How does Finland’s health sector contribute to the economy?
Health matters. The health sector is an important and innovative industry, as well as a source of stable employment for many people. Health systems support active and productive populations, reduce inequities and poverty, and promote social cohesion. A strong health system makes good economic sense and underpins the overall sustainable development agenda.

Countries around the world are grappling with the health, economic and fiscal implications of the COVID-19 pandemic. As they begin to recover from the crisis, difficult decisions will need to be made about how to allocate scarce resources. These snapshots share valuable evidence for policy-makers on how investing in health sectors and health systems helps to achieve national economic objectives.
How does Finland’s health sector contribute to the economy?

The health sector makes up a moderate share of the Finnish economy, with opportunities for growth in the health technology and pharmaceutical industries.

Spending on health is higher in Finland compared to many Western European countries. In 2019 current health spending accounted for 9.2% of total gross domestic product (GDP), above the EU average of 8.3% but lower than Nordic neighbours such as Denmark (10%) and Sweden (10.9%) (Fig. 1) (WHO, 2021). In terms of health spending per person, Finland, at €4710 PPP in 2019 is comparable to the EU average, but spends less than many Western countries (WHO, 2021).

The health share of the government budget, reflecting the priority given to health, has remained around 13% of the total government budget since 2005. In 2019 it reached 13.8% (WHO, 2021), which is markedly lower than other high-income countries like Sweden (18.8%), Germany (20.1%), the United Kingdom (19.7%) and Denmark (16.8%) (WHO, 2021). However, this seemingly low historical priority is partially attributable to the large size of Finland’s overall government budget, which distorts the government’s dominant role in paying for health care. In fact, the priority given to health and other social services is demonstrated through Finland’s strong focus on the concept of an “economy of well-being”, which places well-being – in addition to economic and fiscal considerations – at the core of policy and decision-making (Ministry of Social Affairs and Health, 2020). Moreover, beginning in 2023 around half of the state budget will go towards funding the “well-being services counties” which are new administrative bodies responsible for organizing a range of services including health and social care.

Fig 1 Current health expenditure as a share of GDP in Finland is lower than its Nordic neighbours, though it is above the EU average


Note: Gross National Income (GNI) is used in place of GDP for Ireland.
Public spending on health has increased in response to the COVID-19 pandemic and is expected to continue growing, with at least €2.2 billion expected to be allocated to COVID-19 from the state budget in 2022 (European Observatory on Health Systems and Policies, 2021). These funds have mainly been for testing and treating COVID-19 patients and organizing vaccinations, but funds have also been used since 2020 for procuring equipment and compensating some revenue losses incurred by the municipalities. Additionally, Finland’s approach to lockdown measures during the COVID-19 pandemic was informed by analyses that explicitly took the expected economic impact into consideration, in addition to the epidemiological impact (Finnish Government, 2021).

Health-related industries also play a major role in the economy. Finland is one of the few countries in the world with a trade surplus in medical technologies, and this surplus has grown in the last 20 years. Finland is an attractive operating environment for pharmaceutical and health technology companies (ETLA & PIF, 2020); several leading companies established R&D sites and research units known as Centres of Excellence in the country (Pharma Industry Finland, 2021). Nevertheless, the Finnish pharmaceutical sector is still relatively small (Heiskanen et al., 2017), with domestic production accounting for a limited share of the Finnish pharmaceutical market (EFPIA, 2019).

Health-related R&D, vital to innovation, also supports economic growth. Finland’s government strongly supports the development of research and innovation in health through an ongoing specific growth strategy (Ministry of Economic Affairs and Employment of Finland, 2021), but there may be scope to increase the economic potential of this industry. In 2019, according to OECD data, around 3.1% of the Finnish government’s total R&D budget was allocated to health, relatively little compared to the importance attached to health in the overall government budget. It is also far below public investment in health R&D in Denmark (15%), Norway (15.6%) and the United Kingdom (21.5%) (OECD, 2020).

The health sector provides a stable and growing source of jobs but nurse shortages remain a key challenge

Health sector employment in Finland has steadily grown in the last 20 years, despite broader labour market fluctuations (Fig. 2) (Eurostat, 2020a; IMF, 2020). The health sector accounted for 7.5% of the economically active population in 2019, on a par with Denmark (7.2%) and the United Kingdom (7.2%), and well above the EU28 average (5.3%) (Eurostat, 2020a). The COVID-19 crisis seems unlikely to substantially alter the generally stable level of health employment in Finland.

Nevertheless, there have been nursing shortages in both the public and the private sectors due to high demand for services, despite having the third highest number of practising nurses in the EU with 14.3 nurses per 1000 population in 2019, after Norway (17.9) and Iceland (15.4) (OECD & European Observatory on Health Systems and Policies, 2019). There is also a persistent shortage of physicians, particularly in primary care; at 3.2 physicians per 1000 population in 2019, the total physician to population ratio is lower than the EU average of 3.9 per 1000 population, though it is important to note that many tasks performed by medical doctors are performed by nurses in Finland (OECD & European Observatory on Health Systems and Policies, 2019).

Finland has long faced an uneven distribution of health resources. Municipal health centres have faced difficulties in recruiting and retaining medical doctors in primary care, especially given that occupational services employ about one-third of the nation’s primary care doctors (Keskimäki et al., 2019). There are significant variations in vacancies between regions: in the northeastern parts of Finland, one in five posts is unfilled. In urban areas, such as Helsinki, the number of doctors is greater because there is a higher concentration of hospitals and specialized care units, though even urban areas face recruitment challenges, particularly in primary care (Keskimäki et al., 2019).
Finland has worked to address its workforce shortages for many years, including creating opportunities for continuous education (Norden, 2014), expanding enrolment for provider training in medical schools, strengthening commitment to recruit foreign workers, introducing novel skill-mix solutions to leverage higher levels of nursing employment (Keskimäki et al., 2019) and making efforts to streamline sector processes, as well as improving the use of technology to boost workforce productivity and overcome geographic barriers. The current government also has an extensive health and social care workforce programme. A comprehensive health and social sector reform is to be implemented in 2023 to reduce the fragmentation of health and social care by merging all public health, social and rescue services at the regional administrative level, which will aim to address many of the aforementioned workforce challenges (Ministry of Social Affairs and Health, 2021).

Finland achieves good health outcomes overall but socioeconomic and geographic inequalities inhibit further progress

Finland achieves good health outcomes overall while spending less on health than many Western European countries (Fig. 3). In 2017, treatable mortality was lower than the EU average: 77 deaths per 100,000 people could have been avoided through access to quality health care, compared to 109 on average in the EU (OECD, 2020). Life expectancy is high, reaching 81.8 years in 2019. Finland also has an infant mortality rate among the lowest in the EU, falling from 3.8 per 1000 in 2000 to 2.1 per 1000 in 2018 (World Bank, 2021).

Taken together, this suggests that the Finnish health system is fairly efficient overall. Despite relatively lower health spending levels compared with neighbouring countries, resources appear to be put to good use; only Italy and Spain achieved lower rates of treatable mortality while spending less per person (Fig. 3). According to the World Bank’s Human Capital Index, as a result of investments in health care and education, a child born in Finland today can expect to be 80% as productive by age 18 relative to a child with a complete education and full health (World Bank, 2021) – the highest in the EU, along with Sweden.
This has important implications for enhancing labour force participation and productivity as well as health.

Keeping people healthy across their life course contributes to a healthy and productive workforce, enabling people to participate in the labour market for longer. Labour force participation among older workers is high in Finland: 72% of people aged 55–64 years old were working in 2019 (Eurostat, 2020b), above the EU average (63%) and on a par with Denmark (73%), Germany (74%) and the Netherlands (72%). This is likely explained in part by Finland’s occupational health care system which provides workers with enhanced access to health services, as well as by recent pension policy reforms linking retirement age to increasing life expectancy (Ministry of Finance, 2017). Nonetheless, health status is still a deciding factor in exiting the labour force early in Finland: 72% of people aged 55–64 years old were working in 2019 (Eurostat, 2020b), above the EU average (63%) and on a par with Denmark (73%), Germany (74%) and the Netherlands (72%). This is likely explained in part by Finland’s occupational health care system which provides workers with enhanced access to health services, as well as by recent pension policy reforms linking retirement age to increasing life expectancy (Ministry of Finance, 2017). Nonetheless, health status is still a deciding factor in exiting the labour force early in Finland (Eurostat, 2019), and a high share of the Finnish population suffers from chronic conditions (IHME, 2019). High smoking rates, alcohol consumption and dietary risks account for 36% of the overall disease burden, lower than the EU average (40%) but higher than Sweden (35%) and on a par with Slovenia (36%) (Keskimäki et al., 2019).

The Finnish health system has been working to address these conditions and associated risk factors by engaging in national prevention activities. In 2019, 4% of total health spending in Finland was dedicated to prevention, above the EU average of 3% (Keskimäki et al., 2019; OECD & European Observatory on Health Systems and Policies, 2021). The recently approved major health and social care reform, which aims at greater centralization of responsibilities and resources at the regional level, is intended to improve chronic care and foster a healthier population and a more productive workforce.

In general, vaccination coverage in Finland is higher than in the rest of the EU. Nevertheless, while all nationally recommended vaccinations are included in the statutory benefits basket free of charge, there is scope for improvement. The first dose of diphtheria-tetanus-pertussis (DTAP) vaccine has been largely taken up, but the rate is lower than the EU average for the third dose. Immunization with both doses of measles-containing vaccine can also be improved, as the rate is currently slightly higher than the EU average (WHO, 2020). Finland has achieved high COVID-19 vaccination rates: in April 2022, 88.7% of adults above 18 years old had received the full vaccination series (ECDC, 2022).
Widespread use of co-payments and complex coverage policy design impede access to health services, raising concerns about financial protection and socioeconomic inequalities

The goals of universal health coverage (UHC) are to ensure that everyone can use the quality health services they need without experiencing financial hardship (United Nations, 2015). Universal health coverage is central to health and well-being: it alleviates poverty, reduces socioeconomic inequalities, contributes to health security and boosts economic growth (Cylus, Permanand & Smith, 2018). Financial protection – which is central to UHC and health system performance – is measured using two indicators: catastrophic health spending and impoverishing health spending.

Although Finland’s health care system covers all citizens and permanent residents, and health care coverage for children is high, it involves high co-payments which apply to most municipal health care services, including primary, outpatient, specialist outpatient, inpatient and emergency care, though social assistance may be provided to households that cannot afford to pay co-payments (Kela, 2022). In 2019 out-of-pocket (OOP) spending accounted for 17.4% of current health expenditure, which is above the EU27 average (15.4%) and other Nordic countries (Eurostat, 2021). The main drivers of OOPs in Finland are outpatient medicines and dental care (OECD & European Observatory on Health Systems and Policies, 2019).

In 2016, 0.6% of households were impoverished because of OOPs. The percentage of households that experienced catastrophic health spending reached 3.8% in 2016. The share is relatively higher than in Western European and Nordic countries, and it is especially concentrated among the poorest households, older people, those in retirement, the unemployed and recipients of disability benefits, e.g., those who do not have occupational health care (Tervola, Aaltonen & Tallgren, 2021).

Unmet need in Finland is also high and especially concentrated among groups in vulnerable situations, who happen to be the same people who

![Fig 4](image)

**Fig 4** Catastrophic spending incidence has fallen but the share of households impoverished as a result of paying out-of-pocket payments has increased

Source: Tervola, Aaltonen & Tallgren (2021)
do not have access to free employment-based occupational health care (OECD and European Observatory on Health Systems and Policies, 2021).

Some mechanisms are in place to alleviate the impact of co-payments and improve financial protection, including:

- Children under 18 are exempt from user charges for primary care, childhood vaccinations, maternity and child welfare clinics, diagnosis and treatment of certain communicable diseases (Tervola, Aaltonen & Tallgren, 2021).
- Three separate annual caps: €683 for municipal services, €580 for outpatient prescription medicines and €300 for health-related travel costs in 2021 (Tervola, Aaltonen & Tallgren, 2021).
- An income threshold (e.g., €502 per month for a single-person household) after which health care charges can be reimbursed (Tervola, Aaltonen & Tallgren, 2021).

However, exemptions have not been based on household income and the annual ceilings are fragmented and do not apply to all health services. In 2021 the government adopted a co-payment reform aiming to reduce OOP payments for municipal health services by early 2022. Additional changes are anticipated to be adopted as a consequence of the public health and social care reform in 2023.
Key lessons

Increasing public investment in health technologies and health-related R&D can provide a boost for the economy

With its strong capacity for research, Finland could further support the development of health technologies and health-related R&D. Increasing domestic production of medical goods can create jobs in health research-based industries. In particular, Finland’s rapidly ageing population can provide new business opportunities and result in a so-called “silver economy” if there is greater investment in new technologies and business models that aim to improve health and activity among older people.

Shifting responsibility for health and social care from municipalities to counties could help address health worker shortages and geographic imbalances

Geographic disparities in the health workforce are due in part to the high level of decentralization of the Finnish health system. The shift of administrative responsibility for health and social care from municipalities to counties can allow for better regional planning and a more appropriate allocation of resources according to need. Additionally, the harmonization of salaries to be carried out in the health and social care reform may reduce the regional health worker imbalances, though this may present fiscal challenges for the new counties. At any rate, workforce shortages cannot be addressed through salary increases alone.

Reducing out-of-pocket payments would improve financial protection and access to health services, particularly among vulnerable population groups

High reliance on out-of-pocket payments raises concerns around solidarity and equity in accessing health care. The Finnish government has developed legislation to decrease OOPs for nearly one-fifth of the population, with more services provided free of charge. Further measures improving financial protection – such as reducing reliance on co-payments for prescribed medicines and outpatient care, as well as improving the protective effects of co-payment ceilings by lowering them and applying co-payment ceilings across all types of health services – would be beneficial. Doing so would be consistent with the Finnish government’s commitment to supporting an economy of well-being.
Finland’s health system has historically been highly decentralized, with about 300 municipalities responsible for the organization and provision of services to citizens and permanent residents (Keskimäki et al., 2019; OECD & European Observatory on Health Systems and Policies, 2021). It is currently undergoing comprehensive reforms to include more centralization and integration of services. Under the reforms, this will be consolidated to 22 counties plus the Hospital District of Helsinki and Uusimaa, which will be charged with organizing and providing primary care and specialist services.

The health system was financed largely through taxation and contributions to the statutory National Health Insurance scheme (NHI) (OECD & European Observatory on Health Systems and Policies, 2019). The new system will be financed largely from the central budget. The NHI is managed by the Social Insurance Institution (SII) and covers all Finnish citizens and permanent residents for medicines and certain health services. NHI also partially finances occupational health care (Keskimäki et al., 2019). Under the reforms, the NHI will continue to provide benefits but its role is expected to evolve. There has also been growth in the use of private health insurance to improve access and to cover the cost of private health services not covered by the NHI.

Despite historical fragmentation in financing and service delivery, the Finnish health system is effective, offering good value for money overall and a generous publicly funded benefits package when compared internationally. Yet there are persistent inequities in the system, arising from the capacity of municipalities to deliver accessible and high-quality services, and advantages in speed of access and cost for employed people through occupational health care. High co-payment ceilings and low income thresholds for reimbursement have meant that people with the greatest health care needs often experience the largest out-of-pocket costs. The current reforms aim to address many of these challenges.

REFERENCES


### Key indicators

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<tr>
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<th>Finland</th>
<th>EU Average</th>
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<tbody>
<tr>
<td>People aged 65 and above (%) of total</td>
<td>22.1</td>
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<td>Life expectancy at birth (years)</td>
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<td>GDP per person (PPP US$)</td>
<td>51 458</td>
<td>48 340</td>
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<td>Current health spending per person (PPP US$)</td>
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<td>Health spending paid out-of-pocket (% of current health spending)</td>
<td>17.4</td>
<td>21.6</td>
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Source: WHO, Global Health Expenditure Database (2021); World Bank, World Development Indicators (2021)

Note: Data for 2019; PPP Int$, purchasing power parity in US dollars

The European Observatory on Health Systems and Policies is a partnership hosted by WHO that includes international agencies, national governments, decentralized authorities and academic research institutes. It supports and promotes evidence-informed policy-making, using comparative analysis of European health systems and trends to give decision-makers insights into how their own and other systems operate; what works better or worse in different contexts; and why. Ultimately the Observatory aims to help countries strengthen their health systems to improve their peoples’ health and well-being. It engages directly with policy-makers and works with a range on experts, not least its Health Systems and Policies Network, whose members provide key knowledge and insights into health systems in countries.

WHO Barcelona Office for Health Systems Financing

The WHO Barcelona Office is a centre of excellence in health systems financing for universal health coverage. It works with Member States across WHO’s European Region to promote evidence-informed policy-making. A key part of the work of the Office is to assess country and regional progress towards universal health coverage by monitoring financial protection – the impact of out-of-pocket payments for health on living standards and poverty. Financial protection is a core dimension of health system performance and an indicator for the Sustainable Development Goals. The Office supports countries as they develop policy, monitor progress and design reforms and is part of the Division of Country Health Policies and Systems of the WHO Regional Office for Europe.