Investing Further on Health: Haiti

April 2020

Haiti has set ambitious national goals for its health sector and aims to meet its international commitments, but further public investment in health is needed. Increased public spending on health will have far-reaching consequences, not only for improving health outcomes and the resilience of the health sector, but also by contributing to poverty reduction, improving social outcomes including educational attainment, and increasing economic prosperity. Despite the economic constraints Haiti has long faced as a low-income country, domestic investment in health represents a clear path to immediate and long-term improvements in the well-being of all Haitians, economic growth, national stability, and the achievement of a self-reliant future.

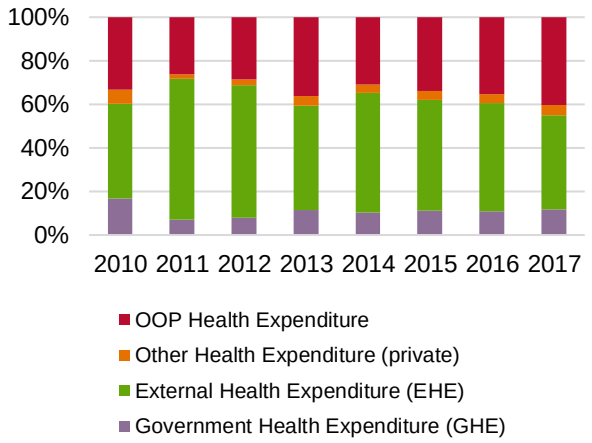
Health investments yield positive returns. Evidence shows the positive association of health investments with development outcomes (Basta et al., 1979; Bleakley, 2003; Bleakley, 2010; Lucas, 2010). Each US dollar of government spending on health has an estimated return of US$4.3 (Reeves et al., 2013). A 2016 meta-study identified a very favorable return on investment (RoI) for public health interventions with an economic return of 14 to 1 (Masters et al., 2017). Investing in health now will generate savings to the health system and foster prosperity as well as economic growth.

Public spending on health contributes to poverty reduction. Approximately 60 percent of Haiti's population is living in poverty (World Bank, 2020). Many experience a cycle of poor health and poverty which perpetuates social conditions, contributing to the development of disease and, in turn, further poverty. Increased public spending on health can help break this cycle by reducing the out-of-pocket expenditures that contribute greatly to poverty. Out-of-pocket spending is a large and growing share of funding for health in Haiti, increasing from 26 percent of health expenditures in 2011 to 40 percent in 2017 (Figure 1) (World Bank, 2019). Particularly for poor and vulnerable groups, out-of-pocket expenditures on health can be a significant challenge and may result in catastrophic expenditures. In 2013, an estimated 3.4 percent of Haitian households incurred catastrophic health expenditures, which occurs when out-of-pocket health expenditures represent 25 percent of overall household expenditure (Pan American Health Organization [PAHO], 2019a).

Why should Haiti invest further in health?

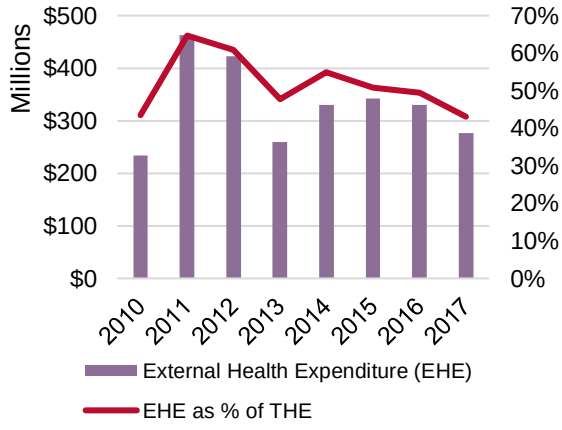
1. **Health investments yield positive returns.**
2. **Public spending on health contributes to poverty reduction.**
3. **Health represents a crucial investment in the well-being of a population and its economic prosperity.**
4. **Reduced reliance on external funding will increase the resilience of the health sector.**
5. **Greater public investment is required to meet national and international goals.**
6. **Investing in global health security is essential to protect lives and the economy.**

Figure 1. Sources of health expenditure in Haiti



Source: World Bank, 2019

Figure 2. Health expenditure from external sources in Haiti



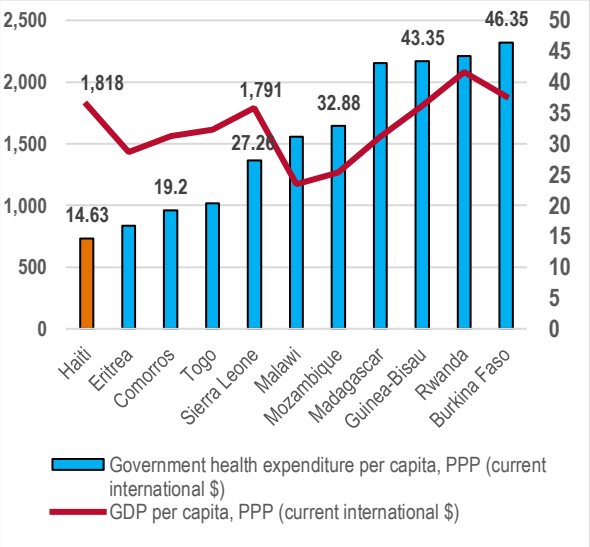
Source: World Bank, 2019

Health represents a crucial investment in the well-being of a population and its economic prosperity. Population health has been directly linked to income growth in developing countries, where investments in health can lead to a more productive, educated, and therefore wealthier population (Bloom & Canning, 2008). Investing in health is critical to keep a population healthy and productive. Healthy individuals live longer and are more productive, improving economic growth and boosting future human capital development (WHO, 2008). Healthy children (and children with healthy parents) are more likely to attend and complete schooling and thus earn more money throughout their lives (Guo et al., 2012). Similarly, healthy adults are more productive at work. In addition, people who live longer are more likely to save and invest money (Jamison et al., 2012).

Reduced reliance on external funding will increase the resilience of the health sector. As shown in Figure 1, Haiti's health system is highly reliant on external assistance. In 2014, international aid represented more than half of total health expenditure (55 percent) (World Bank, 2019). Figure 2 quantifies the decline in external health expenditure in Haiti, from a high mark of US$462 million in 2011 to about US$277 million in 2017. As external aid decreases, it is imperative that the government starts filling the funding gap and provides financial risk protection to the population.

Greater public investment is required to meet national and international goals. Haiti has set ambitious goals in its National Health Strategy (MSPP, 2012) and aspires to meet international commitments such as the Sustainable Development Goals (SDGs). Public health expenditure in Haiti, at current international dollars (Int$) of 14.53 per capita, is very low compared to other countries in Africa with similar levels of GDP, ranging from Int$1,500 to Int$2,000 (Figure 3). Malawi, Mozambique and Madagascar show higher public investments in health despite of lower GDP per-capita than Haiti. Filling the health gaps will require a significant increase in public investment in health. One study estimates that, on average, low-income countries will need to spend US$112 per person on a basic package of priority services to achieve the health-related SDGs by 2030 (Stenberg et al., 2017). Public health expenditure as a percentage of GDP in Haiti has remained under one percent since 2011, whereas public health expenditure among low-income countries worldwide increased from an average of 0.98 percent of GDP to 1.32 percent between 2011 and 2016 (World Bank, 2019). It is essential that the government increases public investment in health to eventually meet national and global health goals.

Figure 3. Public health expenditure and GDP in Haiti and selected African countries, 2016



Source: World Bank, 2019

Investing in global health security is essential to protect lives and the economy. Epidemic preparedness is an investment to protect the economy (WHO, 2018) and effective policies and investments to protect lives are essential to achieve human and economic health. Although it is too early to quantify the impact of the COVID-19 pandemic, getting the epidemic under control is essential to save livelihoods. Countries need to place health expenditures at the top of their priority list and fighting the pandemic is a prerequisite for the economy to rebound (Georgieva & Ghebreyesus, 2020).

Conclusions

To meet the ambitious goals set in Haiti's National Health Strategy, as well as the country's commitments to other national and international targets, an increase in public investment in health is needed. The benefits of this investment will not be limited to improved health outcomes but will also contribute toward broader development outcomes such as reductions in poverty, education, and economic growth.

Investing Further in HIV

April 2020

While Haiti has made significant progress in reducing the number of HIV-related deaths over the past 10 years, the reduction in new HIV cases has been slow, particularly in recent years. At the same time, external support for HIV expenditures is declining, while government expenditure has stagnated (Global Fund, 2017). To sustain Haiti's achievements in HIV and reach epidemic control, Haiti will need more significant public investment in HIV.

HIV has important economic impacts. The income of HIV-affected households is about 35 percent to 50 percent lower than that of non-affected households, and in some countries, HIV is also associated with a 6 percent increase in the likelihood of unemployment (Yamey et al., 2016). HIV, whether affecting students or caregivers, can also negatively impact educational outcomes including school attendance, behavior, and completion (Guo et al., 2012; Pufall et al., 2014), in turn affecting future economic productivity. By helping to avert these negative impacts, each dollar spent on HIV treatment and prevention can have a major positive economic impact.

Spending on treatment yields a particularly high return on investment The projected economic returns of the Fast-Track strategy to end the AIDS epidemic by 2030, a declaration adopted by the United Nations General Assembly, indicate that in the LAC region, HIV programming could yield US$2.6 in benefits for every dollar invested when considering productivity gains during 2017–2030 (Lamontagne, 2019). Spending on treatment yields a particularly high return on investment. For every dollar spent on antiretroviral therapy (ART), LAC countries obtain almost US$4 of returns in economic benefits (Forsythe et al., 2019). The Copenhagen Consensus (2015) reported that each dollar spent on HIV treatment generates up to US$10 in returns through better health and higher productivity. Variations on the return of investment reflect differences in services compared, country contexts and the inclusion of social returns.

To achieve the 90-90-90 targets, further investments are needed in testing and treatment for people living with HIV. Although Haiti is making progress toward the 90-90-90 targets, there is still significant room for improvement. 58 percent of people who know their HIV status are on antiretroviral therapy, but only 67 percent of people living with HIV know their status (UNAIDS, 2020). Additionally, there is no data on the number of people on antiretroviral therapy and achieving viral suppression. Reaching the 90-90-90 goals will require increased investment in testing, treatment, and viral load monitoring.

Why should Haiti invest in HIV epidemic control?

1. **HIV has important economic impacts.**
2. **Spending on treatment yields a particularly high return on investment**
3. **To achieve the 90-90-90 targets, further investments are needed in testing and treatment for people living with HIV.**
4. **Investing now in prevention—in addition to treatment as prevention—will reduce the number of new cases and future resource needs.**
5. **Increased public investment will be necessary to close the funding gap as external assistance decreases over time.**

Each dollar spent on HIV treatment generates up to US$10 through better health and higher productivity if other social benefits are considered.

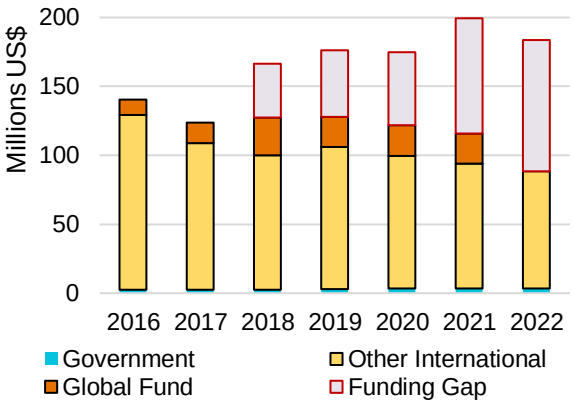
Source: Copenhagen Consensus Center

Investing now in prevention—in addition to treatment as prevention— will reduce the number of new cases and future resource needs. The number of new HIV infections has remained relatively stable in recent years (Figure 3), pointing to a need for increased investment in prevention. In 2015, 20.4 percent of HIV expenditures was dedicated to prevention, but only 0.8 percent was dedicated to prevention programs for men who have sex with men and 2.5 percent for prevention programs dedicated to sex workers (MSPP, 2016). Given the high rates of HIV among these key populations, increased

investment in prevention efforts among them could have a significant impact on overall HIV incidence rates. International evaluations have demonstrated that HIV prevention programs that benefit groups at high risk and that are implemented at scale are cost-effective, providing good value for money expended in low-resource settings (Vassall et al., 2014). Investing in prevention is key to avert new infections and the associated resource needs.

Increased public investment will be necessary to close the funding gap as external assistance decreases over time. Historically, the majority of funding for HIV in Haiti has come from external sources (Figure 3). Most international funds have come from the U.S. President's Emergency Fund for AIDS Relief (PEPFAR) and the Global Fund. In 2015, PEPFAR's contribution represented 86 percent of total funds for HIV, while the Global Fund contributed 10 percent (MSPP, 2016). Still, Haiti is highly dependent on international aid.

Figure 3. Sources of HIV expenditure in US$ millions, 2015–2022



Source. Haiti: country funding landscape table submitted by the country to the Global Fund

An increase in public spending on HIV will be needed to address this gap and prevent a reversal of Haiti's recent achievements.

Conclusions

Greater public investment in HIV is critical to reduce the number of new HIV cases, reach the 90-90-90 targets, and achieve the social and economic benefits of epidemic control. Targeted preventive interventions will help avert new cases across the entire population, and treatment is a powerful investment which also prevents transmission, restores health, improves current and future productivity, and saves lives. HIV spending has a high return on investment therefore Haiti should act now to increase domestic funding and better prepare for potential future declines in external funding.

Investing Further in Tuberculosis

April 2020

Despite making progress in the fight against tuberculosis (TB), Haiti continues to have the highest incidence of TB in the Americas (PAHO, 2018). In 2017, TB incidence in Haiti was 181 per 100,000 people—4.3 times higher than the regional average of 42 per 100,000 (World Bank, 2019). At the same time, progress has stalled in reducing TB-related deaths. Given reductions in PEPFAR funding for TB, increased public investment is crucial to preserve the gains made and make progress toward reducing the number of TB-related deaths (Global Fund, 2017).

Spending on TB yields a high return on investment. Ultimately, it is more cost-effective to invest in TB now to prevent the spread of the disease. Evidence on the cost-effectiveness and benefits of expanded financing for tuberculosis control suggests that such investment will yield a high economic return. The Lancet Commission on TB conducted economic analyses which found the benefits outweigh the costs of preventing TB deaths by a factor of 3 to 5, and that the factor is likely to be higher in some settings (Reid et al., 2019). According to the Copenhagen Consensus Center (2015), each dollar spent on TB generates up to US$30 through better health and higher productivity and can reach up to US$43 if other social benefits are considered.

Each dollar spent on TB generates up to US$30 through better health and higher productivity and can reach up to US$43 if other social benefits are considered.

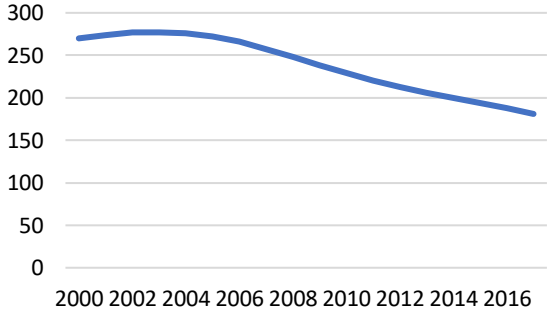
Source: Copenhagen Consensus Center

Further investment is needed to protect progress. Haiti has made progress in reducing the incidence of TB (Figure 4), but other key indicators show challenges remain. The TB case notification rate peaked at 79 percent in 2013 and has since fallen to 75 percent, meanwhile the treatment success rate has hovered between 79 and 82 percent since 2010 (World Bank, 2019).

Why should Haiti invest further in TB?

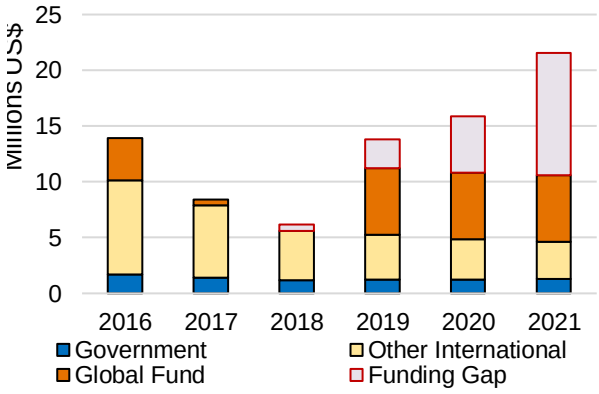
1. **Spending on TB yields a high return on investment.**
2. **Further investment is needed to protect progress.**
3. **TB can have catastrophic financial impacts on households.**
4. **Further investment is needed to address existing funding gaps.**
5. **Under-investment now allows for the emergence of drug resistance, increasing the long-term costs of TB treatment.**

Figure 4. Incidence of TB per 100,000 population, 2000–2017



Source: World Bank, 2019

Figure 5. Sources of TB expenditure in USD millions, 2015–2021



Source. Haiti: country funding landscape table submitted by the country to the Global Fund

TB can have catastrophic financial impacts on households. When a family member has TB, the family suffers a decrease in income due to lost earnings. Over 6 million Haitians live below the poverty line on less than US$2.41 per day, and more than 2.5 million fall below the extreme poverty line of US$1.23 per day (World Bank, 2019). With a poverty rate of almost 60 percent, out-of-pocket and catastrophic costs are a serious threat. For low- and middle-income countries, household income is estimated to decline by an average of 39 percent when a member of the family has TB (Tanimura et al., 2014). Catastrophic health expenditure for TB can be devastating to households pushing them into poverty.

Further investment is needed to address existing funding gaps. Greater investment will be necessary to maintain the downward trend in incidence and jumpstart progress on other key TB indicators in the country. Increased public investment in TB will be even more important in the long-term, as external funding for TB decreases (Figure 5). PEPFAR investment for TB in Haiti is projected to decrease from US$8.36 million in 2015 to an estimated US$1.87 million in 2022, although the Global Fund and other donors are increasing allocations (Global Fund, 2017). Without significant public investment, the resulting funding gap could lead to reversals in the progress made so far.

Under-investment allows for the emergence of drug resistance, increasing the long-term costs of TB treatment. The emergence of multi-drug-resistant TB (MDR-TB) poses a major health threat and could put at risk the progress Haiti has made in TB control. Drug resistance emerges when drugs are of poor quality, patients stop treatment prematurely, anti-TB medicines are used inappropriately, and prescriptions are incorrect (WHO, 2019). In 2015, the average expenditure per notified MDR-TB was more than US$10,000 (WHO, 2017b). A review of 50 countries found that the average treatment cost per patient was US$273 for drug-susceptible TB, increasing to US$6,313 for MDR-TB cases in lower-middle-income countries (Laurence et al., 2015). Based on this data, the average cost to treat a case of drug-resistant TB is 23 times higher than to treat drug-susceptible TB. In 2017, TB incidence in Haiti was 5.4 per 100,000 population, and it was estimated that MDR-TB cases represented 2.3 percent of new TB cases and 13 percent of previously treated cases (WHO, 2017a). Treating MDR-TB is a difficult, long, and expensive process, even when compared to drug-resistant TB. There are limited treatment options, and treatment can last up to two years, versus six months for non-drug-resistant TB (Dall, 2017). Investing in basic TB screening and treatment is key to stop MDR-TB from spreading and avoid a serious and costly epidemic.

Conclusions

Despite declines in donor financing for TB in Haiti, the fight against TB in the country is far from over. Significant progress has been made since the early 2000s, but incidence remains high while deaths, case notifications, and treatment success rates have stagnated. Additionally, MDR-TB, which is vastly more expensive and time-consuming to treat, looms as a threat to Haiti's population and health system. Increased public investment will be necessary to maintain and accelerate Haiti's progress against TB so that drug-resistant- and MDR-TB do not become overwhelming challenges.

Investing Further in Malaria

April 2020

Haiti has been working to reduce the incidence of malaria and transform its malaria control program into an elimination program, with the goal of zero confirmed cases by 2022. Malaria incidence has declined from 9.26 cases per 1,000 population at risk in 2010 to 3.26 cases per 1,000 population at risk in 2017 (Figure 6). Despite these gains, progress has slowed in recent years, and further public investment is necessary to reach the ambitious goal of zero confirmed cases.

Malaria control has a positive impact on the economy. Malaria control means less school and worker absenteeism, and increased productivity in agriculture and local businesses. Potential productivity gains are particularly noticeable in rural endemic areas (Yamey et al., 2016). Malaria-free countries have five times greater economic growth than countries with malaria or reduced malaria. Malaria control has a positive impact on the economy, and it has been estimated that for each 10 percent reduction in malaria incidence, there is an additional 0.3 percent growth in GDP (Gallup & Sachs, 2001).

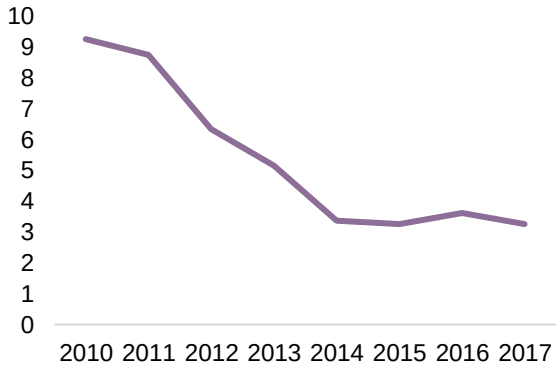
Malaria control is affordable and investing in malaria pays off. Sustained malaria control is a low-cost intervention which brings countries closer to elimination. The cost to protect one person with an insecticide-treated bed net for one year is US$2.10. Similarly, diagnosis and treatment each cost less than one dollar, with one rapid diagnostic test at US$0.53 and treating one case of malaria with a full course of effective treatment at US$0.90. (Macepa, 2016). Sustained control could avert costs to the public health system and to households of treating resurgent malaria, while bringing countries one step closer to malaria elimination.

Spending on malaria yields a positive return on investment. The prevention and treatment of malaria are among the most cost-effective public health interventions. Tools to prevent and decrease malaria transmission are cost-effective with a cost of US$5–8 per case averted (Laxminarayan & Raykar, 2014). Other studies show that every dollar spent on malaria control brings a return of US$2–5 (Titus, 2012). The Copenhagen Consensus (2015) also reported that the benefit for every dollar spent can reach up to US$36 if the social benefits are considered.

Why should Haiti invest in malaria control and elimination?

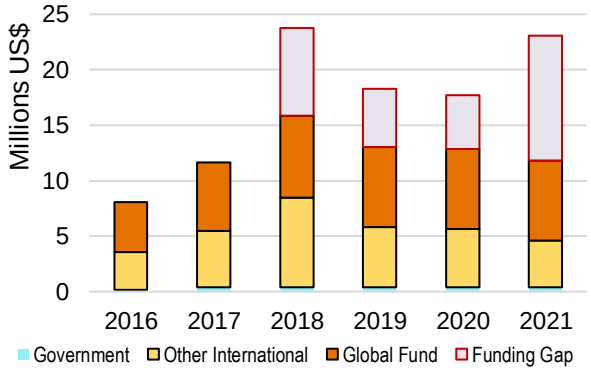
1. **Malaria control has a positive impact on the economy.**
2. **Malaria control is affordable and investing in malaria pays off.**
3. **Spending on malaria yields a positive return on investment.**
4. **Further investment is needed to protect progress in malaria control and stay on track toward the elimination of malaria.**
5. **As external funding decreases, public investment is critical to maintain the malaria response.**

Figure 6. Incidence of malaria per 1,000 population at risk, 2010–2017



Source: WHO, 2019

Figure 7. Sources of malaria funding



Source. Haiti: country funding landscape table submitted by the country to the Global Fund

The prevention and treatment of malaria are among the most cost-effective public health interventions available today.

Malaria control is a highly cost-effective intervention with a cost of just US$5–8 per case avoided. The benefit for every dollar spent can reach up to US$36 if other social benefits are considered.

Source: Copenhagen Consensus Center

Further investment is needed to protect progress in malaria control and stay on track toward the elimination of malaria. Malaria incidence has generally been on the decline since 2010 (Figure 6), at least in part due to successful prevention strategies. However, progress has slowed in recent years, with an incidence rate hovering between three and four new cases per 1,000 population at risk. An additional push in vector control and other prevention activities will be necessary to reach Haiti's goal of malaria elimination by 2022, as has been achieved in other LAC region countries like Paraguay and Argentina (WHO, 2019).

This final push will only be possible if there is increased public investment in malaria. Conversely, when funding for malaria control programs is disrupted, incidence tends to resurge (Titus, 2012), as has been seen in numerous LAC countries since 2015. By committing to increase domestic spending on malaria control, prevention, and surveillance, Haiti can simultaneously increase progress towards elimination and stabilize its gains against future funding volatility.

As external funding decreases, public investment is critical to maintain the malaria response. Between 2015 and 2018, public investment in malaria increased by 250 percent, from US$152,174 to US$392,000 (Global Fund, 2019). However, even with this significant increase, public spending only made up a small fraction of malaria expenditure in the country (Figure 7). Strategic malaria expenditure in Haiti will be necessary avoid a reversal in the gains the country has made. As noted before, funding and programming disruptions open the door for swift resurgences of malaria, so it is critical to ensure a stable supply of domestic funding.

Conclusions

Given a currently low incidence rate, malaria elimination is within reach for Haiti. However, without continued increases in public spending on malaria, the past decades progress will be at risk as donor funding decreases, potentially disrupting malaria programming. As one of the most cost-effective public health interventions and yielding a positive return, malaria control is a wise investment for the country.

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