

How can the Global Fund finance innovation to improve health product supply chains in resource-limited settings?

Access to medicines and quality health products to ensure healthy populations is a global issue. It is also a strategic issue (in financial terms through maintaining the industrial fabric, creating jobs, driving the race for innovation, and enhancing the attractiveness of producer countries) as well as a key political one (governments have a duty to provide accessible care to their citizens to ensure social stability). For that reason, the United Nations Secretary-General's High-Level Panel on Access to Medicines, in its report entitled "United Nations Secretary-General's High?Level Panel on Access to Medicines: Promoting innovation and access to health technologies," calls for a new approach to narrowing the gap between medical innovations and access to medicines.

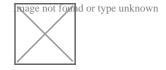
Some key figures

In 2017, the global market for medicines exceeded the \$1,000-billion figure (about €826 billion), an increase of 6% over 2016. The American market (United States) is still the largest, with 45% of the global market, far ahead of the main European markets (Germany, France, Italy, the United Kingdom and Spain), which account for 16.5%, Japan (7.8%) and emerging countries (China and Brazil), which account for 10.7%.

France is still the second-largest European market, while Germany is the largest (QuintilesIMS's 'Outlook for Global Medicines through 2021').

The African continent is home to 13% of the global population, but accounts for 24% of the world's disease burden, only 6% of health expenditures and less than 1% of global pharmaceutical production. In 2016, African health expenditures were estimated at \$150 billion, of which \$100 billion was spent on

importing health products. The latter type of expenditure grew by a factor of five between 2000 and 2012, and that growth is likely to continue, as shown in the table below.



In addition to the ever-growing needs of people living in developing countries, the emergence and rapid spread of generic drugs is in part driving this trend because it enables better access to medicines. However, the limited resources of developing countries have exacerbated social inequalities (middle-class, indigenous, urban and rural populations, etc.) and have given rise to questions about the capacity of healthcare systems to deliver overall and integrated care to all segments of society, and in particular to the poorest who continue to be denied access to medicines.

Providing healthcare for less than one dollar per day, through the implementation of universal health coverage, requires strong supply-chain capacity. No country will make substantial progress toward universal health coverage without strong supply-chain capacity in terms of strategic procurement (efficient and equitable allocation of financial, human, technical, informational and organizational resources to procurement processes is limited) and product distribution covering all areas and populations (with guaranteed funding to ensure care for the most vulnerable).

Constraints to accessing health products

Legal and regulatory constraints

Supply chain performance is dependent on managing key governmental functions, which are legal and regulatory. But pharmaceutical regulatory authorities are seeing a steady decline in the technical and financial resources available to them. Key functions such as approving them for sale, registration, import controls, inspection, pharmaceutical traceability, quality control and pharmacovigilance remain fragile and have negative consequences for the supply chain.

Pharmaceutical deserts on the rise and unequal access to health products

The supply chain does not have the capacity to deliver products to all persons regardless of location. In underserved rural areas that are difficult to access, patients travel long distances to obtain health products. They, and health-facility nurses, must resort to using their own financial resources to obtain essential health products, which raises the issue of equal access to health products and encourages unsafe purchasing from markets or street pharmacies.

Fragmented supply chains

In 2018, the Global Fund evaluated the supply chain in a number of countries; the results show that they are quite fragmented. In some countries, the supply chain comprises more than 20 stakeholders (national central procurement structure, private wholesalers, partners and NGOs) involved in the various supply chain functions and often within one single function (quantification, purchasing, financing, storage or distribution). This results in stockouts in some areas and the possibility of the same product reaching its expiry date in other parts of the country. Given the number of funding bodies with different regulations governing cost recovery, some patients receive treatment while others from the same region must pay for theirs.

Coexistence of different supply channels

That same evaluation process identified several supply channels that overlap and coexist in the absence

of any real and systematic vision: the national supply channel, the private supply channel (for example, turning to private wholesalers when stockouts occur), the national Expanded Program on Immunization (EPI) supply channel for vaccines, the national blood transfusion center (CNTS) supply channel for blood supplies, and various parallel channels (the channels used to distribute insecticide-treated nets, nutrition supplements, pediatric anti-retrovirals and the products distributed by NGOs, among others). These practices pose problems with the pharmaceutical traceability of health products and could constitute a public health risk in the event of a product recall (impossible to identify the lot number, manufacturer, importer, distributor and the quantities distributed and consumed).

Change and innovation for a better supply chain

Given that over 60% of the Global Fund's financial resources are earmarked for health products, managing the supply chain is crucial considering the increase in demand (the scaling-up of ARV treatments, changes in treatment directives, new diagnostic technologies and a growing number of treatment centers).

Using new technologies and IT tools

Through its involvement in strengthening health systems, the Global Fund to Fight AIDS, Tuberculosis and Malaria can help transform the supply chain by harnessing the existing human and financial potential through the use of new technologies and IT tools. Digitizing supply chain information would improve quality assurance data resulting in better performance. That change could lead to productivity gains through the automation of some tasks and the ability to process ever greater quantities of information.

The use of blockchain technology could result in better medicine traceability and effectively combat falsified and lower-quality medicines, as this technology is capable of intervening at each step in the medicines supply chain, from manufacturer to patient.

Helping countries change market dynamics

Moving from a passive and cloistered way of operating (different functions and partners working in isolation from each other) to a proactive and systemic approach to the supply chain will require a change in market dynamics in the various countries through fostering the entry onto the market of new products and manufacturers (to have an impact on access for the largest number of people and to reduce prices). This would involve lowering the number of barriers for products entering the market so as to foster competition, enhance the purchasing power of the various countries, and achieve a balance between the negotiating power of current suppliers and the arrival on the market of new replacement products, all of which could have an impact on the market (80% of products sold are imported from non?African countries).

These changes in market dynamics would also involve setting up joint procurement systems (an old dream that could become reality) so that countries could take advantage of economies of scale and prevent a few suppliers from having monopolies on certain products. This can only be achieved through real political will and harmonized procedures for awarding contracts.

Fostering leadership and political will

Strengthening leadership and political will are matters of some urgency as this is a crucial sector that should be subject to governmental oversight. Supporting the reforms currently being undertaken by the pharmaceutical regulatory authorities and implementing the African Medicines Agency would help speed up the process of authorizing the sale of health products. But the will to harmonize will be incomplete if it is not supported by an effort to harmonize and align all partners on the same roadmap to avoid duplications and parallel systems. A system is needed to transfer Global Fund skills and activities to the national supply system, based on a schedule and the principle of risk management. The partners could also play a crucial role in supporting a change in the economic model used by central procurement structures for essential medicines – which has become urgent – encouraging and supporting the implementation of a public-private partnership for health product distribution.

Lastly, governance and pharmaceutical transparency would be more effective if patients and civil society organizations who play a role as whistleblowers and constructive observers of pharmaceutical practices.

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Further reading:

- BIG, Rapport d'audit Gestion des investissements pour des systèmes résistants et pérennes pour la santé , Genève, 3 mai 2019.
- Le Fonds mondial. Politiques pour améliorer l'accès aux médicaments. Genève, 25 avril 2018.
- Le Fonds mondial. Diagnostic de la chaîne d'approvisionnement au Tchad : vers une chaine d'approvisionnement des produits médicaux durables et efficaces, Genève, avril 2018.
- Le Fonds mondial. Subvention du Fonds mondial à la République du Mali, Genève, 20 novembre 2017.
- Le Fonds mondial. Chaîne d'approvisionnement intégrée du médicament au Niger, Genève, 16 novembre 2017.
- BIG, Rapport d'audit Processus de la chaîne d'approvisionnement du Fonds mondial dans les pays, 28 avril 2017.

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