	Yes	No
LVA	Latvia	2019	2022	Yes	Yes
MLT	Malta	2019	2022*	Yes	Yes
NOR	Norway	2019	2022*	Yes	Yes
PRT	Portugal	2019	2022	Yes	No
ESP	Spain	2019	2022	Yes	Yes
SWE	Sweden	2019	2022	Yes	Yes
GBR	United Kingdom of Great Britain and Northern Ireland	2019	2022	Yes	Yes
	SHI systems				
AUT	Austria	2019	2022	Yes	Yes
BEL	Belgium	2019	2022	Yes	Yes
HRV	Croatia	2019	2022	Yes	Yes
CZE	Czechia	2019	2022	Yes	Yes
EST	Estonia	2019	2022	Yes	Yes
FRA	France	2019	2022	Yes	Yes
DEU	Germany	2019	2022	Yes	Yes
GRC	Greece	2019	2022	Yes	No

ISO-3 code	Country name	Baseline year	Latest year	Four years of data available	PHC data available
HUN	Hungary	2019	2022	Yes	Yes
ISR	Israel	2019	2021	Yes	No
JPN	Japan	2019	2021	No	No
LTU	Lithuania	2019	2022	Yes	Yes
LUX	Luxembourg	2019	2022	Yes	Yes
NLD	Netherlands (Kingdom of the)	2019	2022	Yes	Yes
POL	Poland	2019	2022*	Yes	Yes
KOR	Republic of Korea	2019	2022	Yes	No
ROU	Romania	2019	2022	Yes	Yes
SVK	Slovakia	2019	2022	Yes	Yes
SVN	Slovenia	2019	2022	Yes	Yes
CHE	Switzerland	2019	2022	Yes	Yes
	Middle income countries				
	Government systems				
BLR	Belarus	2019	2022	Yes	Yes
COG	Congo	2019	2020	No	Yes
MDV	Maldives	2019	2020	No	No
PRY	Paraguay	2019	2022	Yes	Yes
	SHI systems				
BIH	Bosnia and Herzegovina	2019	2022	Yes	Yes
BGR	Bulgaria	2019	2022	Yes	No
CRI	Costa Rica	2019	2022	Yes	Yes
MEX	Mexico	2019	2022	Yes	Yes
MKD	North Macedonia	2019	2022	Yes	Yes
MDA	Republic of Moldova	2019	2022	Yes	Yes

* Country data are preliminary and subject to further validation and update.
Source: WHO Global Health Expenditure Database, 2024.

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