

Whilst attention often focuses on how much is spent on health, the fact that health prices in Switzerland are three times that of Mexico means looking at the dollar spend per head can be misleading. Nevertheless, although the United States has among the highest health prices in the OECD, it still provides twice the volume of health services than the average OECD country. This brief gives the latest evidence on how health and hospital prices and health volumes vary across OECD countries.

A measure of the price paid for health care and the quantity consumed gives an insight into why health spending differs across countries. How these factors evolve can shape strategies to increase efficiency and adjust future health expenditure trajectories. The policy options on offer depend on whether variations are driven primarily by the prices in the health sector, or how much care is being consumed.

Many factors help explain the price variations in health care, including relative productivity and local wages, as well as the organisation and governance of the health care system and the approach used to set or negotiate prices.

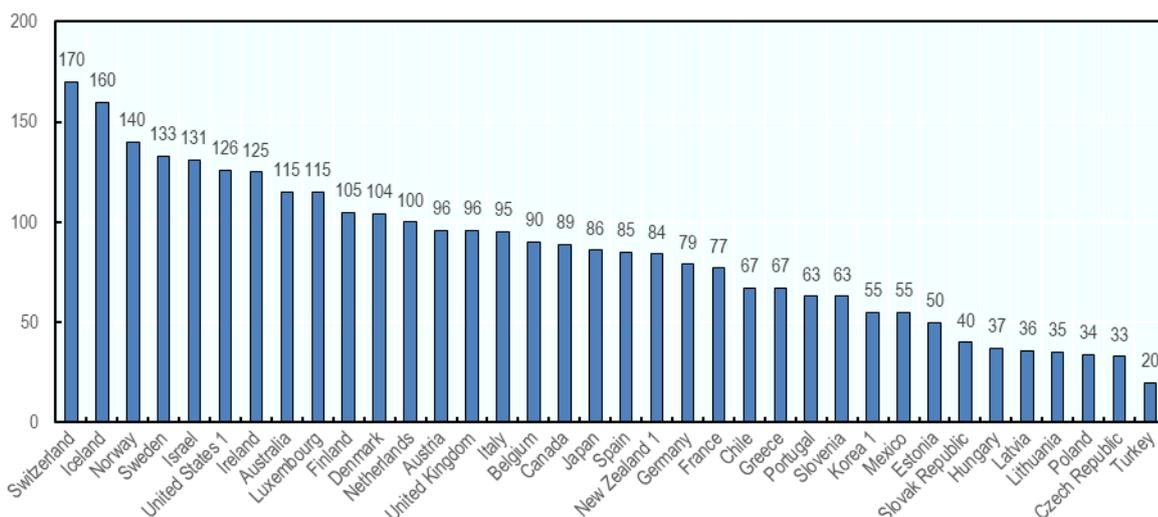
As health care goods and services are often supplied by governments (non-market products), price comparisons often rely on so-called quasi-prices that reflect the costs of producing the output rather than the market value of a product.

Deriving comparative price levels between countries requires the collection of prices for a representative basket of services and goods across the health sector – pharmaceuticals and medical goods, outpatient consultations, as well as hospital services.

Prices can vary not just between countries, but within countries and between providers for a number of reasons. Key factors include the degree of regulation between public and private systems, variation in local input costs, including wages, and different procurement processes across providers.

There can also be differences according to who is paying. In the United States, a hospital may have a standard list price for a treatment, but charge a different fee depending on whether the care is paid by a private health insurer; Medicare or Medicaid, or out of pocket. On average, the price charged to private health insurers was found to be twice the Medicare price (White et al. 2019).

Figure 1: Relative price levels in the health care sector, 2017 (OECD average = 100)



Note: (1) Based on different calculation methodology.
 Source: OECD Health Statistics 2019.

Prices of health care goods and services in Switzerland are eight times higher than in Turkey

Figure 1 shows the variations in price levels for a basket of health care goods and services for each OECD country in relation to the average price level observed across the OECD.

Switzerland and Iceland have the highest health sector prices in the OECD - on average the same basket of goods and services would cost 70% and 60% more than the OECD average, respectively. Health care prices also tend to be relatively high in Norway and Sweden.

In contrast, the price for the same mix of health care goods and services in Chile and Greece is around two-thirds of the OECD average, while a group of central and eastern European countries typically record prices at less than 40% of the OECD average. The lowest health care prices in the OECD are in Turkey, at only around 20% of the OECD average.

Due to the differences in methodology used to calculate prices in the health sector for Korea, New Zealand, Turkey and the United States¹, the relative price levels shown are hard to compare to other OECD countries.

Health care sector prices vary more than general economy prices across the OECD

There is a strong degree of correlation between prices in the health sector and prices in the economy as a whole. But while internationally traded goods such as cars or computers tend to equalise in price between trading partners, services (such as health) are by their nature typically purchased locally, with, for example, higher wages in wealthier countries leading to higher service prices.

Comparing price levels in the health sector and in the economy relative to the OECD average, the variation in health prices is greater than that in economy-wide prices (Figure 2). Countries with relatively low economy-wide prices tend to have health price levels that are even lower than in the general economy. For example, in Poland, general prices are around a half of the OECD average, while health prices in Poland are only about a third of the average OECD level. Similarly, countries with high economy-wide prices tend to have health prices that are even higher, relatively – e.g. overall prices in Switzerland are 40% above the OECD average, but prices in the Swiss health sector are around 70% higher than the average across the OECD.

Not all higher income countries with high general prices have more expensive health care sectors. In France and Germany, general price levels are close to the OECD average, but health care prices are more than 20% lower compared to OECD as a whole.

These observed differences between overall prices and health prices in a country may reflect policy decisions to regulate prices paid for goods and services in the health sector as well as the non-tradeable feature of health services.

United States remains the greatest consumer of health care across the OECD

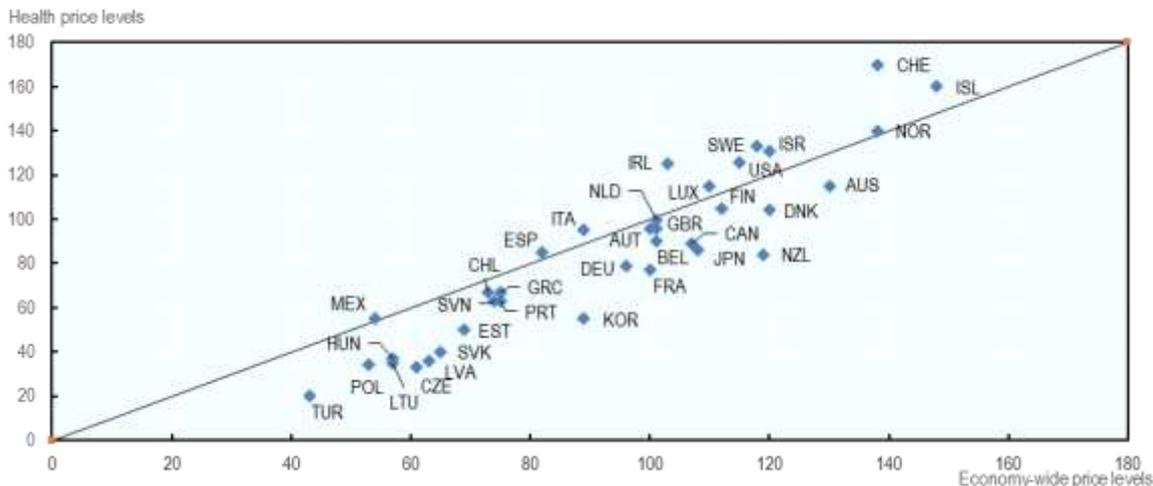
Adjusting for the differences in health prices between countries can give a measure of the amount of health care goods and services being consumed by the population (“the volume of care”). Comparing relative levels of health expenditures with relative levels of volume provides another way to look at relative contributions of volumes and prices in health expenditures. It also shows volume measures are a useful addition to comparisons of spending in the analysis of health care use. [To understand how volumes are calculated, see Box 1]

The volume of health care goods and services across countries varies less than health expenditure (Figure 3). While the United States remains the highest spender in health care at nearly three times the OECD average, the difference between the United States and other countries in volume terms is reduced to two times the OECD average due to the relatively high prices in the US. Other countries with high price levels, such as Ireland, Norway, Sweden and Switzerland also see lower comparative measures of the volume of care than expenditures. On the other hand, the Czech Republic has a higher level based on volumes of care due to the relatively lower prices in their health sectors. While Mexico and Turkey have similar low levels of health spending, the difference in price levels means that the volume of care in Turkey is almost double that of Mexico.

Differences in the volume of care consumed may be related to factors such as the age and disease profile of a population, the organisation of service provision, use of prescribed pharmaceuticals, or difficulties in access leading to lower levels of care being used within a country.

¹ For those countries hospitals PPPs are estimated predominantly by using salaries of medical and non-medical staff (input method).

Figure 2: Health care price levels compared to economy-wide price levels, 2017 (OECD average =100)



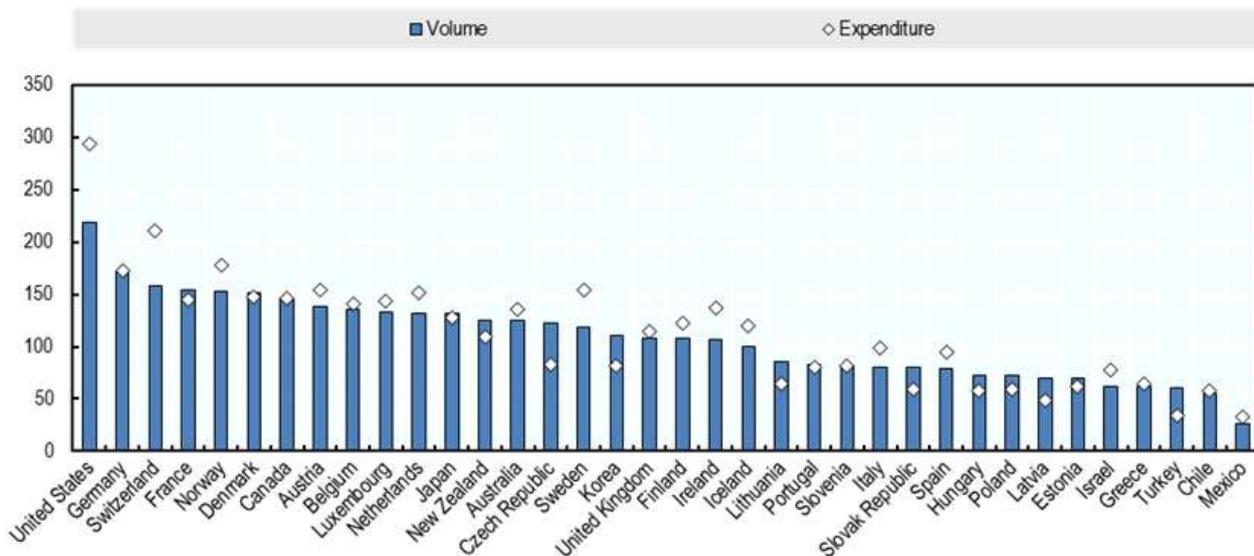
Source: OECD Health Statistics 2019.

Box 1: Using Purchasing Power Parities (PPPs) to calculate health care volumes

To better understand the impact of volume and prices on health spending across countries, data expressed in national currencies are converted into a common currency using Purchasing Power Parities (PPP). PPPs are conversion rates that show the ratio of prices for a basket of goods in one currency to the same goods in another. When PPPs are used to convert expenditure to a common unit means, the results are valued at a uniform price level and the comparison of expenditures across countries reflects only the differences in the volume of goods and services consumed.

PPPs are calculated by first gathering price information for products and services and averaging them within groups. These product group prices are converted to price relativities, which are then weighted and averaged for each aggregation level (for example hospitals, healthcare, or GDP).

Figure 3. Health care volumes compared to health expenditure, 2017 (OECD average =100)



Note: Expenditures are calculated using the PPP for Actual Individual Consumption. Volumes use the PPP for Health Services.
Source: OECD Health Statistics 2019.

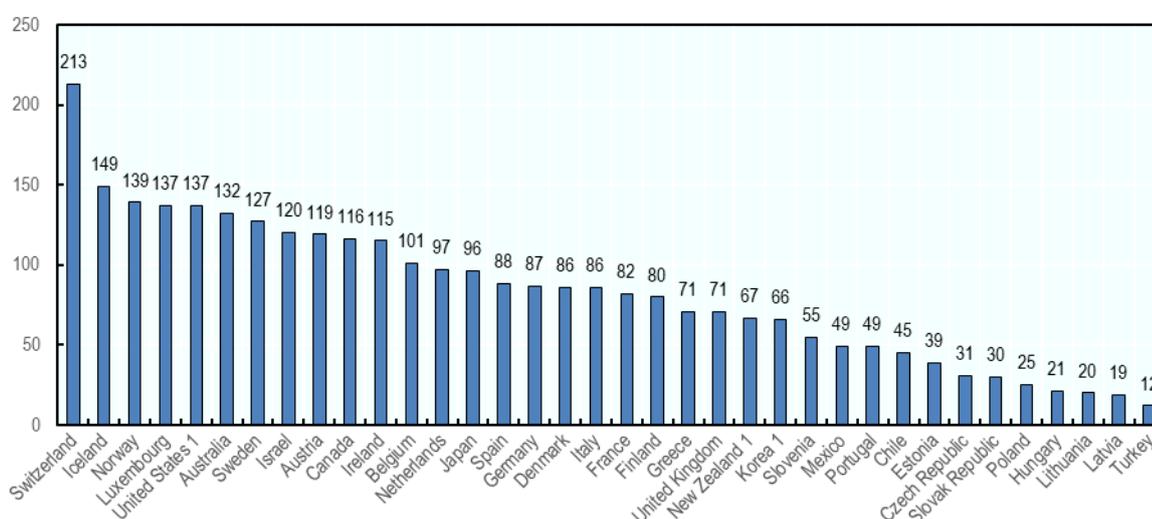
Prices in the hospital sector show an even greater variation across the OECD

Hospital expenditure typically accounts for around a third of overall health spending in OECD countries and therefore weighs heavily in the overall health price level calculations. However, the variation in prices of hospital services and procedures is even greater across OECD countries than in the health sector as a whole. The average price for a caesarean section in Norway, Iceland and Switzerland is around 8000 Euros - around twice the level in France, the Netherlands and Belgium, and seven times the price in Estonia and Portugal. Similarly, at 12000 Euros, the typical price of a hip replacement in Luxembourg or Norway is seven times that reported for Turkey, Latvia and Lithuania.

Estimates for 2017 suggest that average hospital prices in Switzerland are more than double the average level calculated across OECD countries, whereas prices in Turkey are only around an eighth of the OECD average (Figure 4).

More labour intensive than the health sector as a whole (typically 60-70% of hospital spending is staff costs), service prices in hospitals are heavily determined by local (national) wage levels, but may also be influenced by hospital financing mechanisms and funding arrangements, the structure of service provision, as well as the market structure and competition among payers and among providers, and the way prices are set (Barber et al 2019).

Figure 4: Hospital price levels, 2017 (OECD average=100)



Note: (1) Based on different calculation methodology.
Source: OECD Health Statistics 2019.

References

Barber SL, Lorenzoni L, Ong P (2019). Price setting and price regulation in health care: lessons for advancing universal health cover-age. Geneva: World Health Organization, Organisation for Economic Cooperation and Development.

White, Chapin and Christopher Whaley (2019). Prices Paid to Hospitals by Private Health Plans Are High Relative to Medicare and Vary Widely: Findings from an Employer-Led Transparency Initiative. Santa Monica, CA: RAND Corporation.

Useful Links

OECD Health Statistics 2019:
<http://www.oecd.org/health/health-data.htm>

Contact

Luca Lorenzoni – Health Policy Analyst

✉ luca.lorenzoni@oecd.org

☎ +33 1 45 24 76 21

David Morgan – Head of Health Accounts

✉ david.morgan@oecd.org

☎ +33 1 45 24 76 09

🐦 @OECD_Social