TECHNICAL SUPPORT FOR UNIVERSAL HEALTH COVERAGE IN ARMENIA

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FINHEALTH ARMENIA:
REFORMING PUBLIC FINANCIAL MANAGEMENT TO IMPROVE HEALTH SERVICE DELIVERY

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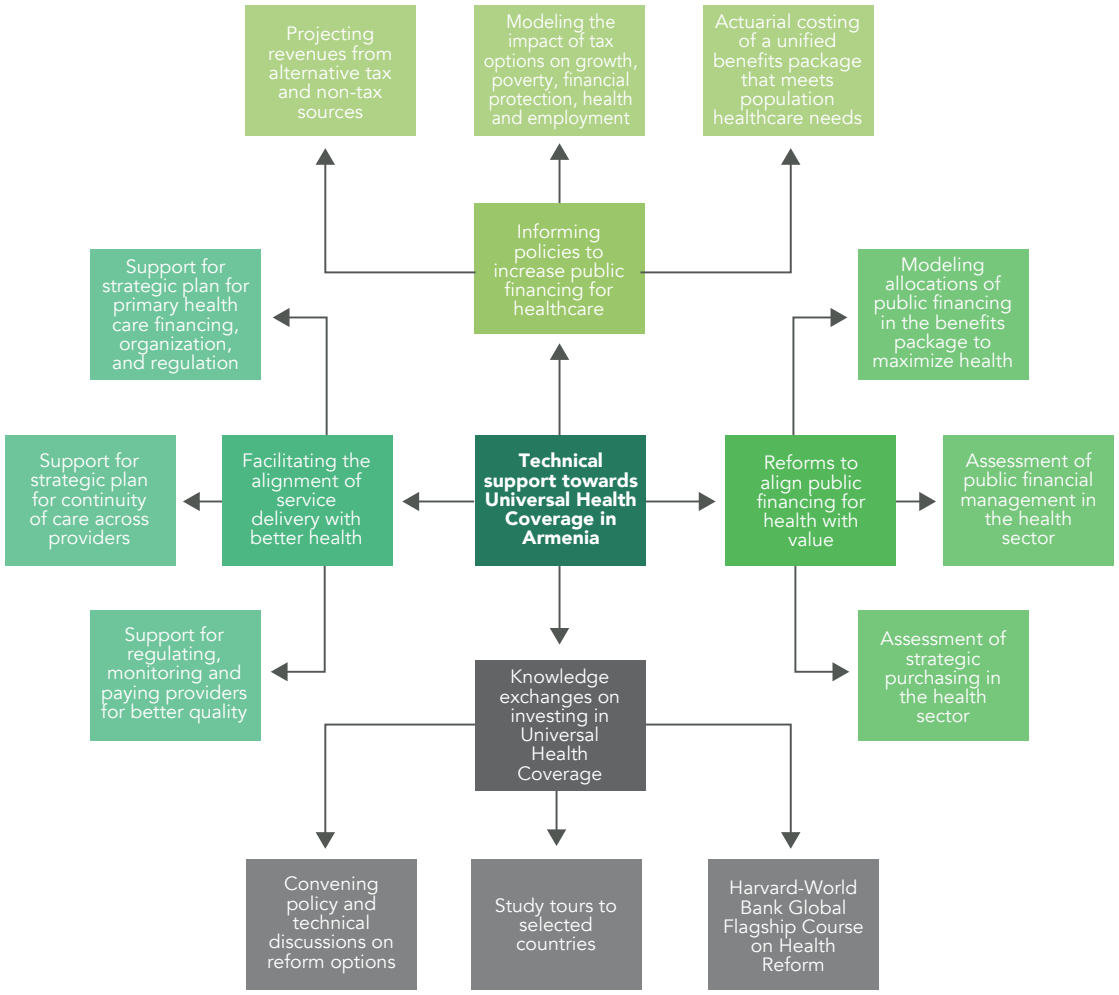
ABOUT THIS REPORT

This report, FinHealth Armenia: Reforming Public Financial Management to Improve Health Service Delivery, is part of the World Bank's technical support toward universal health coverage in Armenia, which includes advisory services and analytics aimed at supporting the government's efforts to expand access to high-quality health care. The report draws on the FinHealth: Public Financial Management (PFM) in Health Toolkit to identify the main PFM–related constraints to improving service delivery and make recommendations that the Ministry of Health can implement to complement broader PFM reforms. The report was financed by the Bill & Melinda Gates Foundation and the Korea–World Bank Partnership Facility.



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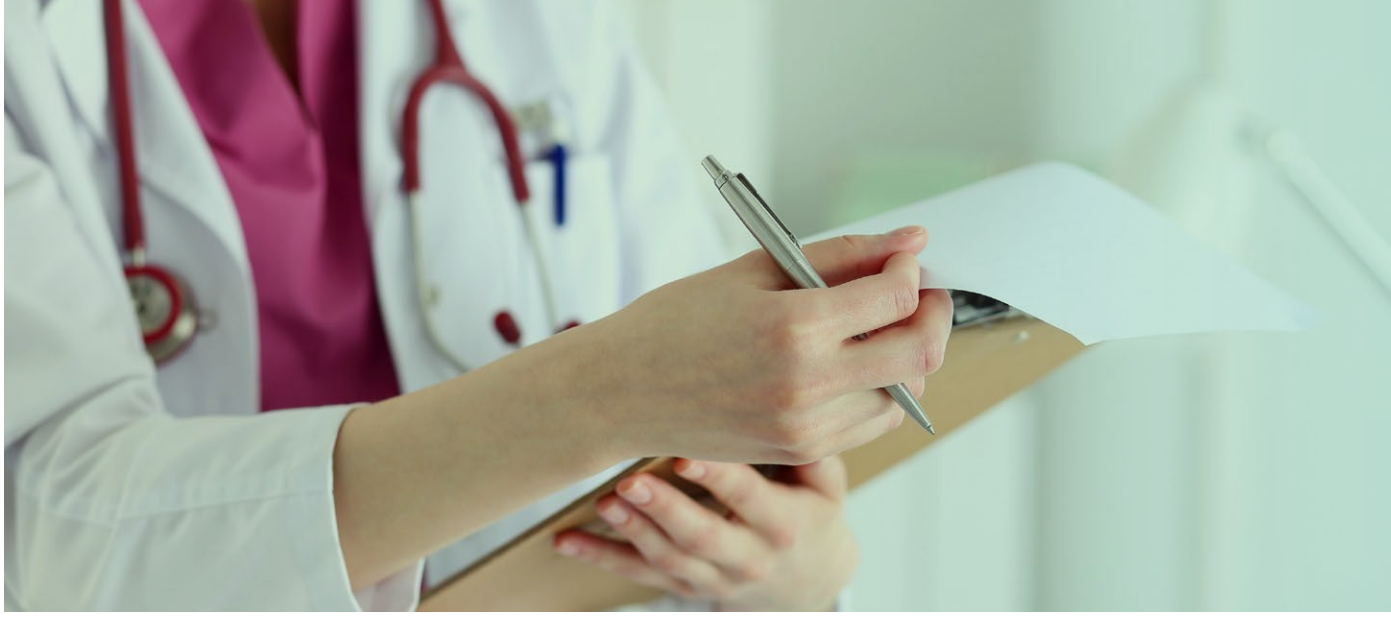
ACRONYMS

ADB	Asian Development Bank
APSAS	Armenian Public Sector Accounting Standard
BBP	Basic Benefits Package
CNCO	Community Non-Commercial Organization
EU	European Union
FBP	Family Benefit Program
GDP	gross domestic product
GFMIS	Government Financial Management Information System
GFSM	Government Finance Statistics Manual
GIZ	German Society for International Cooperation
GNI	gross national income
HDI	Human Development Index
IFRS	International Financial Reporting Standards
IFMIS	Integrated Financial Management Information System
INTOSAI	International Organization of Supreme Audit Institutions
IPSAS	International Public Sector Accounting Standards
ISSAI	International Standards of Supreme Audit Institutions
IT	information technology
MOF	Ministry of Finance
MOH	Ministry of Health
MTEF	Medium-Term Expenditure Framework
NGO	nongovernmental organization
NIH	National Institute of Health
PBB	program-based budgeting
PBF	performance-based financing
PEFA	Public Expenditure and Financial Accountability
PFM	public financial management
PHC	primary health care
PI	PEFA Indicator
PPCM	Public Procurement Contract Management
SAI	Supreme Audit Institution
SHA	State Health Agency
SNCO	State Non-Commercial Organization
STHP	State Targeted Health Program
TOD	Treasury Operating Day
TSA	Treasury Single Account
UHI	Universal Health Insurance
USAID	US Agency for International Development
VAT	value-added tax



EXECUTIVE SUMMARY

Armenia has made significant progress in improving population health outcomes. Average life expectancy in 2018 was 75.9 years, above the average in upper-middle-income countries, up from 70.7 in 1990. The infant mortality rate in 2019 was 6.1 deaths per 1,000 live births, down from 11.4 in 2010. Noncommunicable diseases account for more than 84 percent of disability-adjusted life years. Access to high-quality health care is essential for the prevention and control of these diseases. Financial barriers present a challenge to expanding access to quality care in Armenia.

The government of Armenia aims to make progress toward achieving universal health coverage by 2023, guaranteeing access to high-quality health care for every citizen. The Ministry of Health (MOH) has proposed health financing reforms that expand coverage of a package of services that addresses the prevalent health needs of the whole population. The expanded coverage is proposed to be financed through an increase in prepaid, public revenue. Analysis of public financial management (PFM) constraints can inform policies, helping ensure the efficient and effective use of public health financing as part of the proposed and future reforms. This assessment identifies feasible actions that address binding PFM constraints to service delivery that can be implemented through collaboration between the MOH, the Ministry of Finance (MOF), other central agencies, and development partners.

The assessment was informed by the World Bank FinHealth: PFM in Health Toolkit. This toolkit builds on research that demonstrates a link between the achievement of improved results in the health sector and strong systems for fiscal sustainability, operational efficiency, transparency, and accountability. The approach combines data from a desk review of country statistics, policy documents, and secondary reports with qualitative surveys of health facilities and public health authorities to validate review findings and define feasible recommendations. This study follows a bottom-up approach by identifying PFM constraints at the service delivery level and translating findings into sector-level recommendations.

The budget cycle—including budget formulation, execution, and evaluation—has direct implications for service delivery goals. A high-performing health system should efficiently and equitably deliver access to high-quality services while keeping actors accountable. Hence, the main goals of service delivery are equitable access, quality, efficiency, and accountability. PFM constraints to service delivery mediate their negative impacts by affecting these goals. This report draws on the analysis of the budget cycle via the FinHealth tool to identify the binding PFM constraints to ensuring equitable access to efficient, quality, and accountable health services in Armenia.

Armenia lacks a comprehensive health sector strategy that links health system goals, governance, and policy levers, including PFM, in an approved legal document. The draft Health Sector Strategy for 2020–25 was made available for public discussions in September 2019, but it has not yet been approved. The government has topic-level strategies, but there is no health system–level framework from which service delivery priorities—including for access, quality, and efficiency—can be identified and important reforms defined. Identifying these goals in a government-approved strategy is a first step toward addressing PFM constraints to service delivery.

Underfunded budget programs, the inequitable distribution of health workers, and the limited involvement of regional authorities in planning negatively affect equitable access to care. The underfunding of budget programs under the Basic Benefits Package (BBP) contributes to high formal and informal out-of-pocket payments and financial barriers to accessing needed care. Lower compensation outside Yerevan exacerbates spatial inequities in health care access. The regional health authorities play a limited role in state budget preparation and approval, limiting opportunities to fully reflect service delivery needs.

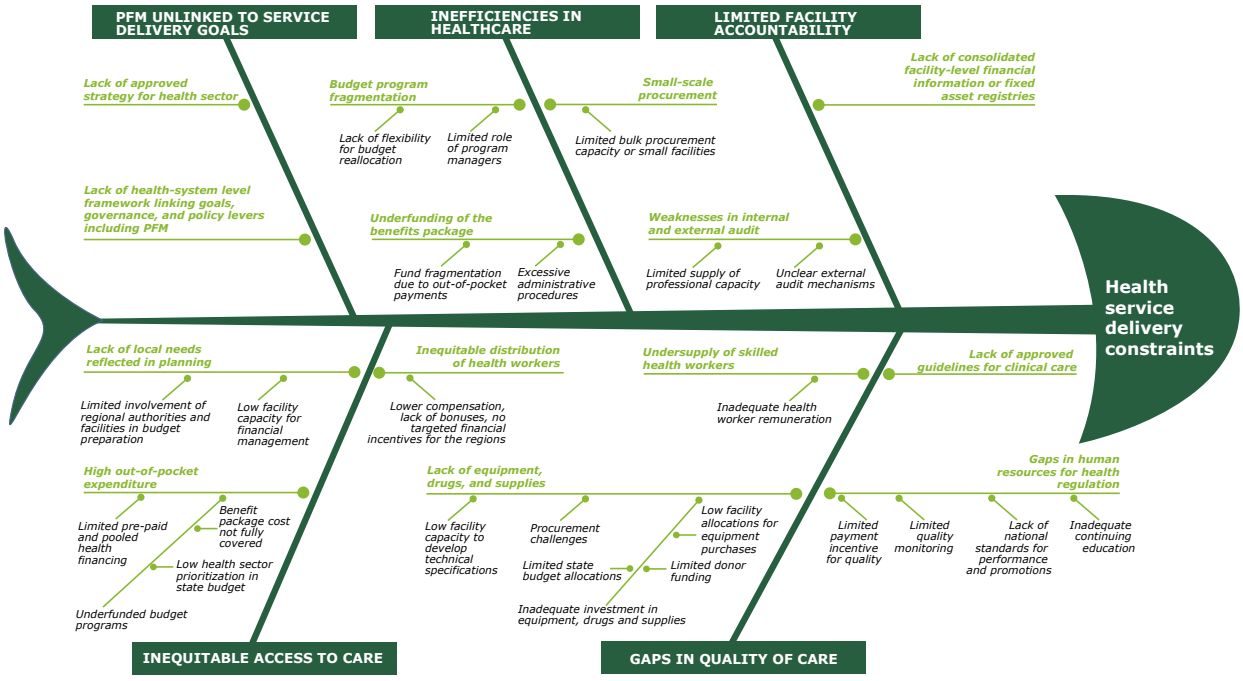
Budget program fragmentation, small-scale procurement, and underfunding of the benefits package by the state budget make it difficult to provide health care efficiently. Because of the fragmentation of budget programs, facility budgets are periodically revised to redistribute funding between activities. Small-scale procurement, particularly in rural primary health care (PHC) facilities, means that facilities have little bargaining power or ability to engage in efficient procurement. The high levels of out-of-pocket payments introduced to cover the funding gap in the state budget for the BBP introduce inefficiencies by fragmenting funds, requiring additional administrative procedures, and leading to suboptimal allocative decisions.

The undersupply of skilled health workers in the regions (Marz), gaps in human resource for health regulation, inadequate capital investment funding, and procurement challenges negatively affect the quality of services. The undersupply of skilled health workers in the regions makes it difficult to provide high-quality health care. The absence of national standards for job descriptions, promotions, or performance assessment in the public health sector leads to lost opportunities to conduct quality assurance for human resources for health. The inadequacy of budget funding for capital investments—including maintenance costs for

infrastructure and equipment, particularly in the regions—and the lack of capacity to develop appropriate technical specifications for medicines and other supplies also negatively affect service delivery quality.

The lack of consolidated financial information and fixed asset registries and weaknesses in internal and external audit limit the accountability of facility managers. There are no systems in the health sector for sector-wide consolidation of facility-level financial information or registries of fixed assets that can be used to verify the completeness and accuracy of accounting and recording. The systems for internal and external audit in the health sector are weakened by limited professional capacity and the lack of clearly defined and comprehensive mechanisms for external audit in the health sector.

These binding PFM constraints to health service delivery are summarized in the "fishbone diagram" below.



This report identifies reforms that the MOH can advocate for, lead, and implement in the short to medium term to address these PFM constraints, in close cooperation with the MOF and other agencies, reviewed in the table below.

POLICY RECOMMENDATION	SUGGESTED IMPLEMENTATION TIMEFRAME AND STATUS
1: Improve planning and public funding of the health sector	
1.1 Develop a comprehensive and costed national health reform strategy that links the short-, medium-, and long-term goals of the health system. The strategy should integrate the main policies and programs that are reflected in existing national strategy and program documents in the health sector. This effort should facilitate a higher level of coherence between State Targeted Health Programs and the Medium-Term Expenditure Framework. It should also contribute to stronger alignment of the government's health policies and priorities with annual health budget programs and activities, including by ensuring appropriate outcome indicators.	Short-term ongoing action
1.2 Increase the level of public funding of the health sector, in order to improve financial protection. The share of the government budget allocated to health should increase steadily over the long term, to enable the government to meet its commitment to provide universal health coverage. Increases in public funding levels should be accompanied by improvements in the efficiency of health spending.	Medium-term planned action
2: Improve budget preparation and monitoring of budget execution	
2.1 Improve health sector budgeting by increasing the involvement of regional health authorities and health facilities. Medium-term planning and bottom-up planning and budgeting processes that involve health facilities would help ensure that their needs are included in the budget for submission to the Ministry of Finance. Without improved prioritization, service readiness and quality will lag despite increased funding.	Medium-term suggested action
2.2 Designate program managers from the key policy departments of the MOH for each health budget program. Program-based budgeting requires the clear assignment of responsibilities for implementation of each budget program through appointed program managers. It is key for achieving satisfactory performance of both financial and nonfinancial indicators of health budget programs.	Medium-term suggested action
3: Implement policies to address professional workforce shortages in regional health facilities, and unify performance and remuneration in the public health sector	
3.1 Implement targeted public budget programs to address the shortages of skilled health workforce in regional facilities. Allocate additional budget funding to motivate medical professionals to fill vacancies in the regions, through financial incentives, including subsidies to cover living and related costs.	Medium-term suggested action
3.2 Revise legislation to enable the government to implement unified regulations for health workforce performance and remuneration in the public sector, in order to help improve service delivery and ensure greater payroll transparency and accountability.	Short-term suggested action
4: Leverage pooled procurement and capacity building to improve procurement in the health sector	
4.1 Consolidate the procurement of drugs and medical supplies for PHC and of the most commonly used items by public facilities under the umbrella of the MOH.	Short-term planned action
4.2 Strengthen the health sector's capacity to develop sound technical specifications, in order to improve the quality of supplied goods and services and save budget resources.	Medium-term suggested action

5: Improve public investment management by strengthening the capacity to prepare and implement appropriately selected capital investments in new and existing infrastructure	
5.1 Progressively increase the share of capital costs in the health sector budget, including allocations for maintenance of existing infrastructure.	Medium-term suggested action
5.2 Introduce and implement clear and transparent criteria for the selection of projects for public investment in the health sector.	Short-term suggested action
6: Strengthen financial reporting mechanisms in the health sector	
6.1 Implement regulations and mechanisms to enable the MOH to access and summarize the full body of financial information from public and private facilities, in order to facilitate assessments of the use of allocated budget resources and total health spending.	Short-term suggested action
7: Improve and strengthen internal and external audit arrangements in the health sector	
7.1 Improve the performance of internal audit systems at the MOH and regional administrations, through capacity building and reforms to attract qualified professionals. Ensure that internal audit units have the ability and knowledge to develop specific health care audit methodologies and conduct broader functional audits. Proper attention should be paid to the payroll audit, one of the components of the government's public financial management strategy 2019–23.	Short-term suggested action
7.2 Elaborate specific, health sector–related requirements for the mandatory annual audit of health facilities that meet certain criteria, contingent on approval of the new accounting and audit legislation by the National Assembly and implementation of independent professional and public oversight mechanisms over the quality of external audits.	Medium-term ongoing action

Note: In public financial management and governance, short term refers to a one to two years, medium term to three to five years, and long term to more than five years.

CHAPTER 1 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report aims to assess public financial management (PFM) bottlenecks in health service delivery and identify recommendations for the Ministry of Health (MOH) and its partners. Over the last decade, development partners—including the World Bank, the Asian Development Bank (ADB), the German Society for International Cooperation (GIZ), and the European Union (EU)—have provided support to the Ministry of Finance (MOF) to conduct assessments of national PFM systems and to implement sequenced reforms that have affected all sectors at all levels of government over the medium term. This PFM assessment identifies health sector–specific bottlenecks and recommends actions that the MOH and regional (Marz) health authorities can take.

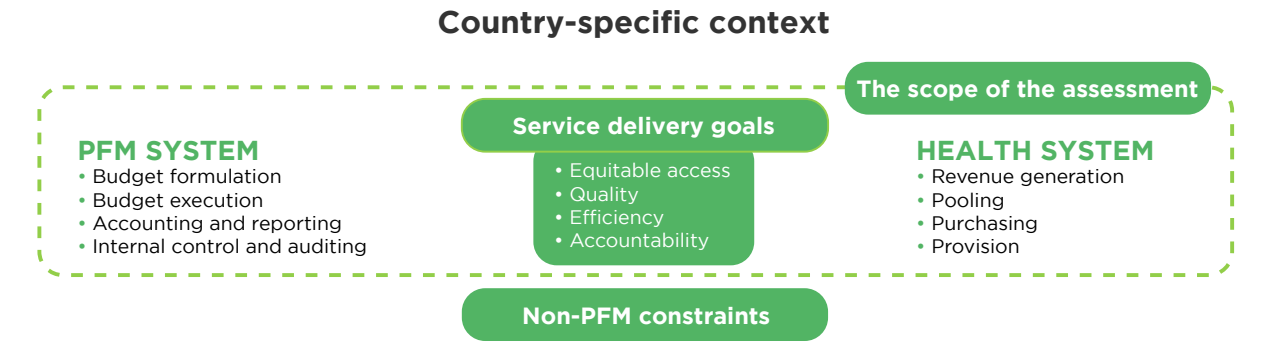
Governments have a central role to play in moving countries toward universal health coverage. In low- and middle-income countries, making progress toward universal health coverage involves financing mechanisms that allow for coverage for the formal sector, the poor and the informal sector, to improve the coverage of quality health services.[1] Models can differ in terms of how health services are organized (through public or private providers, for example) or financed (through general or earmarked tax revenue, for example). However, all successful strategies require certain essential elements. Compulsory prepayment is necessary to ensure mobilization of sufficient funds. Pooling of health funds then allows for cross-subsidy of health care costs between the rich and poor, healthy and sick, young and old. The nature of public financing is also important. In low- and middle-income countries, where most of the population works in

the informal sector, reliance on general government revenues is essential for achieving universal health coverage, because the tax base provided by the formal payroll may be too narrow to finance expanded coverage without creating an unsustainable tax wedge.

PFM systems—the way public budgets are formed, executed, and monitored—interact with health system functions to influence service delivery outcomes. Important service delivery outcomes are efficiency, equitable access, quality, and accountability. The functioning of the PFM system and the rules that govern it have important implications for the health system functions, including pooling, purchasing, and service provision (Figure 1). For example, budget formulation affects revenue generation in the health sector, which influences the supply of human resources for the quality of care. PFM affects service delivery outcomes through health system functions. These interactions, between PFM, health systems, and service delivery outcomes, occur within limits defined by the broader country context, including economic, social, and political factors.

This study builds on a body of research that links improved service delivery outcomes in the health sector to systems for fiscal sustainability, operational efficiency, fiscal transparency, and accountability.[2] The evidence supports the proposition that governance matters for the effective use of public resources in health service delivery.[3]

Figure 1 • Interaction of health service delivery outcomes with public financial management and health systems



The assessment provides rigorous analysis and recommendations that health sector decision makers and stakeholders in Armenia can use. Analyzing bottlenecks at critical stages in budget formulation and execution can also provide a strong basis for dialogue between the MOH and the MOF. The broader MOF-led approach to PFM reforms will likely place additional demands on the MOH to support its budget proposals with evidence-based analysis of the needs of the sector, costed and prioritized policies or programs, and efficient implementation arrangements.

1.2 METHODOLOGY

The assessment was conducted using the World Bank's FinHealth: PFM in Health Tool.[4, 5] Data collection and analysis were conducted through a desk review of relevant policy documents, analytical reports, and statistical data on PFM and health service delivery and financing in Armenia. This information was validated through 16 in-depth interviews with representatives of public authorities and health care providers at the national and local levels. Interviews were conducted using questionnaires that were customized to the Armenian context.[6]

Two questionnaires were administered, one for health facility managers and another for MOH, MOF, and regional health authorities. The questionnaires covered the background of the facility or relevant policy department; the organization and operations of the facility; staffing, planning, and budgeting; revenue sources; management of revenues and expenditures; procurement procedures and maintenance; and reporting and internal and external controls. In larger facilities, more than one person was interviewed, and some statistics on financial performance or staffing were provided after the interview through email or phone calls. The interviews lasted on average 1.5–2 hours. The questionnaires were administered to managers in a sample of eight health facilities across four regions, including the capital city Yerevan.

The sample was purposively selected to include different segments of the health care delivery system (public and private sectors, primary health care and hospital levels, and Yerevan and regional facilities). In addition, eight interviews were conducted with representatives of the MOH, the MOF, and regional health authorities (see Appendix A). Themes across interviews were extracted and triangulated with expert assessments of the challenges in PFM and the health system. Preliminary findings and policy recommendations were presented to stakeholders from the MOH, the MOF, and other relevant agencies during a one-day workshop in Yerevan on October 9, 2019 (see Appendix B). Ideas expressed during the workshop were summarized and reflected in the final report.

The report is structured as follows. Chapter 2 provides background information about Armenia, overviews its health system, and describes the PFM landscape in the country. Chapter 3 discusses the main PFM functions and their implications for the service delivery outcomes Armenia faces. Chapter 4 identifies the weaknesses of the PFM systems that have the most profound impact on access, affordability, and quality of medical services; the efficient use of health financing resources; and accountability for service results by drawing on the information in chapter 2 and the analysis in chapter 3. It proposes policy recommendations for addressing PFM systems weaknesses that lead to health service delivery challenges.

CHAPTER 2 COUNTRY CONTEXT

2.1 ECONOMIC, SOCIAL, AND POLITICAL CONTEXT

2.1.1 GEOGRAPHY AND POPULATION

Armenia is a landlocked country in the southern Caucasus. Located between the Black and Caspian seas, it is bordered by Georgia and Azerbaijan to the north and east and by the Islamic Republic of Iran and Turkey to the south and west. Armenia is a small, mountainous country, 90 percent of which is located more than 1,000 meters above sea level. About half (47 percent) of its area is agricultural land, 36 percent is mountains and highlands, 11 percent is forests, and 6 percent is water surface. The country is subdivided into 10 regions and the capital city Yerevan.

The population of Armenia has been declining since the early 1990s, primarily as a result of emigration, driven by socioeconomic and political factors. There has also been a steep drop in fertility rates, with the number of children per woman falling from 2.38 in 1990 to 1.76 in 2015 (below replacement-level fertility). The decline in population growth has affected urban areas more than rural areas. Between 1990 and 2019, the share of the urban population decreased from 69.1 percent to 63.9 percent (Table 1). In 2017, the natural population growth rate was 3.54 per 1,000 people, far below the global average of 11.4. Armenia's population has also aged, with the share of population 65 and older having increased from 5.6 percent in 1990 to 11.3 percent in 2018. Population aging has potential negative implications for government revenue collection and health service delivery needs.

TABLE 1 • Population of Armenia, 1990–2019

INDICATOR	1990	2000	2010	2019
Total population (thousands)	3,514.9	3,226.9	3,055.2	2,965.3
Urban	2,427.6	2,095.8	1,955.3	1,894.9
Rural	1,087.3	1,131.1	1,099.9	1,070.4
Average life expectancy at birth (years)	70.7	72.9	74.1	75.9[a]

Source: Ministry of Health
Note: a. Figure is for 2018.

2.1.2 POLITICAL AND ECONOMIC SITUATION

In the spring of 2018, large, nationwide, peaceful street protests—referred to as the Velvet Revolution—forced Armenia's long-standing leader from power. The country had just completed a transition from a semi-presidential system to a parliamentary republic, following constitutional amendments passed in 2015. Under the new political system, the prime minister's office became the center of power and the president was elected by Parliament. The outgoing president's subsequent appointment as prime minister, despite public statements that he would not seek the post, sparked vibrant street protests that led to his resignation.

The transition has brought a new commitment to good governance, including efforts to control corruption and increase transparency and accountability. These efforts have resulted in measures to reclaim unpaid taxes from politically linked businesses and a call for firms to operate transparently. Both analysts and citizens report reduced corruption. The *Economist* named Armenia its country of the year in 2018, citing the prospects for democracy and renewal following the Velvet Revolution.

In 2017, Armenia, which had been categorized as a lower-middle-income country, was recategorized as an upper-middle-income country, according to the World Bank classification, based on its 2018 per capita gross national income (GNI) of US$4,230. The proportion of the population that lives below the national poverty line fell from 35.8 percent in 2010 to 23.5 in 2018.[7] Between 1990 and 2018, Armenia's Human Development Index (HDI) value also increased, from 0.631 to 0.760, an increase of 20.4 percent.[8] Armenia's current HDI value puts the country in the high human development category, positioning it at 81st out of 189 countries and territories.

Since 2017, the Armenian economy has rebounded from the 2014–16 downturn. The commodity price shock of 2014, domestic political turmoil, and political disturbances with Azerbaijan in 2016 kept average growth in 2014–16 at 2.3 percent, including near-zero growth in 2016. However,

the economy grew 7.5 percent in 2017, pulled up by strong external recovery and a prudent macroeconomic policy response. Although external conditions weakened slightly in 2018 and Armenia's political landscape underwent a profound change, growth remained resilient, at 5.2 percent. Similar trends continued in 2019, with gross domestic product (GDP) expanding at an annual rate of 6.8 percent in the first half of 2019. As a result of the COVID-19 pandemic and falling commodity prices, projections for 2020 have been lowered to a 2.8 percent contraction. Economic growth is projected to recover over the medium term, to about 4.9 percent in 2021–22, as external conditions stabilize.[9]

With the deficit reaching 5.5 percent of GDP in 2016 and the country breaching the debt ceiling of the fiscal rule, the authorities launched an ambitious consolidation effort. The deficit was lowered to 4.8 percent of GDP in 2017 and to 1.6 percent in 2018. The consolidation reflects sound progress in revenue collection as a result of tax policies, tax administration improvements, and control over current spending, as well as significant underperformance of capital expenditures.[10] Revenues benefited from higher excise taxes on gasoline, diesel, and compressed gas; the introduction of a new value-added tax (VAT) administration system; and a sharper focus on tax compliance following the 2018 political changes. The budget overperformed considerably in the first half of 2019, recording a surplus of about 1.9 percent of annual GDP versus a planned deficit of 1.2 percent of GDP. The improved fiscal accounts resulted in stabilization of the government debt level, with debt declining to about 56 percent of GDP by end-2018, down from almost 59 percent of GDP a year earlier.

2.2 THE HEALTH SECTOR

2.2.1 HEALTH INDICATORS

Armenia performs satisfactorily on key health indicators. Average life expectancy at birth was 75.9 in 2018. This level is comparable to the average in Europe and Central Asia and among upper-middle-income countries, even though Armenia has a higher poverty rate and lower levels of public expenditures on health. The infant mortality rate (deaths in the first year of life per 1,000 live births) was 6.07 in 2019, down from 11.44 in 2010. The maternal mortality ratio of 26 per 100,000 live births places Armenia ahead of the average in upper-middle-income countries (59).[11] Armenia was particularly hard hit by the COVID-19 pandemic. The first case was recorded on March 1, 2020. As of July 26, Armenia had recorded 1,262 cases per 100,000 population, above the average in the World Health Organization's Europe region of 347.[12]

The main causes of mortality in Armenia are noncommunicable diseases. The share of infectious diseases in mortality causes decreased by 57 percent between 1990 and 2019, and mortality from neoplasms (tumors) and endocrine and metabolic diseases almost doubled

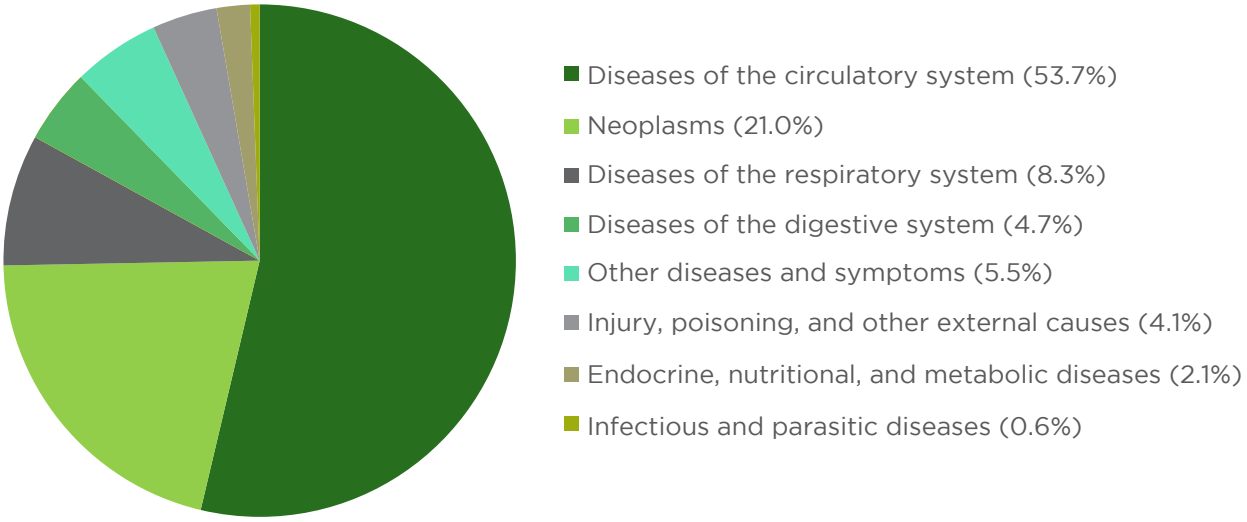
(Table 2). Total mortality per 100,000 population increased, from 620.4 in 1990 to 883.9 in 2019, an increase of 42.5 percent. The two leading causes of mortality in Armenia are cardiovascular diseases and neoplasms, which together are responsible for 74.7 percent of total mortality in the country (Figure 2).

TABLE 2 • Main causes of mortality in Armenia, 1990–2019 (deaths per 100,000 people)

CAUSE OF MORTALITY	1990	2000	2010	2019
Infectious and parasitic diseases	13.0	7.5	9.3	5.6
Neoplasms	99.9	104.3	169.4	185.2
Endocrine, nutritional, and metabolic diseases	15.9	34.8	44.4	18.3
Diseases of the circulatory system	305.9	347.1	419.4	474.9
Diseases of the respiratory system	50.3	37.2	50.8	73.2
Diseases of the digestive system	21.1	20.6	49.8	41.7
Injury, poisoning, and other external causes	55.6	29.0	38.4	36.4
Other diseases and symptoms	58.7	51.3	76.0	48.6
TOTAL	**620.4**	**631.8**	**857.5**	**883.9**

Source: Ministry of Health

FIGURE 2 • Main causes of mortality in Armenia, 2019



Source: Ministry of Health

2.2.2 HEALTH SECTOR GOALS AND SERVICE DELIVERY

The main goals of the government's health sector policies are to improve the health status of the population and to increase the affordability and quality of health services.[13] The country's greatest contributors to the disease burden are noncommunicable diseases, which are on the rise. They accounted for 61 percent of disability-adjusted life years in 1990 and 84 percent in 2016.[14] Population aging may increase this burden significantly, particularly in the absence of stronger health systems for prevention and management. Although the total population is projected to decrease slightly by 2030, the share of people 65 and older is set to rise from 10 percent to almost 20 percent of the population by 2030.[15] Ensuring health care affordability and quality can improve health care use, thereby enhancing population health.

Utilization of medical services in Armenia has changed over the past few decades. Health service use declined in the early 1990s, because of high poverty rates and underfunding of the health system by the public budget. The trend reversed beginning in the mid-2000s, when, after some stabilization, service utilization gradually increased as a result of improvements in the socioeconomic status of the population and in health sector financing. Between 1990 and 2019, the number of hospital admissions per 100 population increased from 13.3 to 14.7 while the average number of annual primary health care visits per person decreased from 7.9 to 4.2 (Table 3). At 4 outpatient contacts and 12 acute care hospital discharges per 100 discharges a year, Armenia's health service utilization measures are also much lower than those of comparator countries, which report 8 outpatient contacts and 15 acute care hospital discharges per 100 discharges a year on average.[16]

TABLE 3 • Utilization of health care resources in Armenia, 1990–2019

INDICATOR	1990	2000	2010	2019
Average number of hospital admissions per 100 population	13.3	5.8[a]	10.6	14.7
Annual number of visits to primary health care facility (thousand)	27,930	7,804	11,596	12,434
Average number of annual primary health care visits per person	7.9	2.4	3.8	4.2

Source: Ministry of Health
Note: Data are for 2001

Armenia inherited an extensive and inefficient health care infrastructure from the Soviet Union that was fully funded from the public budget. The "Semashko-style" centralized health care system provided universal access to a wide range of services, with a heavy emphasis on secondary and tertiary care.[17] The government reformed the PHC network and optimized the hospital network. Between 1990 and 2019, the total number of hospital beds was reduced by almost 61.3 percent, the number of hospitals was cut by about 30 percent, and the number of PHC facilities stayed relatively stable (Table 4). A privatization program in Yerevan prevented the consolidation of services.[18] By 2015, the capital had 73.4 beds per 10,000, above the average of 51 beds per 10,000 among countries in the European Union.[19,20]

TABLE 4 • Health care system resources in Armenia, 1990–2019

TYPE OF RESOURCE	1990	2000	2010	2019
Hospitals	180	146	130	125
Hospital beds (thousand)	30.5	20.8	12.2	11.8
Hospital beds per 10,000 people	86.8	64.5	39.9	39.8
Primary health care facilities	**529**	**503**	**504**	**494**

Source: Ministry of Health

Physical access to PHC and hospital services in Armenia is adequate, but financial access remains a barrier, and not all Armenians have physical access to pharmacies. In the 2018 Integrated Living Conditions Survey, 97 percent of rural households reported that the nearest PHC facility was within 3 kilometers of their residence (see Appendix C). The survey also assessed physical access to pharmacies. Among rural households, 54 percent reported that the nearest pharmacy was within 3 kilometers of their residence; 24 percent reported that the distance to the nearest pharmacy was more than 10 kilometers away (see Appendix C). Health facility managers interviewed for this study reported that the average distance patients travel to the nearest regional health facility for outpatient services was 3–5 kilometers.

Financial barriers and gaps in the quality of care present barriers to health care. When asked for the reasons for not visiting PHC facilities, 56 percent respondents noted self-treatment and 17 percent noted lack of finance as the main reasons. In contrast, none of the respondents cited distance. Financial barriers are the second-highest cause of underutilization of health services at the PHC level (Table 5). These findings are validated by information obtained from interviews with both health facility managers and representatives of health authorities, who noted that financial barriers limit access to health care for at least 30 percent of the population.

TABLE 5 • Main reasons for not visiting primary health care facilities in Armenia, by location (percent), 2018

REASON FOR NOT VISITING PRIMARY HEALTH CARE FACILITY	TOTAL	YEREVAN	OTHER URBAN	RURAL
Self-treatment	56.3	62.2	56.2	47.2
Lack of finance	17	11	20.3	22.8
Remoteness	0	0	0	0
The problem was not serious	12.5	11.9	12.3	13.7
Help was not required	7.7	6.9	6.2	10.6
A relative or a friend was a physician	3.2	3	3	3.8
Other	3.2	3	3	3.8
TOTAL	**100**	**100**	**100**	**100**

Source: National Statistical Service of the Republic of Armenia

2.2.3 LEGAL AND REGULATORY PROVISIONS IN THE HEALTH SECTOR

The law "On Medical Assistance and Services to the Population," adopted in 1996, provides the main legal provisions governing health care delivery and regulation in Armenia. Several other laws and legislative acts, such as the Civil Code, the Tax Code, and the Law on Licensing, also relate to the health sector. These laws regulate the organization and management the health care sector and the provision of medical services. The government has also developed topic-specific health strategies and programmatic documents for tuberculosis, HIV/AIDS, and maternal and child health, which are usually effective for five years and periodically updated by the MOH. The government's policy priorities for the health sector are described in the annual State Targeted Health Programs (STHPs), prepared by the MOH. After the government approves them, they are presented to the National Assembly of Armenia as a part of a draft state budget message (see Appendix D).

2.2.4 INSTITUTIONAL ARRANGEMENTS IN THE HEALTH SECTOR

The MOH is responsible for developing and implementing health care policy. It develops drafts of health legislation, policies, programs, and strategies and submits them to the government for approval. It also approves specific regulations, such as service delivery standards, protocols, and guidelines. It exercises its regulatory functions by licensing health care providers. The MOH also acts as the sole purchaser of budget-funded medical services covered under the Basic Benefits Package (BBP), by contracting about 500 public and private health care providers through the State Health Agency (SHA). It directly manages about 16 health care facilities and institutions, some of which are multi-profile or specialized medical centers.

Health departments of regional administrations and local (community) authorities manage most public health facilities in Armenia, including regional hospitals, urban polyclinics, and rural PHC centers. They appoint facility managers, approve facility budgets, and monitor their execution. They also make key management decisions, including regarding personnel management, procurement, and revisions of service lists. However, neither regional nor local authorities have any direct involvement in the budgeting or public financing of health facilities at the national level under their jurisdictions, as those functions are implemented centrally through the SHA of the MOH. Most dental clinics in Armenia and some of the largest multi-profile hospitals in Yerevan are private. The rest of the health service delivery system, especially in the regions, is publicly owned and managed. In 2017, about three-quarters of all human resources were employed by publicly owned health facilities, which also contained more than two-thirds of the country's hospital bed capacity (see Appendix E).

2.2.5 HEALTH FINANCING AND POOLING ARRANGEMENTS

Low public spending on health presents a challenge to improving access to health care in Armenia. Armenia's total spending on health is high, at 10 percent of GDP and $420 per capita in 2018. However, public health financing as a percentage of total health expenditure is among the lowest in the world, at 13 percent in 2018. Private health expenditures, consisting mainly of out-of-pocket spending, represents 86 percent of current health spending (Table 6).[21,22] Financial protection against health care expenditures remains weak. The MOH and donors proposed earmarked health taxes on tobacco products, alcohol, and sugar drinks, but the government rejected them, because of the rigidities they would purportedly have introduced into the budgeting process. Health financing reforms are needed to increase the share of prepaid revenues, reducing out-of-pocket payments and improving health care access.

TABLE 6 • Sources of health care financing in Armenia, 2016–18

FINANCING SOURCE	2016		2017		2018	
	AMOUNT (MILLION DRAM)	PERCENT OF TOTAL	AMOUNT (MILLION DRAM)	PERCENT OF TOTAL	AMOUNT (MILLION DRAM)	PERCENT OF TOTAL
Public sector	87,930.90	17.4	81,490.00	14.1	78,864.30	13.1
Private sector	409,866.30	81.3	490,736.30	85.1	518,691.90	86.2
Rest of world	6,512.30	1.3	4,405.60	0.8	4,334.20	0.7
Total	**504,309.50**	**100**	**576,631.90**	**100**	**601,890.50**	**100**

Source: Ministry of Health

The government uses public resources generated by general taxation to finance, through provider contracts, a range of services, including PHC and emergency care for all Armenian citizens. The BBP includes several "vertical" health care programs, which provide free, publicly funded medical services for all Armenian citizens, for selected services. It covers PHC services; emergency care; treatment of HIV/AIDS, tuberculosis, and cancer; and maternal and child health care. For socially vulnerable and other special categories of the population, the public sector also covers most hospital services, with some exceptions. Nineteen categories of individuals qualify for coverage of hospital care under the BBP, including people with disabilities, children under 18, pregnant women, and people eligible for the Family Benefit Program (FBP).

Health insurance is not well developed, and the pooling of health risks is fragmented. Armenia does not have a system for pooling compulsory, prepaid, and earmarked funds for health care. Voluntary health insurance funds through employer-subsidized schemes have very limited coverage (less than 2 percent of the population) and account for only 1.2 percent of total health expenditure. Resources from out-of-pocket payments, which account for around 84 percent of total health expenditure, are by their nature not pooled, contributing to inefficiencies in purchasing. Even within the BBP, expenditure on different groups is capped, and there are limitations on redistribution across groups.

Out-of-pocket payments continue to negatively affect the financial protection of patients, resulting in a high level of catastrophic health spending. The key drivers of out-of-pocket spending are informal payments, co-payments for some covered services, and the lack of coverage in the BBP of certain expensive services. The incidence of catastrophic health spending in Armenia is high, with 16 percent of the population spending more than 10 percent of household expenditures on health.[23] Insufficient public funding of services within the BBP contributes to low reimbursement rates for publicly funded services, especially hospital care, which leads to low financial risk protection and gaps in the quality and affordability of medical care in Armenia. In 2019, the BBP price lists for certain categories of beneficiaries were revised to improve

reimbursement rates and reduce incentive for providers to collect informal co-payments.

Armenia has implemented health financing reforms since the late 1990s, aimed at improving the efficiency of public health spending. After it gained its independence from the Soviet Union, in 1991, Armenia financed its health care system from the public budget on a line-item basis. On July 1, 1997, Armenia introduced the first BBP, by government decree. Line item–based budgeting and the direct financing of maintenance costs were replaced with service purchasing—output-based financing of health facilities. The next major step in health financing reforms was the establishment of the SHA as an independent public body charged with purchasing all publicly funded medical services in Armenia. The agency started full-scale operations on January 1, 1999. Between 1997 and 2001, the SHA was directly subordinated to the government and began acting independently of the MOH. In 2002, it became part of the MOH structure; in 2011, the MOH started signing contracts with providers directly. Since then, the SHA has prepared contracts with providers, processed the reporting and disbursement of funds from the budget, and conducted audits. All major purchasing decisions, including the authorization of the contracts with providers, are made by the MOH.[24]

The MOH contracts public and private health facilities to provide BBP services under the same legal framework. In 2019, 469 health facilities were contracted, of which 403 were public and 66 were private. About 54 percent of all contracted facilities are PHC providers (see Appendix E). Almost all inpatient facilities that are licensed by the MOH are contracted to provide budget-funded services under the BBP. Health care providers that are not contracted by the MOH and are not funded from the public budget are mainly private outpatient diagnostic centers and dental offices. Patients eligible for BBP services need referrals from PHC providers for hospital treatment, except in cases of urgent care. In 2019, the MOH started implementing electronic referral forms through the e-health system.

The main provider payment mechanisms are per capita funding with supplementary performance-based financing (PBF) for PHC providers, case-based financing for hospital care, and fee-for-service for certain types of outpatient and inpatient services. Under the per capita mechanism, PHC facilities receive a fixed annual amount for each enrolled patient. A system of open enrollment of service users with PHC providers was introduced in 2005. Hospital services are paid on a fee-per-case basis, where an average price is set for each completed surgical or nonsurgical hospital treatment case. Fee-for-service is used to remunerate both outpatient and inpatient providers for some specific types of services, such as diagnostic procedures, ambulance services, provision of outpatient medicines to special categories of patients, and high-cost medical devices used in certain types of surgical operations. Other provider payment methods are used to pay for a limited scope of services, such as the remuneration of fixed and variable costs for tuberculosis and psychiatric services. In 2011, copayments were introduced for certain categories of BBP services, in order to cover the gap between the actual cost of the service and the BBP remuneration rate. The scope and rate of copayments are periodically revised.

2.2.6 TRENDS IN RESOURCE PROVISION AND EXPENDITURE

Health received about 5–6 percent of the state budget in recent years (Table 7). The budget mainly covers the purchase of medical services under the BBP; budgetary funding for capital costs is limited. In the initial health budget for 2019, capital spending accounted for about 1 percent of the public health budget (all of it for World Bank project activities); in the revised budget it received 3.3 percent.

TABLE 7 • Health budget as share of executed state budget in Armenia, 2015-2019

YEAR	STATE BUDGET EXPENDITURES	HEALTH BUDGET (MILLION DRAM)	HEALTH BUDGET AS PERCENT OF STATE BUDGET
2015	1,408,996.5	86,079.4	6.1
2016	1,449,063.6	88,645.9	6.1
2017	1,504,802.2	83,215.4	5.5
2018	1,447,083.0	79,574.2	5.5
2019	1,629,436.9	97,595.6	6.0

Source: Ministry of Finance

2.3 THE NATIONAL PUBLIC FINANCIAL MANAGEMENT SYSTEM

2.3.1 LEGAL AND REGULATORY PROVISIONS FOR PUBLIC FINANCIAL MANAGEMENT

Armenia's PFM legal framework is defined by the Law on Budget System (1997), the Law on the Treasury System (2001), the Law on Internal Audit (2010), the Law on Accounting of Public Sector Organizations (2015), the Law on Procurement (2016), the Tax Code (2016), and the Law on Audit Chamber (2018).[25] PFM legislation also includes numerous government decrees and MOF regulations, which define the implementation mechanisms of the main provisions in the relevant laws. The PFM legislation covers all levels of public administration and organizations, including central and regional governments, ministries, agencies, and State Non-Commercial Organization (SNCOs).[26]

2.3.2 INSTITUTIONAL ARRANGEMENTS FOR PUBLIC FINANCIAL MANAGEMENT

The MOF monitors the budget execution process and publishes detailed quarterly and annual reports. These reports include information on financial and nonfinancial indicators by budget programs and activities, revenue and expenditure by economic and functional classifications, national and local budgets, grants, budget deficits, and extrabudgetary funds. All other ministries and public agencies submit quarterly budget execution reports to the MOF.[27] Annual budget execution reports, which are submitted by the government to the National Assembly for approval, include the relevant compatible data for the two previous years for both financial and nonfinancial indicators. Financial indicators for the budget execution report (that is, revenues and expenditures, actual versus planned) are automatically generated through the MOF and Treasury software. Nonfinancial indicators (outcomes and outputs) are collected manually by the relevant ministries and public agencies, summarized in Excel worksheets, and submitted to the MOF. Publicly owned health care facilities submit facility annual budget execution reports to the relevant public management authorities (the MOH, regional administration, or community administration). Private health facilities that receive public funding for services in the BBP also submit annual reports to the MOH.

Armenia conducted two Public Expenditure and Financial Accountability (PEFA) assessments, in 2008 and in 2013.[28] The scores demonstrated strong performance for key PEFA indicators (PIs) (Table 8). Despite progress in strengthening the country's PFM system, however, the second PEFA report, released in 2014, revealed weaknesses in several areas. Oversight of aggregate fiscal risk from other public sector entities (PI 9) had some weaknesses, although budget credibility (PI 1–4) and comprehensiveness and transparency (PI 5–8 and 10) were strong. Policy-based budgeting (PI 11–12) and budget execution and cash and debt management (PI 16–17) performed well. Revenue administration was strong (PI 13–14), but the effectiveness of tax collection (PI 15) was not. Internal control (PI 18–21) improved, but weaknesses were observed in accounting, recording, and reporting (PI 22–25) and external scrutiny and audit (PI 26–28).

TABLE 8 • Armenia's performance indicator ratings on the 2008 and 2013 Public Expenditure and Financial Accountability (PEFA) assessments

INDICATOR	DIMENSION	PEFA SCORE	
		2008	2013
A. BUDGET CREDIBILITY			
PI-1	Aggregate expenditure outturn compared to approved budget	B	A
PI-2	Composition of expenditure outturn compared to original approved budget	A	B+
PI-3	Aggregate revenue outturn compared to original approved budget	A	A
PI-4	Stock and monitoring of expenditure payment arrears	B+	A
B. KEY CROSS-CUTTING ISSUES			
PI-5	Classification of the budget	A	A
PI-6	Comprehensiveness of information included in budget documentation	A	A
PI-7	Extent of unreported government operations	A	B+
PI-8	Transparency of intergovernmental fiscal relations	B	A
PI-9	Oversight of aggregate fiscal risk from other public-sector entities	D+	D+
PI-10	Public access to key fiscal information	A	A
C. BUDGET CYCLE			
C(i) Policy-based budgeting			
PI-11	Orderliness and participation in the annual budget process	A	A
PI-12	Multiyear perspective in fiscal planning, expenditure policy and budgeting	B	B
C(ii) Predictability and controls over budget execution			
PI-13	Transparency of taxpayer obligations and liabilities	C+	B+
PI-14	Effectiveness of measures for taxpayer registration and tax assessment	B	B
PI-15	Effectiveness in collection of tax payments	B+	D+
PI-16	Predictability in the availability of funds for commitment of expenditures	A	A
PI-17	Recording and management of cash balances, debt, and guarantees	A	A
PI-18	Effectiveness of payroll controls	B+	D+
PI-19	Transparency, competition, and complaints mechanisms in procurement	B	B
PI-20	Effectiveness of internal controls over nonsalary expenditure	C+	C+
PI-21	Effectiveness of internal audit	D+	C

C(iii) Accounting, recording, and reporting			
PI-22	Timeliness and regularity of accounts reconciliation	A	A
PI-23	Availability of information on resources received by service delivery units	C	A
PI-24	Quality and timeliness of in-year budget reports.	C+	B+
PI-25	Quality and timeliness of annual financial statements	D+	D+
C(iv) External scrutiny and audit			
PI-26	Scope, nature, and follow-up of external audit	D+	C+
PI-27	Legislative scrutiny of the annual budget law	A	C+
PI-28	Legislative scrutiny of external audit reports	D+	D+
D. DONOR PRACTICES			
D-1	Predictability of direct budget support	D+	C+
D-2	Financial information provided by donors for budgeting and reporting on project and program aid	A	A
D-3	Proportion of aid that is managed using national procedures	D	B

Source: Public Expenditure and Financial Accountability (PEFA) Assessment 2013

There is no Government Financial Management Information System (GFMIS). Although there are several PFM-related information technology (IT) systems in the public sector, they are not interoperable, and no individual system addresses the whole PFM cycle. Examples of such IT systems include the MOF's Client Treasury system and the Armenian Electronic Procurement System (ARMEPS).

A GFMIS would cover the whole PFM cycle, including budget planning, budget execution, public procurement, debt management, accounting, budget reporting, and the general ledger. The MOF has implemented a custom-developed Treasury System, which has undergone various enhancements over the last 15 years. The system supports several functions, including ex ante commitment controls, some accrual accounting, and a multidimensional chart of accounts and budget classifications. These classifications include economic and functional classifications that are compliant with the 2001 Government Finance Statistics Manual (GFSM) as well as administrative and program classifications. The system produces monthly, quarterly, and annual budget execution reports that can be disaggregated by economic, functional, program, and administrative classification. The annual budget execution report consolidates the central budget, extrabudgetary funds, and municipalities' statements.

2.3.3 ONGOING AND PLANNED PUBLIC FINANCIAL MANAGEMENT REFORMS

The PFM reform priorities are outlined in the 2019–23 PFM Strategy and Action Plan.[29] It builds on the achievements of previous PFM strategies and action plans, which were developed based on the 2008 and 2014 PEFA assessments.[30, 31, 32, 33] These strategies and action plans also reflected the outcomes of different strategic reforms, as outlined in the government's Poverty Reduction Strategic Program 2003–15, the Sustainable Development Program 2008–21, and the Perspective Development Strategic Program for 2014-25.[34, 35, 36] The reforms outlined in the current PFM strategy are well elaborated. However, many activities in the action plan need further technical and operational expertise for implementation, including support from development partners. This gap in expertise highlights the need to build PFM skills in the public sector. A PFM secretariat function has been established in the MOF to coordinate the implementation of the reforms; it focuses mainly on technical PFM aspects. It could be involved in coordination with development partners.

The main achievements of the PFM reforms in the las two decades include the following:

- **The budgetary system**—based on the Law on Budget System, which was approved in 1997 and has been periodically updated since then—defines the budget system, regulates the budget process, and applies to budgets at all levels, including state and community budgets. It also establishes the requirements and parameters for the Medium-Term Expenditure Framework (MTEF) and its linkage to the budget framework, as well as the requirements for program budgeting.[37]

- **The Treasury system**—implemented in 2001 and improved periodically since then—aims to ensure an effective system of management of public financial assets and liabilities through the regulation and control of the relationships pertaining to the budget system.

- **The accounting system in the public sector,** implemented in 2015, defines the relationships pertaining to accounting of public sector organizations, the requirements for the organization and maintenance of accounting by public sector organizations, and preparation and submission of general-purpose financial statements and other regulations.

- **The public procurement system,** which was implemented in 2000, launched the e-procurement system in 2011. The current Law on Procurement was approved in 2006 and amended in 2018. It regulates the relationships pertaining to the process of acquisition of goods, works, and services by clients and defines the main rights and responsibilities of the parties of these relationships. Establishment of an appeal body and implementation of e-procurement and e-auction systems have improved the effectiveness of public procurement system.

- **The external and internal audit systems in the public sector,** implemented in 2006 and 2010, aim to give objective assurance that public funds are being used in an effective, efficient, and cost-effective manner and to analyze the causes of and reasons for PFM system shortcomings.

CHAPTER 3 PUBLIC FINANCIAL MANAGEMENT AND SERVICE DELIVERY PERFORMANCE

This chapter draws on the FinHealth tool to review public financial management (PFM) functions in Armenia from a health sector perspective. It examines 24 focus areas (H1–H24), identifying key characteristics of budget formulation, execution, and formulation with implications for service delivery. Table 9 summarizes the main weaknesses identified.

TABLE 9 • Key weaknesses of public financial management of Armenia's health sector

AREA	DESCRIPTION	WEAKNESS
Budget formulation		
Strategic planning		
H1	Sector planning coordination	Inadequate involvement of health facilities and lower-level functional units in sector planning
H2	Sector plan costing and financing	Lack of fully costed health sector plan aligned to universal health care 2030 goals
H3	External funding of the sector	Limited use of country public financial management systems by development partners
Budget preparation		
H4	Annual budget preparation process	Weaknesses in bottom-up annual budget preparation and predictability of budget cycle timeline
H5	Budget classification	Limited scoped and flexibility of the role of the program manager
H6	Forecasting of earmarked revenue	Lack of well-established systems of revenue projections in health facilities
H7	Medium-term perspective in expenditure budgeting	Inadequate alignment with long-term sector strategies
H8	Transfers to subnational governments	Limited and often not fully executed community health budgets
Budget execution		
Flow of funds		
H9	Predictability of in-year resource allocation	Significant time lag in release of funds to health facilities in first two months of year
H10	Collection of earmarked revenue for health	Lack of transparent, standardized, and efficient rules at the facility level
H11	Accounting for health sector revenue	Wide variations across public facilities systems and processes
H12	Purchasing arrangements	Lack of objective criteria in contracting for medical services
H13	Payroll controls	Limited and nonstandardized payroll controls at the facility level and lack of integration at the health sector level
H14	Internal controls of nonsalary expenditure	Weak and poorly integrated controls at the facility level
H15	Internal audit	Limited use of mandate, limitations in resources, and risks associated with the proposed outsourcing of the internal audit function
Management of physical inputs		
H16	Staff recruitment	Staff shortages in the regions, absence of balanced distribution, and lack of competitive processes in hiring
H17	Staff performance management	Lack of standardized job descriptions, staff promotion policies, and systems for staff performance assessment and remuneration

H18	Procurement management	Limited capacity to develop technical specifications and adequate supply chain management
H19	Public investment management	Limited budget allocations for capital costs and ad hoc approach to decision making
H20	Physical assets management	Lack of centralized assurance for asset management and variations in practices at the facility level
Budget evaluation		
Accounting and reporting		
H21	Accounting, recording, and reconciliation	Lack of unified system at public facilities, despite standardization of financial reporting
H22	Issuance of budget execution reports	Serious weaknesses in assessment of nonfinancial outcome indicators
Oversight and transparency		
H23	External audit	Lack of systematic approach
H24	Public access to health finance information	Strong at central government level but varies at health facility level

Source: World Bank

3.1 STRATEGIC PLANNING

3.1.1 SECTOR PLANNING COORDINATION (H1): INADEQUATE INVOLVEMENT OF HEALTH FACILITIES AND LOWER-LEVEL FUNCTIONAL UNITS

The MOH is responsible for health sector planning at the national level, including the development of sector-specific strategies and programs. Based on national plans and strategies, regional administrations develop their own four-year plans of socioeconomic development, which are approved by the government. The most recent regional development plans were approved in 2014–15. To ensure that regional development plans are aligned with higher-level programmatic documents, drafts are circulated to all line ministries, including the MOH, which provides feedback on relevant sections before submitting the documents to the government for approval. However, as the public funding of health sector is centralized at the national government level, regional authorities have limited autonomy to implement additional health sector development plans at the local level. Therefore, the regional plans basically reflect the national health policy priorities, providing greater detail specific to the region's demographic and health status.

The MTEF, which is approved at the government level, is the only multiannual financial plan. It is not translated into similar plans by regional governments or other public institutions. The rest of the public sector, including public providers of health services, undertakes annual financial

planning. The annual STHPs do not contain specific implementation timelines, are often poorly aligned with the health budget structure. The STHPs provide only broad descriptions of the government's policies in the health sector. The three-year MTEF is aligned with the structure of the state budget programs.

Health facilities are not systematically involved in the state health budget planning and formulation processes. No established practice allows medical staff to discuss local priorities for facility development and share their needs with managers and planners at higher-level institutions in the sector. This conclusion was validated in interviews with facility managers. Facilities are simply notified about their annual budget after its approval, sometimes in February or March of the current year.

3.1.2 SECTOR PLAN COSTING AND FINANCING (H2): LACK OF A FULLY COSTED HEALTH SECTOR PLAN ALIGNED TO UNIVERSAL HEALTH COVERAGE 2030 GOALS

The BBP of medical services is underfunded. Remuneration of some BBP services reflects the actual cost of service delivery, but many budget programs are underfunded, leading to high out-of-pocket payments (both formal and informal) to cover the gap. There is no approved actuarial costing of the BBP, which hinders negotiations on increasing public funding for medical services.

Public funding for the health sector is limited, increasing the importance of increasing the efficiency of PFM arrangements. Public spending for health accounts for only 1.6 percent of GDP in Armenia, one of the smallest shares of all former Soviet republics (see Appendix F).[38] The state budget more than doubled between 2008 and 2019, rising from 811 billion dram to 1,629 billion dram.[39] Over the same period, the health sector budget increased 95 percent, from 50 billion dram to 97.6 billion dram. As a result, the health budget's share in total budget spending fell from 6.2 percent to 6.0 percent. This decline reflects the inadequate prioritization of the health sector funding by the government.

In 2019, approved public budget funding of the health sector increased 6.5 percent over 2018, from 84.1 dram to 89.6 billion dram. Its share of the budget fell, however, from 5.7 percent to 5.4 percent (see Appendix F). The 13.1 percent midyear increase in the health budget in June 2019 to 103.8 billion dram may demonstrate the government's stronger commitments to the sector. Public health spending is planned to further increase over the next three years, according to the MTEF 2020–22. However, the longer-term prospects for increases in health sector public funding are not clear. The ad hoc nature of increases may indicate weaknesses in planning and budgeting.

The MOH is considering introducing a universal health insurance (UHI) system. The new scheme proposes covering the formally employed population through an earmarked payroll tax. It would pool the health risks of both employer-insured and publicly covered beneficiaries under a

centralized and publicly managed health insurance fund. The launch of the new insurance system is pending approval of the concept paper by the government and adoption of the UHI Law and a related legislative package by the National Assembly in 2020. Implementation of the proposal assumes the creation of a new independent purchasing agency (the UHI Fund), which would pool financial resources, incorporate the current functions of the State Health Agency (SHA) into its structure, and relieve the MOH of its dual role as both a provider and a purchaser of publicly funded medical services. As the UHI Fund would act as the single purchaser of BBP services under the new scheme, it could exercise stronger negotiating power with providers, contributing to strengthening PFM arrangements in the health sector through improved planning, budgeting, and external financial control and oversight. These benefits are conditional on the mandate and technical capacity to support strategic purchasing of health services.

3.1.3 EXTERNAL FUNDING OF THE SECTOR (H3): LIMITED USE OF COUNTRY PUBLIC FINANCIAL MANAGEMENT SYSTEMS BY DEVELOPMENT PARTNERS

Since independence, Armenia has received substantial assistance for its health sector from donor agencies and Armenian diaspora organizations. In the 1990s, international assistance was mainly in the form of medical equipment, supplies, and medicine to address the immediate needs of the health system. Over the last two decades, the main donors have been the World Bank, the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and the US Agency for International Development (USAID). Between 2014 and 2018, the cumulative share of the donor-funded programs in the executed health budget was 6.8 percent, ranging from 5.1 percent in 2017 to 9.8 percent in 2016 (Table 10).

TABLE 10 • External funding of Armenia's health sector budget, 2014–18

YEAR	TOTAL HEALTH BUDGET (MILLION DRAM)		HEALTH BUDGET EXECUTION RATE (PERCENT)	DONOR-FUNDED PROJECTS (MILLION DRAM)		EXECUTION RATE OF DONOR-FUNDED PROJECTS (PERCENT)	SHARE OF DONOR-FUNDED PROJECTS IN HEALTH BUDGET (PERCENT)	
	Adjusted plan	Executed		Adjusted plan	Executed		Adjusted plan	Executed
2014	84,555.3	76,645.4	90.6	10,276.3	4,958.7	48.3	12.2	6.5
2015	86,223.8	86,079.4	99.8	5,360.6	5,858.3	109.3	6.2	6.8
2016	88,913.4	88,645.9	99.7	7,877.6	8,664.5	110.0	8.9	9.8
2017	85,714.8	83,215.4	97.1	5,191.9	4,208.0	81.0	6.1	5.1
2018	83,278.2	79,574.2	95.6	5,891.6	4,284.3	72.7	7.1	5.4

Source: Ministry of Finance

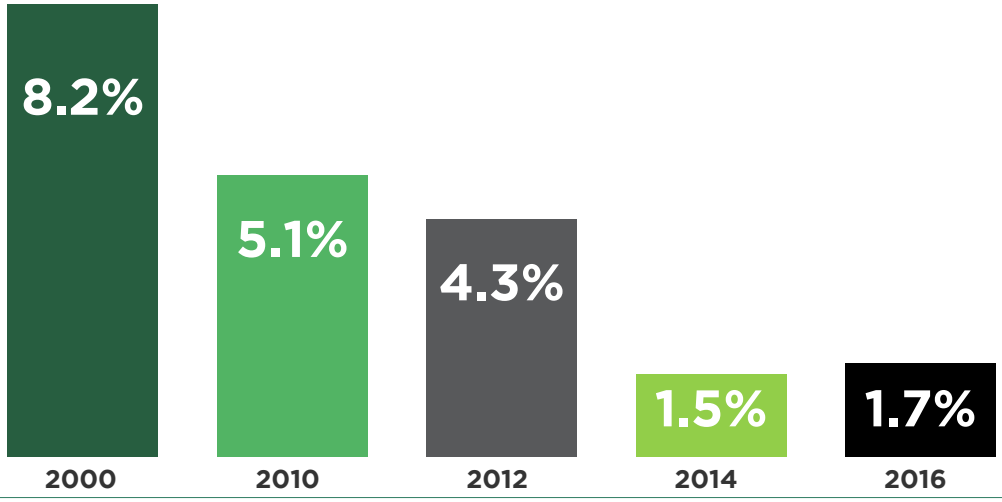
External funding to the health sector is provided through numerous grant projects and a World Bank credit program. Between 2014 and 2018, grant projects amounted to 37 percent of donor support (excluding humanitarian assistance); 63 percent of donor support came from World Bank credit programs. During the same period, the share of financing through the World Bank, including credit programs and grants, accounted for 66 percent of total donor support, the Global Fund's share was 29 percent, and the remaining 5 percent was provided by other donors (see Appendix F). World Bank credit and grant projects focus mainly on the government's agenda for modernizing the health system, including the renovation and construction of regional health facilities and the provision of medical equipment. Global Fund grant projects finance MOH policies in combating tuberculosis and HIV/AIDS. Donors also provide technical assistance to the MOH for the development and implementation of health care reforms, such as new financing mechanisms and efforts to strengthen human resources for health.

Humanitarian assistance is provided mainly by Armenian diaspora nongovernmental organizations (NGOs), including charities. Medicines and other supplies are shipped to the MOH, specific health care providers, or local NGOs. The MOH has a centralized warehouse for storing the medicines and supplies received, which it distributes to health care providers that are contracted to deliver BBP services based on their needs. Because of the decentralized nature of humanitarian assistance projects, it is difficult to obtain precise estimates of their volume and share of health sector funding.

Health sector projects financed by development partners are aligned with health policy documents approved by the government. They include national strategies for tuberculosis, HIV/AIDS, and national immunization programs.[40] Donor-funded projects are reflected in the MTEF and annual health budgets, using national PFM systems for budget planning, classification, and approval. The MOH and the MOF prepare their estimates for donor-funded projects based on existing credit or grant agreements, which are signed by the government and ratified by the National Assembly. Budget execution reports contain detailed information for each development partner–funded program by capital and recurrent cost categories. Both national and donor arrangements can be used to procure goods and services. For bulk procurement of tuberculosis and antiretroviral drugs and medical supplies under Global Fund grant programs, international procurement platforms such as those of the Global Drug Facility for tuberculosis and UNICEF, are used. The Global Fund purchases goods overseas and delivers them to Armenia. These transactions account for half of Global Fund grant project funds and bypass the national Treasury system. The rest of the Global Fund's financial resources, which are spent locally, as well as all World Bank project funds for both credit and grant programs are managed through subaccounts of the MOF's single Treasury account, according to the approved health budget classification of programs and activities. Units in charge of implementing development partner programs undergo mandatory annual external audits by a local or international auditor, according to the rules and procedures of the donors and are periodically audited by the Supreme Audit Institution.

Donor support and humanitarian assistance to Armenia's health sector declined over the last two decades, as the level of self-sustainability for health sector funding in Armenia increased (Figure 3). The share of donor-funded projects in the 2019 approved health budget was 4.0 percent, down from 7.1 percent in 2018. The current World Bank credit program in the health sector will be completed in 2021, according to the MTEF for 2019–22. A proposed new program is reflected in the Country Partnership Framework. To increase self-sustainability, the MOH aims to continue to increase budget funding for activities that had been covered by donors. The national immunization program, for example, used to depend heavily on donors for vaccine procurement. Since 2017, it has been fully funded by the public budget.

FIGURE 3 • Share of external funding in total health expenditure in Armenia, 2000–16



Source: World Bank

3.2 BUDGET PREPARATION

3.2.1 ANNUAL BUDGET PREPARATION PROCESS (H4): WEAKNESSES IN BOTTOM-UP ANNUAL BUDGET PREPARATION AND PREDICTABILITY OF BUDGET CYCLE TIMELINE

There is no fixed date for issuing the budget calendar, which makes the budget planning and preparation process unpredictable for line ministries, including the MOH. The Law on the Budget System defines general provisions for implementing the annual budgetary process. The consolidated budget comprises the state and community budgets. Central and community budgets use the classifications approved by the MOF. Budgetary units are issued a budget circular for the upcoming fiscal year, approved by the prime minister's decree, including the budget calendar.[41] Once the budget circular is approved, all parties—line ministries, the MOF,

and the government—strictly follow it. In 2019, the budget and MTEF calendars were merged. The MOH received the revised budget circular on March 29. The annual budget proposal for the following year, as well as two-year projections (2021–22), had to be submitted by April 30. MOH officials interviewed for this report consider this one-month period insufficient for this task.

The MOF provides methodological guidelines and instructions to public sector organizations for preparing the MTEF. The political involvement of different ministries, as well as relevant committees of Parliament, plays a significant role at different stages of the MTEF and draft budget preparation process, such as during discussions of the underlying macroeconomic indicators and approval of expenditure limits. The draft law for the state budget of the following year, the central bank's opinion, and other relevant information are submitted to the National Assembly at least 90 days before the beginning of the following budget year. The National Assembly begins to discuss the draft law on the coming year's state budget no later than the first ordinary meetings of the November preceding the fiscal year.

The 2019 state budget was approved on November 22, 2018; in 2010–18, the upcoming year's state budget was approved in the first half of December. If the budget is not approved before the beginning of the fiscal year, the government has the authority to carry out expenditures based on the state budget proportions from the preceding year. After the National Assembly approves the state budget for the following year, the government issues a decree on the quarterly state budget allocations that identifies the quarterly payment limits for each budgetary institution. The Treasury prepares a cash flow forecast for the new budget year on a quarterly, monthly, and weekly basis. The forecasts can be adjusted weekly, based on actual receipts and outflows of cash.

Budget preparation by the MOH follows a participatory approach. Budget requests prepared by the MOH are posted on the ministry's website. Any person or legal entity can express its views and concerns on proposed spending directions and the amount of financing. The draft budget must be discussed with representatives of civil society. Budget requests can be revised based on the suggestions received. During preparation of the draft budget, stakeholders scrutinize the previous year's spending on medical care and services by each health facility.

The health budget is unified, as it includes both recurrent and capital costs; it is developed by the MOH at the national level. The budgets of some other ministries and agencies, such as the Ministry of Defense and the police, also contain health-related programs and activities, which are implemented through their own service delivery units. They include the procurement of medical equipment, medicine, and supplies for the army and other services and the maintenance costs of the military hospitals.

3.2.2 BUDGET CLASSIFICATION (H5): LIMITED SCOPE AND FLEXIBILITY OF THE ROLE OF THE PROGRAM MANAGER

Armenia moved to program-based budgeting (PBB) for its entire budget in 2019; the health sector had used it for more than a decade. The state budget classifies expenditures by function and by economic category. All budget programs and activities are presented in both classifications. Most health budget expenditures consist of BBP programs and activities. They are highly aggregated under the economic classification and listed as "procurement of goods and services," without further specification of cost categories, such as salaries and utility costs. Exceptions include MOH staff maintenance and some donor-funded programs. The only budget entity in the health sector is the MOH.

The government piloted PBB in three sectors, including health, in 2004. Initially, the MOH used STHP activities with the existing functional classification of expenditures to define the budget programs. The number of programs in the health budget has changed over the years. There were 8 programs between 2016 and 2018; in 2019, there were 12. The number of activities under the programs fluctuates from year to year; it fell from 73 in 2016 to 53 in 2019 (Table 11). An Appendix to the budget contains 168 output and outcome indicators at the activity level; there are no indicators at the program level. Since 2019, the entire state budget has been presented to the National Assembly using PBB classifications, including nonfinancial output indicators. Since 2019, outcome indicators have been provided in Table 2 of Appendix 1 to the state budget of the given year, a step toward output and performance-oriented monitoring. The full list of programs and activities of 2019 health budget can be accessed on the website of the Ministry of Finance.[42]

TABLE 11 • Health budget programs, activities, and indicators in Armenia, 2016–19

ITEM	2016	2017	2018	2019
Programs	8	8	8	12
Activities	73	74	43	53
Program-level indicators	0	0	0	0
Activity-level Indicators	168	172	129	168

Source: Budget Laws of the Republic of Armenia 2016–19

In contracts with health care providers, the MOH uses the classification in the health budget by programs and activities. Contracts with providers include an Appendix specifying the annual budget. This budget follows the functional classification of the health budget, so that health care providers keep track and report the volume of provided services under each budget activity separately. If there is a need to reallocate funds between budget programs during the fiscal year, the MoH submits a proposal to the MOF and receive a no-objection for these reallocations. The government must approve reallocations. There is a limit of 3 percent of the overall allocations for the sector, as approved by the Law on the State Budget for the current year. Reallocations exceeding this limit are approved by the National Assembly; no such approvals have been granted in the past 10 years. In the health sector, the major budget reallocations take place at the end of the year, based on nine-month performance reports; they require about two months from initiation to implementation. This process may have a negative impact on service delivery, as health facilities either refuse to provide necessary medical care to patients except in emergency situations or put patients on waiting lists until they are formally notified about their revised budgets, at which point the required contract amendments are approved.

PBB requires strengthened monitoring and governance arrangements. The MOH health policy departments oversee the formulation and revision of the STHPs and have some degree of involvement in defining the nonfinancial indicators of the MTEF and budget programs. They are not directly involved in health budget formulation and execution processes, however, particularly the linking of the planning and monitoring of financial indicators to the nonfinancial indicators. There is also a general perception in the public sector, including the MOH, that budgeting is the responsibility of the financial, economic, and accounting units. From the perspective of PBB, it is extremely important to designate program managers from the policy departments that are responsible for implementing each budget program. Nonfinancial outcome indicators, which are the key part of the PBB system, are defined at the level of activities under budget programs. However, performance on these indicators needs to be carefully assessed and incorporated into the prioritization of public budget allocations. These findings are in line with the main conclusions of the World Health Organization report from 2018 on PBB in the health sector of Armenia.[43] They are supported by information obtained from interviews with public officials, including during the workshop to discuss preliminary results of the current study (see Appendix B).

3.2.3 FORECASTING OF EARMARKED REVENUE (H6): LACK OF WELL-ESTABLISHED SYSTEMS FOR REVENUE PROJECTION IN HEALTH FACILITIES

Armenia has no state budget revenues that are earmarked exclusively for the health sector (such as tobacco or alcohol taxes); public funding of the health sector is provided from general government tax revenues. All revenues realized by the health sector, such as through license fees, are incorporated into the state budget and cannot be retained for exclusive use by the MOH. Publicly owned health facilities operate as independent centers; user fees for health services are considered revenues of the facility. Health facilities forecast their revenues (from of out-of-pocket payments) for the year based on the previous year's actual revenues and the current year's BBP contract with the SHA. Facilities may consider, to varying degrees, planned changes in the structure of services they deliver or the potential impact of BBP revisions on their projected cash flow from out-of-pocket payments. There are no formal guidelines or procedures for revenue forecasting.

Out-of-pocket payment charges are the prerogative of the health facility; the government has no formal role in fixing fees. MOH regulations on out-of-pocket payment prices, such as recommended ceilings, are not binding on health facilities and are not strictly enforced. Health facilities that are contracted by the MOH for BBP services provide monthly data on out-of-pocket payments to the SHA and submit quarterly reports to the MOH covering major financial and other performance indicators. This reporting requirement is approved by government decree and was recently revised.[44] Projections of out-of-pocket payments are not consolidated at the regional or national levels for budgeting purposes; they are examined only at the facility level.

3.2.4 MEDIUM-TERM PERSPECTIVE IN EXPENDITURE BUDGETING (H7): INADEQUATE ALIGNMENT WITH LONG-TERM SECTOR STRATEGIES

Armenia has implemented MTEFs since 1999. All line ministries, including the MOH and regional authorities, develop and submit draft MTEFs to the MOF. The MOF develops the consolidated MTEF, which it submits to the government for approval. Health care providers are not involved in the MTEF preparation process. The government discusses the draft MTEF with the state bodies and, after some adjustments, approves it. According to the Law on the Budget System, the MTEF for the next period should be approved before July 10 and published before July 20. It is then issued to the National Assembly as a notice. This process is implemented each year and covers a three-year period (Table 12).

TABLE 12 • Medium-Term Expenditure Framework (MTEF) versus health budgetary funding of Armenia's health sector, 2017–22 (million dram)

ITEM	2017	2018	2019	2020	2021	2022
MTEF 2017–19	86,392.5	83,575.8	82,287.6	n.a.	n.a.	n.a.
MTEF 2018–20	n.a.	78,377.4	75,903.6	73,599.8	n.a.	n.a.
MTEF 2019–21	n.a.	n.a.	90,007.4	106,570.0	117,179.2	n.a.
MTEF 2020–22	n.a.	n.a.	n.a.	107,213.3	115,287.3	126,350.3
Approved budget	85,880.2	84,074.2	89,590.0	n.a.	n.a.	n.a.
Adjusted budget	85,714.8	83,278.2	103,790.1	n.a.	n.a.	n.a.
Executed budget	83,215.4	79,574.2	n.a.	n.a.	n.a.	n.a.

Source: Ministry of Finance
Note: n.a. Not applicable

The MTEF presents forecasts of macroeconomic and aggregate fiscal indicators, with expenditures presented by budget programs and by economic, functional, and administrative classifications. It contains information on revenues, expenditures, and the deficit. It also details the fiscal principles, risks, macroeconomic forecasts, sector analysis, announced sector priorities for the period, and detailed information on programs and their objectives across sectors. Starting in 2019, the draft budget of the following year has been approved in tandem with the MTEF and therefore constitutes the first year's plan of the three-year MTEF cycle. Operationally, this approach is practical. However, it is inconsistent with the fundamental principle of bottom-up annual budgeting that is informed by the MTEF, developed ahead of the budget during the same year. The MTEF is presented in an Appendix to the budget. However, the National Assembly approves only the annual budget law. The approved state budget of the second and third years of the MTEF cycle tends to demonstrate wider fluctuations than the MTEF indicators. In June 2019, the government allocated an additional 12 billion dram to the health sector to expand BBP coverage, increasing the current year's health budget by 13.1 percent. Larger revenues and allocations to health are welcome developments, but they may indicate a lack of accurate forecasting and planning in the MTEF and budget processes, which need to be addressed.

3.2.5 TRANSFERS TO SUBNATIONAL GOVERNMENTS (H8): LIMITED AND OFTEN NOT FULLY EXECUTED COMMUNITY HEALTH BUDGETS

The health sector is not necessarily a focus of subnational governance, given the central role of the national government. Armenia has 1,002 inhabited localities, including cities and villages, which are organized into 502 communities. Community budgets are approved by

elected local councils and consolidated into the national budget. There are no transfers from the national budget and community budgets specifically for the health sector. All transfers are for general community government revenue. Communities may own a health facility, usually a rural ambulatory or a PHC center that is directly contracted by the SHA to provide services in the BBP and funded from the national health budget.

Communities may also spend money on health, for both capital and recurrent costs, but such spending does not play a significant role in public financing of health care. Community health budgets are limited, and budget execution at the community level is much lower than at the national level. In 2018, total planned community health spending was 351 million dram, of which 263 million (75 percent) was the community health budget for Yerevan (see Appendix F). This figure represents only 0.4 percent of the 2018 planned health budget at the national level and 0.2 percent of total planned community budget spending in the country. The execution rate of community health budgets was 56.7 percent (65.3 for Yerevan and 30.8 percent for the other communities combined). Executed community health budgets made up just 0.3 percent of health expenditures at the central level and 1.7 percent of total community budget actual spending.

3.3 FLOW OF FUNDS

3.3.1 PREDICTABILITY OF IN-YEAR RESOURCE ALLOCATION (H9): SIGNIFICANT TIME LAG IN RELEASE OF FUNDS TO HEALTH FACILITIES IN FIRST TWO MONTHS OF YEAR

Execution of the health budget at the national level is satisfactory. It varies substantially across budget programs and years, however. Between 2008 and 2019, the execution rate of the health budget ranged from 87.7 percent (in 2009) to 99.8 percent (in 2015) (see Appendix F). The relatively low health budget execution in 2009 was the result of the impact of the 2008 global financial crisis on the economy. Analysis of health budget execution by budget programs over the last decade indicates that the BBP-related part of the health budget—that is, spending on outpatient and inpatient care programs—had execution rates of at least 98 percent. Underspending of allocations appears to result from savings from centralized procurement of medicine by the MOH or lags in implementation of donor-funded projects.

The MOF secures enough resources in its Treasury Single Account (TSA) to fund the expenditures planned in the state budget, ensuring that commitments are met according to the original or revised expenditure schedule. The TSA, which consolidates the entire state budget and extrabudgetary, deposit, and monetization accounts, is an account at the central bank in the name of the Treasury. All cash balances are calculated daily and consolidated under the TSA. All resources at the disposal of the national government and communities are deposited there,

and all payments are made from the account. In 2011, the government consolidated all special accounts of foreign-financed loan and grant programs into the Treasury. These accounts are foreign currency subaccounts in the TSA opened in the name of the project implementation unit.

Before 2012, disbursements under some foreign-financed programs were made in the form of direct payments to beneficiaries. Since 2012, disbursements and expenditures made under these programs have also been recorded through the Treasury, using the Treasury's special software. In 2018, all SNCOs also joined the Treasury, significantly increasing the transparency of their operations. Previously, each SNCO had a separate account at a commercial bank. The government presents information about budget execution to the National Assembly within 40 days of the end of each quarter and publishes the information within 45 days of the end of the quarter. It presents the annual budget execution report to the National Assembly by May 1 of the following year.

There are periodic delays in the first annual disbursement of funds from the SHA to facilities. Interviews with health sector officials and facility managers indicated that the delays are the result of the volume of work required to prepare the 500 annual BBP contracts with facilities and approve the contracts. This process starts in late January and usually concludes by mid-February, so that facilities do not receive budgetary funding before February. Facility managers reported that as this situation repeats every year, facilities can plan, ensuring that they have cash reserves in the bank at the beginning of the year. However, a few facilities have faced financial constraints, necessitating commercial loans from banks to cover their costs in January and February. Interim and annual financial reports on budget execution adhere to a fixed schedule, and there are adequate measures to ensure the integrity of these reports. In general, at the start of the fiscal year, there are no other delays in the budget execution process, including commitments, verification, payment authorization, and disbursement.

3.3.2 COLLECTION OF EARMARKED REVENUE FOR HEALTH (H10): LACK OF TRANSPARENT, STANDARDIZED, AND EFFICIENT RULES AT THE FACILITY LEVEL

Armenia lacks unified and transparent pricing mechanisms at the facility level for services not covered by the BBP. Facility managers have autonomy over setting the fee schedules. Fees usually differ from facility to facility for the same type of service. Out-of-pocket fees in regional health facilities tend to be lower than in Yerevan-based medical centers, as a result of the higher perceived quality of service and population's ability to pay rather than the differential cost of service provision. The MOH issues guidelines with recommended minimum and maximum fees for health care facilities contracted under the BBP. However, these limits are not legally binding on the facility managers and not universally followed.

Formal out-of-pocket payments are collected through cash payments to the facility cashier's office, bank transfers, or credit card payments and usually properly recorded. Informal out-of-pocket payments—in the form of "thank-you" cash payments to medical staff or in-kind contributions—also occur. These payments are difficult to control, as they are not formally registered or regulated. The under-remuneration of health workers may contribute to informal out-of-pocket payments. Health care providers may also receive formal in-kind contributions as humanitarian assistance, from either the MOH or benefactors, such as diaspora entities or NGOs. These contributions are facility revenue.

3.3.3 ACCOUNTING FOR HEALTH SECTOR REVENUE (H11): WIDE VARIATIONS ACROSS PUBLIC FACILITIES SYSTEMS AND PROCESSES

Health facilities have a high level of autonomy in managing their financial resources. Facilities retain the revenues they collect—including formal out-of-pocket payments, in-kind contributions, and rental fees—and spend them based on the approved facility budget. Medical services are exempt from value-added tax (VAT). People interviewed for this report indicated that facility revenues are tracked mainly through paper-based or Excel-based procedures. Larger public and private hospitals use special accounting software, which also partially substitutes as a financial management tool for managers. However, no special financial management software was encountered in any of the health facilities included in the survey. No government-approved spending rules or regulations are applied for different revenue sources. Facilities follow internal practices and define spending priorities for salaries, taxes, medicine and supplies, utilities, and other costs.

All public facilities have annual budgets, which are approved by their respective managing authorities. These managing authorities may be Marz governors, community heads, or the MOH. Private facilities may or may not have annual budgets; the decision is made by owners and management. Facility budgets can be revised during the year, mainly as a result of revised financing from the MOH, depending on the volume of services provided under the BBP. Public facilities submit monthly, quarterly, and annual financial reports to their respective managing authorities, including information on collected revenues. Private in-kind contributions are reflected in facility revenues, based on their monetary value, which is usually determined by the donor. However, this monetary value can be adjusted by an internal valuation committee set up by the facility manager.

Payments from the Treasury are processed in a timely manner through an electronic billing system. It takes a maximum of two to three days for payments to be approved and the resources to reach the facility. Health facilities receive 60–100 percent of their revenues through bank or Treasury accounts. Almost 100 percent of expenditures, including salary payments, are made by wire transfer. Treasury and bank account transactions are regulated and do not create barriers for service delivery. Cash withdrawal is rarely used, and fund deposits are easily executed. All public and private facilities except SNCOs have commercial bank accounts.

3.3.4 PURCHASING ARRANGEMENTS (H12): LACK OF OBJECTIVE CRITERIA IN CONTRACTING FOR MEDICAL SERVICES

Medical services under the BBP are purchased through direct contracting. In contrast, budget-funded procurement of medicine and medical supplies is usually undertaken through competitive bidding procedures. Noncompetitive procurement of medicines and supplies may be allowed by a special government decree for certain large-scale transactions. Direct contracting for services under the BBP is granted to the MOH by the government decree that regulates public procurement procedures. This decree provides the list of goods and services that can be procured on a single-source basis considering the special or exclusive right of the sellers and service providers.[45] The MOH regulates and implements contracting arrangements under what is called a "state order placement" process. All licensed health care providers that intend to have a BBP contract must submit annual applications to the MOH, including information about their professional and technical capacity, the list of services they will provide, and human resources. A committee set up by the Minister of Health analyzes the applications and makes a recommendation to the minister to contract a facility or reject the application. The final decision regarding facilities to be contracted and services to be delivered under the BBP is approved by the minister's order. The SHA then prepares the contracts.

Treasury procedures require the setting of an annual global budget ceiling for each health budget program allocation per facility. Setting prospective ceilings facilitates the predictability of spending, but it may also limit the ability of the MOH and facilities to respond to the population's health needs. At the beginning of each fiscal year, health facilities receive a predefined maximum annual sum under each health budget program, based on the scope of provided services. These funds are supposed to be spent proportionately during the year. The MOH allocates funds across budget programs to different providers. Allocations are often based on historical patterns, with incremental changes based on the size of the health budget. The MOH periodically revises facility budgets during the year based on their actual and expected performance (where performance is measured in terms of the volume of provided services). A procedure is also in place for reallocating funds across health budget programs and activities. This procedure requires prior authorization by the MOF and is burdensome and time-consuming. Health facilities that have greater flows of patients have no guarantees that they will be reimbursed in full if they exceed their annual budget. To deal with the budget constraints, facilities put patients eligible for services under the BBP on waiting lists.

The government partially addressed this challenge in 2019, by introducing a change in the facility-level budgeting mechanism for three health budget programs (obstetric care, emergency heart surgeries, and medical assistance for military personnel and their family members).[46] Beginning in 2020, there will be no predefined global budget set for BBP contracts for health facilities providing services under those budget programs. Service provision will be limited only by the total amount of a given budget program nationwide. Feedback from the MOH and the MOF suggests that the working arrangements for reallocating funds across budget programs and activities were substantially improved in 2019, so that the process requires less time and effort.

3.3.5 PAYROLL CONTROLS (H13): LIMITED AND NOT STANDARDIZED AT THE FACILITY LEVEL AND LACK OF INTEGRATION AT THE HEALTH SECTOR LEVEL

There are no integrated, sector-wide lists of approved staff positions or the payroll at the facility level. There is also no comprehensive and complete personnel database available in the health sector. The Staff Management Department of the MOH, which is responsible for human resource of health, periodically collects and analyzes information on the availability of medical personnel in the health sector. This analysis tracks vacant positions in regional medical facilities and is periodically updated on the MOH website. The Center for Health Statistics at the National Institute of Health (part of the MOH) publishes aggregated, nationwide data on the number of medical personnel, including doctors and nurses, by specialties and by location (Yerevan and the regions). However, Armenia lacks a frequently updated, reliable electronic tool or database that can provide this information to decision makers upon request.

The health sector payroll system is decentralized and includes a wide variety of processes across facilities. The MOH accounting department is responsible for the payroll of MOH staff. Health facility managers have full responsibility over hiring or firing medical and nonmedical staff, preparing the payroll, and paying salaries. All staff-related decisions, including changes in payroll arrangements, are outlined in an official written order of the facility manager or through labor contracts and their amendments, signed by the employer and employee. All electronic accounting systems, which are in place in most health facilities in Armenia, include an automated payroll calculation component. However, this information is entered manually and is not directly linked to the personnel database. Oversight of the salary fund is addressed in the Strategy on Public Financial Management System Reforms 2019–2023 and Public Financial Management System Reforms Action Plan 2019–2023, which were approved by Decree No. 1716-L of November 28, 2019. In the strategy and action plan, oversight is to be conducted by special payroll audits. All publicly owned health facilities use wire transfers for salary payments to the bank accounts of their employees, as mandated by a government regulation issued in 2014. Salary payments are usually made on time (that is, before the 15th of the next month). However, payroll delays still exist. Retroactive payroll adjustments are very rare and are often in response to errors made during data entry.

3.3.6 INTERNAL CONTROLS OF NONSALARY EXPENDITURE (H14): WEAK AND POORLY INTEGRATED CONTROLS AT THE FACILITY LEVEL

Facility managers have a great deal of autonomy over spending their internal budgets, as long as they comply with the general rules set by the labor code, public procurement regulations, and the tax code.[47] Most health facilities are legally classified as public joint stock companies. They are paid from the public budget based on the volume of BBP services delivered, via fee-per-case, capitation, or fee-for-service. These payment mechanisms do not break down service

costs or control expenditure by economic classification. Separate control mechanisms for salary and nonsalary expenditures are exercised by the MOF only for ministries, other public agencies, and SNCOs. At the aggregate level, legislation stipulates that the Treasury control all types of expenditures covered by the state budget. This control is exercised through the Treasury Operating Day (TOD, formerly called LS-Finance) IT system. The Treasury system details the procedures for automated registrations, controls, and approvals at all stages of the expenditure commitment process. These stages include approved budgets and their updates; quarterly ceilings for each public body; monthly payment schedules; and supporting documents, such as contracts, acceptance and delivery protocols, and certificates.

The Treasury system has scope for improvement. The system does not support the recording of multiyear commitments to improve fiscal controls for large capital investments in the health sector. The government, as well as the sectors, including health, are unable to produce reports that comply with the Armenian Public Sector Accounting Standard (APSAS). Data on assets and liabilities are not aggregated in any reports, because of business process, coverage, and integration issues. The health budget execution report is cash based and not integrated with accrual information. The system lacks advanced analytical and reporting capabilities to produce reports that can meet the requirements of the MOH and other stakeholders, limiting the ability of health policy makers to analyze the effectiveness and efficiency of public budget resource utilization at health facilities. In addition, the source code of the software of the Treasury electronic system is inaccessible to the government, which complicates the process of implementing changes in the system. The nonexistence or nonownership of the source code makes the government dependent on the company that developed the software for the government and supports it, creating a risk from a business continuity perspective, as the company may cease to provide services.

Internal controls are in place and are mostly effective, but they are infrequently bypassed. This conclusion is documented in the audit reports of the MOF's Inspectorate of Financial Control, internal audit units, and the Audit Chamber (formerly the Chamber of Control). These reports have identified violations of internal control processes and the unjustified use of public funds. The violations pertain to asset management, technical and other control rules, established procedures and norms, acceptance of incomplete works and payments thereof, and inadequate accounting of transactions. Assessment of the effectiveness of control systems is the primary responsibility of the internal audit departments of public bodies. The Inspectorate of Financial Control of the MOF checks compliance with the rules of individual transactions only. Internal audit reports identify problems connected with improper oversight over contract implementation, such as inadequate accounting of transactions. There is a need for more comprehensive assessments of internal control systems that can provide a complete understanding of the system efficiency, application of controls, and the extent of compliance with them.

3.3.7 INTERNAL AUDIT (H15): LIMITED USE OF MANDATE, LIMITATIONS IN RESOURCES, AND RISKS ASSOCIATED WITH THE PROPOSED OUTSOURCING OF THE INTERNAL AUDIT FUNCTION

The internal audit system at the MOH and at the regional level needs to be strengthened and its functions expanded.[48] Internal audit units usually conduct simple financial, payroll, and procurement compliance audits at health facilities under their respective jurisdictions. They do not undertake performance edits that examine the overall efficiency of health budget programs or how they are implemented. The MOH internal audit unit does not have a mandate to audit health facilities that are not under MOH direct control. Internal audit units in the regional administration conduct audits only of public health facilities operating under their control.

Because salaries are low, internal audit units, including at the MOH, lack high-level and experienced professionals. Units are chronically understaffed and have high turnover rates, according to health officials and facility managers interviewed for this report. This challenge is partly attributed to the low status of the internal audit unit in the civil service hierarchy. There are six full-time positions in the internal audit unit of the MOH, just three of which were filled as of October 2019. Between 2017 and 2018, almost all staff members had been replaced with new employees. The activities of the MOH internal audit should cover the structural units of the ministry, including the SHA; the licensing agency; the 12 programs and 53 activities of the health sector budget; and the 16 health facilities operating under MOH direct supervision, 10 of which are close joint stock companies and 6 of which are SNCOs. As of September 2019, the internal audit of the MOH had carried out only five audits in 2018 and three in 2019.

Internal audit reports are presented to the head of the public authority (which may be the minister of health or the head of the regional administration) and the audit committee (which may include independent experts). The main function of audit committees, according to the Law on Internal Audit, is to support the internal audit system. However, committee members often lack a clear understanding of their responsibilities, and committees are created to formally meet this mandatory requirement of the law. Recommendations of the audit report, which are approved by the head of the public authority, become mandatory instructions for the head of the audited organization that must be implemented. The internal audit monitors the implementation of the approved recommendations, often undertaken within a reasonable time frame, and reports back on the results.

The government recognizes the weaknesses in internal audit. In 2020, it began liquidating the internal audit units in most ministries and all regional administrations, with some exceptions, such as the Ministry of Defense. The government aims to outsource the internal audit function to independent external audit companies, which will be selected on a competitive basis. It is critical to make sure that the outsourced firms have appropriate professional competence, standing, and terms of reference that are clearly agreed to. There are challenges with the credibility of financial audit certificates issued by private audit firms to hospitals (see section 3.6.1). Outsourcing the internal audit function exposes these processes to the same challenges.

3.4 MANAGEMENT OF PHYSICAL INPUTS

3.4.1 STAFF RECRUITMENT (H16): STAFF SHORTAGES IN THE REGIONS, ABSENCE OF BALANCED DISTRIBUTION, AND LACK OF COMPETITIVE PROCESSES IN HIRING

Staffing policy in the health sector is decentralized. The managing authority approves staffing levels in publicly owned health facilities by specialty. Health facility managers are legally charged with hiring and firing medical and nonmedical staff. The number of staff positions for each specialty may be periodically revised, based on needs at the facility level and the existing workload. However, there are no clear national policies or criteria for undertaking these revisions. Facility-level information on staff vacancies is often not publicized or available to the medical community, except for regional public facilities. Personal connections are therefore often the main source of information for potential job candidates. The hiring process requires candidates to submit a standard package of documents, which may demonstrate their work experience and professional and postgraduate training. However, there are no legislative requirements to do so, and it is rarely the case that the selection process is competitive. In addition, there are no legislative standards for selection criteria in public health facilities. The final decisions are usually made by the facility manager.

There is a gap in the availability and distribution of human resources between the capital city and the regions. In 2019, 13,958 medical doctors were working in the health system; 73 percent of them worked in the capital (where just 36 percent of the population lives). This gap is narrower for midlevel staff. Of the 16,772 nurses, midwives, laboratory technicians, and other midlevel medical staff, 52 percent were working in Yerevan. The ratios of medical doctors and nurses per 10,000 people in Armenia were 47.2 and 56.7, respectively, in 2019 (93.8 and 80.5 in the capital city and 20.1 and 42.7 in the regions). The number of nurses per doctor was 0.86 in Yerevan and 2.13 in the regions, highlighting the larger disparity in the distribution of medical doctors compared with other health workers (Table 13).

TABLE 13 • Composition of Armenia's health workforce, 1990–2019

INDICATOR	1990	2000	2010	2019
Number of medical doctors (all specialties)	14,519	12,270	13,591	13,958
Number of medical doctors per 10,000 people	41.3	38.0	44.5	47.2
Number of nurses and other midlevel medical staff	34,953	22,632	18,649	16,772
Number of nurses and other midlevel medical staff per 10,000 people	99.4	70.1	61.0	56.7

Source: Ministry of Health

The MOH is implementing policies to increase the supply of medical specialists in regional health facilities. Progress has been made in recent years, but spatial inequalities persist. In August 2019, there were 330 vacant positions for medical doctors and 27 for nurses in the regions. The vacant positions represented 9.4 percent of all positions for physicians in regional health facilities. Only 0.3 percent of positions for nurses in the regions are vacant. Medical specialties that are in high demand in the regions include family physicians, therapists, and pediatricians (62 vacant positions); anesthesiologists (23), laboratory doctors (22); radiologists (22); obstetricians/gynecologists (19); and neurologists (19). This information is available on the MOH website and is periodically updated and aggregated at the regional and facility levels.

The shortage of medical specialists in the regions negatively affects service delivery. Interviews with regional health facility managers revealed that vacant positions among medical staff account for 3–10 percent of all positions, which is consistent with MOH data. In addition, annual staff turnover averages 5–8 percent, as a result of emigration and other personal reasons. The lack of key professionals, such as family doctors and anesthesiologists, in the regions limits facilities' ability to supply high-quality health services. To reduce the gaps between the regions and Yerevan, the MOH annually provides some publicly subsidized postgraduate medical education opportunities for medical professionals who are willing to work in the regions after graduation. In 2019, it continued the practice of temporarily assigning medical specialists from Yerevan-based facilities to regional health care providers to fill vacant positions.

More resources should be allocated from the public budget to address the shortages of medical doctors at regional facilities. No information is available on the share of the national budget allocated for human resources. Evidence from surveyed health facilities suggests that, on average, payroll constitutes 60–80 percent of facility budgets. Remuneration (and the workload) is lower on average in the regions than in Yerevan, making it difficult to increase the supply of skilled professionals. Interviews with regional health facility managers suggest that funding is necessary to incentivize skilled staff to fill vacant positions, particularly in difficult-to-reach locations. These incentives may include higher salaries and bonuses and the subsidization of housing, utility bills, and transportation costs. Regional health authorities also recognize the need for additional resources to retain staff in the regions.

3.4.2 STAFF PERFORMANCE MANAGEMENT (H17): LACK OF STANDARDIZED JOB DESCRIPTIONS, PROMOTION POLICIES, AND SYSTEMS FOR STAFF PERFORMANCE ASSESSMENT AND REMUNERATION

There are no formally approved job descriptions, staff promotion policies or guidelines, or staff performance assessment systems in the public health sector. These issues are addressed nonuniformly at the facility level and are the prerogative of the facility manager. Staff promotions are reportedly merit based. Work experience and competencies, which may be subjectively measured, are the main criteria for promotion. Facility managers can take disciplinary action

in response to poor performance, according to the Labor Code and employment contracts, including a written warning or dismissal. Medical doctors may face administrative or criminal charges for malpractice if it results in death or harm to the patient's health.

There is no unified system for remunerating medical personnel in the public sector. The MOH issues guidelines on the payment of doctors and nurses for BBP services, indicating the share of facility revenues to be allocated as payroll. Public health facilities are legally independent entities and are often incorporated as closed joint stock companies with 100 percent public ownership. They are not obligated to follow these guidelines. Private facilities are not inclined to do so. Facility managers are allowed to define payment in agreement with staff within labor contracts. The ability of the MOH to enforce payroll regulations is therefore limited. Facilities use different payroll rules and policies. Payment to medical personnel for the same service may thus vary across facilities. Staff payment mechanisms include fixed monthly wages and performance-based bonus payments based on workload. No reliable data on remuneration levels in the public and private sector are available.

Medical and administrative staff of health facilities have the necessary training, which may be linked to licensing standards. Health facility managers indicate that at least 80 percent of their medical staff received some training in the last five years. Regular training is linked to facility licensing standards set by the MOH that require doctors and nurses to earn postgraduate continuous professional training credits every five years to continue practicing medicine. Nearly 100 percent of the financing and accounting staff in the surveyed facilities had college-level professional education. They had also attended one to three weeks of training in the past five years in accounting, financial management, or implementation of e-health systems. Larger facilities had up to seven staff members involved in financial planning, accounting, and reporting. Small facilities tended to have one accountant (one small private facility outsourced accounting services). Employees of the MOH finance department, the SHA, and the MOF who are involved in financial planning or accounting are professionally educated and periodically trained. Periodic training is a legal requirement for civil servants and is expected within their professional field.

3.4.3 PROCUREMENT MANAGEMENT (H18): LIMITED CAPACITY TO DEVELOP TECHNICAL SPECIFICATIONS AND ADEQUATE SUPPLY CHAIN MANAGEMENT

The Law on Procurement, adopted December 12, 2016, allows procurement to be conducted electronically or via paper-based systems. Procurement can be done by electronic auction, competitive bids or tenders, request for quotations, and single-source procurement. Competitive bids can be open or closed. A closed competitive bid can be targeted or regular. Targeted closed competitive bidding applies when the procured item is not in the list of goods and services to be procured through regular competitive bidding. Competitive bids are the preferred procurement method. Other methods of procurement can be used in exceptional cases stipulated by law.

The annual procurement plans of all ministries and government agencies for the next budget year are approved by government decree at the end of the current year and officially published. Detailed procurement-related information is publicly available on MOF procurement platforms, including the procurement website of the MOF (procurement.am), the Armenia Electronic Procurement System (armeps.am), E-Auction (eauction.armeps.am), and the Public Procurement Contract Management (PPCM) portal. Information is provided for each public tender and each awarded contract by each entity. Data on awarded contracts includes the name of the good or service, the quantity, the unit price, the total value of the contract, and the names of the vendors or suppliers. Signed contracts and invoices can also be accessed and downloaded from the same source. Information on blacklisted suppliers (vendors with bad track records) is publicly available from the procurement information portal. Procurement complaints are discussed and resolved by a procurement complaint resolution body whose members are appointed by the prime minister. This body replaced the Procurement Appeals Board in 2018.

Procurement valued at more than 1 million dram is carried out through open competition. However, single-source procurement can be used when the vendor or service provider has a specialized or exclusive right, as is the case for MOH purchases of medical services under the BPP. The government can also provide a special exclusion by decree to public entities, including ministries or facilities, for single-source procurement. The MOH has used special exclusions for single-source procurement to purchase vaccines and other goods directly from manufacturers or international suppliers. Procurement regulations stipulate the separation of the procurement coordination function from procurement planning and the awarding of contracts. Ministries and large public entities have enough human capacity to follow these procedures; smaller entities, including rural health centers, may include nonqualified staff in the procurement process to formally comply with these requirements.

Lack of capacity to develop appropriate technical specifications affects the availability of medicines, medical goods, and services at the facility level. The e-procurement system links planned purchases and resultant invoices to the Treasury IT system, facilitating commitment control and cash management and reducing the likelihood of unpaid invoices. Challenges in using the procurement system include the lack of technical specifications and difficulties accepting the goods and services delivered. If there is a lack of capacity to elaborate appropriate technical specifications, goods and services are purchased based on the lowest price. This alternative may not necessarily result in the required quality of supplied goods or services. There are also technical difficulties with operating these IT systems. In early 2019, for example, the MOF e-procurement system was not functional for a while, creating delays as facilities had to wait to announce their procurement bids for medicine and other goods again. The e-auction component of the electronic procurement system has not functioned since February 2019.

Interviews with both health facility managers and public officials confirmed these challenges. All interviewees pointed to the lack of clearly defined and high-quality technical specifications for the procurement of medicine and medical supplies. They noted that price is usually the only

criteria on which awards are made. These findings also align with the desk review of public procurement laws and regulations. The impact of these challenges on the quality of goods and services procured is unclear. Suppliers can provide only medicines that are officially registered in Armenia by the MOH's Scientific Center of Drug and Medical Technology Expertise. These medicines have clearly defined technical specifications that must be complied with. However, facility managers reported that patients may prefer to pay out-of-pocket for prescribed drugs from commercial pharmacies, which they perceive as more effective. As one regional hospital director said, "We are not so rich that we can allow ourselves to buy cheap drugs."

Health facilities periodically face delays in receiving centrally procured medicines as a result of procurement challenges within the MOH.[49] In the first quarter of 2019, there were delays in the supply of referral forms for hospital treatment of BBP patients. The MOH orders these forms from a printing house, selected via competitive bids, and distributes the forms to all health facilities in the country. Facilities were confronted with complaints from patients who could not be referred for hospital treatment as a result of the lack of the forms.

There is also a lack of capacity at the facility level to accurately forecast the annual volume of needed medicine at the beginning of the year. At some rural facilities, the volume of medicines and supplies needed is small. Bulk procurement by the MOH could be an efficient way to address supply challenges in these cases. Such a system has been debated during the last few years within MOH. However, there is insufficient capacity to implement a bulk procurement system, and the challenge is not high priority. For certain rarely used drugs with very high unit cost, the small size of the market does not attract potential bidders. In these cases, the procurement tenders are annulled, and patients must buy the drugs themselves. Because of the small market size, these drugs may not be registered in the country by manufacturers.

Interviewed MOH officials noted that the public procurement planning process is not well coordinated with the health budget formulation process. The MOH periodically negotiates with the MOF to improve coordination, particularly for the centralized procurement of drugs. However, this coordination does not relate to BBP services. The procurement system is well integrated with the financial management and budgetary system, providing sufficient and timely information on the completion of all major contracts through the MOF's Client Treasury system. Procurement execution rates at the MOH are close to 100 percent, except for capital investments, which are implemented mainly through donor funds.

3.4.4 PUBLIC INVESTMENT MANAGEMENT (H19): LIMITED BUDGET ALLOCATIONS FOR CAPITAL COSTS AND AD HOC APPROACH TO DECISION MAKING

Armenia's state budget mainly covers recurrent costs for the procurement of goods, works, and services; it provides very limited funding for capital costs. The total volume of capital costs to be financed from government internal revenues, outside credit, and grant programs in the 2019 budget was initially approved at 222.0 billion dram, or 13.5 percent of the planned

expenditures. For the health sector, capital cost allocations initially planned for 2019 were solely under the World Bank credit program, at 887.5 million dram, or about 1 percent of the approved health sector budget. The government increased the health budget for the second half of 2019 by allocating an additional 12 billion dram to the sector, of which 2.6 billion dram was provided for capital costs. The planned capital expenditures included 2.1 billion dram for procurement of medical equipment and 0.4 billion dram for the renovation of regional health centers. The total amount of capital costs in the revised 2019 health budget (103.8 billion dram) was 3.5 billion dram, or 3.3 percent of the health budget.

At the health facility level, allocations from the public budget for equipment or infrastructure were very limited between 2009 and 2018. Before 2009, the government briefly allocated funding for the procurement of basic medical equipment, mainly for regional health facilities. In the last decade, however, donors, particularly the World Bank, provided most capital investment in the health sector. More than 170 PHC facilities and about 20 regional medical centers were renovated and equipped with World Bank support. Health facilities may allocate some portion of their revenues for capital costs, usually for minor renovations or procurement of medical equipment. These revenues are raised through formal out-of-pocket payments or other sources of revenues, which are reflected in their annual budgets. Information on facility-level expenditure on capital costs is not consolidated at the national level.

The selection of investment projects under the World Bank credit program has been a participatory process, led by the MOH. Regional health authorities are involved, but there is no formally approved process or criteria. In the absence of a master plan for health facilities, discussions are not informed by a systematic consideration of regional disparities in access to care to meet population health needs. The selection of capital investment projects for 2019 was done through internal MOH discussions, without much public debate or clarity on the criteria used to make decisions. Renovated health centers face high maintenance costs to run their improved infrastructure and medical equipment, which may be beyond their budgets.

3.4.5 PHYSICAL ASSETS MANAGEMENT (H20): LACK OF CENTRALIZED MECHANISMS FOR ASSET MANAGEMENT AND VARIATION IN ASSET MANAGEMENT PRACTICES AT THE FACILITY LEVEL

There is no consolidated register of fixed assets in the health sector. Each legal entity maintains its own registry of its fixed assets. The Law on Accounting of Public Sector Organizations, which was adopted in 2014 and became effective for the MOH and the health sector in 2017, establishes the accounting standards, policies, and regulations that cover the public management bodies, including ministries, regional and community administrations, SNCOs, and CNCOs. Other legal entities, including public and private joint stock companies and limited liability companies, conduct their accounting, including registration and management of fixed assets inventories, according to the general Law on Accounting adopted in 2002 and related government decrees, MOF orders, and instructions. All publicly owned health care providers submit annual reports

to their respective management authority. These reports include summary information on fixed assets, such as the initial and residual values of land, buildings, vehicles, and equipment, but they are not consolidated at either the national or regional levels. Because there is no effective national system of control and oversight over the maintenance of fixed assets registries, these registries may not be updated regularly or accurately reflect the status of all assets. All public sector organizations did have to conduct inventory and reevaluate their fixed assets in 2016 (per government decree N 264-N of March 17, 2016).

Fixed assets registries, which are maintained at the facility level by the accountant and manager, are an integral part of the accounting system. They should include detailed information on the age and value of each unit and indicate whether it is currently in use or in a storage. Inventories of drugs and medical supplies are also kept at the facility level. If properly maintained, they can provide real-time information on the availability and shelf-life of each medicine in the facility's storage or service delivery units and inform managerial decisions on procurement or disposal. The procurement or disposal of fixed assets by publicly owned health facilities is regulated by accounting legislation and requires approval by the managing authority. Disposal transactions are usually carried out by an internal committee, which establishes the current physical state of the asset, its potential for further usage, and residual and current market values.

3.5 ACCOUNTING AND REPORTING

3.5.1 ACCOUNTING, RECORDING, AND RECONCILIATION (H21): LACK OF UNIFIED SYSTEM AT PUBLIC FACILITIES, DESPITE STANDARDIZATION OF FINANCIAL REPORTING

Armenia lacks a consolidated financial statement for the health sector. According to the Law on Accounting for Public Sector Organizations, all public sector organizations, including the MOH, are required to maintain accrual accounting and prepare annual financial statements. Health facilities, which are legally public joint stock companies, are legally and administratively required to maintain books of accounts and financial reports. Health facilities in the public sector follow the APSAS, which was developed based on International Public Sector Accounting Standards (IPSASs). Public health entities that are state joint stock companies follow International Financial Reporting Standards (IFRS).[50] Sector-wide consolidated financial statements are not required. There is no standard approach for assessing the effective use of the health sector's publicly owned assets, including buildings, land, and equipment. In addition, neither the MOH nor any other public authority has consolidated information on the remuneration of staff of all health facilities.

There is a need to standardize financial and nonfinancial management information systems. Health facility managers interviewed reported having to deal with several financial and nonfinancial reports. Public facilities submit quarterly, semi-annual, and annual financial and nonfinancial

reports to different authorities, a practice that is burdensome and time consuming. In addition, ad hoc requirements for information are made, requiring reports in different formats, disrupting the delivery of core services. Private facilities are required to produce fewer reports than public facilities. Standardizing information requirements and their format and leveraging the e-health system for automated reporting could reduce the reporting burden on health facilities.

There is no unified financial monitoring procedure at public health facilities. Facility managers monitor their revenues, expenditures, and accounts payable or debts on a monthly basis, using different internal procedures and ad hoc reporting forms. All facilities submit monthly service delivery reports to the SHA and the MOH, so that they can monitor budget execution. Regional authorities also require facilities to provide reports on performance indicators, including monthly reports on the number of births and performance of World Bank–funded screening programs and quarterly reports on drugs provided by humanitarian organizations, centrally procured drugs, and accounts payable.

Health facilities' practices on general ledgers and reconciliations are diverse. Public health facilities operate with a significant degree of autonomy. There is no uniform procedure for validating the maintenance of general ledgers and reconciliations. Practices vary significantly across facilities depending on available skills. The Internal Audit unit conducts occasional reviews, but it provides limited oversight over their maintenance. Where applicable, the annual external audit and revenue audits by revenue administration provide external oversight. However, as discussed below, the effectiveness of this oversight is limited. There is a lack of minimum standard practices, ensured through internal audit and other means for maintenance of the general ledger and regular reconciliations.

The MOH is on the Client Treasury System, a Treasury payment system, rather than an Integrated Financial Management Information System (IFMIS) system. All public and private facilities except SNCOs, including CNCOs, have commercial bank accounts. SNCOs have a Treasury account only. However, they must use a commercial bank, for a fee, to make cash deposits, as it is impossible to directly use the Treasury system for that purpose. Bank account information is controlled by the accountant of the organization and is available through e-banking systems. This information is reported to the facility manager, who has control over both cash and noncash revenues.

3.5.2 ISSUE OF BUDGET EXECUTION REPORTS (H22): SERIOUS WEAKNESSES IN ASSESSMENT OF NONFINANCIAL OUTCOME INDICATORS

Detailed quarterly reports of national budget execution are periodically published on the MOF website. They are available for the current year and the past 10 or more years. The reports include information on financial and nonfinancial indicators of the budget by budget programs and activities, revenues and expenditures, economic and functional classifications, national and community budgets, grants, budget deficits, and extrabudgetary funds. The MOF also prepares brief monthly reports on budget execution in the current year. Ministries and public

agencies submit quarterly budget execution reports to the MOF, using a standard format based on the same structure as the approved budget. Annual budget execution reports, which are submitted to the National Assembly for approval, include data for the two previous years for both financial and nonfinancial indicators. Financial indicators of budget execution—that is, actual and planned revenues and expenditures—are automatically generated through the MOF and Treasury software. Nonfinancial indicators (that is, outcomes and outputs) are collected manually by the relevant ministries and public agencies, summarized in Excel worksheets, and submitted to the MOF. Nonfinancial indicators are often viewed as a formal component of the program-based budgeting process and are subsequently adjusted following the revisions of the budget. Performance on nonfinancial outcome indicators is not regularly analyzed to inform budget preparation and revision.

All public and private health facilities that are contracted by the MOH for the provision of BBP services submit monthly reports to the SHA. These reports, which are submitted through the e-health system, include information on the volume of services provided and budget execution for each budget program and activity. Since the third quarter of 2019, facilities have also been required to submit quarterly reports to the MOH covering major performance and financial indicators, including other sources of revenues, such as out-of-pocket payments, and expenditures. This new reporting requirement was approved by government decree and recently revised to include a wider range of information.[51] Beginning in 2020, these reports are consolidated annually by the MOH and published on its website no later than March 31 of the next year. Publicly owned health care providers submit more detailed annual reports to their respective public management authorities on budget execution. These reports are not consolidated at the national level. They are used to assess facility management performance, based on information on the approved and executed facility budget.

3.6 OVERSIGHT AND TRANSPARENCY

3.6.1 EXTERNAL AUDIT (H23): LACK OF A SYSTEMATIC APPROACH

The external audit system for health facilities provides limited quality assurance. Since 2018, the MOH has required all public facilities with an annual financial turnover above 200 million dram to pass an annual external audit; doing so is a precondition for a BBP contract the following year. This requirement is being revised and may be eliminated. Audits are conducted by licensed audit firms, procured competitively. However, there is no effective oversight mechanism, through the Audit Chambers or the MOF, for quality assurance of the work of audit firms. Moreover, as long as the audit is performed, the facility can be contracted, even if the audit raises serious concerns. Regional facilities with lower revenues reportedly find the audit to be an additional financial burden with limited value. There is also a general perception that it is easy to obtain a clean

audit opinion, regardless of the quality of financial statements in the facility. The prevailing view among key stakeholders is that the threshold for audit should be increased or the requirement removed. Before doing so, it is important to consider the implications for accountability and oversight. Annual audits are carried out by the State Revenue Committee, via tax inspection, and by the MOH or Marz administration's internal audit departments. However, none of these audits is designed to provide assurance on the financial statements of health facilities.

The government has approved the Concept of Reforms of Accounting and Auditing Activities, prepared by the MOF in 2018. Following approval, the government submitted a package of legislative acts to the National Assembly on improving the quality of external audit systems. The package includes a new Law on the Regulation and Public Control of Accounting and Auditing Activities, as well as revised versions of the Law on Accounting and the Law on Audit Activities. These new laws aim to establish professional ethics rules for auditors, eliminate potential conflicts of interest, and implement mandatory requirements for auditors' external quality assessment. The new Law on Accounting also provides revised criteria for the mandatory external audit of facility financial statements. When approved, it may apply only to a limited number of health facilities, given the high suggested thresholds for annual turnover, the value of assets, and the number of employees.

Constitutional and legal reforms to develop the Chamber of Control into an Audit Chamber in 2018 have significantly improved the independence and stature of the Supreme Audit Institution (SAI), consistent with International Organization of Supreme Audit Institutions (INTOSAI) standards.[52] The Chamber of Control had a supervision mandate in the past. Reforms provide the Audit Chamber with the external audit mandate, consistent with the International Standards of Supreme Audit Institutions (ISSAI) standards accepted by INTOSAI. Constitutional amendments have increased the independence of the Audit Chamber, which has the authority to approve its annual program of activities, in contrast to the Chamber of Control, whose annual program was approved by the National Assembly. The Audit Chamber consists of a chair and six members, who are appointed or terminated by at least a three-fifths majority of votes of National Assembly deputies on the proposal of the relevant standing committee. The chair and members serve six-year terms. The increased functional competencies of the Audit Chamber meet the requirements for the audit of state and community budgets, borrowings and loans, and access to electronic and online resources related to the use of state- and community-owned property. Other innovations introduced by the Law on the Audit Chamber are a risk-based methodology, ethics, and the quality management system methodology. These changes notwithstanding, the Audit Chamber has not yet fully evolved to effectively perform performance audits.

External audits by the Audit Chamber provide only limited assurance on the health sector. The Audit Chamber has a mandate to cover health sector budget revenues and expenditures, including the contractual payments to health facilities through BBP contracts. It thus has a mandate to audit the BBP payments of all public and private health facilities. However, according to the annual report of the Audit Chamber, it conducted only three audits in 2018. These audits were of MOH structural units, the Health Project Implementation Unit, and the Licensing Agency;

no audits of health facilities were conducted. The Audit Chamber shares its draft reports with the MOH, which comments on it on a timely basis. The Audit Chamber incorporates the ministry's recommendations before finalizing the report and submitting it to the National Assembly. It does not conduct the financial statement audit or express an opinion on the financial statements of health facilities. These audits are conducted by private auditors appointed by the facility management for facilities that cross the annual turnover threshold.

3.6.2 PUBLIC ACCESS TO HEALTH FINANCE INFORMATION (H24): STRONG AT THE CENTRAL GOVERNMENT LEVEL BUT VARIES AT THE HEALTH FACILITY LEVEL

The public has considerable access to health policy and finance information through official web sites. They include the sites of the National Assembly (parliament.am), the government (gov.am), the MOH (moh.am), the MOF (minfin.am), the National Institute of Health (NIH) (nih.am), and the National Statistical Service (armstat.am). However, there is a need for complete and timely facility-level information on service delivery and budget execution. New policy initiatives, including in the health sector, that require approval by the government, are published on the e-draft.am website, operated by the Ministry of Justice. The website is designed to inform and accept feedback from the public. The public also has free access to the entire body of national legislation through the Armenian Legal Information System website (arlis.am), which includes search tools that facilitate access to laws, presidential and government decrees, and ministerial orders.

Drafts of the MTEF and budget law for the next year are available on the MOF website, which also publishes the final, approved versions of these documents as well as monthly, quarterly, and annual reports on budget execution by budget programs and activities. Budget execution reports are usually published within one month of completion of the time period covered. National Health Account reports, annual health statistical reports, and health system performance reports are available through the NIH website, in Armenian and English. The National Statistical Service publishes monthly, quarterly, and annual reports on the socioeconomic status of Armenians, including health sector performance. The MOH website publishes health policy documents; sector strategies; and MOH orders that regulate BBP provision, price lists, guidelines, and quality standards.

The "interactive budget" section of the MOF website provides detailed information, available to the public, on budget execution by sectors, budget programs, and activities. This information can be obtained at the health facility level from monthly facility reports on the total volume of BBP services provided and paid for. Annual BBP contracts between the MOH and health facilities, and their amendments, are posted on the same site. These facility reports contain summary information on the total volume of budget funding received from the beginning of the year; they lack detail on the types and volumes of provided medical services.

Individual health facilities are not required to publish their annual financial or performance reports, including external audit statements. However, a few private facilities with the legal status of open joint stock companies that are publicly traded issue these reports, with limited distribution, to comply with the legal requirement to do so. A small number of public and private health facilities have websites that are periodically updated, but they usually do not share annual financial or audit reports. Public facilities do not periodically make performance reports available to the public, including service delivery statistics such as the number of patients, operations, and units of free medicine provided; bed occupancy rates; annual financial reports; and external audit statements (if available).

3.7 PFM WEAKNESSES AND HEALTH SERVICE DELIVERY GOALS

The PFM weaknesses identified using the FinHealth: PFM in Health Toolkit present challenges for the attainment of health service delivery goals in Armenia.

Armenia lacks a comprehensive health sector strategy that links health system goals, governance, and policy levers, including PFM, in an approved legal document. The draft Health Sector Strategy for 2020–25 was made available for public discussions in September 2019, but it has not yet been approved. The government has topic-level strategies, but there is no health system–level framework from which service delivery priorities—including for access, quality, and efficiency—can be identified and important reforms defined. Identifying these goals in a government-approved strategy is a first step toward addressing PFM constraints to service delivery.

Underfunded budget programs, the inequitable distribution of health workers, and the limited involvement of regional authorities in planning negatively affect equitable access to care. The underfunding of budget programs under the BBP contributes to high formal and informal out-of-pocket payments and financial barriers to accessing needed care. Lower compensation outside Yerevan exacerbates spatial inequities in health care access. The regional health authorities play a limited role in state budget preparation and approval, limiting opportunities to fully reflect service delivery needs.

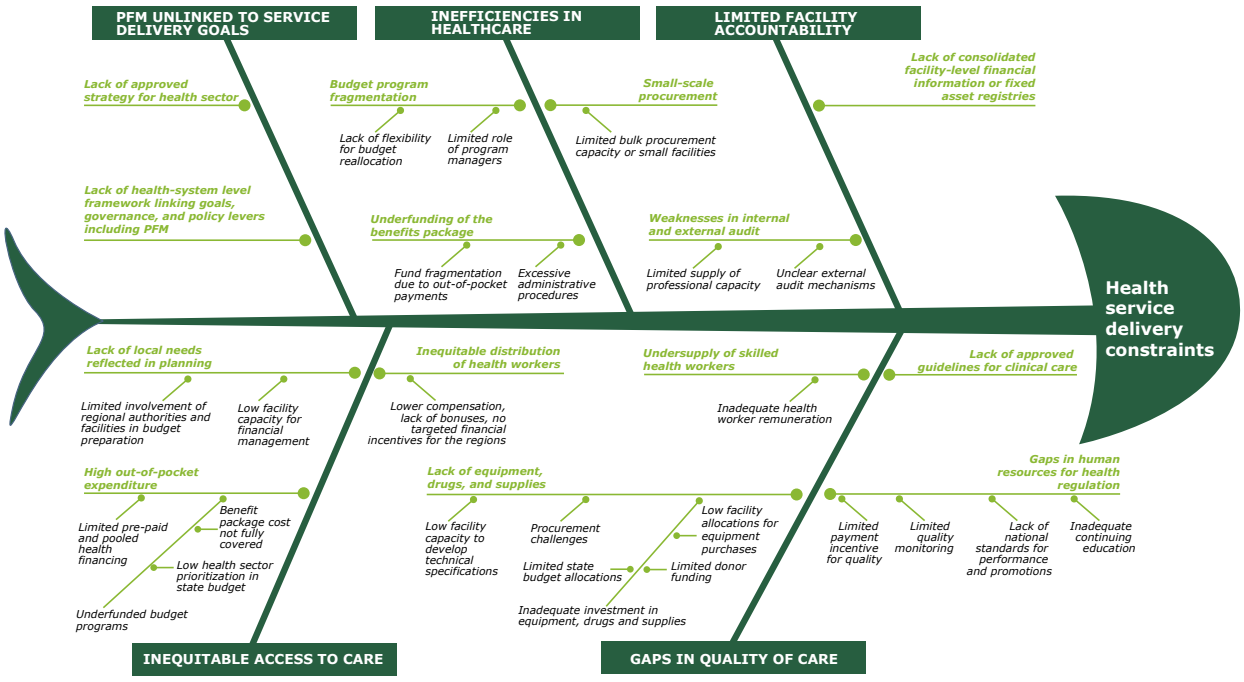
Budget program fragmentation, small-scale procurement, and underfunding of the benefits package by the state budget make it difficult to provide health care efficiently. Because of the fragmentation of budget programs, facility budgets are periodically revised to redistribute funding between activities. Small-scale procurement, particularly in rural primary health care facilities, means that facilities have little bargaining power or ability to engage in efficient procurement. The high levels of out-of-pocket payments introduced to cover the funding gap in the state budget for the BBP introduce inefficiencies by fragmenting funds, requiring additional administrative procedures, and leading to suboptimal allocative decisions.

The undersupply of skilled health workers in the regions (Marz), gaps in human resource for health regulation, inadequate capital investment funding, and procurement challenges negatively affect the quality of services. The undersupply of skilled health workers in the regions makes it difficult to provide high-quality health care. The absence of national standards for job descriptions, promotions, or performance assessment in the public health sector leads to lost opportunities to conduct quality assurance for human resources for health. The inadequacy of budget funding for capital investments—including maintenance costs for infrastructure and equipment, particularly in the regions—and the lack of capacity to develop appropriate technical specifications for medicines and other supplies also negatively affect service delivery quality.

The lack of consolidated financial information and fixed asset registries and weaknesses in internal and external audit limit the accountability of facility managers. There are no systems in the health sector for sector-wide consolidation of facility-level financial information or registries of fixed assets that can be used to verify the completeness and accuracy of accounting and recording. The systems for internal and external audit in the health sector are weakened by limited professional capacity and the lack of clearly defined and comprehensive mechanisms for external audit in the health sector.

These binding PFM constraints to health service delivery are summarized in the "fishbone diagram" below (Figure 4).

FIGURE 4 • Binding constraints to health service delivery



CHAPTER 4 PUBLIC FINANCIAL MANAGEMENT FOR BETTER SERVICE DELIVERY

The Armenian health sector faces PFM constraints to ensuring equitable access to efficient, quality, and accountable health services. Some of these constraints are common across sectors. Addressing intersectoral constraints will require whole-of-government action and may draw on donor support.

This chapter proposes feasible recommendations that could form the basis for a government action plan to improve PFM in the health sector. The recommendations, which are not ordered in terms of importance, could be led by the MOH but would require close cooperation with the MOF and other central agencies for successful implementation.

ISSUE 1: ARMENIA LACKS A COMPREHENSIVE HEALTH SECTOR STRATEGY AND PROVIDES LIMITED PUBLIC FUNDING FOR HEALTH.

Armenia does not have an approved National Health Plan, health policy document, or comprehensive health care sector strategy. The draft Health Sector Strategy for 2020–25 was made available for public discussions in September 2019 but has not yet been approved. The government approves topic-specific strategies and programmatic documents (including for tuberculosis, HIV/AIDS, and maternal and child health), often for a five-year period, and

health sector–related laws regulate specific aspects of disease prevention and service delivery. There is a need for a broader, health system–level framework, including legislation and strategy documents, that define the overall goals of the health system and the roles of different public and private actors, including the MOH, in the formulation and implementation of public health policy and strategies. This framework would provide a more comprehensive and longer-term legal foundation for reforms.

The cost of providing the BBP of medical services, which is funded from the public budget, is not fully covered as a result of limited public resources for health. Remuneration rates of some BPP services reflect the cost of service delivery. Many budget programs are still underfunded, however, contributing to high formal and informal out-of-pocket payments to cover the gap. The BPP has a complex structure and uses a complicated mix of eligibility criteria. There is no officially approved actuarial costing of the BBP, but key stakeholders consider it generous given available public resources.

Policy recommendation 1: Improve planning for and public funding of the health sector.

1.1 Develop a comprehensive and costed National Health Reform Strategy that links the short-, medium-, and long-term goals of the health system. The strategy should integrate the main policies and programs in existing national strategy and program documents in the health sector. This effort should increase the coherence between the STHPs and the MTEF. It should also increase alignment between the government's health policies and priorities and annual health budget programs and activities, including through the inclusion of appropriate outcome indicators.

1.2 Increase the level of public funding for health in order to improve financial protection of the population. The share of the government budget allocated for health should increase over the long term to enable the government commitment to meet its commitment to provide universal health coverage. Increases in public funding levels should be accompanied by improvements in the efficiency of health spending.

ISSUE 2: BUDGET PREPARATION AND APPROVAL DO NOT FULLY REFLECT SERVICE DELIVERY NEEDS, AND THE ROLE OF THE PROGRAM MANAGER FOR PBB IS NOT CLEARLY DEFINED.

The state budget preparation and approval processes are well established at the national level but do not fully reflect service delivery needs. The health budget is centrally planned and approved. It is managed through a single-payer system, with the MOH/SHA as payer. Regional health authorities have a very limited role in health budget planning and no role in budget execution. Fragmentation of state budget programs into numerous activities creates

a need for periodic revisions of facility budgets to redistribute funding from underreported to overreported activities. These revisions require cumbersome and lengthy approval procedures. Staff at the MOH, including the SHA, and facility managers need a better understanding of the budget preparation process, which needs to involve them in prioritizing and costing projected activities and programs.

Fully implementing PBB in health requires clearly defining the role of program managers. The structure of the health budget needs to be streamlined to provide more flexibility to the MOH and facilities to effectively use budget allocations and to give program managers the mandate to oversee the program, as expected under PBB. The MOH's Health Policy Department oversees the formulation and revision of the STHPs and is involved in developing the nonfinancial indicators of the MTEF and budget programs. However, it is not directly involved in health budget formulation, execution, or monitoring. This marginal involvement of health policy experts in the budget cycle reflects a more general problem across the public sector: the perception that budgeting is primarily the responsibility of the financial, economic, and accounting units of government agencies.

Policy recommendation 2: Improve budget planning and the monitoring of budget execution.

2.1 Improve health sector budgeting by broadening the role and increasing the level of involvement of regional health authorities and health facilities. Medium-term planning and bottom-up planning and budgeting processes that involve health facilities would help ensure that facilities' needs are included in the budget for submission to the MOF. Without improved prioritization, service readiness and quality will suffer despite increased funding.

2.2 Designate program managers from the key policy departments of the MOH for each health budget program. PBB requires the clear assignment of responsibilities for implementation of each budget program through the appointed program manager. Such assignment is key for achieving satisfactory performance of both financial and nonfinancial indicators of health budget programs.

ISSUE 3: THE REGIONS SUFFER FROM SHORTAGES OF MEDICAL PROFESSIONALS, AND STANDARDS FOR REMUNERATING MEDICAL PERSONNEL IN THE PUBLIC HEALTH SECTOR ARE NONUNIFORM.

The distribution of health workers does not match population health needs and presents a challenge to ensuring access to high-quality service delivery outside Yerevan. The lighter workload and resulting lower compensation as well as the poor social conditions in the regions make it difficult to fill vacant positions at regional health facilities. Despite investments in renovating and equipping facilities in the regions, accessing good-quality services remains a challenge.

In the public health sector, there are no clear standards for job descriptions, staff promotion policies or guidelines, staff performance assessment, or remuneration. In the absence of clear standards for remuneration, particularly in public facilities, under-remuneration of medical personnel may contribute to higher informal out-of-pocket payments, with a negative impact on access to services. Because of the high level of decentralization, the MOH has limited capacity to enforce payroll regulations in the health sector. Facilities, even in the public sector, use different payroll rules and policies, leading to large and nonsystematic differences in the payment of medical personnel for the same services across facilities, even within the same geographical area.

Policy recommendation 3: Implement policies to address shortages of skilled health care workers at regional health facilities and standardize performance and remuneration in the public health sector.

3.1 Implement targeted public budget programs to address shortages of skilled health care workers at regional facilities. To motivate medical professionals to fill vacancies in the regions, allocate additional budget funding for financial incentives, including subsidies to cover living and related costs.

3.2 Revise laws to enable the government to implement unified regulations for health workforce performance and remuneration in the public sector, in order to improve service delivery, and increase payroll transparency and accountability.

ISSUE 4: DESPITE IMPROVEMENTS, FACILITIES FACE TECHNICAL AND REGULATORY CHALLENGES TO IMPROVING THE QUALITY AND EFFICIENCY OF PROCUREMENT.

Procedures for ensuring the transparency and accountability of public procurement system have been progressively strengthened, but health facilities still face systematic problems in procurement. Challenges include the procurement of medicine and other supplies of low quality as a result of regulatory bottlenecks and the lack of capacity to develop the necessary technical specifications. Health facilities often lack the capacity to plan their needs for medicine and supplies. In addition, lack of resources and a high administrative burden make it difficult for rural PHC facilities to manage supply chains for drugs and medical supplies effectively.

Policy recommendation 4: Leverage pooled procurement and capacity building to improve procurement arrangements in the health sector.

4.1 Consolidate the procurement of drugs and medical supplies at the PHC level and for the items most commonly used by public facilities under the umbrella of the MOH.

4.2 Implement measures to strengthen the health sector's capacity to develop sound technical specifications, with a focus on quality standards. Such measures could improve the quality of supplied goods and services and save budget resources.

ISSUE 5: ALMOST ALL OF THE HEALTH CARE BUDGET GOES TO PROCUREMENT OF MEDICAL GOODS AND SERVICES UNDER THE BBP, WITH VERY LITTLE FUNDING LEFT FOR CAPITAL EXPENDITURES.

Over the last two decades, most public capital investment in the sector was made through donor-funded projects and focused on building or renovating regional PHC infrastructure and hospitals. Budget funding does not cover the maintenance costs of these facilities. As a result, most publicly owned health facilities in Armenia have outdated infrastructure and equipment.

Policy recommendation 5: Improve the management of public investment by strengthening the capacity to prepare and implement appropriately selected capital investments in new and existing infrastructure.

5.1 Progressively increase the share of capital costs in the health sector budget, including allocations for maintenance of existing infrastructure.

5.2 Introduce and implement clear and transparent criteria for selecting projects for public investment in the health sector.

ISSUE 6: NO SYSTEMS ARE IN PLACE FOR THE SECTOR-WIDE CONSOLIDATION OF FACILITY-LEVEL FINANCIAL INFORMATION AND REGISTRIES OF FIXED ASSETS OR FOR PROVIDING ASSURANCE ON THE COMPLETENESS AND ACCURACY OF ACCOUNTING AND RECORDING.

Apart from regular budget execution reports, the government has very fragmented information on the financial well-being of the health sector other than public sector facilities. Even within the public sector, service delivery processes and management are not directly controlled by the MOH. There is a clear need for improved financial accountability and transparency to facilitate the MOH's stewardship role.

Policy recommendation 6: Strengthen financial reporting mechanisms in the health sector.

6.1 Implement regulations and mechanisms to enable the MOH to access and summarize the full body of financial information from public and private facilities, in order to facilitate assessments of the effective and efficient use of allocated budget resources and total health spending.

ISSUE 7: THE SYSTEMS FOR INTERNAL AND EXTERNAL AUDIT IN THE HEALTH SECTOR ARE WEAK.

Because of limited professionally capacity, only a small number of health facilities are audited annually by the internal audit units of the MOH and regional authorities. Internal audits focus on compliance of financial statements and management arrangements. The internal audit function does not fulfill the scope defined in regulations, including audits of all facilities in the health sector partly because of the low administrative placement of the internal audit function. The SAI has yet to fully exercise its mandate to conduct audits of health facilities. No clearly defined and comprehensive mechanisms are in place for external audit of the health sector, limiting the ability to objectively assess the quality of public asset management and the effective use of budget allocations.

Policy recommendation 7: Improve and strengthen internal and external audit arrangements in the health sector.

7.1 Improve the performance of the internal audit systems at the MOH and regional administrations through capacity building and reforms to attract qualified professionals. It is critical to ensure that internal audit units have the ability and knowledge to use health care audit methodologies and conduct broader functional audits. Proper attention should be paid to the payroll audit, one of the components of governments PFM strategy for 2019–23.

7.2 Define specific, health sector–related requirements for the mandatory annual audit of health facilities meeting certain criteria, contingent on approval of the new accounting and audit legislation by the National Assembly and implementation of independent professional and public oversight mechanisms over the quality of external audits.

APPENDICES

APPENDIX A: IN-DEPTH INTERVIEWS CONDUCTED FOR THIS REPORT

TABLE A.1 • In-depth interviews conducted with public officials

RESPONDENT	POSITION, AGENCY
Artem Petrosyan	Head of Health and Social Affairs Department, Aragatsotn Marz Governor's Office
Davit Melik-Nubaryan	Head of Health Care Policy Department, Ministry of Health
Edgar Mkrtchyan	Deputy Head of Public Finance Management Department, Ministry of Finance
Garush Ayvazyan	Deputy Head, State Health Agency, Ministry of Health
Karine Saribekyan	Head of Maternal and Child Health Care Department, Ministry of Health
Lusine Avalyan	Head of Finance-Economic Department, Ministry of Health
Tsaghik Vardanyan	Head of Agency, Ministry of Health/State Health Agency
Zhora Asatryan	Assistant to First Deputy Minister, Ministry of Finance

TABLE A.2 • In-depth interviews conducted with directors of health facilities

RESPONDENT	AGENCY	POSITION, TYPE OF INSTITUTION, LEGAL STATUS
Anna Sisoyan	K. Esayan Polyclinic	Director, public polyclinic, Yerevan Municipality (joint stock company)
Artavazd Vanyan	National Center for Disease Control and Prevention	Director, public center (state noncommercial organization)
Garnik Sahakyan	Charentsavan Medical Center	Director, regional public hospital (joint stock company)
Karmen Hovhannisyan	Karbi Medical Ambulatory	Director, public primary health care facility (community-owned noncommercial organization)
Samvel Danielyan	Professor Yolyan Hematology Center	Director, public hospital (joint stock company)
Samvel Hayrumyan	Kardiomed Family Medicine Center	Director, private primary health care practice (limited liability company)
Sargis Khachatryan	Armavir Medical Center	Director, regional public hospital (joint stock company)
Vardan Manukyan	Abovyan Medical Center	Director, regional public hospital (joint stock company)

APPENDIX B: WORKSHOP PARTICIPANTS

TABLE B.1 • Participants at workshop at Armenia Marriott Hotel, October 9, 2019

PARTICIPANT	TITLE
Ministry of Health	
Lena Nanushyan	Deputy Minister of Health
Lusine Avalyan	Head, Department of Finance and Economics
Varduhi Grigoryan	Head, Department of Drug Policy and Medical Technologies
Manya Mkhitaryan	Head, Accounting Division
Yakov Asatryan	Acting Head, Internal Audit Division
Hayastan Hakobyan	Head, Department, State Health Agency
Kristina Sargsyan	Director, Health Project Implementation Unit
Ministry of Finance	
Zhora Asatryan	Advisor to First Deputy Minister
Anna Ananikyan	Head, Department of Budget Process Management
Anna Mertarchyan	Lead Specialist, Department of Accounting and Audit Activities Regulation and Reports Monitoring
Nune Isahakyan	Lead Specialist, Department of Accounting and Audit Activities Regulation and Reports Monitoring
Yerevan Municipality	
Kamsar Babinyan	Head, Health Department
Gayane Antonyan	Deputy Head, Health Department
World Bank	
Adanna Chukwuma	Task Team Leader and Health Specialist
Manoj Jain	Lead Financial Management Specialist
Srinivas Gurazada	Senior Financial Management Specialist
Arman Vatyan	Lead Financial Management Specialist
Lusine Grigoryan	Financial Management Specialist
Makich Khcheyan	Public Financial Management Consultant
Saro Tsaturyan	Health Finance Consultant
Other	
Samvel Hayrumyan	Director, Kardiomed Family Medicine Center
Susanna Ktrakyan	Head, Health and Social Security of Ararat Marz Administration
Davit Melik-Nubaryan	Consultant, World Health Organization Country Office, Armenia
Anna Sisoyan	Director, K. Esayan Polyclinic
Hovhannes Petrosyan	Chair, Association of Accountants and Auditors of Armenia
Zorayr Karapetyan	Deputy Head of Department, Audit Chamber, Supreme Audit Institution

APPENDIX C: ACCESSIBILITY OF HEALTH CARE IN RURAL COMMUNITIES

TABLE C.1 • Distance to nearest PHC facility in Armenia, by consumption quintile (percent), 2018

DISTANCE TO NEAREST FACILITY (KILOMETERS)	CONSUMPTION QUINTILE I (POOREST)	II	III	IV	V (RICHEST)	TOTAL
< 1	71	71.8	72.4	75.2	75.3	73.5
1 – 3	25.3	26.9	26.8	24.2	24	25.3
4 – 5	-	-	0.2	0.3	0.2	0.1
6 – 10	2.8	-	0.5	0.2	0.1	0.6
>10	0.9	1.4	0.2	0.1	0.4	0.5

Source: National Statistical Service of the Republic of Armenia

TABLE C.2 • Distance to nearest pharmacy in Armenia in rural communities, by consumption quintile (percent), 2018

DISTANCE TO NEAREST PHARMACY (KILOMETERS)	CONSUMPTION QUINTILE I (POOREST)	II	III	IV	V (RICHEST)	TOTAL
< 1	30.7	34.7	35.6	34.2	39.5	35.3
1 – 3	20.6	19.5	17.8	19	17.1	18.6
4 – 5	9.2	9.7	9.4	6.9	4.3	7.6
6 – 10	9.2	10.5	13	17.7	20.1	14.9
>10	30.3	25.6	24.1	22.2	19	23.6

Source: National Statistical Service of the Republic of Armenia

APPENDIX D: STATE TARGETED HEALTH PROGRAMS IN ARMENIA

TABLE D.1 • State Targeted Health Programs in Armenia, by state budget program and activity, 2019

TITLE OF PROGRAM	TITLE OF CORRESPONDING PROGRAM IN 2019 STATE BUDGET	TITLE OF CORRESPONDING ACTIVITY IN 2019 STATE BUDGET	BUDGETED AMOUNT (THOUSAND DRAM)
2019 State Targeted Program for Provision of Primary Health Care for the Population	Primary health care services	Ambulatory-polyclinic medical services	25,404,495.90
		Services for treatment of diseases requiring continuous monitoring and some specific diseases	133,000.00
		Screening of newborn children for early detection of congenital hypothyroidism, phenylketonuria, and hearing impairments	303,534.30
		Laboratory tests and instrumental examinations for verifying the diagnosis at specialized centers	233,126.40
		Primary dental prevention services for children	44,400
	Maternal and child health care	Screening and rehabilitation of children with mental, psychiatric (behavioral), hearing, physical (motion), and other disorders	307,283.90
	Providing medical care for noncommunicable diseases	Services of hemodialysis and peritoneal dialysis	2,484,755.30
	Infectious disease prevention program	Prevention and medical aid services for HIV/AIDs	262,101.60
	Medical care of socially vulnerable people and those included in special categories	Provision of dental care services	507,194.60
	Ambulance services	Ambulance services	3,292,270.00
2019 State Targeted Program for Provision of Medical Care and Services for Individuals, Included in Socially Vulnerable and Other (Special) Categories of the Population	Medical care of socially vulnerable people and those included in special categories	Medical care services for persons included in socially vulnerable and special groups	10,955,389.20
		Medical care services provided to military service persons, as well as rescue service persons and their family members	3,077,217.30
		Medical care and services for the staff of public institutions and organizations	3,826,300.00
		Medical care services for the victims of trafficking	2,000.00
		Provision of urgent medical aid and service (including medical devices, equipment, medication and auxiliary medical services)	100,000.00
2019 State Targeted Program for Medical Care and Services for Diseases That Have Social Dependence and Special Significance	Providing medical care for noncommunicable diseases	Emergency medical care services	3,237,579.50
		Medical care services for psychiatric and addiction disorders	2,515,293.10
		Medical care services for oncological and hematologic diseases	1,917,301.40
	Infectious disease prevention program	Medical care services for tuberculosis	1,021,223.10
		Medical care services for intestinal and other infectious diseases	1,219,950.80

2019 State Targeted Program for Provision of Maternal and Child Health Care	Maternal and child health care	Obstetric medical services	6,953,818.50
		Services of medical care for gynecological diseases	366,976.70
		Pediatric medical care services	8,119,421.00
		Medical care services for infertile couples with use of auxiliary reproductive technologies	210,000.00
2019 State Targeted Program for Provision of Hygienic and Anti-Epidemic Safety of the Population	Protection of Public Health	Services of public health and provision of sanitary-epidemic security of the population	1,847,400.00
		Blood collection services (blood bank)	252,951.00
		National Immunoprevention Program	2,326,057.70
Programs of adjacent services, supporting 2019 state target programs (not belonging to other categories)	Protection of Public Health	Provision of medicine to persons receiving ambulatory-polyclinic, inpatient medical aid and to individuals included in special categories	2,600,003.00
		Customs clearance and distribution services for medicine and pharmaceutical products received as humanitarian aid	57,867.40
	Pathoanatomical, genetic and forensic medical examinations	Forensic and genetic services	399,905.30
		Pathoanatomical services	53,044.00
	Maternal and child health care	Services of providing orthosis and spinal assistants to disabled and poor children	51,136.00
	Protection of Public Health	Healthy lifestyle promotion and public awareness services	26,869.30
		State Program for Tobacco Control and Environment Protection	100,000.00
	Consulting, professional support and studies	Consulting, professional support and research	222,066.20
		Scientific-medical library services	43,564.90
		Delivery of medical services at health care institutions of the regions on Armenia, through temporary secondment of medical doctors	50,000.00
		Maintenance of the e-Health system	500,000.00
	Program for Modernization of Health System and Increasing Its Efficiency	World Bank supported non-communicable disease prevention and control program	1,084,522.00
		World Bank supported non-communicable disease prevention and control grant program	340,588.60
		Global Fund supported grant Program on "Strengthening of anti-tuberculosis measures in the Republic of Armenia"	862,732.30
		Global Fund grant project on "Support to the national program for combating HIV/AIDS in the Republic of Armenia"	898,860.50
		Program for "Improvement of the prevention and control of non-communicable diseases in primary health care level of health system" funded by the Eurasian Fund for Sustainability and Development of the Republic of Armenia	407,510.10

Source: Ministry of Finance of the Republic of Armenia

APPENDIX E: RESOURCES OF ARMENIA'S HEALTH CARE SYSTEM

TABLE E.1 • Resources of Armenia's health care system, by ownership status, 2019

TYPE OF RESOURCE	TOTAL	PUBLIC		PRIVATE	
		NUMBER	PERCENT	NUMBER	PERCENT
Hospitals	125	86	68.8	39	31.2
Hospital beds (thousand)	11.8	7.8	66.1	4	33.9
PHC facilities	494	374	75.7	120	24.3
Medical doctors (all specialties)	13,958	10,479	75.1	3,479	24.9
Nurses and other midlevel medical staff	16,772	12,505	74.6	4,267	25.4

Source: Ministry of Health

TABLE E.2 • Medical facilities in Armenia providing Basic Benefits Package services, by type of facility and legal and ownership status, 2019

TYPE OF MEDICAL FACILITY	PUBLIC FACILITIES					PRIVATE FACILITIES				TOTAL
	JSC	SNCO	CNCO	FND	Total Public	JSC	LLC	IE	Total Private	
Medical centers	53	—	—	2	55	11	12	—	23	78
Health centers	12	—	—	—	12	—	2	—	2	14
Hospitals	7	—	—	—	7	—	5	—	5	12
Polyclinics	39	—	—	—	39	—	1	—	1	40
Other primary health care facilities	—	157	93	—	250	—	3	—	3	253
Diagnostic centers	—	—	—	—	—	2	4	1	7	7
Dental clinics	18	—	—	—	18	—	17	2	19	37
Sanatoriums, rehabilitation centers	6	—	—	—	6	—	1	—	1	7
Ambulance stations	2	—	—	—	2	—	—	—	—	2
Other	14	—	—	—	14	5	—	—	5	19
Total	**151**	**157**	**93**	**2**	**403**	**18**	**45**	**3**	**66**	**469**

Source: State Health Agency.
Note: JSC: Joint stock company; SNCO: State Non-Commercial Organization; CNCO: Community Non-Commercial Organization: FND: Foundation; LLC: Limited liability company; IE: Individual entrepreneur.

APPENDIX F: HEALTH FINANCING AND BUDGETARY INDICATORS FOR ARMENIA AND COMPARATOR COUNTRIES

TABLE F.1 • Selected health financing indicators for Armenia and comparator countries, 2000, 2010, and 2016

COUNTRY	INDICATOR	2000	2010	2016
Armenia	Current health expenditure as percent of GDP	6.5	5.3	9.9
	Current health expenditure per capita (current dollars)	40.5	169.4	358.8
	Domestic general government health expenditure (GGHE-D) as percent of GDP	1.0	1.7	1.6
	General government expenditure (GGE) as percent of GDP	24.7	26.2	27.0
	GDP per capita (current dollars)	622.7	3,218.4	3,614.7
Azerbaijan	Current health expenditure as percent of GDP	3.8	4.9	6.9
	Current health expenditure per capita (current dollars)	24.9	287.7	268.2
	Domestic general government health expenditure (GGHE-D) as percent of GDP	0.9	1.2	1.4
	General government expenditure (GGE) as percent of GDP	18.2	32.0	35.4
	GDP per capita (in current dollars)	649.1	5,857.3	3,891.6
Belarus	Current health expenditure as percent of GDP	5.5	5.7	6.3
	Current health expenditure per capita (current dollars)	57.4	341.8	318.0
	Domestic general government health expenditure (GGHE-D) as percent of GDP	4.3	3.8	3.9
	General government expenditure (GGE) as percent of GDP	35.5	44.3	45.8
	GDP per capita (current dollars)	1,048.3	6,041.7	5,034.1
Georgia	Current health expenditure as percent of GDP	7.4	9.5	8.4
	Current health expenditure per capita (current dollars)	47.9	262.5	308.0
	Domestic general government health expenditure (GGHE-D) as percent of GDP	0.8	2.0	3.1
	General government expenditure (GGE) as percent of GDP	17.4	33.1	30.0
	GDP per capita (in current dollars)	647.6	2,750.3	3,651.4
Kazakhstan	Current health expenditure as percent of GDP	4.2	2.7	3.5
	Current health expenditure per capita (current dollars)	50.5	246.2	262.0
	Domestic general government health expenditure (GGHE-D) as percent of GDP	2.1	1.8	2.1
	General government expenditure (GGE) as percent of GDP	22.9	22.5	22.1
	GDP per capita (current dollars)	1,214.8	9,027.8	7,430.5

Kyrgyz Republic	Current health expenditure as percent of GDP	4.4	7.0	6.6
	Current health expenditure per capita (current dollars)	12.3	61.5	72.9
	Domestic general government health expenditure (GGHE-D) as percent of GDP	2.1	3.4	2.6
	General government expenditure (GGE) as percent of GDP	30.2	37.1	39.3
	GDP per capita (current dollars)	278.4	884.2	1,100.0
Moldova	Current health expenditure as percent of GDP	5.9	12.2	9.0
	Current health expenditure per capita (current dollars)	21.4	198.3	171.2
	Domestic general government health expenditure (GGHE-D) as percent of GDP	2.9	5.6	4.4
	General government expenditure (GGE) as percent of GDP	34.0	40.9	36.1
	GDP per capita (current dollars)	360.7	1,630.8	1,906.1
Russian Federation	Current health expenditure as percent of GDP	5.0	5.0	5.3
	Current health expenditure per capita (current dollars)	95.4	567.4	469.1
	Domestic general government health expenditure (GGHE-D) as percent of GDP	3.0	3.0	3.0
	General government expenditure (GGE) as percent of GDP	30.6	35.4	36.5
	GDP per capita (current dollars)	1,906.1	11,445.5	8,900.0
Tajikistan	Current health expenditure as percent of GDP	4.3	5.7	7.0
	Current health expenditure per capita (current dollars)	6.0	42.3	55.7
	Domestic general government health expenditure (GGHE-D) as percent of GDP	0.9	1.2	2.0
	General government expenditure (GGE) as percent of GDP	19.1	26.1	39.7
	GDP per capita (current dollars)	140.0	738.3	795.8
Turkmenistan	Current health expenditure as percent of GDP	6.9	5.0	6.6
	Current health expenditure per capita (current dollars)	76.6	221.8	422.8
	Domestic general government health expenditure (GGHE-D) as percent of GDP	3.2	1.2	1.2
	General government expenditure (GGE) as percent of GDP	24.1	13.8	14.1
	GDP per capita (current dollars)	1,112.0	4,439.2	6,389.4
Ukraine	Current health expenditure as percent of GDP	5.3	7.0	6.7
	Current health expenditure per capita (current dollars)	35.1	207.4	141.2
	Domestic general government health expenditure (GGHE-D) as percent of GDP	2.5	3.7	2.9
	General government expenditure (GGE) as percent of GDP	35.5	49.2	40.6
	GDP per capita (current dollars)	662.0	2,970.2	2,098.9
Uzbekistan	Current health expenditure as percent of GDP	5.4	5.4	6.3
	Current health expenditure per capita (current dollars)	29.7	72.3	135.1
	Domestic general government health expenditure (GGHE-D) as percent of GDP	2.5	2.7	2.9
	General government expenditure (GGE) as percent of GDP	41.2	34.0	31.8
	GDP per capita (current dollars)	553.8	1,350.0	2,132.7

Source: World Health Organization Global Health Expenditure Database

TABLE F.2 • Approved, adjusted, and executed state and health budget expenditures in Armenia, 2008–19

YEAR	TOTAL STATE BUDGET EXPENDITURES (MILLION DRAM)			STATE BUDGET EXECUTION RATE (PERCENT)	TOTAL HEALTH BUDGET EXPENDITURES (MILLION DRAM)			HEALTH BUDGET EXECUTION RATE (PERCENT)	HEALTH BUDGET AS PERCENT OF TOTAL STATE BUDGET		
	APPROVED	ADJUSTED	EXECUTED		APPROVED	ADJUSTED	EXECUTED		APPROVED	ADJUSTED	EXECUTED
2008	822,054.4	860,637.0	810,574.5	94.2	54,482.8	54,348.9	49,972.5	91.9	6.6	6.3	6.2
2009	945,449.8	992,476.6	929,108.6	93.6	66,087.6	64,024.2	56,168.8	87.7	7.0	6.5	6.0
2010	935,524.6	976,296.9	954,316.5	97.7	55,249.5	57,623.8	56,130.8	97.4	5.9	5.9	5.9
2011	1,001,054.3	1,041,988.1	986,509.2	94.7	62,461.5	66,161.9	63,312.4	95.7	6.2	6.3	6.4
2012	1,044,179.6	1,077,151.1	1,006,102.2	93.4	65,126.5	67,020.7	64,499.0	96.2	6.2	6.2	6.4
2013	1,152,620.0	1,258,187.3	1,142,890.4	90.8	71,978.8	71,816.9	64,355.3	89.6	6.2	5.7	5.6
2014	1,246,437.4	1,294,493.2	1,235,053.4	95.4	80,728.8	84,555.3	76,645.4	90.6	6.5	6.5	6.2
2015	1,305,599.5	1,415,153.5	1,408,996.5	99.6	84,227.4	86,223.8	86,079.4	99.8	6.5	6.1	6.1
2016	1,376,993.0	1,459,040.9	1,449,063.6	99.3	88,350.9	88,913.4	88,645.9	99.7	6.4	6.1	6.1
2017	1,360,112.3	1,561,034.4	1,504,802.2	96.4	85,880.2	85,714.8	83,215.4	97.1	6.3	5.5	5.5
2018	1,465,200.6	1,527,268.1	1,447,083.0	94.7	84,074.2	83,278.2	79,574.2	95.6	5.7	5.5	5.5
2019	1,648,063.1	1,735,945.1[a]	n.a.	n.a.	89,590.0	104,182.4[a]	n.a.	n.a.	5.4	6.0	n.a.

Source: Ministry of Finance of the Republic of Armenia

TABLE F.3 • Health budget and donor-funded projects in the health sector in Armenia, 2014–18

YEAR	TOTAL HEALTH BUDGET (MILLION DRAM)		HEALTH BUDGET EXECUTION RATE (PERCENT)	DONOR-FUNDED PROJECTS (MILLION DRAM)		EXECUTION RATE OF DONOR FUNDED PROJECTS (PERCENT)	SHARE OF DONOR- FUNDED PROJECTS IN HEALTH BUDGET (PERCENT)	
	ADJUSTED PLAN	EXECUTED		ADJUSTED PLAN	EXECUTED		ADJUSTED PLAN	EXECUTED
2014	84,555.3	76,645.4	90.6	10,276.3	4,958.7	48.3	12.2	6.5
2015	86,223.8	86,079.4	99.8	5,360.6	5,858.3	109.3	6.2	6.8
2016	88,913.4	88,645.9	99.7	7,877.6	8,664.5	110.0	8.9	9.8
2017	85,714.8	83,215.4	97.1	5,191.9	4,208.0	81.0	6.1	5.1
2018	83,278.2	79,574.2	95.6	5,891.6	4,284.3	72.7	7.1	5.4

TABLE F.4 •Donor share of executed budget for grant and credit programs in Armenia, 2014-18

YEAR	GRANT PROGRAMS BY DONORS, EXECUTED BUDGET (MILLION DRAM)			TOTAL (MILLION DRAM)	CREDIT PROGRAMS BY DONORS, EXECUTED BUDGET (MILLION DRAM)			TOTAL (MILLION DRAM)	DONOR-FUNDED PROJECTS TOTAL (MILLION DRAM)	SHARE OF MAIN DONORS IN TOTAL(PERCENT)		
	WORLD BANK	GLOBAL FUND	OTHER DONORS		WORLD BANK	GLOBAL FUND	OTHER DONORS			WORLD BANK	GLOBAL FUND	OTHER DONORS
2014	87.4	2,086.5	297.6	2,471.5	2,487.2	—	—	2,487.2	4,958.7	51.9	42.1	6.0
2015	128.1	1,270.9	173.6	1,572.6	4,285.7	—	—	4,285.7	5,858.3	75.3	21.7	3.0
2016	218.0	1,466.4	711.1	2,395.5	6,269.0	—	—	6,269.0	8,664.5	74.9	16.9	8.2
2017	160.3	1,416.5	140.7	1,717.5	2,490.5	—	—	2,490.5	4,208.0	63.0	33.7	3.3
2018	178.0	1,745.2	160.6	2,083.8	2,200.5	—	—	2,200.5	4,284.3	55.5	40.7	3.7

TABLE F.5 • Community health budget expenditure in Armenia, by Marz (dram thousands), 2018

MARZ (REGION)	TOTAL EXPENDITURES OF COMMUNITY BUDGETS	FROM WHICH HEALTH CARE							
		ADMINISTRATIVE COSTS		CAPITAL COSTS		TOTAL			
	ANNUAL ADJUSTED PLAN	ACTUAL	ANNUAL ADJUSTED PLAN	ACTUAL	ANNUAL ADJUSTED PLAN	ACTUAL	ANNUAL ADJUSTED PLAN	ACTUAL
Yerevan	85,527,436.7	62,808,839.2	43,400.0	42,915.0	220,000.0	129,118.5	263,400.0	172,033.5
Aragatsotn	4,873,270.5	3,988,293.2	400.0	100.0	3,300.0	0.0	3,700.0	100.0
Ararat	8,693,570.0	7,246,905.5	12,045.0	7,541.5	6,903.9	5,659.2	18,948.9	13,200.7
Armavir	8,217,461.2	6,352,705.5	3,848.0	2,882.8	10,659.4	0.0	14,507.4	2,882.8
Gegharkunik	7,785,212.3	6,499,431.4	980.0	180.0	36,000.0	990.0	36,980.0	1,170.0
Lori	7,735,798.7	6,624,956.3	3,270.0	2,160.0	3,330.0	3,238.5	6,600.0	5,398.5
Kotayk	9,133,678.8	7,700,348.0	6,054.0	3,773.7	300.0	0.0	6,354.0	3,773.7
Shirak	7,824,451.5	6,646,360.8	0.0	0.0	0.0	0.0	0.0	0.0
Syunik	6,112,483.3	5,081,682.9	0.0	0.0	0.0	0.0	0.0	0.0
Vayots Dzor	2,653,244.4	2,127,643.2	0.0	0.0	0.0	0.0	0.0	0.0
Tavush	3,875,477.3	3,289,780.4	516.8	446.8	0.0	0.0	516.8	446.8
Total	**152,432,084.7**	**118,366,946.4**	**70,513.8**	**59,999.8**	**280,493.3**	**139,006.2**	**351,007.1**	**199,006.1**
Total without Yerevan	66,904,648.0	55,558,107.2	27,113.8	17,084.8	60,493.3	9,887.7	87,607.1	26,972.6

Source: Ministry of Territorial Administration and Development of the Republic of Armenia

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