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Tajikistan

Health system review

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Health Systems in Transition

Tajikistan

Health System Review 2025

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CONTENTS

PREFACE

The Health Systems in Transition (HiT) series consists of country-based reviews that provide a detailed description of a health system and of reform and policy initiatives in progress or under development in a specific country. Each review is produced by country experts in collaboration with the Observatory's staff. In order to facilitate comparisons between countries, reviews are based on a template prepared by the European Observatory, which is revised periodically. The template provides detailed guidelines and specific questions, definitions and examples needed to compile a report.

HiTs seek to provide relevant information to support policy-makers and analysts in the development of health systems in Europe and other countries. They are building blocks that can be used to:

- learn in detail about different approaches to the organization, financing and delivery of health services, and the role of the main actors in health systems;
- describe the institutional framework, process, content and implementation of health care reform programmes;
- highlight challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries; and
- assist other researchers in more in-depth comparative health policy analysis.

Compiling the reviews poses a number of methodological problems. In many countries, there is relatively little information available on the health system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including data from national statistical offices, WHO Health for All database, WHO Global Health Expenditure database, Eurostat, the Organisation

for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF), the World Bank's World Development Indicators, the Global Burden of Disease study and any other relevant sources considered useful by the authors. Data collection methods and definitions sometimes vary, but typically are consistent within each separate review.

A standardized review has certain disadvantages because the financing and delivery of health care differ across countries. However, it also offers advantages because it raises similar issues and questions. HiTs can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situations. They can also be used to inform comparative analysis of health systems. This series is an ongoing initiative and material is updated at regular intervals.

Comments and suggestions for the further development and improvement of the HiT series are most welcome and can be sent to contact@obs.who.int.

HiTs and HiT summaries are available on the Observatory's website (www.healthobservatory.eu).

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Unless otherwise indicated, the HiT uses data available up to August 2024 and reflects the organization of the health system as it was in August 2024.

The European Observatory on Health Systems and Policies is a partnership hosted by the WHO Regional Office for Europe, that includes the Governments of Austria, Belgium, Finland, Ireland, the Netherlands (Kingdom of), Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom and the Veneto Region of Italy (with Agenas); the French National Union of Health Insurance Funds (UNCAM); the Health Foundation; the European Commission; the London School of Economics and Political Science (LSE); and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is composed of a Steering Committee, core management team, research policy group and staff. Its Secretariat is based in Brussels and it has offices in London at LSE and LSHTM and in Germany at the Berlin University of Technology. The Observatory team working on HiTs is led by Ewout van Ginneken, Director; Elias Mossialos, Martin McKee, Reinhard Busse (Co-directors); and Suszy Lessof. The Country Monitoring Programme of the Observatory and the HiT series are coordinated by Anna Maresso. The production and copy-editing process of this HiT was coordinated by Jonathan North, with the support of Lucie Jackson, Jennifer Butt (copy-editing) and Natalia Binert (typesetting).

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LIST OF ABBREVIATIONS

CIS	Commonwealth of Independent States
CME	continuing medical education
COPD	chronic obstructive pulmonary disease
CT	computed tomography
DHIS	District Health Information Software
DRS	Districts of Republican Subordination
EBRD	European Bank for Reconstruction and Development
EPI	exocrine pancreatic insufficiency
GBAO	Gorno-Badakhshan Autonomous *Oblast*
GDP	gross domestic product
GNI	gross national income
GP	general practitioner (family physician)
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
HMIS	health management information system
ICT	information and communication technology
KfW	Kreditanstalt für Wiederaufbau
LITS	Living in Transition Survey
MRI	magnetic resonance imaging
NCD	noncommunicable disease
NGO	non-governmental organization
OOP	out-of-pocket
PHC	primary health care
SDG	Sustainable Development Goal
TB	tuberculosis
TJS	Tajikistani somoni
TSMU	Tajik State Medical University
UN	United Nations
UNDP	United Nations Development Programme

UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAT	value-added tax
WHO	World Health Organization

LIST OF TABLES, FIGURES AND BOXES

Tables

Figures

Boxes

ABSTRACT

This analysis of the Tajik health system reviews developments in its organization, governance, financing, provision of services, health reforms and health system performance. Tajikistan has made progress in reforming its health system away from the model inherited from the Soviet period, but challenges remain. In 2022 the country had the second lowest health spending per capita in the WHO European Region, and health spending is dominated by private out-of-pocket payments (both formal and informal) which undermines a range of health system goals, including financial protection. A basic benefits package was piloted for over 15 years but ended in 2023, and while a new package is in development it had not been introduced as of August 2024. Public financing depends primarily on regional and local authorities, which contributes to regional inequalities in funding. Health system efficiency is undermined by outdated provider payment mechanisms, although there have been efforts to introduce changes such as partial capitation-based payments. Quality of care is an ongoing concern, with challenges including insufficient health data, underinvestment in infrastructure and equipment, staff turnover, deficiencies in the training of health workers, and limited access to pharmaceuticals. The number of doctors and nurses per population in Tajikistan is lower than in other countries in Central Asia, although the number of nurses has increased in recent years. There is a particularly pronounced shortage of doctors in rural areas and a high rate of medical staff migration. Medical education has been a key area of reform, but family medicine continues to suffer from low prestige. Health reforms have aimed to strengthen primary health care, with other priorities including health financing, regulation and financial protection. Under its current national health strategy, the government is committed to promoting universal health coverage for the population by 2030, and has established strategic priorities for health system development in key areas such as governance, financing, workforce and health service quality. A substantial number of reforms and an increase in government spending will be required to deliver this vision.

EXECUTIVE SUMMARY

Tajikistan has a young and predominantly rural population

Tajikistan is a former Soviet country in Central Asia that became independent with the dissolution of the Soviet Union in 1991. Following the 1991–1997 civil war, Tajikistan has experienced political stability and relative economic growth. However, it remains the poorest country in the World Health Organization (WHO) European Region, with a gross domestic product (GDP) per capita of US$ 1055 in 2022.

The country is a presidential republic, with four levels of administration: national (republican), *oblast* (region, *viloyat* in Tajik), city and *rayon* (district), and *jamoat* (municipality). The terrain is mainly mountainous, with some parts of the country difficult to reach, particularly in winter.

In 2022, an estimated 10.1 million people lived in Tajikistan. Population density has risen over the years, with just under three quarters (72%) of the population residing in rural areas. The overall age structure is young, with 36% of the population in 2022 younger than 15 years and only 4% aged 65 years and older.

The first years after independence saw a major decline in population health. Since then the country has worked to improve health across a range of areas, resulting in downward trends in infant and child mortality and maternal mortality. Life expectancy has increased but is still low compared to other countries in the WHO European Region, estimated at 71.6 years in 2021. Main causes of death are noncommunicable diseases, with ischaemic heart disease responsible for the highest number of deaths in 2019.

Governance is centralized and most health services are provided by the public sector

Over the past three decades, the Tajik health system has started to reform certain aspects of governance, financing and service provision. Some elements remain largely unchanged: the public sector continues to be the main funder and provider of health services, although there is a small but growing private sector. Patient rights and public involvement in health policy remain limited, although some progress has been made in recent years.

Health system governance and administration is mostly centralized, being controlled by the national government and managed by the Ministry of Health and Social Protection. Governance is generally top down. Over the past decade some limited policy and administrative powers have been delegated from the national government to *oblast* administrations, but in general there has been little decentralization of policy from national to local government.

The Ministry of Health and Social Protection runs national level health services, while local authorities administer most *oblast*, city/*rayon* and peripheral health services. Intersectoral governance mechanisms exist for specific priority programmes, such as infectious diseases or maternal and child health. One enduring feature of the Soviet system is that there are still some parallel health systems run by other ministries or state companies for their employees.

Health financing relies largely on private out-of-pocket spending

Tajikistan's health spending as a percentage of GDP compares favourably to other countries in the WHO European Region, given that it is the poorest country in the region in terms of GDP per capita. In 2022 health spending amounted to 8.0% of GDP, only slightly lower than the WHO regional average of 8.7%. However, public spending as a share of current health expenditure is one of the lowest in the region, amounting to only 1.9% of GDP in 2021 according to international data. Tajikistan's spending on health in absolute terms, at US$ 351 per capita in 2021 (adjusted for purchasing power), was the second lowest in the WHO European Region.

Local budgets provide the majority of funding within government budgets for health. This contributes to substantial regional inequalities in

public per capita spending on health, due to variations in the size of public budgets per capita and the share allocated to health. Allocation of national-level funding is decided by the Ministry of Finance. Out-of-pocket (OOP) payments from patients (both formal and informal) continue to dominate health spending and amounted to 63.5% of current health expenditure in 2021. Challenges connected to this reliance on patient payments include barriers to accessing services, poor financial protection, and high rates of catastrophic and impoverishing health spending. Private health insurance is largely non-existent, and the introduction of mandatory social health insurance has been postponed several times, with the most recent decree pushing back its introduction to 2025. International and bilateral agencies also play an important role in supporting the country's health system.

Public coverage of health services is provided through Decree No. 600, which allocates government funding for specific services. User fees and exemptions are set out in the decree. A basic benefits package was piloted in 2007–2023 and at its peak covered 31 of the country's 65 *rayon*s. As of August 2024, a new version of the basic benefits package was under preparation, but had not yet been adopted.

Formal patient payments have been introduced since the second half of the 1990s. Formal co-payments are required from patients for most types of health services, unless they are officially exempt by Decree No. 600. Informal payments are understood to account for a high share of private health spending. Inpatient care accounts for the largest percentage of private expenditure (both formal and informal), accounting for 30.4% in 2019, followed by pharmaceuticals (23.9%).

The formation of public budgets continues to be based on inputs, such as the number of beds and health workers, rather than outputs or quality of care. A model of partial capitation-based financing was introduced nationally in 2019 but requires further strengthening. For most public providers, the current management structure is characterized by vertical hierarchies and inflexible funding mechanisms that favour the hospital sector over primary care services, resulting in an inefficient use of resources. Most spending still goes towards inpatient care, with the share dedicated to primary care decreasing between 2014 and 2018. There is not yet a formal mechanism for pooling funds, despite a recognition that this could improve efficiency and equity.

There are challenges related to the health infrastructure and the health workforce

Following independence, Tajikistan inherited a health system from the Soviet period that was nominally comprehensive but underfinanced and inefficient. Since then, the country has struggled to simultaneously improve its health infrastructure while also dispensing with excess capacity. Some infrastructure has been upgraded in recent years, including the building of new health care facilities, although this has largely been carried out with international funding. Much of the health infrastructure continues to suffer from decades of underinvestment, with basic amenities – heating, sanitation and electricity – still lacking in many rural facilities. A lack of specialized medical equipment continues to hinder primary care, although the government and international donors have purchased some new equipment.

In terms of capacity, the country has made sustained efforts to reduce the excessive number of hospital beds that existed in the 1990s. The ratio of acute hospital beds to population has fallen during the past two decades, although it is still high compared to other European countries, particularly in view of the country's young age structure and limited financial resources. The average length of stay in acute care hospitals in Tajikistan has also decreased in recent years, placing it in the middle of comparator countries.

The number of health workers per population has fallen since the 1990s, partly due to high rates of outward migration. In 2008–2018, the absolute number of doctors increased but, due to Tajikistan's growing population, per capita rates remain lower than either the WHO regional average or those of neighbouring countries. Health workers are concentrated in the capital, Dushanbe, and there is a lower density of almost all health workers in less affluent regions, although this may also be connected to lower availability of health facilities in those regions. The government is attempting to address this imbalance using a range of incentives.

Reforming medical education to bring it in line with international standards and structures has been one of the key directions of health reform, but concerns remain about the overall quality of medical education. General practice (family medicine) is treated as a specialty with multiple professional and training courses available, but continues to suffer from low prestige and uptake by medical graduates. There are especially few professional development opportunities in nursing or health management.

Health service provision is poorly integrated and primary care is underdeveloped

The provision of health services in Tajikistan is organized according to the country's administrative tiers and differs in urban and rural areas. In rural areas, primary care is delivered through health houses, rural health centres and rural hospitals. In urban and semi-urban areas, primary and secondary care is delivered by *rayon* and city health centres (replacing the former polyclinics), basic secondary care by central *rayon* or city hospitals, specialized secondary care by *oblast* hospitals, and more complex care by national hospitals.

There is often a duplication of services of central *rayon* and city hospitals, as well as *oblast* hospitals. Service provision is hampered by poor integration of primary and secondary care, and public health continues to be mainly delivered through separate vertical programmes, although over the past decade the government has introduced several legislative and financial reforms aimed at improving coordination and care pathways.

Efforts to strengthen primary care have been a focus of health reforms for two decades. While nominally the first point of contact with the health system, in practice family doctors and district physicians are still often bypassed by patients, partly because they are seen to provide only a limited range of services. In recent years the country has invested heavily in the training of family doctors and nurses to address this issue, although staff distribution remains a challenge in some regions and rural areas.

A broad national health strategy has been adopted

Since 2001, health reforms undertaken in Tajikistan have been centred around health spending efficiency, primary care, financial protection and strengthening health system legislation.

The latest National Health Strategy, covering 2021–2030, established strategic priorities for health system development, many of which involve reforms to existing legislation or practices. Key reform areas include governance, sustainable financing, health workforce strengthening, IT development, and health service quality and accessibility. Recent reform legislation passed by the government has focused on pharmaceutical regulations, access to health care and social protection, specific disease areas such as tuberculosis

and mental health, and the introduction of partial capitation-based financing of primary care.

Reforms envisaged in the future are likely to concern the design and roll-out of a new basic benefits package, pooling funds at the *oblast* level, improvements in per capita funding mechanisms for primary care facilities, and occupational health. Following several postponements, the introduction of mandatory health insurance is also anticipated in 2025.

The performance of Tajikistan's health system is undermined by underdeveloped financial protection, poor quality of care, and allocative and technical inefficiencies

Tajikistan's health system has seen some improvements over the past two decades, but it continues to face challenges connected to socio-economic and geographic factors, structural issues, workforce capacity and shifting epidemiological burdens.

Health equity is an ongoing priority. At present, the main barrier to accessing health services remains high levels of formal (and informal) OOP payments by patients. Health care utilization continues to be higher among wealthier segments of the population, with poorer segments foregoing needed care because of the required OOP payments. Quality of care is another major challenge, affected by factors such as insufficient training, lack of evidence-based clinical guidelines, underuse of generic drugs, outdated facilities and equipment, and perverse financial incentives for physicians. The government has begun to address some of these issues in recent reforms and initiatives.

Most health funding from both public and private sources still goes towards inpatient care, leading to limited resources for primary care and poor allocative efficiency. Services for prevention, screening and early diagnosis are generally underdeveloped. Unmet need for care is particularly high for noncommunicable diseases.

Technical efficiency continues to be hindered by a continued reliance on input-based budgeting. There is no real mechanism for the pooling of funds and no centralized purchasing of services or pharmaceuticals. In terms of transparency and accountability, challenges include the widespread existence of informal payments and a lack of patient feedback and public participation in policymaking.

Over the past two decades, economic growth in Tajikistan has enabled a steady increase in per capita government spending on health. Yet public spending on health as a percentage of GDP remains one of the lowest in the WHO European Region, and spending inefficiencies obstruct greater gains in health service access and health outcomes. Progress towards Tajikistan's goal of achieving universal health coverage will depend to a large extent on the country increasing public spending on health, with additional benefits from improving the efficiency and effectiveness of its health spending and activities.

1

Introduction

Chapter summary

- Tajikistan is a land-locked country in Central Asia that gained independence from the Soviet Union in 1991.
- Tajikistan has made steady progress over the past decades in reducing poverty and growing its economy. However, it is the poorest country in the WHO European Region in terms of gross domestic product (GDP) per capita, and poverty remains a major challenge especially in rural areas.
- Life expectancy has increased but is still one of the lowest in the WHO European Region.
- There has been significant progress in reducing maternal and child mortality, but deaths from diabetes and ischaemic heart disease have risen steeply.

1.1 Geography and sociodemography

Tajikistan is a landlocked country of 143 100 km^2, bordered by Uzbekistan to the west, Kyrgyzstan to the north, China to the east, and Afghanistan to the south (Figure 1.1). Tensions and small-scale military conflicts were reported on the border with Kyrgyzstan in 2021–2022, and border demarcation activities continue on the border shared with Uzbekistan.

Tajikistan is highly mountainous: 93% of its terrain is composed of mountains, with the high mountain ranges of the Pamirs located in the south, and lowland plains in the west. Most of the population lives in the valleys in the south-west and the north. The climate varies considerably according to altitude, with very hot summers in the lowlands and temperatures below freezing in the mountain towns in winter. The country is highly vulnerable to climate change and natural disasters, representing an additional challenge to its economic development.

FIGURE 1.1 Map of Tajikistan

Note: The official names of some regions and cities have changed since this map was produced.

Source: United Nations, 2009.

The post-independence development of Tajikistan has been negatively affected by civil war, interruptions to intercountry trade, and its location in a politically volatile region. In recent years the situation has been more politically and economically stable, although social and economic well-being suffered as a result of the COVID-19 pandemic.

By the end of 2022 Tajikistan's population had reached over 10 million people (Table 1.1). Population density has risen over the years, although the

distribution between urban and rural populations has remained largely similar, with just under three quarters of the population residing in rural areas.

The overall age structure is young, with 36% of the population in 2022 younger than 15 years and only 4% aged 65 years and older. The annual rate of population growth increased from 1.6% in 2000 to 2.3% in 2022, partly due to a fertility rate that remained high at 3.1 births per woman in 2022.

TABLE 1.1 Trends in population/demographic indicators, 2000–2022 (selected years)

	2000	2005	2010	2015	2020	2022
Total population (millions)	6.2	6.8	7.5	8.5	9.5	10.1
Population aged 0–14 years (% of total)	42.5	38.0	35.7	35.8	37.3	36.0
Population aged 65 years and above (% of total)	3.6	3.8	3.3	2.9	3.2	4.0
Population density (people per km^2)	44.4	48.5	53.8	60.9	68.7	–
Population growth (average annual % growth rate)	1.6	1.9	2.2	2.4	2.3	2.3
Fertility rate, total (births per woman)	4.0	3.6	3.6	3.6	–	3.1
Distribution of population (rural) (%)	73.5	73.5	73.5	73.3	72.5	72.0

Source: World Bank, 2024.

The official state language is Tajik but Russian continues to be spoken, as well as Uzbek. Several other languages are spoken by relatively smaller populations groups, including Shughni, Wakhi, Yaghnobi and Yazgulami.

1.2 Economic context

Tajikistan suffered a particularly severe economic decline and collapse of social infrastructure when the Soviet Union dissolved, followed by several years of civil war. After the return to political stability with the ceasefire in 1994 and the peace agreement in 1997, the economy has shown strong signs of recovery. Annual rates of gross domestic product (GDP) growth have varied but been consistently positive: GDP per capita increased on average by 5.2% annually between 2015 and 2022 (Table 1.2), and in 2022 GDP growth was reported as 8%. During the same period there was also a mean

nominal increase of 50% in the average worker's salary. National economic growth was fuelled primarily by exports (19.8%), industry (11.6%) and agriculture (8.8%). As of 2022, Tajikistan was classified as a lower middle income country (World Bank, 2024), although gross national income remains just above the low-income country threshold.

According to the national poverty line, the poverty rate fell to 22.5% in 2022, while the economy grew by 8% in the same year (World Bank, 2024).

However, there was a period of decline in GDP per capita in US dollars between 2015 and 2020, and the rate of job creation has not kept pace with the growing population. Over the past two decades the official rate of unemployment has declined only slightly, from 11.1% to 10.8%. Remittances from relatives working abroad continue to constitute an important source of income: in 2021, remittances constituted approximately a third of Tajikistan's GDP (World Bank, 2023b). This leaves the economy vulnerable to external shocks, such as the COVID-19 pandemic and regional conflicts including instability in Afghanistan and war in Ukraine.

TABLE 1.2 Macroeconomic indicators, 2000–2022 (selected years)

	2000	2005	2010	2015	2020	2021	2022
GDP per capita (current US$)	137	334	740	970	852	897	1055
GDP per capita (current international US$, PPP)	1038	1671	2300	3125	3852	4288	4137
GDP per capita growth (annual, %)	6.9	4.7	4.4	3.6	2.1	6.9	8.0
General government final consumption expenditure (% of GDP)	8.3	14.6	11.3	11.6	11.6	–	10.9
Current account balance (% of GDP)	–	–12.8	–10.3	–5.8	4.1	8.5	15.2
Public and publicly guaranteed debt service (% of GNI)	2.5	1.7	0.9	1.3	1.8	2.3	–
Unemployment, total (% of labour force)*	15.1	13.1	10.9	7.6	7.5	7.7	7.8
Poverty headcount ratio at national poverty lines (% of population)	–	–	–	–	–	23.2	22.5
Income inequality (Gini index)	–	–	–	34.0	–	–	–

Notes: * modelled ILO estimate
GDP, gross domestic product; GNI, gross national income; ILO, International Labour Organization; PPP, purchasing power parity.

Source: World Bank, 2024.

In 2016 the country's Parliament adopted the National Development Strategy of the Republic of Tajikistan for the period up to 2030, whose stated aim is to advance sustainable development and eradicate poverty. It sets a target of increasing domestic incomes by up to 3.5 times by 2030 and reducing poverty by half. Health care, nutrition, food security and social protection all feature as priorities.

1.3 Political context

In 1994 Tajikistan adopted a constitution which defines it as a presidential republic. It has a bicameral parliamentary system and allows religiously based political parties in addition to non-religious parties.

Parliament (*Majlisi Oli*) is composed of a lower house, the *Majlisi Namoyandagon* (Assembly of Representatives), and an upper house, the *Majlisi Milli* (National Assembly). The lower house is a permanent assembly, while the upper house is convened at least twice a year. The *Majlisi Namoyandagon* has 63 members: 22 are elected through a proportional, party list system from a single nationwide constituency, and 41 are elected in single mandate constituencies under a majoritarian system. Parties must pass a 5% threshold to win seats on the party list vote. The *Majlisi Milli* has 33 members who are indirectly elected; 25 are selected by local deputies, while 8 are appointed by the President.

The government includes the Prime Minister and various ministries and departments, including the Ministry of Health and Social Protection and the Ministry of Finance. Central government bodies include the Executive Office of the President, ministries, state committees and agencies. The Council of Ministers is responsible for managing the activities of the government in accordance with the laws and decrees of the *Majlisi Oli* and the decrees of the President. The President appoints the Prime Minister and other members of the Council, with the nominal approval of Parliament. Political power and decision-making are centralized at the level of the President who is directly elected. National health policy is set largely by the central government, including the Prime Minister, the Ministry of Health and Social Protection, and the Ministry of Finance (see Section 2.2).

There are four levels of administration in Tajikistan: national, *oblast* (region or province), city or *rayon* (district) and *jamoat* (commune or

municipality). The 1994 constitution defined the administrative duties of the territorial administrative units and their relationship to the central government. At each level there is an executive body (*hukumat*), an administration, and an elected advisory body (representative council, *majlis*). The heads of *oblasts* and cities or *rayons* are appointed by the executive arm of the government, usually the President. The city/*rayon* administrations and *jamoat* councils play an important role in the provision of health services to their inhabitants.

The *oblast* and local administrative areas of Tajikistan have been changed several times since 1992. The country is now divided into five main administrative units. The three *oblasts* are Khatlon (main city: Bokhtar), with a population of 3.4 million according to the 2020 census, Sughd (2.8 million population in 2020, main city: Khujand) and the Gorno-Badakhshan Autonomous *Oblast* (GBAO) (main city: Khorog) (Tajstat, 2021). This last *oblast* is geographically less accessible and operates more autonomously. It also has a smaller population, amounting to approximately 228 000 people in 2020. Dushanbe (approximately 948 000 inhabitants in 2020) is the capital city and also holds *oblast* status. In addition there are 13 special *rayons* (Districts of Republican Subordination) with a total population of 2.3 million in 2020, that are independent from *oblasts* and report directly to the central state. In total, the country has 47 *rayons*, 18 towns and 65 urban settlements. There are approximately 368 *jamoats*.

Tajikistan is a member of several international or regional organizations relevant to the health sector. These include the United Nations, the World Trade Organization, the Commonwealth of Independent States (CIS), the Organisation of Islamic Cooperation, the Eurasian Economic Community, and the Shanghai Cooperation Organisation. Tajikistan has also acceded to a number of relevant international conventions, including the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the WHO Framework Convention on Tobacco Control.

While Tajikistan has made some progress in recent years, there is still a significant need to strengthen institutions and capacities. This is reflected in the country's relatively low ranking on Transparency International's Corruption Perception Index, which placed Tajikistan 150 out of 180 countries in 2022 (Transparency International, 2022).

1.4 Health status

According to official statistics, life expectancy in Tajikistan was 74.5 years in 2017 (WHO Regional Office for Europe, 2024c; Robinson & Rechel, 2022). However, according to international estimates, which are based on higher estimated rates of infant and child mortality, life expectancy at birth in 2017 was 69.9 years. Estimated life expectancy declined to 68 years in 2020, reflecting the impact of the COVID-19 pandemic, but increased to 71.3 years in 2022 (World Bank, 2024).

Despite these variations, the country has made significant progress in improving maternal and child health outcomes. Maternal mortality is still much higher than in most other countries in the WHO European Region, but according to national data the maternal mortality rate decreased from 97.7 per 100 000 live births in 1990 to 22.4 per 100 000 in 2022 (Republican Centre for Statistics and Medical Information, 2023; Abdusamatzoda, 2024). Estimates of maternal mortality in Tajikistan calculated by international agencies differ from official statistics but also suggest a decline, from 68.0 per 100 000 live births in 2000 to 17.0 per 100 000 in 2020 (World Bank, 2024).

Child health indicators are also improving. Infant and child mortality rates remain high, but both national and international sources indicate a decline. At 26.7 deaths per 100 000 live births in 2022 the estimated infant mortality rate is still relatively high compared to the WHO European average, but it has more than halved since 2000 (Table 1.3). Child immunization has been a priority for the country, and Tajikistan has achieved relatively high immunization coverage. By 2019, 97% of infants were fully vaccinated against measles, diphtheria, whooping cough and tetanus (WHO, 2024b). The country's high vaccination rates were not noticeably affected by the COVID-19 pandemic, with coverage rates maintaining pre-pandemic levels of 97% (World Bank, 2024).

Based on data from the Global Burden of Disease study, the top 10 causes of death in Tajikistan remained broadly similar between 2009 and 2019, with eight out of 10 in 2019 being due to noncommunicable diseases. According to these estimates, major causes of death in Tajikistan include heart disease and stroke, lower respiratory tract infections, neonatal disorders, cirrhosis, diabetes, congenital defects, chronic obstructive pulmonary disease (COPD) and stomach cancer. Ischaemic heart disease remained the cause of the highest total number of deaths in 2019, with an estimated increase of

TABLE 1.3 Mortality and health indicators, 2000–2022 (selected years)

INDICATOR	2000	2005	2010	2015	2020	2021	2022
Life expectancy (years)							
Life expectancy at birth, total (international estimate)	63.3	66.5	67.7	69.3	68.0	71.6	71.3
Life expectancy at birth, male (international estimate)	60.7	64.2	65.4	67.0	66.0	69.6	69.2
Life expectancy at birth, female (international estimate)	66.0	69.0	70.4	71.9	70.2	73.7	73.5
Life expectancy at 65 years, total (international estimate)	15.5	16.3	–	–	15.2*	–	–
Mortality (standardized death rate per 100 000 population)							
Ischaemic heart disease	230.6	220.9	–	–	138.1*	–	–
Stroke	62.5	99.7	–	–	133.0*	–	–
Malignant neoplasm	66.9	72.7	–	–	67.9*	–	–
Respiratory system	108.2	78.8	–	–	29.4*	–	–
Diabetes	14.6	23.3	–	–	48.2*	–	–
Infant mortality rate (per 1000 live births) – international estimate	67.6	47.2	37.0	32.6	28.5	27.6	26.7
Maternal mortality rate (per 100 000 live births) – national estimate	18.0	14.0	–	7.0**	–	–	22.4
Maternal mortality rate (per 100 000 live births) – modelled estimate	68.0	44.0	32.0	20.0	17.0	–	–

Notes: *2019 data, **2016 data.

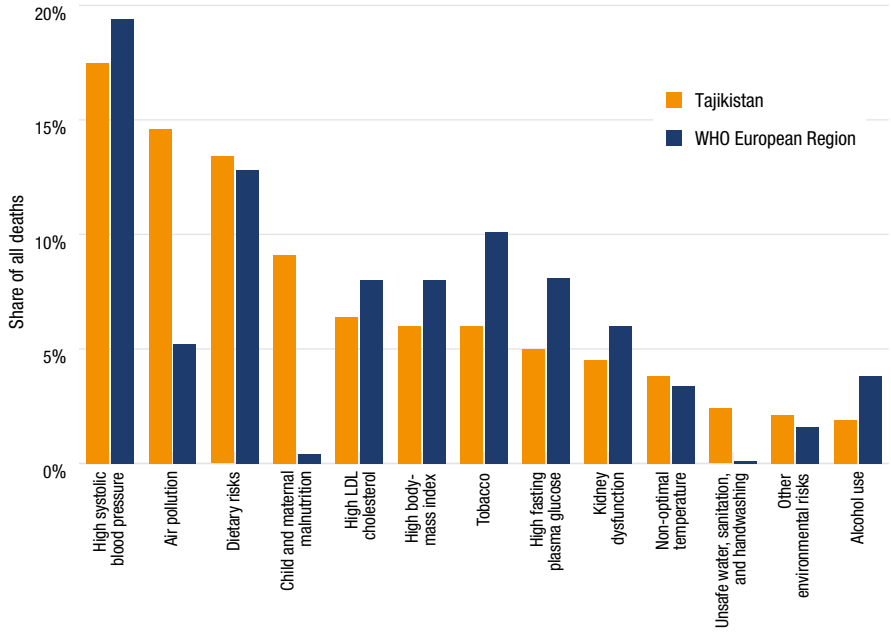
Sources: Republican Centre for Statistics and Medical Information, 2023; WHO Regional Office for Europe, 2024d; World Bank, 2024.

over 19.1% during the decade. The data estimated a meaningful reduction in the total number of deaths from diarrheal diseases, showing a decline of over 35%. At the same time, there was a substantial increase of 90.6% in the number of estimated deaths from diabetes (Institute for Health Metrics and Evaluation, 2024).

In 2021, high systolic blood pressure, air pollution and dietary risks were estimated to be the top three risk factors for health, with deaths due to air pollution far exceeding the average for the WHO European Region

(Figure 1.2), partly due to the burning of solid fuels (such as wood) in homes, with one fifth of the population in 2016 estimated as having to use such fuels (Robinson & Rechel, 2022). Child and maternal malnutrition are a much greater challenge in Tajikistan than in the WHO European Region overall, with 9.1% of deaths attributable to this risk factor, compared to just 0.4% in the region.

FIGURE 1.2 Risk factors affecting health status, 2021



Note: LDL, low density lipoprotein.

Source: Institute for Health Metrics and Evaluation, 2024.

The prevalence of diseases caused by micronutrient deficiencies – such as iron deficiency anaemia, iodine deficiency diseases, and vitamin A deficiency – is a result of limited access to high quality food and iodized salt, especially for vulnerable populations. Poor quality foods, an unbalanced diet rich in animal fats, and high levels of infections, especially in summer, are the main causes of malnutrition. Malnutrition is also the result of food shortages in some households, especially in rural and mountainous areas, as well as inadequate feeding practices for infants and young children.

Overall, one of the most significant challenges affecting the health status of the population in Tajikistan is poverty, which is associated with lower levels of education, increased exposure to a number of risk factors, and challenges in accessing health services. According to a series of national household budget surveys conducted in 2015–2019, food insecurity – which increases stunting and malnutrition risks – remains an issue for many. In 2016, roughly one in five children under 5 years still suffered from stunting (World Bank, 2021a).

In addition, sanitation continues to be a challenge. Access to safe water varies considerably across regions of the country. In cities, water systems are often damaged and subject to frequent shutdowns. In rural areas, only 24% of the population has access to piped water supply services, and most use water from reservoirs, canals, rivers and other unsafe sources (World Bank, 2023a).

2

Organization and governance

Chapter summary

- The Ministry of Health and Social Protection is the main government body responsible for health in Tajikistan. It leads policy formulation and runs national level health services, while subnational authorities deliver most preventive and curative health services at the local level.
- The government remains the main funder and provider of health services. The number of private health care providers is relatively low, although it has grown in recent years and nearly tripled during the past 5 years.
- Health planning in Tajikistan remains strongly influenced by an input-based financing model, although there are some attempts to change this approach.
- In general, health financing decisions are more decentralized than health policy decisions, which are mostly made by the national authorities.

2.1 Historical background

Tajikistan's health system used to be based on the Semashko model of health care typical of countries in the former Soviet Union. Under this model, the population was entitled to a wide range of services provided and funded by the state. However, the system was also highly centralized, underfinanced and inefficient. Many protocols and procedures were inappropriate, management systems were hierarchical and consumer choice was extremely limited. Private payments were limited to a few non-essential services, and unofficial payments were sometimes made to public providers for preferential treatment. In the first years of independence since 1991, the health system remained largely unchanged but was increasingly underfunded (Khodjamurodov et al., 2016).

Over the past two decades, the Tajik health system has moved away from the Soviet legacy and reformed multiple aspects of governance, financing and service provision. The National Health Strategy for 2010–2020 represented an important milestone in the country's health system development. It was the first comprehensive strategy aimed at ensuring strategic coherence and promoting the integration of health considerations across all sectors and policy areas. Adopted in August 2010, it included a framework programme for the implementation of multiple reforms in health services and delivery. More than 80% of the activities planned under this strategy were implemented, and significant improvements were noted in infrastructure and the quality of service provision, especially in maternal and child health (Khodjamurodov et al., 2016).

The National Development Strategy of the Republic of Tajikistan for the period up to 2030 – established in 2021 – was developed in line with the United Nations Sustainable Development Goals (SDGs). It focuses on issues such as the eradication of poverty, the promotion of sustainable consumption and production, and the protection and sustainable use of natural resources. The strategy specifically highlights several issues related to health as being important to advance the country's economic and social development, including access to quality health care, universal health care and medical education.

The latest national health strategy – "Strategy for protecting the health of the population of the Republic of Tajikistan for the period until 2030" (Ministry of Health and Social Protection, 2021b), hereafter referred to as the National Health Strategy for 2021–2030 – was approved on 30 September 2021. It outlines priorities and a framework for measuring progress over the 10 year period. Amongst other elements, it envisages the government's commitment

to the goal of universal health coverage and the introduction of an integrated model for the provision of health services at the primary care level.

National and subnational governments remain the main funder and provider of health services in Tajikistan, although out-of-pocket (OOP) payments remain high. There is a small but growing number of private health care providers. One inherited feature of the Soviet system is that there are still parallel health systems run by other ministries or state companies for their own employees. Although progress has been made in terms of better integration of patient rights, there is still room for improvement.

2.2 Organization

Health services in Tajikistan are organized according to tiers of administration (Figure 2.1). There are four main tiers:

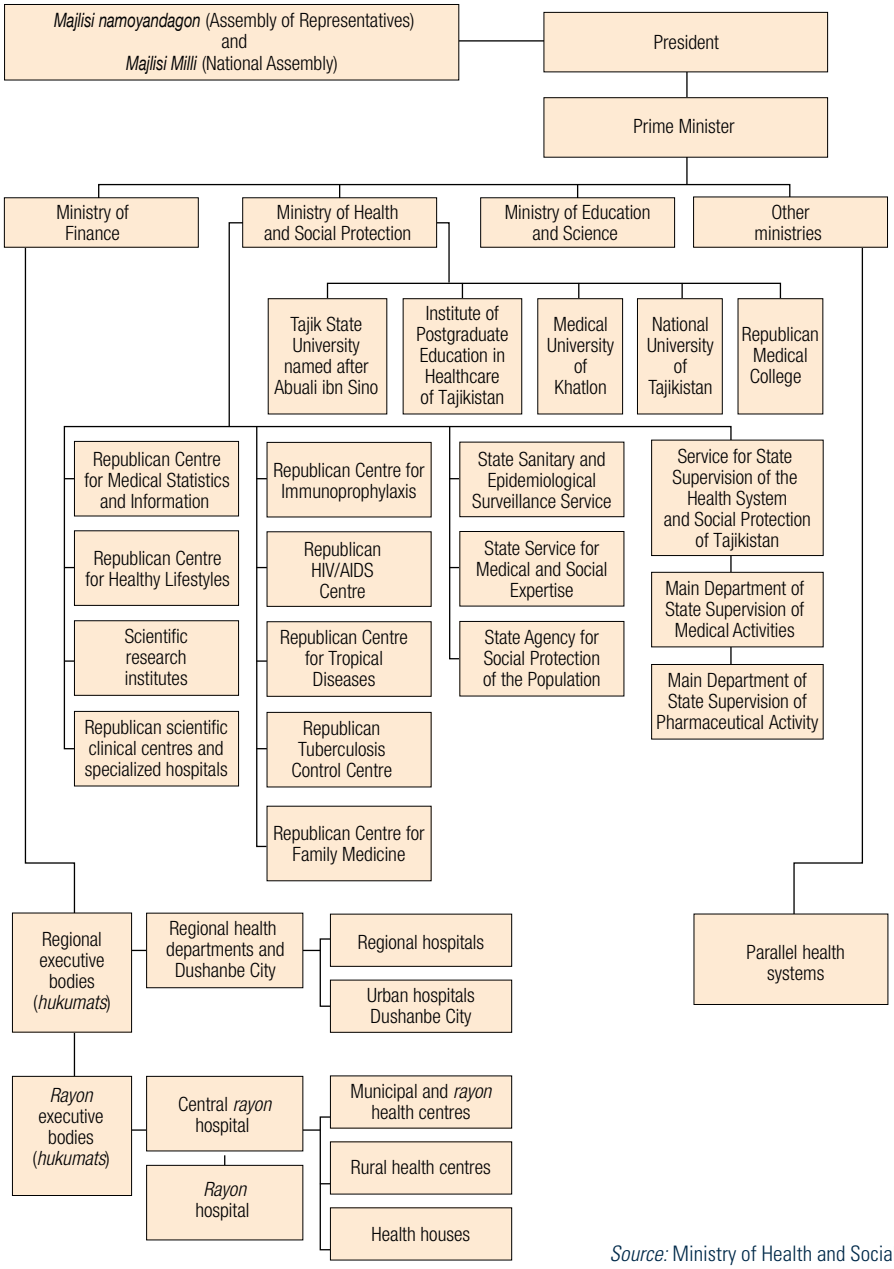
- **Republican (or national) level:** Ministry of Health and Social Protection;
- ***Oblast* (*viloyat* in Tajik) and Dushanbe City level:** health departments within *oblasts* and Dushanbe (Dushanbe functions as an *oblast*-level entity);
- ***Rayon* (*nohiya* in Tajik) or city level:** central, *rayon* or city hospitals (which also perform the functions of previously existing *rayon* or city health care departments); and
- ***Jamoat* level:** commune/municipality peripheral primary care.

For national programmes, services may also be organized into separate vertical pillars according to health care area (e.g. for communicable diseases such as tuberculosis).

The Ministry of Health and Social Protection (formerly the Ministry of Health until its remit and title were expanded in 2013) runs national-level health services, while local authorities administer most *oblast*, city/*rayon* and peripheral health services. While the Ministry of Health and Social Protection formulates national health policy, it is mostly local administrations that deliver health services. Over the past decade some limited policy and administrative powers have been delegated from the national government to *oblast* administrations.

The Government of Tajikistan is ultimately responsible for approving and revising all national health policy. The following bodies are responsible for key governance and management functions in the health system.

FIGURE 2.1 Overview of the health system



Source: Ministry of Health and Social Protection (personal communication), 2023

2.2.1 *Ministry of Health and Social Protection*

In November 2013, Presidential Decree No. 12 transformed the Ministry of Health into the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan (hereafter referred to as the Ministry of Health and Social Protection). This Ministry is the primary body responsible for the overall development, implementation, monitoring, evaluation and coordination of a unified state policy in Tajikistan's health sector. It has responsibility for controlling the quality, safety and effectiveness of health services, pharmaceuticals and medical equipment. It also has direct managerial and financial responsibility for specialized republican health facilities and tertiary level health facilities in Dushanbe, as well as for procurement and distribution of medical supplies and equipment for priority programmes. The management structure of the Ministry includes the central administration, as well as structural subdivisions of local health care departments within the executive bodies (*hukumats*) at the *rayon* level, Gorno-Badakhshan Autonomous *Oblast* (GBAO), Khatlon and Sughd *oblasts*, and Dushanbe City.

The Ministry of Health and Social Protection (Figure 2.2) is responsible for national health policy and monitors the implementation of the health budget at the republican level. According to the Health Code adopted in 2017, the Ministry's duties include:

- developing a national health policy and setting health sector priorities;
- implementing national programmes aimed at controlling the levels of morbidity;
- coordinating the country's health system;
- direct management of health care institutions at the republican level and of research institutes;
- formulating policy for the regulation of pharmaceutical and other medical products, and regulation of their registration, licensing, production and sale;
- setting standards for the quality of services provided in public and private medical institutions;
- ensuring the provision of sanitary and epidemiological services to the population;
- training the health workforce and developing a policy for the professional development of health professionals;

- licensing and certification of persons and institutions providing medical services;
- ensuring international cooperation in the health sector.

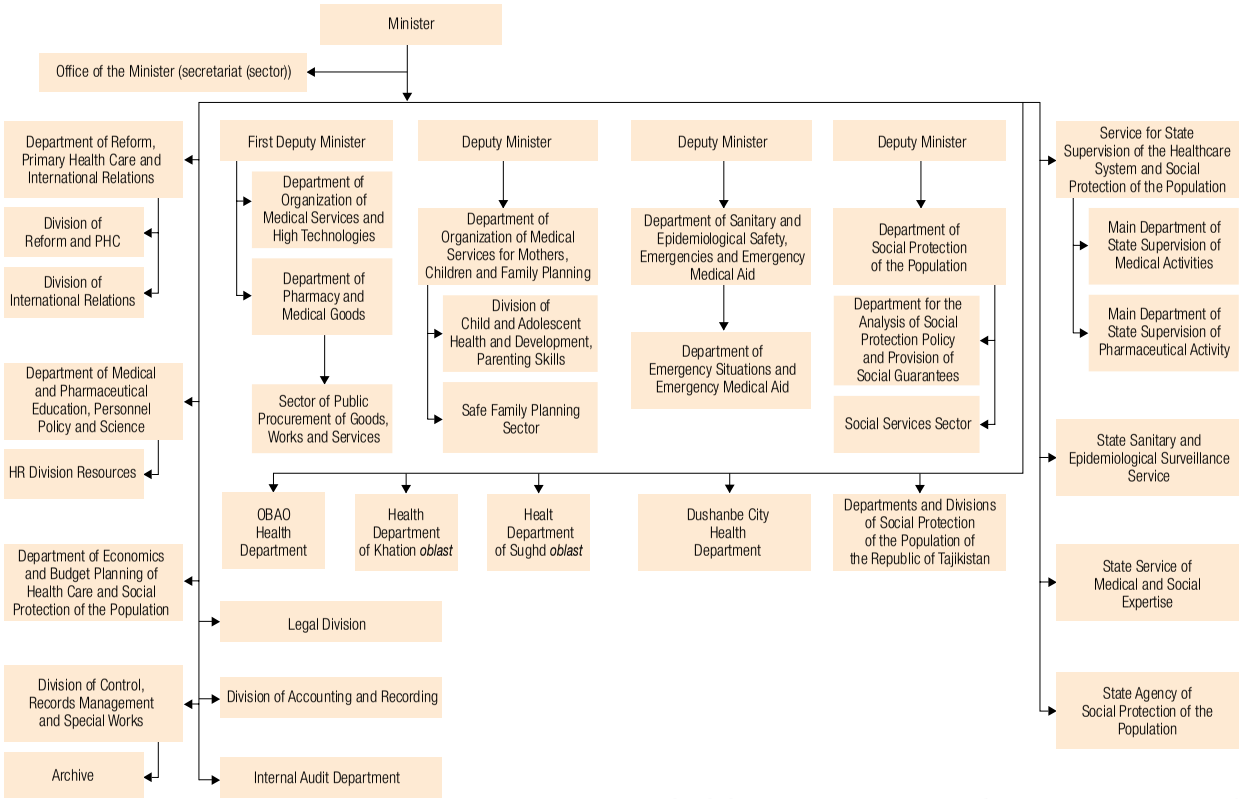
The Ministry itself is governed by the country's constitutional laws, as well as by normative legal acts of parliament (known as the Supreme Assembly, *Majlisi Oli*), government resolutions, and decrees or orders from the President. The Ministry reports on a monthly basis at government meetings, and every 6 months provides a detailed review of the implementation of national strategies and programmes to the National Coordinating Council for Health and Social Protection of the Population.

An advisory board (the *Kollegia*) assists the Minister of Health and Social Protection. The board consists of eight individuals: the Minister, four Deputy Ministers, the rectors of the Tajik State Medical University and the State Medical University of Khatlon, and the Director of the State Agency for Social Protection of the Population. The Ministry also has coordination structures involving representatives of other ministries and departments, as well as coordination structures involving civil society or international development partners, such as the Development Coordination Council.

The structure of the Ministry of Health and Social Protection has undergone several changes since 2013 due to its new responsibility for social protection. As part of the restructuring and expansion of functions in the central office of the Ministry, the Department of Social Protection of the Population was created. In 2017, a new Deputy Minister position responsible for issues related to social protection was introduced. That same year the state services for the supervision of medical activities, sanitary-epidemiological services and pharmaceuticals were merged into a single Service for State Supervision of the Healthcare System and Social Protection of the Population. However, as a result of the COVID-19 pandemic, in 2020 the State Sanitary and Epidemiological Surveillance Service was again separated into a different structure, and the State Service of Medical and Social Expertise (previously part of the Service for State Supervision of the Healthcare System and Social Protection of the Population) was transferred back to the Ministry.

As of 2022, there were 92 curative, preventive and educational institutions subordinate to the Ministry of Health and Social Protection. These included the Avicenna Tajik State Medical University; the Institute of Postgraduate Education in Healthcare and its branches in Khujand (Sughd *oblast*)

FIGURE 2.2 Organizational structure of the Ministry of Health and Social Protection



Notes: GBAO, Gorno-Badakhshan Autonomous *Oblast*; HR, human resources; PHC, primary health care.

Source: Ministry of Health and Social Protection, 2021a.

and Bokhtar (Khatlon *oblast*); the Khatlon State Medical University; the Republican Medical College and 16 regional, city and district medical colleges; three research institutes; 24 specialized clinical hospitals and centres; the Republican Centre for Medical Statistics and Information; 15 national hospitals and republican health centres; five republican sanatoriums and rehabilitation centres; and the republican medical library and press centre. In 2020 the Tajik Medical and Social Institute was established (Presidential Decree No. 25/2–4, 27 June 2020), constituting the first non-state educational institution for higher medical education, and including medical, dental and pharmaceutical faculties.

2.2.2 *Other key government bodies involved in the health sector*

MINISTRY OF FINANCE

The Ministry of Finance is responsible for the state budget, including the financial allocation to the health sector. The Ministry of Health and Social Protection only plays a subordinate role in budgetary decisions. Budgetary funds for the health sector from the central government are distributed by the Ministry of Finance to the Ministry of Health and Social Protection, other line ministries and subnational administrations.

SUBNATIONAL ADMINISTRATIONS

Local governments at the *oblast*, city/*rayon* and *jamoat* level are responsible for the provision of most social services, including health care and education. The functions of each local administration include activities divided between oversight departments (such as the finance department) and executing departments (such as health care).

Oblast and city/*rayon* authorities and finance departments:

- approve the amount of health care expenditure from the local state budget and allocate public funds at the *oblast* and city/*rayon* level;
- manage the financing of health care institutions at the *oblast* and city/*rayon* level;

- receive financial reports and monitor the use of resources; and
- submit financial reports to the Department of Economics and Planning of Budgets for Health and Social Protection, under the Ministry of Health and Social Protection.

Oblast health departments are responsible for the provision of health services in *oblast* level institutions. Together with government bodies at the *oblast* and city/*rayon* level (*hukumats*), they also support activities of city/rayon institutions within the boundaries of the respective *oblast*. The Health Department of Dushanbe City, together with the administration of the city and the city's four districts, coordinates the activities of health care institutions in Dushanbe. Alongside *jamoats*, primary health care institutions are the most peripheral level of health administration.

The *oblast* health departments manage health facilities at the *oblast* level, such as large hospitals and polyclinics, and are also responsible for the procurement and distribution of medical supplies and equipment to subordinate institutions. The financial resources of *oblast* health departments are limited to providing assistance to *oblast* level health care institutions in their *oblast*. Except for *oblast* level institutions, *oblast* departments do not have an allocated budget for health care, but the consolidated *oblast* budget includes planned spending on the health sector for the cities/*rayons*. The *oblast* health departments have a limited number of staff and are mainly responsible for inspection. They are accountable to the Ministry of Health and Social Protection (for professional activities) and the *oblast* administration.

The management of health services in Tajikistan has undergone some minor changes in recent years. In general these changes have involved the creation of new departments and services. In the Soviet period, chief physicians of *rayon* and city hospitals were responsible for supervision of primary care facilities in their *rayons* and cities, resulting in management shortcomings. This changed with adoption of Decree No. 665 in December 2009 "On the establishment of district and city health departments", which established these departments to strengthen the coordination of the health system at the city and district levels, to support health reforms, and to improve the quality of health services (Ministry of Health and Social Protection, 2013c). However, under the decree of the President and the Government "On measures to implement the Decree No. 1301 of the President of the

Republic of Tajikistan dated 11 July 2012 to reduce the number of civil servants working in the field of public administration" the city and *rayon* health departments were abolished. Primary care management functions are now excecuted by primary health care managers in the district and city health centres, working with the chief physicians of *rayon* and city hospitals.

2.2.3 *Parallel health systems*

The previous Soviet model of workplace-based health services has remained partially intact, although less well funded than in the past. Apart from the health institutions at the republican level managed by the Ministry of Health and Social Protection, health care facilities (hospitals and polyclinics) are also run by other ministries or state companies for their employees. These include small inpatient facilities, but also primary care and public health services. Ministries that run these parallel health services in Tajikistan include the Ministries of Internal Affairs, Defence, Security, Taxation, and Transport. They are also provided by a number of large state companies (e.g. Somon Air, Tajik Railway, Tajik Aluminium Company) and industrial associations (for cotton and textiles). Some higher education institutions also provide services to staff and students.

When first established, health facilities in the parallel health services were better maintained and equipped than the mainstream facilities and had a better supply of pharmaceuticals. At one stage they experienced a decline in quality due to lack of appropriate funding, but are now considered to have a good material and technical base, and to be equipped with modern medical devices and equipment. There is limited regulation of parallel health services.

Parallel health services are directly funded by the respective ministries or companies. Historically their expenditure was not always reflected in the state health expenditure reported by the Ministry of Health and Social Protection, but this has now changed: the expenditure of other ministries and agencies has been recorded in the National Health Accounts since 2010, and in the System of Health Accounts since 2013. In 2022 around 2% of public spending on health was estimated to be on parallel health systems.

2.2.4 *Key non-government bodies involved in the health sector*

PRIVATE SECTOR

The number of private health care providers is still relatively low, but it has grown in recent years. A law "On private medical practice" was adopted in 2002 and a committee was established under the Ministry of Health and Social Protection for licensing new private medical practices. The government has also simplified the licensing of private providers and reduced their registration fee. Despite legislative support for the private sector, the scope and volume of services provided privately is still limited. In 2019, there were 479 private health care facilities in the country, including 403 outpatient facilities. Only 7.3% of the country's doctors were employed in the private sector and 6% of hospital beds were private. Less than 1% of births in 2012–2017 took place in private facilities (Neelsen et al., 2021).

The private sector is mainly focused on high-technology diagnostic services, specialized ambulatory and surgical care, and dental care. Most private providers are located in urban areas where the population has sufficient capacity to pay, particular in Sughd, the richest *oblast*, where 10% of physicians and 8% of hospital beds in 2019 were in the private sector. Most dental services are now provided by private practitioners, especially in major cities and *oblast* and *rayon* centres, and the pharmaceutical sector is fully privatized. With the notable exception of the Agha Khan Foundation, which runs a network of health facilities in GBAO, non-profit private providers play a limited role in health care delivery in Tajikistan (Neelsen et al., 2021).

The main reason for the slow development of the private sector is the limited financial resources available. There are no major formal obstacles to the development of private providers, as long as they adhere to national standards of medical and preventive care, and comply with the legal requirements for medical and preventive treatment facilities.

PROFESSIONAL ASSOCIATIONS AND UNIONS

In recent years various associations have been established in Tajikistan, including national associations of nurses and midwives, a physicians' association, and an association of family doctors. As of 2023 there were 27 health-related

national associations or similar groups operating in Tajikistan, covering over 35 specializations. Yet to date they have no formal role in accreditation or regulation, and have little influence on health policy, although physicians have been able to lobby for policy changes.

Trade unions are formally independent from the state but are still closely affiliated with the government. The Trade Union Federation of Tajikistan is the umbrella organization for all trade unions in the country. There is a national trade union of health workers with branches at regional and local levels, which negotiates salary levels with the government and has achieved several salary increases for health workers.

VOLUNTARY/NON-GOVERNMENTAL ORGANIZATIONS AND CIVIL SOCIETY ASSOCIATIONS

Various non-governmental organizations (NGOs) play a role in the provision of health and social services in Tajikistan. The most common goal of NGO projects is to increase the level of knowledge and awareness in the population, in particular in matters of health and nutrition. However, NGO activities are also aimed at improving the quality of medical services or increasing the population's access to services. Target populations include children and women of reproductive age, migrant workers and their families, populations using unsafe water or living at risk of infectious diseases, young people, prisoners, and recently released prisoners. NGO activities in the field of health promotion and disease prevention include reproductive health, safe motherhood, nutrition, HIV/AIDS and sexually transmitted diseases, mental health and drug use.

NGOs also run water and sanitation projects and mobilize financial resources for health care, either by mobilizing communities to raise the necessary funds or by pooling reserve funds. In the latter case, reserve funds may be used to repair medical facilities, cover the cost of fuel for transporting patients in emergencies to distant hospitals, or cover informal payments by those who cannot pay for medical services. NGOs are often heavily dependent on international donors for funding.

INTERNATIONAL DEVELOPMENT PARTNERS

International development partners, including international organizations and charitable foundations, remain key stakeholders in the implementation of health reforms in Tajikistan. In 2021, there were 54 international development partners in the areas of health and social protection, including 27 donor organizations and 27 international organizations providing technical and humanitarian assistance. During 2011–2021, 45 investment projects were implemented in various areas of health and social protection. International partners bring not only important financial resources, but also new technology, knowledge and experience. They provide essential support for the provision of basic medical services and supplies, building human resource capacity and improving infrastructure.

Tajikistan collaborates closely with many international partners and donors. The country is a member of several international and regional organizations relevant to health, including the United Nations, the Commonwealth of Independent States (CIS), the Organisation of Islamic Cooperation, the Eurasian Economic Community and the Shanghai Cooperation Organisation. Following intergovernmental bilateral and multilateral high-level meetings with a number of countries (including Armenia, Azerbaijan, Belarus, China, Czechia, Germany, the Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Russian Federation, Turkmenistan and Uzbekistan), Tajikistan has signed more than 25 cooperation agreements connected to different areas of health and social development for the period 2020–2030.

Using a new subregional approach developed by the WHO Regional Office for Europe, Tajikistan and other Central Asian countries have jointly developed a Roadmap for Health and Well-being in Central Asia for 2022–2025 (WHO Regional Office for Europe, 2022). This is a tool that allows the countries of Central Asia to jointly respond to interrelated health crises. It also represents their commitment to a 2018 United Nations (UN) General Assembly Resolution on "Strengthening regional and international cooperation to ensure peace, stability and sustainable development in the Central Asian region".

The Development Coordination Council (DCC) was established in 2010 with the aim of facilitating information exchange and collaboration between international development partners and the Government of Tajikistan.

The DCC has had a Health Working Group since 2016. Co-chaired by the European Union (EU) and the WHO Country Office, the Health Working Group has held regular meetings and developed tools to facilitate information exchange and discussion on health-related activities. In 2022, five subgroups were established and aligned with the strategic priorities of the National Health Strategy for 2021–2030. These groups work to unify objectives, positions and documents on core topics such as health financing, primary care, health management information systems and human resources.

Progress towards the goals of Tajikistan's National Health Strategy for 2021–2030 is assessed in the Joint Annual Reviews, with inputs from the Prime Minister's and President's Offices, line ministries such as the Ministry of Finance and the Ministry of Labour, the heads of *oblast* health departments, managers of health facilities, development partners, and civil society organizations (Khodjamurodov et al., 2016).

2.3 Decentralization and centralization

The health system in Tajikistan is largely centralized, controlled by the national government, and managed by the Ministry of Health and Social Protection. During the past two decades, public administration reforms have gradually strengthened the regulatory framework of ministries and departments. This has provided opportunities for greater autonomy of health facilities in decision-making, budget use and management.

The abolition of city and *rayon* health departments in 2012 resulted in challenges with regard to accountability and implementation in primary care, such as a lack of clarity in decision-making and inefficient use of resources. To address this, the government delegated some limited political and administrative powers to *oblast* administrations. Since 2014 this has allowed *oblasts* to develop *oblast*-level health policies, provided they are in line with the regulations and guidelines of the Ministry of Health and Social Protection, and to allocate resources accordingly. There are still some challenges in coordinating work between the national level, *oblast* and city/ray*on* administrations, and local medical institutions.

Allocation of funds to the health sector from the state budget is managed centrally, and funding is controlled by the Ministry of Finance. To be granted funds, the Ministry of Health and Social Protection must submit

proposals that fit within a strict budgetary ceiling specified by the Ministry of Finance. In recent years, all proposals made by the Ministry of Health and Social Protection accompanied by feasibility studies have been approved, with the Ministry of Finance making amendments to the budget in order to accommodate them.

Once approved, budgetary funds from the central state bodies are distributed to the finance departments of *oblast* administrations. However, most government revenues are generated and retained at the sub-national/local levels (*oblast*/city/district), and it is these revenues which largely determine the size of their health budgets. Funding is then reallocated to individual health facilities at local levels (see Figure 3.6 in Chapter 3). The net result is that health financing is relatively decentralized, although there are limitations on how national health funds can be spent by subnational authorities, as well as on their ability to raise funds independently through additional charges for health services. Primary health care budgets are formulated on a per capita basis at the national level and distributed to *oblasts* accordingly, but at subnational levels some continue to be based around inputs.

2.4 Planning

Health policy and planning in Tajikistan is undertaken by the state. The Ministry of Health and Social Protection is responsible for the overall planning, management and regulation of health services, and for the development and implementation of national health policies. It is accountable to the government, submits annual reports about its activities, and draws up a budget of financial resources required for the following year. The national government approves and revises national health policies, programmes, laws, investment projects and implementation budgets, all of which are developed and proposed by the Ministry of Health and Social Protection alongside other ministries and agencies.

Health planning remains strongly focused on the budgetary process. For both outpatient and inpatient care, planning has historically followed mechanisms inherited from the Soviet period, with an emphasis on inputs and staffing rather than on quality or outputs. Health reforms were introduced in Tajikistan in 2002 with the aim of moving towards a financing system based on activities or the size of the population covered, but the

allocation of national funding for health budgets remains highly centralized and subnational funds are determined based on local revenue, rather than needs. The Ministry of Health and Social Protection has recognized that the input-based budget lines and funding allocation for inpatient care provide incentives for overcapacity and an overly extensive structure of health facilities, while ignoring the content and quality of care provided (Ministry of Health and Social Protection, 2021b).

Policies have aimed to prioritize health care quality, modernize health service provision, and improve efficiency. Under the National Health Strategy for 2021–2030, the distribution of budgetary funds is intended to stimulate reforms in health service provision. In theory this means that support should be prioritized for progressive models of disease prevention and medical treatment, as well as those which demonstrate cost-effectiveness. State contracts should aim to encourage the effectiveness and operational independence of health facilities. A priority for staffing is intended to strengthen the professional and public image of health workers, including a gradual salary increase. Economic incentives and career opportunities are expected to be linked to measures related to health care, patient satisfaction, productivity and professional ethics. If implemented in practice, these measures would represent positive steps towards improving health care quality, provision and efficiency.

In terms of future planning, the current national health strategy has three core objectives:

- to modernize medical technologies and treatments used in health care facilities;
- to carry out a "structural rationalization" of medical and preventive services;
- to facilitate access to capital for independent medical practices and innovative projects in health care.

Other areas of work are also intended to be a key focus, such as improving the availability and quality of pharmaceuticals, strengthening service integration, and modernizing basic infrastructure in areas of need. At present these are all areas requiring additional support. For example, the existence of counterfeit or low-quality medication hinders access to effective treatment for certain conditions, and is an issue that reportedly increased during the

COVID-19 pandemic (United Nations Office on Drugs and Crime, 2020).

Planning for social policy in health care also sits under the expanded remit of the Ministry of Health and Social Protection. The stated objective is to provide basic medical care to the entire population free at the point of use and to ensure additional financial protection for low-income groups. While there is currently very limited integration of health and other social programmes, in the longer term the plan is to see this increase, creating a more holistic support system for the health and socio-economic welfare of Tajikistan's population. Box 2.1 considers whether Tajikistan has sufficient capacity for policy development and implementation.

BOX 2.1 Is there sufficient capacity for policy development and implementation?

Tajikistan's capacity for policy development and implementation remains at a nascent stage. As a result of discussions between the Ministry of Health and Social Protection and development partners, led by the World Bank and WHO, the Ministry now has a nascent Health Policy Analysis unit. However, it is understaffed and has significant gaps in certain skills.

There are challenges facing the creation of evidence for efficient and sustainable health policies and strategies. While the Ministry of Health and Social Protection does have access to a large amount of health data, it is not easily or consistently aggregated and analysed, which hinders its translation into policy. Most policy evidence is developed with technical support from international development partners but is then rarely converted into legislation due to a top-down governance model. There are also issues facing the communication of key evidence needs to other parts of government.

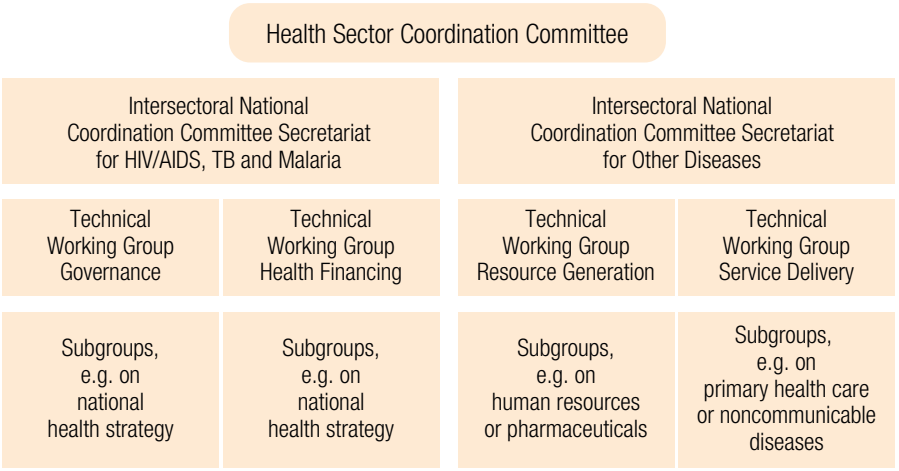
For policies that are created and approved, there remain obstacles to their successful implementation, such as a lack of available financing, insufficient staffing, and limited governance around enforcement.

2.5 Intersectorality

Intersectoral governance mechanisms in Tajikistan are mainly in place for specific priority programmes, such as infectious diseases or maternal and child health. An Intersectoral National Coordination Committee has been set up under the President's administration which mobilizes and oversees the

alignment of external assistance to develop different sectors of the country (Akkazieva et al., 2015). Within the framework of the Intersectoral National Coordination Committee, a Health Sector Coordination Committee which includes national and development partners deals with health priorities and the health system (Figure 2.3). This coordination mechanism offers a forum for advocating interventions and engaging non-health sectors and industries to tackle health challenges.

FIGURE 2.3 Intersectoral coordination mechanisms



Notes: HIV/AIDS, human immunodeficiency virus/acquired immunodeficiency syndrome; TB, tuberculosis.

Source: Adapted from Akkazieva et al., 2015.

Interdepartmental working groups have also been created and function between the Ministry of Health and Social Protection and the Ministry of Education and Science; the Ministry of Labour, Migration and Employment; the Ministry of Economic Development and Trade; the Ministry of Internal Affairs; and the Ministry of Finance, as well as the Committees for Environmental Protection and for Emergencies and Civil Defence.

During the COVID-19 pandemic, the country orchestrated a well-coordinated response across different sectors and entities. While the Ministry of Health and Social Protection played the central role in the planning and implementation of health system activities, the response also included law enforcement, other ministries and government bodies, as well as international development partners such as UN agencies and the World Bank. A cross-government task force was established under the leadership of the Deputy

Prime Minister, with the Ministry of Health and Social Protection as the technical focal point.

2.6 Health information systems

Health statistics are crucial for formulating and evaluating health policy. In Tajikistan, key indicators on the health status of the population and the provision of health services have been included in health policy documents and the country's poverty reduction strategy paper (see Section 6.1). The National Health Strategy for 2021–2030 recognizes the need to further develop information and communication technologies (ICT).

The central state agency responsible for the collection, analysis and publication of health information is the Republican Centre for Medical Statistics and Information. Through its departments at the *oblast* and city/*rayon* level, the centre collects statistical data from all levels of the health system. These data are collated nationally and published regularly. Regardless of the form of ownership, all health care providers are required to use the same accounting and reporting forms approved by the Ministry of Health and Social Protection. The health information system has undergone changes, such as a reduction in the number of required forms, and provision of computers to health facilities at the *rayon* and city level.

However, health professionals are overburdened with reporting forms, with a total of 42 forms at one stage (reduced to 37 as of 2023). Often the data collected are of poor quality and are not used appropriately in decision-making. In general, the country's health ICT infrastructure is underdeveloped, underfunded and unevenly distributed, and computer literacy levels among health workers remain low. The private sector is required to use the same reporting forms as the public sector, but the flow of information is not always clear. In addition, gaps in electronic data flows mean that data cannot always be aggregated, hindering further analysis in policy development.

The State Sanitary and Epidemiological Surveillance Service is responsible for providing statistical data on infectious diseases. However, it does not have the necessary technical capabilities and resources. Its extensive network of laboratories – approximately 100 – lacks the staff and equipment that would be necessary to carry out its assigned duties. Moreover, public health services are fragmented and divided into vertical structures and programmes,

each with their own data collection system. Since 2016 WHO has supported capacity building of the three major laboratories of the country in quality management based on ISO standards. As part of its support to the country's COVID-19 Preparedness and Response Plan, WHO collaborated with the World Bank and other international partners to upgrade 17 regional laboratories. Laboratories in every district and *oblast* hospital provide diagnostic services including COVID-19 tests, as do private laboratories, mostly in larger urban settings.

The State Committee for Statistics (the state statistical agency under the President) is responsible for collecting vital statistics, including data on births and deaths. A major challenge for reliable health statistics in Tajikistan is the need to pay for birth certificates, which leads to under-reporting of birth rates. In recent years, the registration fee has been reduced to US$ 1, although this does not account for informal payments.

The District Health Information Software (DHIS-2) has been implemented and functions mainly at the national and *oblast* levels, while data are input manually at the *rayon* and city level. All primary care data still arrive in paper form at the *rayon* and city level.

Additional surveys have been conducted to obtain data not well captured by current data collection systems. Examples include the Tajikistan Living Standards Surveys in 1999, 2003, 2007, 2009 and 2014; the Demographic and Health Surveys in 2012 and 2017; the Multiple Indicator Cluster Surveys carried out by the United Nations Children's Fund (UNICEF) in 2000 and 2005; the National Nutrition and Water and Sanitation Surveys in 2003 and 2009; the Survey of Water, Sanitation, and Hygiene for Households and Schools in 2016; WHO STEPS surveys on noncommunicable disease risk factors in 2016–17 and 2023; and annual national household budget surveys conducted since 2007.

A 2020 assessment of progress on SDG targets found that there was strong political commitment and a sound legislative framework for regulating the health information system, with activity and interest in advancing DHIS-2 (WHO Regional Office for Europe, 2020). However, it also noted that the system lacked incentives for use, was focused more on data collection than on analysis, and had some notable gaps in registers or integration.

There has been some progress in expanding the use of digital and online health information services. Electronic polyclinic systems – offering services such as online patient appointments, electronic accounting and registration,

online consultations and telemedicine – have been implemented in city health institutions in Dushanbe, Khujand, Bokhtar and Khorog. Web-based services are used by 3630 pharmacies in the country to provide information to patients and manage pharmaceutical delivery. A national telemedicine network has also been created. However, there are a number of challenges facing the ongoing development of management information systems and digital health. These include:

- a lack of proper legislation to ensure the effective implementation of health management systems or digital health services;
- fragmented health information systems (a Unified Health Management Information System, which operates on the basis of DHIS-2, has been developed, but separate health care structures still use their own information systems leading to disparate reporting and indicators);
- a lack of national health data standards or quality assurance processes, resulting in low-quality data;
- continuing issues around the excessive burden of health data reporting requirements on health workers;
- failure to regularly analyse data and incorporate them into decision-making;
- insufficient funding, especially for introducing a unified health management information system;
- underdeveloped ICT infrastructure and administrative capacity.

The main strategic goal for digital health until 2030 is to improve and harmonize the national health information system and expand digitalization and telemedicine systems for health care and social protection. This will include improving digital infrastructure, regulatory frameworks, administrative and staff capacity, service accessibility, and funding.

2.7 Regulation

The Ministry of Health and Social Protection is responsible for regulating the health sector by issuing orders and developing guidelines, instructions and recommendations. It also monitors and visits medical institutions, and considers

claims and proposals from the population. A board, chaired by the Minister, is responsible for reviewing problems and priority issues. It meets monthly and evaluates the implementation of national programmes and policies.

2.7.1 *Regulation and governance of third-party payers*

As of 2024 there was no meaningful funding of the health sector through third-party payers, and consequently there are no regulations or provisions in this regard. Mandatory health insurance does not exist and private health insurance does not play a significant role.

2.7.2 *Regulation and governance of providers*

The Tajik health system can be classified as an integrated model, in which most health service providers are owned and run by the state, and financed from public sources (although private formal and informal OOP payments make up a substantial share of health spending). While some public providers (the "self-supporting centres") have moved towards some degree of organizational and financial autonomy, most public providers are part of a hierarchical state system and receive public funding from the state budget. At the national level, health facilities are managed directly by the Ministry of Health and Social Protection, while at the *oblast* and city/*rayon* level, health facilities are managed by the respective subnational authorities.

The management of public providers has changed little since the Soviet period and still follows the hierarchical structure of the health system, with top-down control. The Ministry of Health and Social Protection is responsible for the regulation and management of public providers. The network of public providers is tasked with the implementation of national health policies and programmes, and with ensuring the availability and quality of health services. Public institutions are accountable to the Ministry of Health and Social Protection and to the relevant subnational authorities at the *oblast* and city/*rayon* levels. They provide reports to the Ministry of Health and Social Protection on an annual, semi-annual or quarterly basis, and submit data, including on staff numbers and services provided, through the Republican Centre for Medical Statistics and Information. The Ministry of Health and Social Protection also regulates the working conditions and salaries of health workers.

Oblast health departments manage the activities of health facilities at the *oblast* level, such as *oblast* hospitals (or city hospitals in Dushanbe). They report to the Ministry of Health and Social Protection on professional matters, and other *oblast* authorities on financial matters.

Rayon/city health departments run health facilities at the *rayon*/citylevel, such as central *rayon* hospitals, city hospitals, rural health centres and health houses (see Section 5.3.2), and are accountable to the Ministry of Health and Social Protection and *rayon*/city governments. Rural medical services are managed by primary health care managers who work in tandem with chief physicians at the central *rayon* hospitals. The chief physicians are responsible for submitting district-level reports to the regional level.

Hospitals are run by chief physicians who are advised by a medical board composed of deputies and other senior specialists. Each chief physician is accountable to the relevant authorities (at the republican, *oblast* or city/*rayon* level) and is appointed by the relevant administration with the approval of the Ministry of Health and Social Protection. The heads of rural health services (health houses, outpatient clinics and village hospitals) work in tandem with the chief physician of the central *rayon* hospital. Heads of medical institutions have little authority; their role is more administrative and largely connected to budget implementation.

A basic benefits package was piloted in 31 *rayons* until May 2023 (see Section 3.3.1), and in these *rayons* the government outsourced more administration to primary care providers and introduced new financial and administrative processes. Several other models for managing administrative or financial procedures have also been piloted. A Health Services Improvement Project, funded by the World Bank, aimed to expand health service coverage and quality by using performance-based funding incentives for primary care providers, but was only implemented in 16 districts between 2015 and 2022, and did not lead to permanent changes (Ahmed et al., 2023).

The Ministry of Health and Social Protection also regulates health services in the private sector. Table 2.1 summarises how providers are regulated at various levels. The Ministry issues certificates to individuals and institutions engaged in private medical practice, and determines the scope of services that can be provided (see Section 2.2.4). It also specifies licensing and registration requirements.

TABLE 2.1 Overview of provider regulation

	LEGISLATION	PLANNING	LICENSING / ACCREDITATION	PRICING / TARIFF SETTING	QUALITY ASSURANCE	PURCHASING / FINANCING
Public health services	Y	Y	Y	N	N	Y
Ambulatory care (primary and secondary care)	Y	Y	Y	Y	Y	Y
Inpatient care	Y	Y	Y	Y	Y	Y
Dental care	Y	Y	Y	Y	Y	Y
Pharmaceuticals (ambulatory)	Y	Y	Y	Y	Y	Y
Long-term care	Y	Y	Y	N	Y	Y
University education of personnel	Y	Y	Y	Y	N	Y

Notes: Y = Yes; N = No.
Source: Authors' compilation.

2.7.3 *Regulation of services and goods*

In terms of procurement, the Ministry of Health and Social Protection purchases medical services from public providers through the Ministry of Finance. This covers consultative, diagnostic and treatment services in the inpatient and outpatient sector. Due to issues with revenue raising and the absence of a formal mechanism for pooling funds, financing of health care providers is highly variable and dependent on available budgetary funds. It also does not take into account the outcome or quality of health services provided. A current health financing project in the Sughd *oblast* is trialling a different approach by pooling revenues from five pilot districts and reallocating funds based on need, as well as establishing an *oblast*-level purchasing agency to contract directly with primary health care facilities.

Under Government Decree No. 600 ("On the procedure for providing medical care in public health institutions for citizens of the Republic of Tajikistan", adopted on 2 December 2008), health care facilities receive funding from the health budget to cover specific beneficiaries or line items (see Section 3.4.1). Some institutions, such as major hospitals and state-run facilities known as "self-supporting centres", are also able to charge patients

official fees for services not covered under Decree No. 600. However, health care providers are not generally allowed to raise and manage their own funds through the introduction of additional official charges or co-payment mechanisms. As a result, some medical institutions are forced to find alternative funding sources in order to cover costs and maintain their functioning. A results-based financing mechanism piloted in some *rayons* with World Bank support provided opportunities for health facilities to use part of these additional donor funds for improving facility conditions, but the pilot remained limited to rural health centres and health houses and was ultimately not deemed to be financially sustainable.

Between 2007 and 2023, a state-guaranteed basic benefits package was implemented in pilot *rayons* and funded by the state budget. The basic benefits package aimed to facilitate the introduction of new forms of financing and management, in which health institutions would be granted a greater degree of autonomy. Like Decree No. 600, under the basic benefits package some health services provided by primary care institutions were provided at no cost to patients, while the rest followed a set price list according to the service or treatment. The pilot ended in May 2023, although a revised basic benefits package is reportedly under development.

The current management structure of most public providers is characterized by vertical hierarchies and inflexible funding mechanisms that favour the hospital sector over primary care services, resulting in an inefficient use of already limited resources. Reform efforts aim to strengthen primary care in order to use resources more efficiently. Per capita financing for primary care was introduced in 2010 and rolled out countrywide by 2018, although it is unclear whether some subnational allocations vary in practice. The policy established a minimum primary care funding requirement per person in the providers' catchment areas. The amount is adjusted annually to account for changes in the cost of health services and macroeconomic conditions. In 2019, this minimum per capita rate amounted to about TJS (Tajikistani somoni) 56 (US$ 5.26) for city health centres, TJS 46 (US$ 4.32) for *rayon* health centres, TJS 38 (US$ 3.57) for rural health centres, and TJS 26 (US$ 2.44) for health houses. However, providers do not have autonomy to actively manage the funds generated through capitation payments according to local needs. Instead, financial allocations remain tied to ring-fenced, input-based budget lines and norms around capitation funding (Neelsen et al., 2021) (see Section 3.2).

HEALTH TECHNOLOGY ASSESSMENT

The development and implementation of technologies in the health sector, as well as the monitoring and evaluation of their use, is the responsibility of the Ministry of Health and Social Protection. Since 2017, quality control and regulation of technologies in health institutions, institutions of social protection and the pharmaceutical industry have been performed by the Service for State Supervision of the Healthcare System and Social Protection of the Population alongside the Ministry. To support health service delivery and improve evidence-based decision-making, the Ministry of Health and Social Protection has also initiated the use of health technology assessment. New technologies will also be considered in the revision and development of the new benefits package (see Section 3.3.1), as well as in the adjustment of clinical guidelines and in advice on the economic use of resources.

2.7.4 *Regulation and governance of pharmaceuticals*

Historically almost all pharmaceuticals have been imported into Tajikistan. As a result, supply is irregular and often expensive, with purchase partly dependent on donor assistance. Counterfeit medicines are also widely available and have been an issue for some time. A lack of effective price regulation for medicines creates access barriers for much of the population.

One of the state priorities is the development of local production capacity for medicines and medical products. Since 2018, with support from local and foreign investors, 10 large companies have been created for pharmaceutical production and over 300 million somoni (US$ 28.2 million) invested in infrastructure and production equipment. Equipment, substances and excipients used for the production of medicines and medical goods are exempt from value-added tax (VAT) and import customs duties. A State Programme for the Development of the Pharmaceutical Industry for 2021–2025 was developed and approved in 2020.

The government has established a legal framework and enforcement mechanisms for regulating the production, use and sale of pharmaceuticals, which encompasses medicines, medical products and alternative medicines. Regulation covers licensing, accreditation, state registration, quality control and certification, post-registration control, and inspection procedures. The

Department of Pharmacy and Medical Goods of the Ministry of Health and Social Protection is responsible for developing, monitoring and evaluating state policy in the pharmaceutical industry. The Service for State Supervision of the Healthcare System and Social Protection of the Population is the state agency authorized to regulate and supervise pharmaceutical activities in the country. A Pharmacological Committee – part of the regulatory body for pharmaceutical management – is authorized to lead matters connected to clinical evidence, and to determine the safety and effectiveness of new medicines, new dosages, dosage forms, indications and contraindications. An Essential Medicines List was first introduced in 1994, and is reviewed and updated every 2 years.

The Scientific Centre for the Production of Experimental Medicines is responsible for the development and application of new medicines based on local products. The Committee for the Development of the Pharmaceutical Industry (*Tajikpharmamindustria*) was originally a unit of the Ministry of Health and Social Protection responsible for the development of new medicines based on local raw materials, but has since been restructured into a commercial organization.

The government has strengthened control over the quality and distribution of pharmaceutical products and improved coordination between public procurement of medicines and donor assistance, as well as increasing funds for procurement. Procurement is managed centrally by the Ministry of Health and Social Protection for a limited list of medicines. State health care institutions can purchase other medicines through a decentralized mechanism, which frequently leads to higher costs. Some medicines and medical supplies for vertical health programmes are provided by international donors.

Areas for further development include improving surveillance systems to monitor pharmaceutical needs and funding allocation, strengthening procurement legislation and enforcement, adopting international standards for pharmaceutical product regulation, and increasing capacity for local production.

2.7.5 *Regulation of medical devices and aids*

Medical equipment is assessed and procured through the procurement unit of the Department of Pharmacy and Medical Goods within the Ministry of Health and Social Protection. Funding has been extremely limited in

the past, although the government and international partners have recently begun to invest more heavily. For basic clinical and non-clinical medical equipment, procurement is carried out through local competitive bidding, while more sophisticated medical equipment is procured primarily through international competitive bidding and funding from international donors. Since 2018, private providers importing medical equipment have been exempt from paying value-added tax on these items.

2.8 Person-centred care

2.8.1 *Patient information*

Literacy in Tajikistan is high compared to other countries with a similar level of economic development, and this facilitates the provision of health-related information. Over the past decade, local communities have become more aware of health issues and many of them have been involved in initiatives to raise public awareness of topics such as maternal and child health, HIV/AIDS and tuberculosis.

Despite these efforts, in general the population still has insufficient access to information about health. This includes information about healthy behaviours and root causes of ill health, especially in relation to noncommunicable diseases. Channels for accessing health information exist but may be harder for certain groups to access. The media regularly provides content on topics such as healthy lifestyles, nutrition, and maternal and child health, and the Ministry of Health and Social Protection has a press centre and a national website. Information technology is underdeveloped, but its application and the use of mobile telephones and the internet is expanding. Information about state-run and private medical services is promoted in television and radio programmes, aiming to improve public awareness about service availability.

In terms of service provision, some advanced medical institutions advertise their services to patients. Certain health-related statistics are published on the Open Data Portal of the Republic of Tajikistan [https://www.stat.tj/en/database-socio-demographic-sector], which as of July 2022 listed 115 datasets relevant to health care in the country. These include disease indicators such as incidence rates; service indicators such as the number of

hospital beds per 100 000 population; information on citizen appeals and their outcomes; and contact information for certain organizations involved in health care provision. How often members of the population consult the website for information is unknown.

The Republican Healthy Lifestyle Centre under the Ministry of Health and Social Protection has the mandate to empower patients. The centre has been involved in developing various national programmes that promote patient empowerment, for issues such as noncommunicable diseases, HIV/AIDS and tuberculosis (Akkazieva et al., 2015). Measures have been taken to inform the population about their entitlements, and the official price list of services is displayed in medical institutions, although informal payments also still exist.

TABLE 2.2 Patient information in Tajikistan

TYPE OF INFORMATION	IS IT EASILY AVAILABLE?
Information about statutory benefits	Yes
Information on hospital clinical outcomes	Yes
Information on hospital waiting times	No
Comparative information about the quality of other providers (for example, GPs)	No
Patient access to own medical records	Yes
Interactive website or 24/7 telephone information	A hotline was established in 2020 for COVID-19 questions and remained in operation as of January 2024
Information on patient satisfaction collected (systematically or occasionally)	No
Information on medical errors	No

Note: GP, general practitioner.
Source: Authors' compilation.

One factor affecting access to information is that, owing to the 1989 Law on the State Language, all organizations in the country must carry out their activities in the Tajik language. This may present language barriers for migrants, minority groups or non-nationals.

2.8.2 *Patient choice*

Patient choice is protected by the Constitution of Tajikistan. In theory all patients have the right to choose a medical institution or doctor (according to Law No. 419 "On public health", adopted on 15 May 1997). In reality, patients have varying degrees of choice. In rural areas, patients typically have a limited range of public providers and a lack of private facilities. However, rural residents often bypass the locally available level of care and seek care at higher levels of the system, often at district or *oblast* levels. One reason for this is that facility buildings or medical equipment may be outdated at the rural primary care level and health workers be less qualified. In addition, the referral pathway from the lower to higher levels of the system does not always function properly. Many bypass the system and access specialist or hospital care directly. Urban residents have better access to higher quality health facilities, along with better access to health information. In cities there is also a higher demand for consultative, diagnostic, laboratory or dental services, which increases competition and provides patients with more choice.

According to consumer protection regulation, patients can choose doctors, specialists or medical institutions. If the patient is not satisfied with their doctor or medical institution, they are entitled to request an additional consultation with another doctor or medical institution. In practice, urban patients can more easily change their primary care doctor, specialist or hospital doctor than rural patients.

Patient choice is also affected by the cost of health services, which become more expensive from the rural to the *rayon* level, from the *rayon* to the *oblast* level, and from the *oblast* to the national level, where all specialized medical institutions are located. Outpatient services are significantly cheaper than hospital treatment, which is likely to prevent some patients from seeking timely hospital care.

It is hoped that the anticipated introduction of a universal package of services will improve patient choice, especially in rural areas. Table 2.3 summarises the existing status of patient choice in the country.

TABLE 2.3 Patient choice in Tajikistan

TYPE OF CHOICE	IS IT AVAILABLE?	DO PEOPLE EXERCISE CHOICE? ARE THERE ANY CONSTRAINTS?
Choices around coverage		
Choice of being covered or not	Yes	In practice mostly covered by the assigned health facility
Choice of public or private coverage	Yes	Yes, depending on financial means
Choice of purchasing organization	No	No mandatory health insurance available yet. Private health insurance is very limited
Choices of provider		
Choice of primary care practitioner	Yes	In rural areas mostly by assigned health facility. Wider choice in larger urban settings
Direct access to specialists	Yes	Yes, if able to pay
Choice of hospital	Yes	Yes, if able to pay
Choice to have treatment abroad	Yes	Yes, if able to pay. Often used for complex tertiary level procedures, resulting in a risk of impoverishment
Choices of treatment		
Participation in treatment decisions	Yes	Yes, but limited by patients' ability to use medical information
Right to informed consent	Yes	Yes, but limited by patients' ability to use medical information
Right to request a second opinion	Yes	Yes, but limited by patients' ability to use medical information
Right to information about alternative treatment options	Yes	Yes, but limited by patients' ability to use medical information

Source: Authors' compilation.

2.8.3 *Patient rights*

The legal basis for the protection of patient rights in Tajikistan is laid down in national regulations. They cover the protection of patient rights, patient choice, complaint mechanisms and reimbursement procedures, as well as information on the price of health services. However, there are ongoing discussions about legal support for enforcing the right to receive health services, as well as the resolution of disputes.

There is an official complaints procedure which includes the regulatory authorities, the regulators of health care institutions and the Ministry of Health and Social Protection. Initially, complaints are considered at the level of the administration of each health care institution, which usually provides a written answer on what measures have been taken to solve the problem. If the complaint requires the involvement of a higher administrative level, the health care institution forwards the complaint to the appropriate recipient.

Complaints referred to the Ministry of Health and Social Protection are usually related to severe cases that cannot be treated at all or require referral outside the country; that involve access to expensive specialized treatment or medicines; or where there have been medical errors or poor standards of care. In each case, the Ministry is responsible for taking and documenting the necessary measures. In addition to formal complaints, the Ministry holds face-to-face consultations twice a week with community representatives to address specific concerns. These meetings are held by the Minister of Health and Social Protection himself, along with representatives of various health divisions and departments.

According to an order from the Ministry of Health and Social Protection, every primary health care centre should have a Quality Committee. Patients can apply for help with issues connected to the quality of care they have received at that institution.

The future creation of a dedicated health Ombudsman has been discussed, as a way to provide new opportunities for patients who wish to complain about the quality of their health care services. For the time being, there is a general human rights Ombudsman in the form of the Commissioner for Human Rights in the Republic of Tajikistan, who was admitted to the Eurasian Ombudsman Alliance in 2019. Every year the Ombudsman produces an official report on human rights violations in Tajikistan, including any issues connected to health protection. According to the Ombudsman's

report in 2020, over 200 cases were resolved in total and over 5 000 legal consultations were provided, including cases connected to health and service quality. Patient rights in Tajikistan are summarised in Table 2.4.

TABLE 2.4 Patient rights in Tajikistan

	Y/N	COMMENTS
Protection of patient rights		
Does a formal definition of patient rights exist at the national level?	Y	Tajikistan Health Code (2017)
Are patient rights included in legislation?	Y	
Does the legislation conform with WHO's patient rights framework?	Y	
Patient complaints avenues		
Are hospitals required to have a designated desk responsible for collecting and resolving patient complaints?	Y	Complaints are collected either in special boxes or in logbooks
Is a health-specific Ombudsman responsible for investigating and resolving patient complaints about health services?	N	
Are there other complaint avenues?	Y	Patients report to MoHSP on negative experiences
Liability/compensation		
Is liability insurance required for physicians and/or other medical professionals?	N	
Can legal redress be sought through the courts in the case of medical error?	Y	
Is there a basis for no-fault compensation?	Y	
If a tort system exists, can patients obtain damage awards for economic and non-economic losses?	Y	
Can class action lawsuits be taken against health care providers, pharmaceutical companies, etc.?	Y	

Notes: MoHSP, Ministry of Health and Social Protection; Y = Yes; N = No.

Source: Authors' compilation.

2.8.4 *Patients and cross-border health care*

There are reliable records of patients crossing the borders of Tajikistan to receive health services abroad. These tend to be more affluent patients travelling for specialized treatment to the Russian Federation or countries in Western Europe.

Labour migration is a major contributor to the Tajik economy. The share of households with at least one migrant increased from 42% to 50% during the first quarter of 2022, but steadily declined afterward. Migration to the Russian Federation increased significantly in early 2022, before reversing after the mobilization of adult men for military service later in the year was announced (World Bank, 2023b). As Tajik migrants can enter the Russian Federation without a visa but labour registration requirements are strict, many work in the informal economy which limits their access to health services. Furthermore, migrants in general are unable to access HIV/AIDS treatment in the Russian Federation, resulting in a risk of late presentation for HIV/AIDS when they return to Tajikistan (Bromberg et al., 2020).

Similarly, Afghan migrants coming to Tajikistan have only limited access to health services, although they are entitled to use primary care facilities. Activities to eliminate malaria in the country have focused on cross-border areas where the risk of malaria outbreaks remains high. However, cross-border activities between Badakhshan in Tajikistan and Badakhshan in Afghanistan stopped after the 2021 regime change in Afghanistan when the border was closed.

3

Financing

Chapter summary

- The most important source of health financing in Tajikistan is private out-of-pocket payments (both informal and formal) through direct payments or co-payments for state-run health services.
- While health spending as a percentage of GDP has increased in recent years, Tajikistan's health expenditure per capita remains the lowest in the WHO European Region. The share of public expenditure as a percentage of current health expenditure is also one of the lowest.
- Most public expenditure is still spent on inpatient care and the share of resources devoted to primary care is insufficient to cover needs, although it has been slowly increasing.
- Budget formation is still largely based on inputs (in particular the number of beds and health workers). There is no real mechanism for the strategic purchasing of health services, and no mechanism for pooling funds at the regional or national level (except in a pilot project in Sughd *oblast*).
- Under Decree No. 600, certain health services are intended to be provided free of charge or for fixed fees. A basic benefits package was adopted between 2007 and 2023 but is currently under revision.
- Ongoing challenges for health financing include a fragmented revenue collection model, low levels of public spending, and high levels of out-of-pocket payments.

3.1 Health expenditure

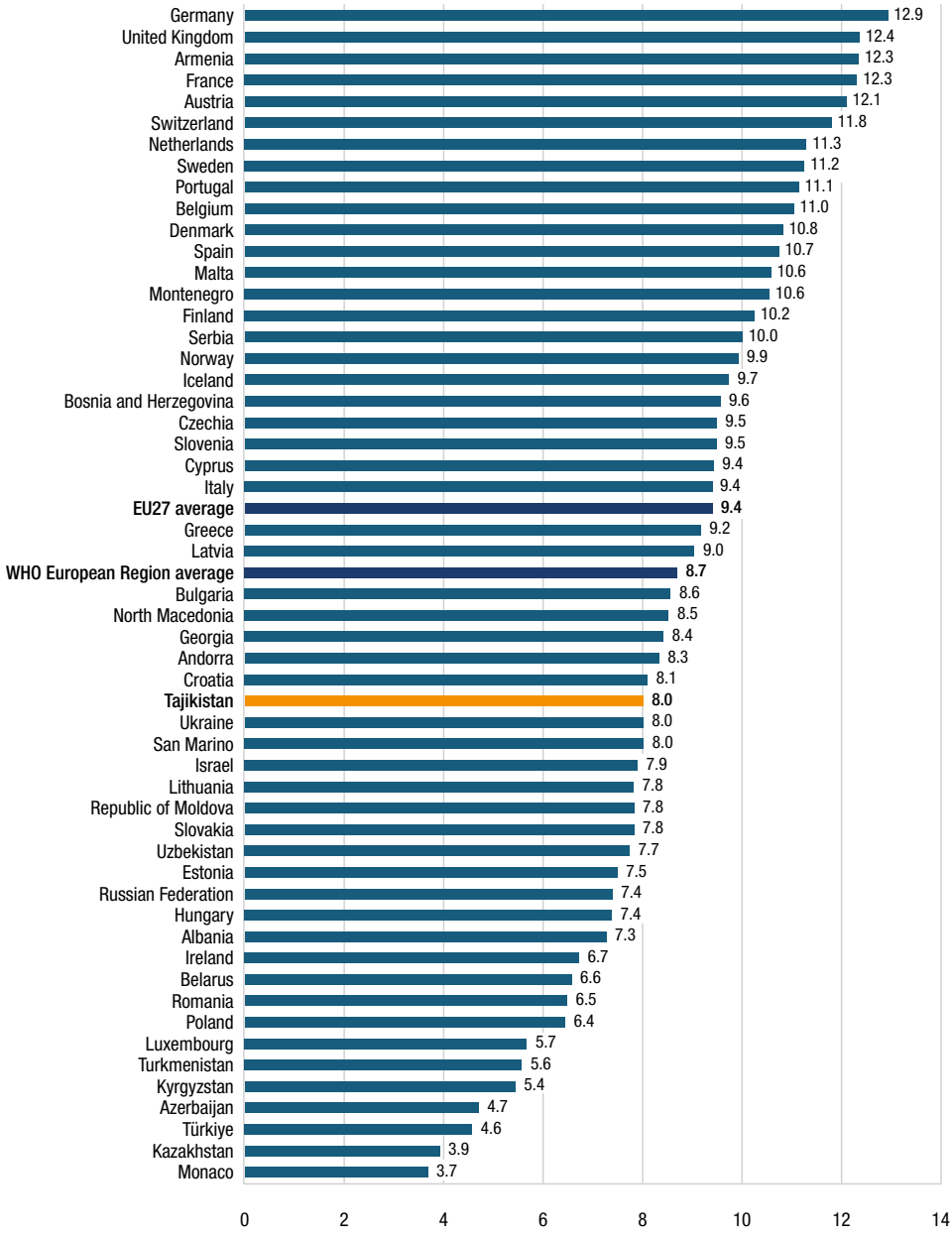
When comparing Tajikistan with other countries in the WHO European Region (Figures 3.1–3.5), the country seems to fare reasonably well in terms of overall health spending as a percentage of GDP, given its socio-economic position as the poorest country in the region. In 2021 health spending amounted to 8.0% of GDP, only slightly lower than the average of the WHO European Region of 8.7% (Figure 3.1). National data reported a slightly lower but still comparable level of 7.0% of GDP. Spending on health as a share of GDP has increased steadily since 2000, also in comparison with other countries in the region (Figure 3.2).

However, this comparatively high rate of current health expenditure is largely due to extremely high levels of OOP payments. Public spending as a share of current health expenditure in Tajikistan is one of the lowest in the WHO European Region. At 24.2% in 2021, it was less than half the regional average of 67.4% in the same year (Figure 3.4). Tajikistan's spending on health in absolute terms, at US$ 351 per capita in 2021 (adjusted for purchasing power), was the second lowest in the WHO European Region, exceeding only Kyrgyzstan (Figure 3.3) where OOP levels are significantly lower. The purchasing power adjusted figure is also affected by the impact of high prices of imported medication: without adjusting for this, the per capita figure in 2021 was just US$ 73.

Beyond this national average, there are substantial variations in per capita health expenditure across the country's regions (World Bank, 2021b). Public expenditure on health as a share (%) of general government expenditure is the second lowest in the WHO European Region, at just 7.0% in 2021, compared to the regional average of 13.9% (Figure 3.5), indicating a lack of prioritization compared to other issues.

Out-of-pocket payments dominate health financing, constituting 63.5% of current health expenditure in 2021 (see Table 3.1). This results in access barriers, poor financial protection, and catastrophic and impoverishing health spending. National data record a similar rate to international data, showing OOP payments representing 60.0% of current health expenditure. Disaggregating health spending by expenditure type shows inpatient spending as the largest source of spending by the government (Table 3.2). However, this includes much of government spending on pharmaceuticals, since spending on inpatient medicines is reported under overall inpatient services. Private OOP spending is dominated by pharmaceuticals and inpatient care.

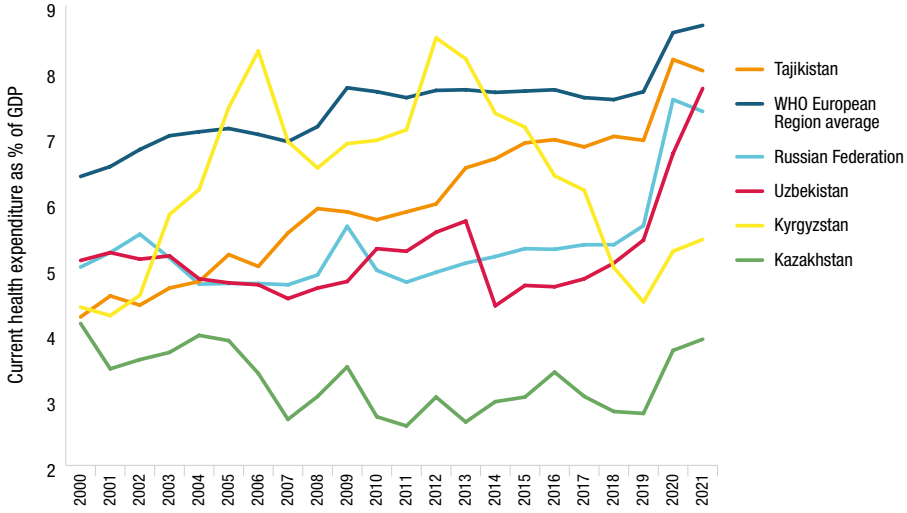
FIGURE 3.1 Current health expenditure as a share (%) of GDP in the WHO European Region, 2021



Note: Note that the Netherlands (Kingdom of) comprises six overseas countries and territories and the European mainland area. As data for this review refers only to the latter, the review refers to it as the Netherlands throughout.

Source: WHO, 2024a.

FIGURE 3.2 Trends in current health expenditure as a share (%) of GDP in Tajikistan and selected countries, 2000–2021



Source: WHO, 2024a.

TABLE 3.1 Trends in health expenditure in Tajikistan, 2000–2021 (selected years)

EXPENDITURE	2000	2005	2010	2015	2020	2021
Current health expenditure (per capita in international US$ (purchasing power parity)	45.0	89.0	134.0	207.0	313.0	351.0
Current health expenditure (as % of GDP)	4.3	5.2	5.7	6.9	8.2	8.0
Public expenditure on health (as % of CHE)	20	19.0	20.6	29.6	26.3	24.2
Public expenditure on health per capita in international US$ (purchasing power parity)	6.0	18.0	43.0	64.0	70.0	73.0
Private expenditure on health (as % of CHE)	79.2	67.7	70.5	62.9	65.3	63.7
Public expenditure on health (as % of general government expenditure)	4.6	4.3	4.5	6.4	7.4	7.0
Government health spending (as % of GDP)	0.9	0.9	1.2	2.0	2.2	1.9
OOP payments (as % of current expenditure on health)	79.1	66.1	70.4	62.6	65.2	63.5

Notes: CHE: current health expenditure; GDP: gross domestic product; OOP: out-of-pocket.
Source: WHO, 2024.

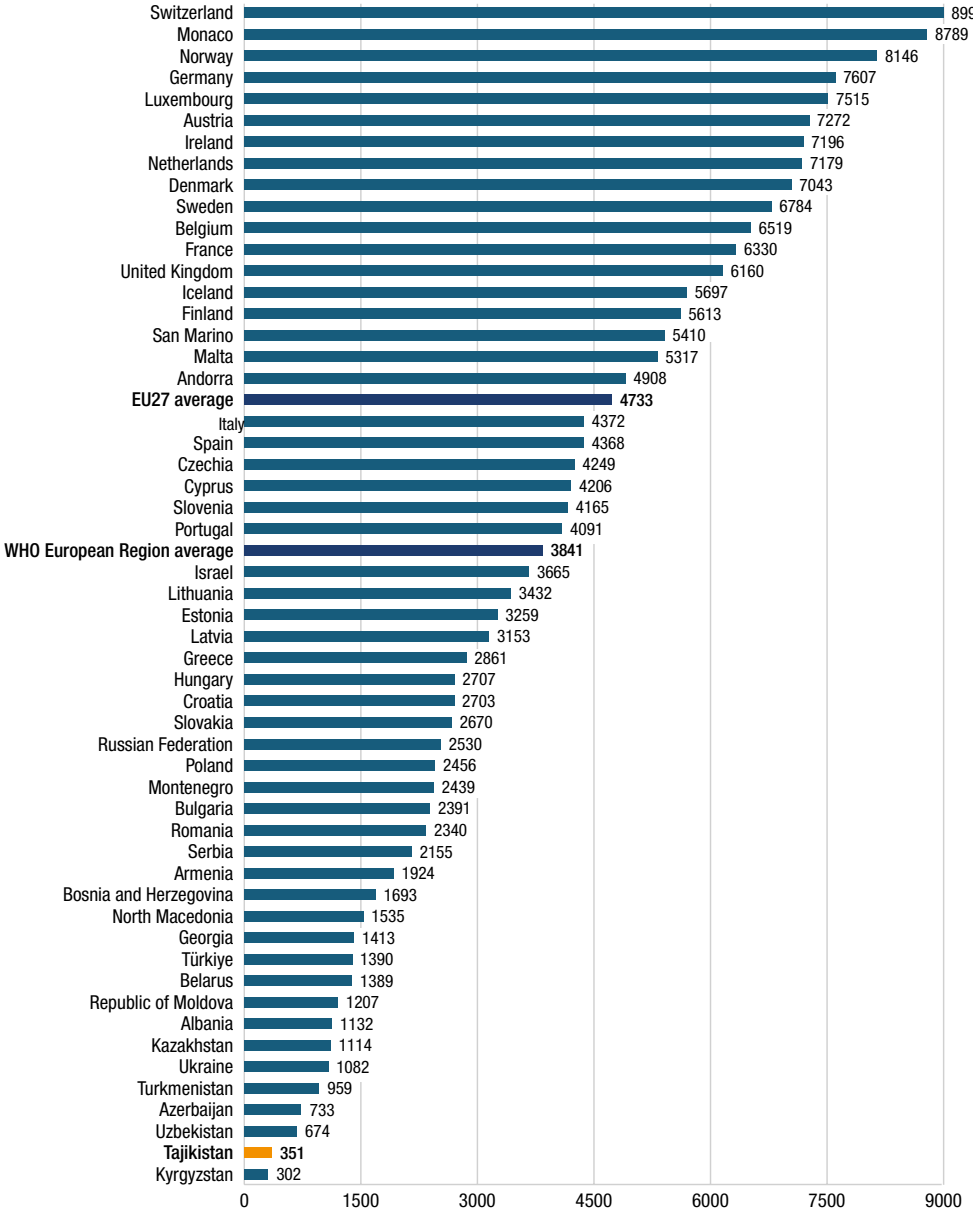
TABLE 3.2 Expenditure on health (as % of current health expenditure) according to function and type of financing, 2019

	INPATIENT CARE	OUTPATIENT CARE	REHABILITATION	LONG-TERM CARE	ANCILLARY SERVICES	PHARMACEUTICALS	PUBLIC HEALTH	ADMINISTRATION	OTHER SERVICES	TOTAL
General government	13.7	9.8	0.5	0.2	1.0	0.0*	2.0	0.9	0.8	28.9
Mandatory health insurance	–	–	–	–	–	–	–	–	–	–
Private out-of-pocket	30.4	15.2	0.0	0.0	1.2	23.9	0.1	0.0	0.0	70.8
Private insurance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other private expenditure	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other (for example, non-profit institutions serving households)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total expenditure	44.3	25.2	0.5	0.2	2.3	23.9	2.1	0.9	0.8	100.0

Notes: * Government expenditure on pharmaceuticals is reported under inpatient care.
Totals may not be exact due to rounding.

Source: National health statistics, NHA data for 2019, Ministry of Health and Social Protection personal communication.

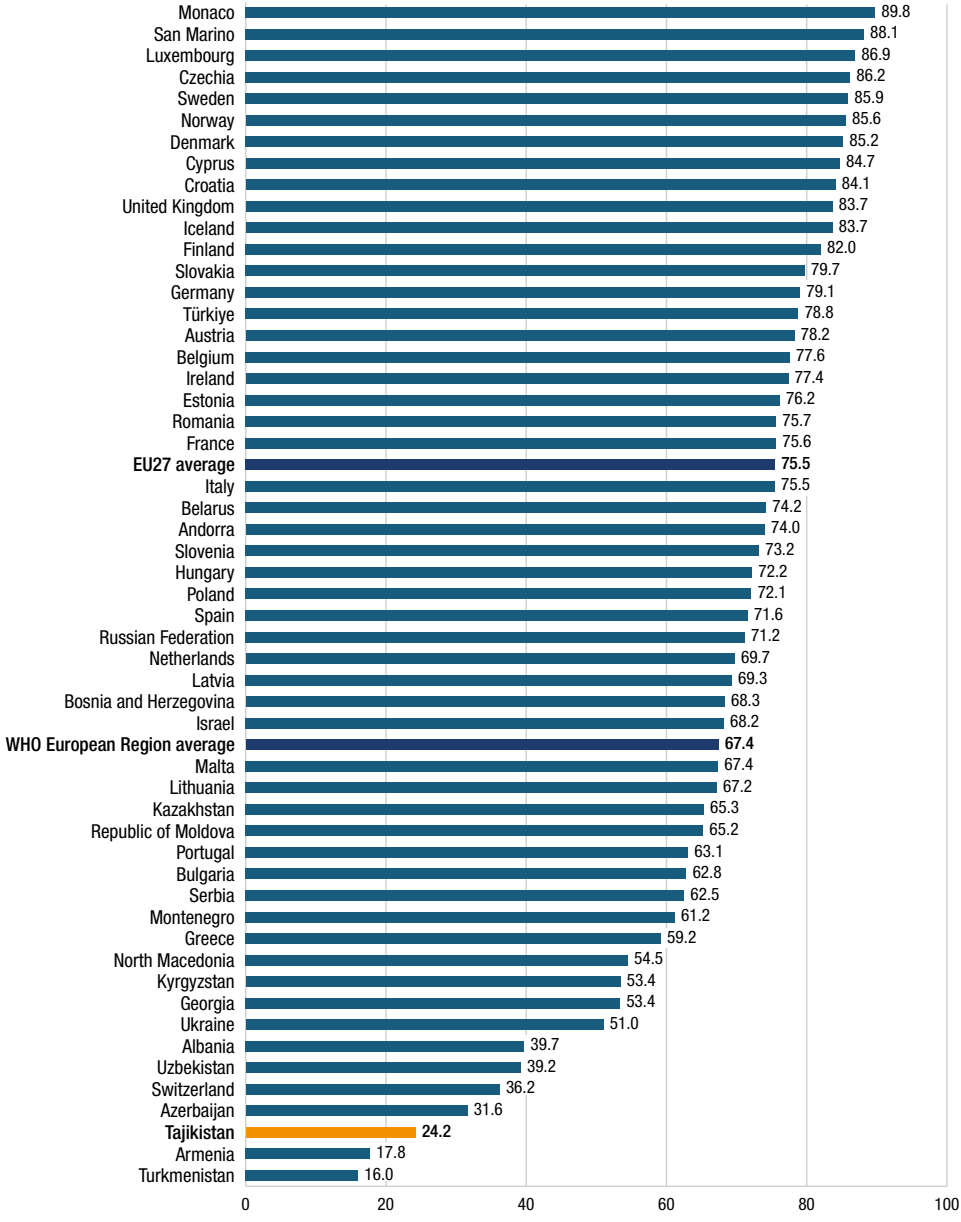
FIGURE 3.3 Current health expenditure in US$ PPP per capita in the WHO European Region, 2021



Note: PPP, purchasing power parity.

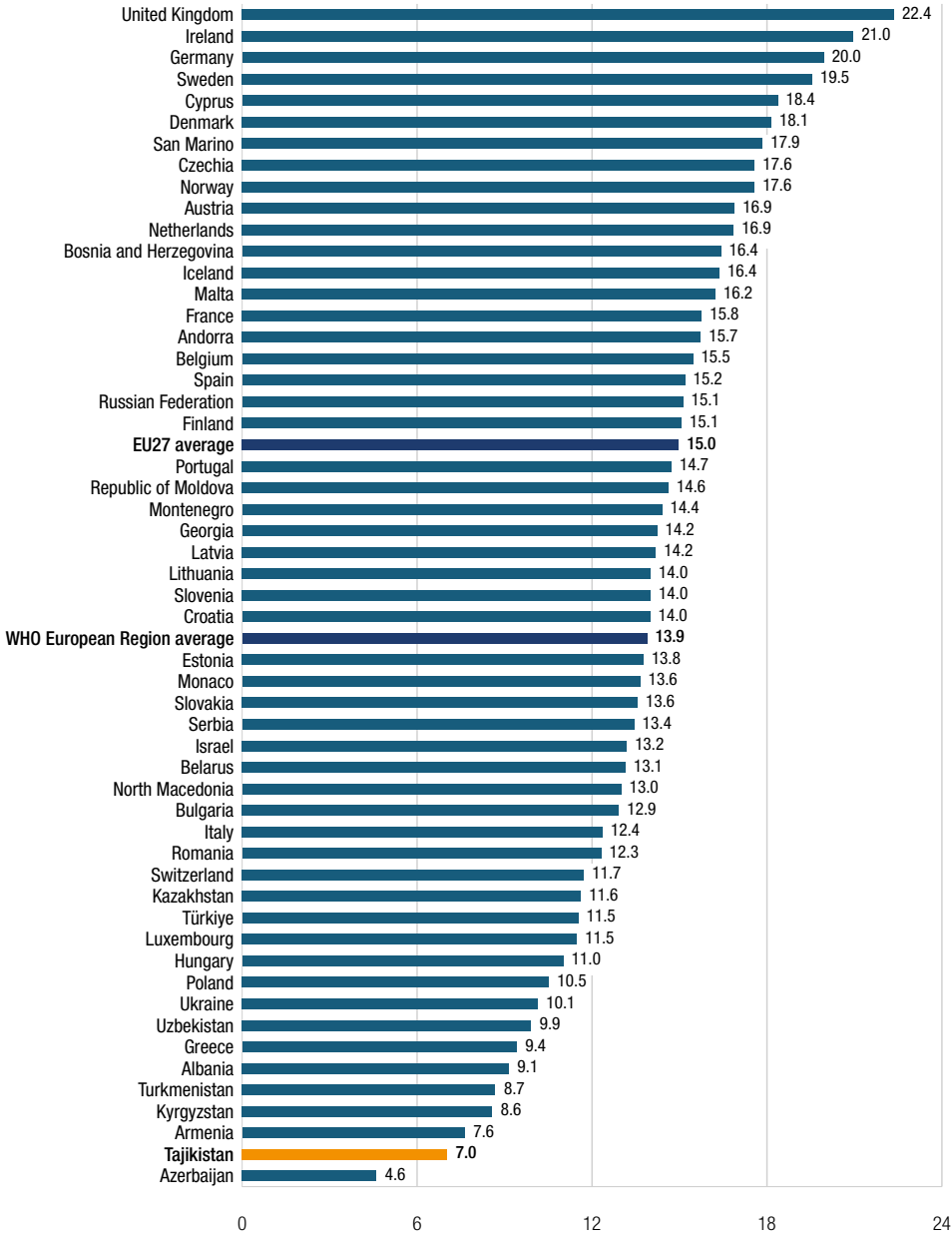
Source: WHO, 2024a.

FIGURE 3.4 Public expenditure on health as a share (%) of current health expenditure in the WHO European Region, 2021



Source: WHO, 2024a.

FIGURE 3.5 Public expenditure on health as a share (%) of general government expenditure in the WHO European Region, 2021



Source: WHO, 2024a.

3.2 Sources of revenue and financial flows

Funding for health services in Tajikistan comes from three main sources: OOP payments, government budgets, and international development aid (see Figure 3.6). The main payers in the system are national and regional authorities, other ministries, and the patients themselves.

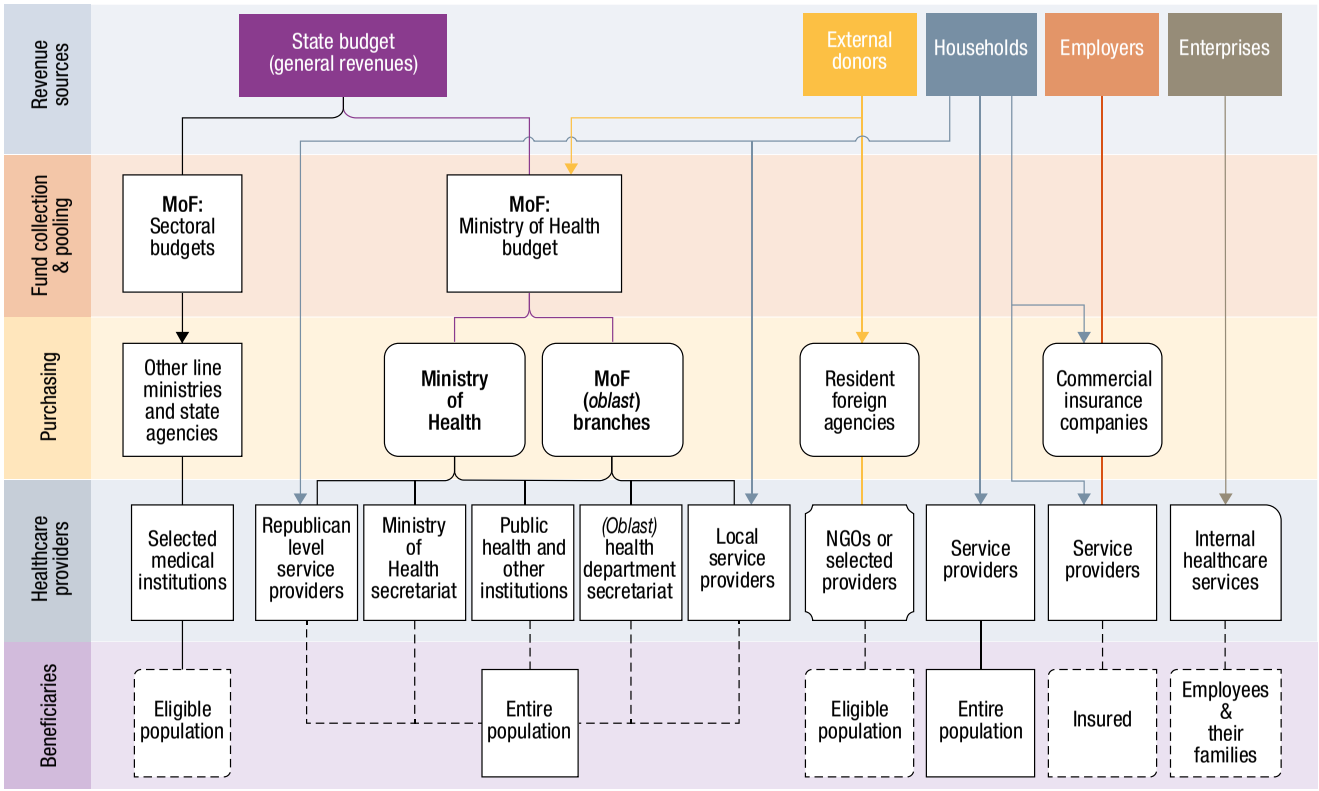
The most important source of health financing is private payments from patients (both official and unofficial), followed by general government spending (mainly from *oblast* or *rayon*/city governments) and external development assistance. Private health insurance is largely non-existent, and the introduction of mandatory social health insurance has been postponed several times. Most public spending on health continues to go towards inpatient care, and the share dedicated to primary care has decreased. Much OOP spending goes towards the cost of medication, especially for households with low incomes (WHO Regional Office for Europe, 2024a).

Government revenues are generated primarily through the collection of national and local taxes. General government taxes include income tax, value-added tax, excise duties, tax on the extraction of natural resources (such as aluminium), road taxes, and a tax on sales of cotton fibre. Local taxes are collected by governments at the *oblast* and city levels, and include taxes on vehicles and real estate.

The public budgeting process consists of negotiations between the Ministry of Finance and a large number of national and subnational budget administrators. National funds for health are initially allocated by the Ministry of Finance to the Ministry for Health and Social Protection. Funds are then disbursed to national-level providers or networks, medical educational institutions and research institutes, and *oblast* and city/*rayon* authorities that in turn allocate funds to subnational authorities, such as *jamoats*, or other service providers (see Figure 3.6).

The Ministry of Finance allocates central budgetary resources directly to the three regional administrations. Their budgetary allocation is based on historical budgets and political priorities. The *oblasts* vary in terms of what proportion of their budget comes from central revenue. *Oblast* administrations can independently decide whether to increase funds for health care from their own resources, and they also spend different amounts based on their inputs (health staffing and facilities) which tend to be higher in wealthier *oblasts*. As a result there are notable inequities in per capita spending between *oblasts*, with the poorest *oblasts* having the lowest per capita spending.

FIGURE 3.6 Financial flows



Note: ESA: MoF, Ministry of Finance; NGOs, non-governmental organisations.

Source: National Health Accounts, Ministry of Health and Social Protection personal communication.

Since 2005 several national health financing reforms have attempted to improve the availability and allocation of funds for health. Attention was initially focused on diversifying funding sources, which included introducing official co-payments, defining a guaranteed package of health services to align commitments to free health services with available resources, and phasing in capitation- and activity-based health budgeting. Projects connected to per capita financing of primary care are being implemented in pilot *rayons*, but as of August 2024 nationwide implementation had not yet been achieved. Another weakness in the current revenue collection model is that it does not allow funds to be formally pooled at the regional or national level, beyond some degree of redistribution between *oblast* allocations (per capita allocations) and district budgeting (input-based calculations) (see Section 3.3.3).

A 2023 public financial management assessment of the health sector in Tajikistan found that about 80% of health care in Tajikistan is delivered by local authorities, of which 54.4% (37 out of 68 districts) strongly depend on intergovernmental fiscal transfers to fund the work (WHO, in press). Their autonomous financial decision-making powers are limited to issues such as tax regulation.

3.3 Overview of the statutory financing system

3.3.1 *Coverage*

BREADTH: WHO IS COVERED?

Almost the entire population of Tajikistan is entitled to publicly provided health services. However, a constitutional amendment removing the right to free health services was approved by a national referendum in June 2003, allowing the government to introduce formal co-payments for all state-run health services. Foreign citizens receiving political asylum and citizens from countries with an intergovernmental agreement with Tajikistan are also covered.

Until recently, public coverage of health services was provided through two approaches: a basic benefits package in pilot *rayons* and the government-funded Decree No. 600 in the rest of the country. Decree No. 600 is part of the government's efforts to address the underfunding of health services and

formalize informal payments. It sets out official prices for health services, and official rates for the co-payments which most of the population must provide in order to receive publicly provided health services. A few population groups are exempt from the co-payments, although in practice eligibility is not well understood by either patients or providers.

To strengthen service access and improve financial protection, a basic benefits package (also known as the guaranteed benefit package) has been in development for the past two decades. When implemented it too required co-payments for many health services, but the number of population groups eligible for free services was wider than those under Decree No, 600, and a wider breadth of health services were provided for free or at lower co-payment rates.

The basic benefits package was first introduced in 2005, but then abandoned in the same year. An updated basic benefits package was launched in four pilot districts in 2007, and by 2022 this had been expanded to 31 of the country's 65 *rayons*. However Decree No. 252 (dated 1 May 2020, "On the approval of the basic package of benefits in pilot districts for 2020–2022") ended in May 2023. The government instructed the Ministry of Health and Social Protection to develop a new basic benefits package. Until this new basic benefits package is finalized and approved, the pilot districts which the former package covered have joined the rest of the country in receiving health services under Decree No. 600 (WHO, 2024c).

Within the basic benefits package, specified social groups and patients with certain diseases were officially exempted from co-payments. The main exemption categories were:

- infants under 1 year and people over 80 years;
- low-income individuals and those who are officially unemployed;
- people living in care homes or orphanages;
- people living with certain disabilities;
- people with specified clinical conditions.

In 2008 the Ministry of Health and Social Protection introduced a similar policy for those *rayons* not covered by the basic benefits package: Decree No. 600. This decree determines which health services in public facilities are provided free of charge and which require patient co-payments. Under Decree No. 600 similar groups are also exempt from co-payments for certain state health services or pharmaceuticals (Table 3.3).

TABLE 3.3 List of beneficiary categories entitled to free health services and pharmaceuticals under Decree No. 600

GROUP 1: SOCIAL STATUS	GROUP 2: DISEASE CATEGORY
• Military members from the following groups: - veterans involved in the Great Patriotic War or military operations in foreign states; - heroes of the Republic of Tajikistan, Soviet Union, persons awarded three classes of the Order of Glory; - heroes of Socialist Labour; - all soldiers – foreign service, veterans of military actions in the territory of other states; - those retired on honourable or special merit; - people living with a disability as a result of injury during active military service; - those living with a disability from childhood; - group I and II diseases resulting from occupational injuries, occupational diseases or general diseases. • Children from the following groups: - orphans living in state orphan asylums; - children living in social care with adopted families, in boarding homes or other hostels for children; - any child left without parental guardians; - all children aged under 1 year; - disabled children aged under 18 years. • People living with a disability due to occupational injury or a health condition; • Pensioners aged 80 and above; • Low-income families and single citizens; • Citizens living with older people or in boarding homes/hostels; • Unemployed citizens (officially registered by the employment authorities); • Victims of human trafficking and victims of domestic violence; • People living with a disability; • Foreign refugees and asylum seekers who are officially staying in the territory of Tajikistan; • Citizens suffering as a consequence of the accident at the Chernobyl Nuclear Power Station and their family members left without guardianship.	• Patients who have suffered a myocardial infarction within the past fortnight; • Patients with terminal stage cancer; • Children with acute respiratory and diarrhoeal diseases aged under 5 years*; • Patients with any of the following conditions: - AIDS - diabetes (type 1) - diphtheria - haemophilia - rabies - leprosy - tuberculosis**.

Notes: *Within the framework of the Integrated Management of Childhood Disease Programme.
** Within the framework of the DOTS (directly observed treatment, short-course) programme.

Source: Authors' compilation.

According to national data for 2021, 52% of hospital patients in the *rayons* covered by the basic benefits package, and 60% of outpatients for specialized services, were officially exempt from co-payments. In the remaining *rayons* of the country, within the framework of Decree No. 600 about 28% of patients were nominally exempted from co-payments in 2019, according to Ministry of Health and Social Protection data. However, for both programmes it was difficult to ascertain exact numbers, as some patients fell into several exemption categories (such as having a certain clinical condition and being on a low income), so that the real number of people benefiting from exemptions was somewhat lower than indicated in these estimates. Overall, the exemption categories were considered to be too broad and needed to be targeted more specifically towards those in greatest need, such as lower-income groups and those with the heaviest burden of disease. Benefits coverage and eligibility should also be easy for beneficiaries to understand. The new basic benefits package is expected to consider these elements in its design.

SCOPE: WHAT IS COVERED?

Currently for all *rayons*, Decree No. 600 determines which health services in public facilities are provided free of charge and which require patient co-payments. Notably, outpatient prescription medicines are not usually covered and must be paid for out of pocket, except for particular groups that qualify for reduced rates (see Section 3.4 and Table 3.4). It was originally envisaged that Decree No. 600 would be applied to all types of health services, but its scope was then confined to laboratory, diagnostic, dental and high technology services. By 2010 the decree was being implemented nationwide for these types of services. In practice, however, there is still significant variation in service costs (see Section 3.4), and informal payments on top of official charges continue to be a challenge.

Under the basic benefits package (2007–2023), there was a similar division between services provided free of charge and those which required co-payments. The package was intended to provide a slightly broader range of free services for populations in pilot *rayons*. However, some of these were only free under specific conditions: for example, ambulance services cover the entire population but were only provided for free if the conditions were life-threatening, or connected to pregnancy or child delivery complications.

DEPTH: HOW MUCH OF THE BENEFIT COST IS COVERED?

Private patient payments were introduced in the second half of the 1990s in some state-run health care facilities – known as "self-supporting centres" – which were allowed to charge for services. A constitutional amendment removing the right to free health care was approved by a national referendum in June 2003, allowing the government to introduce co-payments for state-run health services of their choosing. A co-payment rate for state-run health services was set nationally in the early 2000s, and ranged from 50% to 80% of service costs. This has remained the primary guide for co-payments under Decree No. 600 and the pilot *rayons* previously covered by the basic benefits package (2007–2023). However, the list has not been consistently updated or adjusted for inflation over the years, meaning that 50–80% is a general bracket rather than linked to the specific unit costs of items which may have changed substantially over the years.

Under the 2007–2023 basic benefits package, some state-guaranteed essential health services were provided for free, and other state-run health services required co-payments. A primary goal of the basic benefits package was to reduce informal payments by establishing a predictable and transparent system of patient rights and obligations and by incorporating them into the formal health financing system. In the *rayons* covered by the programme, receipts were provided for co-payments. However, a lack of clarity over which services were covered and the prevalence of informal payments undermined the coverage that this was intended to provide. Initial evaluations found a reduction in under-the-table payments and increased formal salaries of physicians, but overall OOP costs only decreased slightly during the early years (Bobokhojaeva et al., 2009). Despite efforts to provide some services for free and to set standard co-payment rates for others, rates of informal payments have remained high. In 2016, the joint World Bank/European Bank for Reconstruction and Development (EBRD) Living in Transition Survey (LITS) found that almost one in two Tajik households that had used publicly provided health care over the previous 12 months reported making informal payments or gifts to providers – more than double the rate in neighbouring countries (World Bank, 2021b). Improving the depth of coverage remains a priority, although without additional public investment this may prove hard to achieve. Box 3.1 outlines the key gaps in coverage.

BOX 3.1 What are the key gaps in coverage?

In Tajikistan, low overall levels of public funding for health and a limited depth of public coverage result in high levels of OOP payments, which constitute a major barrier to health care access and equity. Outpatient medicines are the most likely health service to lead to catastrophic health spending (WHO Regional Office for Europe, 2024a). Population groups most at risk of financial hardship are lower-income households, older people and unemployed people (WHO Regional Office for Europe, 2024c).

Some groups, such as migrants, are ineligible for most state-provided basic health services. There are also gender inequities. According to the 2017 Demographic and Health Survey, the chief reason for women to forgo needed care was lack of finances: 58% of women in the bottom wealth quintile cited affordability as a major obstacle to accessing needed health services (World Bank, 2021b). Under the basic benefits package (2007-–2023) specific social groups and patients with certain diseases were nominally exempt from co-payments. However, the practice of informal payments reportedly eroded this protection mechanism, and there were also broader issues around the lack of coverage or availability of outpatient drugs.

In terms of scope, the breadth of diseases covered does not necessarily reflect the burden of individual diseases. For some conditions there may be formal coverage rather than effective coverage, defined as the share of the population in need that receives care of appropriate quality. For maternal and child health, for example, almost all women receive some form of skilled birth attendance, but just under half receive delivery and postnatal care of appropriate quality (World Bank, 2021b). In addition, a number of cost-effective preventive services are not covered within the package, such as diabetes screening or other noncommunicable disease (NCD) prevention programmes.

3.3.2 *Collection*

GENERAL GOVERNMENT BUDGET

Within government funding for health, local budgets provide the majority of funding. The public finance structure consists of the republican (national) budget, budgets of approximately 70 local governments (at the *oblast* and city/*rayon* level) and state-targeted funds or trusts (including the Social

Protection Fund, the Reserve Fund of the President, the Stabilization Fund for Economic Development, and the Road Fund).

Funding primarily comes from national and subnational taxes. Taxes are collected by the State Tax Committee and are managed by the Ministry of Finance. The allocation of funds is decided by the Ministry of Finance and approved annually via the law on the state budget. Around 75% of overall state revenue is generated locally (mainly from income taxes collected by the State Tax Committee). The remaining 25% comes from a variety of sources. Most local revenue is redistributed back to local authorities, who receive most of the personal income tax collected from their populations, plus 85% of land taxes.

Funds from taxes on tobacco and alcohol are accumulated on the revenue part of the general state budget and there is no targeted tax for health. There is currently no tax on sugar-sweetened beverages. In 2022, tobacco tax was 42.3% (27.09% excise tax and 15.25% VAT) of the price of a pack of 20 cigarettes. The average price for such a pack was US$ 3.63. Excise tax on alcohol was US$ 2.67 (€2.50) per litre of pure alcohol and the average price of 1 litre of alcohol in 2022 was US$ 3.50–5.30.

Mandatory health insurance in Tajikistan has been under consideration for some time. Early steps towards introducing mandatory health insurance were taken on 5 June 2008, when the Parliament adopted the law "On health care insurance in the Republic of Tajikistan". The law envisaged the introduction of mandatory health insurance in 2010. However, the start date was subsequently postponed to 2014, then to 2017, then to 2021, and most recently to 2025. It is not clear whether a system based on individual contributions (such as payroll deductions or payment to private providers) will ultimately be feasible. Alternative models could include the use of state health insurance funded from pooled tax revenue, with centralized strategic purchasing of health services based on need.

Box 3.2 considers whether health financing in Tajikistan is currently equitable.

TAXES, CONTRIBUTIONS OR PREMIUMS POOLED BY A SEPARATE AGENCY

Taxes are collected only by the State Tax Committee (see above). There are no significant contributions or premiums collected through other routes.

BOX 3.2 Is health financing equitable?

The health budget in Tajikistan is mainly provided through direct and indirect taxes. Direct taxes, such as income and corporate profits, are generally designed to be progressive, with lower income households paying either no or lower rates of income tax. Indirect taxes tend to be somewhat regressive except where exemptions exist, such as for specific food items.

In terms of health spending, a consistently high level of OOP spending undermines the equity and fairness of the Tajik health system. Out-of-pocket payments are a regressive form of health financing in which poorer people may forego health services due to cost and where health service utilization may lead to catastrophic and impoverishing health spending.

There are some elements of progressivity, as formal patient fees to public facilities are higher for people with higher incomes (due to lower co-payments for those on lower incomes) and data from Living Standards Surveys indicate that the richest quintile spends most on OOP payments for health (WHO Regional Office for Europe, 2024a). Yet public spending for outpatient and inpatient care is generally regressive, benefiting the rich more than the poor who tend to have greater health care needs.

The current financing model also reinforces inequities between regions. *Oblast* administrations can choose whether to top up the health budget they receive from the national government from their own funds. As a result, there are large regional inequities, with up to 70% higher health spending per capita in Dushanbe than in Khatlon *oblast* and the Districts of Republican Subordination (DRS), the two poorest regions in the country (World Bank, 2021b). This is partly related to variations in staffing levels and facilities between *oblasts*, which affect spending under an input-based system. Consequently, public per capita health expenditure varies across *oblasts* and *rayons* and is not related to social or health care needs, to the disadvantage of poor and rural areas (Khodjamurodov et al., 2016).

3.3.3 *Pooling and allocation of funds*

At present, the process of health budget formation in Tajikistan is based largely on inputs (in particular, the number of beds and health workers) rather than outputs (for example, per capita financing for primary health care or case-based payments for inpatient or specialized health services). This perpetuates incentives for overcapacity and emphasizes structure over content and quality of care.

Some variation exists between national and subnational budget formation. At the national level, funding is allocated on a per capita basis to *oblasts*. However, this capitation appears to be used primarily as a norm for budgetary allocation, and does not always translate into actual budgeting at subnational levels.

In line with an input-based budgeting mechanism, health facilities receive their public funding prospectively. This kind of funding allocation is based on stipulated input norms for each facility type: for example, a general hospital would receive one physician salary per 25 curative care beds (Neelsen et al., 2021). Health care managers have little discretion in how to distribute the budgets they receive, as funding cannot usually be moved between line items. Across *oblasts* and cities/*rayons*, there is significant inequity in terms of per capita public spending on health.

The Ministry of Health and Social Protection has long held the view that pooling funds, at least at the *oblast* level, is a prerequisite for health financing reform and essential for improving equity and financial risk protection. Within the National Health Strategy for 2021–2030, the government recognizes that the existing revenue collection model does not allow the pooling of funds at regional or national level, and that this hinders financial efficiency. Box 3.3 considers whether resources are currently put where they are most effective.

Measures to address the existing fragmentation of funding are reflected in the current national health strategy, which envisages a pooling of funds, first at the regional level, and later at the national level. Within the framework of WHO technical assistance in the implementation of health financing reform in Sughd *oblast*, a concept note has been developed that identifies the main activities for the pooling of funds at the *oblast* level for a 5 year perspective (2021–2025). In terms of external funding, the government has expressed its interest in creating a comprehensive pool of financial resources from international donors to support the implementation of the national health strategy (Ministry of Health and Social Protection, 2021b).

BOX 3.3 Are resources put where they are most effective?

Historically, Tajikistan's planning system has not favoured effective allocation. Annual budgets for each facility are drawn up based on norms such as staff and beds and – in large part – their historical budgets, divided into a few line items. The approach prioritizes health system inputs over population health needs or outcomes, reducing incentives for focusing on service efficiency. When combined with low levels of public funding for health, it also means that health facilities tend to receive far less than their running costs, further impacting service availability and quality.

A mechanism has been introduced at the national level that allows the redistribution of health budgets using a geographical allocation formula. The intention is for this to improve the efficiency of national resource allocation between different regions, moving to an allocative system for primary health care based on population health needs. However, it currently lacks nuance for any other adjustment factors such as gender, age or levels of service usage. It also does not solve the far larger issue of insufficient public funding for health services, or the absence of pooling to enable the strategic purchasing of key services.

Improving the efficient allocation of funds is highlighted as a priority area of work in the National Health Strategy for 2021–2030. Some work has begun looking into alternative models for funding allocation, such as per capita financing, but agreements on nationwide implementation for these have not yet been adopted.

3.3.4 *Purchasing and purchaser–provider relations*

At present, there is no national mechanism for procuring health services in Tajikistan's health system. Most health facilities are government-owned, while the "purchasers" of health services are patients, the government itself, and external donors. For some time health financing reforms have envisaged the establishment of a clear purchasing role for the Ministry of Health and Social Protection, led by a purchasing department. These plans have so far not come to fruition at the national level, although pooling of funds and establishing a single purchasing system were initiated in Sughd *oblast* for 2019–2022, with a purchasing unit established in the *oblast's* Department of Health. This has not yet been expanded, but it may be used as a model for scaling up nationally in the future.

The budgetary process and relations between levels of government are set out in the 1994 law "On local government" and the 1997 law "On budget organization and budget process". The health care budget is divided between the central (republican) level and local authorities at *oblast* and *rayon*/city level. The Ministry of Finance allocates the health budget based on a proposal from the Ministry of Health and Social Protection. The Ministry of Health and Social Protection is allocated the republican budget, and the *hukumats* (executive bodies) of *oblasts*, cities and *rayons* are allocated the local budgets. The budget of the Ministry of Health and Social Protection is for republican health care facilities, national health programmes and capital investment; the health budgets of local authorities are for health care facilities of *oblasts*, cities and *rayons* and for health development activities at the local level.

The budgets of health facilities have traditionally been determined based on past expenditures and inputs. This process of health budget formation, and the resource allocation and provider payment methods, pose serious obstacles to improving the performance of the Tajik health system. However, a new population-based budget formation has been piloted in primary care since 2013 in an effort to improve the equity and efficiency of public expenditure on health (see Section 3.7).

Health care providers at the levels of primary and secondary care are primarily funded through *oblast* or *rayon*/city budgets, according to norms established on the basis of inputs such as number of beds or staff. Budgets are set for each of the administrative units (republic, *oblasts*, cities/*rayons* and *jamoats*), while the Social Protection Fund and the Road Fund run their own budgets. Local authorities have their own limited sources of revenue but receive substantial earmarked transfers from the republican budget. The national Parliament approves the annual budget for the country, while the representative councils at the regional levels approve their respective budget plans.

Salaries, utility bills and several other expenses are paid by the financial department of each administration at the *oblast*, city/*rayon* or *jamoat* level. Chief physicians (*sartabibs*) of medical institutions and *rayon* primary health care managers have little financial authority as purchasers, since budgets are tied to line items for different categories of expenditure and managers cannot allocate funds independently. Managers must submit a form to the administration's finance office. If there are enough funds in the budget line, the request is approved and the funds are sent directly to the provider.

3.4 Out-of-pocket payments

The largest proportion of health revenue comes directly from health care users as formal and informal OOP payments. The basic benefits package (in place in pilot *rayons* in 2007–2023) aimed to formalize informal payments through official co-payments, and to create a predictable and transparent system of patient rights and obligations. This goal was not fully achieved. Informal payments continued to be a larger source of income for health care providers than formal payments, with the largest share of OOP expenditure – almost 80% in 2018 – being spent on pharmaceuticals (World Bank, 2021b).

Since the end of the basic benefits package pilot, patients in all *rayons* are now charged for certain services provided publicly according to a price list under Decree No. 600, developed by health care institutions and approved by the Ministry of Health and Social Protection and the State Antimonopoly Committee. The list sets out standardized charges for health services from providers, as well as the level of co-payment expected from the patient. However, in practice, patient knowledge of benefits and official charges is limited and informal payments are common (see Section 3.4.3). There is also a small number of private health care providers that operate entirely and officially on a fee-for-service basis.

3.4.1 *Cost sharing (user charges)*

As part of the basic benefits package introduced in 2007, eight co-payment categories were created in the pilot *rayons* covered by the programme. For each category, the average amount a patient was supposed to contribute was set significantly lower than that reported for under-the-table payments for the same health care intervention. The cost-sharing conditions of the basic benefits package were revised a number of times (Ministry of Health and Social Protection, 2013a). This included revisions in August 2008 when the number of co-payment categories was increased to 10; a subsequent joint decree of the Ministry of Health and Social Protection and the Ministry of Finance introduced 12 categories in 2009. In 2007 a co-payment differential was also introduced which stipulated a co-payment of 30% for patients referred from the primary care level, and 70% for self-admission without any referral. This differential co-payment was intended to strengthen the

role of primary care and to direct the flow of patients to primary care units rather than hospitals.

Decree No. 600 applies a similar system of cost-sharing via co-payments for health services, and there is also a differential co-payment for certain services accessed with or without a referral, including outpatient consultations with laboratory tests or diagnostics, and planned hospital services (see Table 3.4). Pharmaceuticals are mostly paid for out of pocket, except for specific groups of people and clinical conditions. This includes patients with terminal stage cancer, tuberculosis, HIV/AIDS, leprosy, acute myocardial infarction (for the first 2 weeks in hospital), haemophilia, diphtheria or insulin-dependent diabetes. It also includes specific population groups, such as veterans of the Second World War, workers with disabilities as a result of the Chernobyl nuclear disaster, patients with disabilities, low-income families and patients aged 80 years or more (see Table 3.3 for full details). Under Decree No. 600, people in these groups are eligible to receive outpatient medication for free, when provided at health care facilities. However, these groups can only access outpatient medicines listed on the Essential Drug List, and only up to a maximum amount of TJS 128 (€12) per year. Since there is currently no price regulation for pharmaceuticals in Tajikistan, this is likely to significantly affect medication affordability for many.

3.4.2 *Direct payments*

Under Decree No. 600, certain services are not covered at all by the state, and many others require co-payments. As a result, patients are regularly required to cover the cost of health goods and services through formal direct payments.

3.4.3 *Informal payments*

Informal, under-the-table payments are very common in Tajikistan and exceed formal payments. According to the 2016 Living in Transition Survey, 47% of households made informal payments when using public providers over the previous 12 months (a decline from 55% in 2010), with a higher share in rural than in urban areas (Neelsen et al., 2021). Among OOP payments to health care providers under the basic benefits package and

TABLE 3.4 Official user charges for health services under Decree No. 600 in 2023

HEALTH SERVICE	TYPE OF USER CHARGE IN PLACE	EXEMPTIONS AND/OR REDUCED RATES	CAP ON OOP SPENDING	OTHER PROTECTION MECHANISMS
Primary care	NA	NA	NA	NA
Outpatient specialist visit	**Percentage co-payments** Under Decree No. 600: 80% of the cost of the visit with referral from a primary care doctor and full cost without referral	People who are part of groups 1 and 2 (see Table 3.3)	No	No
Outpatient prescription drugs	People pay the full cost out of pocket	People who are part of groups 1 and 2 can access outpatient medicines on the Essential Drug List once a year, not exceeding TJS 128 (€12). People with chronic conditions (e.g. diabetes or asthma) get outpatient medicines through a national vertical programme, which is funded partly by the state budget but mainly by international development partners.	No	No
Inpatient stay	**Percentage co-payments** Under Decree No. 600: 50% of the average cost of the treated diseases with a referral from a primary care doctor. Without a referral patients pay the full cost. The cost includes any pharmaceuticals administered during inpatient stays. **Extra billing** If actual expenses for inpatient care exceed more than twice the average cost of the treatment for the treated case, the treatment control commission of the health care facility has a right to demand payment of the additional costs.	People who are part of groups 1 and 2, if referred by a primary care doctor	No	No

HEALTH SERVICE	TYPE OF USER CHARGE IN PLACE	EXEMPTIONS AND/OR REDUCED RATES	CAP ON OOP SPENDING	OTHER PROTECTION MECHANISMS
Dental care	People pay the full cost out of pocket	Pregnant women can access prophylactic dental care twice a year. Prophylactic dental care check-ups for children aged 2–7 are also covered. Emergency dental care is provided free of charge to all citizens	No	No
Medical devices	People pay the full cost out of pocket	Under some vertical programmes (e.g. reproductive health, diabetes, TB) some medical devices are provided free of charge (e.g. pregnancy tests and insulin needles).	No	No
Diagnostic tests	**Percentage co-payments** Under Decree No. 600: 80% of the cost of the visit with referral from a primary care doctor and full cost without referral	People who are part of groups 1 and 2 with a referral from a primary care doctor	No	No

Notes: NA, not applicable; OOP, out-of-pocket; TB, tuberculosis.

Source: WHO, 2024c.

Decree No. 600, informal payments and (to a smaller degree) payments to private providers are estimated to have accounted for a higher percentage of payments than formal ones (Neelsen et al., 2021; World Bank, 2021b). Informal payments are made directly as OOP payments or, especially in rural areas, in the form of food products or even by helping with small repairs (Jacobs & Baez Camargo, 2020). To address this issue, a Presidential decree prohibited cash-based payment for publicly financed health care as of August 2023, stipulating instead that payments must be made electronically, using bank cards. Information is not available on how this new requirement has been implemented, or evidence of its impact on reducing informal payments.

3.5 Voluntary health insurance

Voluntary health insurance is currently provided by over 17 private medical companies in Tajikistan. However, its contribution to overall health spending is minimal. Private health insurance accounted for only 0.01% of current health expenditure in 2020 (WHO, 2024a). The National Health Strategy for 2021–2030 states its intention to create enabling conditions for the development of voluntary health insurance over the course of the decade.

3.6 Other financing

3.6.1 *Parallel health systems*

As in other Central Asian countries such as neighbouring Kyrgyzstan (Moldoisaeva et al., 2022) and Uzbekistan (Ahmedov et al., 2014), parallel health systems outside the system of the Ministry of Health and Social Protection continue to exist in Tajikistan. These include the health systems run by the Ministries of Internal Affairs, Defence, Security, Taxation and Transport; the Tajik Air company; Tajik Railway; the Tajik textile industry; and Talco (the Tajik aluminium factory). In 2017 financing from these parallel health systems accounted for 6.6% of total health expenditure, according to the National Health Accounts.

3.6.2 *External sources of funds*

External sources of funds amount to a significant share of current health expenditure, accounting for 8.4% in 2020. This is up from 1.3% in 2019 (WHO, 2024a), although the increase is likely due to increased external assistance as a result of the COVID-19 pandemic. However, this share is still comparatively small when compared to the global low-income country average of 30% (World Bank, 2021b). About 60% of all capital spending on health in 2018 was reportedly funded by external donors (World Bank, 2021b). The main focus of external aid (accounting for 40%) is on infectious disease control (prior to COVID-19 mainly HIV/AIDS and tuberculosis), with 15% being devoted to noncommunicable diseases (Neelsen et al., 2021).

Tajikistan's health sector is supported by a large number of international organizations, including NGOs and bilateral and multilateral agencies. Key actors include the World Bank, the European Union, the Global Fund, the German government (the Federal Ministry for Economic Cooperation and Development, the German Federal Enterprise for International Cooperation [*Gesellschaft für Internationale Zusammenarbeit*], and the German Development Bank [*Kreditanstalt für Wiederaufbau*; KfW]), WHO, the United Kingdom's Foreign, Commonwealth & Development Office, the Swiss Agency for Development and Cooperation, the United States Agency for International Development (USAID), and the Aga Khan Development Network. Other agencies involved are the United Nations Development Programme (UNDP), UNICEF and the United Nations Population Fund (UNFPA). Although there are efforts to improve donor coordination, such as through the Coordination Council for International Cooperation and the Joint Annual Review, a formal sector-wide approach is not in place.

3.6.3 *Other sources of financing*

The construction and maintenance of health care facilities is primarily financed by the state and international development partners. However, some local businesses or entrepreneurs have also contributed to the development and improvement of access to medical services for the population (Table 3.5). According to a Ministry of Health and Social Protection report to the government, 76 medical facilities were built and 10 repaired by local entrepreneurs

TABLE 3.5 Information on the status of construction and repair of health care facilities in 2022

CITY / DISTRICT	PRIMARY HEALTH CARE LEVEL								SECONDARY LEVEL							
	CONSTRUCTION				RENOVATION				CONSTRUCTION				RENOVATION			
	TOTAL	FUNDING SOURCE			TOTAL	FUNDING SOURCE			TOTAL	FUNDING SOURCE			TOTAL	FUNDING SOURCE		
		LOCAL AUTHORITIES	PARTNERS	ENTREPRENEURS		LOCAL AUTHORITIES	PARTNERS	ENTREPRENEURS		LOCAL AUTHORITIES	PARTNERS	ENTREPRENEURS		LOCAL AUTHORITIES	PARTNERS	ENTREPRENEURS
Dushanbe	0	0	0	0	21	21	0	0	0	0	0	0	15	15	0	0
Sughd	17	4	4	9	58	50	6	2	6	5	0	1	40	36	0	4
Khatlon	36	0	1	35	148	148	0	0	6	2	2	2	27	27	0	0
GBAO	7	0	4	3	3	0	3	0	1	1	0	0	1	1	0	0
DRS	41	7	11	23	75	71	0	4	3	0	0	3	16	16	0	0
Total	101	11	20	70	305	290	9	6	16	8	2	6	99	95	0	4

Notes: DRS, Districts of Republican Subordination; GBAO, Gorno-Badakhshan Autonomous *Oblast*.

Source: Authors' compilation.

(mainly individuals) in 2022, from a total of 117 newly built facilities and 404 renovations. All residents of a given *mahalla* (settlement) often take part in voluntary construction and repair work. Other infrastructure improvements that indirectly benefit health care are also supported by local businesses, such as repairs of the streets or roads on which the health care facilities are located.

Heads of local authorities often open new primary or secondary health care institutions, instructing the district health management to take measures to ensure the health facility has highly qualified doctors and nurses, new modern equipment and all the necessary conditions for providing quality medical care to residents of attached rural areas.

3.7 Payment mechanisms

3.7.1 *Paying for health services*

As of 2024, mechanisms for allocating public resources to health care providers continued to be based largely on inputs (in particular the number of beds and health workers) rather than outputs. This has been described by the World Bank as the leading cause of inefficiency in the Tajik health system, resulting in regional inequalities in public funding for health, expenditure being skewed towards hospital and specialist care, and an oversupply of hospital beds (World Bank, 2021b). Furthermore, financial resources for health care providers remain for the most part closely tied to a line item budget system. Exceptions tend to still be at a pilot phase.

Table 3.6 outlines the various provider payment mechanisms used by different health authorities for various services.

PUBLIC HEALTH SERVICES

The financing of public health services is based on staffing and infrastructure. Some public health services, such as for HIV/AIDS, tuberculosis (TB) and immunization, are funded by external donors but, prior to the COVID-19 pandemic, this support had been decreasing. The services of the sanitary and epidemiological service are also financed from service fees and fines for violation of sanitary rules.

TABLE 3.6 Provider payment mechanisms

PAYERS / PROVIDERS	MINISTRY OF HEALTH	OTHER MINISTRIES	REGIONAL AUTHORITY	LOCAL HEALTH AUTHORITY
GPs	Capitation	Salary	Capitation	Capitation
Ambulatory specialists	Capitation	Salary	Capitation	Capitation
Other ambulatory provision	Salary	Salary	Salary	Salary
Acute hospitals	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*
Other	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*
Hospital outpatient	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*
Dentists	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*	Salary/ Fee for service*
Pharmacies	Salary	Salary	Salary	Salary
Public health services	Salary	Salary	Salary	Salary
Social care	Salary	Salary	Salary	Salary

Notes: Capitation is used primarily as a norm for budgetary allocation at the national level in Tajikistan, and does not always translate into budgeting at subnational levels.
*Under Decree No. 600, while some services in state hospitals are provided free of charge for certain groups, most other patients are required to make a co-payment (around 80% of the cost of services) providing that they have a referral from their GP. Without a GP referral, patients are required to cover the full cost.
Source: Authors' compilation.

PRIMARY CARE

Tajikistan is attempting to shift from a system heavily reliant on hospital-based secondary and tertiary care towards greater use of primary care and public health. Yet the proportion of public spending on primary health care as defined by WHO (including general outpatient curative care, dental outpatient curative care, preventive care and health promotion activities, outpatient or home-based long-term health care, 80% of spending on medical goods, and 80% of spending on health system administration and governance) decreased slightly as a share of overall spending on primary health care, from 22.4% in 2016 to 21.7% in 2019 (internationally comparable data are only available for 2016–2019). Private spending made up 77.5% of the overall amount spent on primary health care in 2019 (WHO, 2023).

According to internationally comparable data, the share of public spending on health devoted to primary health care as a percentage of public expenditure on health decreased from 36.8% in 2016 to 35.2% in 2019 (WHO, 2023). National data suggest that the government increased public funding for primary care services, from 31.6% of public spending in 2010 to 40.7% in 2022, although this may include capital expenditure by primary health care facilities and vertical programme centres (Ministry of Health and Social Protection, 2023b). However, the definition of "primary care" may be rather wide, an issue shared by several of Tajikistan's Central Asian neighbours (Rechel et al., 2023). Health financing reforms are also underway to provide a more comprehensive and unified approach to health care financing, by promoting a move away from input-based resource allocations and towards strategic purchasing of primary health care services based on need.

Partial capita-based financing for unsecured line item expenditure in primary care facilities was rolled out across the country in 2010. In 2013, work on introducing full per capita financing at primary care level started in pilot *rayons*, intended to cover all costs of health facilities including secured line items. In 2016, with support from the World Bank, Tajikistan began rolling out the per capita financing of primary care providers in 55 of its 88 city/*rayon* health centres. The policy was operational throughout the country by 2019. It established a minimum primary care funding requirement per person in provider catchment areas. It varies by provider type and is adjusted annually to account for changes in the cost of care and broader macroeconomic conditions. In 2021, the minimum per capita rate amounted to about TJS 67 (€6) for city health centres, and TJS 54 (€5) for *rayon* health centres. The rates are adjusted upwards for primary care providers in Dushanbe (due to offering more specialized services) and for GBAO (because of its challenging geography and low population density).

However, the model still only amounts to partial per capita funding: unlike fully fledged per capita financing, where all funding is centrally pooled and distributed according to a common formula, Tajikistan's policy has no mechanism to standardize per capita funds across providers beyond setting a minimum rate (World Bank, 2021b). The current national health care strategy commits to improving per capita and performance-based financing mechanisms at primary care facilities (Ministry of Health and Social Protection, 2021b).

Performance-based financing mechanisms are seen as a way to improve the coverage and quality of basic health services, especially for women and

children. Since 2013 the Ministry of Health and Social Protection has been implementing the Health Services Improvement Project, with the support of the World Bank, which has piloted the use of performance-based financing at the primary care level. Initial guidelines for implementing the scheme were outlined in a manual approved by the Ministry of Health and Social Protection (Decree No. 177, adopted on 4 April 2014). The scheme was pre-piloted in Spitamen *rayon* in Sughd *oblast* between April and December 2014. Based on the lessons learnt from this pre-pilot, some modifications were made and it was expanded to seven additional *rayons* in Sughd and Khatlon *oblasts* in January 2015. After having been implemented in a total of 16 pilot *rayons*, the project was terminated at the end of 2023. However, it always remained a pilot project rather than a permanent, sustainable purchasing arrangement. The World Bank has now launched the Tajikistan *Millati Solim* (Healthy Nation) project to run from 2023 to 2028, which focusses on improving primary health care, establishing a strategic purchasing system, and ensuring emergency preparedness.

SPECIALIZED AMBULATORY CARE

Specialized outpatient care in *rayon*/city health centres is funded from the general budget of primary care providers, which is based on capitation. However, public funding per capita varies across *rayons* and there are plans to separate specialized outpatient services from primary care and to base public funding on performance.

INPATIENT CARE

The public financing of inpatient care in hospitals is based on inputs (the number of beds, which determines staffing levels, as well as current expenses for utility and other costs). Hospitals are also financed from user fees, under Decree No. 600.

The Ministry of Health and Social Protection and the Ministry of Finance have recognized that a case-based purchasing model is more efficient than the current input-based one. Initially, the plan was to introduce case-based funding for inpatient care in 2015–2018. This was not fully

realized. However, in the framework of the Maternal and Child Health Integrated Project of the Asian Development Bank (2019–2025), the process of implementing case-based financing in the hospitals of the pilot *rayons* of Rasht, Faizobod and Shamsiddin Shohin has begun. In addition, based on the Work Plan of the Interdepartmental Expert Group under the Ministry of Finance, it is planned to implement case-based financing in hospitals of the five cities and *rayons* of Sughd *oblast*.

PHARMACEUTICAL CARE

State financing for certain pharmaceuticals is carried out within the framework of the general funding of health facilities, with the aim of improving access to key medicines. The government also allocates funds for purchasing medicines for vulnerable groups of the population within the framework of existing national and sectoral programmes, such as for TB, HIV/AIDS and diabetes. However, the vast majority of funds for pharmaceuticals comes directly from patients.

Tajikistan has identified five "special disease" programmes: diabetes, cancer, haematology, organ transplantation and treatments for addiction. The medicines used by these programmes, as well as certain primary health care medicines, are selected from both the national Essential Medicines List (last updated in 2022) and the WHO Essential Medicines List, and are procured through centralized and decentralized mechanisms using government funds. However, the management of these medicines is much more complex than those needed by some other programmes such as exocrine pancreatic insufficiency (EPI), HIV/AIDS and TB programmes. This is partly because there is a much wider breadth of individual medicines for these "special diseases", and partly because procurement is not carried out via international partners (such as UNICEF, UNDP, the Global Fund or UNFPA) with their expertise and global market advantages, but must be undertaken by the national government. In addition, the medicine categories for the EPI, HIV/AIDS and TB programmes are part of the WHO Quality Prequalification scheme which makes it relatively easy to identify high-quality manufacturers, but no such mechanism exists for the "special diseases". Additional logistical and data issues – such as quantification, distribution and usage reporting – are also more difficult than for vaccines, HIV/AIDS, TB or family planning.

3.7.2 *Paying health workers*

Almost all health workers are employed in the public sector. Health worker salaries constitute the main expenditure item of the state health budget, amounting to 82% of public spending for health in 2018. In contrast, medical goods accounted for 4.3% and capital expenditure for 3.2%, shares which are much lower than in many other countries (World Bank, 2021b).

Salaries are regulated by the Instruction on the Salaries of Health Workers of the Republic of Tajikistan (No. 10, adopted on 8 July 2009). This law also specifies how basic salaries differ according to the category of physicians and years of work experience (Ministry of Health and Social Protection, 2013b). It remains the basis for regulating salaries although a subsequent government decree, which remains in effect to this day, mandated that there should be no difference between salaries at the *oblast* and *rayon* levels. However, a consequence of the decentralized system of paying health workers is that *oblasts* and *rayons* can top up the basic salaries of health workers through salary bonuses or based on workload (up to a ceiling of 1.95 full time equivalents [FTE]), leading to significant actual wage differentials for the same category of health workers across *oblasts* and *rayons*, depending on local budgetary resources and the priority given to health by individual local authorities.

Despite major formal increases in health worker salaries in recent years, they remain low in absolute terms. Based on data from the Ministry of Health and Social Protection, in 2022 the monthly salary rates of health workers in primary care were around TJS 700 (€63) for lower level staff, TJS 850–1160 (€77–105) for mid-range staff, and TJS 1160–1765 (€105–160) for doctors. Within hospitals, lower level staff received an average of TJS 635 (€58), mid-level staff TJS 750–950 (€68–86) and doctors TJS 1050–1450 (€95–131). As of 1 June 2022, the average national monthly salary in Tajikistan amounted to 1650 somoni (€148) according to the Ministry of Labour, Migration and Employment. Low salaries in the health sector are key contributors to the high prevalence of informal payments and emigration of health workers (Neelsen et al., 2021).

Salaries are considered the most important line item in health budgets, meaning they are protected. As a result, unspent salary funds cannot be reassigned to other spending items such as utilities or medicines. If a normed staff position remains vacant, facilities can use the corresponding budget to increase the workload and pay of existing staff, while any remaining salary funds have to be sent back to the financial authorities (Neelsen et al., 2021).

4

Physical and human resources

Chapter summary

- While there have been some efforts to reduce excess hospital capacity, the number of hospital beds per population is still high considering Tajikistan's young population and limited financial resources.
- Improvements have been made to health care infrastructure, the provision of modern equipment and the use of innovative technologies, but there is still a shortage of fixed assets and of medical equipment.
- The number of doctors and nurses in Tajikistan is lower than in other countries in the region, and there are significant regional disparities in their distribution.
- Nurses play key roles in many primary care facilities, such as health houses and rural health centres, but their professional training does not always reflect this and consequently they are not always adequately skilled or compensated.
- There has been a high rate of migration of medical doctors and specialists in the last 3 years, and the numbers are higher from rural and remote regions.
- Medical education has been a key area of reform in recent years, although family medicine continues to suffer from low prestige.

4.1 Physical resources

4.1.1 *Infrastructure, capital stock and investments*

INFRASTRUCTURE

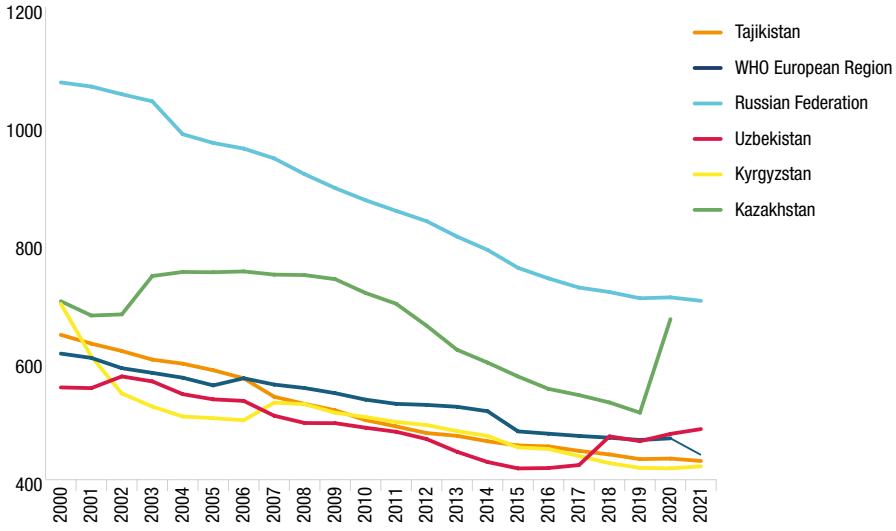
Tajikistan inherited a health system from the Soviet period that was nominally comprehensive but underfinanced, inefficient and expensive. Since independence, the country has struggled to simultaneously improve its health infrastructure while also dispensing with excess capacity. Due to the low level of public investment in the health sector, basic infrastructure and equipment are often missing or in poor condition. Expenditure on capital only accounted for 3.2% of total health expenditure in 2018, which was below the averages for lower middle income countries (6.6%) and low-income countries (3.3%) (Neelsen et al., 2021;World Bank, 2021b).

One of the key challenges facing Tajikistan has been excessive and underutilized hospital infrastructure, partly due to a financing model based on inputs such as the number of hospital beds. In order to mitigate this, Tajikistan has undertaken several stages of rationalizing its hospital network. The ratio of acute hospital beds to population is not overly high compared to other countries (Figure 4.1), but is still relatively high considering Tajikistan's overall young population and limited financial resources. Furthermore, the bed occupancy rate is comparatively low, with on average only two thirds of hospital beds filled, a strong indication of oversupply (World Bank, 2021b). Distribution of health facilities is also uneven, as outlined in Box 4.1.

CURRENT CAPITAL STOCK

Tajikistan has substantially scaled down its extensive hospital infrastructure since independence, but it still struggles with excess hospital capacity. There is a move towards consolidating some of the country's hospitals to improve efficiency with an increased focus on strengthening primary health care (PHC), which is supported by development partners. At the same time, specialized care remains more limited and centralized, with the majority of specialist hospitals based in the capital, Dushanbe. Funds for the renovation of existing buildings have typically been limited, but in recent years there

FIGURE 4.1 Beds in acute hospitals per 100 000 population in Tajikistan and selected countries, 2000–2021



Source: WHO, 2024b.

BOX 4.1 Are health facilities appropriately distributed?

The network of health facilities inherited from the Soviet era was originally designed to maximize access to health services for the whole population, at each administrative level. While health services were nominally available, the range and quality of services was limited.

As in many other countries, the distribution of health facilities is uneven. Larger, specialized institutions cluster around urban centres, especially Dushanbe. In rural areas, health facilities are more limited in scope. Rural hospitals tend to be of significantly lower quality than their urban counterparts, with some lacking even basic utilities and infrastructure such as electricity, water or heating. A 2014–2015 survey reported that in the poorer Khatlon *oblast*, 20% of rural health centres had no functional toilet (World Bank, 2021b). In some cases, they are so poorly resourced that patients bypass them altogether and go directly to central *rayon* hospitals.

Recognizing this, the national hospital rationalization plan for the period 2011–2020 envisaged reducing the number of rural hospitals and replacing them with either rural health centres or *rayon* hospitals – a move intended to improve rural inhabitants' access to higher quality care. This had partial success, but there remains space for further consolidation (see Section 5.4).

has been some investment in new facilities. Between 1990 and 2021, the overall number of medical institutions in Tajikistan increased from 2860 to 4700. Between 2019 and 2021 alone, 1858 health care facilities were created as part of a work plan to honour the thirtieth anniversary of independence. However, the absence of a masterplan to guide their development entailed disproportionate density of centres in some areas. Increased funding has meant that many of these newer institutions have been provided with modern medical equipment, ambulance transport and other higher quality resources compared to older institutions.

As of January 2024, there were 807 private medical institutions in the health care sector (436 legal entities and 371 individuals) and over the past 5 years, over 15 000 surgical interventions have been performed in private medical institutions. According to the Ministry of Health and Social Protection, in January 2024 the private sector employed a total of 5151 health professionals (including 1721 doctors, 1373 nurses and 1056 support staff). The number of private hospital beds was recorded as 2923, representing 5.9% of total hospital beds in the country.

REGULATION OF CAPITAL INVESTMENT

The state is the primary provider of capital funding to publicly run health care facilities. Some funding has been provided by international organizations but only with the state's express consent and oversight. There is also some degree of openness to private investment, but again on condition of state approval.

In 2023, 131 health care institutions were built and put into operation using multiple sources of financing, for a total amount of 169 million somoni (US$ 15.9 million). This included 87 institutions paid for by private investors (Ministry of Health and Social Protection, in press). During the same year 430 medical institutions were renovated, with 287 financed by the state, 52 by private investors, and 91 from donor investment. In addition, some local businesses and entrepreneurs invest in certain kinds of infrastructure that directly or indirectly benefit health (see Section 3.6.3).

INVESTMENT FUNDING

The National Health Strategy for 2021–2030 envisaged the development of an investment plan for the construction, rehabilitation and equipment of primary care facilities (Ministry of Health and Social Protection, 2021b). This may in part be thanks to experiences with donor projects, which have highlighted the potential benefits of investing in and upgrading infrastructure in order to improve the efficiency of health service provision. A project to modernize 12 out of 53 central district hospitals using financial support from the German Development Bank (KfW) demonstrated that centralizing services could help to reduce ongoing expenses. Following the hospitals' repair and reconfiguration, they were able to cover operating costs from the funds they received from the local state budget, which had not previously been possible. Various other donors have provided investment for health infrastructure, either as stand-alone projects or integrated into other initiatives. For example, as part of a major early childhood development project the World Bank has invested in the renovation and construction of primary health care facilities, and the provision of equipment and supplies. Under the *Millati Solim* (Healthy Nation) project, US$ 17.7 million will also be invested by the World Bank between 2023–2028 into the physical and digital infrastructure of PHC facilities to improve the availability and quality of basic amenities and equipment.

The COVID-19 pandemic also led to significant increases in health investment for pandemic preparedness and health service provision. A small amount of these funds was allocated to investments in infrastructure which may be used beyond the pandemic, such as additional intensive care unit beds. A large number of infectious diseases hospitals, and paediatric and adult departments in multidisciplinary hospitals, were modernized.

4.1.2 *Medical equipment*

REGULATION OF MEDICAL DEVICES AND AIDS

The Ministry of Health and Social Protection is responsible for regulating medical devices. Medical equipment is assessed and purchased through the Ministry's procurement department.

EQUIPMENT INFRASTRUCTURE

Historically there have been very limited public funds to purchase new technologies or to maintain and repair existing equipment. A lack of specialized equipment, instruments and facilities continues to hinder primary care, especially in more rural areas. For example, there are 17 computed tomography (CT) scanners in Dushanbe, but only one for the whole of the GBAO region.

The government and international donors have begun to help with this through investments in new equipment and technologies. However, while an increasing amount of medical equipment is being purchased as a capital investment, hospitals and other beneficiary facilities struggle to cover operating costs or repairs. Private clinics play a significant role in offering certain kinds of equipment: of the 77 CT and magnetic resonance imaging (MRI) units available in Tajikistan in 2023, just 29 were owned by the state (18 CT units and 11 MRI units). Table 4.1 lists the number of examinations using diagnostic imaging technologies in 2021.

TABLE 4.1 Number of examinations using diagnostic imaging technologies (MRI units, CT scanners) per 100 000 population

	TAJIKISTAN (2021)	OECD AVERAGE (2022)*
MRI examinations	2350	8460
CT scans	4920	16 270

Note: * These figures are unweighted averages based on available data from the OECD health database.
Source: Ministry of Health and Social Protection personal communication; OECD, 2024 for OECD average.

The Ministry of Health and Social Protection plans to improve the material infrastructure of primary care facilities. This includes introducing more modern diagnostic and treatment methods and innovative technologies (Ministry of Health and Social Protection, 2021b).

4.1.3 *Information technology and e-health*

Digital health and e-health are a priority direction of the National Health Strategy for 2021–2030. However, at present there is a lack of appropriate legislation to support the introduction of health management information systems (HMIS), e-health, digital health care or telemedicine.

A unified HMIS that functions on the basis of DHIS-2 has been implemented nationwide since 2015 with support from the government and the European Union. In theory, this system allows the collection of online information about population health and the performance of hospital facilities, aligned with national indicators. However, a major challenge facing its adoption is that individual hospitals and health centres have been (sporadically) developing their own information systems. This has led to the fragmentation of health information, along with weaker accountability for achieving key outcomes. Another challenge is the lack of national standards for the quality of data collected by the health sector, which at present is inconsistent.

Efforts to collect better quality data need to be balanced with the additional demands they place on health workers. Especially at the level of primary care, staff are already overburdened with excessive requirements for data and reporting. The utility value of the collected data is at times also unclear since they are so far not regularly used to inform decision-making.

Insufficient financing for this area is also an issue. Unifying and standardizing the use of a modernized HMIS requires a detailed assessment of current issues, and a forecast of expenditure. There is also irregular access to health ICT. Some smaller and rural health centres lack electricity, let alone advanced digital technology.

Overall, Tajikistan's health ICT infrastructure is underdeveloped, underfinanced and unevenly distributed. The government is aware of these challenges and has committed to addressing many of them under the current national health strategy. Strategies for doing so include adjusting legal and regulatory frameworks for HMIS and digital health services; developing national health care data standards; and strengthening existing ICT infrastructure. The World Bank's Tajikistan *Millati Solim* (Healthy Nation) project is also supporting the digitalization of primary care facilities.

4.2 Human resources

4.2.1 *Planning and registration of human resources*

The number of doctors and nurses per population is much lower in Tajikistan than in most other countries in the WHO European Region. This leads to capacity problems, such as a lack of skilled nursing in many areas such as post-intervention care and rehabilitation services. Furthermore, standards of professional training and professional development are low, contributing to poor quality of care.

The employment of health workers is determined by national labour legislation, and the vast majority are public sector employees. As a result, registration of their occupation is undertaken by the state. To start working within the medical profession, relevant diplomas must be submitted to HR in the health care units. Further professional development is expected, with reassessments required every 5 years, a process called attestation. In the process "categories" are assigned based on years of experience and performance in the attestation exam. Associations exist for nurses, midwives, physicians and family doctors, but they have no formal role in accreditation or regulation (see Section 2.2).

Health staff planning is typically aligned with bed capacity in hospitals, which has led to a shortage of primary care physicians, especially in rural areas. The Ministry of Health and Social Protection is able to offer incentives to increase the quantity of health workers for specific skills, such as family doctors, or to limit them by capping training numbers. However, the distribution of health workers within the country remains uneven, and in reality rates are significantly affected by the available workforce and a lack of effective incentives (see Box 4.2).

4.2.2 *Trends in the health workforce*

Health care is one of the main sectors of employment in Tajikistan, giving paid employment to around 111 200 people in 2019 according to national data. As of 2023 there were 21 592 physicians and 62 445 nurses, with additional numbers of midwives, support staff, managers and administrative staff (Ministry of Health and Social Protection, 2024).

Tajikistan has relatively low numbers of both doctors and nurses compared to other countries in the WHO European Region (Figure 4.2). Between 2000 and 2021, the number of doctors per 100 000 population fluctuated slightly but remained relatively stagnant, seeing only a marginal decline (215 in 2000 versus 213 in 2021 – see Figure 4.3). The 2021 figure was nearly 44% lower than the WHO European Region average for medical doctors that year (380 per 100 000 population), and represented one of the lowest densities per 100 000 population in the WHO European Region. By 2023, national data reported this to have stayed nearly constant at 212 doctors per 100 000 population, although with notable variation in their regional distribution (see Box 4.2).

BOX 4.2 Are health workers appropriately distributed?

There is generally an oversupply of health workers in hospitals, but shortages in outpatient clinics. There are also significant imbalances in the geographical distribution of the health workforce. Doctors are concentrated in the capital, Dushanbe, while there is a lower density of almost all health workers in less affluent regions. The highest density, at 644 doctors per 100 000 population, was recorded in Dushanbe, while there were only 127 doctors per 100 000 in the highly populated but poorer Khatlon *oblast* and 128 doctors per 100 000 in the DRS (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024).

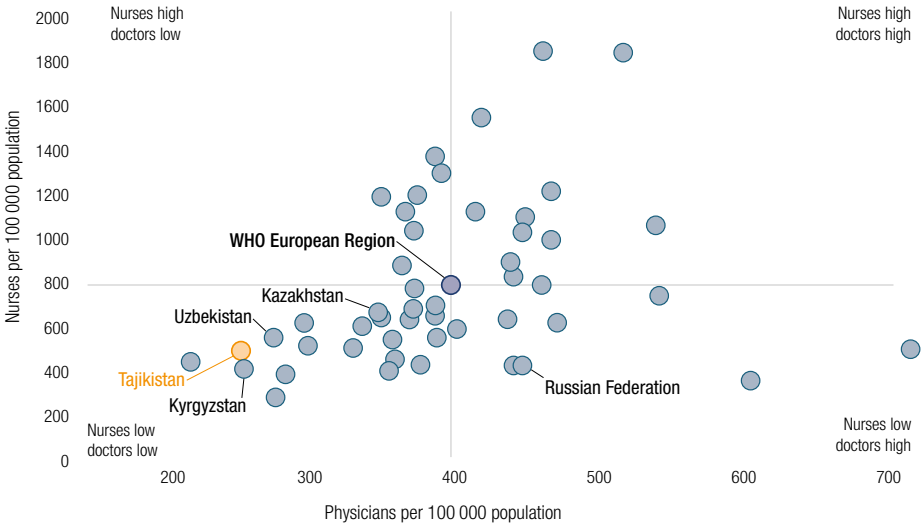
Nurses are better distributed geographically, and currently lead 63.8% of primary care facilities which are mostly in rural areas. There are high vacancy rates and an inequitable distribution of family doctors across regions: Khatlon (56%) has the highest vacancy rate, followed by DRS (31%) and Sughd (27%). Specialists are unevenly distributed across regions and tend to be more available in urban areas or near larger district health centres; in some more remote areas, they are almost entirely absent (Japan International Cooperation Agency & Koei Research & Consulting Inc., 2021).

The Ministry of Health and Social Protection has adopted a range of incentives to improve the distribution and motivation of the health workforce. A recent Health Labour Analysis showed that regional imbalances were still persisting as of 2023 (WHO Regional Office for Europe, 2024b).

The WHO Regional Office for Europe indicates that the number of practising nurses increased from 352 per 100 000 population in 2000 to 475 per 100 000 in 2020 (WHO Regional Office for Europe, 2024b). This is still less than half the average for the WHO European Region (1007 per

100 000 population), although it is more in line with neighbouring countries (see Figure 4.4). According to newer national data, in 2023 the average density of nurses was 615 per 100 000 population. Despite the discrepancy in rates, both datasets indicate a noticeable increase over the past decade.

FIGURE 4.2 Practicing nurses and physicians per 100 000 population, latest available year

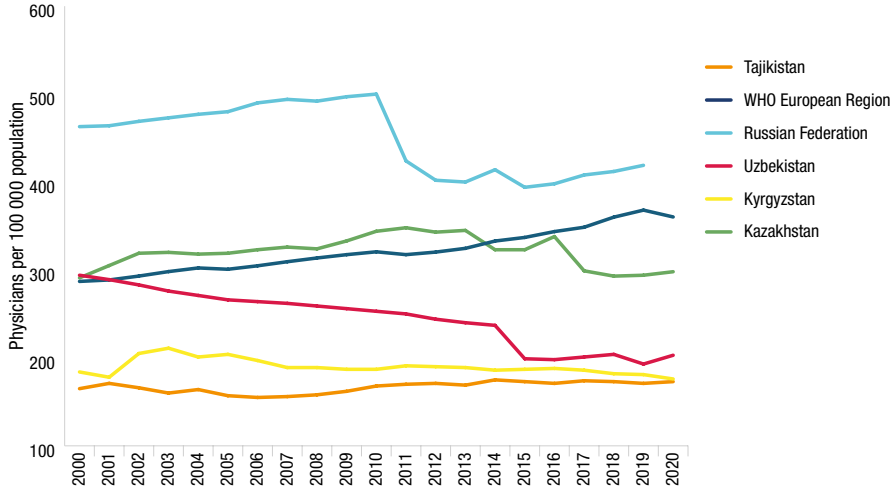


Source: WHO Regional Office for Europe, 2024b.

National data show that the number of midwives (63 per 100 000 population) was higher than the European regional average of 41 per 100 000 population. However, with Tajikistan's young demographic structure and high fertility rate, this may still represent a relatively low number compared to need.

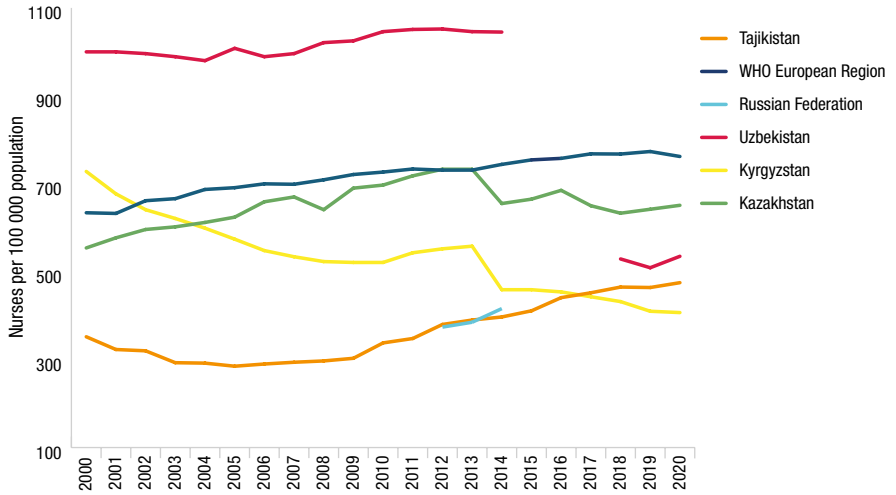
Tajikistan continues to struggle with an insufficient number of specialists in certain areas, including family doctors, paediatricians, neonatologists, psychiatrists, narcologists, infectious disease specialists, rehabilitation specialists, prosthetists and orthopaedists. There is a particularly pronounced lack of family doctors (general practitioners) which has worsened over the past 7 years and is especially acute in some regions. For example, 56% of family doctor positions in Khatlon are vacant, compared to the national average of 31% (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024). Health workers emigrating also contributes to a shortage of qualified personnel in Tajikistan.

FIGURE 4.3 Number of physicians per 100 000 population in Tajikistan and selected countries



Source: WHO Regional Office for Europe, 2024b.

FIGURE 4.4 Number of nurses per 100 000 population in Tajikistan and selected countries



Source: WHO Regional Office for Europe, 2024b.

Overall Tajikistan faces challenges from the pronounced imbalances in the distribution of its health workers, as well as in the overall availability of qualified staff. A survey looking at the availability of the health workforce and

their quality and level of knowledge highlighted a growing concern about access to sufficiently skilled medical workers, especially in rural areas (Japan International Cooperation Agency & Koei Research & Consulting Inc, 2021).

4.2.3 *Professional mobility of health workers*

Similar to its neighbours Kyrgyzstan (Moldoisaeva et al., 2022) and Uzbekistan (Ahmedov et al., 2014), Tajikistan has faced significant emigration of health workers to other countries, in particular the Russian Federation. There has been a high rate of migration of medical doctors and specialists and the numbers are higher from rural and remote regions (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024). Between 2020 and 2022, national data reported a total of 1207 doctors emigrating from Tajikistan, of which a high proportion were family doctors and specialists. Data from the Ministry of Health and Social Protection show the highest levels of migration for doctors from Dushanbe, Sughd and Khatlon *oblasts* and the DRS. The country also faces migration of other health staff, including nurses: between 2020 and 2022, the number of other health staff migrating was more than double the number of doctors. While the majority of migrating doctors previously chose the Russian Federation as the destination country, since the Russian invasion of Ukraine in 2022 there is growing interest in other countries such as Germany and the Republic of Korea. Internal migration exists but in official figures it seems to be lower, registered as around 15% of external migration rates in 2022. According to national statistics there are signs that the rate of emigration may be starting to decline: 597 doctors and nurses returned to the country in 2022. However, rates of unofficial migration are unclear and may indicate different trends. Overall, while medical colleges are still able to attract students, and there has been some return migration, retention of graduates in medical institutions is considered an ongoing challenge, and the health system continues to lose qualified health workers.

Analysis from 2022 shows that although the salaries of health workers in primary care were 23% higher than those in hospitals, the average monthly salary in health care (US$ 95) was 34% lower than the 2021 national average salary in Tajikistan (US$ 143) (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of

Tajikistan, 2024). Salaries for nurses are not determined by either competencies or experience, but rather location of work and their level within the attestation system. In an attempt to rectify this, the National Health Strategy for 2021–2030 commits to a gradual increase of health worker salaries (see Section 3.7.2). It also states the intention to establish a financial incentive system, in order to address geographic imbalances and improve the consistency of health care quality and outcomes. It is hoped that these measures will help to reduce the internal and international migration of health workers.

4.2.4 *Training of health personnel*

Medical education in Tajikistan is provided by public and private institutions. Since 2010 the number of institutions for medical education has increased, as has the number of students and graduates. The total number of medical graduates has doubled between 2013 and 2020, and in 2020 the number of medical graduates per 100 000 population was recorded as 16.7, higher than the average in the WHO European Region of 15.3. Trends in the number of graduates per 100 000 population vary across regions; GBAO has seen a decrease while Sughd and Khatlon have seen a major increase (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024).

There are four medical universities in Tajikistan: the Avicenna Tajik State Medical University (TSMU), the Medical Faculty at the Tajik National University, the Tajik Medical and Social Institute located in Dushanbe, and the Khatlon State Medical University in Khatlon. In 2022 there were 1686 medical graduates, of whom 44% were women. Subnational analysis shows that Dushanbe and Khatlon had the highest densities of medical graduates, while the DRS had the lowest. Several institutions provide postgraduate training programmes, including clinical residencies. These institutions include the Centre of Postgraduate Training of State Educational Institution at TSMU, the Institute of Postgraduate Education of Medical Specialists in the Field of Health Care, and most recently Khatlon State Medical University. The number of medical colleges providing nursing education increased from 16 in 2013 (15 state institutions and one non-state institution) to 37 in 2023 (16 state institutions and 21 non-state institutions). They are responsible for training nurses and other mid-level workers, such as midwives and *feldshers* (doctors'

assistants). In 2023, a total of 68 428 students were enrolled in state medical colleges in Tajikistan (Ministry of Health and Social Protection, 2024). There are no specific training pathways for nursing managers.

To address disparities in the geographical distribution of physicians, students from regions with the greatest shortages are given priority when applying to study medicine. This policy has not yet managed to offset existing imbalances. In general, institutions for training health workers still struggle with issues such as a lack of adequate training materials, equipment, infrastructure and qualified staff.

Since 2007, the training of doctors and pharmacists has been divided into bachelor's and master's studies. A bachelor's degree for dentistry and pharmacy takes 4 years, while for general medicine, paediatrics and public health it takes 5 years. This is followed by a master's degree with an additional 2 to 3 years of studies. Most physicians continue to be trained as specialists. After receiving a medical diploma, physicians undergo a clinical residency programme which lasts 1 year (*internatura*) directly after medical university, 2 years (clinical *ordinatura*) for those who were granted a diploma with honour, or 3 years for those undertaking practical work in their chosen field. No bachelor or university-based training is available for nurses or midwives, and significant barriers exist for nurses to assume teaching roles. As a result, most teaching is delivered by medical doctors.

The quality of medical education has remained a significant concern. One of the challenges used to be the practical year, during which students were often insufficiently exposed to clinical practice. Since 2015 progress has been made in this area through the introduction of a decentralized clinical year within undergraduate medical education, as well as a 2 year specialized postgraduate course for family physicians.

In primary health care, nurses play a significant role in providing and managing services. In many regions they also have to fill clinical gaps due to the unavailability of doctors, with little preparation or regulation to support them. In 2022, nurses were reported to lead 63.8% of PHC facilities (medical points and health houses – see Section 5.3.2) (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024). The roles they play include clinical management, population health management and facility management, and they often provide midwifery care, including management of deliveries. However, these skills are not accounted for in their professional standards or training. Educational and

professional standards are not competency-based, and the latter do not allow for independent decisions regarding patient care, as they are task-oriented.

There have however been some positive developments in the training of nurses. A Faculty of Nursing was established at the Institute for Postgraduate Education, and the duration of nursing education was extended to 4 years. Since 1996, the training of *feldshers* (doctors' assistants) has also been extended to a 4 year course at the Republican Medical College. Paramedics mainly work in rural areas and play an important role in the absence of doctors.

Strengthening family medicine has been a priority for health reforms in Tajikistan since the 1990s. In 1998, the Ministry of Health and Social Protection adopted an order envisaging the gradual transition of primary care towards a system based on general practitioners, a specialty then included in the list of medical professions. The National Health Strategy for 2010–2020 reaffirmed the importance of developing family medicine. The share of primary care facilities offering family medicine (physicians or nurses) increased from 56.0% in 2010 to 70.1% in 2017. However, since 2014 there has been a decline in the number of students enrolling in family medicine, and there was a 45% decrease in the number of enrolments in family medicine per 100 000 population between 2014 and 2022 (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024).

Family doctors are trained at undergraduate and postgraduate levels. For specialists in family medicine, there is a 1 year clinical internship and a 2 year residency. However, there was a national decrease in the number of family doctors (GPs) between 2014 and 2021 (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024). There have been higher declines in specific regions, such as DRS and GBAO, possibly as a result of internal or external migration and a general decline in the number of graduates in family medicine.

Family nurses are trained in medical colleges and educational institutions for family medicine. There was an overall increase of 71% in the number of family health nurses from 2014 to 2021, but their quantity is declining in the more rural regions of Khatlon and GBAO. The number of family health nurse graduates per 100 000 population increased by more than 2.6 times (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024).

Several types of postgraduate medical education and training are available in Tajikistan. These include postgraduate training in primary specialities,

designed to train medical professionals to specialize in areas such as surgery, internal medicine and neurology. Continuing professional development is also available to enhance the professional competency of medical professionals in a particular speciality. Education and training in family medicine – a priority area of need – is provided through several channels. TSMU offers 1 year internships or 2 year clinical residencies in family medicine for doctors, and family nurses can receive training in medical colleges across the country. Specialized training for family medicine specialists is available at the post-graduate level at the Institute of Postgraduate Education in Healthcare, as well as through 15 training and clinical centres dedicated to family medicine.

Currently, retraining programmes are only available for health professionals wishing to switch to family medicine. Medical professionals – both physicians and nurses – wanting to do this can retrain through a 6 month continuous medical training course. This is provided at training and clinical centres for family medicine at the republican, regional and inter-district (zonal) levels.

Health management is an underdeveloped area of professional development, but there are currently two national health management training programmes available to doctors. One is a 2 year programme in health systems management; the other is a 1 year course in public health management for leaders in primary care, which was first offered in 2015. Between 2014 and 2023, a combined total of 154 specialists graduated from these courses.

There has also been progress in medical research in recent years. Despite outdated infrastructure and limited funding, autonomous research institutions are involved in national and international projects, as are research departments in medical schools and hospitals. Within the Ministry of Health and Social Protection, the Department of Medical and Pharmaceutical Education, Personnel Policy and Science manages 15 scientific centres and research departments, as well as state educational institutions.

4.2.5 *Physicians' career paths*

There are currently no well-defined career opportunities for physicians in Tajikistan, in particular in rural areas. In contrast, specialists working in urban areas can make use of incentive systems.

There are few mechanisms in place for managing the performance of health workers. Routine performance evaluations are not commonly used and there is no review of service outputs, in terms of either quality or quantity. There are also no standard tools to conduct ongoing monitoring of clinical practice. Anecdotal evidence suggests that clinical guidelines are not routinely being used. There is also insufficient training in management skills for decision-makers, who are mostly trained as doctors rather than managers.

The latest national health strategy establishes a number of financial and social incentives (such as housing) for doctors in their second year of clinical residency in family medicine. It states that existing educational and training programmes for students and health workers will gradually be revised to allow further development of knowledge and clinical skills among undergraduate and postgraduate students, as well as among practicing professionals. It also states that health workers will be equipped with managerial skills, and that professional health care managers will be trained.

Physicians are officially required to undergo continuing professional training, and a 1 month refresher course every 5 years. There are also a large number of continuing education courses through donor-funded projects. A programme of continuing medical education and development (CME), based on credit hours, is currently being piloted for family doctors in the city of Tursunzade in western Tajikistan. It represents the implementation of an existing regulation on CME, and the results are expected to inform a gradual national roll-out of the programme.

4.2.6 *Other health workers' career paths*

There are few professional development opportunities for health workers who are not doctors. Nurses and midwives are periodically assessed to determine their professional skills and the results are linked to salary scales. However, there is very little latitude for them to move into more specialized roles connected to quality management, advanced professional skills, research or policy. The absence of nursing education at bachelor's, master's and PhD levels limits their access to tertiary education and related progression or opportunities (WHO Regional Office for Europe & Ministry of Health and Social Protection of the Population of Tajikistan, 2024). Several

international partners and non-governmental organizations provide training for continuing professional development, but there is no quality assurance and no opportunities for trainees to progress professionally or in terms of salary. Unlike in many other European countries, there are also no annual requirements for continuing professional development.

5

Provision of services

Chapter summary

- Health services are provided by facilities at the national, *oblast*, city/rayo*n* and village level. There are different models of service delivery in rural and urban areas.
- Public health services are mainly delivered through separate vertical programmes, although efforts have been made to begin integrating some of these.
- Primary care has received greater attention and investment in recent years, but staffing remains an issue. Family doctors and *rayon* physicians are not equitably distributed, offer a limited scope of services, and are often bypassed by patients.
- While there has been some consolidation over the past decade, hospital services are still often duplicated at different levels, limiting the efficiency of service provision.
- There is a national Essential Medicines List, but in practice the availability and purchasing prices of essential medicines can vary substantially, including between regions. Widespread trafficking and availability of counterfeit pharmaceuticals is an ongoing concern.
- Disease prevention is increasingly considered a priority in public health and primary care.

5.1 Public health

The National Health Strategy for 2010–2020 was framed around the strategic development of public health. For the first time, the role of determinants of health and healthy lifestyles were considered in the prevention of diseases. Since 2010, measures to protect people from communicable and noncommunicable diseases have been strengthened. The National Health Strategy for 2021–2030 specifically highlights the importance of providing access to essential public health services.

In Tajikistan, many public health functions (including maternal and child health, tuberculosis, HIV/AIDS control, immunization and health promotion) are conceived and provided as vertically organized programmes separated from curative services. Typically, the corresponding national centres – such as the Republican Centre for the Formation of a Healthy Lifestyle, the Republican Centre for Reproductive Health, the sanitary-epidemiological services, the Institute of Preventive Medicine, and the Republican Centre for the Protection of the Population from Tuberculosis – provide technical and methodological support. A major challenge in the provision of health care relates to the need to integrate these vertical programmes into primary care. For example, tuberculosis units have now been integrated into rayon/city health centres and health houses, working with primary care staff. However, in most cases reporting lines for the different programmes remain vertical.

Sanitary-epidemiological services are responsible for the prevention, monitoring and control of infectious diseases, occupational health, food safety and environmental health. Approximately 20% of their financing comes from the Ministry of Health and Social Protection and some 80% from the provision of paid services. Sanitary-epidemiological laboratories run tests of stool, blood, air, water and food for clinical centres, primary care providers and the sanitary-epidemiological inspectorate.

The aim of the National Immunization Programme adopted by the Ministry of Health and Social Protection is the eradication of six vaccine-preventable diseases: diphtheria, whooping cough, tetanus, polio, measles and tuberculosis. It also works closely with the vaccine alliance GAVI, WHO and UNICEF on plans to include new vaccines such as rotavirus, pneumococcus and human papillomavirus (HPV). Immunization programmes are the responsibility of the Ministry of Health and Social Protection, which

implements them through the Republican Centre for Immunoprophylaxis and its six *oblast* offices. The National Immunization Programme is a priority for the government, and this includes strengthening capacity to manage and operate the programme, optimizing the infrastructure and procedures for vaccine procurement, storage and transportation, and improving the quality and safety of immunization. Over the past decade, routine immunization coverage has reached at least 95%. Two new vaccines, rotavirus vaccine and inactivated polio vaccine (IPV), have been added to the routine immunization schedule. There has also been an increase in government spending on immunization from less than 20% of overall spending in 2015 to 29.4% in 2019. One of the top priorities of the National Immunization Programme is increasing the share of government funding further and improving programme efficiency in the context of broader health sector reforms. Vaccination against COVID-19 was rolled out nationally with the first dose administered on 24 March 2021. As of 31 December 2023, 56% of the population (5.3 million people) had been vaccinated with at least one dose, and nearly 5.2 million people had been fully vaccinated (WHO, 2024d).

Since 2000, Tajikistan has made significant progress in providing access to improved sources of drinking water. Modernization of infrastructure and improving the monitoring of drinking water supply, sanitation and hygiene, energy supply, and food systems, especially in rural areas and small towns, are considered important components of ensuring healthy living conditions. Some improvements are still required, especially in remote rural areas, but this is expected to remain a focus. On 30 November 2018, the government approved national goals and an action plan in the context of the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, the first and only international legal agreement linking sustainable water management and the prevention, control and reduction of water-related diseases in Europe (WHO, 2022).

As is the case in many countries, antimicrobial resistance (AMR) in Tajikistan is a challenge and a priority. In May 2018, Tajikistan adopted a National Action Plan to Combat Antimicrobial Resistance for 2018–2022. The plan outlined actions to be taken across relevant sectors to address the issue of antimicrobial resistance, using a coordinated and comprehensive One Health approach that included human health, veterinary health and the environment. This approach aimed to raise awareness and improve

education on AMR, improve surveillance of antimicrobial resistance and use, improve biosecurity, strengthen infection prevention and control, and achieve a more rational use of antimicrobial medicines. It also included strengthening enforcement of existing laws, such as a 2019 requirement that antibiotic use for farm animals should be by prescription and for treatment purposes only (Government of the Republic of Tajikistan, 2018). In 2023, a second round of the country's Antimicrobial Resistance Action Plan (2023–2025) was approved within the framework of the One Health approach, and is currently being implemented.

Overall, the National Health Strategy for 2021–2030 specifically highlights the importance of improving access to essential public health services. This includes access to services within and beyond health care settings. It also includes a commitment to increasing the responsibility of the population for their own health and the health of others, by promoting a healthy lifestyle.

Box 5.1 considers whether public health interventions have made a difference to date.

5.2 Patient pathways

Planned patient pathways are set out within the national framework of regulations for the stages of medical care (Decree No. 525, adopted 31 December 2002). The pathways differ in rural and urban areas. In rural areas, primary care is delivered through health houses, rural health centres and (to some degree) rural hospitals. In urban areas, primary care is delivered by *rayon* or city health centres. In reality, the majority of patients with urgent or emergency conditions access higher levels of care directly without referral from the primary care level, ignoring the referral system.

In addition, there is also very poor integration of primary and secondary care with regard to continuity of care. A 2018 report form the Asian Development Bank concluded that continuity of care in Tajikistan is hampered by loose links and communication between hospitals and primary care facilities, together with broken referral pathways, and the absence of patient follow-up. In addition to being fragmented, the service delivery system is also duplicative: antenatal care, immunization and childcare are provided at both primary care facilities and specialized treatment centres (Asian Development Bank, 2018).

BOX 5.1 Are public health interventions making a difference?

Disease prevention is one of the priorities of the National Health Strategy for 2021–2030. Reducing tobacco and alcohol use and increasing healthy diets are mentioned as key to reducing the burden of noncommunicable diseases in Tajikistan.

There are reasons to suspect considerable underreporting of tobacco use for males and females, especially for smokeless tobacco (*nasway*). Tajikistan has endorsed a comprehensive tobacco control law that is aligned with the WHO Framework Convention on Tobacco Control, but no indoor public places in Tajikistan are completely smoke-free. The relatively low cost of tobacco also hinders efforts to reduce usage: while cigarette taxes and prices in Tajikistan are increasing, they remain lower than in neighbouring countries. To strengthen tobacco control efforts, special policies aiming to discourage the use of smokeless tobacco are needed, and stronger surveillance data should be collected. These include both consumption and economic data, such as tobacco product sales, prices and excise revenue.

Recorded alcohol consumption is one of the lowest in the WHO European Region, at just 0.8 litres per capita in 2019, but unreported alcohol consumption has been estimated at nearly three times the official rate. There is a national minimum age of 18 years for off-premise sales of alcoholic beverages, and there are legally binding regulations on alcohol promotion and sponsorship, along with health warnings on alcohol advertisements. However, illicit alcohol production and consumption is an ongoing challenge.

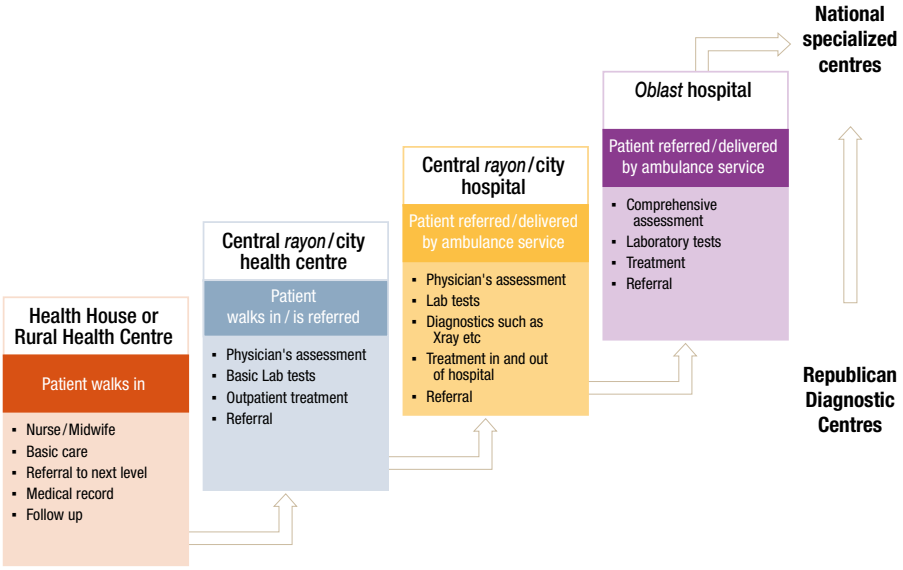
Poor nutrition remains a major problem. In the years since independence, nutrition has not always been well covered by public health services, and NGOs have stepped in to provide community support. Overweight and obesity are less of a concern than in many other countries in the WHO European Region, despite rates slowly increasing in recent years. However, ongoing monitoring of child obesity alongside child underweight rates has been recommended to avoid a double burden in the future and support the development of healthier lifestyles for children (WHO Regional Office for Europe, 2023c).

There is potential for combining increased public spending on health with deterring unhealthy behaviours. Increasing excise taxes on alcohol, tobacco products and sugar-sweetened beverages is highlighted in the current national health strategy as a mechanism to mobilize additional financing for health.

Figure 5.1 represents a summary of the patient pathway through the system on paper. In reality, the patient journey can be significantly more complex. The system also suffers from a lack of trust in both quality of care

and providers. Patients often follow recommendations from friends and family and choose a physician based on perceived trustworthiness rather than accessibility of care. Especially in rural areas, some patients may choose to travel to a more distant clinic due to perceived quality issues with a local one. This is permitted based on a patient's right to choose a medical institution, enshrined in the Health Code, Chapter 7, Article 36, paragraph 2 (Resolution of the *Majlisi Milli* and *Majlisi Oli* of the Republic of Tajikistan dated 18 May 2017). It is also worth noting that the patient pathway can be simplified for certain privileged patients through direct access at all levels, bypassing the lower levels of the system.

FIGURE 5.1 Patient pathway in principle



Source: Authors' compilation.

5.3 Primary care

Primary care is seen as the backbone of the health system. Tajikistan has adopted a primary health care model based on the principles of family medicine, tasked with providing health services for and promoting healthy lifestyles to most of the population. It plays an especially important role considering the national population distribution: in 2023, 72% of the country's population lived in rural areas (World Bank, 2024).

Tajikistan has made strategic investments to improve the organization and strengthen the quality of primary care services. These investments are aimed at reducing the fragmentation of services by incorporating established vertical health services under a unified primary care structure. The country has also invested heavily in the training of family doctors and nurses to provide care based on patient needs and within the appropriate setting. Health worker capacity remains an ongoing priority (see Section 4.2.2).

Tajikistan has a total of 5145 institutions across the field of health and social protection as of 1 January 2024. This figure includes 3980 health facilities, the majority of which (2934) were facilities for primary care, followed by 615 specialized centres covering both inpatient and specialized outpatient needs, and 417 inpatient facilities. Types and numbers of health institutions in different categories are laid out in Table 5.1. In addition, there were 226 institutions connected to social protection.

5.3.1 *Urban areas*

In urban areas, primary care is delivered by *rayon* and city health centres. These are either free-standing or associated with a hospital, and typically offer preventive, diagnostic, curative and rehabilitative services. There are also health houses attached to schools, government enterprises and other institutions.

Under a previous system of polyclinics, services used to be very fragmented, with separate polyclinics for adults, children and women's reproductive health, as well as *oblast*-level polyclinics, dental polyclinics and family planning polyclinics. This changed with Government Decree No. 525, passed on 31 December 2002, after which polyclinics for adults, children and women's reproductive health were merged into *rayon* and city health centres. Dental services remain legally separate, although some dentists practice in rooms hired from health centres.

5.3.2 *Rural areas*

In rural areas, primary care services are provided by health houses and rural health centres. These are managed by city and *rayon* health centres through primary health care managers.

TABLE 5.1 Health and social protection institutions in Tajikistan

1. PRIMARY CARE FACILITIES		2. INPATIENT FACILITIES		3. SPECIALIZED CENTRES	
TYPE	NUMBER	TYPE	NUMBER	TYPE	NUMBER
Health houses	1769	Centre for mental illness	11	Reproductive	69
Medical points	148	TB	23	Centre for healthy lifestyles	70
Rural health	893	Centre for dermatological and venereal diseases	16	Centre for AIDS prevention and control	65
District health	54	Oncology	5	Malaria control	25
Urban health	53	Narcology	8	Paediatric	68
Family medicine	9	Endocrinology	3	Centre for mental illness	2
Ambulance station	70	Cardiology	6	TB protection	38
		Dental centre	1	Centre for skin and venereal diseases	5
		Rehabilitation centre	7	Immunization	66
		Emergency medical centre	2	Narcology centre	2
		Eye disease centres	5	Endocrinology centre	3
		Regional rural hospital	128	Forensic medical examination centre	7
		Central district hospital	53	Cardiology centre	1
		District digital hospital	67	Blood transfusion centre	2
		City clinical hospital	4	State centre for sanitary and epidemiological surveillance	74
		Central city hospital	18	Dental centre	26
		Children's clinical hospital	2	Centre for statistics and medical information	8
		Regional hospital	4	Research institute	1
		Regional children's hospital	2	Other	83
		Physiotherapeutic hospital	2		
		Infectious diseases hospital	7		
		TB hospital	3		
		Psychiatric hospital	3		
		Maternity hospital	8		
		Research institute	3		
		Other	26		
TOTAL:	**2934**	**TOTAL:**	**417**	**TOTAL:**	**615**

Notes: AIDS, acquired immunodeficiency syndrome; TB, tuberculosis.

Source: Ministry of Health and Social Protection, personal communication.

Health houses are envisaged to serve as the first point of contact for a patient in a rural area. They are typically staffed by a nurse only, but may also have a midwife or a *feldsher* (doctor's assistant), with the number of health workers in each health house depending on the size of the population served. Health houses provide immunization, basic first aid, home visits, basic prenatal care and medical referrals (although their gatekeeping role is limited, as there is also direct access to physicians at rural health centres and *rayon* hospitals). Health houses cover rural areas with a catchment population of under 1500 people. They are also established in isolated villages of under 300 people if the village is more than 4 km away from other health facilities. Health houses are funded from village administration budgets. They are affiliated to rural health centres, the next level of the health system in rural areas. In addition to health houses, which cover most areas, there are also medical points providing basic health services for children, which are primarily located in kindergartens, schools and other similar institutions (Ministry of Health and Social Protection, personal communication).

Rural health centres (formerly rural outpatient clinics) are usually staffed by physicians – usually family medicine doctors or therapists not yet retrained in family medicine – in addition to mid-level and junior health staff. They provide the next level of primary care. These clinics are subordinate to *rayon* health centres and central *rayon* hospitals, and offer diagnostics, basic treatment and minor surgeries. Most have basic laboratory facilities for testing blood and urine.

As well as staffing rural health centres and health houses, a significant amount of home visits are also understood to be carried out by nurses from these institutions. This presents challenges around staff capacity and service regulation.

In terms of utilization of outpatient services, in 2018 Tajikistan registered 4.3 outpatient contacts per person per year. This was lower than the Central Asian average (6.2 contacts per person per year), but higher than the rates in Kyrgyzstan and Turkmenistan (WHO Regional Office for Europe, 2024c; WHO, 2024c). However, this figure does not include home visits, which are frequently conducted by nurses from rural health centres and health houses.

The key strengths and weaknesses of Tajikistan's primary care system are outlined in Box 5.2.

BOX 5.2 What are the key strengths and weaknesses of primary care?

Over the past two decades, Tajikistan has worked to transform its health system away from a highly centralized model reliant on hospital and secondary care, towards one that is focused on primary care and public health. The government has introduced various reforms intended to improve health service access, quality and affordability, as well as strengthening workforce training.

There are some relative strengths. The government has progressively increased overall levels of funding for primary care services. It has also made strategic investments to improve the organization and strengthen the quality of primary care services, with some vertical public health services having been successfully integrated into primary care. National immunization programmes have delivered strong results, and excess hospital bed capacity has been reduced to some degree.

However, challenges remain. Reforms around financial protection have not yet delivered the intended benefits: official (and unofficial) OOP spending on health remains extremely high, driven by outpatient medication, and primary health services are not always financially accessible. Nor indeed are they always physically accessible: there are particular issues with primary care delivery in rural and remote areas due to insufficient medical personnel and poor quality infrastructure.

Access to primary care is a priority within the latest national health strategy covering the period to 2030. To support monitoring and accelerate progress, Tajikistan plans to use a data-driven approach with support from initiatives such as the WHO Delivery for Impact 100-day challenge and multilateral partners via the WHO SDG3 Global Action Plan. As a starting point, the government is using data to identify priority areas and develop joint delivery plans.

5.4 Specialized care

5.4.1 *Specialized ambulatory care*

Some specialized outpatient services are covered for some groups of patients under Decree 600 (see Section 3.4). However, in practice a lack of capacity at the primary care level, together with very limited availability of diagnostic tests or treatment options, often leads to multiple referrals to specialized outpatient services, an issue which the current national heath strategy is seeking to correct. For all other patients, outpatient services generally require co-payments of 80% of the cost of the visit.

Access to specialist ambulatory care in rural settings is extremely limited. Some rural health centres have basic laboratory facilities for certain diagnostic tests, but usage rates in practice are unclear. District and city health centres have some specialist medical staff, typically located within district hospitals, but equipment is often outdated or in poor condition, which can limit treatment options. *Oblast* hospitals, usually located in the main town of the *oblast*, offer a fuller range of specialties and more sophisticated technical equipment. In urban areas, certain specialized outpatient services are provided in specialist dispensaries where people are treated for specific long-term diseases, such as tuberculosis, cancer and diseases of the endocrine system.

5.4.2 *Day care*

In rural areas, rural health centres have a limited number of day care beds. In urban areas, day care beds are available at central rayon, city and *oblast* hospitals. These do not usually represent a high percentage of overall bed capacity, with hospitals allocating approximately 4–8 beds per facility to day care.

5.4.3 *Inpatient care*

Depending on disease category, severity and population group, inpatients may be treated in specialized hospitals or in a hospital at one of the different administrative levels. Patient evaluations of the care they receive are still rare (Box 5.3).

BOX 5.3 What do patients think of the care they receive?

Historically, patient evaluation has played a marginal role in health services in Tajikistan. Surveys on patient satisfaction on issues such as hospital care have only been carried out occasionally and point in contradictory directions. More recent data on patients' views on and experiences with health services are not available.

The paradoxical nature of patient feedback is in line with what has been reported from poor rural areas in some other former Soviet countries (Footman & Richardson, 2014) and may reflect low patient expectations. A commitment to patient-centred services is stated in the latest national health strategy, and may provide grounds for increasing the use of patient-reported experience measures in Tajikistan in the coming decade.

The average length of stay in acute care hospitals in Tajikistan has decreased in recent years, from 13.2 days in 2000 to 8.0 in 2021, placing it in the middle of comparator countries (Figure 5.2).

The bed occupancy rate in acute care hospitals in Tajikistan, at 67.5% in 2021, is comparatively low when compared to the Russian Federation and other countries in Central Asia (Figure 5.3).

5.4.4 *Rural hospitals*

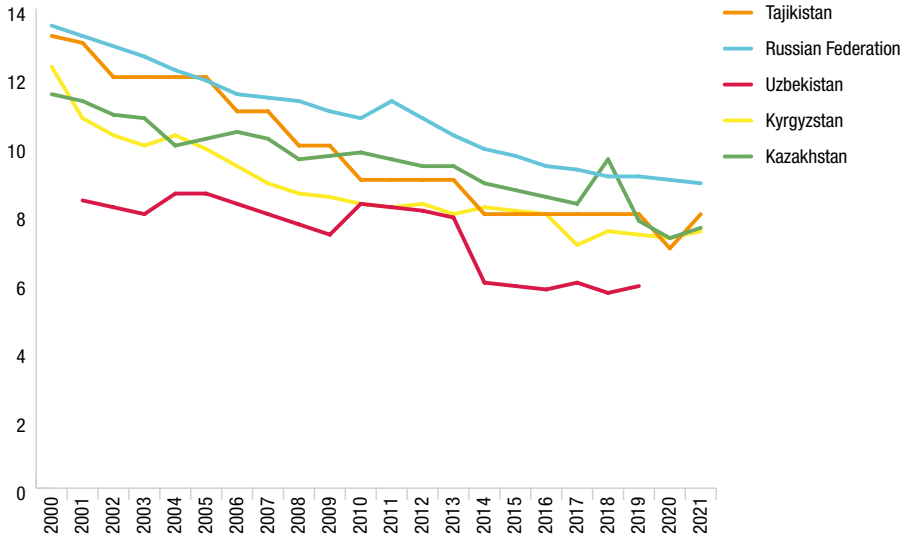
Small rural hospitals with 25–75 beds offer basic nursing care and some medical and obstetric services. They are staffed by a doctor, known as the "therapist". In the previous decade, a national hospital rationalization plan – Strategic Plan for the Rationalization of Medical Facilities in the Republic of Tajikistan for 2010–2020 (No. 169, dated 1 April 2011) – envisaged the eventual closure of most rural hospitals or their transformation into rural health centres or *rayon* hospitals. The exception was for rural hospitals in remote and mountainous areas, where they were to be subsumed under the central *rayon* hospital network.

By 2016, the first phase of the hospital rationalization plan had been implemented in Khuroson, Yavan, Hamadoni and Farhor *rayons* in the framework of a Tajik–German cooperation project. Plans also existed to close several rural hospitals in these four *rayons* and to downsize the remaining ones, reducing the number of rural hospitals in the four *rayons* from 29 to 15. By 2019 there were still 25 hospitals in these four districts.

5.4.5 *Central* rayon *or city hospitals*

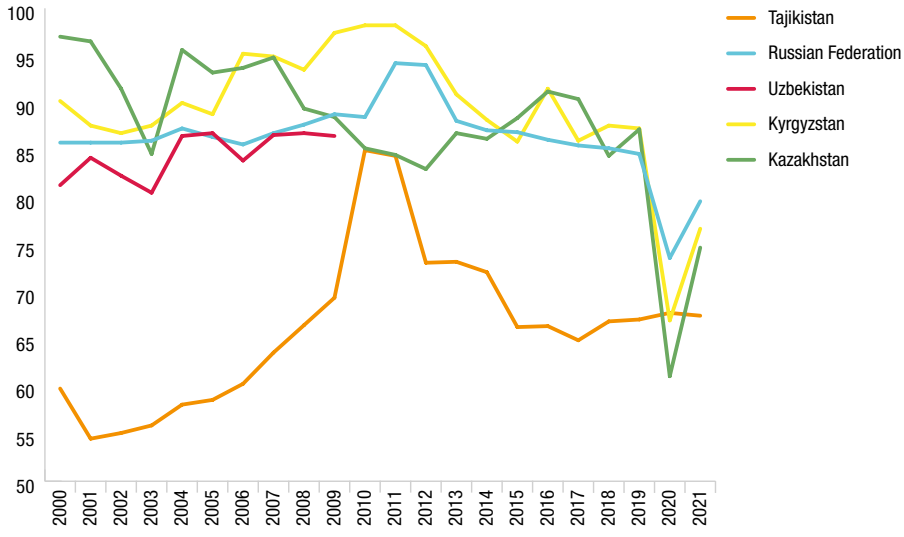
Central *rayon* or city hospitals are located in the largest town of every rayon. They typically have 100–300 beds and are staffed by a range of specialists; many also house a *rayon* or city health centre. There are also subordinate *rayon* hospitals providing a similar range of services to their central counterparts. In larger cities and at the *oblast* level, there tends to be a duplication of services of central *rayon* and city hospitals with those offered by *oblast* hospitals. The country's hospital rationalization plan between 2010 and 2020 envisaged reducing this duplication, and while some progress was made there is still room for improvement in terms of care efficiency (see Box 5.4).

FIGURE 5.2 Average length of stay (days) in acute care hospitals in Tajikistan and selected countries, 2000–2021



Source: WHO Regional Office for Europe, 2024c.

FIGURE 5.3 Bed occupancy rate (%) in acute care hospitals in Tajikistan and selected countries, 2000–2021



Source: WHO Regional Office for Europe, 2024c.

Central *rayon* hospitals generally rely on outdated medical equipment, although some have more modern resources. In some remote or mountainous *rayons*, the distance of the rural population from the central *rayon* or city hospital is considerable, and access to services has become more problematic with the deterioration of emergency services and transport.

5.4.6 Oblast *hospitals*

Oblast hospitals have about 600–1000 beds and offer a broader range of specialties and more sophisticated technical equipment. They are usually located in the main city of the *oblast* and provide specialist care to patients from anywhere within the *oblast*. As mentioned above, there tends to be a duplication of some services in the catchment area of *oblast* hospitals with services provided by central *rayon* and city hospitals, although some (often more complex) services are only available at *oblast* hospitals. In all *oblast* capitals there are also specialized *oblast* centres and hospitals that are vertically subordinated to national centres and hospitals. However, *oblast* hospitals do not currently have the capacity to integrate all these services into a single multi-purpose hospital that would provide services of higher complexity than central *rayon* or city hospitals.

5.4.7 *Specialized hospitals*

Specialized hospitals were an integral part of the Soviet hospital system and continue to exist in Tajikistan. The number of specialized hospitals has remained largely unchanged since Tajikistan became independent, but there has been a reduction of length of stay as well as a decrease of bed occupancy rates.

Many disease categories and population groups are treated in specialized hospitals, including children, cardiology, tuberculosis, psychiatric diseases, neurology, obstetrics and gynaecology, and emergency services. National hospitals at the republican level provide more advanced care and usually also serve as teaching and research hospitals. Scientific research institutes also deliver highly specialized health care and carry out research.

BOX 5.4 Are efforts to improve integration of care working?

Tajikistan has historically struggled with the fragmentation of health services. Public health services have been divided into vertical structures and programmes, creating barriers to coordination of patient journeys between different levels of care or across multiple conditions. Health data collection and management is also limited as a result of the vertical programmes. Siloing is even reflected in public health financing, with allocations based on inputs rather than needs.

To encourage a more integrated model of health care, over the past decade the government has introduced several legislative and financial reforms aimed at improving coordination and care pathways. A major component of this has been the incorporation of established vertical health services under a unified primary care structure within the framework set by the National Primary Health Care Development Master Plan.

The national immunization programme, while technically functioning as a vertical programme at the national level, is well integrated at the primary care level. There have been efforts to reduce duplication in hospital services, and some limited attempts to integrate certain programmes – for example, tuberculosis units have been integrated into r*ayon*/city health centres and health houses, rather than existing as standalone clinics.

There have been some efforts to improve integration between primary, secondary and tertiary care. However, this has primarily manifested as a focus on improving referral pathways between various levels of care, and improved continuity of care, rather than full service integration. In general, services are not fully integrated in primary care, and there continues to be a lack of integration between health services, social services and other care providers.

Strengthening health care integration is deemed a priority in national health planning and organizational policy. Along with a general commitment to reduce fragmentation, some actions are specifically highlighted within the National Health Strategy for 2021–2030, such as the integration of emergency and ambulance services into district-level primary care. Overall there is a growing interest in addressing the issue, although questions remain about how this will be delivered in practice.

5.5 Urgent and emergency care

All *rayon*, *oblast* and republican hospitals provide basic ambulance and emergency services, but there are also separately functioning specialized

emergency hospitals. Since 2015, improvements have been made in the material and technical base of hospitals, including those that provide emergency services. With the support of emergency response projects connected to the COVID-19 pandemic in 2020–2021 – involving many international partners – additional improvements were made through the purchase of equipment such as ventilators, ambulances, anaesthetic and surgical aids, personal protective equipment, specialized beds, and medicines.

In 2019, there were 548 052 calls for ambulance and emergency care. The provision of ambulance transport is a key focus for improving access to health services. During the COVID-19 pandemic, over 60 ambulances were purchased and allocated to primary care facilities and central *rayon* hospitals for transporting patients with emergency conditions. In 2022, 94 new ambulances that meet international quality standards were purchased with support from the Government of Japan.

When interviewing patients during hospitalization, the type of transportation used to reach the hospital is recorded in their medical history, and in interviews with rayon-level providers it was suggested that private transport was much more common than ambulance transport, even for symptoms of serious health events such as chest pain and stroke (Akkazieva et al., 2015).

As part of the reformed primary care system, it is envisaged that health houses and rural health centres will provide basic emergency services in rural areas. The current patient pathway in case of emergency is outlined in Box 5.5.

5.6 Pharmaceutical care

Almost all state pharmacies have been privatized. There has been an increase in the number of pharmacies, but also in the numbers of low-quality medicines and new medicines unknown to the majority of health professionals in the country. The widespread trafficking and availability of counterfeit pharmaceuticals is a major area of concern, and the current national healthcare strategy contains an explicit commitment to strengthen state controls to prevent counterfeit and unregistered pharmaceuticals. It includes developing a draft law to regulate pricing for medicines, implementing international standards for laboratory, clinical and manufacturing practices, and improving laboratory capacity for quality control.

BOX 5.5 Patient pathway in an emergency care episode

There is a national emergency phone number for ambulances: 103, which the patient or family member can dial at any time. Assuming an ambulance is available, a vehicle arrives on scene with a doctor and either a *feldsher* or a nurse on board. In 2022–2023 the number of ambulances tripled: as of 1 January 2024, the country's health system possessed 770 ambulances, of which 501 were in working order. As a result, average waiting time for ambulances has been reduced to around 30 minutes. A 2019 study reported that 80.6% of emergency medical service teams arrived at the scene of an incident in Dushanbe within 15 minutes, although no information was available for ambulance waiting times in less urban areas.

Once at the scene, medical staff conduct a quick triage assessment of the patient's status, provide any required immediate first aid or stabilization procedures, and decide on further actions: either treatment and care at home, or hospitalization. If hospitalization is considered necessary, in rural areas the patient is simply taken to the nearest hospital. In the cities, depending on the patient's symptoms and initial diagnosis by the ambulance doctor, the patient may be taken to either a specialized hospital if required, or to the nearest general hospital.

Patients who are not in need of immediate hospitalization are given medication if available, or prescriptions if not. They are also advised to visit their family physician or specialist as soon as possible for follow-up, although data are not recorded on how many do so (Muminzoda et al., 2019).

A national Essential Medicines List has been in use since 1994 and is usually updated biannually. The latest version was developed in conformity with the World Health Organization's List of Essential Medicines (2021) and includes 357 medicinal substances and 15 medical devices. The cost of medicines on the list is calculated using the prices of international generic drugs, which are on average 10–15% lower than branded medicines (Ministry of Health and Social Protection, 2023a).

In reality, purchasing prices for essential medicines may vary substantially based on availability. Access to quality essential medicines in Tajikistan has been reported to be challenging in many public health facilities. A 2013 study on the availability and prices of medicines found that there was no system

for monitoring the prices of medicines at any level of health care, and highlighted significant variation between median prices of originator brands and the lowest priced generics (2 400% and 300%, respectively) and significant differences in availability between regions. The study recommended that Tajikistan develop a system to regularly monitor the prices and availability of essential medicines in the country, as well as the implementation of relevant policies to incentivize the uptake of generic products, but these recommendations have not yet been effectively implemented (WHO Regional Office for Europe, 2023a). Efforts are being made to improve the availability and affordability of essential medicines. In 2021 WHO supported a survey using data collected by the MedMon mobile application, which monitors the price and availability of essential medicines and health products. The results showed ongoing differences in availability between regions: 39 out of 43 surveyed medicine categories (91%) were available in more than 80% of facilities in Dushanbe, compared to only 18 medicine categories (42%) available in GBAO. In addition, the prices of medicines varied widely across the facilities, with reports of a more than 10-fold difference between minimum and maximum unit prices for 20 medicines (WHO Regional Office for Europe, 2024c).

The law "On medicines and pharmaceutical activities", adopted in 2003 and last updated in 2022, provides the basis for regulating the pharmaceutical sector. Until 2023, procurement of medicines and medical supplies was carried out in conformity with the law "On government procurement of goods, works and services", adopted in 2006 and amended in 2012, which establishes mechanisms for the procurement of medicines and medical supplies. This was replaced in 2023 with the law "On public procurement" which was intended to provide greater transparency over procurement procedures. Regulation of public procurement of goods, works and services is considered one of the priority areas of state policy for the Tajikistan government. The policy's implementation is carried out by a state body, the Agency for Public Procurement of Goods, Works and Services. Since 2016, all procurement is carried out via a tender process but still managed through an electronic procurement system run by the agency. This includes any procurement done by health facilities at *oblast* and city/*rayon* levels. The Ministry of Health and Social Protection holds the status of a qualified purchasing organization, and has the ability to independently purchase all types of goods, works and services.

The Republican Centre for the Procurement of Medicines and Medical Products, established in 2005, was set up to improve access to high-quality, safe and affordable medicines and medical supplies, especially for medical institutions. In March 2014 it was replaced with the Republican Centre for Pharmaceutical and Medical Equipment Services. The main purpose of the centre is to support the provision of services for the storage, delivery, import and distribution of medicines and medical goods. It is the only organization in the country that has the right to import narcotic drugs and precursors used in medicine.

Development of the private pharmaceutical industry, based on local raw materials, formed part of the National Development Strategy for the period up to 2015. However, with the exception of some herbal products, nearly all pharmaceuticals continue to be imported. The new National Development Strategy for the period up to 2030 seeks to improve drug supply mechanisms, as well as the quality and efficacy of medicines and pharmaceutical activities. A priority is tackling the circulation of counterfeit or low-quality medication on the pharmaceutical market.

Pharmaceuticals are supplied by licensed wholesalers (821 in total) and by retail pharmacies and their branches (more than 2180 in total). It is estimated that 99% of pharmacies are private, although the exact proportion of public versus private pharmacies is unknown. Data on the proportions of independent and chain pharmacies are not available either.

Access to pharmaceuticals is frequently a challenge. The MedMon survey in 2021 found that over 75% of facilities reported as available medicines for the treatment of diabetes (sulfonylureas, metformin), asthma (xanthine, salbutamol inhaler), and gastroesophageal disorders (antipropulsives, histamine-2 blockers, proton pump inhibitors). Availability varied with regard to cardiovascular disease treatments (ACE inhibitors, beta blockers, calcium channel blockers, cardiac glycosides, loop diuretics, phosphodiesterase inhibitors, thiazide diuretics). Less than 50% of facilities had cardiac glycosides (e.g. digoxin) available at the time of data collection. However, there were stark differences in the availability of cardiac glycosides between regions: 93% of facilities had these available in Dushanbe, while in Sughd this medicine group was found in only one of the 38 facilities surveyed. Availability of anticonvulsants (e.g. carbamazepine) was critically low – found in fewer than 10% of the surveyed facilities. Whether there is waste in pharmaceutical spending is discussed in Box 5.6.

BOX 5.6 Is there waste in pharmaceutical spending?

Counterintuitively, given the low absolute amounts of per capita health spending in Tajikistan, there has historically been an underuse of generic drugs. Overprescribing of expensive brand names, rather than cheaper generic drugs, risks an unnecessary financial burden for patients. Increased efforts are needed to ensure that high-quality generic pharmaceuticals are available to and affordable for the population. There are also valid concerns around the circulation of counterfeit or low-quality medication on the pharmaceutical market.

Guidelines exist for the pharmaceutical prescription of a list of generic medicines, and over the last 10 years the number of generic medicines on this list has been expanded. However, in practice these guidelines are not widely adhered to: doctors are not legally required to prescribe generic before branded medication, and there is little evidence that many do so.

The current national health strategy highlights the need for ensuring equitable access to essential medicines, and identifies several activities to be undertaken, including developing a law to regulate pricing and prices of medicines.

5.7 Rehabilitation/intermediate care

Medical rehabilitation and intermediate care are still underdeveloped in Tajikistan. There has been some progress in the provision of rehabilitation services for people living with disabilities. In 2013, the Tajik Ministry of Health and Social Protection set up a disability and rehabilitation programme with support from WHO, and announced its intention to develop a national policy as well as better systems and services for rehabilitation. In 2017–2020 the government ran a National Programme on Rehabilitation of Persons with Disabilities, and ensuring the rehabilitation and social integration of people with disabilities is listed as a priority within the current national health strategy.

5.8 Long-term care

Limited long-term care options are provided by the state for older people in Tajikistan. Older people are considered a vulnerable population group and are nominally entitled to home-based care, inpatient facilities and shelter

(International Labour Organization, 2018). A small number of institutions accept older people for long-term care. In general though, relatives and local communities provide a significant proportion of care for older people through informal structures.

There continue to be institutions for people with some types of disability, such as for those with visual or hearing impairments. These institutions exist separately for children and adults; those for adults are also involved in manual production activities. The facilities have health care arrangements with specialists who are in charge of general or particular health problems of residents. In reality, however, most people with disabilities are taken care of by their families or close relatives, and have difficulties accessing health services for financial reasons. Rehabilitation services are inadequate in both quality and quantity. Overall, social stigma, physical barriers and the current system of special schooling and institutionalization all contribute to the ongoing marginalization of people living with disabilities.

A 2018 report highlighted the particular vulnerability of disabled girls and women in Tajikistan as a result of overlapping discrimination connected to disability and gender beliefs. One example is that girls with disabilities are less likely to receive an education than girls without disabilities, further hindering their opportunities for employment (CEDAW et al., 2018).

In 2016, the first ever National Strategic Plan on Rehabilitation of Disabled People for the period of 2017–2020 was developed and approved by the President. Its implementation was led by the Social Protection subdivision of the Ministry of Health and Social Protection. In March 2018, the Government of Tajikistan signed the UN Convention on the Rights of Persons with Disabilities. Within the National Health Strategy for 2021–2030, the rehabilitation and social integration of people with disabilities is a specified output for improvements in health care accessibility and quality.

5.9 Services for informal carers

There are few support systems for families with children with disabilities, except for limited financial support (WHO Regional Office for Europe, 2015). Relatives of those receiving mental health care have not historically been included in mental health care processes and services (WHO, 2009), a tendency that continues today.

5.10 Palliative care

The development of palliative care in Tajikistan is still in its early stages, but important first steps have been taken with the support of the Open Society Foundation. A national association for palliative care has been set up, as well as a chair for palliative care at the Tajik State Medical University, and national standards for the provision of palliative care have been developed and approved by the Ministry of Health and Social Protection. Inpatient palliative care is provided in cancer and TB hospitals, as well as at five regional Hospitals for Nursing Care. There are also palliative day care centres with mobile palliative care teams in Dushanbe and GBAO (Abidjanova, 2018; Lohman et al., 2022).

This is encouraging because patients are in dire need of palliative care. More than 4000 adults requiring it have been officially registered in national records, and this is anticipated to be a significant underestimate of true levels of need. In addition to adult care, about 8550 children per year are estimated to need palliative care. Palliative care for patients with cancer is a particular concern. According to national data, more than 15 000 people with neoplasms are registered in the country, and the incidence rate is increasing from the rate of 35.5 per 100 000 population recorded in 2018 (Ministry of Health and Social Protection, 2021b).

The current national health strategy envisages the development of standards for the provision of palliative care. It also seeks to introduce mechanisms to provide palliative care to patients at home via an interdisciplinary team of professionals. In addition to at-home care, a limited number of beds in existing hospitals would continue to be reserved for palliative care.

5.11 Mental health care

Mental health has received very little attention from either domestic policymakers or international development partners. The provision of mental health care was not specifically regulated until 2002, when the law "On psychiatric care" was adopted.

There are currently 16 mental health centres in Tajikistan, 14 of which have inpatient beds (with a total of 1485 beds). There are also three separate psychiatric hospitals (one national and two regional), as well as several small

mental health support projects and activities supported by international partners, including IFRC (International Federation of Red Cross and Red Crescent Societies), MSF (Médecins Sans Frontières) and UNICEF (which focusses on adolescent mental health).

According to the current national health strategy, while the quality of mental health care has improved in recent years, infrastructure and services provided by mental health hospitals or institutions fall short of acceptable quality standards. This is despite a growing burden of mental illness and more patients in need of treatment. Patients requiring intensive treatment are housed in large public facilities to receive medical care, and without a stand-alone law for mental health it is unclear if treatment is in line with human rights standards. As of 2020 there were no community-based mental health services (WHO, 2021).

5.12 Dental care

Dental care is provided in both public dental institutions and private clinics. The following types of dental care are provided free of charge via public health services for all citizens under Decree No. 600:

- preventive check-ups for children and pregnant women every 6 months;
- oral hygiene services for children from 2 to 7 years old, and women who are registered as being pregnant;
- emergency dental care.

All other dental care has to be paid for by patients out of pocket, and should be priced according to the single price list of the Ministry of Health and Social Protection.

The dental health service is represented at the national level by the Scientific Research Institute of Dentistry under the Ministry of Health and Social Protection. As of January 2024, there were 815 dental institutions in the country, consisting of 574 public clinics, 232 private clinics and 9 dental departments housed in clinics within other ministries. Their regional distribution is somewhat uneven: just 1.3% of clinics are located in GBAO, compared to 50% in Sughd.

6

Principal health reforms

Chapter summary

- The overall pace of health system reform in Tajikistan has been slow. However, the government has initiated a range of reforms over the last two decades to advance universal health coverage and strengthen primary care.
- Priority areas of reform have included health financing, primary care, governance and service delivery.
- The latest National Health Strategy for 2021–2030 remains focused on advancing many of these areas. Current strategic priorities include health financing, health worker recruitment and training, primary care provision, and disease surveillance and reporting systems.

6.1 Analysis of recent reforms

Since 2001, the overall direction of health reforms undertaken in Tajikistan has focused on improving the efficiency of health spending, prioritizing spending on primary care, introducing a basic benefits package to provide financial protection for vulnerable population groups, and strengthening health system legislation.

Since the country's independence in 1991, the development of the Tajik health system can be divided into several stages. In the first stage of health reform (1993–1996), the key elements of the future reform strategy were identified for the medium and long term. The second stage (1997–2001) was concerned with the implementation of consecutive plans of actions for the strategies. However, in the absence of sufficient financial resources and clear lines of action, this process was protracted and did not achieve its intended goals.

During a third stage (2001–2010), the Ministry of Health and Social Protection – with the support of external agencies – started to implement a number of reforms, including in the areas of primary care, hospital care, institutional capacity, health information systems, immunization programmes and health financing mechanisms. Key documents adopted in 2002 were the Health Care Strategy by 2010, and the Conception of Health Sector Reform (Khodjamurodov & Rechel, 2010). In 2007, a Department of Planning and Implementation of Healthcare Reforms and International Relations was established in the Ministry of Health and Social Protection.

In 2010, the Ministry of Health and Social Protection adopted a comprehensive National Health Strategy for 2010–2020. The strategy was based on priorities of the National Development Strategy for 2005–2015 and the Poverty Reduction Strategy for 2005–2015. Its overall goal was to improve population health and create a healthier living environment. It identified priorities for health sector development in four key areas: governance, health financing, resource generation and service delivery. It was hoped that modernizing health system governance would: facilitate the creation of a results-oriented, socially accepted, sustainable, transparent, accountable, equitable and accessible health care sector; lead to improvements in the accessibility, quality and efficiency of health services; and help the development of health system resources. The strategy also aimed to achieve improvements in the prevention of communicable and noncommunicable diseases, the promotion of healthy lifestyles and the provision of modern medical care of good quality. The Ministry of Health and Social Protection gradually increased the use of evidence to inform policy, including through the establishment of a Health Policy Analysis Unit in 2007 (Akkazieva et al., 2015).

To track progress in implementing the National Health Strategy for 2010–2020, the Ministry of Health and Social Protection developed a framework for monitoring and evaluation. Progress was monitored against a set of indicators, with an annual review discussing achievements and challenges.

The annual review involved key stakeholders, including the Prime Minister's and the President's Offices, line ministries such as the Ministry of Finance and the Ministry of Labour, Migration and Employment, the heads of *oblast* health departments and managers of health facilities, development partners, and civil society organizations (Akkazieva et al., 2015).

The National Health Strategy for 2021–2030 was approved in September 2021, with the overarching objective of making progress towards universal health coverage. Its primary strategic directions are based around improving governance, making financing more sustainable, strengthening the health workforce, developing ICT, and improving the quality and accessibility of health services. Among other elements, it envisages the introduction of an integrated model for the provision of health services at the primary care level. Implementation of the strategy is monitored by the Ministry of Health and Social Protection using a set of selected indicators, with annual reports submitted to the government.

In 2017, the Ministry of Health and Social Protection reviewed all existing laws and regulations of the sector and combined them into a single Health Code (adopted by the Parliament of the Republic of Tajikistan on 15 March 2017, #712).

6.1.1 *Primary care*

One of the main goals of current health reforms in Tajikistan is to strengthen primary care. Excess hospital capacity has been reduced, although this has generally taken the form of bed reductions rather than closure of facilities. The services of central *rayon* and city hospitals, as well as *oblast* hospitals, are still often duplicative. In order to increase efficiency, there seems to be a need to further rationalize the network of medical institutions, although this would need to be achieved without compromising access.

Since 2002 there have been changes to the network of primary care providers, such as the establishment of rural health centres and the merging of previously separate polyclinics for adults, children and women's reproductive health into *rayon* and city health centres (see Section 5.3). Significant investments have also been made to strengthen the material and technical base of primary care institutions, as well as in the training of doctors and nurses in family medicine. Tajikistan has increased the portion of the public

budget for health that is allocated to primary care, rising from 34.6% in 2010 to 40.7% in 2022. The number of primary care visits per person and year has risen steadily, from 4.8 in 2010 to 7.6 in 2022 (WHO, 2023).

Ongoing challenges include that patients do not always seek care from family or *rayon* doctors, that there is a shortage of family doctors and nurses in rural areas, and that the competence and scope of practice of family doctors is still very limited. Additional efforts are needed to strengthen family medicine and make it attractive both to medical graduates (to increase supply) and to patients (to increase demand). More broadly, Tajikistan will need to find ways to train a sufficient number of health workers and retain them in the health system. A key objective of the National Health Strategy for 2021–2030 is the establishment of an integrated model for health worker training and development of clinical skills.

In April 2022, a Joint Statement in Support of Strengthening Primary Health Care was developed and signed by the Minister of Health and Social Protection, in collaboration with donors and other development partners. The joint statement is a policy document that sets out key priorities and actions for development partners to strengthen primary health care in Tajikistan. The document establishes a clear shared vision for unifying efforts and stakeholders around a common goal. It has also led to the creation of a joint work plan between the Ministry of Health and Social Protection and the relevant development partners to inform specific actions, as well as a Prioritized Action Plan 2024–2026 that is intended to accelerate progress towards universal health coverage (Ministry of Health and Social Protection, in press).

6.1.2 *Health financing*

Since 2005 Tajikistan has embarked on several health financing reforms. In 2005 the government adopted an overarching "Health system financing strategy in the Republic of Tajikistan for 2005–2015" (Government Decree from 2 July 2015, No. 426), which identified the need to introduce new mechanisms for paying health care providers, and to ensure a more equitable distribution of health care resources.

In 2015 a "Strategic Plan for Further Reforming Health Financing in the Republic of Tajikistan for the period 2015–2018" was adopted. This was a continuation of the health system financing strategy for 2005–2015. It was followed

by the "Strategic plan for health financing reform for the period 2019–2021" (Government Decree from 8 June 2019, No. 394), which represented a continuation of most unfinished activities from the previous strategy. With the purpose of aligning efforts among development partners (including WHO, World Bank, Global Financing Facility [GFF], Asian Development Bank, the Global Fund, the vaccine alliance GAVI and the European Commission), a joint statement to support strategic health financing in Tajikistan was also released. It urged the country to modernize budgeting and payment systems, increase domestic funding for health and distribute resources equitably.

As part of the financing strategies, financing reforms were initiated in primary and secondary care. Progress on several key areas of financing reform is discussed below.

PER CAPITA FINANCING

Partial per capita financing for variable (i.e. non-staff) primary care costs was first piloted in Dangara and Varzob *rayons* in 2005–2006 and was then slowly extended to cover all primary care facilities in the country by 2016. Also in 2016, Tajikistan began rolling out per capita financing for primary care providers in 55 of its 88 city and *rayon* health centres. As of 2019, the policy was operational throughout the country.

The national per capita policy has three goals: (1) increasing financial resources for primary care; (2) achieving a more balanced distribution of funding across primary care providers in different parts of the country; and (3) enhancing the efficiency of health care provision by shifting health care utilization patterns towards primary care. The policy establishes a minimal funding requirement per person in providers' catchment areas which varies by provider type and is adjusted annually to account for changes in the cost of care and macroeconomic conditions. In 2021, this minimum per capita rate amounted to about TSJ 67 (US$ 6.30) for city health centres, and TJS 54 (US$ 5.08) for *rayon* health centres. The rates are adjusted upwards for providers in Dushanbe due to offering more specialized services and for GBAO because of its challenging geography and low population density.

If the standard, input-based budget appropriated to a facility is insufficient to meet the minimum per capita rate, a facility does not receive additional funds from the republican/*oblast* budget. Thus, unlike under

fully-fledged capitation – where all funding is centrally pooled and distributed according to a common formula – Tajikistan's current policy has no mechanism for fully equalizing per capita funds across providers beyond securing the minimum rate (Neelsen et al., 2021). Nor are providers granted greater autonomy to actively manage their funds according to subnational needs and to enhance efficiency, another key feature of capitation elsewhere. Instead, financial allocations remain mechanically tied to ring-fenced, input-based line items. As a result, actual per capita spending varies considerably between *rayons*.

To ensure the quality and accessibility of health services in primary care, the Ministry of Health and Social Protection and the World Bank launched a pilot of performance-based financing in primary health facilities, within the framework of the Health Services Improvement Project. The project was implemented in 8 *rayons* in Sughd and Khatlon *oblasts* and the Districts of Republican Subordination (DRS), scaled up to a further 8 pilot *rayons*, and completed in 2023. So far it has not led to permanent changes in purchasing arrangements.

Within the framework of the health financing reform project in the Sughd *oblast* and with the support of WHO, a new methodology for calculating the per capita standard rate based on needs (bottom-up approach) for primary care services has been developed under pooling of funds at the *oblast* level. Work is also underway to introduce a mechanism for contractual arrangements between a single purchaser and primary care providers in the pilot districts.

The current National Health Strategy for 2021–2030 aims to improve per capita funding mechanisms for primary care facilities through methods including the development of performance-based financing and improvements in health facility contract management.

HOSPITAL PAYMENT SYSTEMS

The legislative basis for introducing case-based payment models for hospital care was created in 2021 with Government Decree No. 465 "On the introduction of a financing mechanism based on the results of treatment in hospital structures" (adopted on 26 October 2021) and a joint order from the Ministry of Health and Social Protection and the Ministry of Finance "On approval of

basic standards and special funding ratios, rules for financing based on case-based treatment in hospital institutions" (adopted on 30 November 2021). Modelling the impact of this new financing mechanism on hospitals in three pilot districts – Shamsiddin Shohin, Faizobod and Rasht – is being carried out by the Asian Development Bank. Currently the Ministry of Health and Social Protection is developing an information system to track case-based financing and the financing of referral services in the hospitals.

MANDATORY HEALTH INSURANCE

The introduction of a mandatory health insurance system in Tajikistan has been discussed since at least 2008, when the law "On health insurance in the Republic of Tajikistan" was adopted by Parliament, envisaging its introduction in 2010. Since then, the introduction of mandatory health insurance has been postponed several times, most recently in 2022.

Feasibility studies on the concept of mandatory health insurance were carried out with the support of WHO in 2013, 2016 and 2021. The main conclusion of the studies was the need to revise and adapt the existing law to reflect current population health requirements, organizational issues (institutional structure, roles and relationships), existing financial mechanisms, and broader economic realities such as a lack of sufficient public funding and low levels of official employment (making options such as a labour market based insurance system unworkable). It is now generally understood that mandatory health insurance will likely entail the use of a single, national model of state health insurance funded from pooled tax revenue, rather than by individual contributions such as payroll deductions or payment to private providers.

In November 2021, the Ministry hosted a roundtable discussion on the issue of health insurance with representatives of ministries, departments and development partners, including the World Bank. The roundtable proposed measures to accelerate the implementation of the current strategic plan.

In legislative terms, another step towards implementing the 2008 law on health insurance was the adoption of the Decree dated 26 October 2021, No. 465, "On the introduction of a financing mechanism based on the results of treatment in hospital structures". This was passed alongside a joint order of the Ministry of Health and Social Protection and the Ministry of Finance, dated 30 November 2021, "On approval of basic standards and special funding ratios,

rules for financing based on the results of treatment in hospital institutions". In addition, a joint order of the Ministry of Health and Social Protection and the Ministry of Finance was passed on 4 December 2019, "On the introduction of the new health financing mechanism in the state health facilities of the pilot city and districts of the Sughd *oblast*". It is hoped that these pieces of legislation will support the implementation of mandatory health insurance by standardizing costs for health services which the government – eventually as a single strategic purchaser – would be able to use.

In December 2022, the government passed an amendment which officially postponed the introduction of mandatory national health insurance until 2025 (Decree No. 596, "On amendments to the law of the Republic of Tajikistan on medical insurance in the Republic of Tajikistan", 9 December 2022).

A list of health reforms from 2005 to 2023 is given in Table 6.1.

6.2 Future reforms

Adopted in September 2021, the current National Health Strategy for 2021–2030 outlines various priorities for the development of the country's health system until 2030. The strategy aims to continue several of the reforms initiated under previous health strategies, but also identifies directions for future reforms that reflect priorities connected to the Sustainable Development Goals (SDGs), such as reducing inequality, enhancing social justice and well-being, developing human capital, and improving population health and life expectancy.

An important area highlighted as requiring revision is the design of the basic benefits package. While it was one of the flagship initiatives of national health policy until recently, its delivery is considered to have been suboptimal: it was not rolled out nationally, was not considered to have been financially sustainable, and did not respond to many of the health care needs of the population. To maximize its potential benefits to population health in a future iteration, a wider range of clinically effective services and essential medicines should be added to the package, ideally with no co-payments (or minimal fixed co-payments), and less effective services should be excluded (WHO Regional Office for Europe, 2024a). The implementation of the much-anticipated law on health insurance is also intended to increase the pooling of sources of financing.

TABLE 6.1 Health reforms 2005–2023

YEAR	LEGISLATION TITLE	FOCUS	IMPLEMENTATION STATUS
2005	Health System Financing Strategy in the Republic of Tajikistan for 2005–2015	Health financing models	Partially implemented
2007	Programme of state guarantees to provide the population of pilot regions of the Republic of Tajikistan with health care for 2007	State Guaranteed Benefits Package (basic benefits package)	Implemented in 31 out of 65 *rayons*. Ended in May 2023
2008	Decree No. 504 "On health insurance in the Republic of Tajikistan: resolution of the *Majlisi Milli* and *Majlisi Oli* of the Republic of Tajikistan"	Introduction of compulsory national health insurance	Implementation postponed in 2014, 2017, 2021 and 2022
2008	Decree of the Government of the Republic of Tajikistan dated 2 December 2008 No. 600 "On the procedure for the provision of health services to citizens of the Republic of Tajikistan by institutions of the state health care system"	Sets framework for fee for service	Partially implemented
2010	Decree of the Government of the Republic of Tajikistan dated 2 December 2008 No. 600 "On the procedure for the provision of health services to citizens of the Republic of Tajikistan by institutions of the state health care system" (as of 29 May 2010)	Approves price lists of services and list of free services	Partially implemented
2010	National health strategy of the Republic of Tajikistan for 2010–2020	National health strategy for the period 2010	Partially implemented
2011	Decree no. 536 "On approval of the action plan for the implementation of a new financing mechanism in health care institutions of the Republic of Tajikistan for 2011–2014"	Beginning of per capita health financing for primary care	Implemented
2013	Joint Decree of the Ministry of Health and Social Protection and the Ministry of Finance (No. 98/25 of 28)	Introduction of full per capita financing of primary care	Partially implemented
2015	Strategic plan for further health financing reform in the Republic of Tajikistan for the period 2015–2018 (Government Decree No. 426)	Health financing models	Partially implemented
2015	Government Resolution No. 827 from 11 December 2015 "On the issues of introducing per capita financing in primary health care facilities"	Per capita financing in primary health care	Implemented
2019	Ministry of Health and Social Protection of the Population and the Ministry of Finance of the Republic of Tajikistan dated 4 December 2019 "On introduction of the new health financing mechanism in the state health facilities of the pilot city and districts of the Sughd *oblast*"	Introduction of the new health financing mechanism within pooling of funds at the *oblast* level, establish of purchasing and contracting mechanisms	Partially implemented
2019	Strategic plan for health financing reform for the period 2019–2021, approved by the Decree of the Government of the Republic of Tajikistan dated 8 June 2019 No. 394	Health financing reform	Partially implemented

YEAR	LEGISLATION TITLE	FOCUS	IMPLEMENTATION STATUS
2021	Strategy for protecting the health of the population of the Republic of Tajikistan for the period until 2030	Sets out the national health strategy for the period 2021–2030	Partially implemented
2021	Strategic plan for primary health care development based on family medicine for the period 2021–2025	Primary health care and family medicine	Partially implemented
2021	Decree No. 465 "On the introduction of a financing mechanism based on the case-based financing in hospital structures"	Formalized the concept of case-based financing	Partially implemented
2021	Order "On approval of basic standards and special funding ratios, rules for financing based on case-based financing in hospital facilities"	Set standard rates and funding allocations for case-based financing in hospitals	Partially implemented
2022	Law on medicines, medical products and pharmaceutical activities	Public administration, provision of medicines, medical products and parapharmaceuticals	Partially implemented
2022	Government Resolution on the procedure for conducting medical and social examinations	Conducting medical and social examinations	Partially implemented
2022	Strategy for financial protection against natural disasters for the period up to 2037	Financial support for natural disasters	Partially implemented
2023	Presidential Decree on measures to expand non-cash payments	Non-cash payment of taxes, fines and services, including medical	Partially implemented
2023	2024–2027 implementation map for digitalization in the health system to achieve the goals of the strategy on health care of the population of the Republic of Tajikistan up to 2030	Health digitalization	Partially implemented

Source: Authors' compilation.

The availability of sufficient health resources – especially human and financial resources – will play a major role in determining whether health reforms in Tajikistan can advance as intended. There is still insufficient public funding for health services, which has been identified as a major risk in the strategy, and this could be alleviated by increasing government spending on health. The fragmentation of public funding sources for health continues to cause both inefficiencies and significant regional and district-level disparities in the distribution of health care funds. To mitigate some of these issues, the National Health Strategy for 2021–2030 intends to develop a mechanism for combining public finances from different sources under the management of a single entity at the *oblast* level. There are also discussions about establishing a fund directly at the national level to create a larger pool.

Initially *oblast* level pooling will be implemented as a pilot in the Sughd region in 2025, but eventually it is hoped that the approach will lead to all public funds sitting in a single financial structure, ultimately enabling the establishment of a national fund. The use of strategic purchasing could also optimize health spending efficiency and value for money (Zine Eddine El Idrissi & Sjoblom, 2022). To address issues around health worker migration, regional inequalities in their distribution, and issues around skills gaps, the strategy envisages improvements in health workforce working conditions and training, such as a national system for continuing professional development, and greater use of financial and non-financial incentives. There is also an intention to introduce greater use of strategic planning tools to strengthen human resource management in health care.

Another area of reform is anticipated to be occupational health. There are intentions to strengthen compliance with environmental and workplace safety standards, especially at newly commissioned production facilities, along with creating a system of state support for improving health conditions in and around businesses. Creating an environmental map and monitoring the environmental situation will be an important first step, although it will require collaboration between different government departments, and between the public and private sectors.

Other priority areas highlighted in the strategy include strengthening information systems and digital health, strengthening the quality and accessibility of health care services, and improving public health preparedness and response to public health emergencies. Future reforms may therefore also be developed to support aims and activities across these topics.

7

Assessment of the health system

Chapter summary

- The Ministry of Health and Social Protection plays a key role in the governance of Tajikistan's largely centralized health system.
- A general lack of transparency, widespread informal payments, and limited public participation in the health policy development process remain among the challenges faced by the health system.
- The main barrier to accessing health services are out-of-pocket payments by patients, especially for medication. This creates significant inequities in health service access, and lower-income groups are most likely to be negatively affected.
- Quality of care remains a major concern, with challenges including insufficient data, underinvestment in infrastructure and equipment, staff turnover, deficiencies in the training of health workers, and limited access to pharmaceuticals.
- Health system outcomes have improved in terms of maternal and child health, but the growing burden of NCDs poses new challenges to the health system.
- Health system efficiency is undermined by the continued reliance on inpatient care, an input-based system of public resource

allocation, the absence of a pooling mechanism for health funds, high levels of out-of-pocket spending (both formal and informal), underdeveloped quality of care, and deficiencies in transparency and accountability.

- A lack of family doctors, nurses and specialists compounds issues around health care access and quality, especially in rural areas.

7.1 Health system governance

The Ministry of Health and Social Protection plays a key role in the governance of Tajikistan's largely centralized health system. It is responsible for developing national health policies and monitoring their implementation. International development partners provide important inputs in terms of resources and technical advice for policies, but coordination still needs improvement. Many initiatives remain in pilot stages for long periods without further expansion or scale up. The influence of professional associations or the public in shaping national health policies is limited. The current national health strategy provides an overall planning framework and highlights main priorities, and the prioritized action plan of the national health strategy is a key instrument for coordinating and supporting the strategy's implementation. However, health planning remains highly centralized and is strongly focused on the budgetary process.

Challenges to the transparency and accountability of the health system include informal payments, lack of clear procurement practices, and lack of public participation.

7.2 Accessibility

The right of the population to health protection was set out in the 1994 constitution and almost the entire population of Tajikistan is entitled to publicly provided health services. However, a constitutional amendment removing the right to free health care was approved in a national referendum in June 2003, allowing the government to introduce a system of co-payments for services provided by state-run health services. At present, the main barrier to accessing health services are the required formal and informal OOP

payments by patients. The share of OOP payments as a percentage of current health expenditure is high, accounting for 63.5% in 2021 (see Section 3.1).

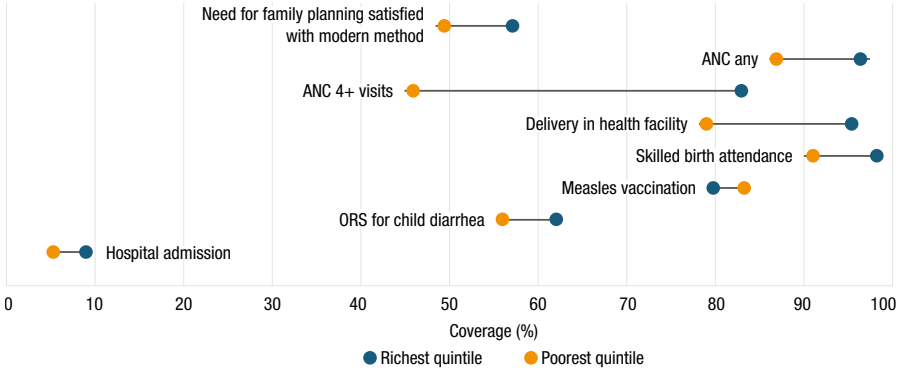
The cost implications of accessing health services mean that poorer groups of the population forgo health services when in need. While up-to-date information on unmet needs for health services is unavailable, data from the 2017 Demographic and Health Survey indicate that richer parts of the population used health services more frequently than poorer parts. This inequity in access could be observed across many types of health services, with the only exception being measles vaccination (Figure 7.1). According to the 2017 Demographic and Health Survey, the chief reason for women to forgo needed care is a lack of money, which 35% of all women and 58% of women in the bottom wealth quintile cite as a major obstacle (World Bank, 2021b).

Unmet need for both preventive and curative care is particularly high for NCDs, which form an ever-larger part of the disease burden in the country, as the system is clearly ill-equipped to meet the challenges of its epidemiological transition. For instance, survey data from 2016 suggested that only 9% of adult females had ever had a cervical cancer screening, that only 27% of hypertensive adults were aware of their condition, and that a mere 13% of them took any medication for it (Figure 7.2) (Neelsen et al., 2021).

Prevention, screening and early diagnosis are generally underdeveloped. In 2019 there were no screening programmes for at least four common cancers (breast, cervix, colon and childhood) (WHO, 2020). There is also limited diagnostics equipment: in 2023 the country had just nine mammography units.

There are also major geographical barriers to access, especially in remote mountainous areas where road conditions remain poor, vehicles are limited, and some communities are isolated during winter months. While the government aims to provide equitable access across the country, health service coverage differs markedly between the country's regions and between urban and rural areas. In rural areas (where 72% of Tajikistan's population lived in 2022), there was a lower proportion of women who had made at least four antenatal visits in 2017 and a lower proportion of women who gave birth at a health facility. However, measles vaccination coverage in 2017 was higher in rural than in urban areas. There were also marked differences in service coverage for maternal and child health across Tajikistan's regions, with provision of at least four antenatal visits varying from 43% in Khatlon to 94% in Sughd (Figure 7.3).

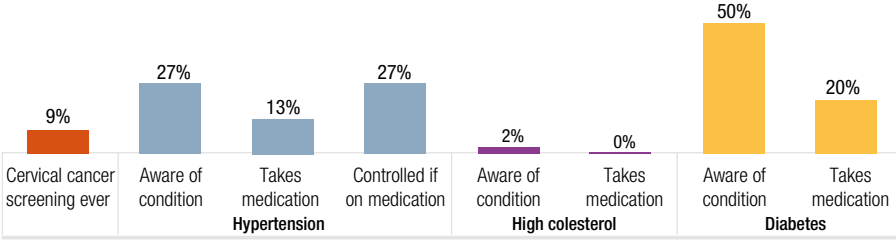
FIGURE 7.1 Health service coverage in 2017, richest and poorest quintile



Notes: Data on all indicators other than hospital admission from the 2017 Demographic and Health Survey. Data on hospital admissions from the 2011 World Bank Household Budget Survey. "Any ANC" is the percentage of pregnancies in the past 2 years of women aged 15–49 with at least one antenatal care (ANC) visit. "ANC 4+ visits" is defined as the percentage of pregnancies in the past 2 years of women aged 15–49 with at least four antenatal care visits. "ORS for diarrhoea" is the percentage of children under 5 with diarrhoea in the 2 weeks before the survey who were given oral rehydration salts (ORS).

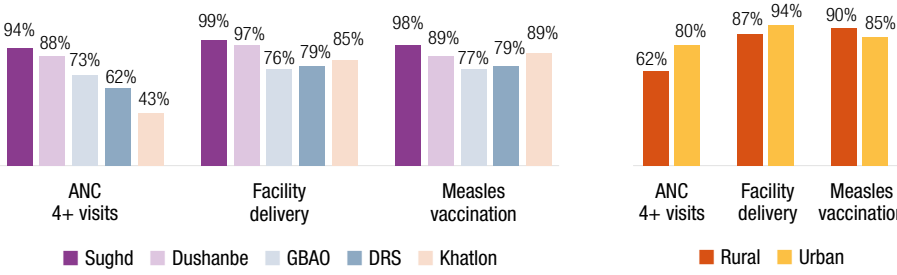
Source: World Bank, 2021b.

FIGURE 7.2 Access to noncommunicable disease care in 2016



Source: Neelsen et al., 2021.

FIGURE 7.3 Regional and urban–rural inequities in service coverage in 2017



Notes: ANC, antenatal care; GBAO, Gorno-Badakhshan Autonomous *Oblast*; DRS, Districts of Republican Subordination.

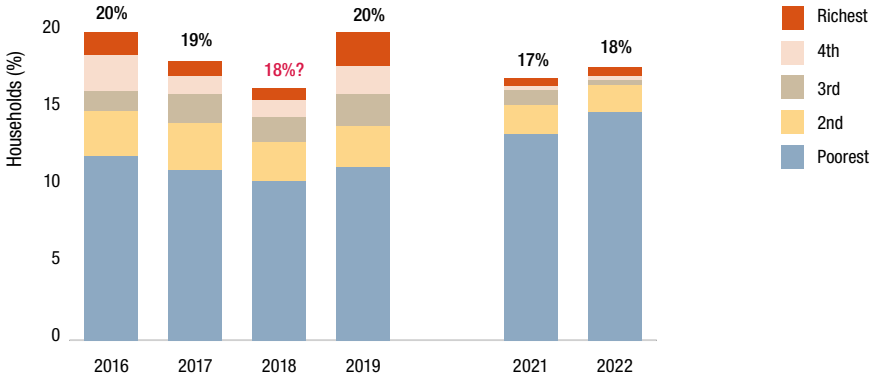
Source: World Bank, 2021b.

7.3 Financial protection

The Ministry of Health and Social Protection has taken steps to improve the financial protection of the population. Two of the most important measures in this regard were the introduction of the basic benefits package, covering 31 of the country's 65 *rayons* in 2022 (but discontinued in May 2023), and Decree No. 600 in the rest of the country (and since May 2023 nationwide). Under both programmes, vulnerable groups of the population were exempt from formal co-payments. However, exemption categories were not sufficiently targeted at those in greatest need and in practice patients may still have to pay, such as for outpatient pharmaceuticals.

In 2022, 18% of households experienced catastrophic health spending and most of these households were impoverished or further impoverished after OOP spending on health care. Households in the poorest consumption quintile are consistently most likely to experience catastrophic health spending (Figure 7.4). Catastrophic health spending is also more likely to occur in households that include at least one person aged over 65 years or are headed by an unemployed person (WHO Regional Office for Europe, 2024a).

FIGURE 7.4 Share of households with catastrophic health spending by consumption quintile

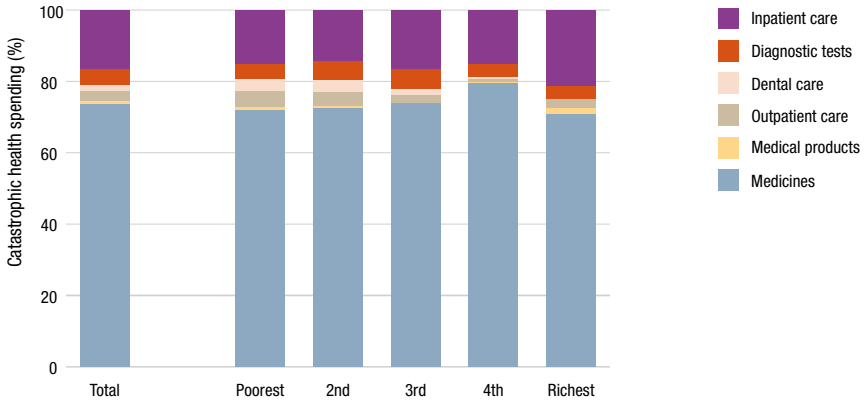


Notes: Catastrophic health spending is defined as the share of households with OOP payments greater than 40% of household capacity to pay. Capacity to pay for health care is defined as total household consumption minus a standard amount to cover basic needs (food, housing and utilities). A household is impoverished if its total consumption falls below the poverty line after OOP payments; further impoverished if its total spending is below the poverty line before OOP payments; and at risk of impoverishment if its total spending after OOP payments comes within 120% of the poverty line. The poverty line is a relative poverty line reflecting basic needs (food, housing and utilities).

Source: WHO Regional Office for Europe, 2024a (based on national household budget survey data from the Ministry of Health and Social Protection).

The incidence of catastrophic health spending in Tajikistan is one of the highest in Europe and is heavily concentrated in households with low incomes and mainly driven by OOP payments for outpatient medicines (Figure 7.5), a pattern in keeping with other countries that have weak financial protection mechanisms for lower income groups (WHO Regional Office for Europe, 2023b).

FIGURE 7.5 Breakdown of catastrophic health spending by type of health care and consumption quintile in Tajikistan, 2022



Note: Diagnostic tests include other paramedical services and medical products include non-medicine products and equipment.

Source: WHO Regional Office for Europe, 2024a.

7.4 Health care quality

Quality of care is a major concern in Tajikistan due to: underinvestment in health facilities; a lack of modern technologies and equipment; inconsistencies and gaps in health worker training; limited access to pharmaceuticals (which often require private household spending); and inequalities in access between different regions or population groups.

One of the key challenges for improving quality of care in Tajikistan is the lack of data. In-hospital mortality rates, which are a commonly used metric for the quality of hospital care, are not known and information on avoidable hospital admission rates, which is a proxy indicator for the quality of primary care, is limited. Information on cancer survival rates is also unavailable.

Internationally reported data on mortality in Tajikistan do not allow a detailed analysis of trends in causes of death, due to gaps in reporting, with the latest data reported to WHO for 2017 and no data available for 2006–2016. Furthermore, the causes of many deaths in 2017 (130 per 100 000 population or 14.2% of all deaths) were ill-defined, indicating problems in registering cause of death.

A study using Global Burden of Disease Study 2016 data estimated that 59% of amenable deaths (treatable deaths, defined as causes of death that can be mainly avoided through timely and effective health care interventions) in Tajikistan in 2016 could be attributed to poor quality of care, amounting to 66 deaths per 100 000 population. The remaining 41% of amenable deaths were attributed to non-utilization of health services (Kruk et al., 2018).

Available information points to major deficiencies. While almost all women in Tajikistan now have access to skilled birth attendance, only half received delivery and postnatal care of appropriate quality, according to the 2017 Demographic and Health Survey (World Bank, 2021b), with gaps in antenatal care visits and deliveries at facilities (Figure 7.3).

In parallel with unmet needs for quality care, there is also unnecessary and potentially harmful care. A study using randomly selected medical records from 15 hospitals and covering 440 children and 422 pregnant women found that unnecessary hospitalizations accounted for 40.5% and 69.2% of hospitalizations, respectively, ranging from 0% to 92.7% across the 15 hospitals. Among necessary hospitalizations, 63.0% and 39.2% were unnecessarily prolonged in children and women, respectively (Jullien et al., 2023). Primary care seems to perform poorly in terms of hypertension detection and management (Chukwuma et al., 2019) and a cross-sectional survey among 1600 adult patients who had visited a primary care facility found a high prescription rate for intravenous and other injections, including antibiotics and vitamins (Fischer et al., 2020). Prescribing drugs has been described as an important source of income for primary care providers, resulting in overprescribing and unnecessary treatments, such as vitamin injections (Donadel et al., 2016).

The government has started to address some of the challenges to the provision of high-quality care. Under the National Health Strategy for 2010–2020, strengthening service quality and access were recognized as key objectives and this led to some improvements in the provision of services. Investments in infrastructure and the introduction of more modern

equipment and technologies have had a positive impact on improving the quality of medical care in certain areas, especially in primary care.

There has also been some progress in the education of health workers, but structural barriers remain, such as the weak integration of primary care and higher levels of care. There is little follow-up for patients after specialist care or hospital treatment, and limited exchange of information to allow primary care providers to carry on treatment and clinical management.

The government has also invested in evidence-based guidelines and protocols. Between 2010 and 2020, over 700 new standards and 50 guidelines were developed (Ministry of Health and Social Protection, 2021b). However, there is little evidence on their application and related patient outcomes. Improving the quality of health care services is a strategic direction of the 2021–2030 health strategy. Objectives include increasing the number of facilities using national clinical standards and reducing inequalities in access to high-quality health services across the country.

7.5 Health system outcomes

The contribution of the Tajik health system to health improvement is modest in some areas and more discernible in others. However, detailed and reliable information is not available on amenable (or treatable) mortality (i.e. deaths that should not occur in the presence of timely medical care) or preventable mortality (i.e. deaths that should not occur in the presence of public health and intersectoral policies).

An analysis of health care access and quality for 195 countries and territories using estimates of the 2016 Global Burden of Disease Study calculated a Healthcare Access and Quality (HAQ) Index, based on age- and risk-standardized death rates from 24 non-cancer causes considered amenable to health care, and age-standardized mortality-to-incidence ratios for eight cancers considered amenable to health care. Tajikistan scored 52 on the HAQ Index in 2016 (an improvement from 41 in 1990), compared to 61 for Kyrgyzstan, 63 for Uzbekistan, and 69 for Kazakhstan. Tajikistan scored comparatively well on vaccine-preventable mortality, but lower on mortality related to cancer and cardiovascular diseases (GBD Healthcare Access Quality Collaborators, 2018). However, a later analysis using data from the 2019 Global Burden of Disease Study revised this estimate downwards to

43 on the HAQ Index for Tajikistan in 2019, compared to 54 for Kyrgyzstan, 49 for Uzbekistan, and 60 for Kazakhstan (GBD Healthcare Access Quality Collaborators, 2022).

Maternal and child health have been an important focus of health policy. Although both are also influenced by wider social determinants of health, falling mortality rates indicate progress in child and maternal health services. Tajikistan performs well for its income level, in particular with regard to vaccine-preventable diseases and births attended by skilled health personnel (World Bank, 2021b). Childhood vaccination for the first dose of the measles vaccine achieved 98% coverage in 2020, and 96% in 2021 for the second dose. Vaccination for diphtheria tetanus toxoid and pertussis (DTP3) saw 97% coverage in 2020, a significant improvement from 83% in 2000.

The infant mortality rate is estimated to have declined from 67.6 deaths per 1000 live births in 2000 to 27.6 in 2021, although this was still the second-highest estimated rate of infant mortality in the WHO European Region after Turkmenistan (35.8). Maternal mortality declined from an estimated 68 deaths per 100 000 live births in 2000 to 17 in 2020. This was lower than the estimated maternal mortality rate for Uzbekistan (30) and Kyrgyzstan (50) in the same year (WHO Regional Office for Europe, 2024c).

Tajikistan has also made important progress in the control of communicable diseases. The incidence of measles is reported to be exceedingly low, recorded as 0.1 per 100 000 population in 2019, compared with a WHO European Region average of 11.2 and a Central Asian Republics average of 24.0 in the same year. Between 2000 and 2014 the estimated prevalence of TB decreased from 457 per 100 000 population to 128. This was in line with the average for Central Asia overall, although more than double the WHO European Region average of 48 (WHO Regional Office for Europe, 2024c).

The burden of NCDs (in particular cardiovascular diseases) has been steadily increasing since the mid-1990s and the health system does not yet offer sufficient preventive and curative services for NCDs (see Section 7.2). In 2017 Tajikistan's age-standardized rate of premature deaths (in people aged 30–69 years) from NCDs was 521 per 100 000 population, roughly in line with other countries in Central Asia, but much higher than the WHO European Region average of 359 deaths (WHO Regional Office for Europe, 2024c). The Ministry of Health and Social Protection has recognized that NCDs present a major challenge for the country and adopted a national

strategy for NCD prevention and control for the period 2015–2023. A new strategy has since been drafted and submitted to the government for approval.

7.5.1 *Equity of outcomes*

As in other countries in Europe, there are pronounced differences between the sexes. Premature mortality from major NCDs for men is higher than for women, with 601 male deaths per 100 000 population in Tajikistan in 2017, compared with 445 for women.

There are also inequitable health outcomes due to financial barriers that are likely to dissuade lower-income individuals from seeking care (see Section 7.2).

7.6 Health system efficiency

7.6.1 *Allocative efficiency*

Health spending in Tajikistan continues to be skewed towards inpatient and specialized care, resulting in a comparatively low level of allocative efficiency. In 2006 the government embraced the goal of increasing spending on primary care to 40% of public spending on health. This goal had not yet been reached by 2019, when public spending on inpatient care amounted to 47.4% of overall public spending on health, whereas outpatient care (including primary care) accounted for only 33.9% (see Section 3.1). In terms of current health expenditure (including the substantial private OOP payments), the share devoted to inpatient care in 2019 was 44.3%, while 25.2% went to outpatient care.

Primary health care is defined by the WHO Global Health Expenditure database as including spending on general outpatient curative care, dental outpatient curative care, preventive care and health promotion activities, outpatient or home-based long-term health care, 80% of spending on medical goods, and 80% of spending on health system administration and governance. Using this definition, primary care spending in Tajikistan decreased from 47% in 2016 to 44% in 2019. However, this share includes the substantial private OOP payments. Public spending only accounted for 22% of primary health care spending in 2019 (WHO, 2024a).

There is also substantial variation across *rayons* in the share of public resources devoted to primary health care (and health overall), indicating poor allocative efficiency. *Rayons* with limited public resources spend far less per capita on primary health care than *rayons* with greater public resources (Figure 7.6).

Reasons for the continued dominance of inpatient care despite the country's limited public resources and young population include an oversized hospital sector and a continued input-based allocation of public resources for health. There have been attempts to rationalize the hospital sector by reducing the number of beds and to reform provider payment systems, but many health services in Tajikistan continue to be provided in inpatient facilities that could be more efficiently managed at the primary care level.

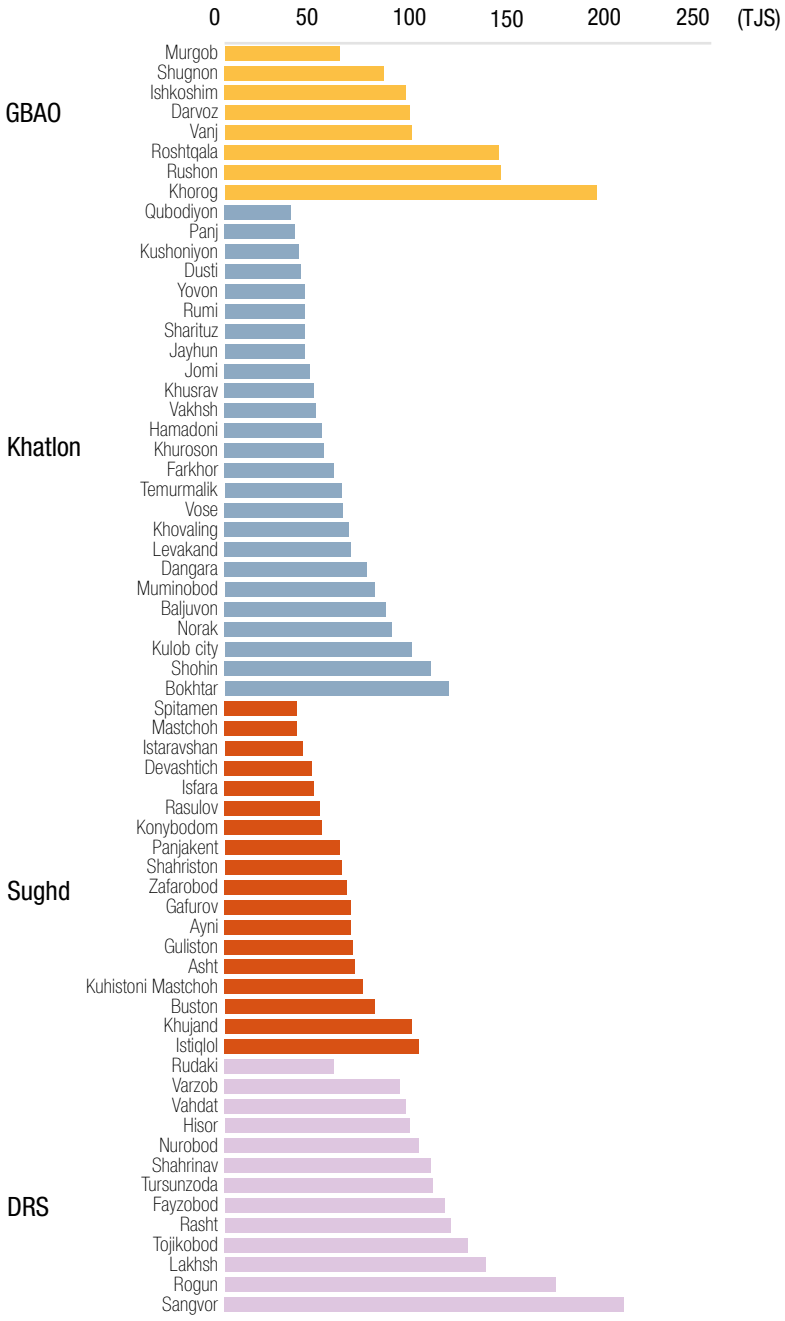
Another challenge for allocative efficiency is the existence of a number of vertical programmes and their insufficient integration into primary care. Various public health services are currently delivered through vertical programmes, including some related to maternal and child health, TB, HIV/AIDS, immunization and health promotion.

7.6.2 *Technical efficiency*

The technical efficiency of the Tajik health system (i.e. the effectiveness of its services given the level of spending incurred) can be assumed to be low. Financing mechanisms continue to be based on inputs rather than outputs or quality of health care, and there is a lack of formal mechanisms for pooling funds at *oblast* level. The country is only slowly moving towards provider payment mechanisms based on the population covered and services provided. The current national health strategy intends to provide guidance on consolidating public finances from various sources under unified administration, at least at the *oblast* level. Administrative inefficiencies and substantial disparities in allocation of health funds further undermine the technical efficiency of staff and services.

A recent World Bank review of public spending on health concluded that Tajikistan has the lowest hospital efficiency among the Central Asian countries (World Bank, 2021b). One of the challenges is low bed occupancy rates. The bed occupancy rate in acute care hospitals in Tajikistan was only 66.9% in 2018 (see Chapter 5, Figure 5.3) and there are substantial differences in local hospitals by *rayon* (Figure 7.7).

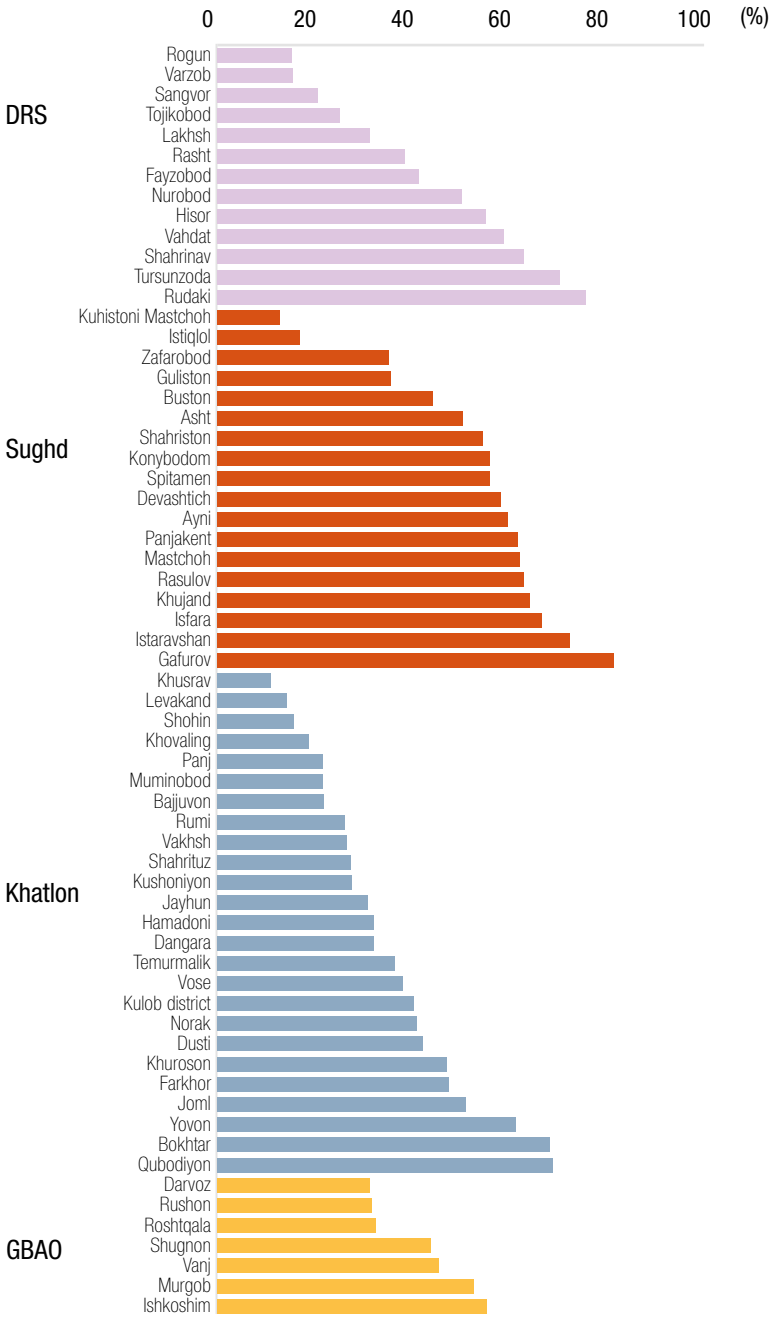
FIGURE 7.6 Per capita spending on primary health care in *rayon* budgets, 2020



Notes: DRS, Districts of Republican Subordination; GBAO, Gorno-Badakhshan Autonomous *Oblast*; TJS, Tajikistani somoni.

Source: Wilkens & Goroshko, 2023.

FIGURE 7.7 Average hospital bed occupancy rates in local hospitals by *rayon*, 2020



Notes: DRS, Districts of Republican Subordination; GBAO, Gorno-Badakhshan Autonomous *Oblast*.

Source: Wilkens & Goroshko, 2023.

In addition to low bed occupancy rates, the average length of stay in curative hospitals is about 8 days, which is one of the longest average lengths of stay in the WHO European Region (Wilkens & Goroshko, 2023). Patients are treated in hospitals longer than is medically needed and there is the added challenge of unnecessary hospitalizations (see Section 7.4). Day surgery is underdeveloped.

Efficiency gains in the hospital sector could contribute to more effective primary care, and prioritizing prevention and early interventions would increase the efficiency of health spending. Tajikistan could potentially achieve the same level of care from its hospitals with lower levels of spending by using all hospital resources at the level of the highest performing region in the country. According to one estimate, expenditures equivalent to 19% of the current health budget could be saved without decreasing essential hospital services (Wilkens & Goroshko, 2023).

Additional barriers to technical efficiency include the high level of private OOP funding (which can mean some patients avoid seeking necessary care, while some providers are incentivized to provide unnecessary care), the absence of centralized purchasing of pharmaceuticals (with each hospital separately purchasing pharmaceuticals from its own budget), and poor quality of care. Technical efficiency is further hampered by an over-reliance on specialists and gaps in health provider knowledge (World Bank, 2021b).

8

Conclusion

Tajikistan's health system continues to retain many features inherited from its Soviet period. It remains primarily state-owned and administered, and health policymaking is highly centralized. Financing, in contrast, is relatively decentralized with the bulk of public funding coming from *oblast* and *rayon* health budgets, although its use is still influenced by national guidance.

Health spending in real terms is low and public spending as a share of current health expenditure is one of the lowest in the WHO European Region, at just 24.2% in 2021. Hospital care continues to dominate the health care landscape in terms of infrastructure, personnel and expenditure. Public financing is still mostly input-based, leading to allocative inefficiencies and some duplicated services.

There are significant inequalities in health care access between different parts of the country and different income groups. A major challenge to resolving these is the high level of private out-of-pocket payments, amounting to 63.5% of health spending in 2021. This undermines financial protection and health equity, and jeopardizes the country's ambitions to achieve universal health coverage. Despite the piloting of a comparatively comprehensive basic benefits package for over 15 years, there were concerns about its financial sustainability and it is unclear what the future holds for any new iteration. There have been attempts to standardize the costs of health services, but the continuing use of informal payments undermines the impact of formal regulation.

An ongoing priority is the strengthening of primary care. The hospital sector has been downsized to some extent, mainly by reducing bed numbers

and closing rural hospitals, but services of the (many) remaining hospitals are still duplicative, limiting the efficiency of health service provision. The government has committed to improving the material infrastructure of primary care facilities and has invested in ways to incentivize medical staff to train or retrain in family medicine. However, family doctors and city/*rayon* primary care physicians are often bypassed by patients, and family medicine continues to suffer from a perception of low prestige. Health worker retention more broadly is also a challenge, with many emigrating to work abroad.

However, the country is continuing to work on reforming parts of the health system. The National Health Strategy for 2021–2030 outlines priorities and a framework for measuring progress until 2030. Amongst other elements, it envisages the introduction of an integrated model for the provision of health services at the primary care level, and the expansion of universal health coverage. Progress will be monitored by the Ministry of Health and Social Protection based on a set of indicators, with annual reports submitted to the government. A prioritized action plan has also been developed to help mobilize and align financing from external and domestic donors towards the strategy's priority activities.

The overall goal of reforms is to increase access to high-quality health care for the entire population. To deliver this goal, a number of steps seem crucial. One of the most important ones will be to improve financial protection and reduce the reliance on out-of-pocket payments. This is a major challenge for the country's health system and not easy to solve, although it might be partially achieved through measures such as a more comprehensive basic benefits package (with fewer co-payments), the pooling of funds, and an overall increase in public sector funding for health. Another important reform will be the further rationalization of the country's hospital facilities, particularly where services are currently duplicated or underutilized.

The introduction of more efficient mechanisms for paying providers could also be an important step. There have been some limited attempts to correct the current input-based financial model, such as the introduction of a form of per capita financing in 2019. However, more could be done to improve the allocative efficiency of the health system. As health reforms in neighbouring countries have shown, the pooling of funds at *oblast* or national level is an important lever to improve the equitable allocation of scarce resources.

Increasing the numbers of skilled health staff, especially in primary care, will also be a key element of future improvements in the quality and

delivery of health care. With low salaries seen as a contributing factor, the government has stated its intention to establish more financial incentives to address regional imbalances and reduce migration abroad.

While progress in some areas has been slow, there are some reasons for optimism. The overarching vision of the national health strategy is centred around expanding universal health coverage, and Tajikistan has committed to addressing the structural, financial and technical challenges that currently hinder its delivery. Yet it remains to be seen how much can be achieved in practice and at scale. Progress will depend to a large extent on the country increasing public spending on health, strengthening financial protection, and improving the efficiency and effectiveness of its health spending.

9

Appendices

9.1 References

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9.2 Useful websites

Agency on Statistics under the President of Tajikistan
https://www.stat.tj/en/

Asian Development Bank in Tajikistan
https://www.adb.org/where-we-work/tajikistan

European Observatory on Health Systems and Policies
https://eurohealthobservatory.who.int/countries/tajikistan/

Institute for Health Metrics and Evaluation: Tajikistan
https://www.healthdata.org/research-analysis/health-by-location/profiles/tajikistan

Ministry of Health and Social Protection
https://moh.tj/en/main/

Parliament of Tajikistan
https://majmilli.tj/

President of Tajikistan
http://president.tj/

United Nations in Tajikistan
https://tajikistan.un.org/en

UNICEF in Tajikistan
https://www.unicef.org/tajikistan/

UNFPA in Tajikistan
https://tajikistan.unfpa.org/en

WHO Country Office Tajikistan
https://www.who.int/tajikistan

WHO data: Tajikistan
https://data.who.int/countries/762

World Bank in Tajikistan
https://www.worldbank.org/en/country/tajikistan

9.3 HiT methodology and production process

HiTs are produced by country experts in collaboration with the Observatory's research directors and staff. They are based on a template that, revised periodically, provides detailed guidelines and specific questions, definitions, suggestions for data sources and examples needed to compile reviews. While the template offers a comprehensive set of questions, it is intended to be used in a flexible way to allow authors and editors to adapt it to their particular national context. The latest version of the template (2019) is available on the Observatory website at https://eurohealthobservatory.who.int/publications/i/health-systems-in-transition-template-for-authors.

Authors draw on multiple data sources for the compilation of HiTs, ranging from national statistics, national and regional policy documents to published literature. Furthermore, international data sources may be incorporated, such as those of the OECD and the World Bank. The OECD Health Data contain over 1200 indicators for the 34 OECD countries. Data are drawn from information collected by national statistical bureaux and health ministries. The World Bank provides World Development Indicators, which also rely on official sources.

In addition to the information and data provided by the country experts, the Observatory supplies quantitative data in the form of a set of standard comparative figures for each country, drawing on the European Health for All database whose data have been officially approved by national governments. Other data sources include Eurostat, the WHO Global Health Expenditure database and the Global Burden of Disease study, among others.

HiT authors are encouraged to discuss the data in the text in detail, including the standard figures prepared by the Observatory staff, especially if there are concerns about discrepancies between the data available from different sources.

A typical HiT consists of nine chapters.

1. Introduction: outlines the broader context of the health system, including geography and sociodemography, economic and political context, and population health.

2. Organization and governance: provides an overview of how the health system in the country is organized, governed, planned and regulated, as well as the historical background of the system; outlines the main actors and their decision-making powers; and describes the level of patient empowerment in the areas of information, choice, rights and cross-border health care.
3. Financing: provides information on the level of expenditure and the distribution of health spending across different service areas, sources of revenue, how resources are pooled and allocated, who is covered, what benefits are covered, the extent of user charges and other out-of-pocket payments, voluntary health insurance and how providers and health workers are paid.
4. Physical and human resources: deals with the planning and distribution of capital stock and investments, infrastructure and medical equipment; the context in which IT systems operate; and human resource input into the health system, including information on workforce trends, professional mobility, training and career paths.
5. Provision of services: concentrates on the organization and delivery of services and patient flows, addressing public health, primary care, secondary and tertiary care, day care, emergency care, pharmaceutical care, rehabilitation, long-term care, services for informal carers, palliative care, mental health care and dental care.
6. Principal health reforms: reviews reforms, policies and organizational changes; and provides an overview of future developments.
7. Assessment of the health system: provides an assessment of systems for monitoring health system performance, the impact of the health system on population health, access to health services, financial protection, health system efficiency, health care quality and safety, and transparency and accountability.
8. Conclusions: identifies key findings, highlights the lessons learned from health system changes; and summarizes remaining challenges and future prospects.
9. Appendices: includes references and useful websites.

The quality of HiTs is of real importance since they inform policy-making and meta-analysis. HiTs are the subject of wide consultation throughout the

writing and editing process, which involves multiple iterations. They are then subject to the following.

- A rigorous review process.
- There are further efforts to ensure quality while the report is finalized that focus on copy-editing and proofreading.
- HiTs are disseminated (hard copies, electronic publication, translations and launches).

The editor supports the authors throughout the production process and in close consultation with the authors ensures that all stages of the process are taken forward as effectively as possible.

At least one of the authors is also a member of the Observatory staff team and they are responsible for supporting the other authors throughout the writing and production process. They consult closely with each other to ensure that all stages of the process are as effective as possible and that HiTs meet the series standard and can support both national decision-making and comparisons across countries.

The review process consists of three stages. Initially the text of the HiT is checked, reviewed and approved by the series editors of the European Observatory. It is then sent for review to at least two independent experts, and their comments and amendments are incorporated into the text, and modifications are made accordingly. The text is then submitted to the relevant ministry of health or appropriate authority, and policy-makers within those bodies are restricted to checking for factual errors within the HiT.

9.4 About the authors

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The Health Systems in Transition Series

A series of the European Observatory on Health Systems and Policies

The Health Systems in Transition (HiT) country reports provide an analytical description of each health system and of reform initiatives in progress or under development. They aim to provide relevant comparative information to support policy-makers and analysts in the development of health systems and reforms in the countries of the WHO European Region and beyond.

The HiTs are building blocks that can be used:

- to learn in detail about different approaches to the financing, organization and delivery of health services;
- to describe accurately the process, content and implementation of health reform programmes;
- to highlight common challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policymakers and analysts in countries of the WHO European Region.

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HiT Country Reviews Published to Date

Albania
(1999, 2002[a g])

Andorra
(2004)

Armenia
(2001[g], 2006, 2013)

Australia
(2002, 2006)

Austria
(2001[e], 2006[e], 2013[e], 2018)

Azerbaijan
(2004[g], 2010[g])

Belarus
(2008[g], 2013)

Belgium
(2000, 2007, 2010, 2020)

Bosnia and Herzegovina
(2002[g])

Bulgaria
(1999, 2003[b], 2007[g], 2012, 2018)

Canada
(2005, 2013[c], 2020)

Croatia
(1999, 2006, 2014, 2022)

Cyprus
(2004, 2012, 2024)

Czechia
(2000, 2005[g], 2009, 2015, 2023)

Denmark
(2001, 2007[g], 2012, 2024)

Estonia
(2000, 2004[gj], 2008, 2013, 2018, 2023)

Finland
(2002, 2008, 2019)

France
(2004[c g], 2010, 2015, 2023)

Georgia
(2002[d g], 2009, 2017)

Germany
(2000[e], 2004[e g], 2014[e], 2020)

Greece
(2010, 2017)

Hungary
(1999, 2004, 2011)

Iceland
(2003, 2014)

Ireland
(2009)

Israel
(2003, 2009, 2015)

Italy
(2001, 2009, 2014, 2022)

Japan
(2009)

Kazakhstan
(1999[g], 2007[g], 2012)

Kyrgyzstan
(2000[g], 2005[g], 2011[g], 2022)

Latvia
(2001, 2008, 2012, 2019)

Lithuania
(2000, 2013)

Luxembourg
(1999, 2015, 2024)

Malta
(1999, 2014, 2017)

Mexico
(2020)

Mongolia
(2007)

Netherlands
(2004[g], 2010, 2016)

New Zealand
(2001*)

North Macedonia
(2000, 2006, 2017, 2024)

Norway
(2000, 2006, 2013, 2020)

Poland
(1999, 2005[k], 2011, 2019)

Portugal
(1999, 2004, 2007, 2011, 2017)

Republic of Korea
(2009*)

Republic of Moldova
(2002[g], 2008[g], 2012)

Romania
(2000[f], 2008, 2016)

Russian Federation
(2003[g], 2011[g])

Serbia
(2019)

Slovakia
(2000, 2004, 2011, 2016)

Slovenia
(2002, 2009, 2016, 2021)

Spain
(2000[h], 2006, 2010, 2018, 2024)

Sweden
(2001, 2005, 2012, 2023)

Switzerland
(2000, 2015)

Tajikistan
(2000, 2010[g], 2016)

Türkiye
(2002[g i], 2011[i])

Turkmenistan
(2000)

Ukraine
(2004[g], 2010[g], 2015)

United Kingdom of Great Britain and Northern Ireland
(1999[g], 2015, 2022)

United Kingdom (England)
(2011)

United Kingdom (Northern Ireland)
(2012)

United Kingdom (Scotland)
(2012)

United Kingdom (Wales)
(2012)

United States of America
(2013, 2020)

Uzbekistan
(2001[g], 2007[g], 2014[g])

Veneto Region, Italy
(2012)

All HiTs are available in English. When noted, they are also available in other languages:

- [a] Albanian
- [b] Bulgarian
- [j] Estonian
- [c] French
- [d] Georgian
- [e] German
- [k] Polish
- [f] Romanian
- [g] Russian
- [h] Spanish
- [i] Turkish

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HiTs are in-depth profiles of health systems and policies, produced using a standardized approach that allows comparison across countries. They provide facts, figures and analysis and highlight reform initiatives in progress.

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