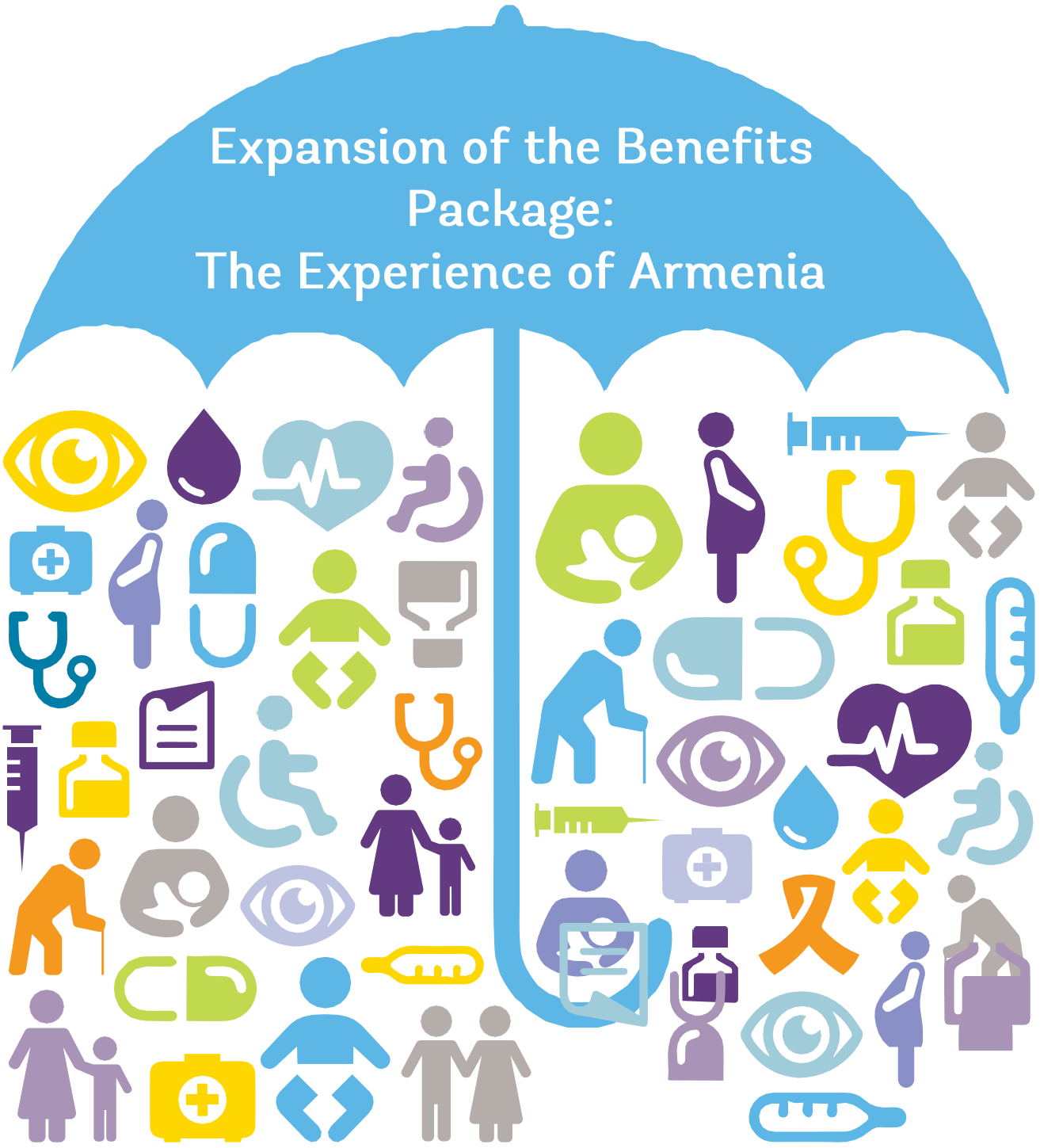
UNIVERSAL HEALTH COVERAGE STUDY SERIES No. 27

Expansion of the Benefits Package: The Experience of Armenia



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WORLD BANK GROUP

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Rouselle F. Lavado, Susanna Hayrapetyan and Samvel Kharazyan

The World Bank, Washington, DC, 2018

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AMD	Armenian Dram
BBP	Basic Benefit Package
BOR	Bed Occupancy Rates
BTR	Bed Turnover Rates
DRG	Diagnosis Related Group
FBP	Family Benefit Program
GDP	Gross Domestic Product
HFMIS	Health Financing Management Information System
ICD	International Classification of Diseases
ILCS	Integrated Living Conditions Survey
MDG	Millennium Development Goals
MOH	Ministry of Health
MOF	Ministry of Finance
MTEF	Medium Term Expenditure Framework
NCD	Non-Communicable Diseases
NHS	National Health Service
OOP	Out-of-Pocket
PBF	Performance Based Financing
PHC	Primary Health Care
SDGs	Sustainable Development Goal
SHA	State Health Agency
SHAIE	State Hygiene and Anti-Epidemic Inspectorate
UHC	Universal Health Coverage
USAID	United States Agency for International Development
WHO	World Health Organization

Contents

Table of Annexes

Table of Tables

Table of Figures

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 additional15 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:
http://www.worldbank.org/en/topic/health/publication/universal-health-coverage-study-series
http://www.worldbank.org/en/topic/universalhealthcoverage/publication/going-universal-how-24-countries-are-implementing-universal-health-coverage-reforms-from-bottom-up

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Susanna Hayrapetyan joined the Bank in 2000. Since then she has held various positions and as a Lead Heath Specialist led projects and conducted high level health policy dialogue in number of ECA and East Asia countries (Armenia, Georgia, Belarus, Russia, Uzbekistan, Kyrgyzstan, Vietnam, Tajikistan, China). Susanna is a medical doctor by training specialized in cardiology and public health. Prior to joining ECA HD, she worked as National Expert on Health at UNDP and as Lead Health Specialist at the Ministry of Health in Armenia. She was engaged in health reforms planning and implementation, focusing on service delivery, health financing, pharmaceutical policy and medical education. In her current capacity, she is responsible for coordination of social sector programs and high level policy dialogue in all CA countries and covers health, education, social protection, skills/jobs and governance.

Rouselle F. Lavado is a Health Specialist at the Central and West Asia Department of the Asian Development Bank (ADB). Prior to joining the ADB, she was a Health Economist at the World Bank, working as a Task Team Leader and team member for several health projects in Europe and Central Asia. She was also a Senior Fellow at the Institute for Health Metrics and Evaluation at the University of Washington and was in-charge of the research team that estimated expenditures by diseases and conducted meta-analysis of household surveys and national health accounts.

Executive Summary

The legacy of the Semashko system left Armenia with an oversized and overstaffed health system. Beginning in the 1990s the country focused on re-designing its health system in an attempt to rationalize resources. In order to improve the efficiency, access and quality of health care service provision, the Government undertook supply-side reforms. These reforms included: (a) strengthening Primary Health Care (PHC) provision; (b) downsizing excess hospital capacity; and, (c) changing provider payment mechanisms and introducing a purchaser-provider split.

Armenia introduced the Basic Benefit Package (BBP) in 1999 for the socially vulnerable population to target the so-called socially important diseases. The package utilizes public resources to finance, through provider contracts, PHC and emergency services for all Armenian citizens, with co-payment exemptions for the poor and vulnerable. In addition, selected inpatient services are provided for free for the poor, vulnerable and other specific categories.

Unfortunately, low public health spending levels and incomplete demand-side health financing reform have resulted in serious shortcomings in financial risk protection outcomes. Armenia's public health financing is among the lowest in the region. High co-payments for BBP covered services, lack of in-patient care coverage for the non-vulnerable population and outpatient pharmaceuticals for all, have resulted in household out-of-pocket (OOP) spending being the predominant source of financing for health in the country. As Armenia is grappling with an aging society and a health care system struggling to adjust to morbidity and mortality epidemiological changes, its path to Universal Health Coverage (UHC) requires increased funding from prepaid//pooled sources in order to sustain and make further progress on improving population health outcomes and financial risk protection.

1. Introduction

1. With a Gross National Income per capita of US$4,020, Armenia is classified as a lower middle-income country, ranked next to El Salvador, Kosovo, Samoa, and Tunisia. A commitment to UHC is enshrined in the country's constitution. Armenia has already attained some of the key health-related Sustainable Development Goals (SDGs), with some of the country's health outcomes closer to those of higher income countries: life expectancy is 75 years; the maternal mortality ratio is 25 per 100,000 live births; the neonatal mortality rate is 7 per 1,000 live births, and the under-five mortality is 14 per 1,000 live births.

2. Nevertheless, the country's health system faces several challenges. In recent years, improvements in population health outcomes have been slower than in neighboring countries. Achievement of UHC implies access to quality health services when needed for the entire population without facing undue financial hardship in the process: improvements in both *service coverage* and *financial coverage*. Armenia fares poorly with regard to the latter. Recent reforms have resulted in a system where general government revenue-financed public spending for health provides extensive coverage through a BBP of essential health services. However, its public financing for health is among the lowest in the region. Co-payments for services covered under BBP as well as lack of coverage for expensive aspects of health care, in particular hospital care and outpatient pharmaceuticals, have resulted in OOP spending by households – a generally inefficient and inequitable modality -- being the predominant source of financing for health in the country. High levels of OOP spending increase the risk of households impoverishment when faced with significant health spending, and reduce the potential redistributive capacity of the health financing system.

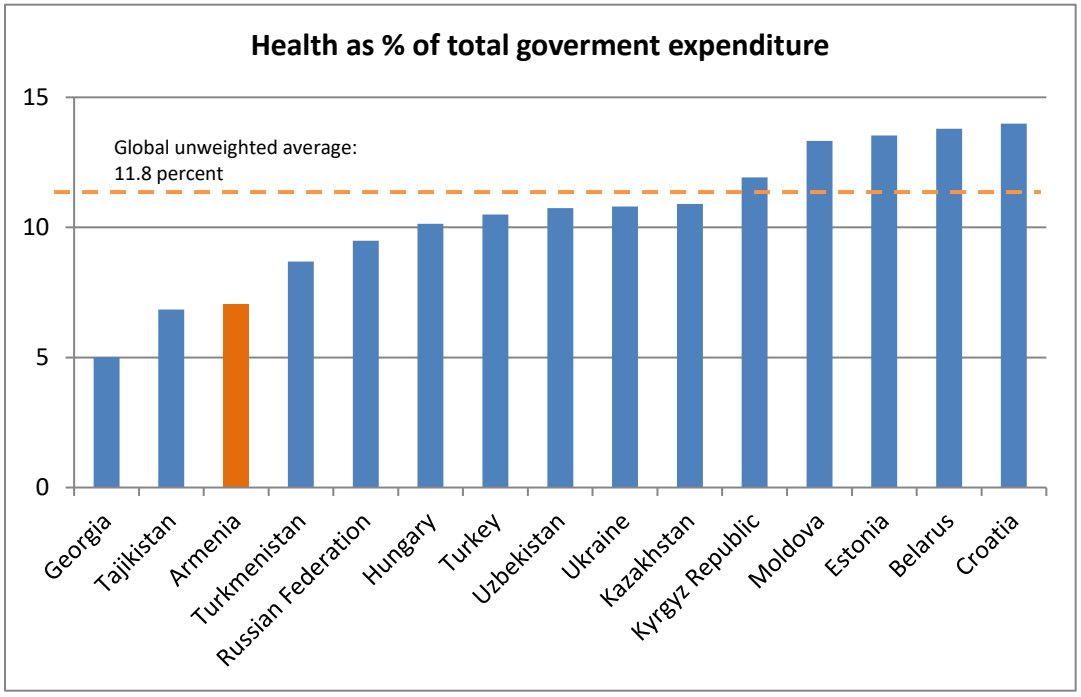
3. In addition, the country faces significant demographic challenges that will impact health spending patterns. While the total population is projected to decrease slightly by 2030, the share aged 65+ is set to rise from 10 to almost 20 percent of the total population by 2030. This demographic shift and other associated factors suggest that Armenia will have to reduce its reliance on OOP health spending and increase public health financing in order to sustain and improve population health outcomes and achieve UHC.

4. This paper examines the Armenian health system, with a focus on the BBP program. It takes stock of implemented reforms and analyzes the pending agenda. The paper is organized as follows. Section 2 provides a general overview of Armenia's health system, focusing on financing and health service delivery. Section 3 describes the BBP program including its institutional architecture, beneficiary targeting, BBP services and fund management, and related information dissemination. Section 4 discusses the sustainability of the BBP program amidst economic, epidemiologic, and demographic challenges. The last section focuses on the pending agenda related to targeting, integrated care, and coverage of the non-vulnerable population.

2. Overview of Armenia's Health System

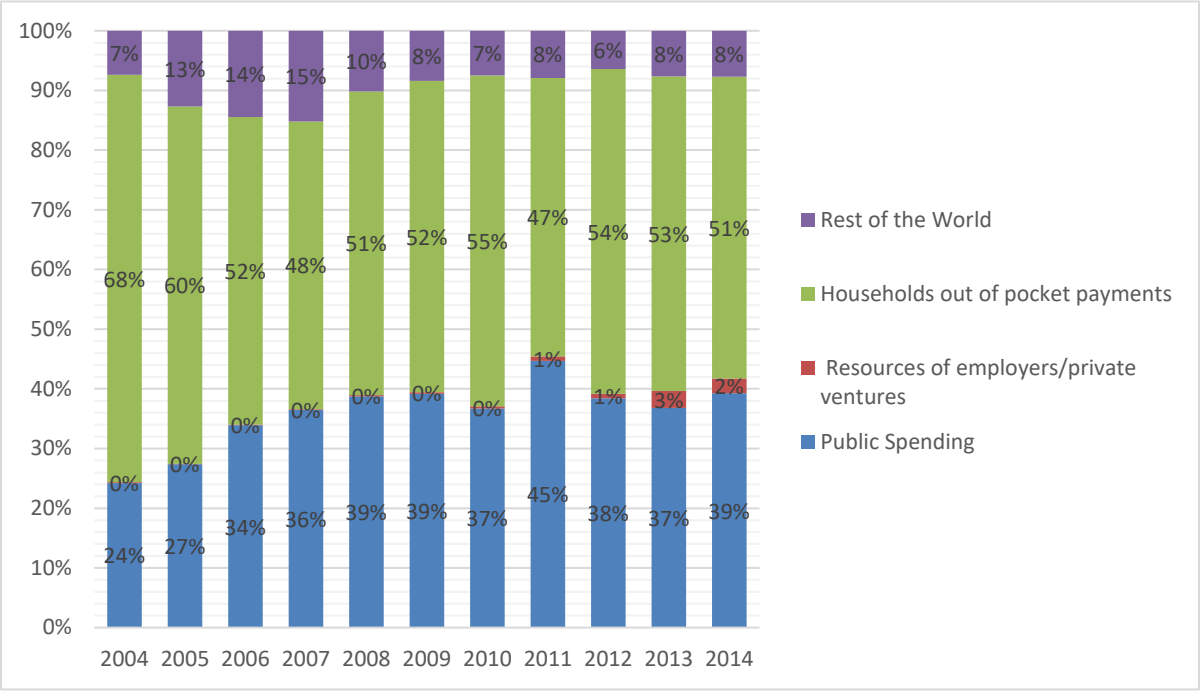
5. Total health expenditure per capita in Armenia was US$162 in 2014, approximately 4.5 percent of Gross Domestic Product (GDP). Health's share of government expenditure was about 7 percent in 2014, lower than the global average (Figure 1). In 2014, 39 percent of total health expenditure was sourced from public spending, 8 percent from international loans and grants and the Armenian diaspora and 51 percent from household OOP. Resources from employers in the form of voluntary health insurance accounted for only 2 percent of total health expenditure (see Figure 2).

Figure 1. Health's Share of Government Expenditures, Selected Countries, 2014



Source: World Health Organization (WHO) Global Health Expenditure Database 2016.

Figure 2. Armenia's Health Financing Sources, 2004-2014

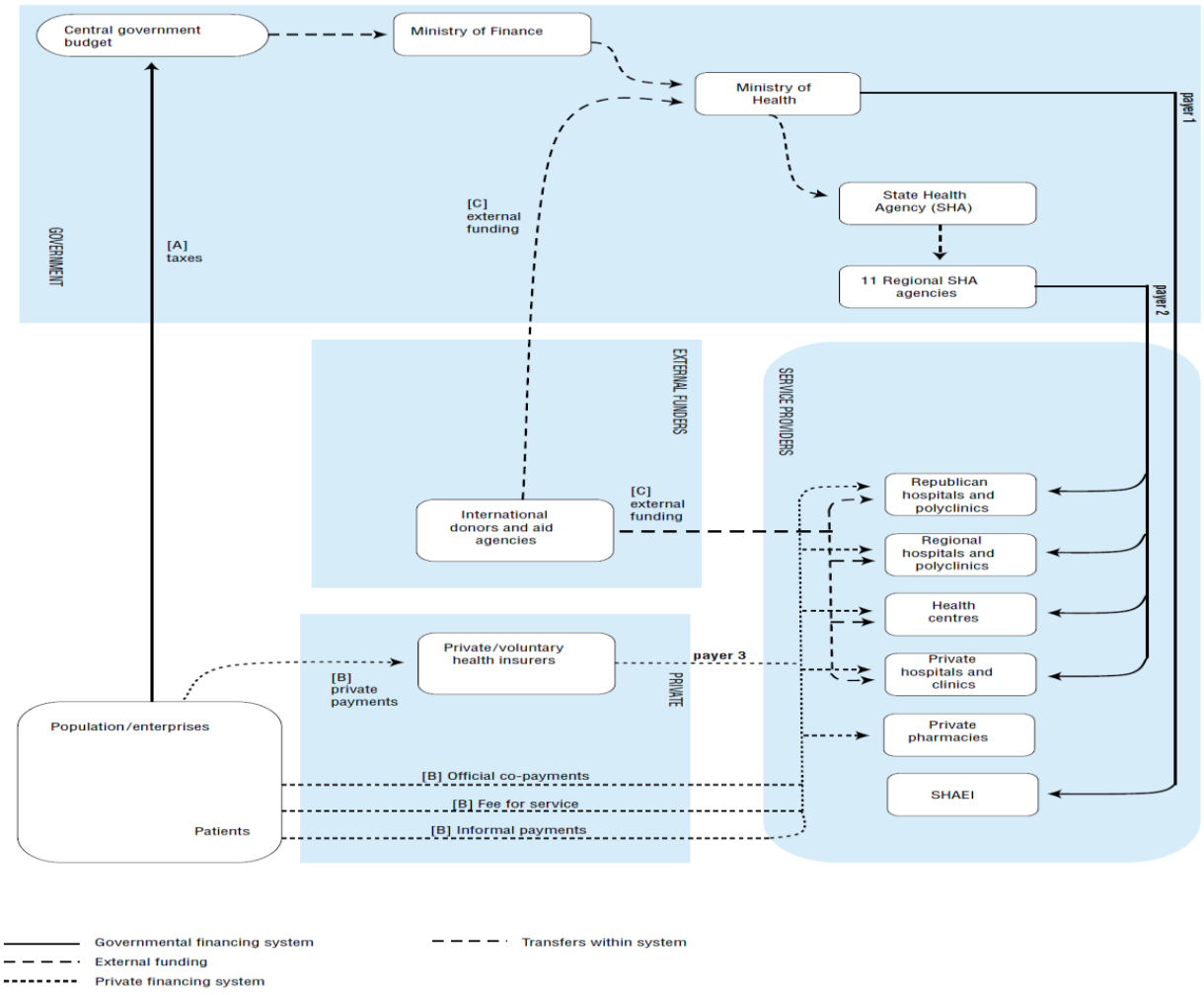


Source: Armenia National Health Accounts, various years.

6. OOP household spending remains the largest source of health financing in Armenia. While the proportion has decreased from a peak of 77 percent in 2000, at 51 percent it remains significantly higher than for countries within a similar socioeconomic context. Further reductions are unlikely unless there is a significant increase in public funding to cover essential health services or/and a reduction in treatment costs through efficiency gains in payment mechanisms.

7. Figure 3 illustrates the financing flows in Armenia's health system. Government funds from general taxation are transferred to various programs, which are managed by the State Hygiene and Anti-Epidemic Inspectorate (SHAIE), State Health Agency (SHA), and other Ministry of Health (MOH) subordinates. Budgets are set with the Ministry of Finance (MOF) during the budget cycle, creating the basis for the annually prepared Medium-Term Expenditure Framework (MTEF). Nearly all of the publicly sourced funds come from the central government, with barely 0.1 percent deriving from local government budgetary contributions in 2012.

Figure 3. Flow of Funds

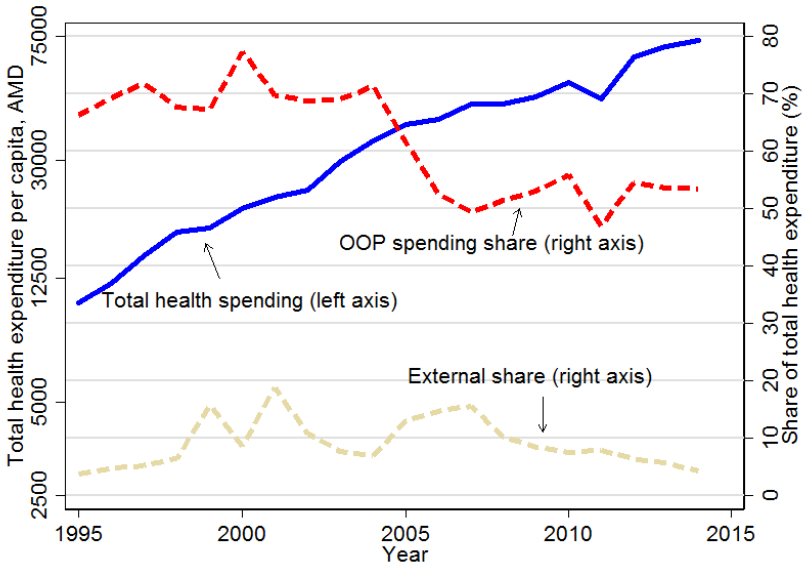


Source: WHO, Armenia: Health in Transition, 2011.

8. Non-poor patients pay considerably more OOP for health services compared to the poor and extremely poor patients (according to the Integrated Living Conditions Survey (ILCS) 2014 on average they paid Armenian Dram (AMD) 3548, 1320 and 562, respectively). The differences partly reflect the financial protection for the poor and vulnerable provided by the BBP (also called state certificate programs). This will be discussed in detail in the next section.

9. Since the mid-1990s total health spending rose rapidly while external financing declined, widening the financing gap that has largely been filled through OOP payments, currently accounting for approximately 50 percent of total health spending. OOP payments are made up of formal co-payments for services under the BBP, direct payments for services not covered by the BBP (most notably hospital care for non-vulnerable and outpatient pharmaceuticals for all population) and informal payments.

Figure 4. Health Financing Transition in Armenia, 1995-2014



Source: World Development Indicators database

10. Armenia's public health system focuses on the control of communicable diseases. SHAEI is responsible for disease notification and surveillance as well as the coordination of prevention activities, health education, prevention of population safety hazards, etc. Starting in 2012, the health sector expanded its focus to include non-communicable diseases.

Table 1. Inpatient and Outpatient Utilization, 2014

Consumption Decile	% which utilized PHC facilities in past month	% which went to hospitals for outpatient care in the past year	% which were admitted to a hospital for inpatient care at least once in the past year
Poorest 1	4.1	4.1	3.7
2	6.6	4.6	3.6
3	5.2	4.5	4.0
4	5.7	5.2	3.5
5	8.0	6.4	5.2
6	8.1	7.4	5.1
7	8.9	5.9	3.8
8	9.8	6.7	4.4
9	11.1	8.3	5.2
Richest 10	13.6	11.6	6.8
Total	8.1	6.5	4.5

Source of raw data: ILCS, 2014.

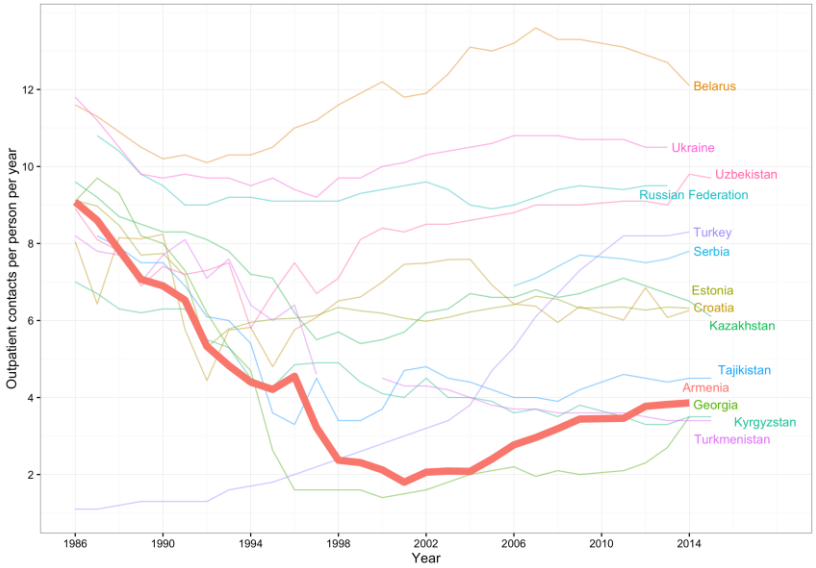
11. Armenia has made significant achievements in re-designing its health system since the late 1990s. In order to improve efficiency, access and quality of health care service provision the country undertook significant institutional and structural reforms. The reforms include: (a) strengthening PHC provision; (b) downsizing excess hospital capacity; (c) changing provider payment mechanisms and introducing a purchaser-provider split; and, (d) improving targeting.

12. Efficiency improvements have been a corner stone of Armenia's health reforms during the past decade. Significant efficiency and productivity gains were achieved through PHC strengthening and the optimization of excess hospital capacity. Starting in the late 1990s, the government steadily incorporated family medicine into the primary health care system. Currently, all medical personnel at the PHC level have been trained in family medicine, and most rural PHC clinics have been upgraded and provided with modern medical equipment and supplies. As a result, visits to primary health care facilities nearly doubled between 2001 and 2009, increasing from 1.8 to 3.4 per capita. The increase for the poorest quintile where access to PHC facilities increased the most was from 3.9 in 2010 to 5.3 in 2014. The majority of preventive services, including immunizations, are provided under PHC services. Before 2006, PHC level physician services were free for the whole population but the non-vulnerable population had to pay for specialist's consultations, laboratory tests, and diagnostic services (i.e. x-ray, ultrasound). In 2006, the government announced that with the exception of expensive diagnostic services, all PHC services were to be free of charge for the whole population. In parallel, the MOF increased by 2.7 the funds allocated to the PHC program.[1]

13. However, utilization, measured through outpatient contacts per person per year, is quite low compared to comparator countries. Figure 5 reveals that Armenia's outpatient contact of 3.8 per 1,000 is lower than most countries, with the latest figures showing that it is only higher than Georgia, Kyrgyz Republic and Turkmenistan. Despite the government's promotion of family medicine, which has achieved a GP registration of around 98 percent the population continues to prefer specialist care.

[1]This increase was based on estimated OOP payments to PHC providers.

Figure 5. Outpatient contacts for Armenia and Comparison Countries

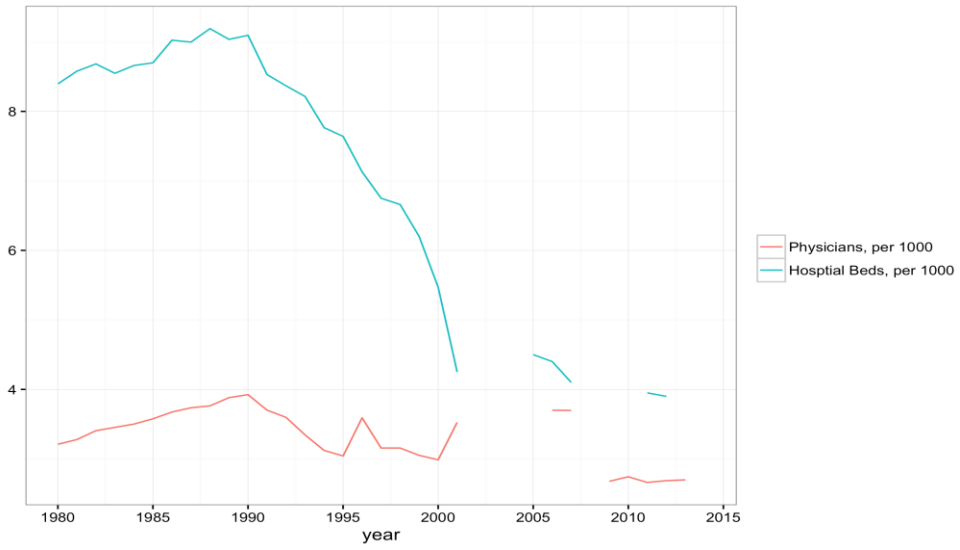


Source: WHO Health for All 2016

14. Hospitals reduced existing excess capacity through hospital mergers, downsizing of bed capacity and elimination of redundant spaces and service. Between 2005 and 2011, Armenia achieved a 40 percent reduction in public hospitals, a process that is still ongoing. To support hospital capacity optimization, the government invested in hospital modernization and on training clinical staff on clinical case-management. In addition, hospitals have been granted greater decision-making autonomy, in particular with respect to expenditures and staffing decisions.

15. Hospital care continues to dominate the national health system, absorbing 42.3 percent of the annual budget in 2012, compared with 37.2 percent for primary care. While the primary care budget appears high when compared to other countries in the region, the Armenian figure includes spending on specialists based in multi-profile polyclinics. Hospital capacity, measured in terms of the number of beds and facilities in the country, has fallen considerably since independence, from 9.1 hospital beds available (per 1,000 people) in 1990 to 3.9 in 2012 (see Figure 6). This is low compared to other countries of the former Soviet Union. The reduction in available beds was supported through the reform of purchasing mechanisms oriented toward outputs instead of inputs. Bed occupancy rates have improved to 62.2 percent in 2013 from a low of 28.21 percent in 2000 (WHO Health for All Database). The average length of stay in acute care hospitals, 6.5 days in 2013, has also declined significantly from 14 days in 1995. Despite having attained the minimum WHO norm for aggregate numbers of workers, the key health human resource issue is the unequal health personnel distribution across regions (*marzes)*.

Figure 6. Hospital Beds and Physicians per 1000, 1980-2014



Source: World Development Indicators Database

16. The introduction of a purchaser-provider split significantly changed the financing of Armenia's health care system. The State Health Agency, established in 1998, is responsible for contracting health care providers and paying them based on the volume of work performed. Provider payment mechanisms were reformed to introduce capitation plus performance incentives (in 2010) for general practitioners and family doctors, while hospital financing has been transformed from inefficient input-based line-item budgeting to an output-based combination of global budget, fee-for-service, and case-based payments for hospitals.

17. The provider payment reforms were accompanied with the establishment of a Health Financing Management Information System (HFMIS) labeled MIDAS. MIDAS allows for data collection on population enrollment and patient encounter and registers the chronically ill patients. The e-Hospital system supports data collection on patient services delivered by hospitals. Both systems are technically, organizationally and institutionally well implemented, and virtually work in all health facilities. The systems generate a variety of predefined reports on performance indicators, registered cases, distribution of funds, expenses, etc., while also allowing for more flexible online reporting.

18. Following the post-independence public service decentralization, operation and ownership of most primary care services and hospitals was devolved to regional and local governments. Local governments can make health personnel employment decisions, while resource financial management and procurement are managed by the facilities upon agreement with local government authorities.

3. The Basic Benefit Package

19. Following the collapse of the Soviet Union, the government realized that it could not afford the old Semashko system, which guaranteed free primary, secondary and tertiary medical services to the entire population. The Semashko system resulted in the over-construction of facilities and over-hiring of staff since financial flows were related to norms rather than actual health system demand. In order to rationalize resource use, the government decided to earmark budgetary resources as a means of targeting the socially vulnerable population and the so-called socially important diseases. The budget funds PHC services and emergency services for all Armenian citizens, with co-payments (typically 50 percent of the cost) for some services and exemptions or reduced co-payments for the poor and vulnerable (see Table 1 for details).[2] In addition, inpatient services are provided for free (exceptions include high-tech health care services) for the poor, vulnerable and special categories.[3] This program is called the BBP.[4]

20. The BBP was instituted via the State Health Targeting Program (AL-139) that was enacted on 30 December 2000 and became effective January 16, 2001. Before the law was enacted, between 1997 and 2000, the government issued yearly decrees outlining the BBP's implementation rules. Initial mistrust in the system due to significant arrears to facilities (in 1999) caused by the absence of volume controls and an economic downturn was overcome following enactment of the law, which assured facility payments and improved the BBP program's legitimacy.

21. In the second half of 2000 global budgeting was implemented, which instituted the maximum amount of contract per facility. Starting in 2001, the government also started to implement program budgeting, while the BBP program became a protected budget item. In addition, in partnership with the World Bank, two working groups were created in 2000 in charge of optimizing facility plans, global budget rules and regulations, and centralizing the procurement of medicines.

22. The BBP is periodically reviewed, with the range of services and/or population groups covered being extended or reduced, depending on the level of funding available.

23. *Targeting.* There are 29 categories of individuals who qualify for BBP coverage, ranging from the disabled, children under 7, pregnant women, and anyone who qualifies for the Family

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[2] The co-payment schedule in Armenia is expressed as a flat fee rather than as a percent of the cost. The fee differs depending on treatment complication, geographic location and type of service. There are four fee steps for surgeries, for instance, depending on the level of complication. The co-payment for the first level of complication is 50,000 drams for marzes, 80,000 drams for Yerevan patients and 120,000 drams for specialized services (like abdominal-reconstruction surgery, regardless of geographic location of hospitals). For the highest-level complication, the co-payment is 2.5 times more. Regardless of complication, the amount that SHA reimburses to facilities is 107,900 drams and 217,900 drams (for specialized services like abdominal-reconstruction surgery). Hence, co-payment rates can range from 46% to 137%.

[3] Decree N 318-N dated March 4, 2004 defines the list of socially vulnerable and special groups of the population. These categories are occasionally revised, and are available in the State Orders. The latest version is available in http://moh.am/OrenqGorcox/MAR-1515.pdf.

[4] HiT 2013 section 3.3.1, and interview with officials in Armenia.

Benefit Program (FBP). Annex 2 includes the complete list of qualifying categories as well as the differences in coverage and co-payment schedules for various groups.

24. The FBP was introduced in 1999 as a social assistance program that provides unconditional cash transfers to the poor.[5] Households applying to receive FBP payments, must apply to the Regional Centers for Social Services, which rate them based on estimated income, social category, disability level, housing status, etc.[6] Households whose score exceed the qualifying cutoff (in 2014 lowered to 30 from 36 to expand coverage) are eligible to receive free inpatient care under the BBP.[7] [8]

25. BBP beneficiaries do not need to be specially registered or have an associated ID card since they should already have documents demonstrating their BBP affiliation provided by other ministries (for example, the disabled have a Certificate of Disability, and Family Benefit Program recipients have a document from the Regional Centers for Social Services). When beneficiaries receive a hospitalization referral or visit a PHC facility or hospital, they must present documents demonstrating their vulnerable status. There are no costs associated with this certification method for the beneficiaries, however there are cost implications for medical facilities since they have to copy patient registration forms and maintain the electronic registration system.[9]

26. *Purchasing services.* The MOH contracts all health facilities through the SHA, which is in charge of paying the facilities and monitoring their reports. SHA purchases BBP from almost all public and private providers in Armenia. The MOH approves the participation of the health facilities in the BBP following an annual application submission. Some providers, such as rural PHC facilities, do not need to submit applications and are automatically included. There are two sets of regulations guiding facilities: PHC providers are under a simple regulation scheme while hospitals are under a more complicated one. Two to three providers lost the right to participate in the BBP during the last few years due to fraud and poor service quality.

27. *Budgeting.* The BBP budget is based on a medium-term expenditure framework that stipulates the level of government health expenditures as percent of GDP.[10] The MTEF is used in the establishment of the state budget, which is approved by the Parliament. Program budgets, and in turn the benefit package, are established from the state budget. Delivery of the benefit package is monitored over the course of the year, with the monitoring reports used when preparing the following year MTEF.

28. Each year each health program is allocated a budget. Currently, the BBP includes 25 health programs that funnel money through the facilities; there are six outpatient programs, 18 inpatient

[5] FBP Evaluation, 2016 p.7. The name of the program has been changed to "Family living standards enhancement benefits" but is still commonly referred to as the FBP.
[6] FBP Evaluation 2016, p.7-8.
[7] Angel-Urdinola and Jain, 2006 Appendix, gives the FBP formula.
[8] Higher score signifies higher vulnerability.
[9] Estimated annual cost for facilities is about 30 million AMD.
[10] MTEF for 2014-2025 is in decree N442-N (03/27/14). MTEF figures are indicative and can be changed depending on economic conditions.

programs, and one for both.[11] Facilities draw down their funds from the health programs where annually a global budget is set for all facilities. For each program, the annual resources allocated are divided into equal monthly installments. If the facility provides services beyond the maximum amount estimated for the month, the excess utilization is subtracted from the following month's budget. Two or three times a year, the SHA rebalances the facilities global budget to reflect actual cases/services. Facilities that provided more services than calculated may receive additional resources depending on budget availability and subject to MOF and Prime Minister approval.

29. The budget is determined using the PHC registered population and cash flow projections (for inpatient services). Since PHC providers are paid through capitation, each patient must register to its PHC facility in order to receive the capitated rate. Facilities are required to report to the SHA actual services delivered, though the agency does not verify service delivery, except for those under the Performance Based Financing (PBF) project.[12]

30. A case-based payment system, introduced in 1999, is used to pay hospitals. Providers report individual cases to the SHA, which then annually audits a number of facilities. ICD (International Classification of Diseases) codes are used to record every case but SHA pays using locally developed codes (a grouping of related ICD codes). The value of different services is formulated by the SHA using: daily hospital costs, average length of stay for a particular service and the service complication coefficient.[13] Program budget items are paid to facilities through the treasury system.

31. BBP programs report their budget execution to the MOF. The MOH has an online portal, which includes program information utilization, facility budgets, etc. The data generated and collected through the portal is used to improve program performance; such as when in 2010 the Working Group used utilization data from the SHA database to determine that the packages with low volumes should be eliminated.

32. *Benefits.* The BBP is divided into two parts—the first part is available for the whole population while the second part is only for the poor, vulnerable, and special groups. BBP services for the whole population are mostly outpatient services that include primary care, maternity services, and sanitary epidemiological services. Ambulance services are provided free of charge for all. Selected outpatient pharmaceuticals are also provided through the BBP (see Table 2).

[11] Examples of the programs are: Under the Outpatient Program (a) General medical services, (b) Specialized services, (c) Dentistry; and, (d) Laboratory Tests. Under the Inpatient Program: (a) General Inpatient; (b) Specialized; and, (c) Mother and Child.

[12] PBF services serve as an incentive for PHC providers to provide priority programs such as screening (pap smear, glucose and hypertension tests), immunization, reproductive health, etc. There is a protocol to validate the PBF services done jointly by the SHA and World Bank project implementation unit.

[13] This payment method started through technical assistance (TA) of a World Bank project. There is an ongoing United States Agency for International Development (USAID) study to apply the Diagnosis Related Group (DRG) to child health services but this has not yet been implemented.

Table 2. Outpatient BBP Coverage

Outpatient Care	Poor/Vulnerable/special group	Non-Vulnerable Group
1. All PHC services: doctors, gynecologists, neurospecialists and general laboratory test (blood tests, urine tests, ultrasounds, x-rays)	Most PHC services are free. PHC doctor referral required for neurospecialist consultations and laboratory tests.	Most PHC services are free. PHC doctor referral required for neurospecialist consultations and laboratory tests.
2. High tech and expensive diagnostic services, i.e. MRI, CAT scan, etc.	No copayment required, except for «Social package members». A PHC facility referral is needed.	Full out of pocket payment required. Patients can submit an appeal to the head of the facility, local government head, or Minister of Health. If the appeal is approved, the patient can be treated without charge. Appeals are limited to 5-10% of the annual facility budget.
3. Pharmacy		
a) Pharmaceutical goods procurement	Budget for this is from the PHC services program under General Medical Services group. Drugs must be part of the approved essential drug list. PHC doctor referral is needed. Copayment for some vulnerable groups: (1) No copay for disability 1-2, disabled children under 18, WWII veterans, orphans under 18, children under 18 with disabled parents, children under 18 with families with 4 or more children, military and family, all children under 7. (2) 50% copay for disability-3 population group, Chernobyl, pensioners that are alone and unemployed, pensioners that are alone and unemployed with children under 18 years in the family, children with single mothers (3) 70% copay for pensioners who are not working *note that FBP beneficiaries are not included in the discount. (see Annex 2 for complete pharmaceutical copayment schedule)	Full out of pocket payment required. PHC doctor referral is not needed.
b) Centralized distribution of pharmaceutical products by diseases;		

Outpatient Care	Poor/Vulnerable/special group	Non-Vulnerable Group
- Diabetes	Fully covered by the Government. PHC doctor referral needed.	Approximately 68% covered by the Government. PHC doctor referral needed.
- Tuberculosis	Fully covered by the Government. PHC doctor referral needed.	Fully covered by the Government. PHC doctor referral needed.
- Mental health	Fully covered by the Government. PHC doctor referral needed.	Fully covered by the Government. PHC doctor referral needed.
- Cancer and Hematological (malignant form)	Fully covered by the Government. Mainly morphine. PHC doctor referral is needed.	Fully covered by the Government. Mainly morphine. PHC doctor referral is needed.
- Epilepsy	Fully covered by the Government. PHC doctor referral from is needed.	Fully covered by the Government. PHC doctor referral is needed.
- Hemodialysis	Fully covered by the Government. PHC doctor referral is needed.	Fully covered by the Government. PHC doctor referral is needed.
- Chronic Diseases	Fully covered by the Government. PHC doctor referral is needed.	Fully covered by the Government. PHC doctor referral is needed.
4. Child immunization, screenings for cancer, diabetes, reproductive health, hypertension, oral hygiene and newborns	No copayment. Does not require PHC facility referral.	No copayment. Does not require PHC facility referral.
5. Dental services	No copayment. Does not require PHC facility referral.	Full out of pocket payment.
6. Ambulance care	Fully covered by the Government.	Fully covered by the Government.[14]

33. Inpatient treatment for around 200 socially significant conditions is provided with no co-payment for selected poor/vulnerable/special groups (see Annex 2 for inpatient eligibility) while the non-vulnerable population must pay a co-payment based on an approved MOH pricelist. There is no copayment required for ten MOH labeled priority diseases/conditions, such as tuberculosis, infections, Spontaneous Vaginal Delivery (SVD), mental health, malignant cancer, hematology, chemotherapy, hemodialysis, antenatal care, delivery services, and reproductive health, for the poor/vulnerable/special groups, while varying percentages are paid by non-vulnerable groups. Diseases included in "High Tech and Expensive Services" require full OOP payment from all, however, patients can submit an appeal to the MOH to receive treatment without OOP expenses.

[14] In 2011, a Chinese grant provided emergency ambulances. Previously, ambulances were not very good and often needed patient contributions to pay for gasoline.

Appeals are limited to 10 percent of the annual facility budget. Finally, conditions/diseases that are not included in the list above (i.e. liver disease, injuries) require PHC provider referral for the poor/vulnerable/special groups while the non-vulnerable groups must pay full OOP, unless granted an appeal by the facility head, local government head, or MOH.

Table 3. BBP Inpatient Care Coverage

INPATIENT CARE	**Poor/Vulnerable/special group**	**Non-Vulnerable Group**
1. Patients with the diseases approved by the MoH and classified under diseases and health statuses that need emergency care.	No copayment. PHC facility referral not required.	Copayment required. MOH approved a pricelist (Yerevan vs Marzes) that includes the payment share. PHC facility referral not required.
2. Patients with MOH approved diseases		
- Tuberculosis	No copayment. PHC facility referral from is required.	No copayment. PHC facility referral is required.
- Infections	No copayment. PHC facility referral is required.	No copayment. PHC facility referral is required.
- Spontaneous Vaginal Delivery (SVD)	No copayment. PHC facility referral is required.	Copayment required. MOH approved a pricelist (Yerevan vs Marzes) that includes the payment share. PHC facility referral is required.
- Mental Health and Narcology	No copayment. PHC facility referral not required.	No copayment. PHC facility referral not required.
- Cancer (Malignant)	No copayment. PHC facility referral required.	Copayment required. MOH approved a pricelist (Yerevan vs Marzes) that includes the payment share.
- Hematology (Malignant)	No copayment. PHC facility referral required.	Copayment required. MOH approved a pricelist (Yerevan vs Marzes) that includes the payment share.
- Chemotherapy	No copayment, but there is a spending limit on medicine.	50% copayment. MOH approved a pricelist (Yerevan vs Marzes) that includes the payment share.
- Hemodialysis	No copayment. PHC facility referral required.	No copayment. PHC facility referral required.

INPATIENT CARE	Poor/Vulnerable/special group	Non-Vulnerable Group
- Antenatal care	No copayment. PHC facility referral required.	No copayment. PHC facility referral required.
- Delivery services	No copayment. PHC facility referral required.	No copayment. PHC facility referral required.
- Reproductive Health	No copayment. PHC facility referral required.	Full out of pocket payment.
3. Conditions for which "high tech and expensive services" are required (i.e. cardiovascular interventions, cosmetic surgery, organ transplant, etc.)	Full out of pocket payment, with some exceptions. Patient can submit an appeal to the Minister of Health. If approved, patient can be treated without charges. Appeals are limited to 10% of annual facility budget.	Full out of pocket payment. Patient can submit an appeal to the Minister of Health. If approved, patient can be treated without charges. Appeals are limited to 10% of annual facility budget.
4. Conditions not included in any of the above (i.e. liver disease, sprains, diabetes complications requiring hospitalization, etc.).	PHC facility referral required. Once referred patients are placed on the hospital wait list.	Full out of pocket payment. Patient can submit appeal to facility head, local government head, or Minister of Health. If approved, patient can be treated without charges. Appeals are limited to 5-10% of annual facility budget.

34. *Referral system.* Though all BBP hospitalizations need a PHC provider referral, this requirement is not strongly enforced. For example, if a poor/vulnerable patient does not obtain a PHC provider referral prior to a hospitalization, they can retroactively obtain the referral so that the hospitalization can be considered free under the BBP.

35. *Information to consumers.* Information regarding beneficiary entitlements is available in the MOH and SHA websites. Entitlement and price lists information is also found within the facilities. There is an MOH hotline for complaints, where agents register complaints, which must be resolved within five days unless a hospital inspection is needed. If the complaint is serious, there is a mediation with the hospital, and if not resolved, the Ministry is involved, extending the process to a maximum of 3 weeks.

36. *Information Environment.* Given that PHC services are paid for through capitation, residents must register with a PHC provider in order to receive free services. According to the SHA database, approximately 98 percent of the population is registered. In order to avoid duplicates and inconsistencies, the system matches all surnames with birth dates. The system could be further improved if the data was cross-checked with the State Population Registry. Currently, a manual database merger is conducted once or twice a year between the SHA and the Ministry of Social affairs. As previously mentioned, the registration of vulnerable/special people is outside the purview of the MOH and SHA.

37. *BBP Coverage*. The BBP covers primary health care services for 100 percent of the population. According to administrative data, 38 percent of the population is covered for inpatient services.[15]

Table 4. Data on BBP Coverage

Type of Coverage	Description	Coverage (millions)	Coverage (% of total population)
Contributory compulsory health insurance schemes	There is no mandatory health insurance in Armenia.	0	0
Contributory voluntary health insurance schemes	Voluntary private health insurance for corporations and individuals.	0.032[16]	1.1%
Non-contributory health insurance schemes	Basic Benefit Package (inpatient coverage) for the poor and vulnerable groups; Special Package for civil servants and military personnel.	1.15	~38%
Non-contributory National Health Service (NHS) provision for enrolled participants (does not include NHS scheme coverage for non-insured populations)	BBP primary health care services	3.01	100%--the entire population is covered for PHC services but only 98% is registered.

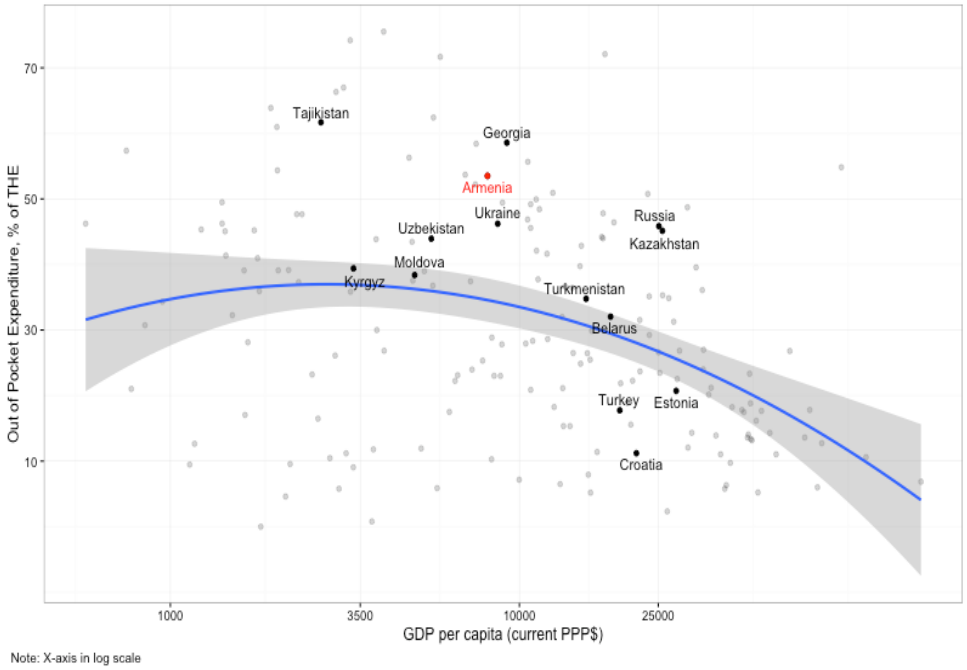
38. *BBP Design*. During the initial years following the establishment of the SHA, there was a working group assigned to support the BBP design, evaluate its cost-effectiveness, burden of disease, and other criteria. However, over time the BBP has been increasingly influenced by budget availability and political considerations. Currently there is no area of the health system designed to examine and update the BBP. Proposed changes must be agreed upon by the MOH and the MOF, incorporated in the MTEF, expressed in the annual government budget message and finally sent to the national assembly for budget appropriations.[17] The most recent health program, Heart Surgery Program, was introduced in 2015 following research revealing that heart surgery is among the leading cause of financial hardship among patients.

[15] ILCS 2014 data estimates that BBP national coverage (inpatient eligibility) is 27 percent, however this figure likely underestimates coverage given that the survey does not provide estimates for all BBP categories. Administrative data provides an estimate of 38 percent. The breakdown is found in Annex 2.
[16] The data is for 2012, https://armenpress.am/arm/news/736135/
[17] http://minfin.am/index.php?cat=72&lang=1

4. Sustainability of BBP amidst Economic, Epidemiologic, and Demographic Challenges

39. Despite improvements and successes, the health system is not bereft of problems. The low level of public funding, high out of pocket costs, and poor financial protection in Armenia are more typical of lower-income countries. At 1.6 percent of GDP, public health financing is among the lowest in the world, even lower than the average for low-income countries. Lack of full service payment for BBP beneficiaries, poor targeting, and low BBP reimbursement fees leads to high levels of informal payments for those in exempt categories, as well as lack of coverage for expensive health care aspects such as outpatient pharmaceuticals. This has resulted in OOP spending by households – a generally inefficient and inequitable financing modality -- being the predominant source of financing for health in the country: accounting for 53 percent of total health expenditures (THE), well above the recommended WHO level of 20 percent (Figure 7). In terms of comparator countries, only Tajikistan and Georgia have a higher OOP spending share. Despite PHC services being supposedly free, around 11 percent of the population, 32 percent from the poorest decile and 4.2 percent from the richest decile (ILCS, 2014, see Annex 1) foregoes primary health because they cannot afford it. Consumer satisfaction regarding financial access to healthcare and drugs is dismal at 9.5 percent and 8.5 percent, respectively. Finally, poor targeting results in the lack of full BBP coverage for many poor, exposing them to substantial impoverishment risks and posing as an obstacle to financial risk protection for the Armenian population.

Figure 7. OOP as % of Total Health Expenditure vs. Income (2014)



Source: WHO Global Health Expenditure Database, 2016

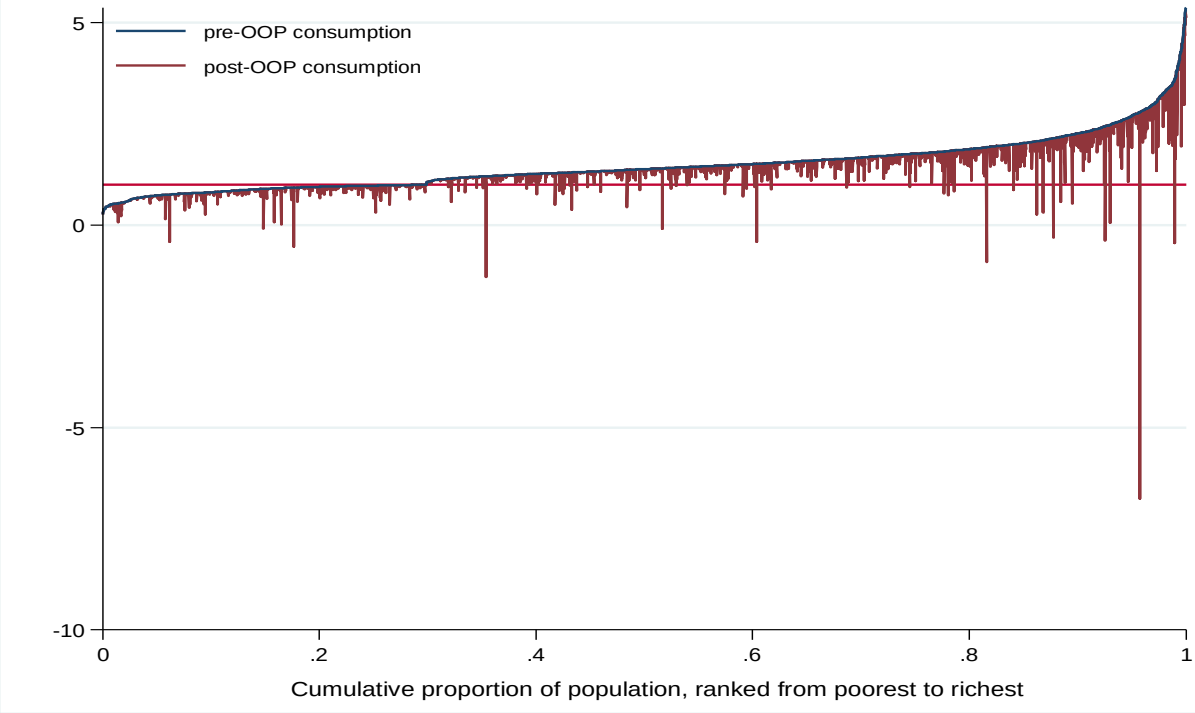
40. High OOP spending is associated with an increased likelihood of falling into poverty. The incidence of catastrophic health spending in Armenia is high, with 4.9 percent of the population spending more than 25 percent of household expenditures on health. Estimates from Armenia's 2013 ILCS revealed that 2.5 percent of Armenian households were poor as a result of high health OOP; higher than for similar countries in the region (see Table 5).

Table 5. Catastrophic and Impoverishing Expenditures

	% of the population spending more than 25% of household expenditures on health	% of the population that became impoverished due to OOP	Survey year
Armenia	4.9%	2.5%	2013
Belarus	0.2%	0.0%	2011
Estonia	2.7%	0.2%	2007
Georgia	9.0%	5.3%	2013
Croatia	0.3%	0.0%	2010
Kazakhstan	0.1%	0.0%	2013
Kyrgyz	0.9%	1.0%	2010
Russia	8.3%	0.8%	2013
Tajikistan	0.8%	2.2%	2009
Turkey	0.3%	0.2%	2012
Ukraine	1.1%	0.0%	2013

41. High household expenditures on health can push households into poverty. Figure 8 shows households ranked by per capita consumption expenditure (x-axis) and per capita health expenditure (y-axis). The spikes reveal differences between households before and after health spending. The figure depicts relatively weak financial risk protection where even households in the richest quintile fell below subsistence expenditure levels (poverty line) after spending on health.

Figure 8. Per Capita Expenditure, Gross and Net of Health Spending



Source: Authors' calculation using ILCS

42. The two main causes for Armenia's high OOP are: (1) insufficient funds for BBP service provision, and (2) exorbitant pharmaceutical prices. Though BBP provider reimbursements are supposed to cover the "full" cost of health care provision, recent estimates reveal that they actually cover roughly half of the cost of most services.[18] Facilities finance BBP recipient services with other revenue sources, such as with out-of-pocket payments of the non-vulnerable population. In addition, patients often have to make unofficial payments to health staff in order to receive certain services.

43. Pharmaceuticals are a significant household expenditure in Armenia amounting for 74 percent of total household OOP health expenditure in 2014. The MOH has a Centralized Drug Procurement Program that provides drugs free of charge for certain diseases such as TB, HIV/AIDS, diabetes, cancer, and some psychiatric conditions. Very few pharmaceuticals are provided through the BBP. Though the BBP's Special Drug Program is supposed to cover essential drugs,[19] it has a limited budget and beneficiaries are poorly targeted (FBP beneficiaries are not entitled to this benefit (see Annex 2)). While there are nearly 30 registered wholesalers, 3 control three-fourths of the market. Furthermore, no regulations for opening pharmacies, has resulted in an excess of pharmacies, around 1900 in the country, of which half are operating in Yerevan. Prices in private pharmacies (which predominate) are high by international standards and

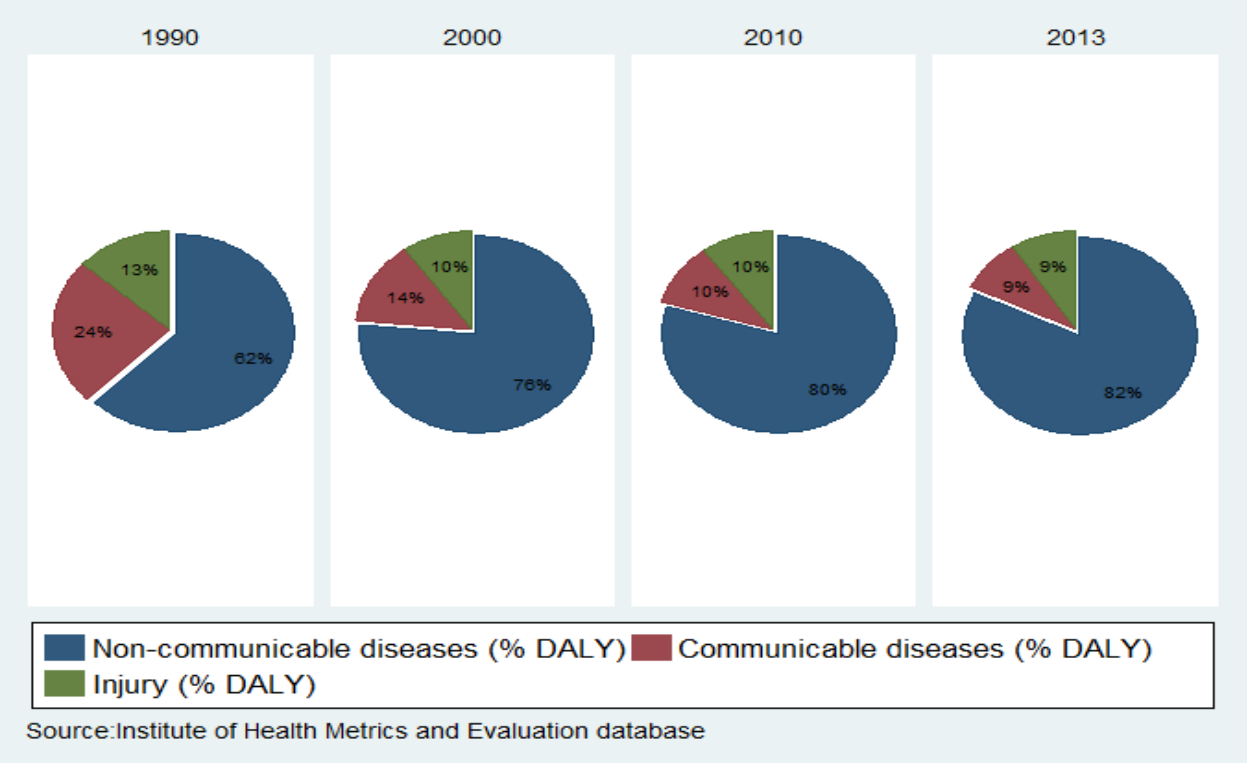
[18] Given that reimbursement is the same for public and private providers, anecdotal evidence reveals that private providers limit the number of poor and vulnerable BBP beneficiaries that they treat to around 15-20 percent of their total cases.

[19] The essential drug list based on WHO recommendations was last updated and approved in 2013.

unaffordable for most households. There are no legal or regulatory provisions regarding medicine prices and the Armenian government does not run an active national medicines price-monitoring system for wholesale or retail prices. Pharmaceutical products are also subject to a 20 percent value added tax.

44. Despite structural and organizational reforms efforts, Armenia's health care system is still struggling to catch up with morbidity and mortality epidemiological shifts. Like many low- and lower middle-income countries, Armenia faces the dual challenge of the unfinished Millennium Development Goals (MDG) agenda and a record increase in Non-communicable Diseases (NCDs). The greatest burden of disease in Armenia, as in most European countries, comes from NCDs, a group of conditions that include cardiovascular disease, cancer, mental health problems, diabetes mellitus, chronic respiratory disease and musculoskeletal conditions (Figure 9). Based on data from the National Institute of Health (NIH) Statistical Yearbook, around 50 percent of all deaths are due to cardiovascular diseases and 74 percent are due to cerebral vascular diseases, neoplasms, and diabetes mellitus combined.

Figure 9. Armenia's Growing NCD Burden

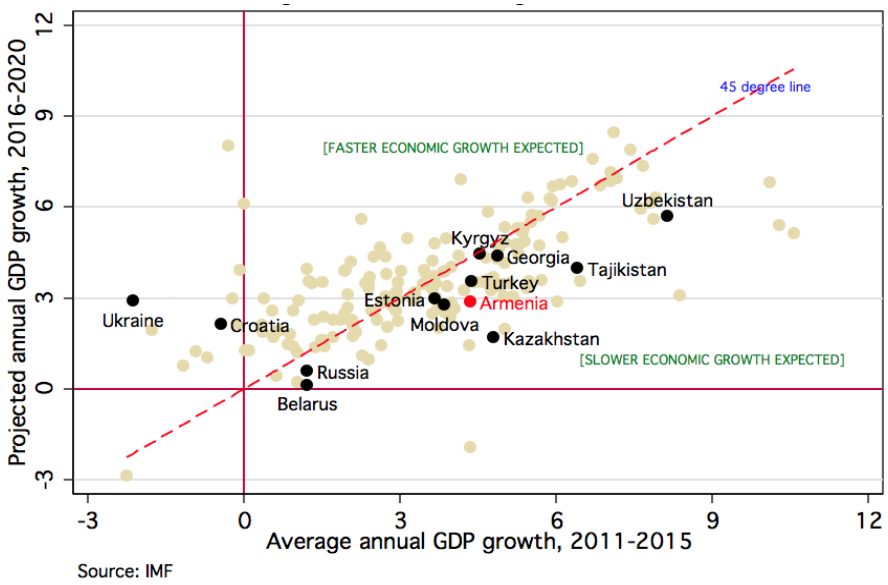


Source:Institute of Health Metrics and Evaluation database

45. Armenia will need to increase public health spending to manage the needs of an aging population, increasing NCD burden, and the pre-existing high level of OOP health care expenditure. Recent actuarial estimates developed for Armenia, project total health care costs will increase from 203 billion drams in 2016 to 280 billion drams in 2021, a 38 percent nominal increase. Moderate to low annual GDP growth (projected below 4 percent until 2021, slightly lower than recent historical trends) will not generate significant additional public revenue to meet

Armenia's growing budgetary needs for competing health, pension, energy, infrastructure, and tourism priorities (Figure 10).

Figure 10. GDP in Armenia is Projected to Fall



46. Due to the tight future fiscal space, Armenia will likely need to implement a mandatory health insurance scheme to reduce out of pocket costs. Additional revenue will have to come from the rationalization of Armenia's numerous BBPs and eligibility categories as well as efficiency gains via modern and strategic purchasing/provider payment systems, targeting revisions, care integration, pharmaceutical reforms, etc.

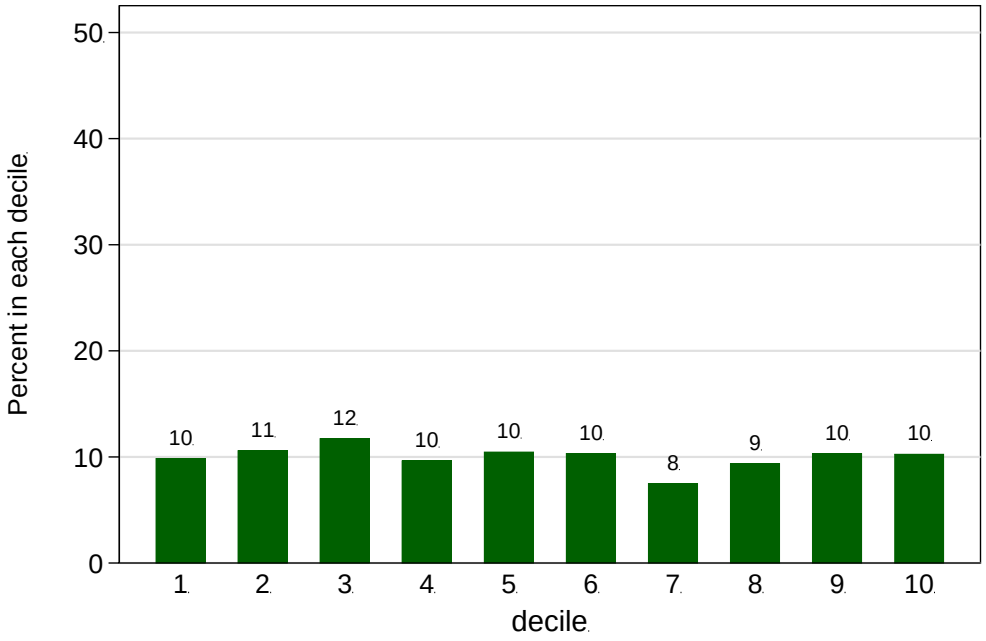
5. Pending Agenda

Revisions in Targeting

47. As previously noted, the BBP and state certificate programs are providing a level of financial protection for the poor. Even small improvements in targeting have led to substantial gains. Given that approximately 30 percent of Armenia's 3 million inhabitants live below the poverty line, a one percentage point increase in coverage of the poor and an equivalent decrease in coverage of the non-poor results in an additional 9,000 poor people becoming eligible and the same number of non-poor becoming ineligible.

48. For instance, individuals who qualify for BBP coverage include all those with a level 2 or 3 disability.[20] Figure 11 reveals that these categories are fairly evenly distributed by consumption decile. BBP coverage could be more progressive applying a better cutoff score and thereby limiting higher income beneficiaries. A more progressive ranking could also contribute to determine the scope of BBP coverage or the level of copayment. For example, individuals with lower scores could have lower copayments or be exempt from copayments for more services than those with higher scores. These are revenue neutral policies that would not incur significant administrative costs given that there already is an FBP scoring mechanism in place.

Figure 11. Distribution of Disabled Categories 2 and 3



Source: ILCS 2014 and World Bank calculations

Integration of Care

49. The number of existing health facilities in Armenia exceed the country's actual needs. Table 6 compares Armenia's hospital system efficiency within the country and with countries at similar levels of development using a graphical method called Pabón Lasso (Asbu, et al., 2012). The method involves determining 4 regions, bounded by selected comparison values of bed turnover rates (BTR) and bed occupancy rates (BOR).

[20] The Government of Armenia has a methodology for assigning disability levels. See Government Decision No.750-N of 13 June 2003: "On Approval of the Classifiers and Criteria for Assigning Disability Groups during Medico-Social Expertise." A reference to this legislation is available at http://www.unescapsdd.org/files/documents/DPC_Armenia.doc. Disability Level 1 is the most severe disability level, and 3 is the least severe.

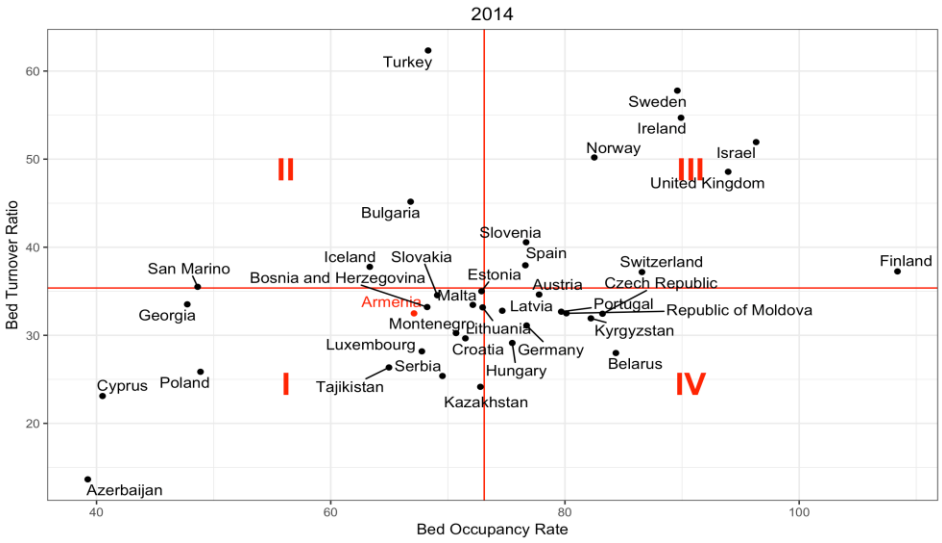
Table 6. Outline of Pabón Lasso Diagram

	Occupancy Rate	
Turnover Rate	**Quadrant II (high BTR, low BOR)** *Excess bed capacity, unnecessary hospitalization, many patients admitted to hospitalization, predominance of normal deliveries*	**Quadrant III (high BTR, high BOR)** *Good performance, small proportion of unused beds*
	Quadrant I (low BTR, low BOR) *Excess bed supply, less need for hospitalization, low demand/utilization*	**Quadrant IV (low BTR, high BOR)** *Large proportion of severe cases, predominance of chronic cases*

Note: from (Asbu, et al., 2012)

50. Figure 12 compares European countries average BTR and BOR.[21] Armenia is positioned in quadrant "I", suggesting that the country's hospitals have an excess capacity of beds and low utilization.

Figure 12. Armenia Benchmarked against European Average in 2014



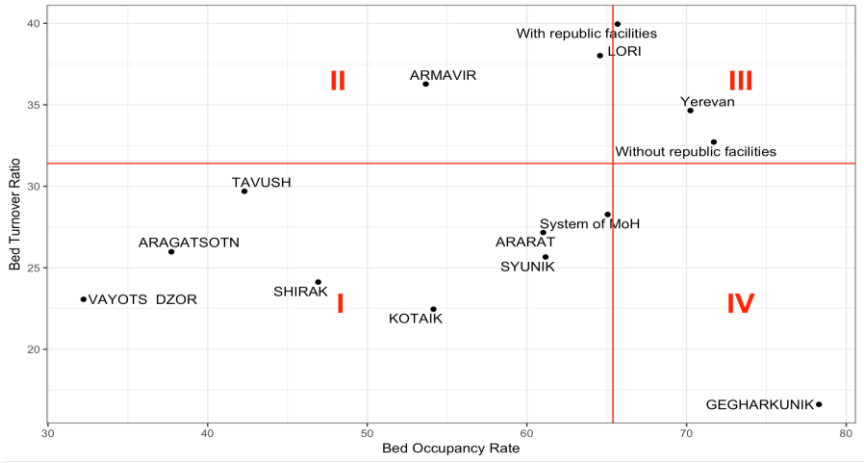
Source: WHO Health for Everyone 2016

51. Pabón Lasso can also be used within Armenia, using data from the marzes. According to Figure 13, Yerevan is the only marze with an efficient hospital sector, with most of the marzes located

[21] The comparator countries are the list of countries in the "Health for All" database: http://www.euro.who.int/en/data-and-evidence/databases/european-health-for-all-family-of-databases-hfa-db

in quadrant I, revealing an oversupply of beds and lack of demand. The MOH run facilities are also located in this quadrant.

Figure 13. Pabón Lasso for Armenian Marzes (2015)



Source: Armenia MoH

52. The data in the diagrams suggests that in the short-run, Armenia may obtain efficiency improvements without additional funding. Even though Armenia has achieved some efficiency gains through hospital optimization, service delivery is still not well integrated. Health facilities, their functions, medical standards and clinical practice guidelines should be re-assessed holistically and the optimization plan[22] revisited. The establishment of an integrated model for rural health services could likely achieve efficiency gains in rural areas.

SHA Governance

53. In order to further pool risks the government is discussing the possibility of administering the BBP and Civil Servants package through private health insurance companies. Private insurers would act as third party administrators to purchase services, while program beneficiaries would be randomly assigned to the insurers. The insurers would then pay claims using previously established rates to a set of providers chosen by the government.

54. Based on international experience, a single purchaser and payer system such as the SHA system pools risks more efficiently and equitably, and is structurally a more effective purchaser given its significant market share. In fact, there are few international examples of purchaser competition (Belgium, the Czech Republic, Germany, the Netherlands, the Russian Federation, the Slovak Republic, and Switzerland), and in those cases, private insurance is heavily regulated. For OECD countries with private insurance involvement, the scope of work is generally focused on

[22] The last optimization plan was in November 2016 (Decree N 1911). This defined the general master optimization plans for the regional health care delivery systems.

covering complementary and supplementary insurance, but not the mandatory basic benefit package.

55. International experience suggests that competition among purchasers is technically more complex and involves higher transaction and administrative costs than a single purchaser system (WHO, 2015).[23] Following international best practices the SHA is a single risk pool and purchaser. However, SHA does not have the mandate (e.g., authority, incentives, information and instruments) to be a strategic purchaser, which would improve the system's efficiency.

56. When the SHA was first established, it was envisioned as the first step towards implementation of a Mandatory Health Insurance Fund. Nevertheless, the SHA still lacks several important aspects of modern payment systems including: effective gatekeeper and referral systems, limited managed care use, lack of effective spending caps, and weak and limited regulation of private sector health spending.

57. The SHA is not a strategic purchaser and because it is under the auspices of the MOH, is granted limited autonomy to initiate major initiatives, such as budget program changes. Every program budget adjustment has to go through the MOH and the MOF. Furthermore, the funds it manages are too limited to pay incentives for finance development/improvements. BBP funding is a small share of revenue for private hospitals and the SHA has no fiscal space for negotiation with providers. Currently, the SHA does not have health or health system role or objectives – as it is narrowly focused on processing facility payments.

58. Armenia faces a challenging future fiscal situation. The country must increase health spending in order to achieve UHC, improve financial protection, and deal with future cost pressures from the demographic, epidemiological, and nutritional transitions, as well as from technology growth. Given moderate GDP growth and revenue projections, Armenia should pool funds for non-vulnerable groups (and/or their employers if they are employed) to pay premiums for a Mandatory Health Insurance Fund through an individual and/or employer mandate, and/or develop a special catastrophic BBP. In order to establish a Mandatory Health Insurance Fund, the SHA must become a strategic purchaser.

[23] WHO (2015). "Analysis of options for purchasing market structure under the NHS". Barcelona: World Health Organization Regional Office for Europe. http://www.moh.gov.cy/moh/moh.nsf/EEBCAF0CDB3C0C4FC22577BB0026941E/$file/2015_04%20WHO%20Analysis%20of%20Options%20for%20Purchasing%20Market%20Structure%20under%20NHS.pdf\

Annex 1: Additional Tables and Figures

Table A. Primary health care utilization rate by region

Year	2010	2011	2012	2013	2014
Yerevan	40.7%	38.5%	38.9%	32.3%	36.3%
Other urban	37.6%	35.1%	35.1%	31.2%	42.7%
Rural	35.3%	31.8%	26.2%	25.1%	34.4%
Total	37.9%	35.2%	32.7%	29.3%	37.6%

Source: Social Snapshot and Poverty in Armenia.

Table B. Inpatient and Outpatient Utilization, 2014

Consumption Decile	% which utilized PHC facilities in past month	% which went to hospitals for outpatient care in the past year	% which were admitted to a hospital for inpatient care at least once in the past year
Poorest 1	4.1	4.1	3.7
2	6.6	4.6	3.6
3	5.2	4.5	4.0
4	5.7	5.2	3.5
5	8.0	6.4	5.2
6	8.1	7.4	5.1
7	8.9	5.9	3.8
8	9.8	6.7	4.4
9	11.1	8.3	5.2
Richest 10	13.6	11.6	6.8
Total	8.1	6.5	4.5

Source of raw data: ILCS, 2014.

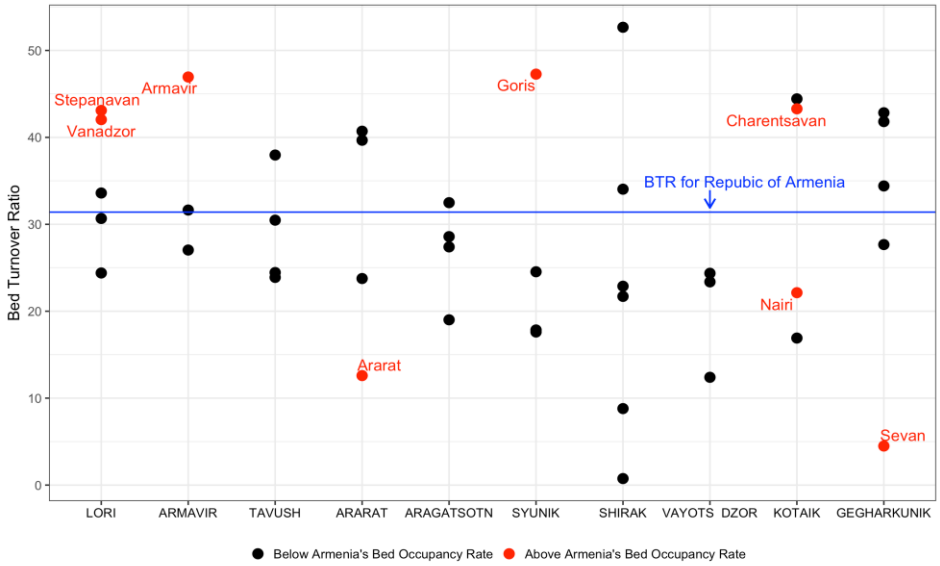
Table C. Health-seeking behaviour when ill, 2014

Consumption Decile	% of population who were sick for at least one day in the past month	% who went to PHC facilities among those who were sick for at least one day	% of population who were sick for more than 3 days in the past month	% of those who went to PHC facilities among those who were sick for more than 3 days	% of population who were sick for more than 3 days and forewent care for financial reasons
Poorest 1	12.5	23.3	7.4	36.3	31.8
2	12.0	32.8	8.3	42.2	19.1
3	11.1	32.7	9.0	37.3	16.3
4	13.4	30.4	10.2	36.6	15.7
5	13.2	44.3	11.4	42.9	11.6
6	14.6	40.7	12.1	42.5	8.0
7	18.5	33.0	15.2	37.7	10.3
8	16.2	44.9	13.6	45.4	5.7
9	18.4	39.2	15.4	41.1	6.5
Richest 10	20.2	46.9	17.4	47.0	4.2
Total	15.0	37.6	12.0	41.5	11.1

Source of raw data: ILCS, 2014.

Figure A. Efficiency of Hospitals

Pabón Lasso Statistics for Armenian Cities (2015)



Source: Armenia MoH

There are efficient hospital systems in cities within inefficient marzes. The marze results depend on the performance of its cities. The diagram is similar as the standard Pabón Lasso, but ordered by *marze*s. Consistent with Figure 13, the majority of cities are in quadrant I or quadrant II and only three in quadrant IV. Remarkably, there are 5 cities in the preferred quadrant III – these are the ones in red, above the blue line. This reveals some variation within marzes, even as a high marze BTR levels are not a good predictor for a city's performance with BORs.

Annex 2: List of Poor, Vulnerable and Special Categories

Poor/Vulnerable/Special Population Categories	Beneficiaries, 2015	Of which the number of FBP beneficiaries (with a score over 30) qualify as another vulnerable group	Inpatient care eligibility	Participation and % of copayment in Special Drug Program
	Number			%
Total	**1,617,032**	**74,748**	**1,150,752**	
Poor and near poor	**402,197**			
Qualify to receive FBP (score over 30)	402,197		included	not included
Vulnerable group	**233,171**	**61,961**		
Disabled, group I	10,259	3,468	included	0
Disabled, group II	80,307	17,421	included	0
Disabled, group III	101,722	9,386	included	50
WW II veterans and those related to them	943		included	0
Orphans or children without parental care up to 18 years old and those related to them.	333	122	included	0
Children between 8 and 12 years old and those over 65 in need of specific dental care.	*Data not available*		not included	not included
Children up to 18 years old in families with disabled members.	*Data not available*		included	0
Children up to 18 years old in families with 4 or more children.	28,909	28,418	included	0
Up to 18 years old disabled children	7,796	3,146	included	0
Children in orphanages and adults in nursing homes	2,902		included	100
Special group	**981,664**	**12,787**		
Women of reproductive age	58,000		included	not included
Children - up to 7 years' old**	285,866		included	0
Children up to 18 years' old in special care dispensary institutions**	30,018		included	not included
Children up to 18 years' old having one parent****	13,200	12,787	included	not included
14-15 years old males of military age*	35,000		included	not included

Military personnel and their family members, family members of those who died in defense of Armenia and retired or disabled personnel receiving military pensions*, ***	4,512		included	0
Rescue personnel and their family members, as well as retired or disabled rescue servants, and family members of those who died*	7,000		included	not included
Incarcerated individuals	*Data not available*		included	not included
Those involved in Chernobyl nuclear plant cleanup.	644		included	50
Trafficking victims	*Data not available*		included	not included
Asylum seekers	*Data not available*		included	not included
Social package beneficiaries*	100,000		included	not included
Military age men (inpatient services, and diagnosed through hospital examination) *	55,000		included	not included
Children (Up to 18 years old) of single mothers****	1,309		not included	50
Unemployed pensioners	390,223		not included	70

* - Expert estimations
** - Database enrolled population, SHA
*** - There are 4512 family members of military personnel that died in defence of Armenia
**** - In MLSA RA databases registered children of single mothers or single parents, only when they are registered in any benefit programs of government

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

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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:
http://www.worldbank.org/en/topic/health/publication/universal-health-coverage-study-series

GOING UNIVERSAL (BOOK):
http://www.worldbank.org/en/topic/universalhealthcoverage/publication/going-universal-how-24-countries-are-implementing-universal-health-coverage-reforms-from-bottom-up

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.

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