Myanmar's health transitions

Country profile

October 2021

In this profile, we examine the impact of four transitions on Myanmar's health system: rapid changes in demography, disease transitions, changing patterns in domestic financing, and shifts in donor financing levels and priorities. These transitions affect whether Myanmar will be able to reach its ambitious goal of achieving universal health coverage (UHC) for its population. Our goal is to understand both the challenges these transitions present and the opportunities that can be harnessed to build a more equitable health system.

1 Demographic transition

Myanmar is experiencing a rapid shift in age structure and rural-urban make-up, and a rise in population. The elderly population is expected to double in the next three decades. Nearly half of Myanmar's population is likely to live in urban areas by 2050. To achieve UHC, Myanmar's health system will need to evolve to address changes in the health service needs arising from demographic transition. See the demographic transition section for more details.

2 Disease (epidemiological) transition

Myanmar faces a double burden of disease with an increasing prevalence of non-communicable diseases (NCDs) and an increase in communicable diseases. Myanmar's primary health care system, which has traditionally focused more on infectious diseases, will need to expand its efforts to build the capacity of health workers to monitor, track, screen, and treat NCDs. In addition, the chronic nature of NCDs coupled with rising healthcare costs will warrant financial risk protection to those in need. At the same time, Myanmar will have to continue improving and expanding access to other essential health services in order to achieve UHC. See the disease transition section for more details.

3 Domestic finance transition

Government health expenditure to total government expenditure increased from 1% in 2011 to 3% in 2019, indicating a shift in the government's prioritization towards the health sector. However, out-of-pocket expenditures have remained a major source of health financing, constituting around 75% of the total current health expenditure. Myanmar's small and fragmented pool of revenues and limited government capacity to execute the health budget impede the country's efforts to provide financial risk protection. Myanmar's strategy to effectively mobilize and pool the revenues will be key to achieving UHC. See the domestic finance transition section for more details.

4 Donor health aid transition

Donor aid plays an important role in Myanmar's health financing landscape. The proportion of external funding to total current health expenditure has increased nine-fold from 1% in 2000 to around 9% in 2019. Most of the donor aid goes to basic health care, HIV/AIDS, and tuberculosis control. The changes in the country's international health funding landscape following the recent military coup in February 2021 are likely to disrupt the provision of these essential health services. Moreover, major donors are likely to transition out of the country in the near future. As a result, Myanmar will need to prepare for financial and programmatic challenges that will arise from donor transition. See the donor health aid transition section for more details.

This is one in a series of profiles focusing on middle-income countries that are transitioning out of official development assistance for health. The profiles are part of a broader study, *Driving health progress during disease, demographic, domestic finance, and donor transitions*, led by the Center for Policy Impact in Global Health.

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Background

Myanmar is a country in transition. The country democratically elected its first government in 2015 after 50 years of military rule. By 2011, the political liberalization process had already begun, which included the release of political prisoners, the initiation of dialogue with the opposition and ethnic groups, and the liberalization of the press.[1] In response to these domestic political reforms, the European Union and the United States eased sanctions on Myanmar in 2012.[2] Since then, the country has consistently achieved annual real gross domestic product (GDP) growth of 5% or more.[4] In 2015, Myanmar moved up the income band from a low-income country to a lower-middle-income country.[3] Its real GDP growth stood at 6.8% in 2019, one of the highest in the Association of Southeast Asian Nations (ASEAN) countries.[4] As a result of the COVID-19 pandemic, Myanmar's GDP growth fell to 1.7% in 2020, slightly higher than the East Asia and Pacific region's average GDP growth (1.2%).[5] On February 1, 2021, Myanmar's democratically elected government was toppled by a military coup. There have been several anti-coup protests throughout the country and Myanmar's economy has been negatively affected; its GDP growth is expected to further shrink by 10% in 2021.[5] Experts project that around 25 million people, about half of Myanmar's population, will be living in poverty by 2022 due to the impacts of the military coup and COVID-19 pandemic.[6]

During the country's democratic years (2012-early 2021), Myanmar made substantial improvements in health outcomes. Life expectancy at birth was 67 years in 2019, a three-year increase from 2012.[7] Myanmar has also experienced a steady decline in child and maternal mortality and improved access to health services.[8,9,10] However, Myanmar's health outcomes remain poor compared to most ASEAN countries.[11] Decades of chronic underinvestment in the health sector have led to shortages in health infrastructure, sub-par quality of health services, and a high burden of out-of-pocket (OOP) health expenditures. In 2015, around 1.7 million people were estimated to be pushed into poverty due to health shocks.[12] Moreover, the country has historically experienced ethnic and geographical disparities in access to essential health services.[13] Since the military coup in early 2021, some public health services have come to a near standstill.

In 2017, the Ministry of Health and Sports (MoHS) committed to achieving universal health coverage (UHC) by 2030.[14] As a first step towards this goal, it aimed to extend the Essential Package of Health Services (EPHS) to the entire population by 2021, increase financial protection, support health systems strengthening, and improve supply-side readiness. The MoHS also planned to create a semi-autonomous purchasing body that would buy EPHS directly from the public sector, for-profit sector, non-government organizations (NGOs), and ethnic health organizations (EHOs). If implemented, strategic purchasing will improve health access in hard-to-reach regions and "discipline all providers (government, EHO, NGO and private) to provide health services that are needed and meet quality standards at reasonable prices."[15]

While these efforts show great promise, Myanmar's health system development and progress towards UHC are greatly affected by four major transitions within the health sector (the 4Ds of health transitions):

- rapid changes in **demography**,
- **disease** (epidemiological) transitions,
- changing patterns in **domestic financing**, and
- shifts in **donor financing** levels and priorities.

In this profile, we examine the impact of these four transitions on Myanmar's health system. Our goal is to understand Myanmar's challenges in achieving UHC and the opportunities that Myanmar can harness to manage these challenges.

This is one in a series of profiles focusing on middle-income countries that are transitioning out of official development assistance for health. The profiles are part of a broader study, *Driving health progress during disease, demographic, domestic finance, and donor transitions,* led by the Center for Policy Impact in Global Health.

Table 1. Snapshot of key development and health indicators

Economic indicators	Gross domestic product (current US$, 2019)	79 billion
	Gross national income per capita (current US$, 2019)	1,390
Social indicators	Human capital index (scale 0-1, 2018)	0.5
	Poverty headcount ratio at national poverty lines (% of population, 2017)	24.8
	Literacy rate, adult (% of people ages 15 and above, 2016)	75.6
Health indicators	Current health expenditure (% of GDP, 2018)	4.8
	Domestic general government health expenditure (% of GDP, 2018)	0.7
	Infant mortality ratio (per 1,000 live births, 2019)	35.8
	Maternal mortality ratio (per 100,000 live births, 2016)	244
	Physicians (per 1,000 people, 2018)	0.7

Source: World Bank Development Indicators

Demographic transition

Myanmar is undergoing rapid demographic transitions (Figure 1). The average annual rate of population growth has declined from 1.2% in the early 1990s to 0.6% in the late 2010s.[16] Currently, the population of Myanmar is estimated to be 54 million. It is expected to grow but at a decreasing annual rate to 62 million by 2050. The decline in population growth rate is because of the decrease in the total fertility rate (live births per woman) from 3.2 in 1990-95 to 2.2 in 2015-20.[16]

Myanmar's population is also experiencing shifts in the age structure of the population pyramid. People are living longer because of the improvements in health care. The life expectancy at birth has increased from 57.7 years in 1985-90 to 66.8 years in 2015-20.[16] The under-five mortality rate has declined from 114.6 to 44.7 per 1,000 live births between 1990 and 2019.[17] This decline has led the country's average age to increase from 24.4 years in 1990 to 30.9 years in 2020. By 2050, the population's average age is projected to be 37.3 years, and a tenth of the population is projected to be above 64 years.[16]

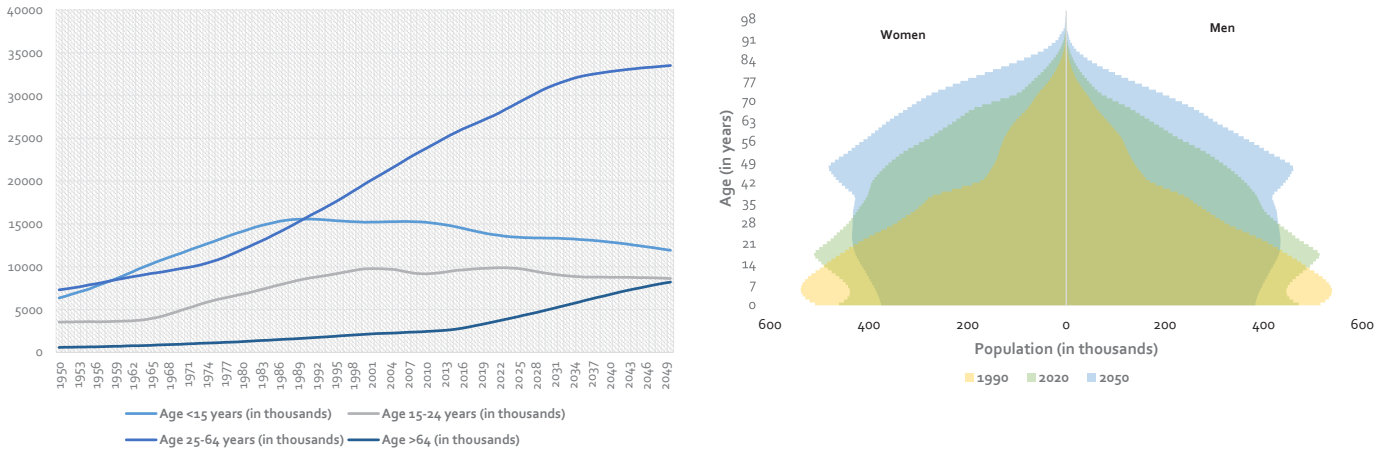
There have been changes in the country's rural-urban make-up. Currently, 69.9% of Myanmar's population lives in rural areas.[18] Myanmar is one of the thirty countries that expect the highest decline in rural population between 2020 and 2050.[19] The rural population is expected to decline to 52.9% in 2050, implying that nearly half of Myanmar's population will live in urban areas in the next thirty years.[18] These demographic transitions pose challenges to Myanmar's objective of attaining UHC by 2030.

Challenge: Ensuring health access to Myanmar's growing population

There is a mismatch in the demand for, and supply of, health care due to shortages in human resources for health (HRH), inadequate health infrastructure, and limited health financing. The mismatch is likely to be exacerbated by Myanmar's population growth. A 2017 survey indicated that 13 out of 15 states in Myanmar did not meet the World Health Organization's recommendation of at least one medical doctor per 1,000 people. Moreover, the number of medical doctors per 1,000 people in the Myanmar public sector has been falling since 2006.[20] Another study found that the coverage of most health services, including full immunization, institutional delivery, and skilled birth attendance, was less than 65% nationally and subnationally.[28] Around 5.8 million people live in hard-to-reach regions in Myanmar.[21] Supply-side capacity gaps, including lack of primary health centers (PHCs), essential medicines, equipment, infrastructure, allowances, and transportation in hard-to-reach and ethnic-dominated areas, impede UHC.[22] Myanmar's government health expenditure is limited (14.8% of its current health expenditure in 2018), resulting in high direct OOP payments and, therefore, poor use of health services.[23]

Policy interventions: Given its growing population, Myanmar needs to create a health system that responds to varied and growing demands. In the National Health Plan (NHP) of 2017-2021, Myanmar proposed extending access to the EPHS to the entire population by 2021.[24] However, the government was still defining the essential service bundle before the military coup in February

Figure 1. Population trends in Myanmar by age group and sex



Source: World Population Prospects, Myanmar 2019

2021. Another welcome step in the NHP was identifying the need to recognize EHO workers, who are major health providers in rural and conflict-affected areas. The NHP emphasized standardizing clinical skills as a first step to including EHO workers in the health care delivery system. Moving forward, Myanmar will have to develop standard operating procedures that clearly define roles, responsibilities, and clinical skills required for EHO worker participation in delivery of the EPHS in hard-to-reach areas.[25] Recognizing and building EHO worker capacity will extend coverage of essential health services to a broader population, including the most vulnerable people and communities.

Challenge: Meeting the health needs of the rapidly growing elderly population

The proportion of the elderly population aged 64 years and older increased from 4% in 1990 to 6.2% in 2020. However, the elderly population is expected to double from 6.2% to 13.2% between 2020 and 2050.[16] According to a survey conducted in 2016, more than half of older adults above 60 years reported at least one chronic non-communicable disease (NCD), and a third reported multi-morbidity, i.e., the prevalence of two or more NCDs.[26]

Myanmar's primary health care system, which has traditionally focused more on infectious diseases, will be challenged by the age-related transition towards chronic NCDs.[27] Studies have shown that private financing of NCDs increases OOP health care costs, contributing to a rise in catastrophic health expenditures, and pushing more households into poverty.[28] In a 2012 survey, around 60% of older people in Myanmar reported that their daily household income was less than US$3 per day. Over a quarter who sought care reported that they needed additional treatment for their illness or injury that they could not afford.[29] Moreover, the median total cost of an episode of hospitalization constituted more than 70% of the median household's monthly expenditure.[27]

Policy interventions: The chronic nature of NCDs coupled with rising healthcare costs warrants long-term care and financial risk protection of the elderly. The National Social Pension scheme was introduced in Myanmar in 2017. As of 2018, people aged 85 years or above were eligible for Myanmar Kyat (MMK) 10,000 (approx. US$5.70) per month under this scheme.[30] Moreover, the government implemented the Older People's Self-Help Groups (OPSHGs) program with an NGO to build the capacity of the elderly to support themselves financially. Until 2018, there were only 63 OPSHGs in Myanmar, supporting 20,000 older people.[31] There is, however, no official policy or program implemented nationwide to provide long-term care to the elderly population.[32] Myanmar can leverage the OPSHG's home care model, whereby community volunteers can be trained to provide basic social care to elderly residents. Investing in meeting the long-term care needs of the elderly will be a crucial step on the path towards UHC.

Challenge: Preparing to address the health challenges of the growing urban population

Urban Myanmar experiences a double burden of both communicable diseases and NCDs due to poor living conditions

and unhealthy lifestyles. The prevalence of metabolic NCD risks, including obesity, hypertension, diabetes, hypercholesterolemia, and hypertriglyceridemia, is higher in urban areas compared to rural areas.[33] Moreover, sanitation- and hygiene-related communicable illnesses such as diarrhea and tuberculosis are prevalent among urban populations.[34] A 2014 study found increased concentrations of young migrant populations in urban Myanmar, leading to an increased burden of sexually transmitted diseases.[35]

Health care workers are primarily concentrated in urban areas.[10] Yet, there was only one doctor per 633,000 population in urban Myanmar in 2015-16.[20] The urban and peri-urban areas also face significant challenges to providing reliable and safe water services and sanitation, contributing to water-borne diseases. Around 93% of the urban population had access to drinking water services in 2017, but only 57% of the population had piped water.[36]

There is inequality in the distribution of health risks and access to health care among different income groups in urban areas. In 2015, 9% of the urban population was categorized as poor.[1,37] The infant and under-five mortality rates in the poorest quintile were more than three times higher than the rates among children in the richest quintile.[35] The proportion of under-five children with chronic malnutrition in the poorest income group (27%) was almost double the proportion in the richest income group (15%). Only 45% of children in the poorest quintile received the DPT3 vaccine, compared to 92% of children in the wealthiest quintile.[35] Similarly, access to improved drinking water and sanitation facilities was concentrated among rich people in the urban areas.

The inability of urban poor people to afford health services limits their health access. A 2016 survey in Yangon found that health costs were among the major reasons urban poor households took a loan after food and basic needs.[34] Nearly half of the urban poor experienced major illness in the year preceding the survey, and its treatment contributed to long-term indebtedness.[34]

Policy interventions: In 2017, the Myanmar government implemented a National Urban Policy to focus on five priority areas, including municipal governance, legislation, land governance, housing, and environmental and climate change.[38] However, Myanmar does not have an overarching national urban health strategy to cater to the urban population's special health needs or to facilitate cross-sector coordination of programs to improve health outcomes. Moreover, health insurance is provided under the Social Security Scheme, but it covers only formal sector employees. Around 65.9% of the urban population works in the informal sector.[39] They have to make OOP payments for health care services. The rising urban population will require a commensurate investment in health infrastructure, safe living conditions, and financial risk protection for the most vulnerable.

Demographic transition takeaways

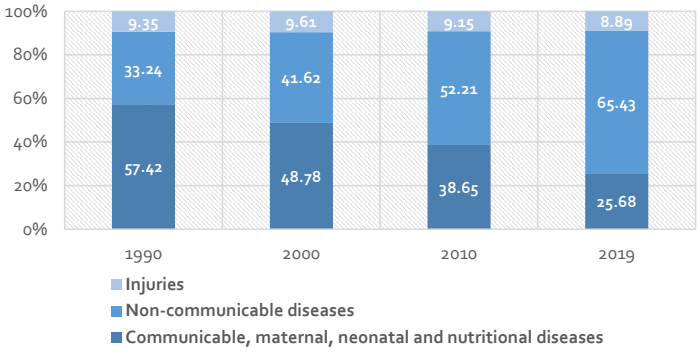
- The rising population is likely to exacerbate the mismatch between demand for and supply of health care due to shortages in human resources for health and limited health financing.
- Myanmar's elderly population is expected to double in the next three decades. As a result, the country's primary health care system, which has traditionally focused more on infectious diseases, will be challenged by the age-related transition towards chronic NCDs.
- Nearly half of Myanmar's population will live in urban areas in the next thirty years. The urban population experiences the burden of both communicable diseases and NCDs due to poor living conditions and unhealthy lifestyles.
- Myanmar will have to invest in creating health systems that respond to varied and growing demands, including long-term care for the elderly, safe living conditions, and financial risk protection for the urban poor.

Disease (epidemiological) transition

Myanmar is experiencing a significant decline in the burden of communicable diseases and a rapid increase in NCDs (Figure 2). In 1990, communicable, maternal, neonatal, and nutritional diseases constituted 57.4% of the total disability-adjusted life years (DALYs). By 2019, the burden of these diseases fell to a quarter of the total DALYs. On the other hand, the burden of NCDs has doubled from 33% in 1990 to 65.4% in 2019.

In 2019, stroke was the leading cause of DALYs lost in Myanmar, and seven out of the top ten causes of DALYs lost were NCDs (Figure 3). Between 2009 and 2019, deaths and disabilities due to NCDs such as stroke, diabetes, cirrhosis, and chronic kidney disease, have increased rapidly.

Figure 2. Share of diseases to the total DALYs lost, 1990-2019



Source: IHME GBD, Myanmar 2019

The DALYs lost due to communicable diseases like tuberculosis have declined substantially. DALYs lost due to diabetes grew by 25% during this period, making diabetes one of the top five causes of death in Myanmar.

There has been a corresponding shift in underlying disease risk factors, with NCD-related risk factors becoming prominent in the last decade (Figure 4). Air pollution, high blood pressure, alcohol use, and kidney dysfunction have increased in their relative contribution to deaths and disabilities. A 2014 survey indicated that every adult in Myanmar has at least one NCD risk factor. The prevalence of three or more NCD risk factors among people aged 25 to 64 years is higher in Myanmar than in most Southeast Asian countries.[40] The disease transition poses significant challenges to Myanmar's already overwhelmed and understaffed health system, one that has primarily focused on infectious disease.

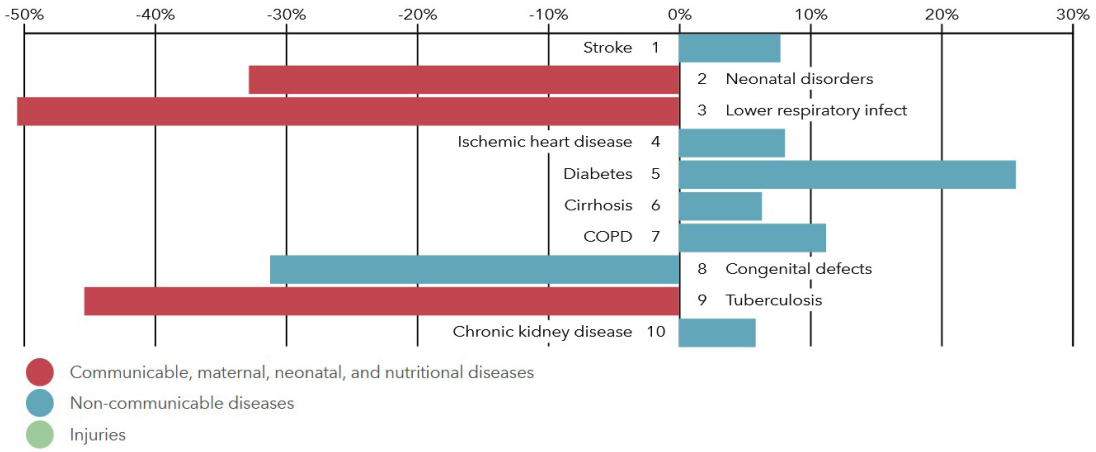
Challenge: Ensuring availability and affordability of NCD care

Limited access to and coverage of NCD prevention and treatment is a major challenge in addressing NCD-related DALYs lost. Moreover, late detection of NCDs at the primary health level further increases the risk of life-threatening complications. According to a 2014 survey, around 37%, 86%, and 98% of the sample aged 25-64 years had never had measurements of their blood pressure, blood sugar level, and cholesterol, respectively. Among respondents with high blood pressure, only 9.2% received treatment, and only 2.8% of the respondents had received effective treatment that brought their blood pressure under control.[40]

The chronic nature of NCDs contributes to the existing high OOP health expenses. Households with chronically ill members face a greater risk of catastrophic health expenditures.[41] Moreover, the risk of impoverishment among households containing a person with a chronic illness is three times higher than among those without chronic illness.[28]

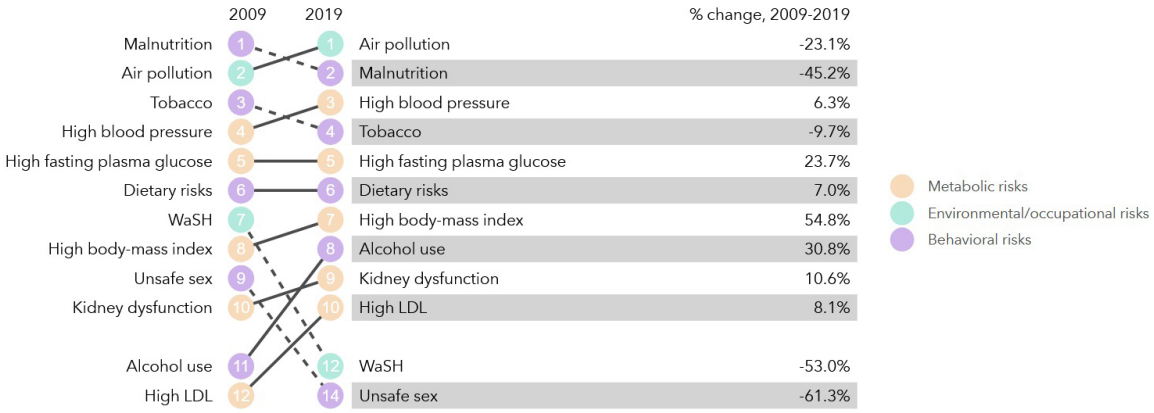
Policy interventions: To tackle the challenges posed by the transition of the disease burden to NCDs, the government of Myanmar drafted a National Strategic Plan for Prevention and Control of NCDs. This plan recognized NCDs as a government health priority. To integrate NCD prevention and care into the primary healthcare system, the government piloted the Package of Essential NCD interventions (PEN) in two townships in 2012.[42] In 2017, this intervention was implemented in ten townships. The findings from this

Figure 3. Top 10 causes of death and disability (in DALYs lost) in 2019 and percent change 2009–2019, all ages combined



Source: IHME GBD, Myanmar 2019

Figure 4. Top 10 risks contributing to the total number of DALYs lost in 2019 and percent change 2009–2019, all ages combined



Source: IHME GBD, Myanmar 2019

pilot indicated that a lack of trained human resources in facilities implementing PEN services, an insufficient supply of essential medicines, and a shortage of required diagnostic equipment were key barriers in providing NCD care at PHCs.[43] The rapid increase in chronic NCDs also necessitates financial risk protection for those who cannot afford health care. There is no comprehensive health insurance system in Myanmar, and the social security system, which includes a health insurance component, covers less than 2% of people in Myanmar. One way to raise funds for providing adequate NCD health infrastructure and financial protection is to increase taxes on alcohol, cigarettes, and sugar-sweetened beverages.[44] At the same time, Myanmar will have to expand its efforts to build the capacity of front line health workers to monitor, track, screen, and treat NCDs at PHCs.

Challenge: The unfinished agenda of newborn, child, and maternal health

Although Myanmar has achieved a steady decline in child and maternal mortality over time, the rates of neonatal, infant, and under-five mortality, and the maternal mortality ratio (MMR) are among the highest in Southeast Asia. In 2019, Myanmar's neonatal mortality rate (NMR) and under-five mortality rate (U5MR) were 22.4 and 44.7 per 1,000 live births, respectively.[45] Myanmar recorded a MMR of 244 deaths per 100,000 live births in 2016. These mortality indicators are worse in remote and internally displaced communities in Eastern Myanmar. To achieve the Sustainable Development Goal targets—an NMR, an UMR, and an MMR of 12, 25, and 0.7 per 1,000 live births, respectively, the country will have to accelerate its efforts. A 2016 study in Myanmar reported no significant relationship between the availability of maternal health services and maternal mortality levels.[46] The states with a higher number of nurses or midwives per 100,000 people did not necessarily have lower maternal mortality levels. This implies that ensuring the availability of maternal health services alone is not enough. Improving physical and social accessibility to and quality of these health services is essential.[46]

Policy interventions: In 2010, Myanmar implemented the Maternal and Child Health Voucher Scheme (MCHVS) to address the high rate of maternal and infant mortalities. While the scheme was implemented according to the guidelines, there were some gaps. Midwives who distributed the vouchers did so mainly to pregnant women who visited them at the health facility.[47] The pregnant women who stayed in the remote areas away from the health facility were less motivated to use the vouchers. While the MCHVS is a promising program, increasing its coverage and reducing barriers to accessing it is essential.[47] Myanmar's EPHS, which was underway before the 2021 military coup, included maternal, newborn, and child health services. If and when the country prioritizes the EPHS, it will need to invest in clearly communicating the service package to people in order to improve its uptake.[56]

Challenge: Responding to outbreaks and diseases of pandemic potential

Myanmar has been significantly affected by natural disasters and communicable diseases in the past two decades.[48] Before COVID-19, Myanmar reported cases of H1N1 influenza ("swine flu") and avian influenza ("bird flu") in 2017, and poliovirus type 1 in 2019. In the Global Health Security Index assessment, Myanmar was ranked 72nd among 195 countries with a total index score of 43.4, indicating the country's "moderate" preparedness to respond to a public health emergency.[49] The country performed below the global average on prevention, health systems preparedness, and risk environment, and above the global average on detection, rapid response, and international norm compliance.

Myanmar has faced many challenges in containing the spread of COVID-19, including political turmoil following the military coup and inadequate testing facilities, hospital beds, intensive care units, and health workers. The economy has taken a hit, leading to food and income shortages. The conflict between the military and ethnic armed organizations (EAOs) has negatively impacted the delivery of essential health services in conflict-affected regions. As of September 25, 2021, 13.2% of Myanmar's population received at least one dose of COVID-19 vaccine.[50] Following the coup, COVID-19 testing, the vaccination program, and other essential health services were stalled. Most civilians refused to take the COVID-19 vaccine, and health workers went on strike to protest the military regime.[51] The COVID-19 pandemic has shown that a public health emergency of this magnitude is likely to overwhelm Myanmar's inadequate and understaffed health infrastructure and political stability is key to containing the pandemic.

Policy interventions: Since 2006, Myanmar has had a national strategic plan to prevent, control, and respond to influenza. In 2018, Myanmar developed a National Action Plan on Health Security to support preparedness planning for all hazards, risks, and events. The framework also allows countries "to scale up operational readiness by implementing priority preparedness activities around imminent risks."[52] Before Myanmar could fully implement the plan, it was hit by COVID-19. The partial implementation included the launch of a field epidemiology training program.[53] The country will have to continue its efforts to (1) build emergency supply chains to ensure access to essential medicines, equipment, and food supplies; (2) expand the health workforce, and its capacity to respond to the pandemic; (3) invest in strengthening surveillance, diagnostic, and case management functions; and (4) work with EHOs in conflict-affected parts to supply essential health services.

Disease (epidemiological) transition takeaways

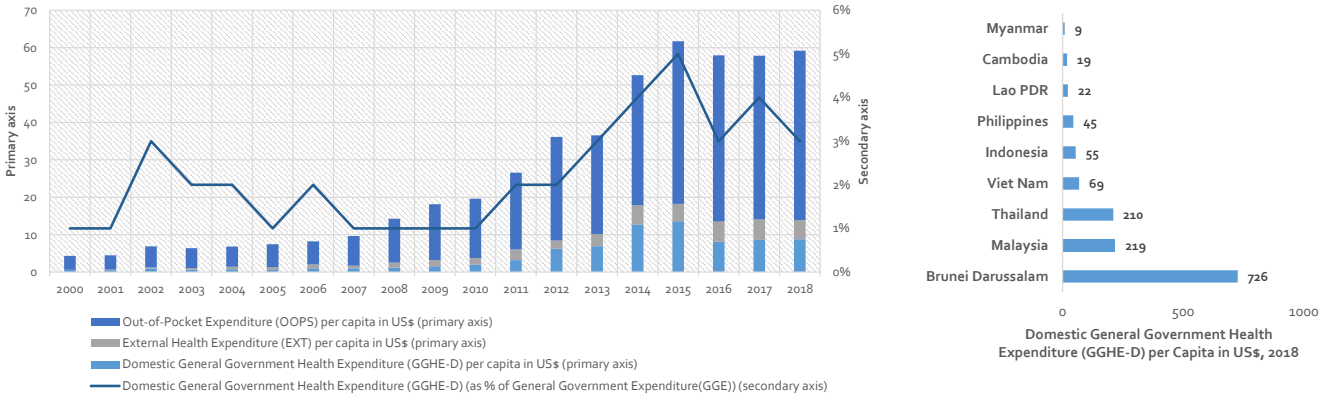
- Myanmar faces a double burden of disease: increasing prevalence of NCDs as it struggles with communicable diseases.
- In the absence of a comprehensive financial risk protection system, the chronic nature of NCDs contributes to the high OOP health expenses. Moreover, lack of trained human resources, an insufficient supply of essential medicines, and a shortage of required diagnostic equipment are critical barriers to providing NCD care at primary health centers.
- In 2019, Myanmar's neonatal mortality rate and under-five mortality rate were 22.4 and 44.7 per 1,000 live births, respectively, substantially above the Sustainable Development Goal targets of 12 and 25 per 1,000 live births.
- Myanmar was moderately prepared to respond to a public health emergency. The COVID-19 pandemic has shown that a public health emergency of this magnitude is likely to overwhelm Myanmar's health infrastructure.
- Myanmar will need to expand its efforts to tackle changes in its disease epidemiology by building the capacity of front line health workers to monitor, track, screen, and treat NCDs and public health emergencies and by improving accessibility to and quality of maternal and child health service.

Domestic financing transition

The current health expenditure per capita has grown fifteen-fold from US$4 in 2000 to US$59 in 2018 (Figure 5). Household OOP payments constituted three-quarters (75%) of the current health expenditure in 2018 (Figure 6). The government health expenditure and external health expenditure were about 14.8% and 8.7%, respectively.

Between 2000 and 2018, there was an increase in the share of government health expenditure to total government expenditure, indicating a shift in the government's prioritization towards social sectors. In 2018, the government spent 3% of all government spending on health. Moreover, Myanmar has shown a higher annual increase in government health expenditure than the annual increase in OOP payments in the last decade (Figure 7). The relative increase in government health spending is important as

Figure 5. Health expenditure trends in Myanmar, 2000-2018



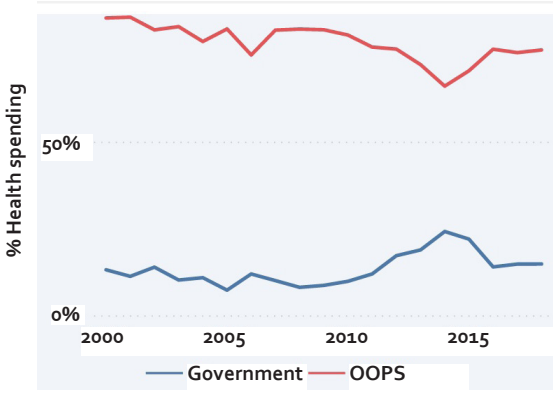
Source: Global Health Expenditure database, WHO 2018

it sets the country on a transition towards reducing OOP payments and insuring households against health risks and their associated costs.[54] Despite all these improvements, Myanmar's level of government health expenditure per capita (US$9) continues to be the lowest among ASEAN countries (Figure 5).

Challenge: Reducing OOP expenditures and extending health services to all

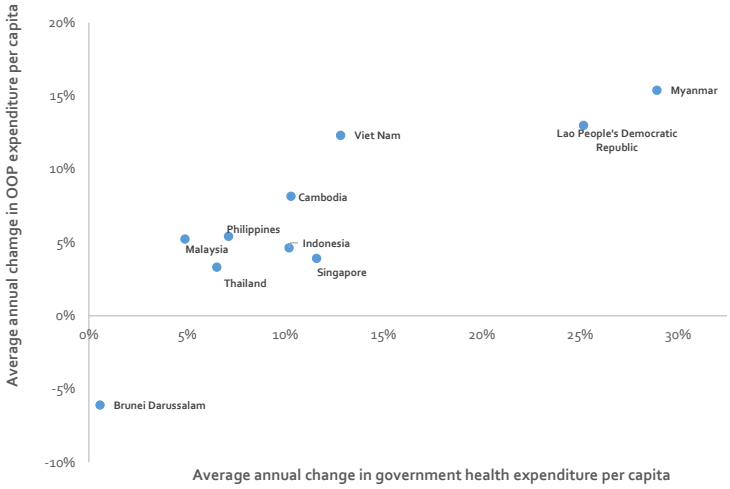
Between 2000 and 2018, OOP expenditures have remained a major source of health financing, constituting around 75% of the total current health expenditure. Poor households incur debt or go without medical care due to high costs associated with financing health care. A 2015 survey indicated that among the households incurring health expenditures during the 12 months preceding the survey, 28.3% financed health care by taking a loan and 12.7% had to sell their assets.[12] The proportion of households taking a loan to meet their health care needs is higher among households in the poorest income group (34.4% among poorest quintile vs. 15.8% in the richest quintile) and those living in rural areas (31.3% in rural vs. 20.5% in urban).[12] Moreover, around one in twenty (4.4%) households experienced catastrophic health expenditure in 2015, implying that the share of their health expenditure to total consumption expenditure exceeded 40%.[12] In the same year, 3.4% of households (~1.7 million people) fell below the poverty line due to health shocks.[12]

Figure 6. OOP expenditure and government health expenditure (as % of current health expenditure), 2000-2018



Source: Global Health Expenditure database, WHO 2018

Figure 7. Average annual change in OOP expenditure per capita and government health expenditure per capita, 2008-2018



Source: Global Health Expenditure database, WHO 2018

In 2012, the MoHS provided free emergency, childhood, and maternal health services in MoHS-managed public health facilities. It also introduced its free medicines policy in the same year. There was a dramatic rise in MoHS's expenditure on drugs and medical consumables, and the share of such expenditure in total MoHS spending increased from 5% in 2011-12 to 30% in 2013-14.[55] Despite these policies, household OOP spending continues to be high. This is because there is a lack of clarity and awareness about services and medicines available for free.[56] In addition, the Service Availability and Readiness Survey of health facilities found that less than half of the surveyed facilities did not have the required amount of essential medicines, diagnostic capacity, and basic amenities.[56] Lack of facility readiness and unavailability of services limits providers' ability to ensure the free provision of essential health services.

While there could be many reasons for the unavailability of these services, insufficient investment in health is one of the major causes of the inefficiency and a significant challenge to achieving UHC by 2030. Moreover, the pooled funds in Myanmar are small, fragmented, and lack diversity, limiting the redistribution of resources to increase equitable health access and financial protection. The government's capacity to execute the health budget is limited; 11.18% and 15.3% of the total budget allocated to the health sector remained unspent in 2015-16 and 2016-17, respectively.[25] There have also been several bottlenecks in the effective management of public finances. The World Bank notes that these bottlenecks include "a disconnect between planning and budgeting cycles, a lack of budget transparency, and the use of historical planning and budgeting rather than evidence-based data that reflect actual needs and priorities, line-item budgeting, input-based rather than output-based budgeting, and limited financial management capacity."[57]

Policy interventions: In June 2017, Myanmar's House of Representatives urged the government to fund Myanmar's health care by setting up a national health insurance system.[58] Any efforts to set up a national insurance system will face significant challenges. Most of Myanmar's population works in the informal sector. Collecting insurance premiums from informal workers will be difficult. The premium contributions of informal sector workers will have to be covered through general taxes.

The NHP (2017-21) proposed measures to improve the public financial management system. These measures include: "(i) improving budget allocation by introducing and communicating explicit formulas for inter- and intradepartmental 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."[56] Implementing these measures will be key to managing the country's public finances.

The government was in the process of defining the services included under the EPHS and estimating the per capita cost of delivering these services equitably before the military coup in February 2021. There were plans to set up a semi-autonomous purchasing agent to purchase the EPHS from providers directly. Non-government organizations had implemented pilots to understand practical considerations in the design and implementation of strategic purchasing. The lessons from these pilots will be valuable if and when Myanmar continues its pursuit to improve the financing of UHC.[59]

Domestic finance transition takeaways

- After 2012, there was a slight increase in the share of government health expenditure to total government expenditure, indicating a shift in the government's prioritization towards social sectors. However, OOP expenditures have remained a significant source of health financing, constituting around 75% of the total current health expenditure.
- In 2015, one in twenty households experienced catastrophic health expenditure, and 3.4% of households fell below the poverty line due to health shocks.
- The pooled funds in Myanmar are small and fragmented, and the government's capacity to execute the health budget is limited.
- Implementing measures outlined in National Health Plan (2017-2021) to improve the public financial management system and lessons from pilots on the strategic purchasing and the EPHS will be vital in improving Myanmar's health financing.

Donor health aid transition

The proportion of external funding out of total current health expenditure grew nine-fold from 1% in 2000 to around 9% in 2019 (Figure 8). During the military regime in the 1990s and early 2000s, international donors provided aid to civil society organizations from across the border, mainly bypassing the state. As Myanmar began its democratic transition in 2011, the donors increasingly engaged with the government and routed funds through government agencies.[60]

In 2019, the top five donors that provided development assistance for health (DAH) to Myanmar were the Global Fund, Gavi, the Vaccine Alliance, and the governments of the United States, the United Kingdom, and Japan (Figure 9). Most DAH went to basic health care, followed by control of sexually transmitted diseases, including HIV/AIDS, tuberculosis control, health policy and administrative management, and reproductive health care.

While the disease burden in Myanmar has shifted to NCDs, the country has not experienced commensurate donor finance towards control of NCDs. Myanmar received external assistance for NCDs control for the first time in 2019. DAH for NCDs was just 0.2% of total DAH in 2019.

Challenge: Changes to international health funding landscape following the military coup

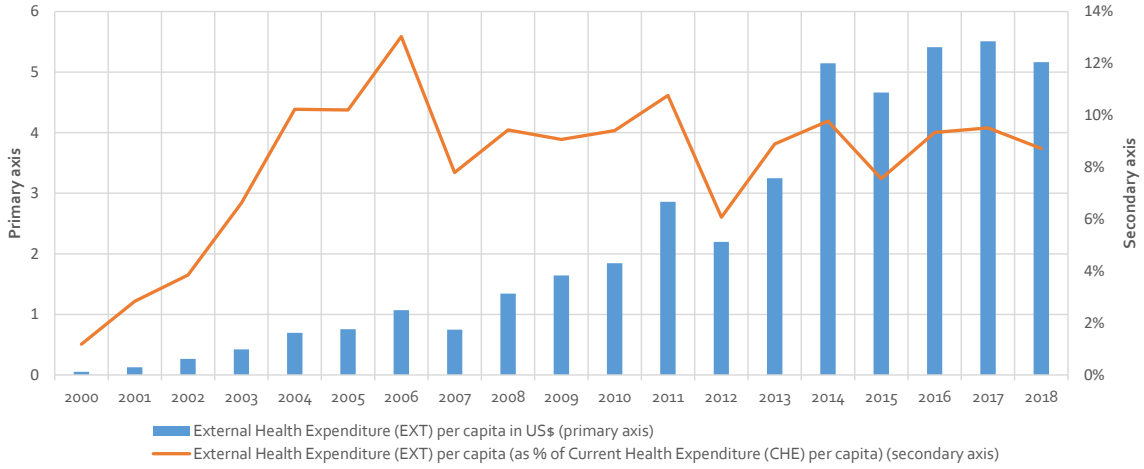
Donor assistance continues to be a significant source of health funding in ethnic areas. A third of Myanmar's population belongs to ethnic minority groups. The armed conflict between the military and certain ethnic groups has posed significant challenges in coordinating a successful health response in ethnic minority-dominated areas in Rakhine, Kachin, and Chin states. Several donors and international NGOs have been providing health assistance to these regions.[61] However, these donors have not received enough government and military support to work in these regions. Moreover, the government and military junta have imposed unnecessary travel restrictions on donors in the past.[61] These restrictions limit the support these donors can provide to vulnerable ethnic groups. People in these regions report food insecurity, poor living conditions, and health-related concerns, all of which would be alleviated by aid.[63] The current military regime can continue to deter international aid in ethnic areas if it remains in power.

Following the military coup, the international donors have responded by levying sanctions. The US indicated that it would redirect its assistance from military junta to civil society organizations. At the same time, the World Bank has put a hold on the disbursements to its operations in Myanmar.[60,64] The changes in the country's international health funding landscape following the military coup are likely to disrupt the provision of other essential health services amidst the COVID-19 pandemic.

Challenge: Sustaining health interventions post donor exit

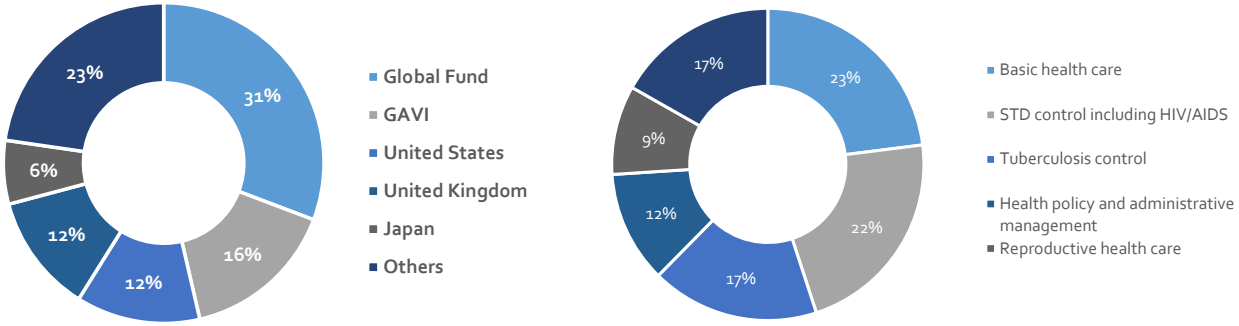
As the country grapples with the changing international

Figure 8. Changes in external health expenditure per capita and share of external health expenditure per capita to current health expenditure per capita, 2000-2018



Source: Global Health Expenditure database, WHO 2018

Figure 9. Development health assistance from top five donors and health care areas to Myanmar, 2019

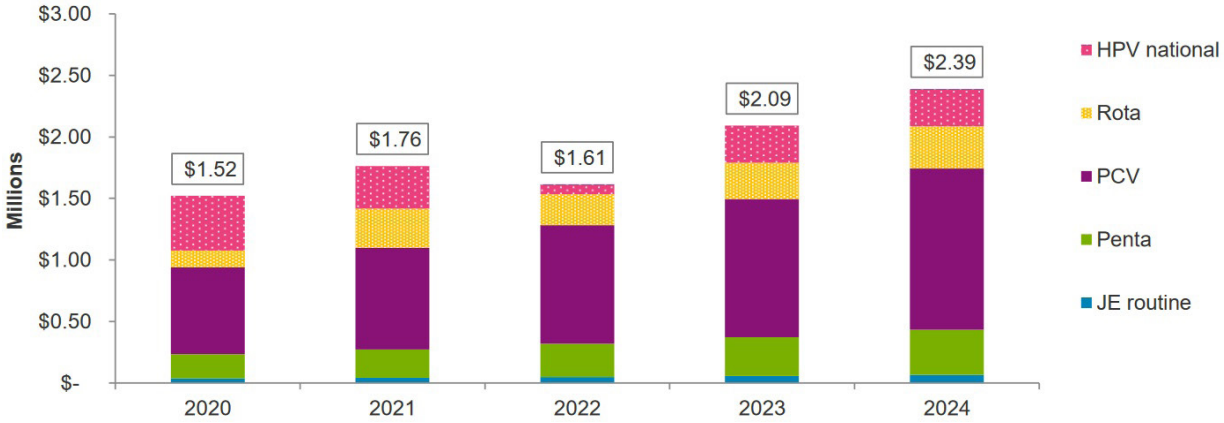


Source: OECD Creditor Reporting System, 2019

health funding landscape, it will also have to prepare for challenges that will arise from donors transitioning their assistance away from the country in the near future. While Myanmar is projected to move to the Global Fund's 'transition funding' phase for HIV in 2035[65], it is set to enter Gavi's 'accelerated transition' phase for vaccination in 2024. This coming shift implies that Myanmar's vaccination co-financing requirements are likely to increase substantially in the next five years.

The transition of Myanmar away from DAH is likely to pose financial and programmatic challenges. For instance, the government's financing comprised just 14% of the total immunization costs in 2015.[66] Most of the funding for immunization came from external sources. Until 2017, funding for all traditional vaccinations came from UNICEF. Since then, the Myanmar government has taken the responsibility of financing all these traditional vaccines. During the same period, Myanmar transitioned to the preparatory phase under Gavi's vaccine introduction grant. The country's co-financing obligations under the Gavi-funded immunization program are gradually increasing. In 2024, when Myanmar is set to enter Gavi's accelerated transition phase, the country's co-financing obligations are expected to double from US$0.9 million in 2018 to US$2.3 million in 2021. The rising burden of co-financing immunization will likely be a challenge to the MoHS as the budget allocations to the health sector are not enough to cover all the vaccination costs.[28] Moreover, the donor funds are channeled from outside the government. Gavi provides funds to UNICEF and WHO, and these organizations, in turn, support the national immunization program.[56] As Gavi transitions its support away from Myanmar, the country's ex-

Figure 10. Myanmar's projected co-financing obligations to Gavi, 2020-2024



Source: Gavi, Co-financing information sheet, 2019

isting delivery chains, procurement processes, and human resources are likely to be strained.

Policy interventions: In Myanmar's Expanded Program on Immunization (EPI) plan (2017-21), the MoHS recognized Myanmar's high dependence on donors and a need to increase its immunization program's financial sustainability.[66] The plan highlighted a few strategies to increase the financial sustainability of the program. These included advocating increased funding from the government, improving program efficiency to reduce wastage and costs, and exploring the applicability of setting up an immunization trust fund. Early alignment of donor activities with national policies, co-ownership and planning of transition by both the government and donors, and technical assistance to develop human resource capacity and system readiness will be critical to the program's sustainability.[67]

Development assistance transition takeaways

- The proportion of external funding of the total current health expenditure grew nine-fold from 1% in 2000 to around 9% in 2019. Donor assistance continues to be a significant source of health funding in ethnic areas.
- Major donors like Gavi and the Global Fund are likely to transition their assistance away from the country in the next two decades.
- There have been changes in the country's international health funding landscape following the military coup. Some donors have responded by levying sanctions or putting a hold on their disbursements to operations in Myanmar.
- Myanmar will have to prepare for financial and programmatic challenges that arise from donor transition.

Conclusion

Myanmar is facing transitions in demography, diseases, domestic financing, and donor assistance that are likely to impact the country's progress towards UHC. Myanmar will have to expand and adapt its health systems to address these changing health needs. The plans by the MOHS to extend EPHS to the entire population, set up a semi-autonomous purchasing agent, and involve EHOs and NGOs in health service delivery were steps in the right direction to ensure universal, affordable, and equitable access. However, limited health financing impedes the execution of some of these plans. Myanmar will have to raise more funding from domestic, pre-paid, and pooled sources to realize these plans. Specifically, the funds need to be targeted towards addressing the NCD burden and the needs of the elderly, urban poor, ethnic minorities, and people living in hard-to-reach areas. Above all, political stability will be pivotal in ensuring Myanmar's progress towards UHC amidst these four transitions.

Resources

1. Bünte, M., & Portela, C. (2012). Myanmar: The beginning of reforms and the end of sanctions. [cited 2021 September 3]. Available from: https://www.ssoar.info/ssoar/handle/document/30963#
2. U.S. Eases Myanmar Sanctions in Response to Reforms [Internet]. [cited 2021 Sep 19]. Available from: https://www.csis.org/analysis/us-eases-myanmar-sanctions-response-reforms
3. WB Update Says 10 Countries Move Up in Income Bracket [Internet]. World Bank. [cited 2021 Sep 19]. Available from: https://www.worldbank.org/en/news/press-release/2015/07/01/new-world-bank-update-shows-bangladesh-kenya-myanmar-and-tajikistan-as-middle-income-while-south-sudan-falls-back-to-low-income
4. World Economic Outlook (April 2021) - Real GDP growth [Internet]. [cited 2021 Sep 19]. Available from: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO
5. Uneven Recovery: East Asia and Pacific Economic Update, April 2021 [Internet]. World Bank. [cited 2021 Sep 19]. Available from: https://www.worldbank.org/en/region/eap/publication/uneven-recovery-east-asia-and-pacific-economic-update-april-2021
6. Myanmar approaching point of economic collapse: UN report [Internet]. UN News. 2021 [cited 2021 Sep 19]. Available from: https://news.un.org/en/story/2021/04/1091002
7. Life expectancy at birth, total (years) - Myanmar | Data [Internet]. [cited 2021 Sep 19]. Available from: https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=MM
8. Maternal mortality ratio (modeled estimate, per 100,000 live births) - Myanmar | Data [Internet]. [cited 2021 Sep 19]. Available from: https://data.worldbank.org/indicator/SH.STA.MMRT?locations=MM
9. Mortality rate, under-5 (per 1,000 live births) - Myanmar | Data [Internet]. [cited 2021 Sep 19]. Available from: https://data.worldbank.org/indicator/SH.DYN.MORT?locations=MM

This is one in a series of profiles focusing on middle-income countries that are transitioning out of official development assistance for health. The profiles are part of a broader study, *Driving health progress during disease, demographic, domestic finance, and donor transitions*, led by the Center for Policy Impact in Global Health.

10. Situation Analysis of Access to Healthcare Services in Myanmar: Overview of Maternal Healthcare. [Internet]. [cited 2021 March 10]. Available from: https://www.pic.org.kh/images/2019Research/20190128%20Situation%20Analysis%20of%20Access%20to%20Healthcare%20Services%20in%20Myanmar%20Overview%20of%20Maternal%20Healthcare_Ei%20Ei%20Phyo%20Oo.pdf
11. Ingram G. Development in Southeast Asia: Opportunities for donor collaboration [Internet]. Brookings. 2020 [cited 2021 Sep 19]. Available from: https://www.brookings.edu/multi-chapter-report/development-in-southeast-asia-opportunities-for-donor-collaboration/
12. Ergo, A., Htoo, T. S., Badiani-Magnusson, R., & Royono, R. (2019). A new hope: from neglect of the health sector to aspirations for Universal Health Coverage in Myanmar. Health policy and planning, 34(Supplement_1), i38-i46. [cited 2021 March 10]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6807514/
13. Zaw, P. P. T., Htoo, T. S., Pham, N. M., & Eggleston, K. (2015). Disparities in health and health care in Myanmar. The Lancet, 386(10008), 2053. [cited 2021 March 10]. Available from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)00987-3/fulltext
14. MINISTRY OF HEALTH [Internet]. [cited 2021 Sep 19]. Available from: https://mohs.gov.mm/cat/NHP%20(2017-2021)
15. Community Partners International. Strategic Purchasing Pilot. Learning Brief 1: "Strategic" Purchasing: what is it, how are we doing it, and why? [Internet]. [cited 2021 March 10]. Available from: https://www.cpintl.org/uploads/8/7/0/2/87020218/cpi_strategic_purchasing_learning_brief_1_what_is_it_how_are_we_doing_it_and_why_09-18.pdf
16. World Population Prospects - Population Division - United Nations [Internet]. [cited 2021 Sep 19]. Available from: https://population.un.org/wpp/
17. Myanmar (MMR) - Demographics, Health & Infant Mortality [Internet]. UNICEF DATA. [cited 2021 Sep 19]. Available from: https://data.unicef.org/country/mmr/
18. World Urbanization Prospects - Population Division - United Nations [Internet]. [cited 2021 Sep 19]. Available from: https://population.un.org/wup/
19. United Nations, Department of Economic and Social Affairs, Population Division. World urbanization prospects: the 2018 revision. 2019. Available from: https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf
20. Saw, Y. M., Than, T. M., Thaung, Y., Aung, S., Shiao, L. W. S., Win, E. M., ... & Saw, T. N. (2019). Myanmar's human resources for health: current situation and its challenges. Heliyon, 5(3), e01390. [cited 2021 March 10]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6441837/
21. Myanmar Information Management Unit. (2019) Hard to Reach Areas. [Internet]. [cited 2021 Sep 19]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Map_Hard_To_Reach_Area_MIMU1648v01_03Sep2019_A3.pdf
22. Wangmo, S., Patcharanarumol, W., Nwe, M. L., & Tangcharoensathien, V. (2017). Hard-to-reach villages in Myanmar: challenges in access to health services and interim solutions. Qual Prim Care, 25(4), 187-92. [cited 2021 March 10]. Available from: https://primarycare.imedpub.com/hardtoreach-villages-in-myanmar-challengesin-access-to-health-services-and-interimsolutions.php?aid=19841
23. Domestic general government health expenditure (% of current health expenditure) - Myanmar | Data [Internet]. [cited 2021 Sep 19]. Available from: https://data.worldbank.org/indicator/SH.XPD.GHED.CH.ZS?locations=MM
24. World Bank. Moving towards UHC, Myanmar, National initiatives, key challenges, and the role of collaborative activities [Internet]. [cited 2021 Sep 19]. Available from: https://documents1.worldbank.org/curated/en/991991513148339321/pdf/122045-BRI-Moving-Toward-UHC-series-PUBLIC-WorldBank-UHC-Myanmar-FINAL-Nov30.pdf
25. Universal Health Coverage in Myanmar: The Way Forward - COMMUNITY PARTNERS INTERNATIONAL [Internet]. [cited 2021 Sep 19]. Available from: https://www.cpintl.org/field-notes--updates/uhcday_2019
26. Aye, S. K. K., Hlaing, H. H., Htay, S. S., & Cumming, R. (2019). Multimorbidity and health seeking behaviours among older people in Myanmar: A community survey. PloS one, 14(7), e0219543. [cited 2021 March 10]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6622547/
27. Helpage International. Older people's access to healthcare in Myanmar. [Internet]. [cited 2021 Sep 19]. Available from: https://www.helpage.org/where-we-work/east-asia/myanmar/
28. Han, S. M., Rahman, M. M., Rahman, M. S., Swe, K. T., Palmer, M., Sakamoto, H., ... & Shibuya, K. (2018). Progress towards universal health coverage in Myanmar: a national and subnational assessment. The Lancet Global Health, 6(9), e989-e997. Available from: https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(18)30318-8/fulltext
29. Helpage International. (2012).The situation of older people in Myanmar. [Internet]. [cited 2021 Sep 19]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/The%20Situation%20of%20Older%20Persons%20in%20Myanmar%20(English)%20Summary.pdf
30. Government to lower eligibility age for pension payments to 85 | The Myanmar Times [Internet]. [cited 2021 Sep 19]. Available from: https://www.mmtimes.com/news/government-lower-eligibility-age-pension-payments-85.html
31. Knodel, J., & Teerawichitchainan, B. (2017). Aging in Myanmar. The Gerontologist, 57(4), 599-605. [cited 2021 March 10]. Available from: https://ageingasia.org/ageing-population-myanmar/

32. Department of Older Persons, Ministry of Social Development and Human Security, Thailand College of Population Studies, Chulalongkorn University, Thailand Association of Southeast Asian Nations (ASEAN). (2018). Research Project on Care for Older Persons in ASEAN+3 The Role of Families and Local and National Support Systems. [Internet]. [cited 2021 Sep 19]. Available from: https://www.duke-nus.edu.sg/docs/librariesprovider3/research-policy-brief-docs/care-for-older-persons-in-asean-3---the-role-of-families-and-local-and-national-support-systems.pdf?sfvrsn=583of2be_4

33. Htet, A. S., Bjertness, M. B., Sherpa, L. Y., Kjøllesdal, M. K., Oo, W. M., Meyer, H. E., ... & Bjertness, E. (2016). Urban-rural differences in the prevalence of non-communicable diseases risk factors among 25–74 years old citizens in Yangon Region, Myanmar: a cross sectional study. BMC Public Health, 16(1), 1-12. [cited 2021 March 10]. Available from: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3882-3

34. Lives on Loan: Extreme poverty in Yangon [Internet]. Resource Centre. [cited 2021 Sep 19]. Available from: https://resourcecentre.savethechildren.net/node/16577/pdf/Lives%20on%20loan.pdf

35. Intra-urban, A. W. B. Urban Health in Myanmar: Assessing Wealth-based Intra-urban Health Inequalities. [Internet]. [cited 2021 March 10]. Available from: https://dhsprogram.com/pubs/pdf/FA124/FA124.pdf

36. Access to drinking water [Internet]. UNICEF DATA. [cited 2021 Sep 19]. Available from: https://data.unicef.org/topic/water-and-sanitation/drinking-water/

37. World Bank and Ministry of Planning and Finance, Myanmar. (2017). An analysis of poverty in Myanmar. [Internet]. [cited 2021 March 10]. Available from: http://documents1.worldbank.org/curated/en/556581502987486978/pdf/118851-REVISED-v2-PovertyReportPartEng.pdf

38. Department of Urban and Housing Development, Ministry of Construction. National Urban Policy Framework. [Internet]. [cited 2021 March 10]. Available from: https://myanmar.un.org/sites/default/files/2020-01/NATIONAL-URBAN-POLICY-FRAMEWORK.pdf

39. Ministry of Labour, Employment and Social Security and Central Statistical Organization. (2015). Myanmar labour force, child labour and school to work transition survey. [Internet]. [cited 2021 March 10]. Available from: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-yangon/documents/publication/wcms_516117.pdf

40. Latt, T. S., Zaw, K. K., Ko, K., Ohnmar, M., Hlaing, M. M., Oo, E. S., & Thein, K. M. M. (2014). Report on National Survey of Diabetes Mellitus and Risk Factors for Non-communicable Diseases in Myanmar (2014). New Delhi, India. [cited 2021 March 10]. Available from: https://www.who.int/ncds/surveillance/steps/Myanmar_2014_STEPS_Report.pdf

41. Htet, S., Fan, V., Alam, K., & Mahal, A. (2015). Financial risks from ill health in Myanmar: evidence and policy implications. Asia Pacific Journal of Public Health, 27(4), 418-428. [cited 2021 March 10]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5663448/

42. Helpage International. Planning for Healthy Future. The importance of tackling NCDs in Myanmar. [cited 2021 March 10]. Available from: https://europa.eu/capacity4dev/capacity-building-in-public-health-for-development/documents/sphc-myanmar-policy-brief-planning-health-future-importance-tackling-non-communicable

43. Aye, L. L., Tripathy, J. P., Maung Maung, T., Oo, M. M., Nwe, M. L., Thu, H. M. M., ... & Kaung, K. K. (2020). Experiences from the pilot implementation of the Package of Essential Non-communicable Disease Interventions (PEN) in Myanmar, 2017-18: A mixed methods study. PloS one, 15(2), e0229081. [cited 2021 March 10]. Available from: https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0229081

44. Helpage International. (2019). Tackling non-communicable diseases to achieve universal health coverage in Myanmar. [cited 2021 March 10]. Available from: https://reliefweb.int/sites/reliefweb.int/files/resources/NCDs_policy_brief_FINAL.pdf

45. World Development Indicators | DataBank [Internet]. [cited 2021 Sep 19]. Available from: https://databank.worldbank.org/source/world-development-indicators

46. Department of Population Ministry of Labour, Immigration and Population. (2016). Thematic report on maternal mortality. [cited 2021 March 10]. Available from: https://myanmar.unfpa.org/sites/default/files/pub-pdf/4C_Maternal%20Mortality.pdf

47. Pilasant, S., Kulpeng, W., Werayingyong, P., Tritasavit, N., Yamabhai, I., Teerawattananon, Y., ... & Tantivess, S. (2016). Maternal and child health voucher scheme in Myanmar: a review of early stage implementation. BMC health services research, 16(1), 1-10. [cited 2021 March 10]. Available from: https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1850-3

48. Epidemic preparedness in Myanmar: case study [Internet]. [cited 2021 Sep 19]. Available from: https://www.preventionweb.net/publication/epidemic-preparedness-myanmar-case-study

49. Global Health Security Index. GHS Index profile: Myanmar. GHS Index. [cited 2021 March 10]. Available from: https://www.ghsindex.org/country/myanmar/

50. Ritchie H, Mathieu E, Rodés-Guirao L, Appel C, Giattino C, Ortiz-Ospina E, et al. Coronavirus Pandemic (COVID-19). Our World Data [Internet]. 2020 Mar 5 [cited 2021 Sep 19]; Available from: https://ourworldindata.org/coronavirus/country/myanmar

51. China Donates 500,000 COVID-19 Vaccines to Myanmar Junta [Internet]. The Irrawaddy. 2021 [cited 2021 Sep 19]. Available from: https://www.irrawaddy.com/news/burma/china-donates-500000-covid-19-vaccines-myanmar-junta.html

52. NAPHS for ALL - A 3 Step Strategic Framework for National Action Plan for Health Security. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO. [cited 2021 March 10]. Available from: https://apps.who.int/iris/bitstream/handle/10665/278961/WHO-WHE-CPI-2018.52-eng.pdf?sequence=1

53. Kham,Nang Mo. Project Information Document - Myanmar COVID-19 Emergency Response Project. Washington, D.C.: World Bank Group. [cited 2021 March 10]. Available from: https://documents1.worldbank.org/curated/en/178971586428026889/pdf/Project-Information-Document-Myanmar-COVID-19-Emergency-Response-Project-P173902.pdf

54. Savedoff, W. D., Ferranti, F. D., & Smith, A. L. (2012). Transitions in health financing and policies for universal health coverage. Washington, DC: Centre for Global Development. [cited 2021 March 10]. Available from: https://www.r4d.org/wp-content/uploads/THF-Summary-Transitions-in-Health-Financing-and-Policies-for-Universal-Health-Coverage.pdf

55. World Bank. (2015).Myanmar Public expenditure review 2015. [cited 2021 March 10]. Available from: http://documents1.worldbank.org/curated/en/504121467987907393/pdf/103993-WP-P132668-PUBLIC-Myanmar-PER-Dec-2015.pdf

56. World Bank. (2018). Myanmar health financing system assessment. [cited 2021 March 10]. Available from: http://documents1.worldbank.org/curated/en/506281543467798250/pdf/132560-28-11-2018-13-35-16-MyanmarHFSAFINAL.pdf

57. Myint et al. (2020). Keeping universal health coverage in myanmar on track. [cited 2021 March 10]. Available from: https://www.cpintl.org/uploads/8/7/0/2/87020218/2020-12_cpi_synthesis_report_keeping_uhc_in_myanmar_on_track_web.pdf

58. Myanmar Parliamentarians Gather for Universal Health Coverage [Internet]. COMMUNITY PARTNERS INTERNATIONAL. [cited 2021 Sep 19]. Available from: http://www.cpintl.org/2/post/2019/03/myanmar-parliamentarians-gather-for-universal-health-coverage.html

59. Crapper, D., Htat, H.W., Aung, P.M. (2017). Myanmar strategic purchasing brief series – no. 1. [cited 2021 March 10]. Available from: https://www.psi.org/wp-content/uploads/2020/02/UHC-Learning-Brief-Series-No1-Package-of-Services.pdf

60. Décobert A. Myanmar's coup might discourage international aid, but donors should adapt, not leave [Internet]. The Conversation. [cited 2021 Sep 19]. Available from: http://theconversation.com/myanmars-coup-might-discourage-international-aid-but-donors-should-adapt-not-leave-154742

61. Myanmar: Restrictions on international aid putting thousands at risk [Internet]. Amnesty International. 2017 [cited 2021 Sep 19]. Available from: https://www.amnesty.org/en/tech//en/latest/news/2017/09/myanmar-restrictions-on-international-aid-putting-thousands-at-risk/

62. Forty Rights. (2018). Avoidable Deprivations in Humanitarian Aid to Ethnic Civilians Displaced by War in Kachin State, Myanmar. [cited 2021 March 10]. Available from: https://www.fortifyrights.org/downloads/They_Block_Everything_EN_Fortify_Rights_August_2018.pdf

63. Forty Rights. (2018) Myanmar: End Restrictions on Humanitarian Aid in War-torn Kachin State. [cited 2021 March 10]. Available from: https://www.fortifyrights.org/mya-inv-2018-08-30/

64. Developments in Myanmar [Internet]. World Bank. [cited 2021 Sep 19]. Available from: https://www.worldbank.org/en/news/statement/2021/02/01/developments-in-myanmar

65. Silverman, R. (2018). Projected health financing transitions: timeline and magnitude. Center for Global Development Working Paper, (488). [cited 2021 March 10]. Available from: https://www.globalfundadvocatesnetwork.org/wp-content/uploads/2018/10/projected-health-financing-transitions-timeline-and-magnitude.pdf

66. Department of Health, Ministry of Health, The Republic of the Union of Myanmar. (2016). Expanded Program on Immunization Multi Year Plan 2017-2021 Revised January 2016. [cited 2021 March 10]. Available from: https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/myanmar/myanmar_cmyp_2017-2021.pdf

67. Burrows, D., Oberth, G., Parsons, D., & McCallum, L. (2016). Transitions from donor funding to domestic reliance for HIV responses. Recommendations for transitioning countries. Nairobi: APM Global Health. [cited 2021 March 10]. Available from: https://www.globalfundadvocatesnetwork.org/wp-content/uploads/2016/04/Aidspan-APMG-2016-Transition-from-Donor-Funding.pdf

Funding and authorship

This profile was funded through a grant from the Bill & Melinda Gates Foundation to the Duke Center for Policy Impact in Global Health. The Foundation played no role in writing the profile. The profile was written by **Ashwini Deshpande, Wenhui Mao, Tom Traill , Zarni Lynn Kyaw, Pyone Yadanar Paing, Zin Mar Win, Si Thura, Osondu Ogbuoji,** and **Gavin Yamey**. It was designed by **Heather Hille**.

Methods

Our research included a desk-based review of websites, strategy documents, grey literature reports, and academic literature. This project was screened for exemption by the Duke University Institutional Review Board as part of the study 'Driving health progress during disease, demographic, domestic finance and donor transitions (the"4Ds"): policy analysis and engagement with transitioning countries.'