



How the Global Fund drives Innovation

SDSN Working Paper

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13 March 2018

Abstract

The health sector has experienced the fastest acceleration of progress in achieving the Millennium Development Goals, particularly in the fight against infectious diseases. This success has required innovating new technologies, treatment models, and management systems for controlling HIV/AIDS, tuberculosis, and malaria, as well as propagating lessons. Thanks to its unique design principles, the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria has been at the center of innovation and rapid learning in the health sector through (i) its independent technical review of country proposals that ensures rapid dissemination of innovation and reconciles country ownership with adherence to medical best practice; (ii) its ability to disburse funds directly to government departments, civil society organizations, international organizations, and the private sector; which fosters innovation in service delivery models and ensures locally appropriate implementation mechanisms; (iii) its close collaboration with businesses to harness innovation and ensure well-functioning markets for commodities; and (iv) its support for systematic implementation research and independent evaluations of Global Fund operations and supported programs. Thanks to these four drivers of innovation, virtually all countries, including low-income and fragile states, now have functioning control and treatment programs for the three diseases. In view of the large funding needs for Agenda 2030 and the pressure on aid budgets, it's high time to accelerate innovation and learning outside health. This should start with studying and applying lessons from the Global Fund and Gavi.

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Established in 2001, the Global Fund to Fight AIDS, Tuberculosis and Malaria has become the dominant mechanism for channeling aid for Tuberculosis and Malaria. It is second only to PEPFAR in providing AIDS funding (IHME, 2016). Independent evaluations give it high marks and generally attest to its strong track record in innovation regarding its own processes and business model (Macro International, 2009; DFID, 2016). Throughout its existence, the Global Fund has adapted its approach to address operational challenges and respond to changes in our understanding of how best to fight the three diseases.

It is far less appreciated, though, how far the Global Fund has driven innovation in countries' fight against AIDS, Tuberculosis, and Malaria. Without this innovation and the application of new knowledge and tools by countries around the world, it would have been impossible to generate the impressive acceleration of progress observed under the Millennium Development Goals, particularly in the poorest countries (McArthur and Rasmussen, 2018).

When the Global Fund was created in 2001 there was substantial evidence about the efficacy of medical interventions to control, prevent, and treat the three diseases. It was not known, however, how to design and implement national-scale programs to roll out these interventions, particularly in resource-poor environments with weak health systems. There was no operational understanding of community engagement at scale, budgets, human resource training, supply chain management, monitoring and evaluation, and other dimensions that make or break operational programs. As a result, complex interventions, such as antiretroviral therapy (ART) of HIV/AIDS infections, were widely considered impossible to implement in sub-Saharan Africa. Treatment was not even mentioned in a major review of HIV/AIDS in Africa published in *Science* (Binswanger, 2000).

Less than ten years later, the situation had changed profoundly thanks to rapid innovation in technologies and delivery models. Today, virtually every developing country, including conflict-affected countries or counties that score poorly on metrics for governance and government effectiveness, implements evidence-based programs against the diseases. All programs have clear outcome objectives, efficient logistics, transparent budgets, and comprehensive monitoring and evaluation (GFATM, 2015). The health community has successfully tackled some of the toughest implementation challenges, including harm reduction programs for injecting drug users, AIDS prevention among prostitutes and migrant labor, the taboo of AIDS testing, diagnosing and treating multi-drug-resistant tuberculosis, or the logistics of distributing malaria bed nets in poor and conflict-affected countries (Jamison et al., 2013).

This unprecedented innovation and propagation of knowledge were driven by many organizations working on health. Yet, the Global Fund was the central motor of innovation and knowledge diffusion thanks to a number of unique design principles that set the organization apart from any other donor with the exception of Gavi (Shakow, 2006; DFID, 2016; Sachs and Schmidt-Traub, 2017). There are four major ways in which the design and business model of the Global Fund has been fostering innovation at local, national, and global levels since 2001:

First and most significantly, during the Global Fund's rounds-based mechanism countries could apply for macroeconomically significant volumes of funding that were awarded on the basis of independent technical evaluation of country-led proposals. Proposals could be submitted in three disease categories and were reviewed by the independent Technical Review Panel (TRP) comprising scientists and practitioners drawn from a broad range of disciplines related to the Global Fund's mandate. After each round, the TRP shared findings with WHO, UNAIDS, Roll-Back Malaria, and other technical partners. For example, the TRP highlighted shortcomings in proposals that needed to be addressed by the health

community as a whole, cases where available knowledge was not applied in certain countries, and innovations in one country for consideration by others. Since all Global Fund documents are available online, countries whose proposals were not successful could learn from the example of successful proposals.

In this way, each new Global Fund round led to rapid advances in the quality of country proposals (Schmidt-Traub, 2018). The health community as a whole, led by the technical partners, focused on tackling clinical and operational challenges for future rounds. Through this iterative process countries quickly abandoned ineffective quinine in favor of artemisinin-based combination therapy to treat malaria; introduced long-lasting insecticide-treated bed nets; involved communities in diseases control programs with a focus on vulnerable populations; adopted common CD4 count thresholds for AIDS treatment; mainstreamed harm reduction programs; and so forth. Gaps in available tools, such as rapid diagnostic tests for malaria, were flagged by the TRP and tackled by the public health community. In particular, the Gates Foundation invested heavily in filling the gaps in the technical tools needed to control and treat the diseases. After six short years of operation, Round 8 held in 2008 demonstrated the Global Fund's ability to generate high-quality demand for national-scale programs in virtually all developing countries.

In parallel, the scale of the funding opportunity afforded by the Global Fund mobilizes finance ministers to work with their health counterparts to address bottlenecks and governance deficits impeding the country's ability to apply for Global Fund resources. In this way, the pooled international financing helped tackle challenges of governance and political leadership in countries that go unaddressed today in sectors where the international financing is more fragmented (Schmidt-Traub and Sachs, 2015).

Reviews of proposals by the TRP only considered whether a proposal was consistent with the latest scientific evidence. On this basis, the first two AIDS proposals submitted by China were rejected, particularly since they failed to include harm-reduction programs for injecting drug users. This rejection generated vocal criticism from the government, but the TRP and the Global Fund Board remained steadfast. Subsequently, the Chinese government changed its approach to managing the AIDS epidemic and generated impressive results (Minghui et al., 2015; Wang et al., 2014). It is unlikely that any bilateral donor or a multilateral mechanism without independent technical review would have withstood such pressure from a very large country. This would have resulted in a political compromise to the detriment of aid effectiveness.

The rapid progress in generating quality demand from countries is even more remarkable since – just like governments and the health community at large – TRP members initially did not know what constituted a sound country program. Through careful review of dozens of proposals for each of the three disease categories and iterations under the rounds-based mechanism, this knowledge gradually emerged. Here the “vertical” focus of Global Fund financing across three major disease components helped, as it encouraged in-depth discussions on the practicalities of controlling each disease. Since proposals for fighting a particular disease were comparable across countries, new innovations as well as weaknesses in proposals, became apparent more easily. At least during this early phase in the fight against the diseases, a “horizontal” approach yielding bespoke country proposals with limited comparability would likely not have enabled the rapid learning that the Global Fund and its TRP generated.

Through its independent technical review, the Global Fund has balanced the need for country ownership in designing and implementing disease control programs with the equally important focus on rigorous,

evidence-based program design and implementation that ensures value for money (Schmidt-Traub, 2018). Since program design is truly country led, recipient countries are generally happy with the Global Fund even though it imposes tough conditions on the need to adhere to operational best practice as well as the transparency and results-focus of resource use.

The demand-led model of the rounds-based mechanism was replaced by the new funding mechanism in 2011, under which countries apply for a pre-set country allocation. Though a small competitive element of incentive funding remains available, this shift in the model has weakened the bottom-up demand discovery that has been a key driver of innovation under the Global Fund (Sachs and Schmidt-Traub, 2017). Yet, by that time the knowledge and operational practices for controlling and treating the diseases had been widely propagated.

The second way in which the Global Fund has fostered innovation is through its ability and willingness to disburse funds directly to any type of organization, including different government departments, local and international civil society organizations, international organizations, or the private sector. The only conditions are that the multi-stakeholder Country Coordination Mechanism approve the recipient and that the latter agree to undergo rigorous audits by third-party Local Fund Agents (LFAs). This approach generates healthy competition among different disbursement channels, and it helps exploit complementarities between different operational partners. Both have driven rapid innovation in program design and implementation.

In countries where governments are weak, civil society organizations may operate national-scale programs, such as the multi-drug-resistant tuberculosis program in Somalia. Elsewhere, civil society organizations run outreach programs targeting marginalized populations that might be difficult or impossible for government institutions to undertake.

Third, the Global Fund has been working closely with businesses to harness innovation and ensure well-functioning markets. Its demand forecasts for malaria bed nets and other commodities reduce uncertainty and have enabled businesses to invest in product development and production, which in turn has generated rapid cost reductions in major commodities (Zelman et al., 2014). The Global Fund played a key role in the differential pricing regime for ART negotiated by the Clinton Foundation, which led to rapid reductions in the cost of these life-saving drugs in poor countries (Stover et al., 2011). The Global Fund also works informally with businesses to tap their expertise and innovation capacity on new treatment regimens, procurement, logistics, behavior change programs, etc.

In a fourth channel for promoting innovation, the Global Fund supports systematic implementation research and independent evaluations of its operations and programs. The independent Office of the Inspector General (OIG) has a broad remit to initiate reviews and inspections of any aspect of the Global Fund's work. The reports are made public and have uncovered weaknesses in programs supported by the Global Fund. They have also served to document best practice and helped inform WHO treatment guidelines. For example, Global Fund programs and their independent evaluation were critical in fostering a consensus on the need for free or highly subsidized distribution of bed nets (WHO, 2010) or improvements in ART treatment guidelines (WHO, 2016).

Taken together these four drivers of innovation resulting from the Global Fund's design principles have enabled and supported the generation of quality demand for increased investments in health. Today virtually every country, including low-income and fragile states, has functioning control and treatment programs for the three diseases. This is a complete reversal from the situation in 2001 when no

developing country had such programs in place. Some of the mainstream tools for fighting the diseases were not known or widely available in 2001, and their development and widespread adoption were enabled by the Global Fund's grant model, which continuously pushed the boundaries of clinical and public health best practices. These tools include long-lasting insecticide-treated bed nets, low-cost ART, rapid diagnostic tests for malaria, artemisinin-based combination therapy for malaria, or advanced treatment for multi-drug-resistant tuberculosis.

Similar advances have been made on immunization thanks to Gavi's business model, which resembles that of the Global Fund. No other sector under the Millennium Development Goals can point to such breakthroughs, even though few face challenges that are as operationally complex, politically sensitive, and resource intensive, as treating HIV/AIDS, tackling multi-drug resistant TB, or controlling malaria in endemic countries.

Despite the critical role played by the Global Fund's design principles, these are poorly understood or appreciated outside the health community. The senior leadership of major multilateral financing instruments is often not aware of how the Global Fund operates and what explains its success. There is a rich academic literature on the Global Fund in *The Lancet* and other medical journals, but it tends to focus on details without considering how the Global Fund as a whole has driven innovation in health. Moreover, this literature is virtually unknown outside the health community. The policy literature on multilateral financing instruments often lumps the Global Fund together with multilateral trust funds that share none of its innovative design principles (OECD, 2015).

Conversely, the development economics literature is principally concerned with questions of optimal aid allocation (Temple, 2010) without adequate consideration of how quality demand can be generated. This represents another major gap since most investment challenges for the SDGs defy easy answers. We do not *really* know how to ensure quality education for all, how to decarbonize countries energy systems, how to protect and restore biodiversity at national scales, or meet other complex investment challenges under the Sustainable Development Goals. Each will benefit from investigating how the Global Fund generated quality demand for complex health investment programs across a broad range of operating environments and within a short period of time.

The adoption of the Sustainable Development Goals increases demand for public-private development finance for complex development challenges. This rising demand coincides with mounting pressure to reduce official development budgets or to divert aid away from core development needs. As a result, it becomes more important than ever to consider how quality demand for complex investment programs can be generated across the broad spectrum of developing countries, how public funds can be channeled more effectively, and how innovation in program design and implementation can be fostered. These are the challenges the Global Fund has helped tackle successfully in the fight against the three diseases. Therefore, other sectors and their pooled financing mechanisms, such as the Global Environment Facility, the Green Climate Fund, the Global Partnership for Education, the International Fund for Agricultural Development, and many others should study and consider the lessons from the Global Fund.

References

- Binswanger, H.P. (2000), "Scaling up HIV/AIDS programs to national coverage," *Science*, 288(5474), 2173–2176.
- DFID (2016), "Raising the standard: the Multilateral Development Review 2016," Department for International Development, London.
- GFATM (2015), "Global Fund Results Report 2015," Global Fund to Fight AIDS, Tuberculosis and Malaria, Geneva.
- IHME (2016), Development Assistance for Health Database 1990-2015, <http://ghdx.healthdata.org/record/development-assistance-health-database-1990-2015>, accessed December 7, 2016.
- Jamison, D.T., L.H. Summers, G. Alleyne, K.J. Arrow, S. Berkley, A. Binagwaho, F. Bustreo, D. Evans, R.G.A. Feachem, J. Frenk, G. Ghosh, S.J. Goldie, Y. Guo, S. Gupta, R. Horton, M.E. Kruk, A. Mahmoud, L.K. Mohohlo, M. Ncube, A. Pablos-Mendez, K.S. Reddy, H. Saxenian, A. Soucat, K.H. Ulltveit-Moe, and G. Yamey (2013), "Global health 2035: a world converging within a generation," *The Lancet*, 382(9908), 1898–1955.
- Macro International (2009), "The Five-Year Evaluation of the Global Fund to Fight AIDS, Tuberculosis, and Malaria: synthesis of study areas 1, 2 and 3," Macro International, Geneva.
- McArthur, J.W., and K. Rasmussen (2018), "Change of pace: Accelerations and advances during the Millennium Development Goal era," *World Development*, 105, 132–143.
- Minghui, R., F. Scano, C. Sozi, and B. Schwartländer (2015), "The Global Fund in China: success beyond the numbers," *The Lancet Global Health*, 3(2), e75–e77.
- OECD (2015), "Multilateral Aid 2015. Better Partnerships for a Post-2015 World," Organisation for Economic Co-operation and Development, Paris.
- Sachs, J.D., and G. Schmidt-Traub (2017), "Global Fund lessons for Sustainable Development Goals," *Science*, 356(6333), 32–33.
- Schmidt-Traub, G. (2018), "The role of the Technical Review Panel of the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria: an analysis of grant recommendations," *Health Policy and Planning*, 33(3), 335–344.
- Schmidt-Traub, G., and J.D. Sachs (2015), "Financing sustainable development: implementing the SDGs through effective investment strategies and partnerships," Working Paper, Sustainable Development Solutions Network.
- Shakow, A. (2006), "Global Fund - World Bank HIV/AIDS Programs comparative advantage study," World Bank and Global Fund to Fight AIDS, Tuberculosis and Malaria, Washington D.C. and Geneva.
- Stover, J., E.L. Korenromp, M. Blakley, R. Komatsu, K. Viisainen, L. Bollinger, and R. Atun (2011), "Long-term costs and health impact of continued Global Fund support for antiretroviral therapy," *PLoS One*, 6(6), e21048.
- Temple, J.R.W. (2010), "Aid and conditionality," in: *Handbook of Development Economics*, vol. 5, Elsevier, Amsterdam, pp. 4415–4523.
- Wang, R.-B., Q.-F. Zhang, B. Zheng, Z.-G. Xia, S.-S. Zhou, L.-H. Tang, Q. Gao, L.-Y. Wang, and R.-R. Wang (2014), "Transition from control to elimination: impact of the 10-year global fund project on malaria control and elimination in China," *Advances in Parasitology*, 86, 289–318.
- WHO (2010), *Guidelines for the Treatment of Malaria*, 2nd ed., World Health Organization, Geneva.
- (2016), *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach*, World Health Organization.
- Zelman, B., A. Kiszewski, C. Cotter, and J. Liu (2014), "Costs of eliminating malaria and the impact of the Global Fund in 34 countries," *PloS One*, 9(12), e115714.