Health and the Economy
a series of country snapshots

How does Tajikistan's health sector contribute to the economy?

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Health matters. The health sector is an important and innovative industry and a source of stable employment for many people. Health systems support active and productive populations, reduce inequities and poverty, and promote social cohesion. A robust health system makes good economic sense and underpins the overall sustainable development agenda.

Countries worldwide have grappled with the health, economic and fiscal implications of the COVID-19 pandemic. Going forward, 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.

This snapshot is part of a series developed by the European Observatory on Health Systems and Policies in collaboration with the WHO Barcelona Office for Health Systems Financing. It draws on cross-country comparable data and country-specific analysis and expertise to explore how well the health sector in Tajikistan contributes to the economy – and how it can do more.

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How does Tajikistan's health sector contribute to the economy?

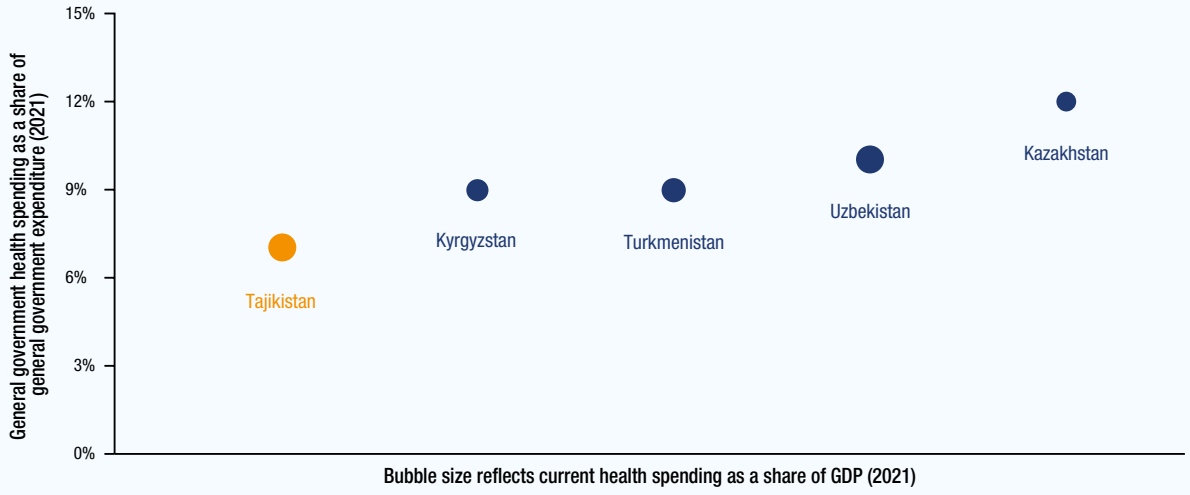
Spending on health in Tajikistan is relatively low overall, and little comes from public funding – sustained public investment in the sector could yield positive impacts on health and the economy

Health spending in Tajikistan is lower than WHO European Regional averages. Tajikistan currently spends about 8.0% of its gross domestic product (GDP) on health (2021 estimates, all financing sources combined). This lies above several of its neighbours, but is still below the WHO European Region average of 8.7%. At US$ 72 (2021), health spending per person in Tajikistan is the lowest in the WHO European Region, and around half the averages of neighbouring countries. Furthermore, the Tajik Government contributes to less than one quarter (24.2% in 2021) of the current health expenditure in the country, equating to around 7% (2021) of government spending overall (Fig. 1). By comparison, public funding in Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan all accounted for a greater share of current health expenditure (around 40%) and of government spending overall (9–12%) in their countries in 2021 (WHO, 2023; Wilkens & Goroshko, 2023).

Although it remains low compared with most of its neighbours and other middle-income countries in the WHO European Region, public spending on health in Tajikistan has indeed increased during the last two decades. Starting from 0.9% of GDP in 2000, it has more than doubled its share to its current level of 1.9% (with a stagnation in growth trends since 2014).

Expanding the role of the health system in the Tajik economy will require greater government expenditure on health, but Tajikistan – like

Fig 1 A smaller share of government spending goes to health in Tajikistan compared with in other Central Asian countries



Source: WHO (2023).

many other lower-middle-income countries (LMICs) – has a large informal sector that limits the revenues it can raise from general taxation. However, recent fiscal reforms have been successful in maintaining a decent tax to GDP ratio of 21.3% (2018) – the second highest in Central Asia. This can create the required impetus for expanding fiscal space in Tajikistan. Fiscal measures for raising additional revenue (for example, through additional cess or taxes on consumption of tobacco products) for the health sector may also have potential but remain underexplored. However, it is important to note that even with adequate government revenues, challenges in funding health in Tajikistan are likely to persist: a recent analysis of public expenditure patterns in Tajikistan suggests that underfunding of the health sector has been largely driven by a lack of political prioritization of health rather than the availability of financial resources (Wilkens & Goroshko, 2023).

There are some positive signs of increased government prioritization of health, but further improvements are needed. As part of its response to the COVID-19 crisis, Tajikistan increased its health budget by 36.5% between 2020 and 2022, using funds from both the government budget and development partner support. Public resources for the health sector amounted to US$ 315 million in 2023 – a record high in Tajikistan, and double the amount from 7 years earlier. Going forward, it will be important to stay on this trajectory and correct historically low levels of public funding for (and political prioritization of) health.

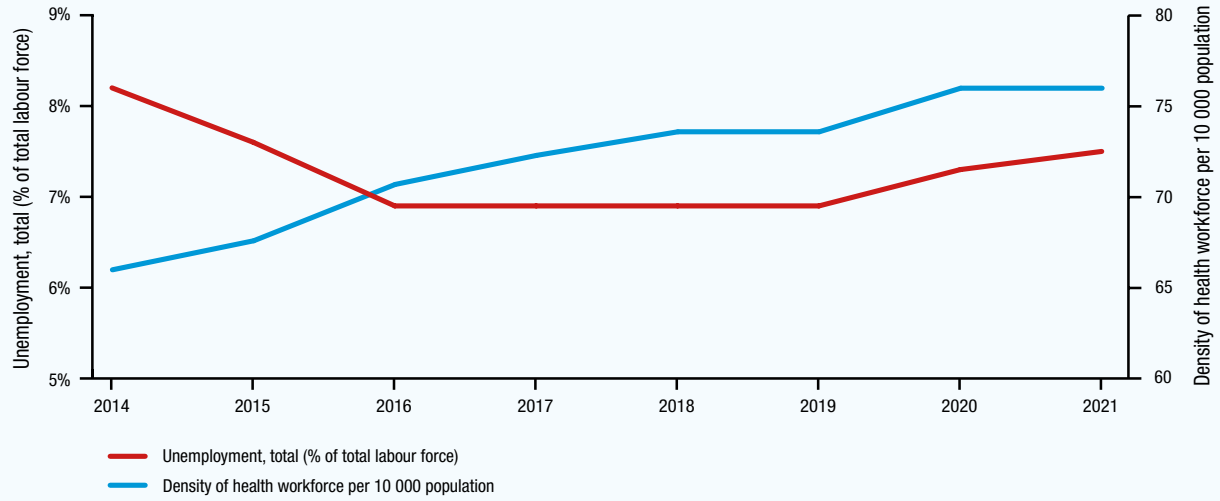
The health sector has a high potential to be a source for gainful employment and economic growth, while simultaneously meeting growing demand for key human resources for health

There are clear opportunities for the Tajik health sector to act as a stable source of employment during periods of economic instability (Fig. 2). For example, although unemployment rose in 2020 and 2021, the density of the health workforce continued to increase. Nevertheless, there remain gaps in recruitment and retention of critical human resources for health.

Health care workforce density in Tajikistan is currently lower than the WHO European Region average and it has stagnated over the past several years (WHO Regional Office for Europe, 2024b). There is an uneven distribution of health care workers within the country, with more rural regions having a lower density of medical professionals – particularly doctors – compared with urban settings (WHO Regional Office for Europe, 2024b). Salaries for primary health care workers are 23% higher on average than for those working in hospitals, but there is a shortage of family doctors in Tajikistan. Salaries for health care workers in Tajikistan are low overall (US$ 95 per month in the health sector compared with US$ 143 per month in general in Tajikistan), and major health care worker vacancies exist (WHO Regional Office for Europe, 2024b). Outmigration of skilled medical graduates is a key challenge – particularly from rural and remote regions.

The demand for health and care workers is high, and if improvements are made, there could be many opportunities for employment in the sector, which could yield positive knock-on impacts on the wider economy, particularly because there is a relatively high number of skilled/trained professionals, although issues regarding streamlining the education curriculum towards key health service needs (for example, family doctors, nursing) remain. The number of medical graduates in Tajikistan is 16.7 per 100 000 people (2022) and has grown steadily in recent years; doubling from 2014 to 2022. This rate is above the WHO European Region average of 15.3 medical graduates per 100 000 people (2022). In a recent analysis that was undertaken to inform the development of a National Health Workforce Action Plan in Tajikistan, several policy recommendations were made to improve the availability of health workers to provide quality health care in the country. These included: increasing salaries; improving the facilities where health workers live and work; developing

Fig 2 Jobs in the Tajik health sector have remained stable even amidst fluctuations in the labour market



Source: WHO Regional Office for Europe (2024b); World Bank (2024).

appropriate career development pathways; implementing medical, nursing and midwifery curricula and education system reforms to dovetail with the health system's needs; and creating particular incentives to encourage family doctors to practice in primary health care settings.

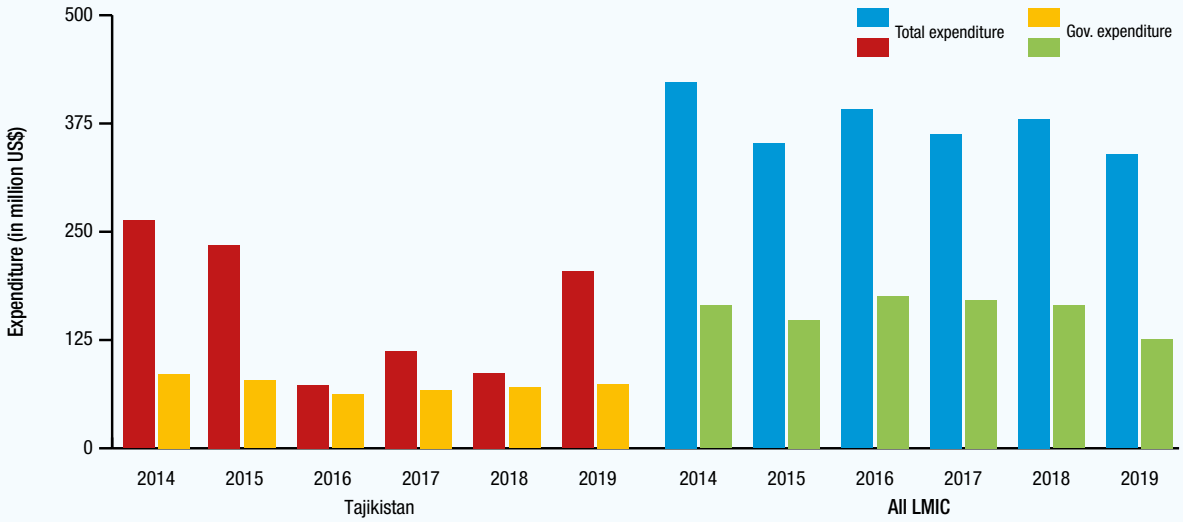
There are opportunities to achieve better population health outcomes and productivity growth, particularly by investing in primary care to address the growing burden of noncommunicable diseases in Tajikistan

Tajikistan's younger demographic structure – with a higher concentration of the population in economically productive working age groups – can create a demographic dividend that can catalyse economic growth. However, this is conditional on ensuring that the growing burden of noncommunicable diseases (NCDs) and their risk factors in these age groups are effectively addressed.

Noncommunicable diseases are estimated to account for 69% of all deaths annually in Tajikistan – 42% due to cardiovascular diseases, 10% due to cancers, 4% due to chronic respiratory diseases and 2% due to diabetes (WHO, 2018). A quarter of these deaths (29% for male individuals and 22% for female individuals) occur in people in their most economically productive ages (30–70 years). Such premature mortality can have significant, adverse impacts on both individual households and the economy.

Premature death or disability for household members can also create acute or chronic poverty traps for households with no alternative means of livelihood; for the economy, the aggregate productivity losses can slow down or stall economic growth (World Economic Forum, 2011; Bertram et al., 2019). Additionally, the costs of longer-term – often lifelong – treatment for most NCDs (mostly due to medication expenses) place major burdens on households, which are largely reliant on out-of-pocket (OOP) expenditures to finance their medical care (Jaspers et al., 2015;

Fig 3 Spending on NCDs (both by the government and overall) in Tajikistan is below the LMIC average



Source: Calculated from WHO (2023).

Murphy et al., 2020; Kazibwe, Tran & Annerstedt, 2021; NCD Alliance, 2023). Treatment of NCDs met through OOP expenditure can reverse the progress made in extending financial risk protection, a disturbing trend observed across most LMICs (Murphy et al., 2020).

Increased public spending on NCDs – met by raising required revenues by earmarking appropriate domestic resources – is key in responding to the growing NCD burden and avoiding productivity losses and other adverse economic impacts of NCDs. Currently, the government's share of expenditure on NCDs remains less than one third of the total NCD treatment expenses in Tajikistan; less than the global LMIC average (Fig. 3).

Public spending on NCDs must support evidence-based interventions around the 'best-buys' to effectively reduce NCD risks. The 'best-buys' are high-priority, low-cost interventions that are most cost-effective, protect against financial risks and prioritize the poorest people. According to one study, implementing or scaling up the preventive and curative 'best-buys' to reach a population coverage of 50% by 2030 will cost an estimated additional investment of US$ 0.62 per person for low-income countries and US$ 1.44 per person in middle-income countries. Investments in these best-buys also have significant, high positive returns – at least US$ 7 for every US$ 1 invested by 2030 (Bertram et al., 2019).

Most of these interventions – either effective preventive and screening or diagnostic measures, or treatment of common NCDs – can be effectively implemented in the primary health care setting (Varghese et al., 2019). The WHO-recommended package of essential NCD (WHO PEN) interventions for primary care, later updated as the 'best-buys', lays out a 'prioritized set of cost-effective interventions that can be delivered with acceptable quality of care, even in resource-poor settings' (WHO, 2020). A recent pilot implementation of essential interventions, guided by the WHO PEN, for the management of hypertension and prevention of cardiovascular diseases in primary health care in one Tajik district yielded significant improvements in several aspects of screening and monitoring NCD biomarkers and prescribing drugs (Collins et al., 2021).

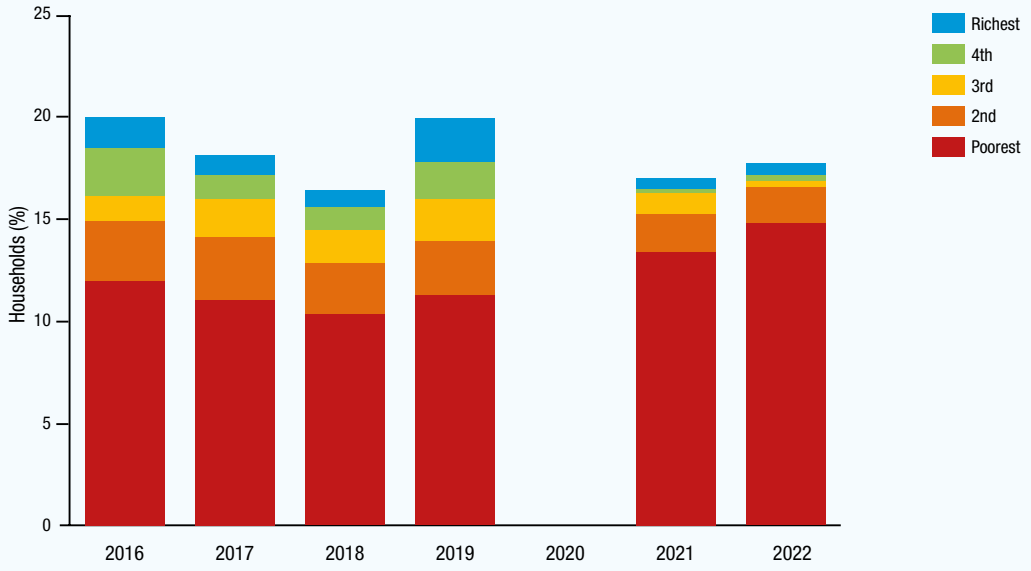
Reducing the high reliance on OOP spending to finance health care is critical to protect against financial hardship and adverse economic consequences for households

High reliance on OOP payments to finance medical care has been proven to be inefficient, inequitable, impoverishing and counteractive to universal health coverage in Tajikistan. For Tajikistan, predominance of OOP expenditure on health constitutes major risks against financial and wider social protection, particularly for vulnerable households. Tajikistan has some of the highest levels of catastrophic health spending in the WHO European Region, and OOP payments accounted for 64% of the total health spending in Tajikistan in 2021 (WHO Regional Office for Europe, 2024a).

A recent analysis found that 18% (2022) of households in Tajikistan experience catastrophic spending, and of these, many were impoverished or further impoverished after spending OOP payments for their health care (Fig. 4). The poorest households, those with at least one person aged over 65 years and/or those headed by an unemployed person, have some of highest likelihood of experiencing catastrophic spending in Tajikistan – exacerbating existing socioeconomic inequalities in the country. Medicines and inpatient care are the most likely health services to lead to catastrophic spending in Tajikistan, meaning that the growing portion of the population living with NCDs are particularly at risk.

Ongoing efforts are underway to improve financial protection and further improvements are needed. The Basic Benefit Package (BBP) introduced in Tajikistan in 2007 attempted to ensure affordable access to essential services, but large gaps remain. The BBP covered a defined set of free services (for example, emergency care, basic preventive/primary care, common diagnostic tests), and determined a set of services (for example, outpatient department care, advanced diagnostics and other hospital care) for which it adopted a co-payment system (50–70%) based on specific criteria and population groups. However, the percentage of the population entitled to free services or exempt from co-payments under the BBP was very small, so many individuals were

Fig 4 Nearly one in five people in Tajikistan experience catastrophic health spending



Source: WHO Regional Office for Europe (2024a).

Note: Data are not available for 2020. Break in series in 2021: data before and after 2021 are not comparable because of changes in the questionnaire. Results for 2016 to 2019 were adjusted to address issues with the survey sampling design.

left unprotected from catastrophic health spending under the scheme (Khodjamurodov et al., 2016; Neelsen et al., 2021).

More recently, in 2023, the Tajik government abolished the BBP programme and extended the implementation of a decree (Decree 600) that prohibits cash-based payments for publicly financed health care and defines a co-payment policy for the whole country. Although it is certainly a step in the right direction, concerns exist that the decree has many of the same shortcomings as the BBP. In particular, many households are still responsible for paying for many essential drugs using OOP payments, so there may continue to be large impacts on financial protection in Tajikistan, especially given the growing burden of chronic NCDs and multimorbidity in the country.

Key lessons

Increased public spending on health in Tajikistan is needed to begin to address the negative health, social and economic consequences of historical underspending

Tajikistan relies more heavily on household OOP payments to fund health care services than most other countries in the WHO European Region, because of the low priority given to health in the government budget. This has profound negative impacts on health and financial protection outcomes. Evidence from other LMICs around the globe demonstrates that to emerge out of a disproportionate, unsustainable and inequitable reliance on OOP expenditure to finance health, prioritization of health by the public sector is essential. With a growing economy and a growing interest in implementing supportive fiscal policies, Tajikistan is entering a crucial point in time where it could potentially embark on a sustained growth path of increased public spending on health combined with strategic emphasis on the 'best-buys' for its health system (for example, strengthening primary health care, improving benefits package design and expanding coverage, increasing NCD prevention and control efforts).

For an LMIC such as Tajikistan, the linkages between the health sector and the wider economy are of critical importance. Premature death or disability for household members can create acute or chronic poverty traps for households with no alternative means of livelihood; for the economy, the aggregate productivity losses can slow down or stall economic growth. As such, increasing public funding for health provides an opportunity not only to improve health outcomes, but also to boost productivity and economic growth.

Tajikistan can leverage its available supply of skilled health professionals by improving working conditions and compensation of those in the health and care sector

Although Tajikistan has a rate of medical graduates above the WHO European Region average, the density of health care workers who are actually employed in the country is below the WHO European Region average. Geographic inequalities in health care worker density also exist in Tajikistan – with large gaps in rural areas (and particularly

within the primary health care setting). On average, salaries in the health care sector are low and many health care workers may face poor working or living conditions. As such, outmigration of the health workforce is a key challenge for Tajikistan.

Given the high availability of skilled professionals, the Tajik health sector has an opportunity to become a source of gainful and stable employment and economic growth with the right measures. Some potential avenues to attract skilled workers to health care settings include increasing salaries, improving living and working conditions (at the infrastructure level), developing appropriate career development pathways, implementing medical, nursing and midwifery curricula reforms that correspond to the health system's needs, and creating incentives specifically for family doctors to practice in primary health care settings.

Expanding health benefits coverage to a wide range of clinically effective services for the general population in Tajikistan is crucial to ensuring financial protection as well as for addressing the growing burden of chronic NCDs

Tajikistan has one of the highest shares of households with catastrophic health spending in the WHO European Region. The two largest types of health care driving this catastrophic spending in Tajikistan are spending on outpatient medicines and inpatient care. Those households that are poorer, have at least one person over 65 years and/or are headed by an unemployed person are the most likely to experience catastrophic spending in Tajikistan.

This is especially salient because there is a growing number of people with chronic NCDs in Tajikistan who rely on longer-term (or lifelong) treatment – mostly medication expenses – for their conditions. Many of these people must use OOP payments for their medical care, exacerbating financial protection challenges for those who are already likely to be impacted by economic productivity loss due to their ill health.

In addition to increasing public spending on health, Tajikistan can also make further efforts to review and expand its benefits package to cover effective services and essential medicines. This should be accompanied by a review co-payment and exemption policies to protect the most vulnerable and ensure that Tajikistan continues to progress towards universal access to safe, high-quality, effective and efficient health care services and products.

Description of the health system

Tajikistan's health system is centrally organized, with ownership, administration and service provision mostly through the public sector. The Ministry of Health and Social Protection is responsible for designing and implementing the national health policy – the most recent being the comprehensive Strategy on health care of the population of the Republic of Tajikistan up to 2030 – with budget provisions coming through the Ministry of Finance. Local government bodies at the provincial (vilayet or oblasts) and city/district (rayon) levels are responsible for health service provision and funding at these levels, but decentralization remains limited.

Public spending on health per capita in Tajikistan is one of the lowest in the WHO European Region, although it has increased over the past few years. Out-of-pocket expenditures continue to dominate health spending, accounting for 64% of total health expenditure in Tajikistan. A BBP was introduced in 2007, and provided essential primary care and emergency services to all population, with others requiring co-payments of various proportions for specialised outpatient services. Certain health conditions such as tuberculosis, HIV/AIDS, haemophilia, cholera, diphtheria and diabetes were entitled to public funding under the BBP. Recently, the BBP was replaced by Decree 600, the financing schema for which remains largely similar.

Tajikistan's health infrastructure suffers from decades of underinvestment and excess capacity of hospitals and hospital beds. Recent efforts have led to a reduction in the ratio of hospital beds to population lower than the average for the WHO European Region. The budgeting system continues to be dominated by the input-based system that governs federal budgets available for local units, leading to inequalities in public spending in poorer regions. A per-capita-based financing system for primary care is yet to be implemented nationally. Despite having one of the highest numbers of medical and paramedical graduates per 100 000 population in the WHO European Region, Tajikistan has one of the smallest health workers to population ratios in the WHO European Region. Low salaries, poor working conditions in rural and remote regions, and outmigration of health workers remain pressing concerns.

Tajikistan has made remarkable progress in addressing communicable diseases with high immunization rates for all vaccine-preventable diseases. Life expectancy at birth in Tajikistan (74.5 years in 2019) has improved and is higher than the Central Asian average (73 years). Infant and maternal mortality rates have witnessed major improvements and remain lower than the average for Central Asian countries, but significantly higher than the WHO European Region average. NCDs have emerged as the leading cause of mortality and burden of disease in Tajikistan. The Ministry of Health and Social Protection, recognizing that NCDs represent a major challenge for the country, have adopted a national strategy for the prevention and control of NCDs during 2013–2023.

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Key indicators	Tajikistan	Central Asia	WHO European Region
Life expectancy at birth, both sexes combined (years)	74.5 (2017)	73.0 (2015)	78.3 (2017)
Estimated maternal mortality per 100 000 live births (2017)	17.0	23.6	12.7
Estimated infant mortality per 1000 live births (2017)	29.6	17.7	7.0
Population size, in millions (2020)	8.9	72.6	927.2
GDP per capita, PPP US$ (2020)	3858.0	12326.0	35340.0
Poverty rate, at national poverty lines (2018)	27.4	14.1 (2017)	14.9
Current health spending per person PPP US$ (2021)	351.0	680.0	3844.0
Out-of-pocket expenditure (as a % of total health expenditure) (2021)	64.0	54.0	27.0

Source: WHO Regional Office for Europe (2022); WHO (2023).

Note: GDP, gross domestic product; PPP US$, purchasing power parity in US dollars.

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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 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 people's health and well-being. It engages directly with policy-makers and works with a range of experts, not least its Health Systems and Policies Network, whose members provide key knowledge and insights into health systems in countries.

WHO Barcelona Office
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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 Sustainable Development Goals. The Office supports countries as they develop policies, monitor progress, and design reforms. It is part of the Division of Country Health Policies and Systems of the WHO Regional Office for Europe.

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