KEY MESSAGES AND RECOMMENDATIONS

- **Antiretroviral therapy** should have the highest priority among interventions. ART coverage should **further be increased** from current level.
- Funding for prevention and testing programmes targeting **female sex workers, men having sex with men** and **people who inject drugs (PWID)** should be **kept close to their current level**.
- Funding allocated for PWID should be shifted from general testing and primary prevention towards **needle and syringe programmes**, as well as **treating more patients diagnosed with HIV**. **Prisoner programmes** can also reach many current and former PWID and should be **scaled up substantially**.
- It is essential to assure that **total available annual funding will not be less than the critical level of between US$ 50 million and US$ 60 million**. Funding below this level combined with no considerable improvements in programme efficiency would lead to a **catastrophic situation** which must be avoided at all cost.
- In addition to allocative efficiency, **technical efficiency** of HIV programmes should be reviewed and improved where necessary. Programme management should also be made more efficient, reducing the currently high management costs through **greater use of Government or alternative systems in service delivery**. **Reducing the unit cost** of each direct and indirect programme could produce **the same effect as increasing the total budget**, thus averting more new infections and HIV-related deaths.
- While beyond the scope of this report, it must be emphasized that available data shows that Myanmar is spending too little on health for its income level. Myanmar should look at the overall burden of disease, its policy priorities, and **decide options for increased fiscal space for health**, including HIV/AIDS.
BACKGROUND

Myanmar has the third-highest adult HIV prevalence (0.76%) in the Asia-Pacific region. The epidemic is concentrated among several key populations, such as female sex workers (FSW), men who have sex with men (MSM), and people who inject drugs (PWID). HIV is the most rapidly growing individual cause of DALYs in Myanmar, with 2.7% of all DALYs attributable to HIV in 2013. The country’s response to the epidemic has focused on these key populations, and until now, has mainly been funded by international donors. Recently, the Government of Myanmar has for the first time allocated domestic resources for HIV medicines and opiate substitution therapy.

It makes sense to use resources to achieve the greatest benefits possible. The economic term is “allocative efficiency”—maximizing health outcomes choosing the least costly and most effective mix of health interventions. To assess the allocative efficiency of the HIV response in Myanmar, the World Bank and UNAIDS conducted, together with the University of Bern and Burnet Institute, an analysis using the mathematical model Optima HIV (www.optimamodel.com).

KEY FINDINGS

With the current HIV response efforts, it is expected that approximately 8,400 new HIV infections and 8,100 HIV-related deaths will occur each year in Myanmar. However, even without additional resources, if the current budget envelope were better targeted through optimal allocations of resources to the right programmes targeting the right populations, annual new infections would be expected to decrease by around 1,000 and deaths by around 700 (Fig. 1).

If the available HIV resources remain at around 2014 HIV budget levels in Myanmar, then funding should be reallocated to support greater coverage of antiretroviral therapy (ART), which can also efficiently prevent onward transmission of HIV (Fig. 2).

Even without additional resources, it is important for spending on prevention programmes targeting key populations (FSW, MSM, PWID) to be protected at close to the current levels (Fig. 2).
Figure 1  Expected average annual new HIV infections and HIV-related deaths in Myanmar 2016–20

<table>
<thead>
<tr>
<th>HIV related infections/deaths</th>
<th>Difference made by optimal allocation</th>
<th>Average annual new HIV infections 2016–20</th>
<th>Average annual HIV-related deaths 2016–20</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSW</td>
<td>0</td>
<td>700</td>
<td>6,000</td>
</tr>
<tr>
<td>Clients</td>
<td>500</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>MSM</td>
<td>1,500</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>PWID</td>
<td>2,000</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Prisoners</td>
<td>2,500</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Other populations</td>
<td>8,000</td>
<td>6,000</td>
<td>6,000</td>
</tr>
</tbody>
</table>

Notes: The current budget allocated in the current way (orange and red/blue), or optimal way (red/blue only). “Other populations” include also former representatives of key populations, after ending their high-risk behaviour.

Figure 2  Current (left) and optimal (right) allocation of current (2014) budget level to minimize new HIV infections and HIV-related deaths in Myanmar between 2016 and 2020.

Among programmes targeting PWID, funding should be shifted from testing and primary prevention towards needle/syringe programmes, as well as treating more diagnosed patients. Among programmes targeting PWID, funding should be shifted from testing and primary prevention towards needle/syringe programmes, as well as treating more diagnosed patients. Opiate substitution therapy (OST), due to a number of factors specific to Myanmar context, is recommended to continue to be funded as an essential prevention programme. Funding for programmes targeting prisoners (of whom a
considerable proportion are current or former PWID) should be increased substantially (Fig. 2).

While there are people diagnosed with HIV but not on ART, with the current budget envelope, HIV testing and counselling (HTC) and prevention programmes (condom and behaviour promotion) for other than FSW, MSM, PWID or prisoners, should be reduced to allow scale-up of programmes with greater priority for impact given the current state of the epidemic and resource availability (Fig. 2).

If total funding drops below a critical level (US$ 50–60 million), the HIV response may no longer be able to maintain the current ART coverage and effectively prevent new infections. This would be a catastrophic situation, where the results of a formal optimisation analysis lose their meaning and should not be used for policy making. All efforts must be made to keep the funding above this critical level (which is higher than the annual total spending until 2013).

If total funding drops below a critical level (US$ 50–60 million, which is about 80% of the 2014 budget of US$ 68.9 million), the HIV response may no longer be able to maintain the current ART coverage (see Figure 3) and effectively prevent new infections. This would be a catastrophic situation, where the results of a formal optimisation analysis lose their meaning and should not be used for policy making. All efforts must be made to keep the funding above this critical level (which is higher than the annual total spending until 2013).

Figure 3   Optimal allocation of HIV funding with variable budgets. The percentages refer to the direct-programme funding available in 2014

If the total HIV budget were to increase by at least 20% compared with the 2014 level, then scaling up HTC for all populations becomes important to facilitate uptake of ART among those currently undiagnosed and not in care. This can be interpreted as the introduction of a “test and treat” approach.

The analysis has several limitations, related to uncertainty of data and some simplifying assumptions. The strengths, limitations and assumptions behind this
Reducing management costs would free resources that could be channelled into direct programmes for greater impact.

study are presented in detail in the full report, which will help the interpretation of findings. For example, it was assumed that the allocation will not change over the 5-year time period. The allocation of resources within individual programmes was not assessed: attention should also be given to programme unit costs by, for example, developing alternative, more efficient, outreach strategies for HIV testing, which could also allow to expand testing to new key population groups.

The costs of management and administration increased more than threefold between 2011 and 2012. This occurred at the time when the Global Fund returned to Myanmar and Three Diseases Fund was closed. The increase could therefore be partly due to differences in reporting principles and start-up costs of the Global Fund programme. However, reducing management costs would free resources that could be channelled into direct programmes for greater impact.

Finally, Myanmar is spending too little on HIV/AIDS and health in general: the contribution of public financing on health is only 1.0% of GDP. More resources for HIV are needed, but this should not be done with the cost of other fields of health care. Myanmar should look at the overall burden of disease, its policy priorities, and decide options for increased fiscal space for health, including HIV/AIDS.