

Harnessing the Power of Private Distribution Channels for UHC

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New technology, better use of data, and entrepreneurial passion in improving distribution channels is reaching a critical mass with the potential to drive extraordinary improvements in availability, affordability, and quality of health products. Global health institutions can play a significant role in further boosting the overall innovation ecosystem for health products distribution. However, most distribution system innovators are missing from global discussions around UHC and access to medicines. This note provides background on why the mainstream global health architecture has struggled to find the right engagement model with the private distribution channel and presents ideas that could be included in the new “toolbox” for development assistance for health.

INTRODUCTION

In September 2019, heads of states, ministers of health, and global agency leaders gathered in New York for a United Nations meeting on Universal Health Coverage (UHC). The meeting helped mobilize high-level political attention to the core idea that UHC is a smart investment for countries at all levels of income. In October, the Inter-Parliamentary Union (IPU) passed a resolution urging parliaments and parliamentarians around the world to take all possible measures to achieve UHC by 2030.

Medicines and health products are an indispensable component of UHC. A large proportion of total healthcare expenditures in low- and middle-income countries (LMIC) is on medicines and health products. And most of this expenditure is private out-of-pocket (ranging from 61.2 to 76.9 percent (Lu et al. 2011)). UHC aims to reduce out-of-pocket (OOP) spending on pharmaceuticals and health products through [reimbursement schemes covering clinically appropriate and cost-effective medicines](#).

While public policymakers and donors are discussing frameworks and research ideas, the market is already on the move—the [private pharmacy channel in sub-Saharan Africa](#), Southeast Asia, India, and other regions is already seeking to improve health product distribution as well as price, quality, and availability for patients in the out of pocket/self-pay market for health products. While solving for problems in today’s OOP market, some firms are also getting ready for a future where medicines will be reimbursed at a larger scale by national insurance schemes.

WHY HASN'T MAINSTREAM GLOBAL HEALTH EMBRACED THE PRIVATE PHARMACY CHANNEL?

Most people in countries such as India, Nigeria, Kenya, and Ghana acquire medicines in private pharmacies, chemist shops, and drug stores using their own money, paying out of pocket. Allowing patients the option of obtaining medicines at private pharmacies is an opportunity to reduce the long-term cost of UHC, and is a common practice in high-income countries around the world, including the UK and Canada. Higher patient convenience associated with private pharmacies can result in quicker treatment initiation and better adherence, generating savings from avoided in-patient episodes when a patient's disease progresses to advanced stages.

Despite this reality, the private pharmacy channel (i.e., distributor, wholesaler, retailer) is largely ignored by low- and middle-income governments and global health financiers as a strategy to support UHC and expand access. (There are some exceptions, such as for contraceptives, where successful programs have been created in the private channel.) Instead, UHC conversations often center on further expanding the role of government into areas such as pharmaceutical production, as some proposed at the [UN High-Level Meeting on UHC](#) in September.

Four main concerns underpin the almost exclusive support of public-sector medicines distribution system by global health funders:

1. The private channel does not serve rural areas or lower socioeconomic quintiles. Critics claim that the private channel for medicines engages in “cream skimming” by serving only wealthy and profitable customers in affluent urban areas, leaving the more expensive or harder-to-reach areas for the government distribution system.
2. Prices are high in the private channel. Multiple studies show that prices in private retail pharmacies (and drug shops) are many times higher than those available via the public sector. This is attributed to the presence of multiple middlemen who “make profits at the expense of public health.”
3. Quality in the private channel is questionable as there are fewer quality checks and the manufacturers from which private wholesalers obtain their stock are not always of high quality.
4. The private channel only stocks and promotes fast-moving health products. Private retail pharmacies, drug shops, and the wholesalers who serve them do not always stock “essential medicines” but often only stock and promote fast-moving health products.

In addition to these concerns, corruption and other forms of rent-seeking in the public sector medicines supply system create a complex political economy (Silverman et al. 2019) which disregards and obfuscates the effectiveness and efficiency that private actors may bring to the medicines distribution sector (Agrawal et al. 2016).

ROOT CAUSES OF SHORTCOMINGS IN THE PRIVATE MARKET

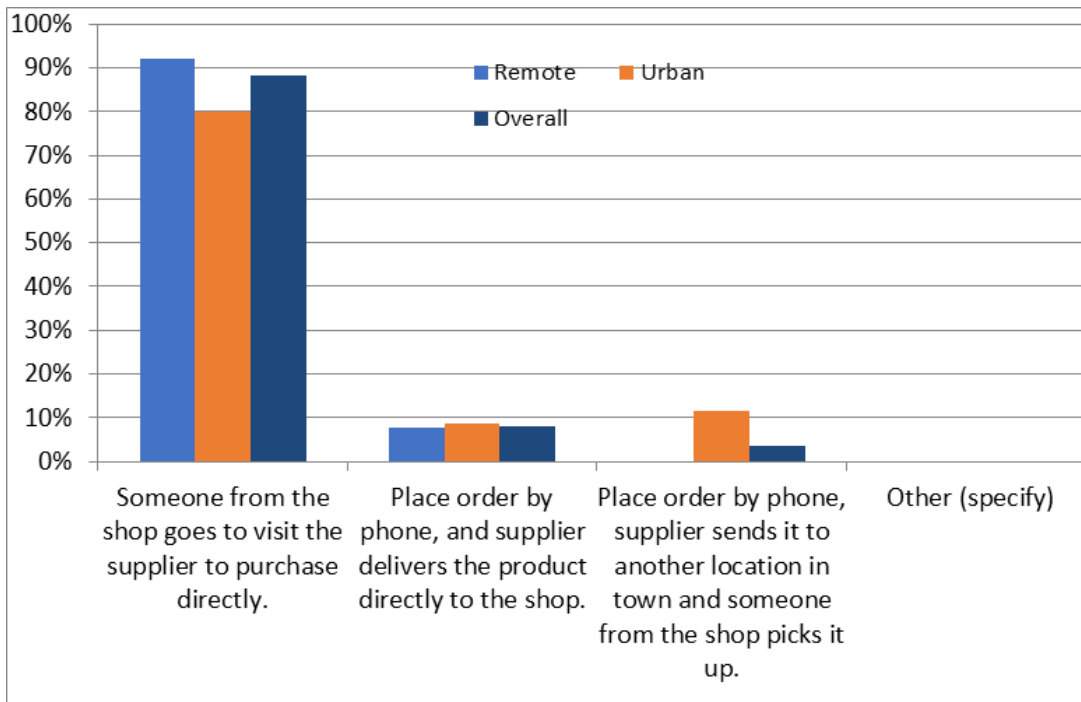
While each of the above concerns is valid, it is important to look at the root causes that lead to these shortcomings.

Fragmented wholesale/distribution markets mean higher channel markups

The wholesaler/distributor market in most LMICs is extremely fragmented. In the United States, for example, a few large wholesalers—Cardinal Health, McKesson, and AmerisourceBergen—cover over 90 percent of drugs sold. In Western Europe and Japan, four or five major wholesalers/distributors distribute to 90 percent of the market (Yadav and Smith, 2012). In LMICs, hundreds, even thousands, of companies control tiny shares of the drug wholesale market (Yadav and Smith, 2012).

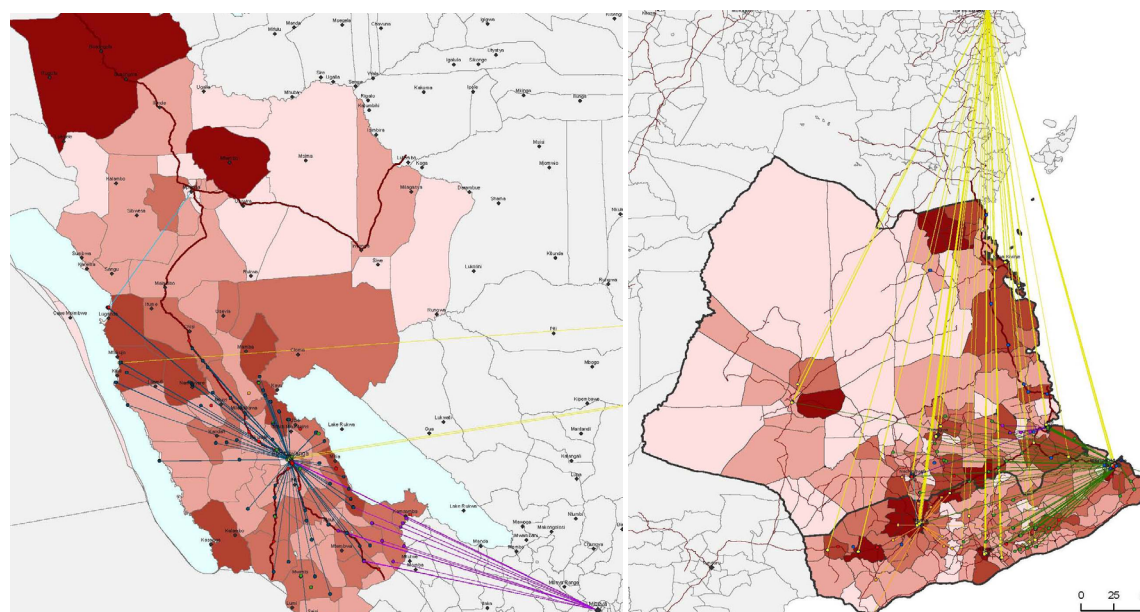
Wholesaling is a high fixed cost business. Excessive fragmentation means that subscale wholesalers and distributors cannot make investments in the logistics, infrastructure, and technology needed for national coverage. So, while there are hundreds and thousands of wholesalers, none of them have full national distribution coverage. As a result, owners of retail pharmacies and drug shops in smaller towns and villages either travel to the wholesaler locations in main cities or in some instances to sub-wholesalers in nearby mid-sized towns (Figure 1, Figure 2). Additional intermediaries—multiple levels of sub-wholesalers, for example—emerge to supply to rural pharmacies or specific geographical markets. The extra levels in the system contribute to higher markups. Excessive fragmentation of the wholesaler market also leads to challenges in regulatory enforcement. Weak regulatory agencies with limited resources for site inspection find it hard to routinely inspect the hundreds and thousands of wholesalers.

Figure 1. Private pharmacies and drug shops (in Tanzania) do not receive deliveries but travel to the wholesaler/distributor to purchase stock



Source: Yadav P. et al. 2012

Figure 2. Private pharmacies and drug shops (in Tanzania) must travel long distances to the wholesaler/distributor to purchase stock



Source: Yadav P. et al. 2012

Excessive fragmentation contributes to more intermediaries in the channel, poor flow of credit in the channel, and, as a result, higher markups and higher retail prices. More intermediaries in the channel also create more opportunities for lower-quality, substandard, and fake medicines to enter the system.

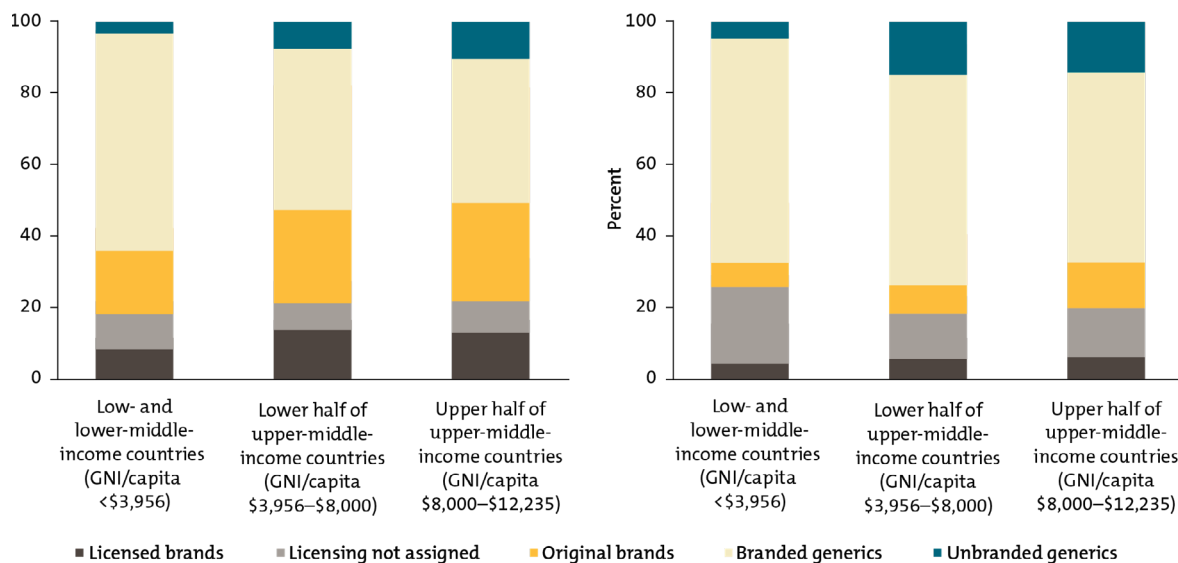
Limited working capital credit means stock issues and limited supply

In each of the modes of wholesaler supply described above, the wholesaler/sub-wholesaler engages in a “cash and carry” business mode, meaning the purchasing pharmacy/drug shops must pay upfront for the medicines they purchase. Lack of working capital means pharmacies stock only selected fast-moving items and sometimes less than enough inventory. In a highly working-capital-constrained environment, pharmacy and drug shop owners struggle to manage their stocking effectively. In a small sample study in Tanzania and Uganda, over 41 percent of drug shop owners said they could not keep their shop premises in good condition due to lack of capital, and 33 percent said they could not stock enough quantity of medicines (Yadav, Smith and Alphas 2012). When working capital is tight, they choose to stock products that require less working capital. Fast-moving (and less expensive) medicines require less working capital than slow moving ones.

Branded generics instead of cheaper unbranded generics mean higher prices

In OECD countries, patients tend to trust the safety and efficacy of generic medicines, which are priced lower than their branded competitors. Quality regulation systems in many LMICs are weaker and under-resourced. As a result, patients and healthcare workers use brand as a signal of quality and prescribe/purchase more expensive branded medicines. The use of branded generics is sometimes more pronounced in the private pharmacy channel.

Figure 3. Dominance of branded generics in health product markets in low- and middle-income countries



Source: Silverman et al. 2019

HOW ARE THE NEW INNOVATORS SOLVING FOR THESE CHALLENGES?

Understanding these root causes of the shortcomings in the private market allows better insights into the business models of the new innovators in the pharmacy channel, [many of which have evolved](#) to solve these challenges.

[mPharma](#), operating in six countries, provides a “pay as you sell” consignment inventory model to retail pharmacies who join its network. It uses its own distribution network to deliver products sourced from high-quality manufacturers (or large distributors) to retail pharmacies. As a result, it solves for the challenges related to too many middlemen, insufficient stocking of slow-moving items, and questionable quality. [Shelf Life](#) also provides a “pay as you sell” consignment inventory model to retail pharmacies as a subscription service. Others, such as [MaishaMeds](#), focus their solution on quality sourcing and a technology platform to help retail pharmacies stock the right “depth” and “width” of inventory. [mClinica](#) in South East Asia acts as an information intermediary between retail pharmacies, pharmaceutical companies, and government stakeholders. [Kasha](#) solves many of these problems by bypassing the retail channel and providing direct-to-home (or designed pick-up point) delivery of women’s health products in Rwanda and Kenya. In addition to solving for supply chain and retail competition challenges, Kasha allows women the confidentiality and privacy that comes with e-commerce. Online pharmacy as a whole is a growing sector in India with large players such as [PharmEasy](#), [Img](#) and [Netmeds](#) who have raised large amounts of private capital and expanded rapidly to become national players. While not the same as quality assurance, technology companies such as [Sproxil](#), [Pharmasecure](#), and [mPedigree](#) have created mobile authentication systems that help patients verify the authenticity of the drug they are purchasing in the private channel. The supply chain for health

products in the private sector continues to evolve very rapidly in most LMICs and traditional channel roles will continue to get blurred. Successful innovators will design products and solutions that address a more comprehensive set of needs for their customers (retail pharmacies or end patients).

Many of these players are also creating models for accepting third party payments, and/or prepayment digital wallets (e.g., [MTIBA](#) or mPharma's Mutti product). Accepting third party payments requires them to build dispensing verification, invoicing, and payment systems into their technology and operations platforms. As a result, they are now (at least partially) ready to be part of a national health insurance reimbursement network. Further, in countries where a growing middle and wealthy class is willing and able to pay out-of-pocket, the goal of UHC in the short-term should be to channel their expenditure to a more efficient channel.

A great deal is still unknown about the cost economics and specifics of these innovators' business models. However, one thing is common to all—they are obstinately focused on growing their scale. They realize that growth and profit in their business will only come if they put the consumer in the center and deliver lower priced or higher quality products and a higher convenience factor. Almost all of them are also aggregating data in new ways and using data analytics to generate insights that are valuable for pharmaceutical companies and could also be highly beneficial for governments and payers.

IDEAS FOR ACTION

Despite their ingenuity and foresight, these new players are largely “missing from the table” in discussions related to medicines and UHC. Except for a few small grants from private philanthropy, the global health architecture has largely ignored these groups in terms of resource allocation and other forms of engagement. Policymakers do not have the right tools to support this new wave of ingenuity in health product distribution.

We call for four immediate actions:

A robust and coherent policy framework

UHC involves complex tradeoffs between multiple and often conflicting goals related to expanding coverage, cost containment, and private sector versus public sector delivery. The medicines subcomponent of UHC becomes even more complex due to linkages with industrial policy, and lack of strong evidence around successful approaches for payers to reimburse for medicines obtained in private pharmacies. A successful inclusion of the new distribution innovators in mainstream medicines market in a country will require coherent actions at the local, subnational, national, and international levels. A robust, coherent, and integrated policy framework is a prerequisite.

The experiences of Ghana's National Health Insurance Fund (NHIF) with reimbursement for medicines and other challenges demonstrate that without appropriate policy design, the innovations in business models will not meet the end goal of access to quality medicines for all (Seiter et al. 2009). In the early days of Ghana's NHIF, medicines were excluded from the case-based payments to providers and were carried out on a fee-for-service basis. This payment policy contributed to a doubling of NHIF expenditures on medicines and led to a cascade of effects that undermined the sustainability of NHIF.

Monitoring and data reporting on medicines use will be an important part of the policy framework which will help shed light on where there has been progress, or lack of it, and why. Most of the new business models are also data-rich platforms that can facilitate such monitoring in ways that were not feasible in the past.

Retooling mainstream global health supply chain programming to include innovators

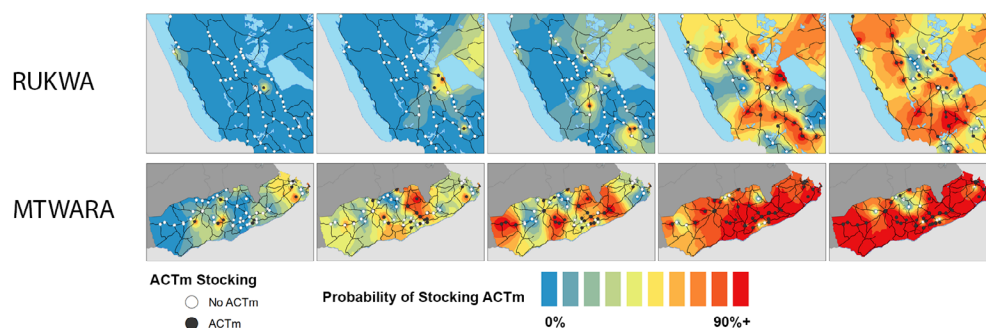
The mainstream funding model for the global health supply chain consists of resources embedded within multiyear cycle grant programming to procure and distribute health products and build supply chain technical capacity. Health products are either procured by a global mechanism such as the Global Fund's pooled procurement mechanism or USAID's Global Health Supply Chain- Procurement Supply Management project, or by national/sub-national procurement systems run by country governments. Distribution of globally or nationally procured commodities is facilitated by grant monies provided to country governments or large NGOs. In addition, large NGOs and governments receive grant monies to provide technical assistance to government agencies who operate the supply chain. Prominent in the global supply chain architecture is USAID's flagship \$9.5B Global Health Supply Chain Procurement Supply Management which procures and distributes medicines for HIV/AIDS, malaria and family planning. These large multiyear multi-country grant mechanisms are not suited for supporting small, for-profit companies disrupting the distribution channel. As USAID initiates discussions about the next phase of its supply chain work, it is worth exploring design options that can bring the distribution channel innovation into its mainstream supply chain programming.

Admittedly, the funding structures in bilateral and multilateral institutions are rigid and it may not be easy to rapidly create blended financing vehicles to serve this new market reality. It is also harder for mainstream development assistance for health (DAH) actors to work with channel innovators because the founders of these companies have personalities with bold and straight talk wired into their DNA, whereas global health actors value diplomacy as their most valuable asset. Nevertheless, there is an opportunity to create a window for innovation in mainstream global health supply chain programming.

Grant capital to accelerate rural expansion

Many of the new business models are initially focused more on serving customers in urban and peri-urban regions. For building the confidence of government payers, such businesses must expand their rural reach. Traditional grant capital by DAH actors could help cover fixed costs for an accelerated rural expansion of the innovators. An earlier project to enhance remote reach of artemisinin-based combination therapy for malaria in Tanzania demonstrated that for a product that is competitively priced, modest incentives (or signals of incentives) can create stronger remote/rural reach, and quite rapidly.

Figure 4. Private channel serves remote and rural areas when product price is appropriate for the market, and adequate incentives exist for rural distribution (or better market size information)



Source: Yadav et al. 2012

DAH-DFI partnership structures

The traditional instruments of DAH were designed for governments and large nonprofit organizations as recipients. Most of the health distribution innovators described earlier are for-profit companies funded by private capital. Some would argue that private capital providers (venture capital, private equity firms) are better at understanding the risks embedded in these new private models and may be the most effective way of financing these tech-enabled companies. Therefore, investing in such groups should be best left to venture capital firms (VC) or, at best, impact funds. And there is strong merit to the argument that grants from mainstream DAH actors may dilute the financial discipline that some of these business models are built on.

However, DAH actors have far greater knowledge of this sector than traditional VCs or even mainstream development finance institutions (DFIs). VCs and DFIs who are unfamiliar with the sector may believe investment risks to be greater than they actually are and may thus be unwilling to invest. In ideal model will be for DAH actors to partner with DFIs such as CDC, the International Finance Corporation, and the Overseas Private Investment Corporation to create the investment instruments most suited to plug market gaps in the distribution market. A partnership between DAH and DFIs (DAH+DFI) can play roles such as

Market-catalyst: DAH+DFI can act as a provider of early tranches of capital to such businesses and understand/mitigate risk based on knowledge and influence of DAH actors. This would have a strong market signaling effect for other mainstream providers of private capital.

Ecosystem enhancer: Instead of investing in specific firms, the DAH+DFI can invest in institutions and intermediaries that can help the whole ecosystem of distribution channel innovators. Further research is required to understand the market-level constraints that several distribution channel innovators collectively face.

The modalities of financing can always be designed, but one thing is clear: by not bringing the ideas, energy, and inventiveness of the new actors in the pharmacy channel into mainstream discussion about UHC, we risk designing the medicine component of the UHC system on an archaic model of input financing-based health product distribution. The efficiency losses from continuing with such system design can be immense—perhaps large enough to pose a risk to the core of the UHC movement itself.

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