

MYANMAR HEALTH FINANCING SYSTEM ASSESSMENT

DISCUSSION PAPER

October 2018

Hui Sin Teo

Jewelwayne Salcedo Cain



WORLD BANK GROUP
Health, Nutrition & Population

MYANMAR HEALTH FINANCING SYSTEM ASSESSMENT

Hui Sin Teo
Jewelwayne Salcedo Cain

October 2018

Health, Nutrition and Population (HNP) Discussion Paper

This series is produced by the Health, Nutrition, and Population Global Practice of the World Bank. The papers in this series aim to provide a vehicle for publishing preliminary results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

For information regarding the HNP Discussion Paper Series, please contact the Editor, Martin Lutalo at mlutalo@worldbank.org or Erika Yanick at eyanick@worldbank.org.

RIGHTS AND PERMISSIONS

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Health, Nutrition and Population (HNP) Discussion Paper

Myanmar Health Financing System Assessment

Hui Sin Teo^a, Jewelwayne Salcedo Cain^a

^a *Health, Nutrition and Population Global Practice, World Bank, Washington D.C., USA*

Abstract: Myanmar's National Health Plan (NHP) for 2017-2021 has laid out the vision of achieving Universal Health Coverage (UHC) by 2030. The NHP aims to improve the delivery of health services and financial protection for Myanmar people through substantial investments in frontline service delivery units and through a range of reforms in the health system, including on health financing. This report assesses Myanmar's health financing system. The analysis is structured around three main sets of questions: (i) Who pays for health in Myanmar? Given that the government needs to invest more in the health sector, where could (or should) the money come from; (ii) Are prepaid and pooled funds for health sufficient and equitable? What additional pooling arrangements could Myanmar consider; and (iii) What key steps and reforms are needed for Myanmar to develop the capabilities of a strategic purchaser in the medium term? This Health Financing System Assessment aims to inform health financing policy choices that the Government of Myanmar will need to make as part of the development and implementation of its Health Financing Strategy.

Keywords: Health financing, Myanmar, Universal Health Coverage

Disclaimer: The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

Correspondence Details: Hui Sin Teo, 1818 H Street NW, Washington, DC 20433, USA, hteo@worldbank.org

Table of Contents

Acknowledgements	3
Abbreviations	4
Currency Equivalentents	4
Executive Summary	5
Introduction.....	7
Country Context	10
Health Outcomes and Universal Health Coverage Objectives	15
Demographics and Key Health Outcomes.....	15
Universal Health Coverage	18
Health Financing	23
Resource Mobilization.....	23
Fiscal Space for Health	36
Pooling	39
Purchasing	42
A Case Study on Immunization.....	49
Key Takeaways and Next Steps	55
References.....	57

List of Figures

Figure 1.1: Health Financing as a Critical Input, Output, and Outcome in Universal Health Coverage	8
Figure 1.2: Growth Prospects over the Medium Term, 2013–2023.....	10
Figure 1.3: Myanmar’s Projected Economic Growth compared to Regional Peers.....	10
Figure 1.4: Declining Poverty Rates, 2004–2015	11
Figure 1.5: Union Government Revenue as a Share of GDP, 2013–2020.....	12
Figure 1.6: Union Government Expenditures, 2013–2020	13
Figure 1.7: Union Government Spending by Function, 2009–2017.....	13
Figure 1.8: Increase in Public Debt and Fiscal Deficit, 2013–2020	14
Figure 1.9: Trends in Key Health Indicators in Myanmar, 1960–2015	15
Figure 1.10: Infant Mortality Rate by State/Region, 2015.....	16
Figure 1.11: Myanmar’s Progress on Health Outcomes, 1990–2015.....	16
Figure 1.12: Burden of Disease by Causes in Myanmar, 1990–2016	17
Figure 1.13: Three Dimensions of Universal Health Coverage	19
Figure 1.14: Service Readiness of Health Facilities	19
Figure 1.15: Institutional Deliveries by State/Region	21
Figure 1.16: Institutional Deliveries by Wealth Quintile	21
Figure 1.17: Low Coverage of NCD Care in Myanmar (Hypertension Treatment and Control as Tracer). 21	
Figure 1.18: Total and Public Health Expenditure vs. Income, Myanmar and Comparator Countries	23
Figure 1.19: Government Health Expenditure, 2009–2016	24
Figure 1.20: Health Budget as a Share of GDP, 2010–2017.....	24
Figure 1.21: Myanmar Government Spending Growth (Index, 2009/10 = 100)	25

Figure 1.22: Health Budgetary Spending as a Share of Union Government Expenditure	25
Figure 1.23: Out-of-Pocket Spending as a Share of Total Health Spending, 2015	27
Figure 1.24: Out-of-Pocket Spending in relation to Public Spending on Health, 2015	27
Figure 1.25: Annual Spending on Health by Consumption Quintile.....	28
Figure 1.26: Household Impoverishment due to Health Expenditures	29
Figure 1.27: Share of Households That Took Loans or Sold Assets to Cover Medical Expenses in the Past 12 Months (Survey Year 2015).....	29
Figure 1.28: Reasons for Not Seeking Care despite Medical Need	31
Figure 1.29: External Financing for Health	32
Figure 1.30: Actions Taken after Illness/Injury.....	42
Figure 1.31: Flow of Funds in the Health System.....	43
Figure 1.32: Conceptual Relationship among Benefits Design, Fiscal Space for Health, and Supply-Side Readiness	45
Figure 1.33: Measles Vaccination by State/Region	50
Figure 1.34: Measles Vaccination by Wealth Quintile	50
Figure 1.35: Myanmar's Cofinancing Obligations to GAVI, 2018–2022 (Projected).....	52

List of Tables

Table 1.1: Composition of Union Government Revenue, 2013–2017	12
Table 1.2: Union Government Spending by Economic Classification, 2013–2020	14
Table 1.3: Selected Health Outcome Indicators: Myanmar vs. Comparator Countries, 2015.....	15
Table 1.4: Myanmar's Top 10 Causes of Disease Burden, by Lost DALY Share, 1990–2016	17
Table 1.5: Top Ten Risk Factors of Ill Health in Myanmar, 1990–2016	18
Table 1.6: Service Readiness for Routine Child Immunization.....	20
Table 1.7: UHC Monitoring Framework, Selected Indicators.....	22
Table 1.8: Health Financing Indicators, Myanmar (2015) and Comparator Countries (2014).....	25
Table 1.9: Medium-Term Fiscal Framework: Functional Allocation of Expenditure	26
Table 1.10: Budget Execution Rates of Ministry of Health and Sports.....	26
Table 1.11: Financial Protection Indicators, Myanmar vs. Comparator Countries	31
Table 1.12: Positive Changes Attributable to Social Health Insurance and Key Implementation Challenges	34
Table 1.13: Assessment of Equity in Financing in the Absence of a Kakwani Index	35
Table 1.14: Potential Sources of Fiscal Space for Health in Myanmar	36
Table 1.15: Pooled Funds for Health, Myanmar	39
Table 1.16: Responsibilities and Key Tasks of a Strategic Purchaser	44
Table 1.17: Guiding Principles for Policy Decisions on Provider Payment.....	46
Table 1.18: Myanmar's Routine Immunization Schedule for Children, 2017.....	49
Table 1.19: National Immunization Coverage in Myanmar, 2015 and 2016.....	50
Table 1.20: Immunization Program Costs, 2015.....	51
Table 1.21: Delivery Channels for Immunization Services in Myanmar	53

List of Boxes

Box 1.1: Thailand's Universal Coverage Scheme.....	40
--	----

Acknowledgements

This report was prepared by Hui Sin Teo and Jewelwayne Salcedo Cain, with input from Hnin Hnin Pyne, Nang Mo Kham, and Giorgia Demarchi. The authors gratefully acknowledge the partnership and support of the Ministry of Health and Sports, Myanmar. The authors thank Toomas Palu, Gevorg Sargsyan, and Lars Sondergaard for their guidance and support. Peer reviewers were Ajay Tandon and Ellen Van De Poel. The report was edited by Shazia Amin.

This report was made possible by the generous support of the Multi-Donor Trust Fund for Integrating Health Programs. The authors are grateful to the World Bank for publishing this report as an HNP Discussion Paper.

Abbreviations

DALY	Disability-adjusted life year
EPHS	Essential Package of Health Services
EHO	Ethnic health organization
EPI	Expanded Programme on Immunization
GDP	Gross domestic product
IMR	Infant mortality rate
MCH	Maternal and child health
MDG	Millennium Development Goal
MMR	Maternal mortality ratio
MoHS	Ministry of Health and Sports
MoPF	Ministry of Public Finance
MTFF	Medium-Term Fiscal Framework
NHA	National Health Accounts
NHP	National Health Plan
NCD	Noncommunicable disease
OOP	Out-of-pocket
PFM	Public financial management
SARA	Service Availability and Readiness Survey
SEE	State economic enterprise
SHI	Social health insurance
STEPS	Stepwise Approach to Surveillance Survey
SDG	Sustainable Development Goals
UHC	Universal Health Coverage
U5MR	Under-five mortality rate
WDI	World Development Indicators

Currency Equivalents

2013: US\$1 = 934 MMK
2014: US\$1 = 984 MMK
2015: US\$1 = 1,163 MMK

Executive Summary

Myanmar is undergoing a period of significant change politically, economically, and socially. Political changes and economic reforms have ushered in a period of rapid growth. New directions in social policy have led to renewed hope for significant improvements in public service delivery and social inclusion. In the health sector, a new National Health Plan (NHP) for 2017–2021 has laid out the vision of achieving Universal Health Coverage (UHC) by 2030, choosing a path that is explicitly pro-poor. The NHP aims to improve the delivery of health services and financial protection for Myanmar people through substantial investments in frontline service delivery units, and through a range of reforms in the health system, including on health financing.

Chronic underinvestment in the health sector has left health facilities in a poor state of readiness to deliver essential health services, and Myanmar fares poorly on many key health indicators. In the public sector, shortages in medicines and commodities, poor availability of basic amenities, and low diagnostic capacity have led to ineffective and inefficient service delivery. This, in turn, contributes to low coverage rates and poor health outcomes. There are vast disparities in health outcomes and coverage across geographic areas and across social strata; and conflict and security concerns exacerbate inequity of access to care. Myanmar has made significant improvements in Millennium Development Goal (MDG) indicators for disease control, but is lagging in maternal and child health (MCH) indicators. Myanmar is unlikely to attain the Sustainable Development Goals (including UHC) unless it can improve health outcomes at a much faster pace than it is today. At the same time, a rising burden of noncommunicable diseases (NCDs) makes prioritizing essential health services even more challenging in Myanmar. These demands will have an impact on health financing policy decisions.

Myanmar will need to invest more in the health sector—and, in particular, increase the public share of health spending—to make substantial progress toward UHC and achieve the goals of the NHP. In 2015, total health spending in Myanmar was approximately 4.7 percent of GDP. The public share of total health spending was just 23.0 percent, or about 1.1 percent of GDP, despite a substantial increase in government budgetary health spending since fiscal year 2011/12. This was among the lowest compared to countries at a similar level of development. With the low level of public spending on health, out-of-pocket (OOP) payments end up filling the void. OOP payments comprise 74.0 percent of health spending, and place a large financial burden on households. Approximately 16.0 percent of Myanmar households face catastrophic health spending, and 3.4 percent of the population are pushed into poverty due to health spending each year. Households respond to financial shocks from health spending by resorting to detrimental coping strategies such as selling assets and taking loans, which makes them even more vulnerable to poverty in the future.

The current macro-fiscal environment is conducive for the government of Myanmar to commit to investing more in the health sector. Despite moderated fiscal conditions in recent years, a strong medium-term economic outlook provides a solid backdrop for increasing government spending, including on health. The Medium-Term Fiscal Framework (MTFF) envisions that the health budget could increase 0.3 percentage points through fiscal year 2019/20—from 1.1 percent of GDP today, to 1.4 percent of GDP in fiscal year 2019/20. Over the last five years, the health sector has been the biggest beneficiary of a rebalancing of government spending priorities. The health budget as a share of Union government budget increased from 3 percent in fiscal year 2011/12 to a steady 8 percent today. Further increases—although perhaps not at the same rate—can be expected.

As public spending on health increases, it will be important to ensure that resources are spent efficiently. Understanding the key sources of inefficiency in the health sector and implementing targeted reforms will be a key task, going forward. Reforming the structure of Myanmar's health financing arrangements will be needed to improve the efficiency and equity of health financing. A key objective of health financing is to pool funds for health care on behalf of a population before they get sick. Pooling from a large, diverse population allows for risk-sharing across healthy and not-so-healthy individuals. Pooled funds for health in Myanmar today are small and fragmented, limiting the redistributive capacity of the health

financing system. The most important task now is to increase the share of prepaid and pooled funds for health. The way in which pooled funds are governed and managed will also be an important decision, with significant implications in the ability to allocate funds in line with health needs.

In line with plans by the Ministry of Health and Sports (MoHS) to shift toward a system of health service purchasing through a semi-autonomous entity, the government will need to establish a financing mechanism to allocate funds to this entity. It will also need to consider such a shift of payments to be based on needs or outputs, rather than inputs. Myanmar's current budget cycle lacks a systematic process of linking strategic planning to budgeting. Budgets are formulated through a top-down process, without a method of assessing health needs and the financing requirements of each administrative or service delivery unit. Public sector health providers are allocated funds based on input-based, line-item budgets, with little flexibility to vire funds across line items. The shift toward a system of purchasing will require a different financing structure for both the purchaser and providers. The purchaser will need a sustainable source of revenue, information, and autonomy to determine payment rates for services, and the flexibility to allocate funds across a range of services and providers. Providers, likewise, will be better able to respond to changing needs and deliver the requisite services if they have a degree of autonomy and authority in managing their funds and making decisions. In general, shifting toward a system where funds are allocated based on determined needs, outputs, or performance would improve the responsiveness and efficiency of all parties.

Developing the capacity of the purchasing entity will be critical to ensure that purchasing is strategic, rather than passive. This includes the ability to project and manage revenues and expenditures; select providers and manage contracts effectively; develop and implement provider payment systems and calculate payment rates; and monitor provider performance, service utilization, and quality. Putting the systems and people in place, starting now, would give Myanmar's purchasing body sufficient time to develop these requisite capabilities.

Ultimately, it will be critical to ensure that overall health system and health financing reforms are aligned. There is scope for substantial reforms in Myanmar's health financing system. Increasing investments in the health sector, reforming the structure of how and where pooled funds are managed, and introducing strategic purchasing are all, in themselves, significant reforms. But health financing does not operate in isolation from the rest of the health system. It will be important for health service purchasing, service availability and readiness, and fiscal capacity to be aligned. For example, services commissioned by the purchasing entity cannot be delivered if there are insufficient funds, or if health facilities are not equipped to deliver the services. Conversely, money will be wasted if there are additional funds but the health system is not equipped to channel the funds to facilities in an efficient manner. Achieving better health outcomes for Myanmar people will require that improving the health system and health financing reforms are done in tandem with one another, such that reforms in multiple areas—infrastructure, financing, supply chain, human resources, information systems, and governance—will support each other.

Introduction

Over the past few decades, Myanmar has achieved significant improvements in its population health outcomes. Life expectancy at birth has steadily increased to 66 in 2015. Over the past 25 years, mortality rates (maternal, under-five, and infant) have all fallen substantially. Nonetheless, there remain significant challenges and room for improvement in Myanmar's health sector. Myanmar did not achieve its 2015 Millennium Development Goal (MDG) targets of 36 per 1,000 live births for under-five mortality and 130 per 100,000 live births for maternal mortality. Overall, health outcomes remain poor in comparison to other countries in the region. Decades of underinvestment in Myanmar's health system has resulted in severe shortcomings in service availability, readiness, and coverage of key health interventions. There are also substantial disparities across socioeconomic groups and across geographical areas in terms of health outcomes and coverage of essential services. Myanmar is now faced with a double burden of an unfinished MDG agenda including MCH and communicable diseases, and a growing burden of noncommunicable diseases.

Myanmar spends very little on health. According to data from the Ministry of Health and Sports, total health spending per capita in 2015 was 70,100 kyat, or US\$54, about 4.7 percent of GDP (Myanmar, MoHS 2017). The public share of total health spending was 23 percent, which is very low compared to other countries at a similar level of health spending and income. Notably, spending continues to be low despite a substantial increase in public spending on health in the most recent five years. Prior to 2012, total health spending hovered around 2.3 percent of GDP, with the public share at about 1.0 percent of GDP. Out-of-pocket (OOP) spending by households remains the dominant source of financing for health, comprising 74 percent of total health spending in 2015. OOP spending on health is a major cause of catastrophic expenditure by households, and can push or keep households in poverty. Households are expected to have "cash in hand" when seeking care, regardless of whether they are seeking care from a private or public provider. Poorer households and those in rural areas spend significantly less on every component of health spending, signaling their lower capacity to seek care.

Myanmar has laid out a vision of achieving Universal Health Coverage (UHC) by 2030. This includes the rollout of an Essential Package of Health Services (EPHS) progressively, in three phases, to extend access to these services to the entire population by 2030. A first step in this direction has been articulated in the National Health Plan (NHP) 2017–2021, which aims to strengthen Myanmar's health system and pave the way to UHC, choosing a path that is explicitly pro-poor. Key objectives of the NHP 2017–2021 are to extend access to a basic EPHS for the entire population while increasing financial protection; support health system strengthening and improve supply-side readiness; and to help create or increase demand for essential services and interventions (Myanmar, MoHS 2016).

Making progress toward UHC and achieving the goals of the NHP will not be possible with Myanmar's current level of health spending and, in particular, the low share of public spending on health. To this end, the government of Myanmar is in the process of developing a Health Financing Strategy. This strategy aims to outline how resources will be mobilized to finance progress toward UHC, and how to strengthen risk-pooling mechanisms to improve affordability of care and address the substantial barriers to seeking care, especially among the poor and vulnerable (Myanmar, MoHS 2016). The NHP has laid out a vision of developing a strategic purchasing function in the public sector, to contract with and purchase health services from a range of nonpublic health providers. Key policy decisions on how to establish this purchasing function will likewise need to be addressed in the Health Financing Strategy.

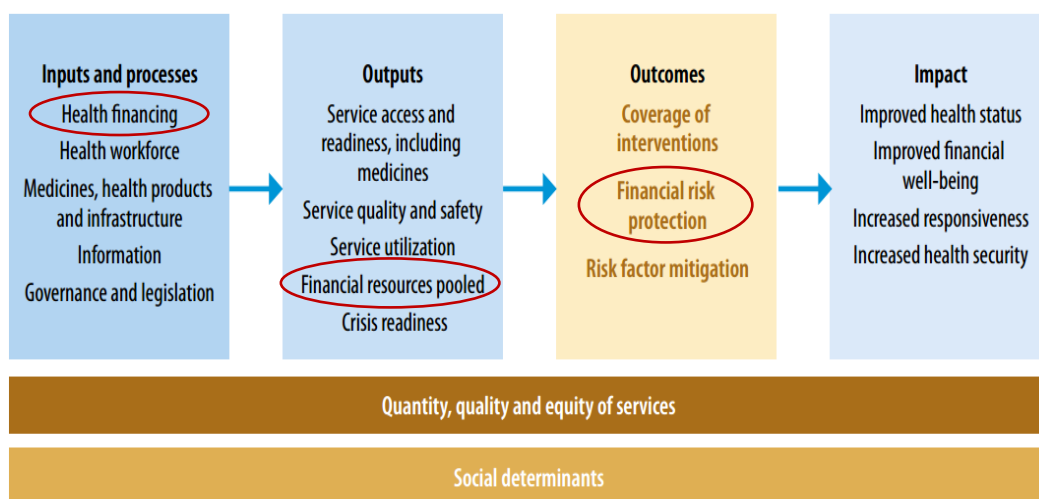
In this context, this report assesses Myanmar’s health financing system. The overarching goal of this assessment is to identify critical opportunities and constraints for health financing in Myanmar. In turn, it aims to inform health financing policy choices that the government of Myanmar will need to make as part of the development of its Health Financing Strategy. Health financing refers to the “function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively, in the health system.... The purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care” (WHO 2000). Accordingly, the core question to be answered in a Health Financing Strategy for Myanmar is: *How can and should the country change its health financing arrangements (that is, policies around revenue- raising, pooling, purchasing, benefit design, and overall governance of the system) to influence progress toward the final coverage goals of UHC?* (Kutzin et al. 2017).

Health financing is a critical element of UHC. UHC means that all people can use the promotive, preventive, curative, rehabilitative, and palliative health services they need, and that these are of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship. This definition of UHC embodies three related objectives:

- i. There should be equity in access to health services—everyone who needs services should get them, not only those who can pay for them.
- ii. Quality of health services should be good enough to improve the health of those receiving services.
- iii. People should be protected against financial risk, ensuring that the cost of using services does not put them at risk of financial harm.

Another way of looking at the role of health financing in UHC is through the lens of the health system “results chain.” This conceptual framework links inputs and processes (health system “building blocks”) to outputs, outcomes, and impact. Health financing is a critical input to the health system. More importantly, the pooling of financial resources is an important output on the path toward UHC, and improving financial risk protection is itself a UHC objective (figure 1.1).

Figure 1.1: Health Financing as a Critical Input, Output, and Outcome in Universal Health Coverage



Source: WHO 2013.

Achieving these objectives requires a range of reforms in the health system at large, as well as specific health financing reforms to ensure that there are sufficient resources to cover the health needs of a population, that funds are pooled in an effective and efficient way, and that the allocation of resources and purchasing of health services are done in an equitable and efficient manner. With these key principles in mind, this report assesses health financing in the context of key health system outcomes and UHC goals, and then examines the current situation of each of the health financing functions (revenue-raising, pooling, and purchasing—including benefits design). Equity and efficiency, cross-cutting objectives of the health system, will be considered throughout the report.

The assessment is structured around three main sets of questions, which aim to serve as guideposts for Myanmar policy makers as they develop a Health Financing Strategy:

- i. Who pays for health in Myanmar? Given that the government needs to invest more in the health sector, where could (or should) the money come from? (Revenue-raising and fiscal space)
- ii. Are prepaid and pooled funds for health sufficient and equitable? What additional pooling arrangements could Myanmar consider? (Pooling)
- iii. What key steps and reforms are needed for Myanmar to develop the capabilities of a strategic purchaser in the medium term? (Purchasing)

The rest of the report is laid out as follows: The next section provides an overview of the context in Myanmar—economic growth, trends of poverty and informality, and the fiscal environment, and highlights implications for the health sector and health financing system. We then discuss Myanmar’s progress on selected health outcomes and UHC objectives, highlighting key achievements and critical gaps, and how this may influence health financing policy decisions. The report then covers health financing arrangements and discusses each of the health financing functions of revenue-raising, pooling, and purchasing structured around the three sets of questions above. A case study on immunization is presented at the end of this report to illustrate how financing interacts with other key elements of service delivery and its resultant outcomes. Immunization was chosen as a tracer as it is one of the recommended service coverage indicators that the World Health Organization (WHO) and World Bank use to measure progress toward UHC.

Country Context

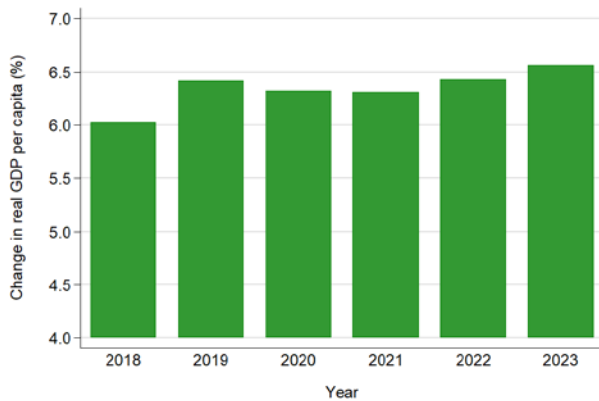
2015 was a historic year for Myanmar, when a democratically elected government took office for the first time in over 50 years, marking a momentous change after decades of military rule. Just a few years prior to that, around 2010, Myanmar begun opening up to the world. Domestic political dialogue and reforms had begun, sanctions were gradually lifted, and with that came an increase in investments flowing into Myanmar. In this new political and economic environment, expectations are high for a new phase of growth, prosperity, and security in the country. This includes ensuring that the country’s growth is inclusive, and that the government delivers on a range of social services—including health care—which Myanmar has underinvested in for decades.

This unique political and economic context is an important backdrop against which to assess the performance of Myanmar’s health sector and health financing system. This section looks at economic growth, trends of poverty and informality, and the fiscal environment, and highlights implications for the health sector and health financing system.

Economic growth and poverty trends

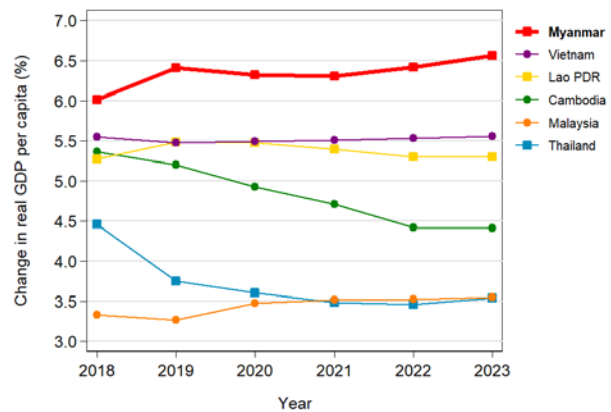
Today, Myanmar is one of the fastest-growing countries in the world. With gross national income (GNI) per capita of US\$1,190 in 2017 Myanmar is classified as a lower-middle-income country. This level of income roughly parallels that in other countries in the region such as Bangladesh and Cambodia, but is substantially lower than in Lao People’s Democratic Republic, Malaysia, Thailand, and Vietnam. Myanmar’s real growth in gross domestic product (GDP) averaged 7.8 percent per year between 2011 and 2015 (World Bank 2017b), outpacing almost all other economies in the world. Growth slowed to 5.9 percent in 2016/17, reflecting the effects of a natural disaster (flooding in 2015), a narrow production base, and increased competition. But growth prospects for Myanmar nonetheless remain highly positive. Economic growth is expected to average 6.4 percent per year over the medium term, comparing favorably to regional peers (figures 1.2 and 1.3).

Figure 1.2: IMF Growth Prospects over the Medium Term, 2018–2023



Source: IMF World Economic Outlook, October 2018.

Figure 1.3: IMF Projected Economic Growth for Myanmar compared to Regional Peers

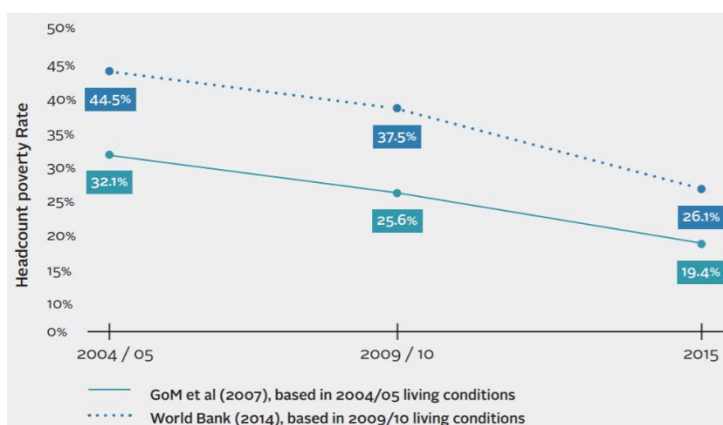


Source: IMF World Economic Outlook, October 2018.

Strong economic growth has led to a significant decline in poverty.

Myanmar has seen substantial poverty reduction over the last decade—the latter half of which was a period of sustained reforms. Using national estimates to compare trends in poverty over time reveals that poverty declined from 32.1 percent in 2004/05 to 25.6 percent in 2009/10 and to 19.4 percent in 2015; (this assessment used the method produced in the Integrated Household Living Conditions Assessment [IHLCA] reports). A decline of a similar magnitude was registered using the World Bank’s revised estimate: poverty went down from 44.5

Figure 1.4: Declining Poverty Rates, 2004–2015



percent in 2004/05 to 37.5 percent in 2009/10, and 26.1 percent in 2015 (see figure 1.4) (Myanmar, MoPF and World Bank 2017). These improvements in well-being are also reflected in other measures of welfare. Average household expenditures have increased by 15 percent over the decade, although urban areas have seen faster growth in household welfare compared to rural areas. This is consistent with the finding that inequality in Myanmar has risen over this same period. The Gini coefficient was estimated to be 0.32 in 2015. Households in the top quintile have seen faster consumption growth than those in the bottom quintile (World Bank 2017a). While the level of inequality in Myanmar is not considered high from a regional or global perspective, it will be important to monitor progress on inequality indicators and other proxy measures for equity of access to services, including health care, to ensure that these services are reaching the poor and other vulnerable groups.

Despite falling poverty rates in Myanmar, many households continue to remain vulnerable. In 2015, at least approximately 20 percent of the population still lived below the poverty line, while 40 percent continued to live under the near-poor line. Thus, the bottom 40 percent of Myanmar’s population continues to be either poor or very vulnerable to falling into poverty. Moreover, beyond facing a substantial risk of absolute poverty, this group has limited access to basic services such as health care, electricity, and improved water and sanitation.

Poverty affects the willingness and ability of households to contribute financially to their health care costs—whether this is through upfront contributions to a coverage scheme, or fees and co-payments at the point of service. Health financing policy decisions thus need to consider realistic expectations with regard to households’ contribution to health care costs. The poor and near-poor continue to remain vulnerable to poverty, and could very easily become impoverished or be pushed deeper into poverty if they must pay out-of-pocket while seeking care. This has a direct consequence on the UHC objective of ensuring financial protection against large and impoverishing health care expenses. A later section on OOP spending will discuss the financial impact of health expenditures on households in greater detail.

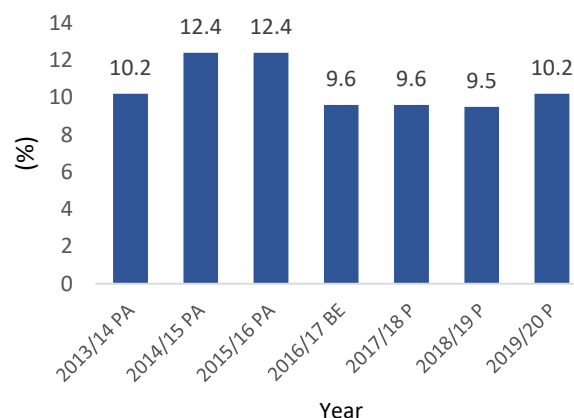
In addition, more than three-quarters of Myanmar’s labor force remains in the informal sector. Data from the 2015 Myanmar Labor Force Survey estimate that the share of informal employment to total employment (nonagriculture sector) in 2015 was 82.5 percent. This represents a daunting challenge. Expanding health coverage to the non-poor informal sector has been a huge challenge that many countries have faced in their path toward UHC. Myanmar will be no exception. This will be discussed in a later section on social health insurance (SHI).

Fiscal environment

The fiscal capacity of a country refers to the government’s ability and willingness to mobilize public revenues, which in turn allows it to spend money on public services and programs, including health. With strong prospects of economic growth in the medium term, Myanmar is in a good position to harness the benefits of strong and steady growth and channel these into public services. High levels of economic growth can lead to increases in fiscal space for health (Tandon and Cashin 2010).

Economic growth and revenue reforms have increased Myanmar’s general government receipts significantly in recent years. In 2009, general government revenue was just 6 percent of GDP. This has increased steadily to 10 percent in 2013/14, and to 12 percent in 2015/16 (figure 1.5). Union government revenue as a share of GDP has moderated in the last two years, largely due to a drop in international commodity prices, which impacted gas receipts. Up to 2019/20, it is expected that Union government revenue as a share of GDP will hover around 10 percent. This is based on the anticipation of a combination of negative and positive factors: continued low international commodity prices and declining production, which would be offset by improvements in tax collection and administration, which should help to reduce “revenue leakage” in the system (World Bank 2017b).

Figure 1.5: Union Government Revenue as a Share of GDP, 2013–2020



Source: World Bank 2017b.
Note: PA = Provisional Actuals; BE = Budget Estimates; P = Projected.

Despite these improvements, the revenue effort in Myanmar remains weak compared to other countries at a similar level of development. Myanmar has one of the lowest levels of government revenue mobilization at 10 to 12 percent of GDP; for other lower-middle income countries, this share ranges from 15 to 25 percent on average. A large share of economic activity falls outside the tax net, such as in small and micro enterprises. In addition, a legacy tax administration system, together with decades of underinvestment, have resulted in a major erosion of Myanmar’s tax base. Despite good progress in recent years, tax receipts are at approximately 6 to 7 percent of GDP (table 1.1) compared to between 10 to 20 percent of GDP for countries at a similar level of income (World Bank 2017b).

In terms of composition of general government revenue, tax revenues account for approximately 60 percent of Union government receipts, and are more stable and better correlated with economic activity than are nontax revenues. Thus, anchoring spending decisions against expected tax receipts is important for fiscal sustainability. Nontax receipts have recently included one-off telecom licensing fees, which contributed to windfall earnings, and gas sector royalties, which depend on gross earnings from gas sales. Other important nontax receipts are dividend payments (or contributions) from state economic enterprises (SEEs), which are on a declining path (World Bank 2017b).

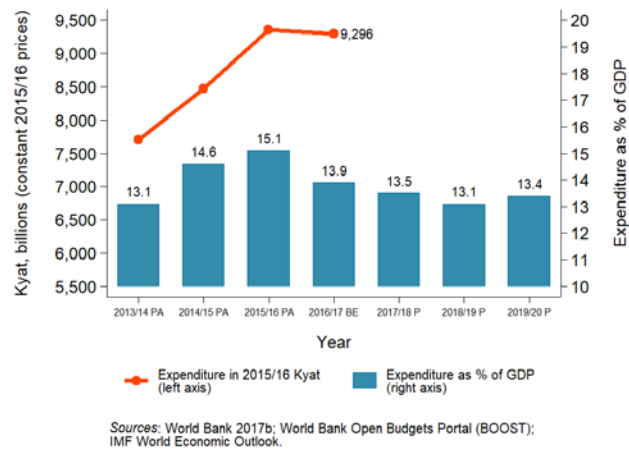
Table 1.1: Composition of Union Government Revenue, 2013–2017

	2013/14 (%)	2014/15 (%)	2015/16 (%)	2016/17 (%)
Revenue	10.0	12.2	12.1	9.2
Tax	6.7	7.0	6.7	6.4
Income tax	3.1	3.4	3.2	3.2
Commercial tax	2.9	2.8	2.9	2.6
Customs duties and excise tax	0.6	0.8	0.6	0.6
Nontax	3.4	5.1	5.4	2.8
Receipts on use of national properties (oil, gas, telecoms)	0.4	2.3	1.3	1.0
SEE contributions	1.3	0.8	1.1	0.7
License and fees	0.5	0.5	0.4	0.2
Other	1.2	1.5	2.5	0.9

Source: World Bank 2017b.

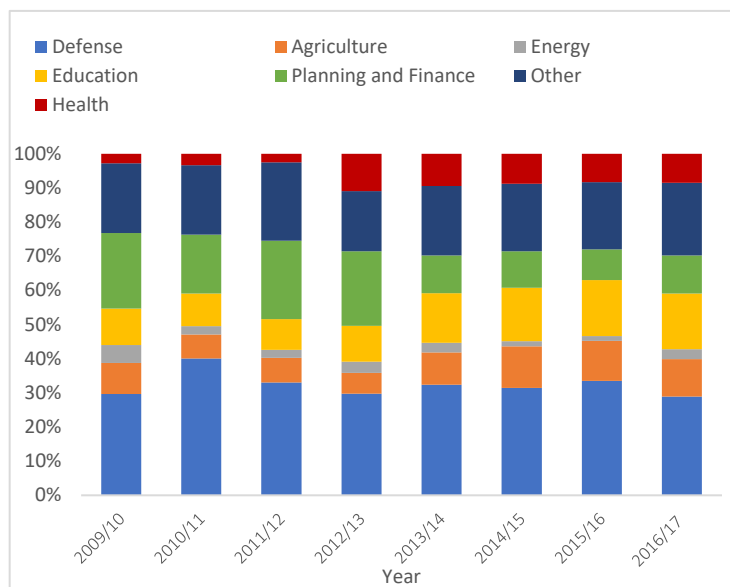
On the expenditure side, government spending in Myanmar has been increasing but is still very low compared to that in other countries at a similar level of income. Between 2011/12 and 2012/13, there was a sharp rise in government spending, from 3.8 to 7.7 trillion kyat—this represented an increase from 8.3 to 13.1 percent of GDP. The one-time increase has since been sustained, with government spending a steady 13 to 15 percent of GDP between 2015/16 and 2016/17 (see figure 1.6). This level of spending is likely to continue within this range in the medium term. This increase was from a very low base: prior to the current wave of reforms, Union government spending was around 6 to 8 percent of GDP (2009/10 to 2011/12). Despite the recent increase in spending, Myanmar’s level of public spending remains low relative to comparator countries, many of which typically spend upward of 20 percent of GDP.

Figure 1.6: Union Government Expenditures, 2013–2020



More importantly, given the decades of low spending and underinvestment, it is likely that further sustained increases in government spending will be necessary for Myanmar to achieve substantial improvements in its delivery of public services. Compared to countries at similar levels of income, Myanmar spends a larger share of GDP on defense and a smaller share on health, education, social protection, and economic services. This reflects a combination of a relatively small general government and the crowding out of nondefense priorities in the Union budget (World Bank 2017b). A rebalancing toward nondefense priorities began in 2012/13. The health sector, in particular, benefitted from this rebalancing. The Ministry of Health and Sports’ (MoHS) budget increased from 3 to 11 percent of the total Union government budget, in just one fiscal year (figure 1.7). Reprioritization of the government budget has been an important source of fiscal space for health. This will be discussed further in the section on fiscal space.

Figure 1.7: Union Government Spending by Function, 2009–2017



Source: World Bank 2017.

In terms of composition of spending by economic classification, Myanmar has one of the lowest levels of recurrent general government spending relative to other countries at a similar level of income. For decades, this hampered access to public services, as service delivery units had little to no operating budgets to deliver services effectively. In tandem with the recent rise in government spending, there has been a rebalancing toward recurrent spending. This was in line with government efforts to increase resources for frontline service delivery. As a share of general government spending, recurrent expenditures have gone from approximately 57 percent in 2013/14 to an estimated 70 percent in 2016/17 (World Bank 2017b). Recurrent spending as a share of GDP has also increased from 7.4 percent (2013/14) to 9.3 (2014/15) and to 10.3 (2015/16), with a concomitant reduction in capital spending in those years (table 1.2).

Table 1.2: Union Government Spending by Economic Classification, 2013–2020

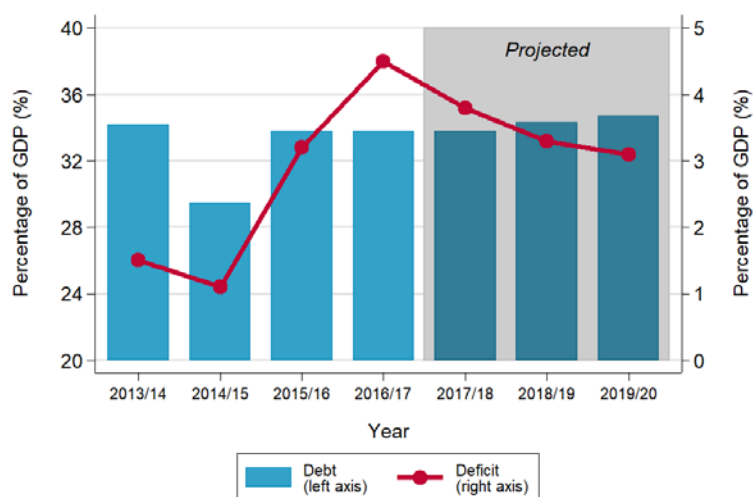
(Percent)

Expenditures by economic classification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
EXPENDITURE	13.1	14.6	15.1	13.9	13.5	13.1	13.4
Recurrent	7.4	9.3	10.3	9.8	9.7	9.5	9.6
Wages	1.5	1.7	2.2	2.0	1.9	2.0	2.1
Transfers	1.0	2.6	2.7	2.4	2.2	2.0	1.9
Interest	1.1	1.1	1.0	1.1	1.3	1.4	1.4
Other	3.8	3.8	4.4	4.3	4.2	4.1	4.1
Capital	5.7	5.4	4.9	4.0	3.8	3.7	3.8

Source: World Bank 2016.

With a moderate outlook for revenue mobilization and increasing public expenditures, Myanmar’s overall fiscal position has tightened, but deficit and public debt levels remain within manageable range in the medium term. Public sector deficit tripled from 1.1 percent of GDP in 2014/15 to 3.2 percent of GDP in 2015/16, and above 4.0 percent in 2016/17, but remains manageable (figure 1.8). This has been due to a combination of declining commodity revenues, exchange rate depreciation, unexpected expenditures for flood and disaster relief, and a higher wage bill. In 2015/16, public debt was 34 percent of GDP. Over the medium term, the public sector deficit is projected to consolidate from an estimated 4.5 percent of GDP in 2016/17 to 3.1 percent by 2019/20 (World Bank 2017b). Continued high levels of real GDP growth and fiscal discipline will be important to ensure that this level of public deficit and overall debt levels remain manageable.

Figure 1.8: Increase in Public Debt and Fiscal Deficit, 2013–2020



Source: World Bank 2016.

Health Outcomes and Universal Health Coverage Objectives

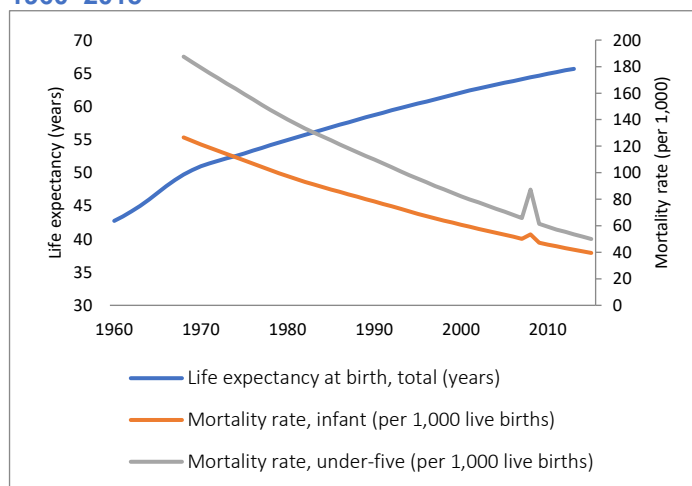
Demographics and Key Health Outcomes

Health outcomes in Myanmar have improved substantially and steadily over the last few decades. Life expectancy at birth has risen steadily from just 43 years in 1960 to 66 years in 2015. Since 1990, the under-five mortality rate (U5MR) has fallen from 106 to 50 per 1,000 live births, and infant mortality rate (IMR) has declined from 76 to 40 per 1,000 live births (figure 1.9).¹ In this same period, the maternal mortality ratio (MMR) fell from 520 per 100,000 live births to 227 in 2015 (Myanmar, MoHS and ICF 2016).

Yet there is still much room for improvement in the health status of Myanmar's population. Myanmar's health outcomes remain poor relative to global and regional standards. Myanmar's life expectancy of 66 years is the lower than that in three of its four neighboring countries.

Mortality rates are also substantially poorer compared to regional peers, except for Lao PDR (table 1.3). Myanmar did not achieve its 2015 Millennium Development Goal (MDG) targets of 36 per 1,000 live births for under-five mortality and 130 per 100,000 live births for maternal mortality.

Figure 1.9: Trends in Key Health Indicators in Myanmar, 1960–2015



Source: World Bank WDI 2017.

Table 1.3: Selected Health Outcome Indicators: Myanmar vs. Comparator Countries, 2015

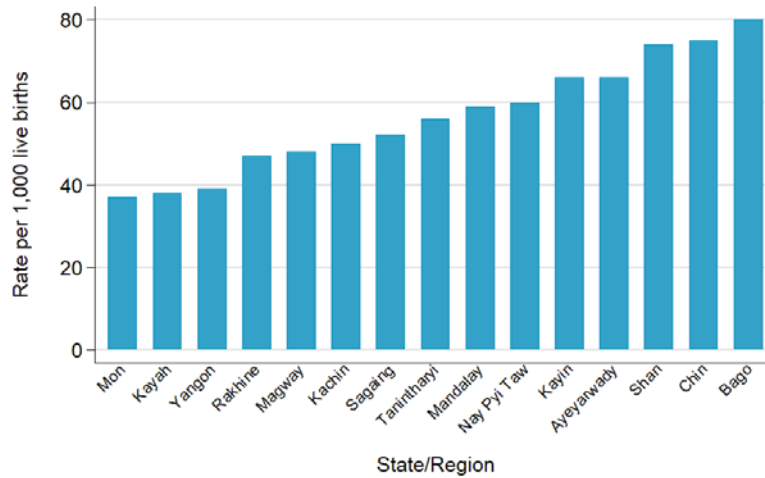
Indicator	Myanmar	Cambodia	Lao PDR	Thailand	Vietnam
Life expectancy	66	68	66	75	76
Infant mortality rate (per 1,000 live births)	40	25	51	11	17
Under-five mortality rate (per 1,000 live births)	50	29	67	12	22
Maternal mortality ratio (modeled estimate per 100,000 live births)	178 (227 from DHS)	161	197	20	54

Sources: World Bank WDI 2017; Myanmar, MoHS and ICF 2016.

There are also wide variations in health outcomes across the country. For example, the infant mortality rate across states and regions ranges from 37 per 1,000 live births in Mon State, to 80 in Bago Region—more than a two-fold difference (figure 1.10). The same degree of variation is observed for neonatal and under-five mortality rates. Populations in urban areas also consistently fare much better than rural residents—neonatal mortality in urban areas is 18 per 1,000 live births, while it is 36 in rural areas; under-five mortality is 42 per 1,000 live births in urban areas, while it is 80 in rural areas (Myanmar, MoHS and ICF 2016).

1. The spike in IMR and U5MR in 2008 is likely largely due to the devastating effects of Cyclone Nargis.

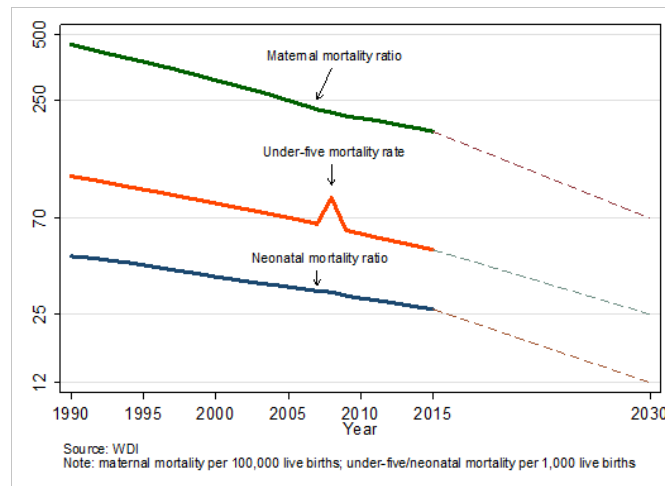
Figure 1.10: Infant Mortality Rate by State/Region, 2015



Source: Myanmar Demographic and Health Survey 2015-16.
 Note: Estimates are calculated for the 10-year period before the survey to ensure that there are sufficient cases to produce statistically reliable estimates.

If improvements in maternal and child health continue at the same pace as before, Myanmar will not be able to meet the Sustainable Development Goal (SDG) targets by 2030. A faster rate of improvement—as seen in the steeper dotted line projected in figure 1.11—will be needed if Myanmar is to fulfill the SDG targets for neonatal, under-five, and maternal mortality.²

Figure 1.11: Myanmar’s Progress on Health Outcomes, 1990–2015



Source: WDI
 Note: maternal mortality per 100,000 live births; under-five/neonatal mortality per 1,000 live births

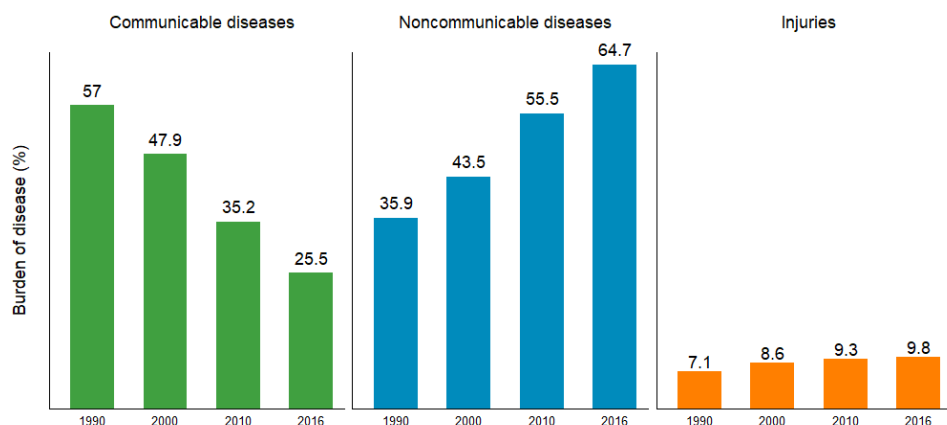
Myanmar’s demographic profile is still relatively young. Of its population of 52.4 million in 2015, approximately 27.9 percent were below 15 years of age, and the median age was 27.7. The elderly (65 years and above) comprised just 5.3 percent in 2015. This share is expected to grow to 8.6 percent by 2030, and to 13.1 percent by 2050. The working-age population (ages 15 to 64) is expected to grow from 66.8 percent in 2015 to 68.9 percent in 2025. At the same time, the population is still growing at a steady pace. Average total fertility rate between 2010 and 2015 was 2.3 children per woman. Myanmar’s total population in 2030 is expected to be just under 58 million, and is projected to increase to about 62 million

2. The global SDG targets are 12 per 1,000 live births for IMR, 25 per 1,000 live births for U5MR, and 70 per 100,000 live births for MMR.

in 2050 (UN DESA 2017).³ Given these demographic trends, the next 10 to 15 years will be the prime time for Myanmar to reap the benefits of its “demographic dividend.”

Despite its young demographic profile, Myanmar is undergoing a rapid epidemiological transition. The share of communicable diseases in the overall burden of disease in Myanmar has declined from 57 percent in 1990 to 26 percent in 2016. Noncommunicable diseases (NCDs) now account for the largest share of the burden of disease—65 percent—an increase from 36 percent in 1990 (figure 1.12) (IHME 2017). In 2016, cerebrovascular diseases were the leading cause of disease, and 7 out of the top 10 causes of disease burden were NCDs (table 1.4).

Figure 1.12: Burden of Disease by Causes in Myanmar, 1990–2016



Source: IHME (2017).

Table 1.4: Myanmar’s Top 10 Causes of Disease Burden, by Lost DALY Share, 1990–2016

Rank in 2016	Disease/condition	Category	DALYs lost share			
			1990 (%)	2000 (%)	2010 (%)	2016 (%)
1	Cerebrovascular disease	NCD	3.8	4.5	5.2	5.6
2	Lower respiratory infections	CD	12.2	11.5	7.2	4.5
3	Sense organ diseases	NCD	2.0	2.4	3.1	3.7
4	Road injuries	INJ	2.2	3.0	3.3	3.5
5	Ischemic heart disease	NCD	1.7	2.1	2.9	3.4
6	Lower back and neck pain	NCD	1.4	1.6	2.6	3.3
7	Chronic obstructive pulmonary disease	NCD	1.4	1.8	2.4	3.0
8	Diabetes mellitus	NCD	1.0	1.3	2.2	3.0
9	Tuberculosis	CD	7.6	6.5	3.9	2.9
10	Skin and subcutaneous diseases	NCD	1.6	1.8	2.4	2.8
DALYs per 100,000 population			57,777	49,918	37,073	31,215

3. Myanmar’s 2014 census data are presented here for reference (UN data are used in the main text). Based on the 2014 census, the reported population is 51.5 million. Of Myanmar’s total population, 28.6 percent are below 15 years of age, while 5.8 percent are 65 years and above. Median age is 27.1 years. The census projects the population in 2015 to be 52,450,516. Of the total population, 28.6 percent are under 15 years and 5.8 percent are 65 years and above, with median age equal to 26.3 years. Total population is projected to be 59,399,039 in 2030 and 64,984,255 in 2050. Population below 15 years of age is projected to decrease to 24.8 percent in 2030 and further down to 19.8 percent in 2050. Population 65 years old and above is projected to increase to 9.3 percent in 2030 and further up to 15.0 percent in 2050. For the working-age population, the share is 65.6 percent in 2015, up to 65.9 percent in 2030, but decreasing slightly to 65.2 percent in 2050. All these figures assume medium-variant projections.

Source: IHME 2017.

Note: DALY = Disability-adjusted life year; NCD = Noncommunicable disease; CD = Communicable disease; INJ = Injury.

There has been a corresponding shift in the underlying risk factors of ill health in Myanmar, with NCD-related risk factors becoming more prominent over the last few decades. Tobacco use, obesity, and underlying conditions of hypertension and diabetes have all increased in their relative contribution to the burden of disease. Many of the top 10 risk factors contributing to the overall burden of disease are key risk factors for NCDs (table 1.5). A nationally representative survey conducted in 2014 found that almost every adult had experience of or exposure to at least one NCD risk factor, and that Myanmar ranked highly among Southeast Asian countries for prevalence of multiple NCD risk factors (Myanmar, MoHS; WHO; and WDF 2014). Tackling NCDs effectively will require policies targeted at these key risk factors—including tobacco control strategies, programs to promote healthy living and behavior change, and a concurrent ramp-up in service delivery for NCD prevention and treatment.

Table 1.5: Top Ten Risk Factors of Ill Health in Myanmar, 1990–2016

Rank in 2015	Risk factors	DALYs lost share (%)			
		1990	2000	2010	2016
1	Tobacco	9.1	9.1	9.6	10.3
2	Child and maternal malnutrition	32.2	24.3	14.9	9.6
3	Air pollution	11.7	11.8	9.8	8.6
4	High systolic blood pressure	4.5	5.5	7.0	8.0
5	Dietary risks	4.5	5.4	6.9	7.8
6	High fasting plasma glucose	3.0	3.7	5.2	6.5
7	Alcohol and drug use	2.4	3.5	4.9	5.5
8	High body mass index	0.9	1.4	3.2	4.1
9	Occupational risks	1.5	1.8	2.6	3.1
10	Impaired kidney function	1.5	1.9	2.3	2.6

Source: IHME 2017.

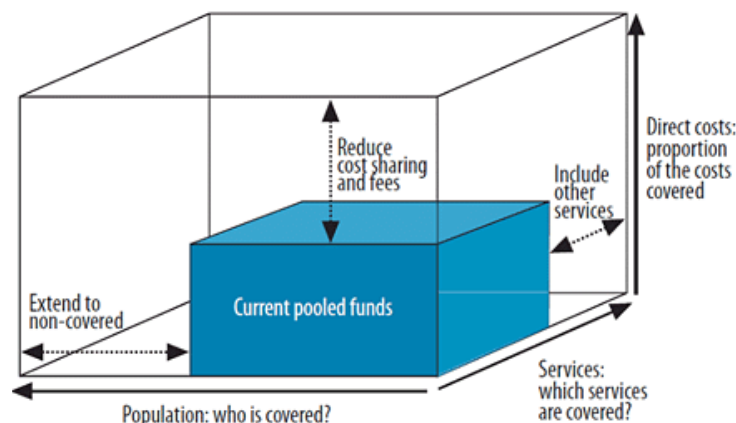
Note: DALY= Disability-adjusted life year.

Alongside this significant shift in Myanmar’s epidemiological profile, the country continues to have an unfinished MDG agenda. Tuberculosis still accounts for 3.0 percent of the overall burden of disease, albeit significantly improved from 7.6 percent in 1990, and MCH outcomes are still lagging. A key challenge, going forward, will be to tackle both the unfinished MDG agenda and emerging health needs, such as NCDs, at the same time. Myanmar will need to find a way to prioritize investments in health, and also find ways to leverage investments in one set of interventions for communicable diseases so they can also help address others, such as NCDs.

Universal Health Coverage

Universal Health Coverage encompasses three key dimensions: population coverage, service coverage, and cost coverage. These are depicted in the “UHC cube” (figure 1.13). Understanding Myanmar’s progress on these dimensions will enable us to assess what it will take for the country to achieve UHC by 2030.

Figure 1.13: Three Dimensions of Universal Health Coverage



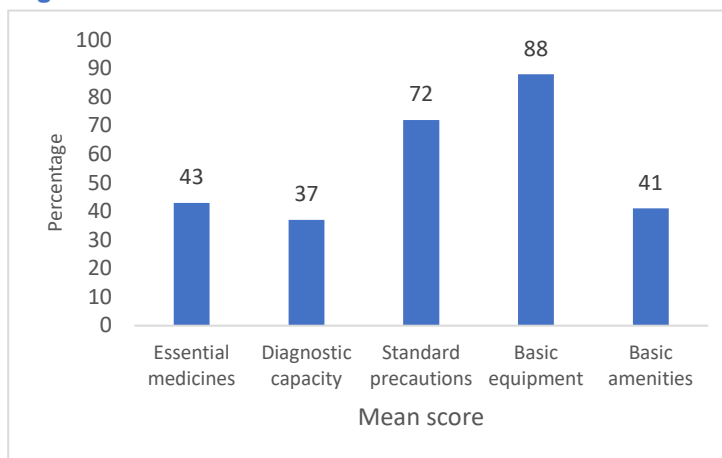
Source: WHO 2013.

In theory, Myanmar provides the whole population with free access to a range of health services in public facilities managed by MoHS.⁴ Since 2012, care for all emergency, maternal, and childhood illnesses has been provided free of charge in all public hospitals. A free medicines policy was also introduced at the same time.

In practice, there are substantial challenges with access to and coverage of key health interventions for a range of reasons. First, to date, Myanmar has not had an explicit benefits package. This has led to much uncertainty over which services and consumables are meant to be free for patients at the point of care, and which are not.

The Ministry of Health and Sports is now in the process of defining an Essential Package of Health Services. Second, insufficient resources—including funding, equipment, commodities, and staff—severely limit the ability of providers to deliver services. The 2015 Service Availability and Readiness Survey (SARA) assessed general service readiness of health facilities by examining the availability and functionality of tracer items in five domains: selected essential medicines, diagnostic capacity, standard precautions for infection prevention, basic equipment at the outpatient department, and basic amenities. The findings showed that on average, less than 50 percent of facilities surveyed were assessed to have the requisite amount of essential medicines (43 percent), diagnostic capacity (37 percent), and basic amenities (41 percent) (figure 1.14). There was also large variation across types of facilities, with tertiary hospitals (specialist, general, and private hospitals) faring much better than facilities at the township level and below (township hospitals, rural health centers, and subcenters).

Figure 1.14: Service Readiness of Health Facilities



Source: Myanmar, MoHS and WHO 2015.

While there may be a range of reasons—other than insufficient funding—as to why service readiness is poor, the low level of spending on health is, in itself, a key source of inefficiency. Using immunization as a tracer condition, we can see that none of the types of facilities are at full-service readiness. Every type of public sector health facility faces inadequacy of service readiness, due to

4. Public sector health facilities would also include, for instance, military hospitals, which are not accessible to the entire population—hence the specification that we are referring to applies only to facilities under MoHS.

shortages of inputs (table 1.6). Shortages of one or more inputs has an impact on overall service readiness and, more importantly, on efficiency. Doctors with limited supplies of medicines or diagnostic kits, or basic health staff in rural areas with ineffective cold chains for vaccines, cannot deliver health services effectively. The inputs that *are* in place may then very well go to waste. Another outcome is that patients receive incomplete care; this lack of comprehensiveness signals poor quality care. Therefore, Myanmar can become more efficient—and improve health service coverage and quality of care—by spending more rather than less. Further investments in basic health service inputs and health systems will help to eliminate the inefficiency that comes from spending too little. Insufficient funds are not the only underlying problem, and additional financing for health is surely not the only solution. However what is clear is that further investments will be required to strengthen the health system and to improve overall service readiness and access to good quality care.

Table 1.6: Service Readiness for Routine Child Immunization

(Percent)

Facility type	Guidelines for child immunization	At least one staff trained on immunization in the past 2 years	Cold box with ice packs	Refrigerator	Sharps container	Auto-disable syringes	Temperature-monitoring device	Immunization cards
General/state/district hospital	52	90	90	38	33	52	33	33
Township/subtownship hospital	64	73	86	27	36	64	36	36
Specialized hospital	86	100	100	71	71	86	71	86
RHC/UHCs	52	90	90	38	33	52	5	84
Sub-RHC	64	73	86	27	36	64	Not required	83

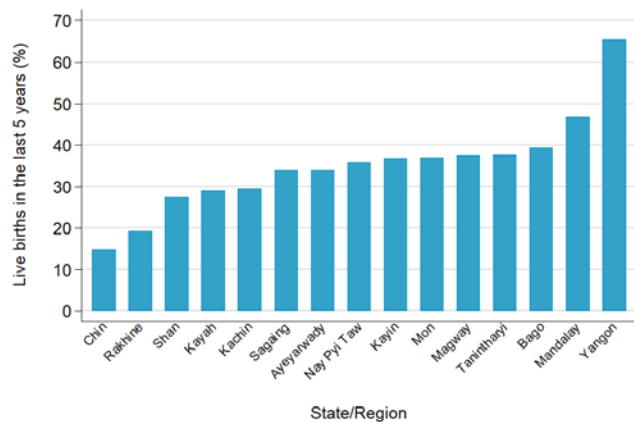
Source: Myanmar, MoHS and WHO 2015.

Note: RHC = Rural health clinic; UHC = Urban health clinic.

One result of resource shortages and uncertainty over charging policies is implicit rationing. Patients are unable to get the care they need, for want of necessary inputs. This is exacerbated by unclear policies on fees and charges. Qualitative studies have shown that patients face less uncertainty about costs at private sector facilities where the fees and charges tend to be more predictable and therefore easier for people to understand and be sure of when they seek care. All these factors impact the adequacy of the cost-coverage dimension of UHC (“proportion of costs covered,” in the UHC cube). This will be discussed in further detail in a following section on health financing, in relation to the low share of prepaid and pooled funds and the nature of out-of-pocket spending in Myanmar.

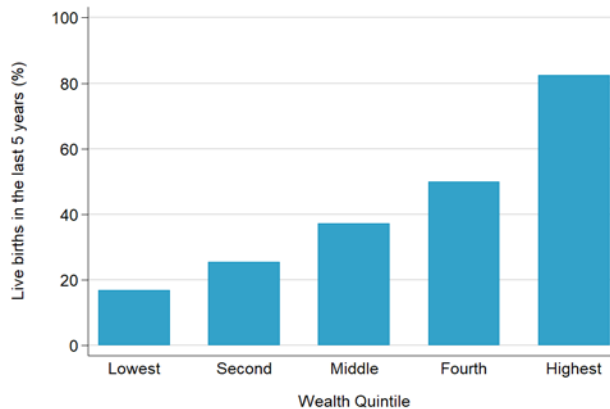
Selected indicators for service coverage show discrepancies by geography and social strata. Only 14.7 percent of births in Chin State were in a health facility, compared to 65.4 percent in Yangon. Even if we treat Yangon and Mandalay—Myanmar’s largest and most prosperous cities—as exceptions, this level of output is much worse than in states/regions such as Mon, Tanintharyi, and Bago (figure 1.15). Further, institutional deliveries in the bottom quintile were just 16.8 percent, compared to 82.5 percent in the top quintile (figure 1.16). Home deliveries reflect the opposite: 83 percent among the bottom quintile, and just 17.4 percent among the highest quintile. These diverging statistics are important because the share of institutional deliveries is also a proxy metric for access to good quality and safe care. This same trend of populations in higher-income strata receiving care from more skilled health professionals also holds true for antenatal care. Discrepancies by wealth and geography can be observed for immunization outcomes and coverage rates—which will be discussed in the case study on immunization, at the end of the report.

Figure 1.15: Institutional Deliveries by State/Region



Source: MoHS and ICF 2016.

Figure 1.16: Institutional Deliveries by Wealth Quintile

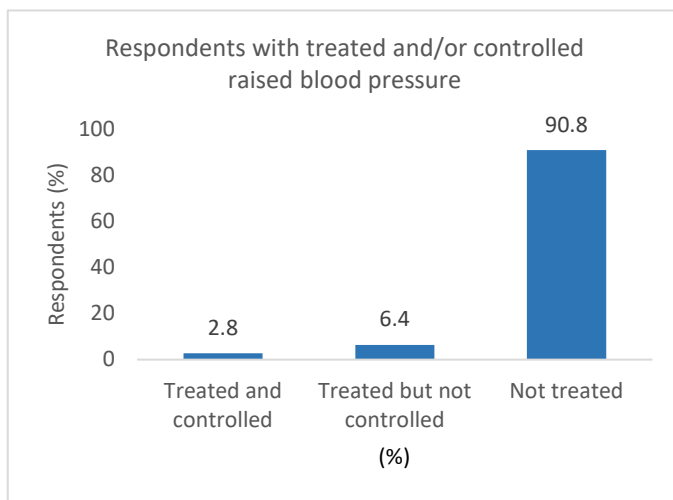


Source: MoHS and ICF 2016.

In addition, there are severe shortages in access to and coverage of NCD prevention and treatment services. The 2014 Myanmar Stepwise Approach to Surveillance (STEPS) Survey found that basic screening for NCD-related risks was not routine: 37 and 86 percent of respondents, respectively, had never had their blood pressure and blood sugar measured. Among hypertensive respondents, only 9.2 percent were receiving treatment for high blood pressure—of these, 2.8 percent had their condition under control, while 6.4 percent were being treated but their condition was not controlled (figure 1.17; Myanmar, MoHS; WHO; WDF 2014).

Early detection, treatment, and effective management of individuals at risk of NCDs is a key gap in Myanmar’s health service delivery. Given that NCDs now form most of the burden of disease, uncontrolled or poorly managed disease progression is a huge risk to the population and to Myanmar’s health system. Experience from other countries with a similar disease profile has shown that chronic conditions—which overlap heavily with NCDs—are best managed in proximity to patients in the primary care and/or community setting. This is for reasons of effective case management, as well as of cost. Countries such as Vietnam and China have gone down the path of excessive use of hospitals, specialists, and tertiary care for the treatment of many conditions that could be better (and more cheaply) managed in the primary care setting. This is a path that Myanmar should aim to avoid, as it has too often resulted in care being provided in inappropriate settings, at costs that neither the health system nor individual patients can bear.

Figure 1.17: Low Coverage of NCD Care in Myanmar (Hypertension Treatment and Control as Tracer)



Source: Myanmar, MoHS; WHO; WDF 2014.

These inequities in access and coverage are inimical to Myanmar’s progress toward UHC, as a large share of the population continues to be left out from receiving even the most fundamental services, such as maternal and child health care—and, increasingly, NCD care. Overall, on all dimensions of UHC—population, service, and cost coverage—Myanmar still has a long way to go, especially in terms of ensuring equitable coverage across rich vs. poor, and urban vs. rural populations.

Myanmar’s performance on many of the health outcomes and outputs mentioned above can—and will—be used as a proxy of the country’s progress toward UHC. Progress toward UHC can be measured against a set of indicators on preventative and promotive care, treatment, and financial protection that has been proposed jointly by the World Bank and the World Health Organization under the UHC Monitoring Framework. UHC is also part of the Sustainable Development Goals (Target 3.8), which Myanmar has adopted. Global platforms and networks such as UHC2030⁵ similarly support the attainment and monitoring of progress toward UHC objectives. Myanmar’s achievement on these metrics is mixed relative to comparator countries in East Asia and to the average for lower-middle-income countries. On financial protection, in particular, Myanmar’s performance is very poor (table 1.7). This will be discussed further in Health Financing, the next section of the report.

Table 1.7: UHC Monitoring Framework, Selected Indicators

Indicators	Myanmar (%)	Developing East Asia (%)	Lower-middle-income countries (%)
<i>Prevention and health promotion</i>			
Family planning	52	58	26
Antenatal care	81	90	79
Skilled birth attendance	60	80	55
Tobacco nonuse	89	74	83
Access to improved water	80	85	69
Access to improved sanitation	48	70	28
<i>Treatment</i>			
Antiretroviral therapy	47	42	33
Tuberculosis	59	58	56
<i>Financial protection</i>			
Prepaid/pooled share of total health spending	23	76	62
OOP < 25% consumption	95	98	98

Sources: Myanmar, MoHS and ICF 2016; WHO 2017a.

5. For more on UHC2030, see <https://www.uhc2030.org/>.

Health Financing

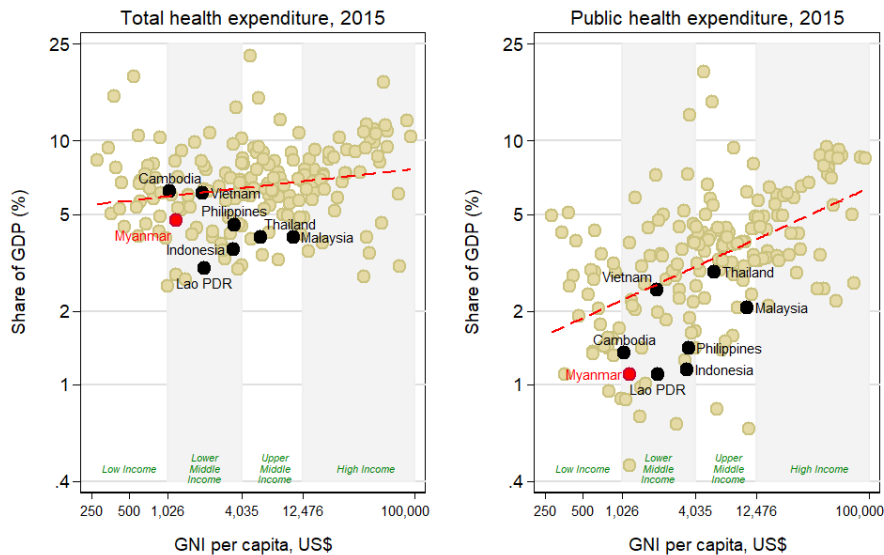
Resource Mobilization

The first core health financing function is to mobilize resources for health. The objective is to raise sufficient resources, in a sustainable way, and in an efficient and equitable manner. In general, mechanisms for raising revenue for the health system include (i) compulsory or mandatory prepayments, such as general revenues raised by governments that are earmarked for health, social health insurance (SHI) contributions, and mandatory purchase of private insurance; (ii) voluntary prepayments, such as through voluntary private or nonprofit health insurance schemes; (iii) out-of-pocket spending by households; and (iv) foreign sources, such as development assistance, which may or may not be spent via government channels.

How revenues are raised—that is, the sources of funds, structure of payments or contribution methods, and collection arrangements—have significant implications for efficiency and equity. This section starts by detailing the main sources of financing for health: government budgetary expenditure, out-of-pocket spending, and external financing. It also discusses social health insurance for purposes of considering options for the future. Overall, sources of financing for health are examined with a view to answering the questions: *Who pays for health in Myanmar? Given that the government needs to invest more in the health sector, where could (or should) the money come from?*

In 2015, total health spending was approximately 4.7 percent of GDP (Myanmar, MoHS 2017). In absolute terms, health spending per capita was 70,100 kyat, or about US\$54. This amount was below average compared to other countries at a similar level of income. In terms of the composition of health spending, the public share—including government budgetary and social insurance expenditures—was 23 percent (Myanmar, MoHS 2017). This translated to about 1.1 percent of GDP, which was among the lowest compared to countries at a similar level of income (figure 1.18).

Figure 1.18: Total and Public Health Expenditure vs. Income, Myanmar and Comparator Countries

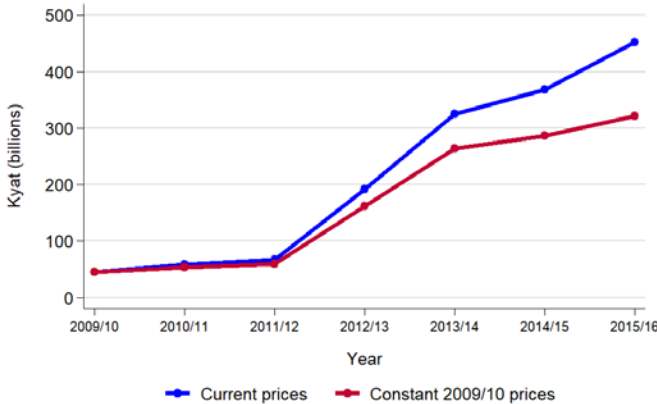


Sources: Myanmar, MoHS 2017; World Bank WDI; WHO 2017b.
 Note: X- and Y-axes are expressed in log scale.

Government Budgetary Expenditure on Health

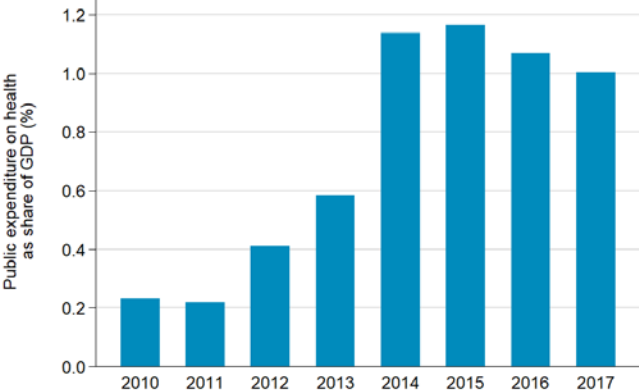
It is important to note that Myanmar’s level of health spending is low, despite a substantial increase in government budgetary health expenditure since 2011/12. The budget of the Ministry of Health and Sports increased more than fivefold in real terms (represented in constant 2009/10 prices) between fiscal year 2011/12 and fiscal year 2015/16, and by an even larger magnitude in nominal terms (figure 1.19). This rate of increase has been even higher than the average annual economic growth rate—as a share of GDP, Myanmar’s health budget had hovered at about 0.2 to 0.3 percent prior to 2011. This shot up to 1.1 percent in 2014. The share has remained at about 1 percent since then (figure 1.20).

Figure 1.19: Government Health Expenditure, 2009–2016



Source: World Bank Myanmar Economic Monitoring Reports; Myanmar Statistical Information Service; WDI.

Figure 1.20: Health Budget as a Share of GDP, 2010–2017

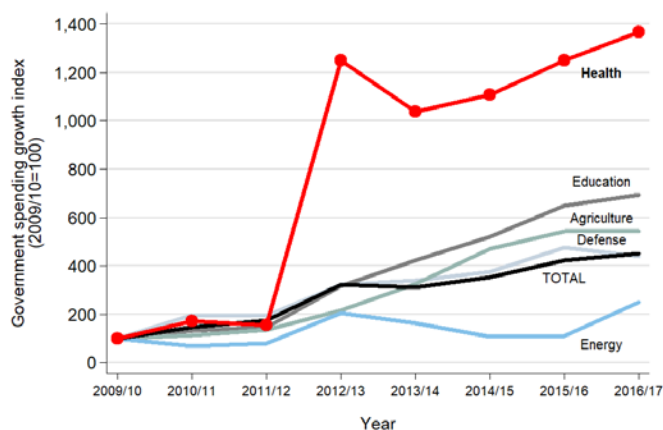


Source: World Bank Myanmar Economic Monitoring Report; WHO Global Health Expenditures Database

A major reason behind this sharp increase in the health budget has been a shift in the government’s prioritization toward social service sectors. The health sector has been the largest “beneficiary” of this recent shift in government spending priorities. Figure 1.21 shows the growth in spending, relative to each ministry’s level of spending in fiscal 2009/10. The rate of increase of the MoHS’s budget has outpaced that of all other ministries by a wide margin, albeit starting from an extraordinarily low base. As a share of total Union government expenditure, the MoHS budget increased from approximately 3 percent prior to fiscal 2011/12, to more than 8 percent from fiscal 2012/13 onward (figure 1.22).⁶ Previously, Myanmar was an outlier on this metric, with government budgetary health spending as a share of government expenditure, among the lowest in the world. This recent increase has brought it closer in line with comparator countries and to the average (10.2 percent) among lower-middle-income countries (table 1.8).

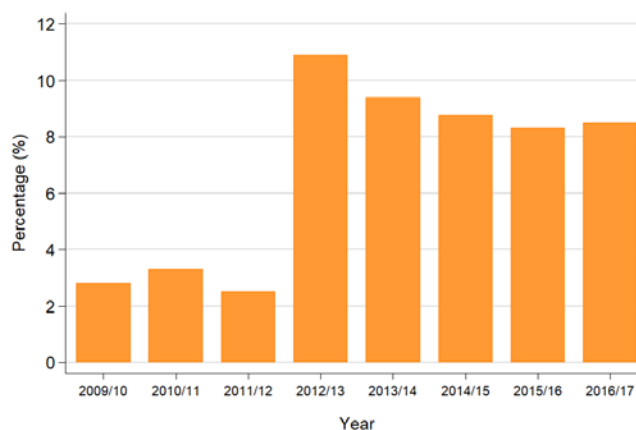
6. As a share of public expenditure, public sector health spending increased from 1 percent in 2009/10 to about 4 percent in 2015/16.

Figure 1.21: Myanmar Government Spending Growth (Index, 2009/10 = 100)



Source: World Bank Public Expenditure Review 2017.

Figure 1.22: Health Budgetary Spending as a Share of Union Government Expenditure



Source: World Bank Myanmar Economic Monitor Reports.

Table 1.8: Health Financing Indicators, Myanmar (2015) and Comparator Countries (2014)

	Myanmar (2015)	Cambodia	Lao PDR	Thailand	Vietnam	Lower-middle-income countries	East Asia and Pacific
GDP per capita (current US\$)	1,355	1,163	2,212	5,831	2,086	2,390	4,163
Total health expenditure per capita (current US\$)	54	72	57	232	127	136	281
Total health expenditure as a share of GDP (%)	4.7	6.2	3.0	4.0	6.1	5.9	7.1
Government share of total health expenditure (%)	23.0	21.7	36.7	71.6	40.0	47.3	60.2
Government health expenditure as a share of government spending (%)	8.0	6.6	4.2	15.3	8.2	9.1	11.3

Source: Myanmar, MoHS 2017; IMF World Economic Outlook, October 2018; WHO Global Health Expenditure Database.

Note: Excludes high income countries.

This shift reflects a rebalancing of the Union budget that started in 2011/12, and is set to continue in the medium term. Myanmar has reduced the share of spending on defense from 40 percent of the Union Budget in 2010/11 to less than 25 percent in 2016/17. The Medium-Term Fiscal Framework (MTFF) envisions a further reduction of defense allocations to 21 percent in 2019/20. This rebalancing has provided, and can continue to provide, additional fiscal space for health and other prioritized sectors. Prioritizing one sector over another is sometimes perceived as a zero-sum game among competing sectors, especially if tight fiscal conditions dictate that budgets must be cut from one sector to provide budgetary room for

another. This is not the case in Myanmar today. Total Union budget allocations have grown substantially over this same period, from just over 3 trillion kyat to about 10 trillion kyat, allowing the rebalancing of budget allocations to be done without drastic cuts to any single ministry. Even though the relative allocation to defense has come down, for example, the MTFF expects that defense spending will continue to be able to grow by 6 to 7 percent per year in nominal terms until fiscal year 2019/20, while nominal spending in other sectors is set to increase even faster (World Bank 2017b). The health budget is expected to increase another 0.3 percentage points in the period of this MTFF, to reach 1.4 percent of GDP in 2019/20 (table 1.9). At currently projected rates of growth, the health budget could reach about 1.5 trillion kyat by 2020—a roughly 50 percent increase in nominal terms from its current level.

Table 1.9: Medium-Term Fiscal Framework: Functional Allocation of Expenditure

(Percent)

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
				B	P	P	P
Health	1.1	1.1	1.1	1.0	1.0	1.2	1.4
Education	1.7	1.9	2.1	1.9	1.9	2.1	2.5
Economic services	1.7	1.9	1.9	1.9	2.0	1.9	2.2
General services	1.8	1.8	1.7	1.8	1.9	2.0	1.9
Social protection	0.5	1.1	1.6	1.8	1.7	1.6	1.5
Defense	3.8	3.8	4.3	3.4	3.1	2.9	2.6

Source: World Bank 2017b.

Note: B = Budgeted; P = Projected.

As public spending on health increases, it will be important to ensure that funds are well-utilized and spent efficiently. Budget execution rates for five fiscal years, up to fiscal year 2015/16, show that MoHS has had challenges in fully utilizing its allocated budget. Budget execution was at just 49 percent in fiscal 2012/13—the year in which the MoHS budget increased sharply—indicating a substantial challenge with absorbing a sudden and large infusion of funds. Capital planning and expenditure continues to be an area for improvement—as seen in the significant variations between original and revised estimates, and three consecutive years of extremely low capital budget execution (12 to 19 percent in 2012/13 to 2014/15). The current budget appears to be slightly more stable, although significant overspending in fiscal 2014/15 (approximately 150 percent) likewise suggests difficulties in budget accuracy (table 1.10).

Table 1.10: Budget Execution Rates of Ministry of Health and Sports

		2011/12	2012/13	2013/14	2014/15	2015/16
% BE Expended	Total	78	49	64	104	100
	Current expenditure	95	93	96	165	108
	Capital expenditure	33	12	13	19	92
% RE Expended	Total	77	48	60	96	90
	Current expenditure	94	92	95	157	91
	Capital expenditure	33	12	11	17	88
% Increase RE vs. BE	Total	1.3	2.2	5.9	8.6	11.7
	Current expenditure	1.4	0.8	1.3	5.4	18.7
	Capital expenditure	1.0	3.3	13.0	13.2	3.6

Source: Myanmar, MoPF (unpublished document) 2017, with authors' calculations.

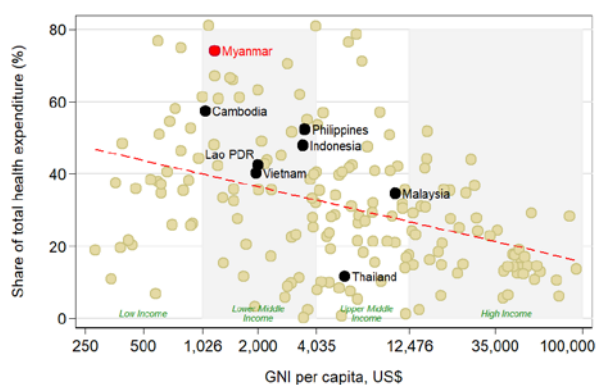
Note: BE = Budget Estimates; RE = Revised Estimates.

Poor budget execution—underspending, overspending, and poor budget accuracy—is symptomatic of broader challenges in the public financial management (PFM) system. This, in turn, affects health service delivery. There are PFM challenges across the budget cycle: from budget formulation to execution and monitoring. Budget formulation will be addressed in a later section on pooling of funds and how the government health budget is allocated. On budget execution, there are a host of factors that contribute to difficulties in spending on time and on target. These include gaps and rigidity in the budget classification, which either leaves some service implementers without adequate budget allocation or causes delays in accessing the budget allotted under wrong budget line items; lack of or limited communication and understanding of how to apply financial rules and regulations in a standardized manner, such as for procurement of medicines and in providing advances or reimbursement for travel costs; late submission and approval of revised budget estimates and consequently late release of funds, leaving service delivery units little time to spend the money before the end of the fiscal year; reliance on a fully paper-based process without standardized digitization of the financial data; and chronic deficit in qualified accounting staff within the spending units, especially at the state/region and township levels. The magnitude of these challenges will only increase as the health budget continues to grow. Improving absorptive capacity and alignment of PFM rules with the health system will be important, as part of the broader health financing reform.

Out-of-Pocket Spending on Health

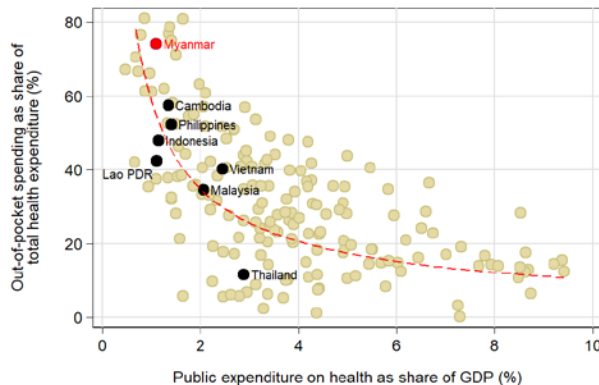
Out-of-pocket (OOP) expenditure by households remains the dominant source of financing for health. In 2015, out-of-pocket spending by households accounted for 74 percent of total health spending (MoHS 2017).⁷ This is among the highest in the world (figure 1.23). High OOP spending on health is, in many ways, in response to the low level of public spending on health. Global data show that public spending on health tends to rise with income, and at the same time, OOP payments typically decline as government spending on health increases (figure 1.24). But with the low level of public spending on health, OOP payments end up filling the void.

Figure 1.23: Out-of-Pocket Spending as a Share of Total Health Spending, 2015



Sources: World Bank, WDI, WHO 2017b Myanmar, MoHS 2017.
Note: X-axis is expressed in log scale.

Figure 1.24: Out-of-Pocket Spending in relation to Public Spending on Health, 2015



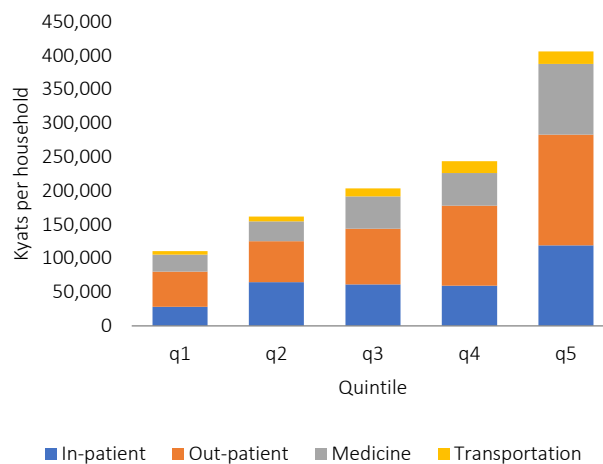
Sources: WHO 2017b, MoHS 2017.
Note: X-axis is expressed in log scale.

7. The National Health Accounts for 2014–2015, published by Myanmar MoHS in 2017, made a significant adjustment to household health expenditure. This caused a major revision to the estimates of out-of-pocket spending, which, in turn, impacted the composition of health spending (public, private, and external shares of total health spending). Specifically, the Myanmar MoHS 2017 report made the following adjustment: “For the estimation of general household health expenditure for 2014–15, instead of using previous year estimation (2.3 percent as a share of medical care expenditure in total household expenditure), we used 6.6 percent as a share of medical care expenditure in total household expenditure, according to 2015 Myanmar Poverty and Living Condition Survey (MPLCS) finding.” These adjustments may not be reflected in global databases at the time of writing. For this same reason, this report does not present trend analysis of the level or share of OOP spending, as a time series with consistent methodology is not yet available.

The average household is estimated to spend 6.6 percent of its consumption (or allocate 6.5 percent of its total cash spending) to health. This translates to an estimated 203,000 kyat per household (or 45,000 kyat per capita) annually, ranging from an average of 123,000 kyat per household (24,000 kyat per capita) for the poorest 40 percent to 256,000 kyat per household (63,000 kyat per capita) for the richest 60 percent. Households below the poverty line spend about 107,000 kyat on average for health, which is about half that of households above the poverty line (World Bank 2018).

Outpatient care comprises the largest share of OOP spending, followed by inpatient care and medicines. Outpatient expenditures comprise about 39 to 46 percent of total health spending, while inpatient expenditures make up about 24 to 36 percent of total health spending. Transportation cost comprises about 5 to 7 percent of total health spending. The share of spending for inpatient, outpatient, medicine, and transport as a total of household health spending is broadly similar across households (figure 1.25). Notably, poorer households and those in rural areas spend significantly less on every component of health, signaling their lower capacity to seek health care. Higher-income households incur higher OOP spending on health, indicating their greater ability to seek and pay for care.

Figure 1.25: Annual Spending on Health by Consumption Quintile

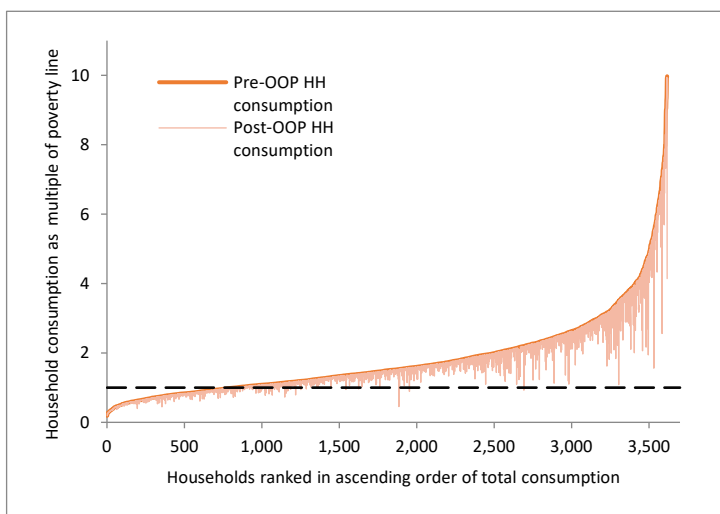


Source: World Bank 2018.

High OOP spending places a large financial burden on households. Poor households, in particular, may have to incur debt for health care expenses, or else they may simply forgo care because it is unaffordable. Approximately 16 percent of Myanmar households face catastrophic health spending—that is, they devote over 10 percent of their total expenditure to health. This share declines at a higher threshold—5 percent of Myanmar households spend over 25 percent of their purchasing power on health—but is still high compared to that in other countries.

Health spending also has a significant impoverishing effect on households. Health shocks usually happen concurrently with financial shocks, as households are forced to pay out of pocket for care to cope with the health shock. The financial impact is to worsen poverty: approximately 3.4 percent of the population, or 1.7 million people, were pushed into poverty due to health spending (based on data from the latest available survey year) (figure 1.26).

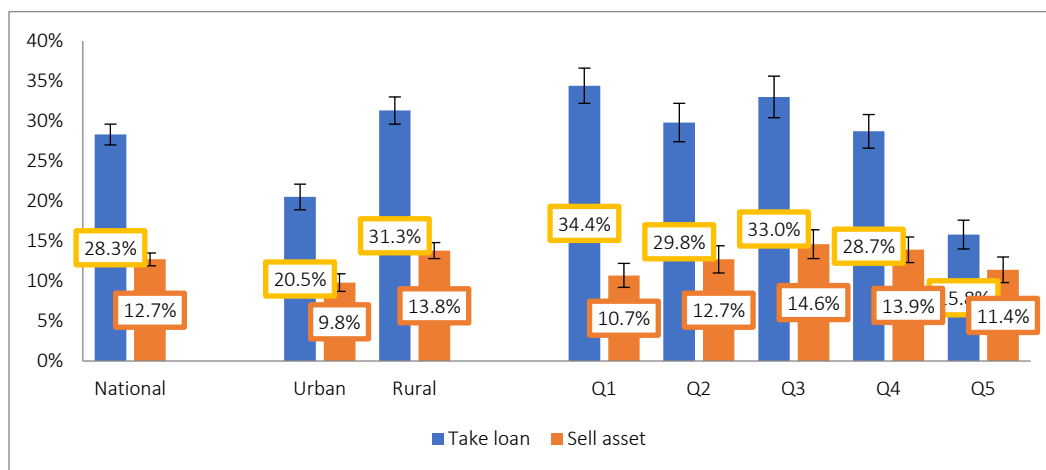
Figure 1.26: Household Impoverishment due to Health Expenditures



Source: World Bank 2018.

Households have been found to respond to financial shocks from health spending by resorting to detrimental coping strategies that make them even more vulnerable to poverty in the future. About 28 percent of households took loans and 13 percent sold their assets to cover health spending (figure 1.27). There is an equity dimension to this trend as well: A higher share of households in the lowest quintile took loans to cover medical expenses (34.4 percent) as compared to that in the top quintile (15.8 percent). In addition, households often reduce their consumption expenditure—predominantly by changing food consumption habits—to pay for health care. Overall, these coping mechanisms are highly costly, undermine livelihood strategies, and make households even more vulnerable to future income risks.

Figure 1.27: Share of Households That Took Loans or Sold Assets to Cover Medical Expenses in the Past 12 Months (Survey Year 2015)



Source: World Bank 2018.

A unique feature of OOP payments for health in Myanmar is that households view this as an inevitable part of seeking care. A qualitative study of OOP expenses for health found that all patients expect and encounter some form of OOP expenditure, regardless of the type of health care they seek. This comprises inpatient and outpatient services from providers considered public, private, or informal. Direct expenses encountered across both public and private providers include service fees charged for injections and other small procedures, which are generally deemed low at about 2,000 kyat; fees for various kinds of investigations and consultations; and—in more advanced stages of diagnostics and treatment—lab and imaging fees that can range in cost between 500 and 8,000 kyat each. Payments for medicines, acquired from the providers or purchased directly by users, are often singled out as a significant expense. In addition,

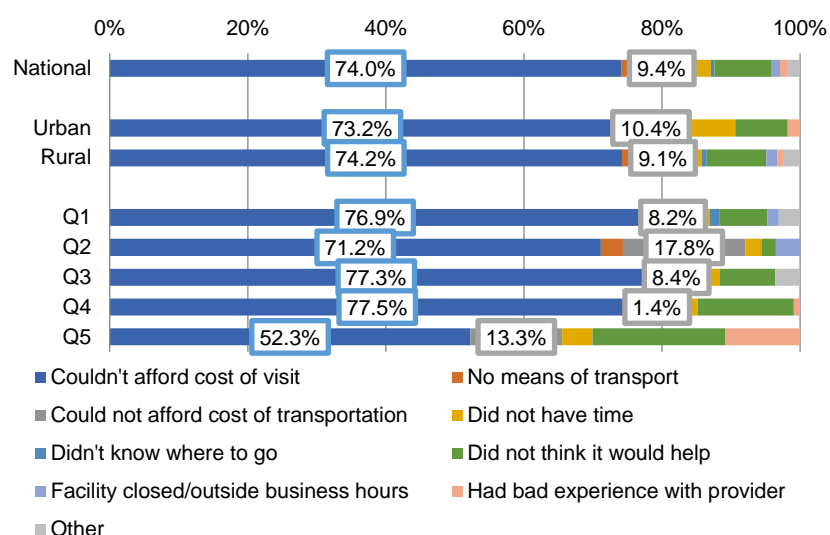
public providers reportedly rely on a small initial registration or admission fee. Inpatient services also require payment for surgery and delivery fees, accommodation and meals (especially when facilities are far from patients' residence). These charges are often unpredictable, as there is no official fee schedule (Save the Children 2017).

The lack of clarity on fees and charges at public sector health facilities contributes to the unpredictable nature of OOP expenses that households incur. A free medicines policy was introduced in 2011/12, but to this day there is lack of clarity and poor communication on the scope of the policy as well as an overall lack of awareness on what services are nonchargeable versus those that continue to have an element of “community cost-sharing.” Going forward, an explicit benefits package, which is clearly defined and well-communicated to the population, would improve the delivery and utilization of health services. Work is already underway to define and cost the basic Essential Package of Health Services (EPHS). The EPHS is intended to be introduced progressively in three phases: a Basic Package that would be made accessible to all by 2021, under the NHP 2017–2021, an Intermediate Package by 2025, and a Comprehensive Package by 2030. The package should also define any cost-sharing ratios, if any, for non-poor segments of Myanmar's population. This would help to mitigate the uncertainty that households face when they seek care at public facilities, as they would know in advance what fees need to be paid (if any) and for what services.

Another reason OOP payments are required is to help providers cope with resource gaps and respond with flexibility to needs of patients in care. Public providers are unable to offer even a basic service package free of charge or at rates that can be afforded by all. Thus, they rely on various systems to collect fees to ensure the provision of basic care. In addition to the formal sources mentioned above, providers rely on more informal sources of funding. Although taking different forms and referred to with different terminologies, “donations” or “offers” play a significant role such that they have become hard to distinguish from fees. Donations are portrayed by both providers and users as a common and inevitable fact of life—something that must be paid as opposed to a discretionary payment. Donations may be charged upon discharge or at completion of a procedure; at the direct request of providers, through envelopes and donation boxes in facilities; or paid spontaneously by patients, as dictated by custom.

The need for OOP spending presents a barrier to seeking care and thus has a negative impact on access to care. On average, 20 percent of households reported not seeking care even though they thought that their condition warranted medical attention. Among these households, three-quarters reported that they chose not to seek care because they lacked the financial means to do so, most commonly due to the expected cost of the visit, and a smaller share because they could not afford the cost of transportation. Costs of care appear to be equally prohibitive to all wealth strata except for the top quintile: in the fourth quintile, 77.5 percent of households reported lack of financial means to pay for care, while this share drops to 52 percent for the top quintile (figure 1.28). This is not surprising, given the profile of poverty in Myanmar, where at least 40 percent of the population is poor or near-poor and a large share remains vulnerable to financial shocks including those from large health expenditures.

Figure 1.28: Reasons for Not Seeking Care despite Medical Need



Source: World Bank 2018.

Overall, the incidence of OOP spending on health is regressive. On average, households in the poorest quintile spent 6.9 percent of their purchasing power on health, compared to 6.3 percent in the richest quintile. This suggests a mild, but not significant, regressive trend of expenditure. In general, this type of analysis is difficult to interpret in a situation where access to care is unequal—such as in Myanmar. OOP spending largely reflects a “pay as you go” system, and does not account for forgone care. Among the poorest quintile, 26.4 percent of households did not seek treatment when ill, compared to just 17.6 percent among the richest quintile. As discussed previously, a chief reason for forgoing care is the cost of care. These patterns of care-seeking, considered alongside OOP spending data, reveal that the regressive nature of OOP spending is further exacerbated by inequitable access to care, due to inability to pay.

Myanmar has a substantial way to go to ensure that its population can access care without undue financial burden. It fares poorly on key indicators of financial protection (table 1.11). Global data show that catastrophic health expenditure and impoverishment remain low in countries where OOP spending represents less than 15 to 20 percent of total health spending (Xu et al. 2010). An increase in prepaid/pooled public spending on health, both in absolute terms and as a share of total health spending, will be needed to improve financial protection in Myanmar.

Table 1.11: Financial Protection Indicators, Myanmar vs. Comparator Countries

Country	Prepaid/pooled share of total health expenditure (%)	OOP < 25% consumption (%)	Neither pushed nor further pushed into poverty (%)
MYANMAR	23	95	96
Cambodia	26	98	98
China	68	95	87
Indonesia	53	99	95
Lao PDR	61	100	94
Malaysia	65	100	99
Philippines	46	99	86
Thailand	92	99	100
Vietnam	63	98	96
<i>East Asia & Pacific countries</i>	76	98	92
<i>Lower-middle-income countries</i>	62	98	88

Source: WHO 2017a.

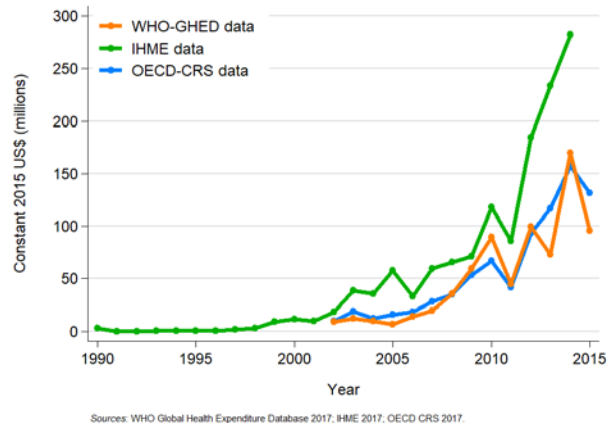
Note: Data on prepaid/pooled share is for 2014. Corresponding years for data on catastrophic spending and impoverishment are Myanmar (2015), Cambodia (2011), China (2007), Indonesia (2014), Lao PDR (2007), Philippines (2009), Thailand (2010), and Vietnam (2010).

External Financing for Health

External financing for health in Myanmar has increased significantly in recent years. As Myanmar opened up, with the easing of sanctions, and the transition to a civilian government, larger amounts of development assistance have flowed in. This is quite unusual as compared to other countries, including other high-growth countries in the lower-middle-income category—many of which have seen a marked decline in external financing for health in recent years.

External financing for health is estimated to have tripled from about US\$74 million in 2010 to US\$236 million in 2014 (WHO 2017b) (figure 1.29). It is important to note that tracking external financing is quite challenging, as most of the funds flow outside the government system, as discussed below. The National Health Accounts for 2014-2015 records a much lower figure: 100,843 million kyat in 2014, or approximately US\$100 million (Myanmar, MoHS 2017). This is closer to the estimate of disbursements recorded in the OECD Creditor Reporting System (CRS). Estimates of external financing as a share of total health spending also vary widely, from 3 percent (Myanmar, MoHS 2017) to about 10 to 14 percent of health spending in global databases.

Figure 1.29: External Financing for Health



A large share of these resources goes toward public health programs, with most of the funds channeled outside of the government’s budget, via nongovernment implementing partners. The main donors in Myanmar’s health sector are the Global Fund to Fight AIDS, Tuberculosis, and Malaria (“the Global Fund”); GAVI, The Vaccine Alliance; the 3MDG Fund, which is a pooled fund from seven bilateral partners; the Japan International Cooperation Agency (JICA); and the International Development Association (IDA). Most of the funds remain off-budget, and are managed and/or implemented by NGOs and UN agencies. Broadly, the programs focus on control of communicable diseases and strengthening delivery of MCH services.

In some programs, external funding continues to comprise the majority share. For immunization, for example, domestically sourced government funding covers just 7 percent of total immunization expenditures, and there remains a high reliance on external funding for vaccines and injection supplies. The implications of high reliance on external financing and an imminent transition away from GAVI financing—will be discussed in the case study on immunization, at the end of this report.

In the short term, external financing for health is likely to continue to be an important source of financing. Ideally, these resources would serve as a supplement to—but not replacement of—domestic resources, and help to catalyze necessary investments into the health sector to improve readiness of the health service delivery system. In the longer term, domestic sources of financing will need to adequately replace external financing, to sustain the delivery of health services to Myanmar’s population. Based on macroeconomic growth projections, Myanmar’s economy is likely to grow at a relatively fast pace in the

medium term, and revenue collection is expected to strengthen. If health care continues to be prioritized and some of this increased revenue is allocated to the health sector, there should be sufficient fiscal space in the medium term to adequately replace development assistance for health.

Understanding what it will take to sustain the success of health programs that were financed by external sources is more important than simply considering the amount of external financing that a country receives. One of the key policy challenges facing countries is to strengthen their health systems to accelerate and sustain progress toward key health outcomes, while effectively managing the transition from and integration of externally financed health programs. This is important both from financial and programmatic perspectives. From the financial perspective, this implies mobilizing replacement domestic financing for programs that are financed primarily by external funds. This should ideally be channeled through prepayment and pooling mechanisms, to ensure greater efficiency and equity. From the programmatic perspective, it would be important to ensure that governments have the institutional capacity to deliver these services effectively. Many externally financed programs run in parallel to government systems, with separate procurement, financial management, human resource management, and reporting modalities. This likewise happens in Myanmar, where parallel and poorly coordinated implementation arrangements have added to the burden of already capacity-stretched health managers and staff, and put in place competing processes and varied incentive structures. Going forward, achieving better alignment across externally financed programs and integrating them into the government system will be critical to their sustainability. Transition and sustainability are discussed further in the case study on immunization.

Social Health Insurance

While there is a long history of social health insurance (social security) in Myanmar, to date there is no comprehensive health insurance system and coverage is extremely low. The social security system, which was established in 1956, covers predominantly private sector employees in the formal workforce (excluding families of the covered employees). The scheme covers less than 2 percent of Myanmar's population (less than one million people). Social health insurance (SHI) spending by the Social Security Board (SSB) amounted to just 0.42 percent of total health spending in 2015 (Myanmar, MoHS 2017). Benefits provided by the scheme include free medical care during illness, payment of 75 percent of basic salary during maternity leave, full salary for one year for severe injuries, cash payments for death and injury, and survivors' pension. The employee and employer each contribute 2 percent of the worker's salary into the scheme, while the government supports program management costs (WHO 2014).

One of the main reasons SHI continues to play such a small role in health financing is that the contribution method of the scheme is ill-suited to Myanmar's labor market structure. With more than 80 percent of the labor force engaged in informal employment, any attempt to establish a more comprehensive social health insurance system that includes the informal workforce would face the challenge of collecting contributions from this population segment. This is a challenge that many countries have faced in their path toward UHC and in trying to expand health coverage to the non-poor informal sector. Further, with 40 percent of Myanmar's population still vulnerable to poverty and financial shocks (World Bank 2017a), it is likely that a significant proportion of premiums for any such scheme will, to a large extent, need to be funded by government contributions on behalf of the population.

Evidence from a range of countries that have tried to expand health insurance coverage to the informal sector shows that the most successful ones are those in which the government has abandoned its expectations to derive substantial revenue from that endeavor (Bitran 2014). Broadly, countries have taken two different approaches to extending coverage for non-poor individuals working in the informal sector: (i) noncontributory schemes in which resources for covering the poor are extended to the informal sector (for example, Thailand); and (ii) contributory schemes, where schemes that cover the formal sector are extended to the informal sector generally with a reduced or tiered contribution rate according to ability to pay (for example, Indonesia). Whether a country takes the first, the second, or a mix of the two approaches generally depends on political and economic factors within the country. These include fiscal space capacity and constraints to expanding coverage, the size and make-up of the informal sector within the country, and the institutional capacity to identify and verify the income of informal sector workers (Bitran 2014; Tandon et al. 2016).

Many of these factors are relevant to Myanmar, and will need to be taken into consideration in discussions on whether (and how) to establish a social health insurance system and build the necessary institutional arrangements to ensure that it functions well. Recent discussions in Myanmar have mooted the idea of a social health insurance system, backed by robust legislation that would ensure that the health insurance system supports the UHC objectives of effective coverage and financial protection. Experiences from other countries that have introduced or reformed their SHI systems have shown that these reforms—and the act of legislation in particular—has helped to concretize explicit health service guarantees to the population, and provided a legal basis for collection of contributions. In practice, especially in lower-middle-income countries such as Myanmar, much of the funding continues to come from general government revenues. This has been the case in many countries in this region: China, Thailand, and Vietnam, as well as in many Eastern European and Latin American countries. But what the legal framework does is to enshrine the rights of the population to receive services as defined by law or in policy. In addition, positive changes that have come out of the institutionalization of social health insurance in law include strengthened institutions, increased funding, improved access and financial protection, and increased patient empowerment. These positive changes attributable to SHI—and key lessons and challenges to be aware of, as summarized in table 1.12—can serve as guideposts for Myanmar’s reform effort over the coming few years.

Table 1.12: Positive Changes Attributable to Social Health Insurance and Key Implementation Challenges

Domain	Positive changes attributable to SHI	Key implementation challenges
Legislation and political processes	1. Facilitates national debate and consensus on financing health care and allocating resources, especially where legislation is required to authorize mandatory contributions. 2. A commitment to SHI over the long term has seen success in expanding membership.	Legislation can be blocked or may be difficult to pass if there is a lack of consensus among key stakeholders ^a
Revenue generation and enforcement	3. Implementation of SHI has succeeded in raising more revenues for health in addition to existing revenues raised by general taxation.	1. Mandatory SHI needs to be enforced. Passing a law and creating an organization to collect premiums is relatively easy, but enforcing collection of premiums is challenging.
Pooling arrangements and inclusion criteria	4. SHI has constituted a formal mechanism for pooling revenues and spreading risks across population groups, from rich to poor and across the life cycle.	2. Dependents of contributing members present a big challenge. The poorer the country, the higher the dependency ratio.
Benefits design and financial control	5. Implementation of SHI has forced more careful and rational planning regarding the imperative of equating SHI revenues with SHI expenditures.	3. Accurate estimates of the benefits package and of costs determine the financial sustainability and survival of SHI.
Accountability	6. Improves accountability between contributing members and the SHI system, especially if benefit entitlements have not been honored.	4. Leakage of SHI funds due to corruption will be a perpetual threat.
Service provision	7. Separates public finance from public provision of health care.	5. Supply should be built up progressively if clients in peri-urban and rural areas, in particular, are to have access to adequate health care.
Equity of coverage	8. Discussions on how to expand coverage for the poor and other	6. Enrollment of those in the informal sector or the self-employed will always be

	vulnerable groups have led to more realistic consideration of equity.	a major challenge because mandatory enrollment is not easily enforceable. 7. All stages of SHI face major problems in relation to defining, certifying, and subsidizing the poor.
Provider payment	9. The onus on SHI to achieve value for money has encouraged new thinking and experimentation with different forms of provider payments.	8. Provider payment mechanisms that aim to shift the financial risk of provision to the provider, such as capitation, will have to be continuously monitored and evaluated.
Governance and administration	10. Where new organizations responsible for raising earmarked revenues for health and contracting has occurred, this has helped to clarify and redefine institutional roles and responsibilities, especially of MoHS.	9. Improvement of the administrative efficiency and effectiveness of SHI requires attention on several fronts. For example, consolidating existing social insurance and other risk-pooling schemes is often tricky.

Source: Adapted from Hsiao and Shaw 2007 with authors' additions.

Note:

a. Authors' addition. The other (numbered) points in the table are from Hsiao and Shaw 2007.

A summary picture of these various sources of health financing suggests that on balance, health financing in Myanmar is regressive. The relative progressivity of health financing is strongly influenced by the sources of revenue and the structure of funding contributions. Equity of health financing can be measured using a Kakwani Index, which compares the distribution of health payments across households, ordered according to their socioeconomic status from poorest to richest, with the distribution of households' income or total expenditure. In the absence of robust national data, however, a broad assessment of equity in financing can be done by determining the percentage share of total health expenditure funded by each financing mechanism, and by considering whether that funding source is likely to be progressive or regressive (McIntyre and Kutzin 2016). Table 1.13 summarizes this assessment for Myanmar. Without precise data to calculate the benefit incidence or financing burden of each financing source, it is difficult to quantitatively assess whether health financing is progressive or regressive in aggregate. However, as three-quarters of the sources of funds for health come from a source that is regressive (OOP payments = 74 percent), it is most likely that health financing is, on balance, regressive.

Table 1.13: Assessment of Equity in Financing in the Absence of a Kakwani Index

Category	Financing mechanism	Share of total health spending (%)	Progressivity	Remarks
Public / government revenue sources	Direct taxes (personal income and corporate taxes)	~13	++	PIT ~3.2 percent of GDP; 0 to 25 percent marginal rates, exempt below 2 million kyat annual income. CIT ~2.6 percent of GDP; 25 percent + capital gains and dividends tax.
	Indirect taxes	4	+	Other tax = 1.9 percent of GDP
	Other	4	—	Nontax revenue + grants = 1.8 percent of GDP
	Social health insurance	0.42	+	Progressive, but pool is small and nondiverse. No redistributive capacity.
Private / Voluntary	Private voluntary health insurance	<2	+	No robust market information available. Likely progressive but insufficient pooling.

revenue sources	Community-based health insurance	<1	—	No robust market information available
	Out-of-pocket payments	74	--	Regressive (see OOP section)
External resources	External resources	3	—	None

Sources: Myanmar, MoHS 2017; World Bank 2016; authors' calculations.

Note: ++ = Highly progressive; + = Moderately progressive; -- = Highly regressive; — = Not available; PIT = Personal Income Tax; CIT = Corporate Income Tax.

Fiscal Space for Health

Raising more domestic, prepaid, and pooled resources for health will be critical to support Myanmar's progress toward UHC. Conversely, continuing on a path where OOP payments continue to be the dominant source of financing and where the health financing burden is regressive will hurt Myanmar's progress toward UHC. In this context, what options does Myanmar have for generating additional fiscal space for health? Fiscal space for health refers to the ability of governments to increase spending for the health sector, without jeopardizing the government's long-term solvency or crowding out expenditure in other sectors needed to achieve overall development objectives. Fiscal space for health can be generated from a variety of sources, broadly grouped into five categories (Heller 2006; Tandon and Cashin 2010):

- i. Conducive macroeconomic conditions, such as economic growth and increases in overall government revenue that, in turn, might lead to increases in government spending for health
- ii. A reprioritization of health within the government budget
- iii. An increase in health sector-specific resources, such as taxes that are earmarked for health
- iv. An increase in grants and foreign aid specific to the health sector
- v. An increase in the efficiency of existing government spending on health

Table 1.14 summarizes the potential sources of fiscal space for health and Myanmar's prospects for raising additional public resources for health from each of these sources. A more detailed write-up on efficiency is included after the summary table, given that efficiency is a health system objective and is a crosscutting topic in this report.

Table 1.14: Potential Sources of Fiscal Space for Health in Myanmar

Source of fiscal space for health	Key information / policy options	Prospects for fiscal space (very good, good, moderate, poor)
Macro-fiscal environment	<p>Key information:</p> <ul style="list-style-type: none"> Strong medium-term economic outlook—despite moderated fiscal conditions in recent years—with a projected rate of growth of 6.9 percent per annum in the medium term. Medium-Term Fiscal Framework envisions that the health budget will increase 0.3 percentage points through FY2019/20, from 1.1 percent of GDP today to 1.4 percent of GDP in FY2019/20. In nominal kyat terms, this would be an increase of about 50 percent from just under 1 trillion kyat today to 1.5 trillion kyat in FY2019/20. 	Very good

Source of fiscal space for health	Key information / policy options	Prospects for fiscal space (very good, good, moderate, poor)
	<p>Policy options related to this pillar of fiscal space, however, are limited. This source of fiscal space lies outside the domain of the health sector, and is not a policy lever, which MoHS can exercise. Nonetheless, awareness and knowledge of the overall macro-fiscal context can support MoHS's case for advocating for greater allocation of the general government budget to the health sector.</p>	
Reprioritization of health in the government budget	<p>Key information:</p> <ul style="list-style-type: none"> • Health sector has already been the biggest “beneficiary” of the rebalancing of the Union government budget, which started in 2011/12. • Health budget as a share of Union budget increased from 3 percent in 2011 to more than 8 percent in 2015 and 2016. • Further rebalancing is expected, but may not be the main driver of additional fiscal space for health, as it was from FY2012 to FY2016. <p>Policy options:</p> <ul style="list-style-type: none"> • Develop a clear, costed plan of health reforms under the umbrella of the National Health Plan 2017–2021 (ongoing in FY2017). This would provide a strong rationale for increasing the budget share for health. 	Good
Health sector–specific resources	<p>Key information:</p> <ul style="list-style-type: none"> • <u>Social health insurance</u>: Due to the high level of poverty and large informal sector, implementing mandatory social health insurance with contributions from the population will be extremely challenging. Experience from other countries has shown that increasing coverage has usually taken a noncontributory route, with general taxes covering contributions for the poor and other vulnerable groups, and it has highlighted ongoing challenges in enrolling the informal sector. • <u>Tobacco and other “sin taxes”</u>: Given that tobacco is the number one risk factor for ill health in Myanmar, tobacco taxation reforms should be considered, along with other measures to curb use. <p>Policy options:</p> <ul style="list-style-type: none"> • <u>Social health insurance</u>: The most successful attempts to implement SHI have been those in which government has abandoned its expectations to derive substantial revenue from the endeavor. This is likely to be applicable in Myanmar as well. • <u>Tobacco and other “sin taxes”</u>: Initiate dialogue to raise and harmonize taxes on tobacco and other products that are harmful to health. Broad stakeholder engagement will be critical to effective legislation and implementation. 	Moderate

Source of fiscal space for health	Key information / policy options	Prospects for fiscal space (very good, good, moderate, poor)
External resources	<p>Key information:</p> <ul style="list-style-type: none"> External financing has increased in recent years, but phase-out (e.g., GAVI financing for immunization) has already begun. Transition planning, including key considerations on both financial and programmatic sustainability, needs to begin as soon as possible. <p>Key policy options:</p> <ul style="list-style-type: none"> Use external resources in the short term to catalyze necessary investments into the health sector and improve health service–delivery readiness. Improve alignment between externally and domestically financed health programs. Strengthen critical service–delivery support mechanisms, including procurement, financial management, human resource management, and reporting modalities. Develop plans for health financing transition, including both financial and programmatic sustainability. 	Moderate
Efficiency gains	<p>The low level of spending on health is itself a source of inefficiency. With shortages in one or more inputs, the resources that <i>are</i> in place cannot be adequately used, and therefore may be wasted. At the same time, additional resources that have been allocated to MoHS in recent years have not been used efficiently due to systemic challenges with public financial management (PFM), resulting in low budget execution. In addition, OOP spending is highly inefficient. OOP spending deters and delays utilization, prevents and limits the benefits of pooling from being realized, and incentivizes providers to provide unnecessary care.</p> <p>Areas and policy options for increasing efficiency:</p> <ol style="list-style-type: none"> <u>Increase the level and share of public financing for health</u> (discussed above). <u>Consolidate/rationalize different financing streams and mechanisms into a larger, more diverse risk pool</u> to reduce fragmentation in the system, and improve equity and financial protection for all citizens. (To be discussed in following section on Pooling). <u>Reform in public financial management (PFM) and provider payment methods</u> can improve technical efficiency. On PFM, shifting away from top-down budgeting can reduce the mismatch between budget allocations and health needs, and facilitate improvements in budget execution. Moving toward a method of provider payment that is more responsive to needs on the ground can create an incentive for better performance. (To be discussed in section on Purchasing). 	Good

Source: Authors' summary.

Pooling

Pooling is the second key health financing function. Pooling is the accumulation of funds for health care on behalf of a population before they get sick. The main rationale for pooling of funds is that health care costs are unpredictable. Individuals do not generally know when they are going to fall ill, what health services they will require, or how much it will cost. Although it is difficult to predict an individual's future health service needs and costs, it is possible to draw on epidemiological and actuarial data to estimate the probable future health service needs of a large group of people. Healthy members of the pool are helping to pay for the services of those who are ill, and members of the pool can draw on the resources as and when they need them (that is, when they fall ill). The risk of falling ill and incurring unexpected, large health costs is thus shared among those in the pool (McIntyre and Kutzin 2016).

The effectiveness of pooling arrangements depends on three key characteristics: size, diversity, and compulsory participation. First, size: the larger the pool, the greater the capacity to provide cross-subsidies to support those with the greatest health service needs. Second, diversity: cross-subsidizing from the healthy to the sick is facilitated when the pool comprises individuals with a mix of health risks. Third, compulsory or automatic inclusion of populations in pools makes pooling much more effective. When participation in a pooling arrangement is voluntary, sicker people tend to join, while healthier ones do not. This problem of adverse selection destabilizes pool funds over time, requiring increased collections or exclusions to maintain financial balance for voluntary schemes. With these principles in mind, this section aims to shed light on the questions: *Are prepaid and pooled funds for health sufficient and equitable? What additional pooling arrangements could Myanmar consider?*

Prepaid and pooled funds for health remain relatively small and fragmented. The de facto pool for most of the population is the government health budget. The size of the pool remains small, at about US\$12 per capita per year (Myanmar, MoHS 2017). A process of estimating the per capita cost of the basic Essential Package of Health Services (EPHS) is underway. However, based on global estimates and experience from other countries, it is likely that Myanmar's current level of public spending on health is insufficient to cover the basic health needs of its population. There are also smaller and less diverse pooled funds for health in Myanmar. These include the social health insurance scheme managed by the Social Security Board, and voluntary private health insurance schemes. Table 1.15 summarizes the key characteristics of the three existing types of pooled funds for health.

Table 1.15: Pooled Funds for Health, Myanmar

Pooled fund	Size of pool	Diversity	Compulsory / voluntary	Share of total health spending (%)
Ministry of Health and Sports	51 million (Myanmar population)	Very diverse; no explicit exclusions	Compulsory: financed through general government revenue	22
Social health insurance (Social Security Board)	<1 million formal sector employees in enterprises with >5 employees	Pool is small and nondiverse	Compulsory, but effectiveness of implementation is unclear	0.42
Private voluntary health insurance	Unknown, likely very small	Pool is likely small and nondiverse	Voluntary	<2

Source: Authors.

One option that Myanmar could consider is to continue a steady expansion of general government revenue financing for health, and channel the funds to a semi-autonomous agency for pooling and purchasing. This would be consistent with the vision of the NHP to establish a public purchasing entity in the medium term. Currently, public funding for health consists of general government revenues, which are channeled through the budgets of MoHS, other ministries and departments, and to the social security

scheme. Private funding is mostly out-of-pocket payments made by households, which are neither prepaid nor pooled. Several countries with fragmented pooling arrangements and low coverage for poor and vulnerable groups have chosen policy reforms that aim to increase equity of coverage by introducing tax-financed schemes. The Philippines, for example, has a single pooled fund—managed by PhilHealth—with different contribution rates based on ability to pay. Contributions for the poor and other vulnerable groups are covered by the state through tax financing. Funds from social health insurance contributions thus complement tax financing via the government budget. This is the case in most lower-middle-income countries. In some countries, tax-financed schemes may run in parallel with other existing coverage programs, but they often quickly form the largest pool (by population size) and facilitate a rapid ramp-up of overall population coverage. This is the case in China and Thailand. Thailand's reforms can be instructive, given the context and policy choices that should be made as part of Myanmar's process of formulating a Health Financing Strategy. Thailand's Universal Coverage Scheme (UCS) pools government budget funds at the national level, and allocates spending equitably across the population (box 1.1).

Box 1.1: Thailand's Universal Coverage Scheme

Thailand's Universal Coverage Scheme (UCS) aims to increase population coverage, improve equity, and provide financial protection to its citizens. At the same time, the scheme was designed to take into account fiscal space, to ensure financial sustainability of the program in the long run. At its inception, UCS had three defining features:

i. **A tax-financed scheme, free at the point of service.** General tax was chosen as the main source of financing because it was the most pragmatic option and it was believed to be the most progressive. Senior policy makers took the view that in practice, universality was likely to mean a tax-financed scheme: if politicians wanted to reach universal coverage as quickly as promised, using general tax revenues was the only choice. Collecting premiums from scheme members would have involved technical complications, and was also politically unpalatable.

ii. **A comprehensive benefits package with a primary care focus.** The UCS scheme aimed to cover a comprehensive set of essential health services (with a small exclusion list), broadly covering all services that were part of the schemes that preceded the UCS. The initial benefits package that was part of the rollout across the nation in 2001–02 was thus guided by historical precedents, based on what was covered under other health insurance schemes. However, subsequent inclusion or exclusion of an intervention was guided by a health technology assessment, equity and ethical considerations, and supply-side capacity to scale-up.

iii. **A fixed annual budget with a cap on provider payments, to manage overall costs.** The UCS greatly simplified the budget allocation process to participating providers (mostly public): the total UCS budget equals the capitation rate multiplied by the total number of UCS members in that budget year. Formerly, the Budget Bureau exercised substantial discretionary power in allocating the health budget to the Ministry of Public Health (MoPH): it was negotiated on an individual program basis, across thousands of programs. This led to a complicated budget approval process. The new system introduced greater transparency because the capitation rate was negotiated on the basis of evidence concerning utilization, unit cost, and annual fiscal capacities. In addition, providers are not allowed to balance bill patients for extra costs, thus curbing cost escalation.

Source: Health Insurance System Research Office 2012.

Another approach is to begin consolidating disparate health coverage schemes and offer a standardized benefits package according to the population's epidemiological profile and costs of care. In the East Asia region, South Korea has been most successful with this reform. In 2000, South Korea merged three existing types of health insurance funds—one for employees, one for schoolteachers and civil servants, and one for self-employed people—into a single pool. The biggest upside of this reform has been significant efficiency gains through savings in administrative costs, which declined from 7.9 percent of all social health insurance scheme expenditures to 2.4 percent between 1996 and 2008. This allowed for

expansion of health insurance benefits, such as cancer screening, reduced co-insurance rates for conditions that caused patients to incur large out-of-pocket expenses, and introduction of ceilings for cumulative out-of-pocket payments (Yip and Hafez 2015).

A consolidation of pooled funds will need to be done in tandem with reforms in other parts of the health system. It will be important to improve service delivery capacity so that all Myanmar people, especially those in remote and rural areas, can avail themselves of health services and the benefits that come from a consolidated pooled fund. The risk, otherwise, is that benefits will accrue mostly to urban areas (and to higher-income households), where service availability and utilization are generally higher. This would lead to a more inequitable distribution of public spending on health. In addition, the governance of a consolidated pool is often tricky. In Myanmar, this would involve discussions between MoHS and the Social Security Board, at a minimum, to align administration and governance, benefits packages, contribution rates, and payment methods.

In general, as national income increases, prepaid and pooled resources increase as a share of total health spending. Regardless of how fund pools are arranged and governed, the most critical task in Myanmar now is to reduce its reliance on out-of-pocket spending, and to increase the share of prepaid and pooled funds.

In addition to inadequacy of pooled funds, budget allocation criteria also hinder the ability of the government health budget to be distributed in a way that effectively responds to health needs. This has to do with the lack of strategic planning linked to budgeting, the top-down nature of the budget preparation process, and the absence of a needs-based formula to allocate funds to subnational governments and service delivery units.

Myanmar's budget cycle focuses almost exclusively on financial controls, while key planning tools are almost entirely absent. These would include strategic plans, medium-term expenditure frameworks, and multiyear budgets. While the government of Myanmar has a Medium-Term Fiscal Framework (MTFF), it does not have a Medium-Term Expenditure Framework (MTEF). The MTFF helps aggregate total fiscal space available to determine resource availability, but does not help determine and plan for future expenditure allocation, as an MTEF would. Macroeconomic forecasts are not routinely shared with the line ministries, nor are they used to determine aggregate expenditure ceilings. Major policy decisions or options are not required to be fully costed in terms of estimates of forward expenditures and are not required to be described in sector strategy documents. The result is that budgetary allocations are guided largely by prior year budgets. While departments and subnational levels submit budget proposals during the annual budget preparation period, approved amounts do not necessarily reflect what has been requested, with little discussion and room for justification on why the amount requested was reasonable. Manual, paper-based consolidation procedures for the budget make it difficult to facilitate a consultative process and analyze expenditures to inform decisions on budget allocations.

Within its budget ceiling, MoHS allocates funds to central departments, states/regions, and townships using different and sometimes inconsistent methods—none of which adequately allows for redistribution of funds across administrative lines to meet changing health needs. The capital budget is based primarily on norms for population-to-facility ratios and annual plans for construction and purchase of equipment. Allocations may deviate from the norm if there are special projects in the pipeline. Capital budgets are held and managed either at the central or state/region levels, depending on the specific nature of the project. Township Medical Officers, however, hold no responsibility for managing the budget, contracting, and procurement of infrastructure projects and equipment. While there is merit in consolidating these processes for efficiency reasons (for instance, bulk orders, larger contracts), this also suggests that there is less flexibility for decision making at the township level.

Allocation of the recurrent (operational) budget varies depending on the department in charge and the line item. Two main departments oversee service delivery: the Department of Medical Services (DMS) and the Department of Public Health (DoPH). DMS allocates the operational budget, based on the number of sanctioned hospital beds and bed utilization rates. The budget for medicines for services overseen by the DMS is allocated on a per capita basis. Medicines are then procured either through the Central Medical Store or by state/region procurement departments, and expenditures therein deducted from each

subadministrative unit's account. DoPH's method of allocating its budget is less clear; to date, no distinct formula or allocation criteria have been laid out. Across the board, townships, states/regions, and central departments cost their own personnel budget, based on the number of sanctioned staff in position. They then receive the budget disbursed into their respective accounts. When viewed in aggregate, the operational budget is in fact a series of line items, each with different budget allocation criteria (or lack of criteria). The way the funds are spent is also relatively circumscribed, leaving little ability to reallocate funds across line items. In effect, the public financial management (PFM) system curbs the responsiveness of the health system.

A range of activities and reforms under the NHP 2017–2021 aims to improve these planning and budgeting processes. First, through the development of a basic EPHS, Myanmar will have an explicit and prioritized list of services, which the government will guarantee access to. This service package is being costed, and the estimated cost—with sensitivity analysis for realistic ramp-up and coverage scenarios—will form part of MoHS's budgeting process for fiscal 2018/19. Second, the NHP has started rolling out a process of engaging townships to develop an Inclusive Township Health Plan (ITHP) for each of the 330 townships. Key information gaps are the following: Who is doing what and where? Which services and interventions reach which communities? Where are the gaps in supply-side readiness and service availability and who could fill them? (NHP 2017–2021). Bottom-up planning via the ITHP will facilitate better service planning which, when combined with costing data, will inform MoHS on how and where to allocate its funds. The vision is to use these processes to improve service readiness, coverage, and equity of access and financing.

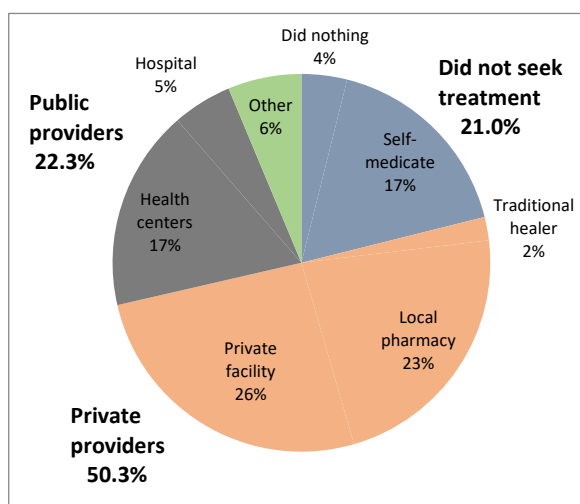
NHP 2017–2021 also explicitly aims to improve the PFM system. Proposed activities include: (i) improving budget allocation by introducing and communicating explicit formulas for inter- and intra-departmental resource allocation; (ii) synchronizing health sector planning and budgeting cycles; and (iii) creating a new budget line to consolidate existing, disparate operational budget lines, to enable more flexibility in spending by health facilities.

Purchasing

The third key health financing function is purchasing. Purchasing is the process of allocating prepaid resources from pooled funds to providers for service benefits. Closely linked to purchasing are decisions on benefits (what services, and at what level of cost coverage) and provider payment methods. The way purchasing arrangements are set up will have significant implications for provider behavior and efficiency.

NHP 2017–2021 has laid out a vision to develop a strategic purchasing function in the public sector, to contract with and purchase health services from nongovernment health providers, starting around 2019 to 2020. This is in recognition of the fact that it is not realistic for the public sector to aim to reach the entire population of Myanmar in delivering the basic EPHS promised under the NHP. A considerable segment of the population seeks care outside the public sector. The Myanmar Poverty and Living Conditions Survey (MPLCS) found that half of those who reported ill health sought care at nonpublic facilities (figure 1.30). The survey was unable to disaggregate what type of providers these individuals went to. However, based on the general profile of nonpublic health providers, this can range from private for-profit general practitioner (GP) clinics, ethnic health organizations (EHOs), or nongovernmental organizations (NGOs). An added problem is that Myanmar does not have a health facility census that includes all private providers. An

Figure 1.30: Actions Taken after Illness/Injury

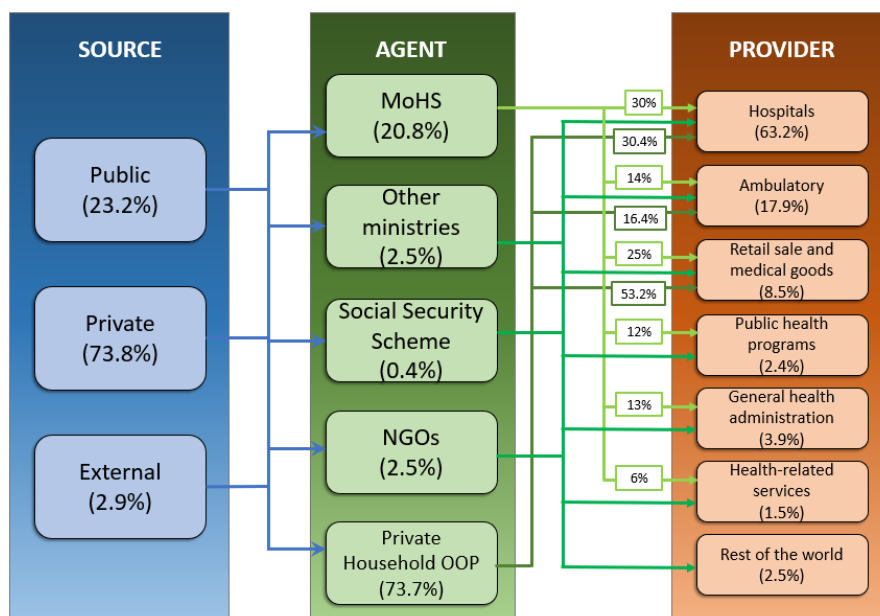


Source: World Bank 2018.

effort is now underway, via the Inclusive Township Health Plan exercise, to identify all health providers in each township.

Mapping health spending from sources to agents and providers also gives a summary picture of how money flows across different entities. Using the National Health Accounts classification, figure 1.31 summarizes public, private, and external financing sources as a share of total health spending, and maps the flow of funds to different financing agents and provider types. Most relevant to purchasing is the observation that there are already multiple financing agents—MoHS, other ministries, the Social Security Board (SSB), and NGOs—purchasing health services on behalf of different subpopulations in Myanmar. The same service provider could be receiving multiple sources of revenue from different agents, possibly each with a different payment method or rate.

Figure 1.31: Flow of Funds in the Health System



Source: Myanmar, MoHS 2017, authors' representation.

Going forward, MoHS intends to purchase services from both MoHS providers and nonpublic health care providers to improve equitable coverage, build synergies, and avoid duplication in service delivery (NHP 2017–2021). A semi-autonomous body will be established to undertake the purchasing functions. Given these plans, and keeping in mind the already complex environment with multiple financing agents, this section of the report aims to answer the question: *What key steps and reforms are needed for Myanmar to develop the capabilities of a strategic purchaser in the medium term?*

Broadly, a purchasing entity will have four main responsibilities. These are described in table 1.16, along with the corresponding tasks that need to be fulfilled. The following paragraphs outline the present context in Myanmar as relates to fulfilling each of the four responsibilities, and highlight key opportunities, constraints, and actions that may be needed to enable Myanmar to develop a strategic purchasing capability in the medium term.

Table 1.16: Responsibilities and Key Tasks of a Strategic Purchaser

Responsibilities of strategic purchasers	Key tasks
Know how much money the purchasing agency has and how much it spends	Project and manage revenue and expenditure
Decide what to buy and from whom to buy	Select providers and enter into contracts with them to deliver services in the benefits package
Decide how and how much to pay providers	Develop and implement provider payment systems and calculate payment rates
Know how the money is being used	Monitor provider performance, service utilization, and quality

Source: Adapted from Cashin 2016.

Projecting and managing revenue and expenditure

Myanmar’s semi-autonomous purchasing entity will need to establish independence from MoHS in its functions of revenue and expenditure management. The reason for this relates to a key objective of purchasing. Purchasing aims to address one of the main problems traditionally encountered by health planners—bridging the gap between planning, budgeting, and allocation of resources (Figueras et al. 2005). This is a problem in many countries and likewise in Myanmar, as described in the section on pooling. Myanmar’s system of planning and budgeting is based on top-down historical budgets, with a mismatch between budget allocations and health needs. Purchasing could vastly improve this system by closely linking revenue estimates with clear plans on what the funds will be spent on, and how.

A key intermediate step in aligning revenue and expenditure is to ensure that the purchasing entity has a sustainable source of revenue, and has a system (and staff) that will enable it to manage and track expenditures. On the revenue side, experience from other countries that have undertaken reforms for strategic purchasing shows that regulation of purchasers’ budgets is critical to ensure financial adequacy. This often involves official approval by parliament of a purchaser’s budget in cases where the purchaser is a public organization, often with an annual spending ceiling. In countries where there are multiple purchasers, it is also important to set the rules for the distribution of funds among purchasers, usually involving mechanisms or formulas to compensate for differences in the risk structure of different purchasers (Figueras et al. 2015). Both these considerations will be important in Myanmar. First, as part of the process of formulating its Health Financing Strategy, relevant stakeholders will need to discuss what sources of revenue the purchasing entity can or should draw on, and decide on a process for formulating, debating, and approving the budget. Second, stakeholders will need to decide on the institutional structure of the purchasing entity—national or at the state/region level—which will have implications on how revenue projections are developed and how monies are distributed. On the expenditure side, a robust tracking system will enable the purchaser to understand its expenditure patterns—service volumes, unit prices, utilization patterns—so that adjustments can be made to improve efficiency and equity of spending over time. Adequate staffing for these functions will be critical.

Revising benefits package, selecting providers, and contract management

Deciding what to buy and from whom to buy is a key task of any purchasing entity. More specifically, this will involve the development and/or revision of a benefits package (what to buy), selecting providers to contract with (who to buy from), and adequate contract management capacity to ensure that services delivered are of an acceptable quality.

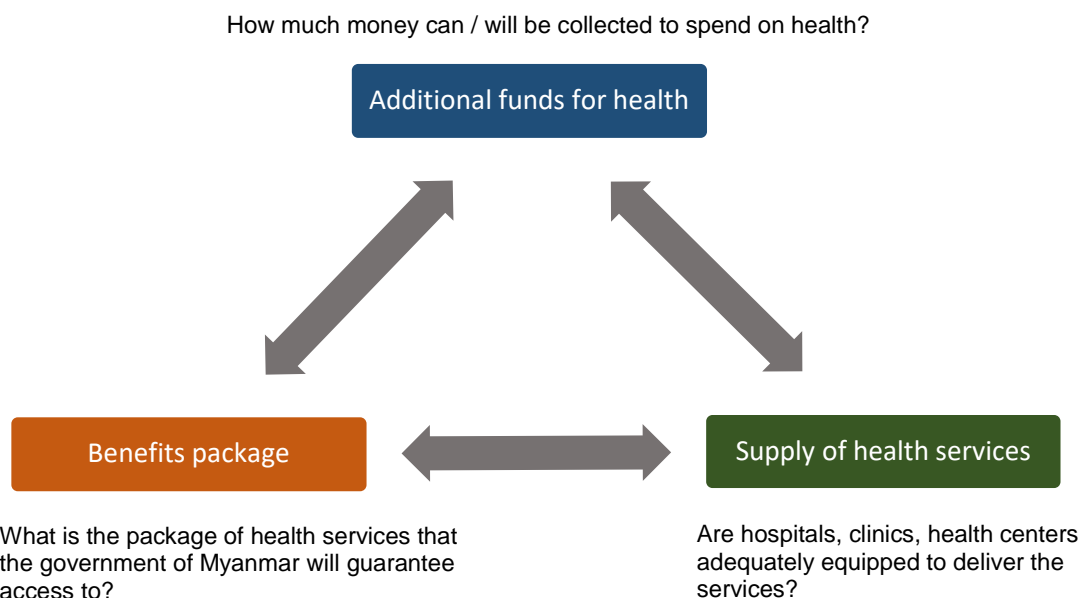
Given resource constraints, the benefits package is a useful tool that helps policy makers decide which health care services can and will be covered, and which cannot. Increasingly, countries are moving toward the use of positive lists to define their benefits packages. This can be a list of services and coverage by health conditions (diagnosis-based), clinical procedures (procedure-based), and/or a list of drugs to be included in the package. The level of detail in defining the benefits package can vary greatly—for example, treatment for certain diagnoses may be covered, but what exactly that coverage entails may

not be explicitly detailed. Determining and defining the specificity of the benefits package will be an important step for Myanmar.

The basic EPHS represents a good first step in defining a benefits package for Myanmar. The basic EPHS has already been defined through consultation with key directorates in MoHS. It includes a wide range of services and interventions, aimed at improving outcomes in reproductive, maternal, newborn, child, and adolescent health, nutrition, communicable and noncommunicable diseases, and emergency conditions. MoHS is currently in the process of developing treatment guidelines and standards of care for these services. In the medium term, having an objective set of criteria for revising the basic EPHS and selecting providers to contract with will be critical. This will be important for reasons of transparency, cost-effectiveness, and quality.

Ultimately, it will be critical to ensure alignment among the benefits package that has been promised, service availability and readiness, and fiscal capacity. Figure 1.32 below represents the conceptual relationship among these three key factors. The benefits package that the government of Myanmar will guarantee access to will need to be defined, sized, and costed in relation to supply-side readiness and availability of funds. A benefits package that is overly generous cannot be delivered if there are insufficient funds to meet operating costs, and if health facilities are not equipped to deliver the services. Likewise, if there are additional funds but the health system is not equipped to channel the funds to facilities, the health sector will run into a problem of poor absorptive capacity. At present, Myanmar faces the dual problem of insufficient funding and poor supply-side readiness, as described in earlier sections on health spending and service readiness. The key challenge will be to undertake health system and health financing reforms in tandem with one another, such that reforms in multiple areas—such as infrastructure, financing, supply chain, and human resources—will support each other rather than create unintended disconnects across subsectors of the health system.

Figure 1.32: Conceptual Relationship among Benefits Design, Fiscal Space for Health, and Supply-Side Readiness



Source: Authors.

With a benefits package in place, provider selection through an objective contracting mechanism provides a good opportunity for improving performance and quality of care. In the short term, MoHS intends to purchase on a pilot basis with MoHS providers; the selection process will likely be purposive. To purchase services in nongovernment-controlled areas, working relationships with ethnic health organizations may need to be negotiated on a case-by-case basis. Other than these exceptions, several

general principles for selecting providers and contracting should be adhered to. On the side of the purchaser, this includes making transparent and rational choices in placing contracts, and ensuring that its policy objectives and service delivery requirements are made clear to the provider. On the side of providers, those hoping to win contracts should be able to demonstrate clearly how they can supply services that meet purchaser objectives, and the exact nature (and an estimate of volume) of services offered (Langenbrunner, Cashin, and O'Dougherty 2009). Purchasing contracts should aim to fulfill the objectives of transparency and accountability, value-for-money, and be quality-assured. A key task will be to start building the capacity of the purchasing entity, to ensure that it has the capability to manage and enforce contracts, to fulfill these objectives.

Provider payment systems

The mechanisms used to pay providers are critical for incentivizing efficient provision of quality health services. There are a range of payment mechanisms for individual providers (for example, salary, capitation and fee-for-service) and for facilities (for example, budgets, fee-for-service, per diem, and case-based payments). Some mechanisms may create an incentive to underprovide services (such as capitation), while others provide an incentive for over-servicing (particularly fee-for-service); some do not provide an incentive to provide good quality care (for example, salaries), while some promote efficiency of service delivery (for example, capitation and case-based payments) (McIntyre and Kutzin 2016).

The provider payment method that is best for a country is context-dependent, and will change over time. Broadly, however, three main principles should guide policy decisions for provider payment (Cashin 2015). These are: (i) appropriately selecting the mix of provider payment methods, (ii) designing payment systems strategically, and (iii) ensuring appropriate implementation arrangements. Key considerations for each of these principles are summarized in table 1.17, with discussion of selected key issues below.

Table 1.17: Guiding Principles for Policy Decisions on Provider Payment

Principle	Key considerations
Select the right mix of provider payment methods	<ul style="list-style-type: none"> • The way provider payment systems work together within the country's overall payment system architecture • The capacity of the purchaser to design and manage payment systems of varying complexity • The autonomy, flexibility, and capacity of providers to respond to payment incentives • How the payment systems align with and strengthen other health financing functions, such as pooling of funds and defining benefits or essential services packages • Other factors that influence institutional relationships and provider behavior, including political, legal, and public financing factors
Design payment systems strategically	<ul style="list-style-type: none"> • Be appropriate for the goals and context of the country and the current capacity of the purchaser and providers • Be transparent about roles and relationships (particularly among the purchaser, providers, and the population), the basis for payment, and the parameters and formulas used to calculate payment rates • Create consistent incentives that maximize benefits and minimize unintended consequences to advance health system goals • Set payment rates based on a combination of cost information, the resource constraints of the purchaser, and other policy considerations
Ensure appropriate implementation arrangements	<p>Implementation arrangements should</p> <ul style="list-style-type: none"> • Create the conditions necessary to operate and manage the payment system • Give providers the flexibility to respond to incentives • Make it possible to balance financial risk and manage costs • Include systems for monitoring and improving quality

	<ul style="list-style-type: none"> • Ensure that stakeholders on all sides are accountable and that adverse consequences can be managed
--	--

Source: Cashin 2015.

How provider payment systems work together within the country's overall payment system architecture is critical. In Myanmar, public sector health providers are paid based on input-based, line-item budgets, and health professionals are salaried. Out-of-pocket spending by patients at public facilities also contributes to providers' revenue source. This, in effect, forms a partial fee-for-service payment method to public providers. By and large, private providers are paid on a fee-for-service basis.

Among public sector health providers and within the public financial management structure, the health budget is allocated to administrative units and implementing institutions according to cost elements in specific input line items. The economic chart of accounts (CoA) for operating budgets comprises six different categories: (1) pay, allowance, and honoraria; (2) traveling allowance; (3) expenses of goods and services; (4) maintenance charges; (5) transfer payments; and (6) entertainment and meal expenses. These are further subdivided into more detailed input line items. Budget managers have very little authority to reallocate budgets across line items throughout the year. In theory, there is a process for virements between budget line items but it is seldom used. The official process for revising budget estimates is relatively tardy so that revised estimates are finalized too close to the end of the fiscal year, when budget estimates for the following fiscal year are already being prepared.

In general, while input-based budgets are effective in containing costs, they do not offer incentives for efficient or responsive provider behavior, and are largely incompatible with the objectives of strategic purchasing. In the process of developing their Health Financing Strategy, policy makers should consider the scope for linking budgets to performance and reporting requirements to allow for monitoring of performance within the public financial management context (McIntyre and Kutzin 2016). An alternative would be to consider budget transfers to the semi-autonomous purchasing entity—this would need to be regulated and approved, as mentioned in the subsection on revenue.

As Myanmar adopts strategic purchasing, robust cost data will help the purchaser determine reasonable payment rates. At present, due to the budget structure, very little information is available on the cost of delivering each type of service or intervention. While some implementing institutions include subdivisions into disease programs and health facilities, there is no program budgeting per se for specific groups of activities related to objectives. This makes it difficult for MoHS—and in the future, the purchasing entity—to understand service costs and set payment rates based on cost information, one of the factors in strategic payment design, mentioned in the table 1.17. A costing exercise of the basic EPHS will provide initial cost estimates for the package, subdivided into specific services (for instance, antenatal care, family planning, deliveries, and reproductive health). A management system to collect cost information will help to refine cost estimates by replacing them with actual costs, and will serve as the platform on which the purchaser can effectively manage all financial data and payments to providers. Developing a system that is appropriate to Myanmar's needs will be a key next step.

An additional issue to highlight when contracting with MoHS providers is the degree of autonomy and authority these providers will have in managing their funds and making decisions. A key issue in relation to purchasing by the Ministry of Health and Sports or a mandatory health insurance or other semi-autonomous public organization is whether they are also responsible for service provision, and if so, whether providers have been granted some form of management authority and a purchaser-provider split created. Unless public sector managers responsible for service delivery have legally delegated decision-making authority, public sector health providers will not be able to respond to the incentives created through the purchasing arrangements, and cannot be held fully accountable for their performance (McIntyre and Kutzin 2016). The choice of payment methods may be constrained by the capacity of the health purchaser and the autonomy of providers. For example, if the payment method, such as capitation, creates strong incentives for efficiency, but providers do not have the flexibility to alter the mix of inputs they use, such as by shifting staff, service quality could suffer (Cashin 2015). In Myanmar, public hospitals and health centers have minimal decision-making authority. The distribution of human resources is centrally planned, and budgets are relatively rigid. Attempts to purchase from MoHS providers should take into consideration how

centralized functions such as human resource planning and public financial management, among others, impinge on provider autonomy and accountability.

Monitoring provider performance, service utilization, and quality

Finally, it is critical that there is a strong system in place to monitor the activities that a purchaser is responsible for, to ensure good performance and quality of care. The main functions of purchaser systems include registration and eligibility, premium collection, contracting and contract management, claims adjudication, support for provider payments, utilization management, and quality assurance. While some functions—such as checking eligibility—are specific to insurance-based systems, most of the other functions apply to all and any types of purchasers.

It will be important to assess what type of purchasers' system would be appropriate for Myanmar. While the technical specifications of a purchasers' system are beyond the scope of this report, what is important to note is that these systems can be highly complex and expensive to implement. Experience from countries with long experience of implementing purchaser-side systems suggest that the overall investment has been in the tens of millions of dollars, and has taken many years to properly implement. Myanmar will need to assess and determine what type of purchaser-side system it will aim to put in place in the short term, and then develop more sophisticated functions over the medium term.

A Case Study on Immunization

Immunization is one of the most critical health services delivered in every health system around the world. Vaccines in the World Health Organization’s Expanded Programme on Immunization (EPI) are proven to be medically effective and cost-effective. Further, immunization can be characterized as a public good once “herd immunity” is achieved. EPI programs are therefore well worth the investment, but also generally thought of as a service that should be financed through publically sourced funds.

Using the national immunization program as a “tracer condition” thus offers an opportunity to illuminate critical policy issues and bottlenecks in a country’s health service delivery system. This case study outlines how the immunization program is financed and implemented, and aims to assess challenges that the program may face in the near future. This is particularly critical in the context of the health financing transition, which Myanmar is beginning to undergo—including a decline in financing and technical support from external partners for the EPI program—and as it aims to increase the prepaid/pooled share of financing and reduce OOP spending by households. The case study documents immunization outcomes and coverage rates, highlights key issues on financing and implementation arrangements, and concludes with an outlook on the future of the program.

Myanmar’s routine immunization schedule covers all the “traditional vaccines” among WHO’s recommended routine vaccines. Several “new vaccines” have been introduced in recent years—pentavalent vaccine in 2012 and Japanese encephalitis (JE) and pneumococcal vaccines since 2016. Myanmar’s routine immunization schedule for children is summarized in table 1.18.

Table 1.18: Myanmar’s Routine Immunization Schedule for Children, 2017

Time/age	Antigen
At birth	• BCG, hepatitis B
2 months	• BCG, pentavalent vaccine-1 (DPT, hepatitis B, HiB) • PCV-1 • Polio-1
4 months	• Pentavalent vaccine-2 • PCV-2 • Polio-2 • Injectable polio vaccine
6 months	• Pentavalent vaccine-3 • PCV-3 • Polio-3
9 months	• Measles, rubella
1.5 years	• Measles, rubella

Source: Myanmar, MoHS 2015.

Immunization coverage in Myanmar appears to have declined in the few years leading up to 2015. In 2010 and 2011, for example, BCG coverage was estimated to be 93 percent, but was recorded at just 86 percent in 2013 and 2014. OPV3 (three doses of oral polio vaccine) coverage declined even more sharply, from 90 percent to 76 percent in this same period (WHO and UNICEF 2016). Estimates for coverage rates also vary depending on data source; table 1.19 summarizes these differences.

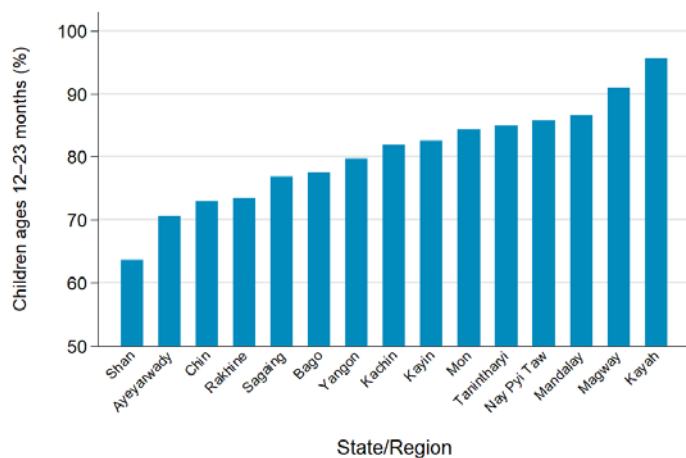
Table 1.19: National Immunization Coverage in Myanmar, 2015 and 2016

Vaccine	WHO / UNICEF estimates (2016) (%)	National Monitoring and Evaluation Framework (2015) (%)	Demographic Health Survey (2015) (%)
DPT3/Penta3	90	78	62
BCG	88	86	88
OPV3	89	78	67
Measles-rubella	91	86	77
Tetanus toxoid	—	80	70

Sources: WHO and UNICEF 2016; Myanmar, MoHS 2015; Myanmar, MoHS and ICF 2016.
Note: — = Not available.

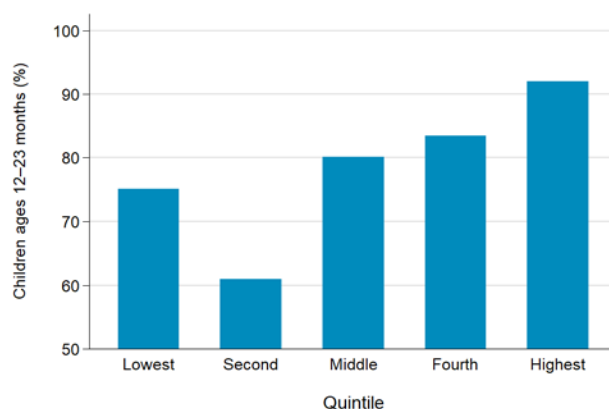
There are wide discrepancies in immunization coverage rates across states/regions and by economic status. The national average rate for a fully immunized child was 54.8 percent in 2015, with urban areas registering a 67.5 percent coverage rate, compared to just 50.4 percent in rural areas. Across states and regions, the poorest-performing region recorded just 33.8 percent of fully immunized children, versus 81.3 percent in the best-performing region (Myanmar, MoHS and ICF 2016). On average, lower-income families have much poorer immunization coverage rates than higher-income families. For illustrative purposes, figures 1.33 and 1.34 show discrepancies in coverage for measles by states/regions, and by wealth quintiles.

Figure 1.33: Measles Vaccination by State/Region



Source: Myanmar, MoHS and ICF 2016.

Figure 1.34: Measles Vaccination by Wealth Quintile



Source: Myanmar, MoHS and ICF YEAR 2016.

Resource constraints and limited physical access are among the key reasons for the worsening immunization coverage. There are inadequate resources and support for midwives and supervisors to travel for outreach, and lack of cold chain storage at the rural health centers. In addition, the key service provider for immunization, the midwife, is overburdened with multiple responsibilities and the need to conduct outreach with inadequate resources (Myanmar, MoHS 2015). Coverage is especially poor in conflict-affected and geographically hard-to-reach areas, self-administered regions, and among peri-urban populations.

In many ways, these constraints are symptomatic of broader health system deficiencies, where chronic underinvestment in facilities and equipment, inadequate funding, and stretched human resources are binding constraints to service delivery. Achieving sustained improvements in immunization coverage

and making progress on other health outcomes and outputs will require tackling some of these critical bottlenecks to service delivery in the health system.

Immunization financing

In 2015, total immunization expenditures were approximately US\$58 million.⁸ The cost for routine immunization was US\$30 million, while supplementary immunization activities (SIAs)—such as campaigns—cost US\$28 million. A further breakdown into cost categories shows that 19 percent of the total cost was spent on routine vaccine supply and on injection supplies for routine immunization; 41 percent was spent on SIAs. This comprised a large share of the costs in 2015 due to a large catch-up campaign for measles-rubella, as well as a polio campaign in response to two cases of vaccine-derived polio. Shared costs comprised 14 percent of total program expenditure, while management, surveillance, and advocacy each comprised relatively small shares of total expenditure.

Table 1.20: Immunization Program Costs, 2015

Cost category	Expenditure (US\$, millions)	Share of total (%)
Vaccine and injection supplies (routine immunization only)	12.7	19
Service delivery	3.5	5
Advocacy and communication	3.0	5
Monitoring and disease surveillance	1.8	3
Program management	1.0	2
Capital costs	8.4	12
SIAs (vaccine + operation costs)	27.6	41
Shared costs	9.4	14

Source: Myanmar, MoHS 2015.

External sources of financing comprise most immunization program funding, while the share of domestically sourced government financing remains very low. Financing from GAVI comprised 56 percent of immunization program costs in 2015. The 3MDG Fund contributed 15 percent, a large portion of which was spent on the purchase of cold chain equipment, through UNICEF (Myanmar MoHS 2015). Funding from GAVI, UNICEF, and WHO paid for vaccines and supplies, training, microplanning, as well as Information, Education, and Communication (IEC) activities. Government financing comprised just 7 percent of total immunization program costs. The government share of the *routine* immunization program is larger, at 14 percent, but is still relatively small.

Almost all external financing flows outside of the government system. GAVI provides two types of financial support to the immunization program: (i) the Vaccines Introduction Grant, and (ii) the campaign-operating budget. There have also been some ad hoc funds provided for other initiatives, such as through the Global Polio Eradication Program and Health System Strengthening (HSS) grants. Myanmar's second HSS grant commenced in 2017. Currently, there is no direct financial mechanism from GAVI to the government of Myanmar. For vaccine costs, for example, funds flow from GAVI to UNICEF Copenhagen (Supply Division) directly. GAVI also provides financing to UNICEF and WHO to enable these organizations to support the national immunization program. Other national programs have similar arrangements for fund flows of external financing outside the government system. While this has supported program implementation to date, a key step would be to create a financial mechanism for the transfer, receipt, and use of external funds through the government system. Strengthening and using country systems is a core principle of development assistance, donor alignment, and accountability.

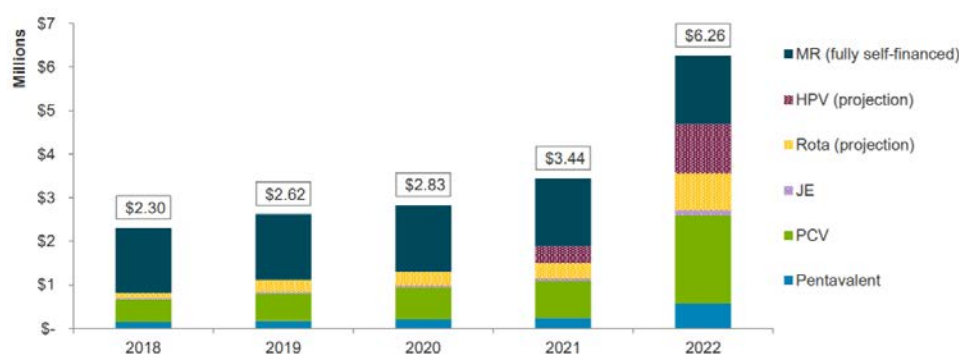
There are ongoing efforts to increase the share of domestic sources of financing for immunization, starting with the cost of vaccines. Up to 2016, all funding for traditional vaccines was from UNICEF. 2017 marked a turning point where, for the first time, government assumed responsibility for the cost of traditional vaccines. At the same time, Myanmar has entered the preparatory transition phase with respect

8. Including shared costs (for instance, personnel, buildings, and transport), the total cost rises to US\$67 million.

to the support it receives from GAVI, and cofinancing requirements are gradually increasing. Assuming the cost of traditional vaccines, combined with its share of cofinancing for new vaccines, was estimated to cost the government US\$6.7 million in 2017. This represented about a five- to six-fold increase in government funding for vaccine procurement as compared to previous years. Myanmar is also in the process of applying to the Vaccine Independence Initiative—a credit line for vaccine procurement managed by UNICEF—so that it can continue to bear the cost of vaccines from domestic sources (borrowing).

The government of Myanmar has fulfilled its financing obligations for vaccine costs to date. However, future funding commitments to the immunization program are uncertain, leaving a significant financing gap. The government has been cofinancing the pentavalent vaccine since 2012. The share of cofinancing for the pentavalent vaccine is increasing, and obligations for other new vaccines have started to kick in (Pneumococcal Conjugate vaccine since 2016; Human papillomavirus and rotavirus in the near future). Myanmar is projected to enter the accelerated transition phase in 2021, where cofinancing requirements will increase sharply. While the GAVI cofinancing obligations in 2017 were estimated at just US\$697,000, this is expected to increase to \$6.26 million in 2022 (figure 1.35). The annual projected cost of the immunization program is not expected to increase—it is likely to stay around US\$60 million—but government’s share will need to increase. Based on available information on secure and probable sources of funding, the annual funding gap from 2019 to 2021 is estimated to range from US\$8 to US\$15 million (Myanmar, MoHS 2015). This presents serious concerns over sustainability of financing for immunization. Closing this gap will require more fiscal space. The options for fiscal space for health outlined in an earlier section of this report would apply to the immunization program as well. Additional domestic resources would first need to be allocated to the health budget—and as a secondary step, allocated to the immunization program based on prioritization of needs across MoHS.

Figure 1.35: Myanmar’s Cofinancing Obligations to GAVI, 2018–2022 (Projected)



Source: GAVI 2017.

Programmatic functions of immunization service delivery

In addition to financing sustainability, it will be important to understand the readiness and sustainability of programmatic functions of the immunization program. These functions represent many of the key elements and activities necessary for effective service delivery. These include planning and budgeting, service delivery arrangements, human resources, supply chain, and information systems. We consider some of these functions here.

Planning and budgeting for the immunization program follows a systematic process, but some gaps remain. The planning process is led by the EPI Program at MoHS, and supported by WHO and UNICEF. Together, these parties form the Technical Working Group (TWG) on Immunization. An annual workplan and evaluation are jointly conducted by all parties in the TWG. A five-year plan is also reviewed on a regular basis. This plan aims to lay out supply requirements for the medium term, with updates on projections based on parameters such as population, coverage rates, and shipment planning. Despite this systematic planning process, there are key gaps in the planning and budgeting process. In particular, it is very difficult to match service delivery plans with budget estimates and allocation. It is especially difficult to apportion

operating expenses, including shared costs. As a result, there are often no clear budget estimates for operating costs for the immunization program. Each service delivery unit (that is, each township) has a rough idea of the number of children in its target area and an immunization schedule to follow. However, implementation, supervision, and monitoring of EPI activities is challenging without clear deliverables that are backed up by a budget. This is symptomatic of the broader public financial management issues in Myanmar, where budgets are set based on historical spending and monies are voted into specific line items based on economic classification. A shift toward program budgeting, or an alternative method of more clearly linking program targets and outputs to funding, would help to improve the planning and budgeting process, including for immunization.

A large share of immunization services are delivered at nonfixed posts. Fixed posts include MCH Centers, Urban Health Centers, Rural Health Centers, and subcenters and township hospitals. However, it is estimated that 80 percent of immunization is delivered through outreach activities in wards and villages, via mobile services, and through crash programs. The key differences among these modes of service delivery are outlined in table 1.21.

Table 1.21: Delivery Channels for Immunization Services in Myanmar

Mode of delivery	Description (nationally recommended practice)
Fixed post	Regular, routine immunization services provided at health facilities
Outreach	Monthly, routine immunization services provided by a midwife away from a resident village, in areas that are easily accessible (day trip, no overnight stay)
Mobile	Routine immunization services provided by a midwife away from her resident village, in areas that are not easily accessible. Monthly (ideally); minimum of 6 times a year. Requires >24 hours round-trip travel; may require overnight stay.
Crash program	Special immunization services (campaign) provided by a group of health workers in hard-to-reach areas, during the open season—typically October to March—at least 3 times per year.
International NGOs or ethnic health organizations deliver immunization services in self-administrative areas and special regions that are not serviced by the government. Where possible, government supplies the vaccines.	

Source: Adapted from Myanmar, MoHS 2015, with authors' additions.

The choice of delivery channels is, in part, driven by the features of the supply chain for immunization. The EPI supply chain is separate from the supply chain for other health commodities. EPI commodities are procured through the UNICEF Supply Division. UNICEF also helps to facilitate customs clearance and ships the vaccines to a central cold room. There are 22 subdepots across the country; transportation to these 22 subdepots is outsourced by the government to a company.

While the supply chain from import to the subdepot level is relatively robust, there are gaps at the township level and below. Township Medical Officers are meant to collect vaccines monthly. Some rudimentary stock management is conducted, based on planned number of children to immunize and number of outreach sessions. However, there is no precise inventory management system from the 22 subdepots to the township level. In addition, there are critical gaps in the cold chain from the township level to facilities. An earlier description of service readiness highlighted that only 38 percent of rural health centers (RHCs) have refrigerators, and this drops further to 27 percent among subcenters. The lack of an effective cold chain for vaccines at the RHC and subcenter level means that basic health staff/midwives must rush out to deliver immunization services, shortly after receiving the supplies. The norm is for midwives to collect vaccine supplies from the township hospital once a month (when they go to receive their salary). Typically, immunization sessions will be conducted at fixed posts the day after staff have collected the supplies. On Days 2 and 3 after supplies are collected, staff conduct outreach services in neighboring villages. This results in the phenomenon of “immunization days”—as opposed to immunization services being available as and when they are needed, for example, when a child is born, or when patients visit the facility. Anecdotal evidence suggests that this infrequent—albeit regular—immunization service delivery

schedule may lead to missed opportunities to improve coverage. Vaccine efficacy may also be affected by poor cold chain and long travel times.

Improvements of information systems are underway. A Central Logistics Management Information System is already available at the national level. This provides aggregated stock and consumption information. The aim is to roll out an IT migration plan to include subdepots in this system. Partners are also supporting upgrading of the cold chain to improve stock readiness at the township level and below. This should greatly improve service availability and readiness of the immunization program. Yet, further challenges are likely to remain, such as the number and distribution of staff, ability to reach mobile populations, and service delivery in conflict-affected areas.

In sum, the national immunization program is in its early transition phases, with much work to be done to ensure financial and programmatic sustainability. While the government has started financing traditional vaccines and has met cofinancing obligations for new vaccines, future commitments for government financing of vaccine procurement remains uncertain. There are also gaps in planning and budgeting for service delivery costs, especially operating expenses. Most immunization services are delivered outside fixed posts today. While this may have the benefit of reaching remote populations, constraints in the cold chain at the township level and below may affect vaccine efficacy. Establishing well-functioning stores for EPI supplies and other commodities will be critical to improving immunization coverage.

Key Takeaways and Next Steps

To conclude, we revisit the three sets of questions that this report has focused on.

Today, Myanmar people bear the largest burden of health financing through direct payments for their own care at the point of service. The out-of-pocket share of health spending, at 74 percent in 2015, is very high by global and regional standards, and is higher than almost all other countries at a similar level of income. OOP spending is an inefficient and inequitable way of paying for health care. Continuing on a path where OOP payments continue to be the dominant source of financing for health will hurt Myanmar's progress toward UHC—in particular the objective of improving financial protection against large and impoverishing health spending.

Myanmar needs to mobilize additional public resources for health. Public spending on health is very low, both in absolute terms and as a share of total health spending. Despite recent increases in the health budget, public spending on health is 23 percent of total health spending, equivalent to just US\$12 per person per year. While it is impossible to determine how much money any country needs to support its attainment of UHC, benchmarking with other countries shows that Myanmar's current level of public spending is insufficient. No country has attained the Sustainable Development Goals and reduced OOP spending on health to less than 30 percent of total health spending without public expenditures on health being at least 2.7 percent of GDP (Tandon et al 2016), much higher than Myanmar's current public spending on health at 1.2 percent of GDP.

The low level of spending on health has also led to substantial inefficiencies in the health system. Service readiness is poor due to the absence of one or more requisite inputs. This leads to poor service availability, ineffective coverage, and, in turn, low quality care and poor health outcomes. Myanmar can become more efficient—and improve health service coverage and quality of care—by spending more rather than less. Further investments in basic health service inputs and health systems will help to eliminate the inefficiency that comes from spending so little. Financing arrangements also contribute to inefficiencies: rigid public financial management rules make it difficult for health providers to respond to changing health needs; and input-based line-item budgets are poor in incentivizing higher utilization and quality of care.

An increase in general government revenues and a larger allocation to the health sector are likely to be the biggest sources of fiscal space for health in the medium term. With a strong medium-term macroeconomic outlook, economic growth and stronger revenue collection are likely to be the main drivers of growth in public spending—some of which will go to health. A continued rebalancing of government spending priorities toward social service sectors will also contribute to an increase in health share of the government budget. But the health sector must be ready to utilize these additional resources effectively. Clear plans for health reforms, better absorptive capacity, and an increase in efficiency of spending will help to show that additional resources allocated to the health sector are a justified and worthy investment.

While there have been calls for the introduction of social health insurance, coverage for the majority of Myanmar people will most likely have to come from a public source of revenue (for example, tax financing), rather than from individual contributions. With Myanmar's high level of poverty and large informal sector, implementing mandatory social health insurance with contributions from the population will be extremely challenging. Even the current social health insurance scheme, which caters to formal sector employees, covers only a minuscule share of the population and accounts for less than 1 percent of all health spending. Experience from other countries has shown, on the one hand, that increasing social health insurance coverage has usually taken a noncontributory route, with tax financing covering contributions for the poor and other vulnerable groups, and, on the other hand, highlighted ongoing challenges in enrolling the informal sector. This is likely to be the case in Myanmar as well.

As public financing for health increases, one option that Myanmar could consider is to channel public funds to a semi-autonomous agency for pooling and purchasing. This would be consistent with the vision of NHP 2017–21 to establish a public purchasing function, and would provide the new purchasing entity with a predictable and sustainable stream of revenue. Many lower-middle-income countries have adopted this option of budgetary transfers to a semi-autonomous agency, which will then purchase services

on behalf of the covered population. Often, these schemes quickly form the largest pool (by population size) due to government efforts to ramp up coverage.

Over time, an additional challenge may arise about consolidating disparate pooled funds and purchasing entities that cater to different populations and offer different benefit packages. Myanmar already has several health service purchasers, but they are small in coverage and fund size as compared to the government budget, which is the de facto pooled fund for the Myanmar population. While in theory a single purchaser has the benefit of stronger purchasing power, the process of consolidating disparate entities is complicated, and has met with limited success where it has been tried. At this stage, getting a new purchasing entity off the ground should likely be MoHS's main task.

Building the capacity of a strategic purchasing entity will need to start now. Steps are being taken to define and cost a basic Essential Package of Health Services, to be delivered by 2021. But experience from other countries suggests that building the requisite systems to facilitate strategic purchasing takes many years. A strategic purchaser must know how much money it has (revenue projections) and how much it spends (expenditure management); decide what to buy (determining a benefits package) and from whom to buy (contracting); decide how and how much to pay providers (provider payment and pricing); and know how its money is being used (performance monitoring and quality assurance).

Myanmar's current system of allocating resources for health is broadly incompatible with the objectives and responsibilities of strategic purchasing. This will need to change to facilitate the reforms envisioned. The current system of historical line-item budgeting, with little flexibility to reallocate resources as needs change, curbs the responsiveness of the health system. A paradigm shift—from one that focuses on controlling the allocation of inputs, to one that focuses on outputs, performance, and quality—will be a challenging but necessary task to set Myanmar on the path toward achieving the goals of its National Health Plan, and ultimately the objectives of Universal Health Coverage.

Many of these shifts and reforms are choices that need to be made by a conscious, informed decision-making process, including a wide range of stakeholders in Myanmar. Raising additional resources for health will require consensus from public financing institutions. Changing the way funds for health are pooled may impact institutional and governance arrangements—or require the statutory establishment of a new entity. Establishing a purchasing entity represents a new relationship among the purchaser, providers, and patients. Finally, many of these changes may require a legal foundation. Establishing a process to discuss, deliberate, and gain consensus on these important decisions on health financing would help to ensure that there is sufficient buy-in for the reforms—and, in the long run, ensure that the strategic direction of health financing in Myanmar can be sustained and effectively implemented.

References

- Bitran, R. 2014. "Universal Health Coverage and the Challenge of Informal Employment: Lessons from Developing Countries." Health Nutrition, and Population Discussion Paper, World Bank, Washington, DC.
- Cashin, Cheryl, ed. 2015. *Assessing Health Provider Payment Systems: A Practical Guide for Countries Working toward Universal Health Coverage*. Joint Learning Network for Universal Health Coverage.
- Cashin, Cheryl. 2016. "Health Financing Policy: The Macroeconomic, Fiscal, and Public Finance Context." World Bank Studies. Washington, DC: World Bank. doi:10.1596/978-1-4648-0796-1. License: Creative Commons Attribution CC BY 3.0 IGO.
- Cashin, Cheryl, and Ajay Tandon, 2010. "Assessing Public Expenditure on Health from a Fiscal Space Perspective." Health, Nutrition, and Population Discussion Paper, World Bank, Washington, DC.
- Figueras, Josep, Ray Robinson, and Elke Jakubowski, ed. 2005. *Purchasing to Improve Health Systems Performance*. European Observatory on Health Systems and Policies Series. Copenhagen: World Health Organization.
- GAVI, The Vaccine Alliance. 2017. GAVI Country Factsheet: Myanmar. <https://www.gavi.org/country/myanmar/>. Accessed December 2017.
- IHME (Institute for Health Metrics and Evaluation). 2016. Global Burden of Disease Study 2016, Data Resources. Available at: <http://ghdx.healthdata.org/gbd-2016>.
- Health Insurance System Research Office. 2012. *Thailand's Universal Coverage Scheme: Achievements and Challenges. An Independent Assessment of the First 10 Years (2001–2010) Synthesis Report*. Nonthaburi, Thailand.
- Heller, Peter. 2006. "The Prospects of Creating 'Fiscal Space' for the Health Sector." *Health Policy and Planning* 21 (2): 75–79.
- Hsiao, William C., and R. Paul Shaw. 2007. "Social Health Insurance for Developing Nations." World Bank Institute (WBI) Development Studies. Washington, DC: World Bank.
- IHME (Institute for Health Metrics and Evaluation), GBD (Global Burden of Disease). 2017. "GBD Compare." Seattle, WA: IHME, University of Washington, 2017. <http://vizhub.healthdata.org/gbd-compare>. Accessed November 2017.
- Jowett, M., M. P. Brunal, G. Flores, and J. Cylus. 2016. "Spending Targets for Health: No Magic Number." Health Financing Paper No. 1, World Health Organization, Geneva. <http://apps.who.int/iris/bitstream/10665/250048/1/WHO-HIS-HGFHFWorkingPaper-16.1-eng.pdf>.
- Kutzin J., S. Witter, M. Jowett, and D. Bayarsaikhan. 2017. *Developing a National Health Financing Strategy: A Reference Guide*. Geneva: World Health Organization. (Health Financing Guidance No. 3) License: CC BY-NC-SA 3.0 IGO.
- Langenbrunner, John C., Cheryl Cashin, and Sheila O'Dougherty, ed. 2009. "Designing and Implementing Health Care Provider Payment Systems: How-to Manuals." Washington, DC: World Bank.
- McIntyre D., and Kutzin J. 2016. "Health Financing Country Diagnostic: A Foundation for National Strategy Development." Health Financing Guidance No. 1. Geneva: World Health Organization.

- Myanmar, MoHS (Ministry of Health and Sports), WHO (World Health Organization), and WDF (World Diabetes Foundation). 2014. *Report on National Survey of Diabetes Mellitus and Risk Factors for Non-communicable Diseases in Myanmar*. Nay Pyi Taw.
- Myanmar, MoHS (Ministry of Health and Sports) and WHO (World Health Organization). 2015. *Nation-wide Service Availability and Readiness Survey (SARA)*. Nay Pyi Taw.
- Myanmar, MoHS (Ministry of Health and Sports). 2015. *Expanded Program on Immunization Multi-Year Plan 2017–2021*. MoHS, Department of Health, Central Expanded Programme on Immunization, Nay Pyi Taw.
- Myanmar, MoHS (Ministry of Health and Sports) and ICF International. 2016. *Myanmar Demographic and Health Survey 2015–16: Key Indicators Report*. Nay Pyi Taw, Myanmar, and Rockville, MD.
- Myanmar, MoHS (Ministry of Health and Sports). 2016. *Myanmar National Health Plan 2017–2021*. Yangon. http://themimu.info/sites/themimu.info/files/assessment_file_attachments/NHP_2017-2021_ENG_0.pdf. Accessed January 2018.
- Myanmar, MoHS (Ministry of Health and Sports). 2017. *Myanmar National Health Accounts: 2014–2015*. Nay Pyi Taw.
- Myanmar, MoPF (Ministry of Planning and Finance) and World Bank. 2017. *An Analysis of Poverty in Myanmar: Part One—Trends between 2004/05 and 2015* (Vol. 2). Washington, DC: World Bank Group.
- Myanmar, MoPF (Ministry of Planning and Finance). (unpublished document). 2017. Microsoft Excel workbook file.
- OECD (Organisation for Economic Co-operation and Development). 2017. CRS (Creditor Reporting System). <https://stats.oecd.org/Index.aspx?DataSetCode=crs1>. Accessed October 2017.
- Save the Children. 2017. *Qualitative Study of Out-of-Pocket Expenditures (OOPE) on Health: Further Expanding the Knowledge and Evidence Base of Health Financing in Myanmar*. Washington, DC: World Bank and 3MDG.
- Tandon, Ajay, Cashin, Cheryl. 2010. *Assessing Public Expenditure on Health from a Fiscal Space Perspective*. Health, Nutrition and Population (HNP) discussion paper;. World Bank, Washington, DC. © World Bank.
- Tandon, Ajay, Eko Setyo Pambudi, Pandu Harimurti, Emiko Masaki, Ali Winoto Subandoro, Puti Marzoeki, Yasmin Chrysanti, Vikram Sundara Rajan, Darren W. Dorkin, Amit Chandra, Chantelle Boudreaux, Pei-Lyn Melissa Chew, and Nugroho Suharno. 2016. *Indonesia—Health Financing System Assessment: Spend More, Right, and Better*. Washington, DC: World Bank.
- UN DESA (United Nations Department of Economic and Social Affairs) 2017. Population Division. *World Population Prospects 2017*. (Cited December 2017). <https://population.un.org/wpp/>
- WHO (World Health Organization). 2000. "The World Health Report 2000: Health Systems: Improving Performance." Geneva: WHO.
- WHO (World Health Organization). 2013. *World Health Report: Research for Universal Health Coverage*. Geneva: WHO.
- WHO (World Health Organization). 2014. *The Republic of the Union of Myanmar Health System Review*. Health Systems in Transition, Vol.4, No. 3. Geneva: WHO.
- WHO (World Health Organization). 2017a. *Global Health Observatory, the 2017 Update*. Geneva: WHO. <https://www.who.int/gho/en/>. Accessed October 2017.

- WHO (World Health Organization). 2017b. Global Health Expenditure Database, 2017. Geneva: WHO. <http://apps.who.int/nha/database/ViewData/Indicators/en>. Accessed October–December 2017.
- WHO (World Health Organization) and UNICEF (United Nations Children’s Fund). 2016. *Annual Report on Immunization Performance for the Period January-December 2015, Myanmar*. http://www.who.int/immunization/monitoring_surveillance/data/en/ and <http://www.data.unicef.org/child-health/immunization>.
- World Bank. 2016. *Myanmar Economic Monitor, December 2016: Anchoring Economic Expectations*. Washington, DC: World Bank Group.
- World Bank, World Development Indicators (WDI). 2017. (Cited October–December 2017). <http://databank.worldbank.org/data/home.aspx>
- World Bank. 2017b. *Myanmar Public Expenditure Review 2017: Fiscal Space for Economic Growth*. Yangon, Myanmar: World Bank. <https://openknowledge.worldbank.org/handle/10986/28392>. License: CC BY 3.0 IGO.
- World Bank. 2018. “Out-of-Pocket Spending on Health and Health-Seeking Behavior in Myanmar.” Myanmar Poverty and Equity Analysis Series, 2018/01, World Bank, Washington, DC.
- Xu, Ke, Priyanka Saksena, Matthew Jowett, Chandika Indikadahena, Joe Kutzin, and David B. Evans. 2010. “Exploring the Thresholds of Health Expenditure for Protection against Financial Risk.” World Health Report, Background Paper No. 19, 328–33. Geneva: World Health Organization.
- Yip, Winnie, and Reem Hafez. 2015. “Improving Health System Efficiency. Reforms for Improving the Efficiency of Health Systems: Lessons from 10 Country Cases.” Geneva: World Health Organization.

Myanmar's National Health Plan (NHP) for 2017-2021 has laid out the vision of achieving Universal Health Coverage (UHC) by 2030. The NHP aims to improve the delivery of health services and financial protection for Myanmar people through substantial investments in frontline service delivery units and through a range of reforms in the health system, including on health financing. This report assesses Myanmar's health financing system. The analysis is structured around three main sets of questions: (i) Who pays for health in Myanmar? Given that the government needs to invest more in the health sector, where could (or should) the money come from; (ii) Are prepaid and pooled funds for health sufficient and equitable? What additional pooling arrangements could Myanmar consider; and (iii) What key steps and reforms are needed for Myanmar to develop the capabilities of a strategic purchaser in the medium term? This Health Financing System Assessment aims to inform health financing policy choices that the Government of Myanmar will need to make as part of the development and implementation of its Health Financing Strategy.

ABOUT THIS SERIES:

This series is produced by the Health, Nutrition, and Population Global Practice of the World Bank. The papers in this series aim to provide a vehicle for publishing preliminary results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character. For free copies of papers in this series please contact the individual author/s whose name appears on the paper. Enquiries about the series and submissions should be made directly to the Editor Martin Lutalo (mlutalo@worldbank.org) or HNP Advisory Service (askhnp@worldbank.org, tel 202 473-2256).

For more information, see also www.worldbank.org/hnppublications.



1818 H Street, NW
Washington, DC USA 20433

Telephone: 202 473 1000
Facsimile: 202 477 6391
Internet: www.worldbank.org
E-mail: feedback@worldbank.org