Investing in health in Myanmar: How can the country reach grand convergence and pro-poor universal health coverage?

Introduction
The government of Myanmar and partners hosted the first national gathering of major actors in the health sector 28–29 July, 2015 at the Myanmar Health Forum. The Forum—focused on the topic “Investing in Health: The Key to Achieving a People-Centered Development”—included representatives from civil society, state and municipal health authorities, multiple ministries, international development partners, health workers’ associations, universities, and other experts.

The Forum highlighted many of the major changes underway in the health sector as part of the country’s broader process of liberalization. Since 2011, Myanmar has begun to undergo a gradual liberalization towards a more democratic system of government and more open economy. The government is also working to forge peace in conflict areas. In the health sector, two priorities for the government have emerged as part of this transition: committing itself to a path to Universal Health Coverage (UHC) and increasing its domestic funding for health from its very low base.

As Myanmar emerges from its isolation, it is eager to learn lessons from other countries. Two Commissioners from the Lancet Commission on Investing in Health (CIH), Professor Dean Jamison and Dr Helen Saxenian, participated in the Myanmar Health Forum to share lessons from the CIH as Myanmar pursues its UHC health goals.

The CIH is a group of 25 health and economics experts chaired by Professor Lawrence Summers and co-chaired by Professor Dean Jamison. In its report Global Health 2035: A World Converging Within a Generation, the CIH outlined opportunities for low- and middle-income countries to achieve a grand convergence. The CIH estimated that by investing 70 billion USD annually over the next 20 years, by 2035 the rates of avertable infectious, child, and maternal deaths in LICs and LMICs would fall to the rates seen today in the best-performing upper-middle-income countries. To achieve such convergence, increased health sector investments by countries, together with a reprioritization of development assistance for health (DAH), would need to focus on:

1. Scaling up current interventions for infectious, maternal, and child health conditions to very high levels;
2. Health systems strengthening (HSS) to effectively deliver these health tools and interventions; and
3. Expanding research and development for discovery and delivery of new health technologies.

Myanmar could likewise experience large improvements in health, and strengthen its economy, by increasing strategic investments in the health sector. In this Policy Brief, we first summarize the key messages of the CIH. Next we provide estimates of the financial investments needed for Myanmar to reach convergence and the health and economic returns on these investments. We then outline Myanmar’s past record on investing in health against the backdrop of (a) its health challenges, (b) the directions the government is taking to step up public sector and external health investments, and (c) alternative pathways to reaching UHC in the context of Myanmar.
Myanmar is well positioned to make progress towards achieving convergence through increased health spending and new health policies that support pro-poor UHC. To achieve convergence, the CIH estimates that Myanmar would need to invest an additional approximately one billion USD annually over the next 20 years (Table 1). The majority of these investments (65%) would be allocated to HSS, in order to build the capacity of the health sector to effectively and efficiently deliver priority interventions. Programmatic investments would need to focus on interventions in areas including HIV, malaria, and child health. Investments in these priority areas should focus on populations with greater health needs, including the rural poor. Such targeted investments in high burden areas will be essential in Myanmar, where poverty rates are highest in rural areas (76%) and in conflict affected areas such as Chin State (71%) and Rakhine State (78%).

Table 1. Estimated incremental costs in 2035 of enhanced investment to achieve convergence

<table>
<thead>
<tr>
<th>Category</th>
<th>Incremental cost in 2035</th>
<th>% of program costs</th>
<th>% of total costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family planning</td>
<td>21</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Maternal and newborn</td>
<td>58</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>Immunization</td>
<td>85</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>Childhood illness</td>
<td>38</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>Malaria</td>
<td>94</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>60</td>
<td>14%</td>
<td>5%</td>
</tr>
<tr>
<td>HIV</td>
<td>90</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td>Health systems strengthening</td>
<td>825</td>
<td>5%</td>
<td>65%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,277</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Myanmar would experience significant reductions in mortality as the result of these strategic investments to achieve convergence. For example, the under-5 child mortality rate could fall by over half—from 66 deaths per 1,000 live births in 2011 to a projected 31 deaths per 1,000 live births in 2035. Likewise, the country would experience dramatic declines in mortality from infectious diseases such as HIV and TB (Table 2).

**Benefit: cost ratio of health investments.** Increasing public spending on cost-effective interventions can be an important driver of economic growth in the country, in addition to improving health and financial protection for the population. At a global level, the *Global Health 2035* report estimated that reductions in mortality in low- and middle-income countries accounted for about 11% of income growth in these countries over the past 20 years.

In Myanmar, investing in health to achieve convergence would also show strong economic returns. The CIH, calculating the economic benefits of these investments, estimates that the economic benefits of convergence would exceed costs by a factor of 5–7 in the Myanmar: each dollar invested in the convergence agenda would return around US $5 from 2015–2035 (Table 3).

Table 2. Estimated reductions in mortality by investing in convergence

<table>
<thead>
<tr>
<th>Cause</th>
<th>2011 (# of deaths)</th>
<th>2035 (# of deaths)</th>
<th>% reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal deaths</td>
<td>1,700</td>
<td>1,000</td>
<td>37%</td>
</tr>
<tr>
<td>Child deaths</td>
<td>58,000</td>
<td>25,000</td>
<td>56%</td>
</tr>
<tr>
<td>Tuberculosis deaths</td>
<td>22,000</td>
<td>4,000</td>
<td>83%</td>
</tr>
<tr>
<td>HIV deaths</td>
<td>12,000</td>
<td>2,300</td>
<td>84%</td>
</tr>
<tr>
<td>Births</td>
<td>870,000</td>
<td>810,000</td>
<td>7%</td>
</tr>
<tr>
<td>Total Fertility Rate</td>
<td>2</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Under-5 Mortality Rate</td>
<td>66</td>
<td>31</td>
<td>53%</td>
</tr>
</tbody>
</table>

Table 3. Costs, benefits, and benefit-cost ratio

| Population             | 53,260,000         |
| Incremental expenditures in 2035 | 1,277,000,000 |
| Incremental expenditures per capita | 24 |
| Per capita income      | 1,100              |

**Deaths averted**

- Stillbirths (weighted) 400
- Deaths age 0–4 (weighted) 14,000
- Maternal deaths 520
- TB deaths 12,880
- HIV/AIDS deaths over 5 10,200
- Total 38,000
- Cost per death averted 33,575

**Benefit:cost calculations**

- Reduction in mortality (in SMU) 7.1
- Per capita value of mortality reduction 141
- Benefit:cost ratio 5.9
The CIH showed that given the projected economic growth in low- and middle-income countries over the coming decades, this level of investment is feasible in most countries. Between 1–3% of the projected increase in GDP in LICs and LMICs from now to 2035 could fund the convergence agenda. The CIH also showed that fiscal policies, such as the taxation of tobacco, alcohol, and sugar, could raise substantial revenue for health, while acting as a powerful tool to curb rates of non-communicable diseases and injuries.

The CIH argued that “pro-poor” pathways towards UHC are the most efficient way to improve health outcomes. Countries should first expand their publicly financed benefits package focused on maternal and child health and infectious disease—this approach is “pro-poor” as the poor are disproportionately affected by these conditions. This package should be publicly financed and universally available with zero or very low user fees.

**Health challenges in Myanmar**

Myanmar’s health needs are great. The country is faced with a double burden of disease: it must address both the challenges of infectious, child, and maternal mortality as well as reduce the incidence of non-communicable diseases and injuries. Myanmar continues to have high rates of maternal, child, and infectious deaths. In 2013, the maternal mortality ratio was estimated at 200 deaths per 100,000 live births. Over the years 2010–2015, under-five child mortality was estimated at 60 per 1000 live births and its infant mortality rate at 46 per 1000 live births. WHO/UNICEF estimate that coverage of essential childhood immunizations remains well below the targets for the Decade of Vaccines. There continues to be a high burden of HIV/AIDS, TB, malaria, and several neglected tropical diseases (NTDs)—including lymphatic filariasis and intestinal worms. Most of the population in Myanmar is at risk of NTDs.

**Box 1. Full income accounting**

Full income is a more comprehensive measure of the returns to investing in health. Full income captures both the “instrumental” value of health investments (i.e., the benefits from increased economic productivity, as measured by GDP) and the “intrinsic” value of better health (i.e., the economic value of living longer in and of itself). The change in a country’s full income over a period of time is estimated by adding its income growth (i.e., GDP growth) to the value of additional life years gained over that time period.

Between 2000 and 2011, about a quarter of the growth in full income in low-income and middle-income countries resulted from VLYs gained.

**Figure 1. Annual value of mortality decline**

*The CIH, in Global Health 2035, calculates the annual value of mortality decline as a percentage of base year GDP non-inclusive of health expenditures. Due to a lack of accessible historical data on per capita health expenditure in Myanmar, we have adjusted the full income calculations to show the annual value of mortality decline as a percentage of base year GDP inclusive of health spending.*
Although there was, and continues to be, a large presence of international non-governmental organizations (NGOs), these groups worked outside of the government resulting in a highly fragmented system. Presently, donors are expanding assistance, and some are beginning to channel funds through the government. Major donors include the Global Fund, bilateral funders, and Gavi, the Vaccine Alliance. Gavi has committed $156 million over the period 2001 to 2020 to support new and underused vaccine introductions and HSS. The Three Millennium Development Goal Fund (3mdg.org) is pooling funding from seven bilateral donors to support the health sector, and currently has funding of $330 million for 2012–16, primarily to support maternal and child health. The World Bank is also renewing its health funding to the country. This year, the government is the recipient of the World Bank’s first health project in Myanmar, a highly concessional (International Development Association) credit of $100 million. This project is supporting the government’s objectives of (i) improving services, (ii) expanding use of health services, and (iii) reducing out-of-pocket expenditures through the provision of free essential drugs at the township hospital level and below, and free health services for pregnant women and children under five years.

Reaching universal health coverage (UHC)

These increased investments are part of Myanmar’s new efforts to expand access to health coverage. Recognizing the challenges resulting from decades of underinvestment in health, the government has committed to reaching UHC by 2030, and has begun taking the first steps to achieve this goal. UHC can be defined as the “end state of universal population coverage with a comprehensive set of interventions and zero or close to zero out-of-pocket expenses for all those interventions.” Figure 3 presents three dimensions of UHC: (1) the percent of the population covered; (2) the percent of the country’s population covered; and (3) the percent of the country’s population covered with a comprehensive set of interventions. Although there was, and continues to be, a large presence of international non-governmental organizations (NGOs), these groups worked outside of the government resulting in a highly fragmented system.

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Given resource constraints, most countries fall short of true UHC on one or more of these dimensions. The government of Myanmar will need to make choices on how it will move from its present system on each dimension—the target population covered, the percent of costs paid by user fees, and the size of the benefit package. No matter how it moves, it will need greater public financing to enable coverage expansion.

**Alternative pathways to UHC:** The government of Myanmar is currently pursuing a number of new policy directions as it seeks to achieve UHC by 2030. The CIH found that the most feasible pathway to achieving pro-poor UHC is publicly financed insurance schemes that cover the vast majority of the population, with free coverage initially directed at a highly prioritized set of health services for infectious diseases and maternal and child health. This approach would best serve the poor, as these populations are disproportionately affected by these conditions. As fiscal space (budgetary room) permits, this benefit package can be progressively expanded over time to include services for additional conditions such as non-communicable diseases (NCDs). This approach would be administratively easier than establishing a broader benefit package that was supported in part by fees, and then developing mechanisms to identify and exempt the poor from such fees.

Myanmar, through its current focus on essential medicines and maternal child health, is well positioned to follow such a pathway. However, to truly implement this, the government will have to focus on strengthening the township health system—including ensuring adequate staffing and supply of medicines and supplies—as this will likely be the backbone of service provision, especially in rural and underserved areas. NGO and private, for-profit providers could have a significant role in service provision in many areas, and the government will need to collaborate with the private sector to ensure universal provision of free essential services. In addition to the importance of adequate financing, strategic purchasing will need to be developed and revised over time to promote both efficiency and accountability in the system.

The government, led by the Ministry of Finance, recently introduced legislation that permits private voluntary health insurance schemes. The government is also interested in expanding social security benefits, including health care, for formal sector workers. International experience shows that private voluntary health insurance is not a pathway towards UHC. Given Myanmar’s small formal sector, social security will have only a limited role over the medium term. Another strategy that was mentioned at the Myanmar Health Forum—small, community-based financing schemes—may also expand coverage to some populations. However such schemes are fragmented and do not promote large risk-pooling, making them less sustainable and economically viable.

**Increased public financing.** Progress towards universal health coverage in Myanmar will take time. According to WHO’s global health expenditure database, the government devoted only 1.5% of general government expenditure to health in 2013. Although this may be an underestimate given the more current numbers presented at the Myanmar Health Forum, it still has a long way to go in reaching levels typical of other countries. Figure 4 compares Myanmar with other ASEAN countries on this indicator.
To meet the investment needs to achieve convergence, the government will need to steadily increase public spending on health from its own resources, as well as continue to engage external assistance for health sector development. Increases in domestic financing should be possible given Myanmar’s strong growth projections. The IMF projects the country’s GDP will grow between 7 and 8%, in real terms, from 2015 to 2020.8

**Conclusion**

The Commission on Investing in Health outlines a set of high impact opportunities that Myanmar can pursue to dramatically improve population health and achieve a “grand convergence.” By increasing health sector spending by approximately one billion USD annually, Myanmar could cut deaths from maternal, child, and infectious conditions by over half. This represents almost a tripling of the government’s most recent estimates of public spending on health. With the help of external assistance, and, over time, steadily increasing domestic contributions, this level of investment should be feasible, considering the country’s projected economic growth and priority placed on health. These investments also make economic sense: for every dollar invested towards convergence, 5 USD would be returned.

Myanmar is at a unique moment. The country is liberalizing, and in the health sector the government has committed to positive changes including its commitment to achieve UHC by 2030. Although health spending remains low, increased public health investment in the most recent years shows promising changes in the right direction. As Myanmar continues moving towards UHC and the SDG agenda, the CIH recommendations can provide the evidence to support greater health investment.

**Endnotes**

i Cost estimates presented here are calculated using the standard methodology from the CIH analysis. Programmatic costs were estimated using the OneHealth Tool, a software product developed by the UN Inter Agency Working Group on costing. Health system strengthening cost estimates drew on the 2009 report of the High Level Task Force on Innovative Financing for Health Systems, which projected investments needed to achieve the Millennium Development Goals. Details on the methodology can be found in Appendix 4 of the Global Health 2035 report, available at http://www.globalhealth2035.org/sites/default/files/2035/appendix-4.pdf.

ii To estimate the benefit:cost ratio of investing in health in Myanmar, we followed the CIH methodology used in the Global Health 2035 report. The benefit:cost ratio weighs the incremental cost of investing in convergence against the number of deaths averted through these investments. Deaths averted refers only to those deaths averted in pregnancies that occurred, and does not include deaths averted from preventing pregnancies. For consistency with global economic literature, deaths in children under-5 are weighted at 50%, and stillbirths are weighted at 8%. To calculate the value of deaths averted, the reduction in mortality is presented in standard mortality units (SMU), which is then valued at 1.8% of GDP per capita. A more detailed description of the methods and assumptions used can be found in Appendix 3 of the report, available at: http://globalhealth2035.org/sites/default/files/2035/appendix-3.pdf.

iii Some of this increase in spending could be attributable to increased external assistance that is on-budget. Note these recent data are much higher than latest numbers for Myanmar in WHO’s global health expenditure database.

**References**


3 United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects, the 2015 Revision.

4 WHO/UNICEF estimates Myanmar’s coverage of DTP3 at 75% for 2014, which is well below the Decade of Vaccines target of 90%. For data, see: http://www.who.int/immunization/monitoring_surveillance/data/en.


6 WHO global health expenditure database for 2013.

7 World Bank Group, Myanmar: Ending poverty and boosting shared prosperity in a time of transition, November 2014, Report No. 93050-MM.

8 IMF, World Economic Prospects, April 2015.