

HOW COULD PRIVATE SECTOR PHARMACIES AND DRUG SHOPS ADVANCE PROGRESS TOWARDS UNIVERSAL HEALTH COVERAGE?

INTRODUCTION

Private sector pharmacies and drug shops play an important role in providing access to health services to millions of people living in low- and middle-income countries (LMICs) that have shortages of healthcare workers and suboptimal access to other sources of primary healthcare. How these outlets are integrated into health systems, however, will determine whether they extend access to high quality, affordable care or provide substandard products and services without financial protection.

This piece provides an overview of the current role of pharmacies and drug shops in LMIC health systems, presents opportunities for these outlets to increase integrated access to high quality health products and services, examines challenges related to these approaches, and discusses the potential for health impact from better integrating pharmacies and drug shops into the health system.

Along the way we share several illustrative examples of how PSI is working with pharmacies and drug shops in countries such as Kenya, India, Tanzania, Uganda, and Nigeria to improve access to care and increase affordability of health services, including:



A regulatory framework for drug shops that provides access to government training, enables distribution of a wider range of products, and establishes quality assurance mechanisms



Targeted pharmacy interventions, including up-skilling providers, that increase the integration of pharmacies and the availability of products



Infrastructure to accredit and reimburse drug shops through public health insurance schemes to provide financial protection for primary care products

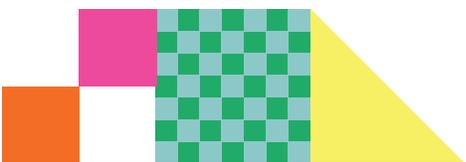


ePharmacy models that increase privacy and access can lead to improved linkage to care and adherence behavior



Unifying regulatory policy for pharmacies that has the potential to spread best practices and increase integrated access to high quality products

These examples illustrate how national governments can partner with other key stakeholders to harness the potential of pharmacies and drug shops to ensure that consumers receive high quality care with financial protection and are referred through better-integrated care networks when appropriate.



BACKGROUND

Before the COVID-19 pandemic, coverage of essential health services had improved incrementally, while the proportion of the population experiencing financial hardship when seeking care was increasing. The 2022 United Nations Sustainable Development Goals report notes that “service coverage (SDG indicator 3.8.1) [improved] from an index of 64 in 2015 to 67 in 2019, while the proportion of the population spending more than 10% of their household budget on health out of pocket (SDG indicator 3.8.2) worsened from 12.7% in 2015 (940 million people) to 13.2% in 2017 (996 million people).”¹ The report goes on to note that “against this backdrop, the COVID-19 pandemic is likely to slow down the progress made in health service coverage (SDG 3.8.1) over the past 20 years and exacerbate the financial hardship experienced by those paying out-of-pocket for health.”¹

One of the largest and most persistent barriers to increasing effective coverage of essential health services while improving financial protection is inadequate healthcare financing. The Lancet Global Health Commission on Financing Primary Healthcare notes that “annual government spending on PHC [primary healthcare] is \$3 per capita in low-income countries and \$16 per capita in lower-middle-income countries, which falls far short of any commonly used benchmark of the minimum amount needed to provide a basic package of health services.”²

Persistent shortfalls in public financing for health often lead consumers to seek care in the private sector where they are often left without financial protection. One study looked at 65 countries in Latin America, Africa, Europe, and Asia and found that the private sector provides half of all healthcare in many settings.³ Given the extensive use of the private sector and continued financial exposure of seeking care in the private sector, it is important to explore how private healthcare provision can be better integrated into the broader health system and into government-managed health financing arrangements, thereby accelerating progress toward universal health coverage (UHC).

Nearly half of all private spending on health – most of which is out of pocket – is on medicines², suggesting that much of this spending happens in private pharmacies and drug shops. In Kenya, for example, studies have shown “that 26 - 69% of the Kenyan population visit retailers as the first point of contact for common illnesses such as fever.”⁴

From a consumer perspective, pharmacies and drug shops are highly desirable first points of contact. Several studies note the importance of convenience and easy accessibility of pharmacies for receiving services for HIV and pregnancy prevention, including pre-exposure prophylaxis (PrEP)⁵ and emergency contraception.⁶ Convenience may be a particularly important aspect to certain segments of consumers, such as young people⁶ and those in geographically underserved areas.⁷ However, a lack of integration with the broader health system may leave too many consumers without appropriate referrals to primary, secondary, and tertiary care facilities when needed, whether in the public or private sector.

Despite the desirability and significant role that pharmacies and drug shops play, is an acute shortage of pharmacists in many settings. As a result, there is a proliferation of drug sellers that are not supervised by a pharmacist. This presents what will be a persistent challenge for years to come, as health systems work to balance ensuring appropriate dispensing of high-quality products, while maintaining and increasing access.⁸

PHARMACIES are dispensers of prescription pharmaceutical products and may also sell retail products and offer basic health services. These are owned, operated, or supervised by a registered pharmacy professional and typically overseen by a national or regional regulator.

DRUG SHOPS are unregulated or poorly regulated purveyors of health products, which may include prescription or over-the-counter health products, among other wares. They typically operate outside a formal regulatory environment and their commercial activities may, in fact, be illegal.

In Kenya, the shortage of pharmacists results in a considerable portion of legally registered drug shops operating without supervision from certified pharmacy professionals. It is concerning that these shops may be responsible for the distribution of counterfeit products or providing the wrong product. This is especially pronounced since there are an estimated to be roughly 20,000 community retail outlets across Kenya, “compared to only 5,000 registered and practicing pharmaceutical technicians.”⁹

Whether through pharmacies or drug shops, the dispensing practices risk suboptimal patient outcomes and contribute to antimicrobial resistance (AMR). For example, in Tanzania mystery clients shopping at pharmacies and drug shops were frequently (>85%) provided with a half course of amoxicillin, without a prescription.¹⁰ While the Tanzanian Government “has laws, regulations and guidelines that prohibit antibiotic dispensing without prescription, [this] study suggests non-compliance by drug providers.”¹⁰ One of the contributing factors is the absence of robust data reporting systems that would allow regulators to target enforcement and corrective actions, including training.

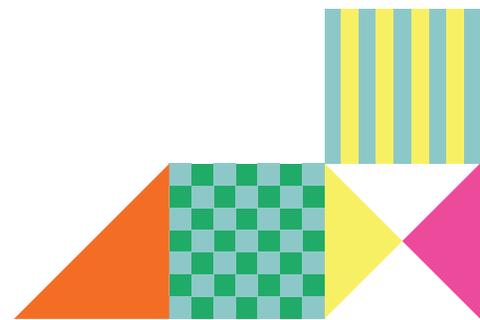
Effective change requires more than policy alone; it also requires developing the systems and structures to effectively integrate these providers into the health system. Several systematic reviews of literature related to pharmacy-based distribution of healthcare products and services demonstrate that it matters how these programs are scaled; results vary significantly, but confirm that pharmacies have the potential to play a larger role in primary healthcare. Findings related to privacy and trust are mixed and likely to be context specific. A systematic review notes that as trusted healthcare professionals, pharmacists can play an important role in expanding access to vaccination services.¹¹ In some circumstances, accessing services through pharmacies may be experienced as a more anonymous way to receive care, while in other circumstances, pharmacies may not be set

up to provide adequate privacy, particularly in the context of screening or counseling related to sensitive topics.^{5,6} Added privacy may be particularly important for young people and other marginalized groups, who may not wish to disclose their health seeking behaviors. Contextual knowledge on privacy and trust related to specific health services and settings should be established before introducing new services through pharmacy channels, in addition to ensuring that those pharmacies are adequately integrated with the health system to provide referrals to appropriate services when needed.

OPPORTUNITIES

The following examples describe several approaches to increasing access to high quality, affordable essential health products and services with financial protection along with some of the steps that have been taken to realize effective results:

- A regulatory framework for drug shops that provides access to government training, enables distribution of a wider range of products, and establishes quality assurance mechanisms
- Targeted pharmacy interventions, including upskilling providers, that increase the integration of pharmacies and the availability of products
- Infrastructure to accredit and reimburse drug shops through public health insurance schemes to provide financial protection for primary care products;
- ePharmacy models that increase privacy and access can lead to improved linkage to care and adherence behavior
- Unifying regulatory policy for pharmacies that has the potential to spread best practices and increase integrated access to high quality products



CREATING A STRUCTURE FOR ACCREDITED DRUG DISPENSING OUTLETS

The Accredited Drug Dispensing Outlets (ADDO) program in Tanzania is working to increase access to essential medicines while making drug shops safer, specifically the ADDO is an initiative led by the Tanzanian Food and Drug Authority to train and license small, privately operated retail outlets in rural and poor areas to sell a set list of essential medicines, including selected prescription drugs. This provides an avenue for previously unlicensed drug sellers to become a more integrated part of the national health system.

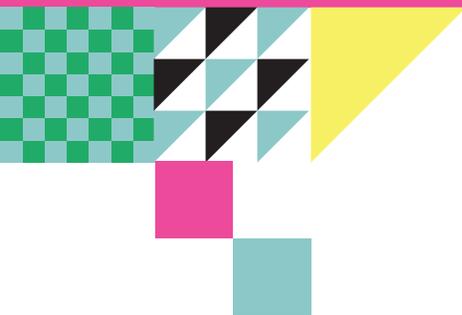
This program is particularly important for increasing access to essential medicines “because full-service pharmacies are located almost exclusively in major urban areas (60–70%) percent in Dar es Salaam alone).”¹² Small drug shops mandated to sell non-prescription medication are often the most convenient retail outlet from which to buy medicines for the approximately 75% of the population that lives in rural and peri-urban communities. Thus, the goal of the ADDO Program is to better equip these drug shops to provide affordable, quality medicines and pharmaceutical services in rural and peri-urban areas of the country, while providing a regulatory framework to improve dispensing behavior.

This program has been scaled up across the country and more than 14,000 ADDOs have been accredited.¹³ There is some initial indication that accreditation has improved the quality of care as “ADDO dispensers are trained to refer complicated cases to a health facility, and notably, 99% of mystery shoppers presenting a pneumonia scenario received an antimicrobial (54%), a referral (90%), or both (45%), which are recommended practices for managing pediatric pneumonia.”¹³ Likewise, this program seems to have increased access to higher quality health services and products as “ADDOs are the principal source of medicines in Tanzania and an important part of a multi-faceted health care system.”¹³ While increased access is an important outcome, the ability of ADDOs to refer complicated cases to appropriate care may be equally important for ensuring that patients receive the best care possible.

While these results demonstrate considerable systems change, they have not come easily. They have required careful consideration for the necessary support to ADDOs. Successful implementation has included “(i) Integrating the use of modern internet communication technology in the management and oversight of ADDOs; (ii) Institutionalizing ADDO trainings; (iii) Strengthening of the ADDO inspection and audit system; (iv) Expanding the role of ADDO Associations; and (v) Strengthening the linkage between ADDOs, community health workers and health facility services.”¹⁴ With founding leadership from the Tanzanian Food and Drug Authority from 2005-2012, the program has been handed over to the Pharmacy Council and is effectively integrated into the national regulatory regime and should continue indefinitely.

PSI'S CONTRIBUTION

PSI has worked in Tanzania to support ADDOs by providing trainings to 600+ in the Shinyanga Region, creating popular contraceptive brands sold through ADDOs, and implementation of retail surveys to track Malaria ACT availability in ADDOs.



INCREASING ACCESS TO HIGH QUALITY PRODUCTS THROUGH PHARMACIES

Up to now, pharmacies in most LMICs have been underutilized for managing public health needs. Pharmacies typically stock what sells, but sometimes this does not match public health priorities. Moreover, products that are stocked may at times be substandard or even counterfeit. Through targeted interventions designed with consumers at the center, however, pharmacies can play a much bigger role in addressing some of these priorities by accelerating the uptake of new and underutilized products, while reducing dispensing of suboptimal treatments or dosing.

PSI'S CONTRIBUTION

PSI is working to accelerate the introduction of HIV self-tests in the private sector by training pharmacists, developing scalable promotions for the products, and creating linkage tools to ensure that patients are connected with appropriate follow-up services.

HIV self-tests (HIVST) have been available for over-the-counter usage since 2012 in high income countries, yet a private sector retail market was slow to develop in sub-Saharan Africa (which carries the greatest burden of HIV), largely due to high prices. The Strengthening HIV Self-Testing in the Private Sector (SHIPS) Project aims to grow the private sector market for HIVST in Kenya, Uganda, and Nigeria. This project is piloting a self-care campaign that features and positions HIVST as part of HIV prevention, sexual and reproductive health, and HIV treatment in Nairobi and Kisumu in Kenya, Abuja and Lagos in Nigeria, and Kampala in Uganda. This campaign has been rolled out through social media, in-store activations, community mobilization, and targeted community media. In response to the campaign, the project is observing increasing access points for HIVST and sexual and reproductive health products through physical and online pharmacies, e-commerce, and vending machines.

Most importantly, SHIPS has taken an integrated approach such that clients have on-going support and linkage to post-exposure prophylaxis (PEP), PrEP, confirmatory testing for HIV and antiretroviral therapy (ART). Facilitated integration with the national HIV response ensures that those who test receive appropriate care at higher-level facilities. While still at the pilot stage, this work has resulted in a business case, a pricing strategy, and a scale up plan for HIVST in the private sector. Many of these lessons, would be broadly applicable to increasing access to new products and services through pharmacies and drug shops, including integrating these services with the rest of the health system.



Vivian Ooko arranges medicines at the Nyalenda Health Centre Pharmacy. November, 2018, Kenya. ©Population Services International

BUILDING THE INFRASTRUCTURE FOR PUBLIC HEALTH INSURANCE PAYMENTS TO PHARMACIES

Pharmacies have the potential to play a larger role in the provision of primary healthcare in LMICs, yet financial barriers continue to prevent access. Thus, integrating pharmacies into public payment systems provides an opportunity to accelerate progress toward UHC. While designing and deploying effective accreditation and reimbursement mechanisms for pharmacies in LMICs can be extremely challenging, there are some examples that demonstrate how this integration can be successfully achieved.

PSI'S CONTRIBUTION

Building on the experience of implementing this web-based interface for healthcare providers, PSI is working with the Government of India on an initiative to expand the model to pharmacies, where it will be used to reimburse for a full range of products in the essential health package.

In India, the Government of Uttar Pradesh rolled out Hausala Sajheedari (HS), a digital platform that facilitates public reimbursement of private providers for priority health services. The platform streamlines the entire process, from the application for accreditation to the submission and reimbursement of claims. It helps overcome systems barriers and enables the existing actors in the health system to play their role as expected, whether this relates to verifying that facilities meet quality standards or checking claims to prevent fraud. The platform increases efficiency, accountability, and transparency. It allows public money to flow seamlessly to accredited private providers, who are now able to deliver quality family planning services to poor and vulnerable populations that would otherwise not be able to access them. It also provided a structure for private providers to report health data. Following the introduction of HS, uptake of target services has increased more than ten-fold. The platform has already been rolled out in all 75 districts

of the state. It is now being replicated in other states, and its scope is being expanded to also include other primary healthcare services beyond family planning.¹⁵ Other countries facing similar challenges could adapt the model to their context.

EPHARMACY or “online pharmacy is an internet-based vendor that sells medicines.”¹⁶ In India, as of 2022, there were estimated to be “around 250 online drug stores” and an increasing preference for ePharmacy, with 76% respondents [in one survey] agreed that e-Pharmacy would be convenient as compared to the existing mode of purchase.¹⁷ While this is a relative nascent field, it has the potential to grow quickly.

ePharmacy models have enormous growth potential. As they grow, it will be critical to ensure that they deliver high quality, affordable health products. The effective integration of ePharmacy as a layer of the health system will require adequate mechanisms for training, data sharing, quality assurance and timely referral to clinical care providers, whether public or private.

PSI'S CONTRIBUTION

PSI India is leveraging the power of existing ePharmacy companies to shorten the consumer's healthcare journey by connecting private providers with public labs; facilitating doorstep delivery of free TB drugs; and offering treatment adherence support—all to bring high-quality TB care to the consumer in one, seamless system. The system had to: 1) encourage providers to order the right test for a patient who presents with TB symptoms; 2) ensure that those tested TB positive get registered in the National TB patient tracking system; and 3) enable people who test positive for TB to get the appropriate drugs free of charge. Lessons learned from this initiative have the potential to apply to a larger basket of essential health products.

OPPORTUNITY FOR POLICY CHANGE, INCLUDING ENABLING SELF-CARE

Harmonization of the policy and regulatory environment for pharmacies (and drug shops) could present an opportunity to integrate best practices for training, safety, quality, and access for pharmacies, however currently there is considerable variation in what pharmacists are permitted to do.¹⁸ A survey conducted among members of the International Pharmaceutical Federation showed wider variation in pharmacists' permitted scope of practice. For example, of International Pharmaceutical Federation members surveyed 76% of jurisdictions could dispense emergency contraceptives, 32% adjust prescription, 16% do independent prescribing, and 68% could offer home delivery. Pharmacy based HIV testing was permitted in only 18% of jurisdictions and pharmacies could provide first aid/immediate care services in 54%.^{19,1}

One of the newer areas not addressed in the International Pharmaceutical Federation report is the potential role of pharmacies as a provider of self-care products. Thanks to technological advances, consumers are now able to take personal action to meet a healthcare need that would otherwise be addressed by a healthcare professional. Self-care can result in improving decision-making in support of consumers' own health and can include self-administration of medications (e.g., self-injectable contraception), self-administering diagnostic tests (e.g. HIV self testing), and independently accessing health information. Yet realizing the potential for pharmacies in self-care will require policy changes to increase the scope of practice for pharmacist in many settings."²⁰

PSI'S CONTRIBUTION

PSI has always been intentional about improving markets and health systems so that they work for people. With more sophisticated markets, more global attention on improving national health systems, and increasing focus on local ownership, capturing and reporting impact in these new ways is important now and into the future. As such PSI has committed to influencing policy interventions that increase access to quality health products. In 2021 and 2022 PSI documented more than 40 examples of interventions that contributed to changing or operationalizing policy.



Pharmacist Raphael Diaka at Pharmex. Defeat Malaria, PSI Green Project. 2016, Democratic Republic of Congo. ©Population Services International

CHALLENGES

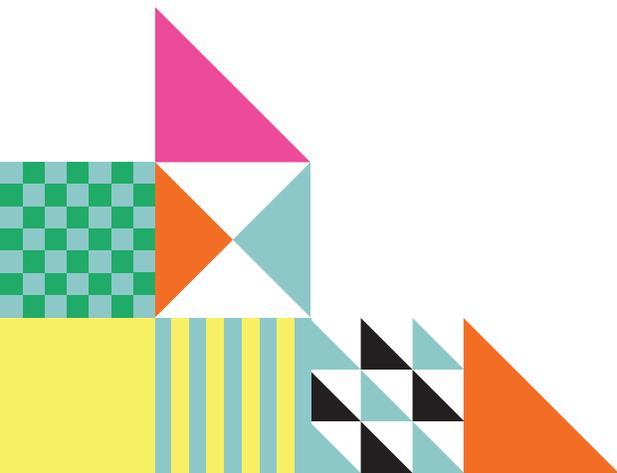
Outlined above are several opportunities relating to the role that pharmacies and drug shops can play in increasing integrated access to essential health products and services and improving financial protection. They represent attempts to address common challenges, such as the proliferation of unlicensed drug shops across LMICs or the lack of interface to integrate pharmacies and drug shops into national health financing arrangements. While the models presented could potentially transform access to essential health services, particularly in rural and peri-urban areas, it should be noted that most, except for ADDOs in Tanzania, are still being piloted or implemented at a regional level. It will be important to better understand what it takes to scale them up.

Considering pharmacies and drug shops together is complex, as these two different types of dispensing outlets operate under distinct regulatory regimes. There may, in fact, be some conflict between supporting pharmacies and drug shops. Ideally, we would like to see more trained pharmacists operating pharmacies in all areas with shortages of healthcare services; however, given the shortage of trained pharmacists and the adverse economic conditions in many rural and peri-urban areas, this is unlikely to happen for many years. Supporting drug sellers may not be a perfect solution, but it may be the right solution to increase access in the short and medium term. In fact, in some contexts, pharmacists have supported ADDO schemes, recognizing that they will increase quality and bring about a more level playing field, in which ADDOs are subject to at least some of the same regulations and quality checks.

CONCLUSION

Pharmacies and drug shops are a critical layer of the health system but cannot realize their full potential until they are sufficiently integrated into national health systems. Before the COVID-19 pandemic, coverage of essential health services had improved incrementally, while the proportion of the population experiencing financial hardship when seeking care was increasing. One of the largest and most persistent barriers to increasing effective coverage of essential health services while improving financial protection is inadequate healthcare financing. Persistent shortfalls in public financing for health often lead consumers to seek care in the private sector where they are often left without financial protection. From a consumer perspective, pharmacies and drug shops are highly desirable first points of contact due to convenience, privacy, and accessibility, however a lack of integration with the broader health system may leave too many consumers without appropriate referrals to primary, secondary, and tertiary care facilities when needed, whether in the public or private sector. While pharmacies and drug shops have the potential to improve integrated access to high quality, affordable health products, effective change requires more than policy alone; it also requires developing the systems and structures to effectively integrate these providers into the broader health system.

While many of the interventions have been shown to be effective as pilots or for a limited range of health products, all show promise of high acceptability at scale for a wider basket of essential health products. While strengthening public sector healthcare provision will remain critical to advancing UHC, it is also important to realize the potential of the private sector in shaping consumer behavior and mitigating the effects of acute health worker shortages. In many LMICs, pharmacies and drug shops are often already the first point of contact with the health system for a large proportion of the population. It is therefore important to make sure that the products they sell are both of quality and affordable, and that effective referral mechanisms are in place to improve continuity of care.



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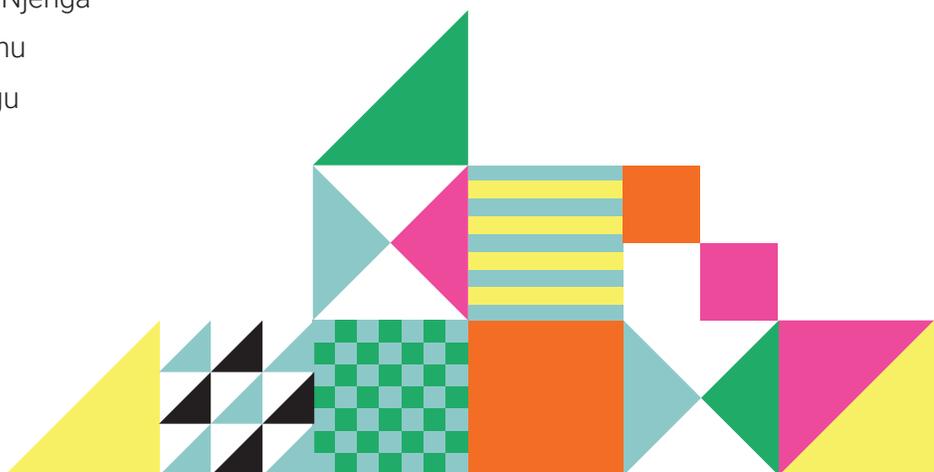
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Medical Detailer, Mr. Taing Pary, makes regular rounds to pharmacists like Pin Rina in the town of Phaav. Here he gives her a demonstration on the paper use of the malaria testing kit, Malacheck. November 2010, Cambodia. ©Population Services International. Photo by Jake Lyell

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