Challenges on the Path to Universal Health Coverage: The Experience of Azerbaijan

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María Eugenia Bonilla-Chacín, Gulara Afandiyeva, and Agustina Suaya

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## ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AMSSW</td>
<td>Azerbaijan Monitoring Survey of Social Welfare</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HCP</td>
<td>Health Coverage Program</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus Infection/Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>IHME</td>
<td>Institute of Health Metrics and Evaluation</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MSHI</td>
<td>Mandatory Social Health Insurance</td>
</tr>
<tr>
<td>NCDs</td>
<td>Noncommunicable Diseases</td>
</tr>
<tr>
<td>OOP</td>
<td>Out-of-Pocket</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
</tr>
<tr>
<td>WDI</td>
<td>World Development Indicators</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
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Preface to the second round of the Universal Health Coverage Study Series

All over the world countries are implementing pro-poor reforms to advance universal health coverage. The widespread trend to expand coverage resulted in the inclusion of the “achieving universal health coverage by 2030” target in the Sustainable Development Agenda. Progress is monitored through indicators measuring gains in financial risk protection and in access to quality essential health-care services.

The Universal Health Coverage (UHC) Studies Series was launched in 2013 with the objective of sharing knowledge regarding pro-poor reforms advancing UHC in developing countries. The series is aimed at policy-makers and UHC reform implementers in low- and middle-income countries. The Series recognizes that there are many policy paths to achieve UHC and therefore does not endorse a specific path or model.

The Series consists of country case studies and technical papers. The case studies employ a standardized approach aimed at understanding the tools – policies, instruments and institutions used to expand health coverage across three dimensions: population, health services and affordability. The approach relies on a protocol involving around 300 questions structured to provide a detailed understanding of how countries are implementing UHC reforms in the following areas:

- **Progressive Universalism**: expanding population coverage while ensuring that the poor and vulnerable are not left behind;
- **Strategic Purchasing**: expanding the statutory benefits package and developing incentives for its effective delivery by health-care providers;
- **Raising revenues** to finance health care in fiscally sustainable ways;
- **Improving the availability and quality of health-care providers**; and,
- **Strengthening accountability** to ensure the fulfillment of promises made between citizens, governments and health institutions.

By 2017, the Series had published 24 country case studies and conducted a systematic literature review on the impact of UHC reforms. In 2018 the Series will publish an additional 15 case studies, A book analyzing and comparing the initial 24 country case studies is also available: *Going Universal: How 24 Developing Countries are Implementing UHC Reforms from the Bottom Up*. Links to the Series and the book are included below.

Daniel Cotlear, D. Phil.
Manager and Editor
Universal Health Coverage Study Series

Links:
Acknowledgments

This document would not have been possible without support from the Mandatory Health Insurance Agency; the Ministry of Health of Azerbaijan; and the following officials from the Mandatory Health Insurance Agency: Mr. Zaur Aliyev (Director), Mr. Isa Aliyev, Mr. Tural Gulu, and Mr. Fadai Mammadov. Ms. Zakiyya Mustafayeva, from the Ministry of Health, also provided key support. Finally, Ms. Elvira Anadolu provided invaluable guidance to the team in the development of this case study.
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María Eugenia Bonilla-Chacín is a Senior Economist in the Health, Nutrition and Population Global Practice at the World Bank. Her areas of interest are health promotion policies and primary health service delivery. Maria Eugenia earned a PhD in Economics from The Johns Hopkins University. As an economist working on health issues in the Latin America and the Caribbean, Africa, and Eastern Europe and Central Asia regions, she has led several technical assistance and analytical studies on various health issues, including health financing, service delivery, and health in all policy areas. She has also been lead investigator on several regional and global analytical studies, such as on Governance of Multisectoral Interventions to Reduce Health Risk Factors in Latin America and the Caribbean, and she is currently coordinating a global analytical study on obesity prevention. In addition to her work in health, she has also led and participated in the design and implementation of projects in education, social protection, and multisectoral operations.

Agustina Suaya is a consultant to the Health, Nutrition and Population Global Practice at the World Bank. She has a Master’s degree in Public Policy from the George Washington University, with a concentration in program evaluation and statistical analysis. At the World Bank, she focuses on Latin America and the Caribbean, contributing to studies on the performance of health policies and the efficient delivery of services. In addition to working with the Health Global Practice, she has also participated in projects of the Social Protection & Labor Global Practice. Agustina has also been a consultant at the Inter-American Development Bank.
Executive Summary

Over the last decade, Azerbaijan has been able to increase significantly public resources for health. In 2015, per capita public expenditure on health was about 74 manats, which was six times higher in real terms than in 2000. Despite these increases, Azerbaijan still spends much less that other Former Soviet Union (FSU) countries as a share of total government expenditure.

The additional resources for health were used to renovate the health infrastructure and to increase the number and availability of pharmaceutical products provided at no cost to the population. There were also new government policies with the aim of increasing the list of pharmaceuticals and medical supplies provided at no cost to patients. The Government increased several times the list of drugs provided free of charge for inpatient care; it increased the number and resources to state national programs that provide free pharmaceuticals and medical supplies for the control of specific diseases or conditions, such as maternal and child care, diabetes, and HIV/AIDS; and it increased the availability of outpatient drugs provided at no cost to certain beneficiary groups.

These efforts, however, have had only a limited effect on access to health services and on catastrophic health expenditure. Analyses based on two household surveys (Azerbaijan Monitoring Survey of Social Welfare - AMSSW 2008 and 2015) show that most of the increase in health care utilization between those two years occurred in inpatient care and among the highest income population groups. There was even a slight decrease in utilization of outpatient care among the poor. Nevertheless, there is evidence of an improvement in coverage of key maternal and child health services supported by one of the state national programs.

Regarding financial protection, there was a sharp increase in the incidence of catastrophic health expenditure in the population between 2008 and 2015. However, this increase was concentrated among households in the richest two deciles of the consumption distribution. In contrast, among the poor, the incidence of catastrophic expenditure decreased. Nevertheless, overall the incidence of catastrophic health expenditure, remains very high. In 2015, as many as 16 percent of households had health expenditures higher than 30 percent of total expenditure.

The country’s macroeconomic and fiscal environment has changed significantly in the last three years, and thus any additional progress toward universal health coverage would require a different approach to the one used so far. It would require an increase in resources for health and stronger efforts to pool these resources, a strengthened prioritization in the use of funds, a more efficient use of existing health resources, and a reform in the organization and functioning of the health delivery network.

In this context, the Government is currently piloting the introduction of a Mandatory Social Health Insurance (MSHI) scheme. The main objective is to improve financial protection in case of illness and to provide access to quality healthcare services. This new MSHI scheme could not only increase revenue collection, but it could also generate needed structural changes in the system by
creating a single purchasing agency and by changing provider-payment mechanisms from line-item budgets to payments linked to outputs.

To achieve these results the MSHI faces some challenges in the design and implementation process. First, collecting revenue from non-poor informal sector workers is complex, and few countries have been able to do so. Second, in other FSU countries where similar schemes were introduced, only in Moldova it resulted in an unambiguous increase in resources for health, at least during the first years after introduction. In addition, the payroll tax rate tended to be small, as is the one planned for Azerbaijan—from 2 to 4 percent (increased in Moldova later on), reducing the potential of the MSHI payroll taxes for increasing revenues. In contrast, other countries in the region that also introduced health insurance, such as Latvia, Bulgaria, and Estonia, health taxes were much higher, reaching up to 17 percent.

The introduction of the scheme will require much preparation to ensure its success. It will be particularly important to define a package of services for which beneficiaries would be entitled and ensure that this package can be fully funded by the scheme. For the pilot project, currently an extensive list of services is included in the essential package to be financed by the MSHI. However, to make this package sustainable and fully funded by the scheme, a revision would be advisable.

A mechanism for identifying and enrolling beneficiaries and for collecting and pooling resources would also be needed. Currently, the decision is that the Mandatory Health Insurance Agency will collect revenue during the pilot phase. However, for the national implementation of MSHI, other agencies that routinely collect taxes and premiums from workers could be considered, such as Tax Authorities and the Ministry of Labor and Social Protection.

In addition to implementing the MSHI reform, other reforms will also be needed to ensure that the potential impact of the mandatory health insurance scheme is realized. For instance, other sources of revenue collection for health will be needed as well as a reform in the organization and functioning of the public delivery network. Due to the small size of the formal labor market, about 33 percent of the workforce, the revenue collection capabilities of the MSHI will be limited. Thus, other revenue collection efforts will be needed. Since public expenditure on health as share of total expenditure remains among the lowest in the region, there is room to increase this share and generate needed fiscal space for health.

Tobacco taxation might be another source of funds for health that would be important to consider. As many as 36 percent of adult men in the country smoke. Azerbaijan is one of the four countries in the world where tobacco prevalence has actually increased over the last 15 years. At the same time, Azerbaijan in 2014 had the lowest taxation on tobacco in all Europe. Higher taxes on tobacco can provide more resources for health while reducing the prevalence of smoking—a major risk factor for population health in the country.

Another important source of fiscal space for health could be achieved through efficiency gains and input cost reductions. Currently, some of the drugs procured for the state national programs are brand-name pharmaceuticals, not generics. In addition, despite seemingly adequate numbers of health personnel and infrastructure, health service utilization rates have not significantly changed; they remain among the lowest in the region. This reflects large inefficiency in the use of these
resources. Similarly, despite previous efforts to consolidate the hospital infrastructure, the system still has significant overcapacity.

Improving the allocative efficiency of the resources used for health could also generate fiscal space for the sector. The prioritization of drugs and services provided free of charge to patients should be strengthened. Moreover, health technology assessments could be conducted regularly to inform and to update the list of pharmaceuticals that are provided at no cost as well as to decide which services have to be included in the State Guarantee Package of Services under the MSHI. The criteria used to include some drugs are unclear. The basket of drugs provided free of charge is highly focused on inpatient care and curative care and not on prevention, with some exceptions such as childhood immunization.

Finally, improving effective coverage and financial protection of the population will not only require a health financing reform, but also a reform in the organizational structure and functioning of the health delivery network. Currently, the system remains heavily biased toward hospital care, leaving primary health care (PHC) underfunded and underdeveloped. PHC facilities are not the first point of contact with the health sector; rather, it is often hospital care. Thus, the PHC services remain underutilized.

The strengthening of PHC is a key pending reform, particularly given the high burden of illness from noncommunicable diseases (NCDs) that are more effectively and efficiently detected and controlled in a PHC setting, preventing exacerbation of the diseases and hospitalization. Indeed, the utilization of health services to diagnose, detect, and treat these illnesses is limited. For example, only 17 percent of people who suffer from high blood pressure have it under control, and as many as 18 percent of people with diagnosed diabetes were not registered at the policlinic and thus were not beneficiaries of the state diabetes program.5

The state national programs are managed as vertical programs; their financing is managed centrally by the Ministry of Health (MoH) and does not flow through the district authorities who are in charge of most service provision in the country. They take up a substantial share of the public budget for health—in 2015, up to 35 percent. They focus mostly on treatment, while prevention is a crucial part of the intervention protocol of these conditions, particularly in the case of NCDs, which do not receive much attention or funding.

Finally, for providers to be able to respond to incentives for production and quality improvement, they would need a much higher degree of autonomy than they currently have. This includes, among other things, autonomy in financial management, which they currently lack due to inflexible line-item budgets, and autonomy in personnel management. Otherwise, any attempt to reap benefits from strategic purchasing is unlikely to succeed.

In summary, Azerbaijan has initiated an important health financing reform aimed at improving access to health services and financial protection against ill health. To ensure the country reaps all the potential benefits of the scheme, additional efforts will be needed, not only to increase revenue collection for health, but also to improve the performance of the service delivery network.
1. Introduction

Azerbaijan is an upper-middle-income country with a Gross Domestic Product (GDP) per capita of US$5,496. In 2015, the country had a population of about 9.6 million. During the last 15 years, Azerbaijan has had a strong economic performance that has been translated into important reductions in poverty and in middle-class growth. According to the World Bank Systematic Country Diagnostic, the poverty rate went from 50 percent in 2000 to only 6 percent in 2012. This strong performance was driven by natural-resource-based economic growth, which allowed the country to recover from the negative economic and social impact it suffered after the breakup of the Soviet Union and mass displacement of people after the Nagorno-Karabakh armed conflict.

The country has experienced large improvements in health outcomes in recent years. Maternal mortality went from 86 per 100,000 live births in 1995 to 25 in 2015. The infant mortality rate also decreased, from 75.2 per 1,000 live births in 1995 to 27.9 in 2015. Indeed, the country’s life expectancy increased by almost eight years between 1990 and 2015. Despite these rapid improvements, the country still lags behind other countries with similar or even lower income per capita in key indicators (table 1).

<table>
<thead>
<tr>
<th>Country</th>
<th>Life Expectancy</th>
<th>Maternal Mortality per 100,000 Live Births</th>
<th>Infant Mortality per 1,000 Live Births</th>
<th>GDP Per Capita in Constant 2010 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkmenistan</td>
<td>65.3</td>
<td>45</td>
<td>47.6</td>
<td>5,563.2</td>
</tr>
<tr>
<td>Serbia</td>
<td>74.8</td>
<td>16</td>
<td>6.2</td>
<td>5,501.7</td>
</tr>
<tr>
<td>Macedonia</td>
<td>75.0</td>
<td>8</td>
<td>6.5</td>
<td>4,631.3</td>
</tr>
<tr>
<td>Romania</td>
<td>74.4</td>
<td>30</td>
<td>10.9</td>
<td>8,518.3</td>
</tr>
<tr>
<td>Georgia</td>
<td>74.4</td>
<td>39</td>
<td>12.8</td>
<td>3,469.7</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>76.1</td>
<td>12</td>
<td>5.9</td>
<td>4,481.6</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>70.6</td>
<td>25</td>
<td>31.2</td>
<td>5,820.1</td>
</tr>
<tr>
<td>Albania</td>
<td>77.4</td>
<td>30</td>
<td>13.8</td>
<td>4,277.1</td>
</tr>
<tr>
<td>Belarus</td>
<td>72.0</td>
<td>4</td>
<td>4</td>
<td>6,264.9</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>74.3</td>
<td>10</td>
<td>10.5</td>
<td>7062.1</td>
</tr>
</tbody>
</table>

Source: World Development Indicators data.

Azerbaijan faces a double burden of disease. While communicable diseases and maternal, neonatal, and nutritional conditions remain important causes of mortality and disability, noncommunicable diseases (NCDs) are fast increasing their impact on population health. Currently, the main causes of disability-adjusted life years lost in Azerbaijan are ischemic heart disease, lower respiratory infections, and cerebrovascular diseases, followed by low back and neck pain, neonatal encephalopathy, and diabetes. While the burden from communicable and neonatal conditions has been rapidly decreasing, the burden from NCDs, especially from diabetes, is
The objectives of this case study are to assess how the poor fared as a result of recent efforts toward universal health coverage in Azerbaijan, and to provide an overview of the government’s planned additional reforms, in the context of a difficult economic and fiscal situation.

The case study will first focus on how the poor have fared as a result of Azerbaijan’s efforts in the last decade to improve health coverage and population financial protection in case of illness. These efforts occurred during a period of strong economic performance driven by natural-resource-based economic growth. Thanks to improvements in oil and gas revenues, public expenditure on health increased six-fold since 2000. Although the organization and functioning of the system did not significantly change during this period, the additional resources were used to provide pharmaceuticals and medical supplies at no cost to the population and to refurbish the health care infrastructure. During this time, the number of drugs and medical supplies provided at no cost in inpatient care increased, while the list of outpatient care drugs and medical supplies that were provided at no cost to eligible population groups either increased or became more widely available.

The positive economic and fiscal outlook the country enjoyed from the mid-2000s has significantly changed in the last two years due to a sharp decrease in oil prices. This difficult context, as well as continuous challenges in ensuring financial protection and access to services, has highlighted the need for health financing reform, as well as reform of the functioning and organization of the health system. In this context, the country recently renewed previous efforts toward implementation of a Mandatory Social Health Insurance scheme, which was mandated in 2007. To contribute to the country’s policy debates, the second objective of this case study is to discuss how this reform plan could further contribute to universal health coverage, and what challenges the country would face in its implementation.

2. General Health System Overview of Financing and Delivery

Overview

The Azerbaijan health care system financing and organization continues to follow the Soviet Semashko model, a national-health-service-type system with centralized planning of resources and personnel, primarily public ownership of health care facilities, input-based allocation of funds, and no clear provider-purchaser split. The public resources that finance this system come from general government revenue.

Expenditure on health in Azerbaijan has significantly increased in the last 15 years. Although there are discrepancies between the harmonized World Health Organization (WHO) Health for All Database and national data, they both highlight a rapid increase in health expenditure since 2000. The improvement is linked to a sharp increase in oil revenues and the economic growth that came with it, and to the end of the armed conflict in Nagorno-Karabakh.
According to data from the Azerbaijan State Statistical Committee, in 2015 total per capita expenditure on health was about US$212.6 (about manat 218.19 of that year).\textsuperscript{13} This was a significant increase from 15 years earlier; indeed, per capita expenditure in 2015 was 17 times higher than in 2000. This expenditure represented about 4 percent of that year’s GDP. According to the WHO Health for All Database, total expenditure on health also increased significantly over that period, although the increase was of smaller magnitude (figure 1).

\textbf{Figure 1. Trends in Total and Public Health Expenditure in Azerbaijan, 1995–2014}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Trends in Total and Public Health Expenditure in Azerbaijan, 1995–2014}
\end{figure}

\textit{Source: WHO Health for All Database.}

\textit{Note: PPP = purchasing power parity}

Public expenditure on health also increased significantly over the last 15 years; however, it remained low as a percentage of total health expenditure. In 2015, per capita public expenditure on health was about 74 manats, which was six times higher in real terms than in 2000. Despite this large increase, public expenditure on health that year represented about 34 percent of total expenditure on health, according to national data, but just about 20 percent according to the WHO database (figure 1).

In 2014, Azerbaijan remained the ex-Union of Soviet Socialist Republics (USSR) country with the lowest public expenditure on health as a share of total health expenditure or as a share of total government expenditure (figures 2 and 3). As a reference, that same year Turkey’s public expenditure on health as a percentage of total health expenditure was 77 percent, and as percentage of total government expenditure was 10.5 percent, while the European Union (EU) averages were 76 percent and 15.3 percent, respectively.
As a result of the low public expenditure on health, Azerbaijan has the highest out-of-pocket (OOP) expenditure on health in the region (figure 4). According to the last household survey (AMSSW 2015), households spend on average 12.5 percent of their consumption on health. That same year, 23 percent of households incurred catastrophic health expenditures, allocating more than 20 percent of their total consumption to health.
Most of this OOP expenditure is on pharmaceutical products, both with and without a prescription. According to the 2015 AMSSW, 80 percent of household OOP in health was expenditure on pharmaceuticals. Another 10 percent was spent on lab exams, and the remaining 10 percent was spent on payments (both formal and informal) to medical personnel.

Although in principle all health consultations in public facilities are meant to be free of charge, in practice most patients continue to provide payments (often informal) to medical personnel. Health personnel working in public facilities are paid through salaries. However, these salaries remain low. The average monthly salary of health personnel is among the lowest in the country, averaging less than half the average monthly salary and only twice the current minimum wage of manat 105 (table 2).

Table 2. Average Monthly Salary across Economic Activity in Azerbaijan, 2015

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Salary (manat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On economy – total</td>
<td>466.9</td>
</tr>
<tr>
<td>Agriculture, forestry, and fishing</td>
<td>245.8</td>
</tr>
<tr>
<td>Mining</td>
<td>2171.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>527.9</td>
</tr>
<tr>
<td>Electricity, gas, and steam production, distribution, and supply</td>
<td>513.2</td>
</tr>
<tr>
<td>Water supply; waste treatment and disposal</td>
<td>333.3</td>
</tr>
<tr>
<td>Construction</td>
<td>677.7</td>
</tr>
<tr>
<td>Trade; repair of transport means</td>
<td>378.1</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>575.8</td>
</tr>
<tr>
<td>Accommodation and food service activities</td>
<td>464.6</td>
</tr>
<tr>
<td>Information and communication</td>
<td>747.2</td>
</tr>
<tr>
<td>Financial and insurance activities</td>
<td>1210.9</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>308.2</td>
</tr>
<tr>
<td>Professional, scientific, and technical activities</td>
<td>752.4</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>542.6</td>
</tr>
<tr>
<td>Public administration and defense; social security</td>
<td>494.7</td>
</tr>
<tr>
<td>Education</td>
<td>301.1</td>
</tr>
<tr>
<td>Human health and social work activities</td>
<td>204.2</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>252.7</td>
</tr>
<tr>
<td>Other service activities</td>
<td>441.9</td>
</tr>
</tbody>
</table>


Organization of the Public Health Sector

The MoH is responsible for most decisions on key health policy initiatives at the national level, including health system management, health policy development, environmental health, and control of communicable diseases. At the regional level, however, the MoH has limited means to influence health care providers, because they are financially dependent on the local district authorities. District authorities have direct managerial responsibilities for health provision in their districts. The regional health care providers (such as rural hospitals, policlinics,
Dispensaries, rural health centers, rural outpatient clinics) are formally attached to the District Health Authority, which is usually represented by the Head of the Central Regional Hospital, and he or she is the administrator of the District Health Authority.

In addition to the public providers managed by the Ministry of Health and by the District Health Authorities, the country also has several parallel networks of public providers. These are the networks managed by State Customs Committee, State Railways, the Ministry of Defense, the Ministry of Internal Affairs, and the Ministry of Emergency Situations. Each caters to the workers of these particular agencies.

Public health facilities include policlinics, which offer outpatient services; hospitals; and specialized clinics, which offer inpatient services. There are 553 public hospitals in the country, 1,744 policlinics, and 1,799 medical stations in the districts.

Part of the additional resources received from the increase of oil revenue that went to the health sector were used to renovate, build, and equip health facilities. In recent years, the government has started to allocate more and more resources for capital investment, primarily for the renovation or construction of hospitals and for new diagnostic equipment. As in many other ex-USSR countries, the health infrastructure in Azerbaijan suffered significantly from a low level of capital investment through the 1990s.

More than 500 medical institutions were renovated and a number of new regional hospitals were built between 2005 and 2013. In 2014, 25 additional hospitals were remodeled, while in 2015, 62 additional hospitals and policlinics were reconstructed and/or renovated. Initially, the Ministry of Health also improved the efficiency of its hospital network, through infrastructure consolidation and other efforts that resulted in an increase in the hospital occupation rates and a decrease in the average length of hospital stays. However, these consolidation efforts have been stalled with the construction of new facilities.

Private provision of health care has also been increasing over time. Currently, there are about 500 private providers in the country, including hospitals and outpatient clinics.

3. Brief Description of Public Health, Primary Care, and Key Supply-Side Efforts

Azerbaijan public health efforts are mainly limited to the control of communicable diseases, which is the responsibility of the sanitary-epidemiological network. Currently, the responsibility for public health services is divided among different agencies, including the Sanitary-Epidemiological Service, the Public Health and Reforms Centre of the Ministry of Health, and the National HIV/AIDS Centre.

Primary health care in the country is provided through ambulatory facilities that also offer outpatient specialized care. The model differs between rural and urban areas. In rural areas, there are two types of health care facilities that provide ambulatory care: rural health centers and rural outpatient clinics.
The rural health centers are usually small health centers with one or two rooms and basic medical equipment staffed by medical assistant, midwife, and/or nurse. They provide first aid, prenatal and postnatal care, basic disease prevention activities such as immunization and health education, and simple medical procedures (injections and wound dressing).

The rural outpatient clinics are staffed by a physician, a pediatrician, and midwife/nurses. They are responsible for providing primary health care services, including management of the most common health conditions, prenatal and postnatal care, and preventive services including immunization and health promotion. In some cases, when patients are unable to come to the clinic, physicians make home visits to provide care.

Outpatient departments of rural hospitals have a broader scope of care, and provide the services available through rural outpatient clinics plus delivery care, laboratory services, and dental care. Rural hospitals usually have an obstetrician-gynecologist, a dentist, and laboratory personnel.

The organization of inpatient care in Azerbaijan also differs between rural and urban areas. In each rural district, inpatient care is provided by the network of central regional hospitals, rural hospitals, dispensaries, and specialized hospitals providing services for certain conditions. The most common types of specialized health care facility are maternity, Tuberculosis, dermatovenerology, psychiatric, oncoligical, and endocrinological clinics. The specialized hospitals are not present in every district but are located based on regional principles to cover the entire country, while all tertiary-level facilities are located in Baku.

Emergency care is provided through ambulance stations, which function in each region and city either as a stand-alone facility or as a department within the central district hospital.

4. **HCP Institutional Architecture and Interaction of HCP with the Rest of the Health System**

This case study considers the health coverage program (HCP) for Azerbaijan to be the country’s efforts to increase the number of pharmaceuticals and medical supplies provided free of charge to the population. There were different government policies with the aim of increasing the list of pharmaceuticals and medical supplies provided at no cost in inpatient care; increasing the number and resources to state national programs that provide free pharmaceutical and medical supplies for the control of specific diseases or conditions, such as maternal and child care, diabetes, and HIV/AIDS; and increasing the availability of outpatient drugs provided at no cost to certain beneficiary groups.

From independence to 2008, the health system did not change significantly. It retained the main features of the Semashko system. During this period, public facilities were allowed to charge formal user fees for health services. Income from user fees was mainly used to supplement salaries and, on the rare occasion where there was a surplus, to pay for drugs and/or improvements to a given facility.
Between 1994 and 2008, state services were entirely free of charge only for certain population groups, such as children, pensioners, students, military personnel and conscripts, women during pregnancy and postpartum, disabled patients, refugees and internally displaced people, those involved in national sports teams, and prisoners. All others had to pay formal copayments to receive certain services.15

Following the adoption of the National Concept on Health Financing Reform in 2008, the Ministry of Health discontinued formal user charges in all state health facilities. Effectively, this meant that all services provided at state health facilities were, at least in theory, fully state funded.

However, there were important exceptions to the services and pharmaceuticals that were not funded through the state budget and for which patients continue to pay formally. Efforts to reduce these exceptions constitute the health coverage program discussed in this case study. The first is related to the list of pharmaceutical products provided free of charge for public hospital patients. In 2005, the Ministry of Health enacted the first list of 60 pharmaceutical products and 23 medical supplies that were fully funded by the state budget and provided free of charge to hospitalized patients. Over the years, this list has significantly increased, as has the budget allocated to the procurement of these pharmaceuticals and medical supplies. As figure 5 shows, by 2015 there were 305 pharmaceuticals and medical supplies in the drug list provided free of charge in hospitals.

Figure 5. Number of Pharmaceutical Products included in the Essential Drug List Provided Free of Charge in Inpatient Facilities, and Total Public Expenditure on Pharmaceutical Products in Azerbaijan, 2009–16

A second effort to reduce the exceptions was that of state national programs, the number of which increased in the last few years, as have the resources allocated to them. From 2006, a significant share of the health care budget has been allocated to these programs. By 2015, the funding for targeted health programs was almost double in real terms, representing in 2015 about 35 percent of total public expenditure on health. A list of state health programs and their corresponding budgets for 2008–16 is provided in table 3. The majority target certain health conditions aimed at covering the cost of providing equipment and pharmaceuticals through centralized procurement. Indeed, the number of drugs, laboratory tests, and medical supplies linked to 11 programs have increased yearly, as has the budget allocated to them.
Table 3. Total Budget of State National Programs in Azerbaijan for 2009–15, in Thousand Manat of 2000

<table>
<thead>
<tr>
<th>Program Description</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State Program on Hemophilia and Thalassemia Hereditary Blood Diseases</td>
<td>5,420</td>
<td>7,576</td>
<td>7,192</td>
<td>9,285</td>
<td>9,252</td>
<td>9,191</td>
<td>8,675</td>
</tr>
<tr>
<td>2. State Program on Diabetes</td>
<td>3,712</td>
<td>5,688</td>
<td>5,284</td>
<td>5,526</td>
<td>5,700</td>
<td>5,663</td>
<td>14,459</td>
</tr>
<tr>
<td>4. State Program on Chronic Kidney Failure</td>
<td>10,553</td>
<td>10,309</td>
<td>9,769</td>
<td>10,598</td>
<td>12,580</td>
<td>9,731</td>
<td>10,725</td>
</tr>
<tr>
<td>5. Program of Immuno-Prophylaxis of Infectious Diseases</td>
<td>2,599</td>
<td>2,135</td>
<td>1,980</td>
<td>2,038</td>
<td>1,973</td>
<td>1,264</td>
<td>1,217</td>
</tr>
<tr>
<td>6. Action Plan for Protection of Health of Maternity and Childhood</td>
<td>2,052</td>
<td>1,368</td>
<td>903</td>
<td>906</td>
<td>877</td>
<td>872</td>
<td>1,704</td>
</tr>
<tr>
<td>7. Expenses for the Action Plan for 2008–12 on Prevention and Combating HIV/AIDS</td>
<td>514</td>
<td>1,412</td>
<td>1,332</td>
<td>1,359</td>
<td>1,315</td>
<td>1,308</td>
<td>1,318</td>
</tr>
<tr>
<td>8. State Program on Oncology</td>
<td>5,121</td>
<td>5,224</td>
<td>6,451</td>
<td>13,318</td>
<td>13,112</td>
<td>13,064</td>
<td>13,344</td>
</tr>
<tr>
<td>9. Expenses related to financial support of the Action Plan on Combating Tuberculosis</td>
<td>1,355</td>
<td>1,585</td>
<td>881</td>
<td>219</td>
<td></td>
<td></td>
<td>608</td>
</tr>
<tr>
<td>10. Expenses for the Action Plan for the Medical Treatment of Multiple Sclerosis Patients</td>
<td></td>
<td></td>
<td>1,754</td>
<td>1,189</td>
<td>1,339</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Mandatory medical checkup for children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,177</td>
<td>2,028</td>
</tr>
<tr>
<td>Total budget</td>
<td>30,641</td>
<td>34,429</td>
<td>34,875</td>
<td>45,294</td>
<td>48,145</td>
<td>45,376</td>
<td>56,212</td>
</tr>
</tbody>
</table>


Finally, the third effort relates to a list of 184 drugs provided at no cost to specific beneficiary groups. The Cabinet of Ministries created the list, which includes the following categories of beneficiaries: disabled of 20th January Day; disabled during all national conflicts; disabled children; disabled (disability category 1 and 2); children born during the Chernobyl disaster; people who lived or worked in the Chernobyl disaster zone; elderly people, children, disabled asylum seekers from the Nagorno-Karabakh conflict zone; vulnerable people receiving a financial allowance from the Ministry of Labor and Social Protection; people with HIV/AIDS; and people with transplanted organs. The budget for these pharmaceuticals has also been increasing over the years, particularly after 2014, when the budget benefited from a twofold increased. The large increase in 2015 was due to a change in policy. Before that year, these pharmaceuticals were only provided in Baku policlinics, considerably reducing their availability to the population outside the capital city. Starting in 2015, these drugs have been available throughout the country.

5. Identification, Targeting, and Enrollment of Beneficiaries

All inpatients receive available drugs free of charge. Therefore, no specific registration or enrollment in this program is needed.
In the case of state health programs, the enrolment of beneficiaries depends on the targeted health condition. The list of beneficiaries in the programs is provided by family and ambulatory center doctors. Since 2008, the information about these beneficiaries has formed part of a national registry that includes identification number, personal data, diagnosis, results of laboratory analysis, and details of treatment. Table 4 shows trends in the number of beneficiaries of some these national programs.

Table 4. Trends in Number of Beneficiaries of State National Programs, 2010–16

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State Program on hemophilia and thalassemia hereditary blood diseases</td>
<td>1,650</td>
<td>2,794</td>
<td>3,123</td>
<td>3,517</td>
<td>4,022</td>
<td>4,074</td>
<td>4,403</td>
</tr>
<tr>
<td>State Program on diabetes</td>
<td>121,095</td>
<td>135,711</td>
<td>153,506</td>
<td>177,474</td>
<td>194,520</td>
<td>209,377</td>
<td>218,778</td>
</tr>
<tr>
<td>State Program on chronic kidney failure</td>
<td>2,967</td>
<td>3,045</td>
<td>3,477</td>
<td>3,790</td>
<td>3,933</td>
<td>4,214</td>
<td></td>
</tr>
<tr>
<td>Expenses related to financial support of the Action Plan on combating tuberculosis</td>
<td>12,469</td>
<td>11,505</td>
<td>11,383</td>
<td>11,456</td>
<td>9,757</td>
<td>9,695</td>
<td>9,620</td>
</tr>
<tr>
<td>State Program on patients with cancer</td>
<td>28,052</td>
<td>29,585</td>
<td>32,285</td>
<td>34,681</td>
<td>37,932</td>
<td>40,653</td>
<td>41,370</td>
</tr>
<tr>
<td>Expenses for the Action Plan for the medical treatment of multiple sclerosis patients</td>
<td></td>
<td>727</td>
<td>694</td>
<td>1,118</td>
<td>1,126</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Health.

There are different registration mechanisms for beneficiaries of drugs free of charge at the outpatient-care level. For instance, vulnerable people receiving financial support from the Ministry of Labor are registered in the Targeted State Social Assistance Program. These beneficiaries are identified using a means test. Currently, there are about 451,538 people in this registry. People with disabilities and those who lived or worked in the Chernobyl disaster area are also registered at the Ministry of Labor and Social Protection. The asylum seekers are registered in the State Committee of the Republic of Azerbaijan on Refugees and Internally Displaced People. People with HIV/AIDS and with transplants are included in a special registry of the Ministry of Health. They all have special certificates from the respective ministries confirming their beneficiary status.

6. Special Topics Related to the Management of Public Funds in HCP

The MoH budget includes resources for hospitals attached to the MoH, polyclinics and ambulatory units, sanatoriums, sanitation-epidemiology stations, and other facilities in the Baku area. It also includes resources for the state health programs (Annex figure A.1).

Medicines and other consumables from these programs are distributed from a central ministerial body—the Innovation and Supply Center—to medical facilities throughout the country to be provided for registered beneficiary patients. The procurement of drugs for these health programs is based on requests from these facilities.
The Ministry of Finance provides resources directly to the districts, and these resources are used to fund all health facilities under the district authorities. There is no connection between the MoH, district, and other state departments’ budgets. The parallel health services provision (State Customs Committee, State Railways, Ministry of Defense, Ministry of Internal Affairs, Ministry of Emergency situations) is outside the influence of the Ministry of Health, as providers are subordinate to, and financed through, the relevant line ministry.

The line item budgets for health, including budgets of all public health care facilities, are based on the expense categories, such as salaries, food, and pharmaceuticals. Once the budget is approved, switching funds across line items is almost impossible, since the approval of the prime minister is required. This rigidity provides incentives to administrators to overestimate budgetary needs and to spend the entire budget, since the unspent funds are returned to the Ministry of Finance.

The budgets for health at all levels follow historical trends. The previous year’s budget is the starting point for the current year’s preparations. Each line item is based on norms linked to bed numbers, staffing levels, and other factors. Budgets are prepared on the assumption of 100 percent bed occupancy. Thus, there are no incentives for production or quality improvement at the health facility level, and although certain pharmaceuticals are provided free of charge, the actual provision of services beyond the prescription of pharmaceuticals is not assured. Indeed, even though Azerbaijan has a similar number of physicians per 100,000 as the EU average (although a smaller number of nurses), and despite large increases in public resources for health, health service utilization rates have not significantly changed in recent years and, at least with respect to inpatient care, remain the lowest in Eastern Europe and Central Asia. Outpatient care also remains comparatively low.16

In addition, since the budgets do not reflect the needs of the population, but the existing infrastructure and historical trends, there are large inequalities in per capita health expenditure across regions (figure 6). The city of Baku receives the largest per capita expenditure. This might reflect expenditure from the MoH aimed at the entire country. However, even excluding Baku, the differences continue to be large. For instance, Absheron per capita expenditure on health is four times as high as that of Aran. Other policies are also behind these large differences in expenditure per capita. Until recently, the outpatient care pharmaceuticals provided free of charge to specific beneficiary groups were only available in health facilities in Baku.
Figure 6. Government Per Capita Expenditure on Health across Economic Regions and Country Average, in Nominal Manat, 2016

Source: Ministry of Finance.

The MoH procures and distributes not only drugs and medical supplies provided through the state national programs, but also all other pharmaceuticals provided at no cost to the population. This includes the drug list approved in 2015, which includes more than 305 drugs and medical supplies procured by the Ministry of Health for public hospitals and which are meant to be free for all inpatients, but also the list of 184 pharmaceuticals for primary health care facilities that are to be given free of charge to certain eligible population groups. All procurement is conducted by the Innovation and Supply Centre, which receives requests from the Ministry of Health based on either the estimates of relevant chief specialists (for the state health programs) or requests from health facilities.

7. Management of the HCP Benefits Package

The HCP benefits package, in this case the list of pharmaceuticals provided free of charge in hospitals or for certain beneficiaries in outpatient care, is developed by the MoH. Each year, the MoH revises its different pharmaceutical lists. There is no agency or department within or outside the ministry that performs medical technology assessments. The decision on what drugs to include does not necessarily follows a formal process, but depends on the opinions of expert MoH officials.

8. HCP Effectiveness in Improving Access of the Poor and Financial Protection in Case of Illness

This section analyzes the potential effect of Azerbaijan’s efforts to increase the number of pharmaceuticals provided free of charge to the population on the utilization of health services and on financial protection against illness, with a focus on the poor. To do so, we mainly use the AMSSW household surveys from 2008 and 2015.
In summary, these efforts have had relatively little impact on access to health services or financial protection against ill health. Most of the increase occurred in inpatient care and among the highest income population groups. There was even a slight decrease in utilization of outpatient care among the poor. Nevertheless, there is evidence of an improvement in coverage of key maternal and child health services supported by one of the state national programs that is part of the Health Care Program. Regarding financial protection, there was a sharp increase in the incidence of catastrophic health expenditure in the population between 2008 and 2015. However, this increase was concentrated among households in the richest two deciles of the consumption distribution. In contrast, among the poor, the incidence of catastrophic expenditure actually decreased.

The HCP was focused on providing some pharmaceutical products free of charge. Indeed, household expenditure in pharmaceuticals decreased significantly between 2008 and 2015. However, since this list was limited in terms of products and beneficiaries, and there was no major change in the organization and functioning of health services, the impact of the HCP on contributing to the achievement of universal health coverage was limited, as will be detailed below.

**Health Service Utilization**

On average, there was no significant change in health service utilization between 2008 and 2015, although the distribution across consumption groups changed. During this period, utilization of health services decreased slightly among the poorest deciles of the consumption distribution (figure 7), and significantly increased among the richest decile.

![Figure 7. Utilization of Health Services in the Previous Month by Consumption Decile, 2008–15](image1)

![Figure 8. Utilization of Inpatient and Outpatient Care Services in the Previous Month by Consumption Decile, 2008–15](image2)

*Source: Analysis of AMSSW 2008 and 2015.*
Between 2008 and 2015, the only difference captured by the surveys is in types of services. In 2015, the utilization rate of inpatient care was higher than in 2008 (4 percent compared to 3 percent), while that of outpatient care was about the same. The distribution across income deciles also differs. Inpatient care utilization remained the same among the poorest end of the consumption distribution, but it slightly increased among the rich, while outpatient care decreased in most of the income distribution with the exception of the richest deciles, where it increased significantly (figure 8).

Data from the WHO Health for All Database show a similar overall trend. Outpatient care contacts per person per year did not change much, although there was a slightly decreasing trend. Inpatient discharges show a slight increasing trend, particularly after 2010 (figure 9). Although it is not possible to establish causation, in 2005 the government started providing a few inpatient pharmaceuticals free of charge, and this list has increased several times since. In contrast, outpatient care pharmaceuticals were provided free of charge for only particular population groups in Baku, and for certain health conditions in the entire country, largely limiting the benefits of these later policies.

![Figure 9. Azerbaijan Trends in Health Care Utilization Rates and Per Capita Expenditure, 1996–2014](image)

*Source: WHO Health for All Database.*

*Note: PPP = purchasing power parity.*

There are large differences in utilization rates across urban and rural areas and across regions (figures 10 and 11). Between 2008 and 2015, utilization rates changed in rural and urban areas and in geographic regions, but there is no clear pattern to these changes. For instance, utilization rates in 2008 were higher in rural than urban areas, but by 2015 this pattern had reversed. Similarly, except in the Aran and Upper Karabakh regions, the utilization rates within regions changed between 2008 and 2015, but not always in the same direction, as shown in figures 10 and 11.
The main cause of non-utilization of health services is the lack of resources to pay for them; this did not change in the two years of the AMSSW. As many as three-fourths of the population listed the lack of resources to pay as the main cause for non-utilization of services in both years. However, a larger percentage of the poor reported this in 2008 than in 2015, while among the higher-income population, a larger percentage reported this in 2015 than in 2008.

The MoH state national programs are often linked to a particular health condition affecting limited population groups. It is difficult to look at their effects on the poor, with the sole exception of the Action Plan for Maternal and Child Health. Data from the Demographic and Health Surveys of 2006 and 2011 show an improvement in the coverage of key maternal and child care services in the country, improvements that have been more marked among the poorest 20 percent of the population (figures 12 and 13).
Financial Protection

The HCP should also have improved the financial protection of the population by decreasing OOP expenditure on pharmaceutical products. Table 5 shows that expenditure on health increased across all income levels between 2008 and 2015. In these two years, income per capita significantly increased but, as shown in table 5, the share of total household expenditure that goes to health also increased. Most of the increase in the total share that goes to health took place among the richest end of the consumption distribution. In 2015, the richest two deciles allocated between 20 and 33 percent of their resources to health care; in 2008, they allocated between 14 and 18 percent. In contrast, among the poorest end of the income distribution, the share of expenditure decreased.

Table 5. Azerbaijan Total Household OOP Expenditure on Health and Share of Health Expenditure out of Total Expenditure across Consumption Deciles, 2008 and 2015 (manat of 2008)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total household expenditure on health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>32.6</td>
<td>50.4</td>
<td>61.2</td>
<td>77.9</td>
<td>85</td>
<td>119</td>
<td>168.7</td>
<td>251.5</td>
<td>389.4</td>
<td>1120.2</td>
<td>234.7</td>
</tr>
<tr>
<td>2008</td>
<td>24</td>
<td>37.9</td>
<td>57.9</td>
<td>64.6</td>
<td>82.8</td>
<td>103.5</td>
<td>134.3</td>
<td>165.5</td>
<td>225.5</td>
<td>530.1</td>
<td>142.5</td>
</tr>
<tr>
<td><strong>Percent increase</strong></td>
<td>36%</td>
<td>33%</td>
<td>6%</td>
<td>21%</td>
<td>3%</td>
<td>15%</td>
<td>26%</td>
<td>52%</td>
<td>73%</td>
<td>111%</td>
<td>65%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share of health expenditure out of total household expenditure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>2008</td>
<td>7%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Analysis of AMSSW 2008 and 2015.

Most OOP expenditure was on pharmaceutical products, and mainly those prescribed in outpatient care settings. However, the share of the total expenditure that went to drugs decreased from 75 percent in 2008 to 56 percent in 2015. This includes all pharmaceutical products, with or without a prescription. This decrease in the share of expenditure on drugs occurred in all income levels, but was highest among people from the richest consumption deciles. In contrast, expenditure on consultations and lab tests increased from 14 to 39 percent, while payments for gifts to health personnel decreased from 11 to 6 percent between 2008 and 2015.

The pattern observed in the expenditure on pharmaceutical products could be related to the HCP policies. First, there was an increase in the number of inpatient care drugs provided free of charge. This policy benefited the entire population, independently on their income level. The data seem to confirm this, since for some consumption deciles, we can observe a small reduction in the share of this expenditure—a reduction that is not, however, always significant.
The second policy was targeted to vulnerable groups and consisted of providing some medicines free of charge in outpatient settings. The effect of this policy should be stronger on lower-income families if vulnerable groups are concentrated among the poor. However, overall, the different vulnerable categories are not necessarily related to income levels (figure 14). The data suggest that there was a reduction in the share allocated to this item between 2008 and 2015; this, however, could also be the result of a decrease in outpatient care utilization among the poor. This effect though was present at all income levels (figure 15). It is possible that this lack of results is related to difficulties in the implementation of this policy, particularly difficulties in having the required pharmaceuticals at the health facilities when eligible patients seek care. Unfortunately, there are no data that would allow us to evaluate this further.

Between 2008 and 2015, the two years for which data are available, the incidence of catastrophic health expenditure significantly increased. In other words, the share of households with health expenditures higher than 20 or 30 percent of total expenditure increased. However, the incidence
of catastrophic health expenditure among the poor decreased, particularly for deciles 2 and 3 (figures 16 and 17).

The overshoot for catastrophic expenditure between 2008 and 2015 and across the different thresholds increased (figures 18 and 19). In other words, the amounts households spent on health above the different catastrophic expenditure thresholds increased over time. However, this increase is again taking place among the richest income deciles and not among the poorest, where the overshoot remained the same or slightly decreased.
9. Pending Agenda

Thanks to growing oil revenues, Azerbaijan significantly increased public resources for health in the last decade, resources that were used to renovate the health infrastructure and increase the number and availability of pharmaceutical products at no cost to the population. These efforts, however, had a limited impact on decreasing catastrophic health expenditure, and on improving access to health services. In addition, the country’s macroeconomic and fiscal environment has changed significantly, and thus any additional progress toward universal health coverage would require a very different approach. It would require an increase in resources for health and stronger efforts to pool these resources, a strengthened prioritization in the use of funds, a more efficient use of existing health resources, a change in provider-payment mechanisms, and a reform in the organization and functioning of the health sector.

Increasing and Pooling Resources for Health – Plans for a Mandatory Social Health Insurance

Increasing public resources for health remains an important pending agenda. Despite large increases in resources, public expenditure on health remains low as a percentage of GDP, as a percentage of total expenditure, and as a percentage of total government expenditure. As a result, Azerbaijan remains one of the countries in Eastern Europe and Central Asia with the highest out-of-pocket expenditures on health.

*Mandatory Social Health Insurance:* The government plans to introduce a mandatory social health insurance (MSHI) scheme as a way to mobilize resources for the sector in a more efficient and equitable manner. The introduction of this scheme was initiated with a pilot project that covers Mingachevir (a city) and Yevlakh (a district) with a total population of 228,100.

The plans for implementation of the MSHI face many challenges to ensure it can improve financial protection and access to services, particularly among the poor. One of the main challenges is to ensure that it significantly increases resources for health. According to data from the State Social Protection Fund, in 2015, only about 33 percent of the labor workforce, about 1.5 million people, was employed in the formal sector and thus contributed to this fund.

According to the Framework Document for the Implementation of the Mandatory Health Insurance in Azerbaijan, the country plans to levy a 3 percent payroll tax, 2 percent to be paid by employees and 1 percent by employers; this, however, refers only to the 1.5 million people in the formal labor market. This would provide manat 200 million in additional resources per year, or about 26 percent of the total government budget for health in 2015.

Collecting revenue from the nonpoor informal sector workers is challenging, and few countries have been able to do it. Nevertheless, the country plans to collect about 4 percent of the annual living wage of the self-employed informal sector workers, an estimated 3.8 million people. In addition, it plans to finance, through general taxation, the premiums of the poor and specific beneficiary groups (including internally displaced people, beneficiaries of the Targeted State Social Assistance Program, and people with disabilities), an estimated 4.3 million people.
Experience in the region can highlight the challenges involved in increasing resources for health by introducing a mandatory social health insurance scheme. In the other ex-USSR countries where these schemes were introduced, only in one country, Moldova, did it result in an unambiguous increase in resources for health, at least during the first years after introduction. In some of these countries, transfers from the local authorities to the MSHI fund were supposed to finance the premiums of state-subsidized groups, such as children, students, and pensioners, but often these transfers did not take place, resulting in an overall decrease in resources. Moldova avoided this by centralizing the resources from the rayon to the national level, and thus the transfers for the subsidized groups came from the central budget.

Also, in most ex-USSR countries, the payroll tax rate tended to be small, as is the one planned for Azerbaijan—from 2 to 4 percent (increased to 5 percent in Moldova later on), reducing even more the potential of the MSHI payroll taxes for increasing revenues. In contrast, in other countries in the region that also introduced health insurance, such as the ex-Yugoslav republics that introduced insurance schemes, Latvia, Bulgaria, and Estonia, the taxes were much higher, ranging from 6 to 17 percent.

The introduction of the scheme will require much preparation to ensure its success. It will be particularly important to define a package of services for which beneficiaries would be entitled and ensure that this package can be fully funded by the scheme. For the pilot project, an extensive list of services was included in the essential package to be financed by the MSHI. However, to make this package sustainable and fully funded by the scheme, a revision would be advisable.

The government would also need to design a mechanism for identifying and enrolling beneficiaries and for collecting and pooling resources for them. Currently, the decision is that the Mandatory Health Insurance Agency will collect revenue during the pilot phase. However, for the MSHI scale-up, other agencies that routinely collect taxes and premiums from workers could be considered. For instance, this role could be played by the tax authorities or even by the Ministry of Labor and Social Assistance, since they collect resources for the pension plans. In addition, to eliminate the existing inequalities and inefficiencies generated by the fragmentation of resource pools, it would be important to consider pooling all resources that are now going to the district authorities and to the different parallel networks (such as the Railways and State Customs Committees), with those to be collected by the MSHI.

It will also require a change in provider payment mechanisms. Currently, the MSHI, which will be the single health service purchaser agency, is planning to use per capita payments for primary health care with additional bonus payments, fee-for-services for specialized outpatient care, and global budgets for hospitals. However, for these new payment mechanisms to generate incentives to increase efficiency and/or productivity, a reform to the functioning and organization of the health delivery network needs to occur. Some of these issues are detailed below, since they would be needed even without implementation of the MSHI.

_Tobacco taxation:_ There are other sources of funds for health that will be important to consider, particularly under the current, more restricted, macroeconomic and fiscal environment. Tobacco taxation is one of them. The country has a high prevalence of tobacco smoking. As many as 36 percent of adult men smoke. At the same time, Azerbaijan in 2014 had the lowest taxation on
tobacco in all Europe. Higher taxes on tobacco can provide more resources for health while reducing the prevalence of smoking, a major risk factor for health in the country.

**Input-cost reduction:** Another important source of fiscal space for health could be achieved through efficiency gains (discussed below) and input cost reductions. Currently, some of the drugs procured for the state national programs are brand-name pharmaceuticals, not generics. For instance, data from the MoH show that 95 percent of pharmaceuticals procured under the state program on diabetes were branded, as were 97 percent of those procured for the state program on hemophilia and thalassemia hereditary blood diseases, and 100 percent of immune depressants for chronic kidney failure.

**Reducing the fragmentation of resource pools:** Finally, the resources that are already allocated for health are fragmented in different pools. In addition to the MoH and the district health authorities, there are several agencies and ministries that run their own health delivery network, generating fragmentation in the risk pooling that results in inequalities and inefficiencies. Eliminating this fragmentation is also part of the pending agenda.

**Improving Allocative Efficiency – Revising the State Guarantee Package of Services**

Improving the allocative efficiency of the resources used for health could also generate fiscal space for the sector. The prioritization of drugs and services provided free of charge to patients could be strengthened. For instance, no health technology assessment informs the development of the list of pharmaceuticals that are provided at no cost or to decide which services will be included in the State Guarantee Package of Services that will be financed by the MSHI. In addition, the criteria used to include some drugs are unclear. For instance, cardiovascular diseases are the main cause of death and disability in the country; however, other diseases affecting smaller population groups have dedicated state programs that procure drugs free of charge, such as hemophilia; chronic kidney disease, which is largely the consequence of advanced cardiovascular disease and diabetes; and multiple sclerosis.

The basket of drugs provided free of charge is highly focused on inpatient care and curative care and not on prevention, with some exceptions such as childhood immunization. While the list of inpatient care drugs benefits all, only a limited list of pharmaceuticals is provided free of charge for primary health care (PHC), and often for selected beneficiary groups, even though the main burden of disease comes from NCDs, which would require early detection and control and which can be provided more cost-effectively at the PHC level. In addition, as a result of this prioritization of drugs to be provided at no cost, household OOP expenditure remains very high, and they are mainly concentrated on pharmaceutical expenditure linked to outpatient care (both PHC and specialized care) and to nonprescription pharmaceuticals.

**Improving the Efficiency in the Use of Health Resources**

Azerbaijan has a similar number of physicians per 100,000 as the EU average, and slightly fewer than the number of nurses. It also has a relatively high number of hospital beds compared to other ex-USSR countries, despite much effort to consolidate hospital infrastructure (figures 20 and 21).
Despite seemingly adequate numbers of health personnel and infrastructure and large increases in public resources, health service utilization rates have not significantly changed; they remain among the lowest in the region. This reflects large inefficiency in the use of these resources. Indeed, bed occupation rates in Azerbaijan are among the lowest in the region (figure 22). Despite previous efforts to consolidate the hospital infrastructure, the system still has significant overcapacity. Previous efforts to optimize the delivery network seem to have stalled and even slightly reversed when several regional hospitals were constructed. In addition, there is considerable inefficiency in the use of the beds that are occupied; the country has one of the largest hospital average lengths of stay in the region (figure 23).
Generating Incentives for Performance through Changing Provider-Payment Mechanisms

Provider payment mechanisms based on historical line item budgets and a lack of clear division between purchaser and provider do not generate performance incentives. Health personnel receive salaries that do not depend on services provided. These salaries are also very low, which might explain why the country has not been able to eliminate informal payments to providers. Similarly, the budgets for hospitals and PHC facilities do not depend on service provision but on historical trends, which perpetuates geographic inequalities in resource allocation. The inflexibility in the line item budgets also generates inefficiencies, because providers cannot decide where is best to use resources, while at the same time having an incentive to spend all resources within categories to avoid future budget reductions.

In addition, the lack of a clear purchasing/provider split also limits incentive for performance improvement by precluding strategic purchasing. Currently, services are purchased passively, as they are financed through historical budgets and salaries in the case of health personnel. This limits the possibility of the purchasing agency deciding what to buy, when, and from whom.\(^\text{22}\) Thus, it limits options to improve efficiency and quality of services.

The plans for the new MSHI could reduce some of these challenges, although this is not necessarily assured. The MSHI would create a single purchaser of services autonomous from the MoH, and is planning to use different provider-payment mechanisms that are meant to increase efficiency and in some cases productivity. A major challenge for the implementation of the
MSHI would be the preparedness of health providers, and particularly public ones, to face completely different payments and incentives, as detailed below.
Changing the Organization and Functioning of the Health System

Another important pending reform is that of the organization and functioning of the health delivery network. Currently, the system remains heavily biased toward hospital care, leaving PHC underfunded and underdeveloped. PHC facilities are not the first point of contact with the health sector; rather, it is often hospital care. Figure 24 shows that more than 50 percent of outpatient care visits across all consumption deciles occur in hospitals, both public and private. Without a major reform in the organization of the service delivery network, a reform to create an MSHI and increase prepayment for health will not be enough to achieve significant progress toward universal health care coverage.

![Figure 24. Type of Health Facility Used for Outpatient Care](image)

Source: Analysis of AMSSW survey 2015.

This is an inefficient use of resources, particularly given the high burden of disease coming from NCDs in the country. Indeed, the utilization of health services to diagnose, detect, and treat these illnesses is limited. For example, only 17 percent of people who suffer from high blood pressure have it under control, and as many as 18 percent of people with diagnosed diabetes were not registered at the policlinic and thus were not beneficiaries of the state diabetes program.23

While major investments in construction and rehabilitation were made in secondary care, during 2009–15, MoH reconstructed and rehabilitated 86 hospitals, but only 25 primary health care facilities were rehabilitated. Especially in rural areas, outpatient visits remain low, with 2.5 visits per person per year in Guba-Khachmaz in 2009 compared to 6 visits in Baku and 7.3 in Absheron.

The state national programs are managed as vertical programs; their financing is managed centrally by the MoH and does not flow through the district authorities who are in charge of most service provision in the country. They take up a substantial share of the public budget for health—in 2015, up to 35 percent. They focus mostly on treatment, while prevention is a crucial part of the intervention protocol of these conditions, particularly in the case of NCDs, which do not receive much attention or funding.
Finally, for providers to be able to respond to incentives for production and quality improvement, they would need a much higher degree of autonomy than they currently have. This includes, among other things, autonomy in financial management, which they currently lack due to inflexible line item budgets, and autonomy in personnel management. Otherwise, any attempt to reap benefits from strategic purchasing is unlikely to succeed.

**Improving the Targeting of Vulnerable People**

The majority of the beneficiaries of pharmaceutical products free of charge are not poor (see figure 14). Better targeting of beneficiaries could free up resources that could be used to finance other services for the poor.
Annex 1:

Figure A.1: Budgeting Mechanism in Azerbaijan
NOTES

1 Kutzin, Cashin, and Jakab 2010.
2 Kutzin, Cashin, and Jakab 2010.
4 WHO et al. 2015.
6 WDI (World Development Indicators) 2016.
11 IHME 2016.
12 These discrepancies are likely due to an underestimation of private expenditure on health and because the national data show only public expenditure from the Ministry of Health and District Health Authorities, and not health expenditure from other sources such as the State Customs Committee, State Railways, Ministry of Defense, Ministry of Internal Affairs, and Ministry of Emergency Situations. These agencies are likely to manage as much as 20 percent of all resources allocated to health, since they manage their own parallel health networks.
14 A term for the combined specialty of dermatology and sexually transmitted infections.
15 Ibrahimov et al. 2010.
16 WHO Health for All Database 2014
17 MHI 2017.
18 Kutzin, Cashin, and Jakab 2010.
19 Kutzin, Cashin, and Jakab 2010.
21 WHO et al. 2015.
22 Busse 2007.
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http://data.euro.who.int/hfadb/.


World Bank Systematic Country Diagnostic.
The Universal Health Coverage (UHC) Studies Series was launched in 2013 to develop and share knowledge regarding pro-poor reforms seeking to advance UHC in developing countries. The Series recognizes that there are many policy alternatives to achieve UHC and therefore does not endorse a specific path or model.

The Series consists of country case studies and technical papers. The case studies employ a standardized approach aimed at understanding the tools – policies, instruments and institutions – used to expand health coverage across three dimensions: population, health services and affordability. The approach relies on a protocol involving around 300 questions structured to portray how countries are implementing UHC reforms in the following areas:

- **Progressive Universalism**: expanding coverage while ensuring that the poor and vulnerable are not left behind
- **Strategic Purchasing**: expanding the statutory benefits package and developing incentives for its effective delivery by health-care providers
- **Raising revenues to finance health care in fiscally sustainable ways**
- **Improving the availability and quality of health-care providers**
- **Strengthening accountability** to ensure the fulfillment of promises made between citizens, governments and health institutions

By 2017, the Series had published 24 country case studies and a book analyzing and comparing the initial 24 case studies. In 2018 the Series will publish 15 additional case studies. Links to the country case studies and the book are included below.

**COUNTRY CASE STUDIES:**

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The Universal Health Coverage Study Series aims to provide UHC policy makers and implementers with knowledge about available and tested tools – policies, instruments and institutions – to expand health coverage in ways that are pro-poor, quality enhancing, provide financial risk protection and are fiscally sustainable.