Innovative Financing Approaches for Increasing Pharmacy Inventory
Summary

Private pharmacies and drug shops are important providers of family planning products in many low- to middle-income countries. This brief explores ways to expand access to finance for both. It explains the role of private pharmacies and drug shops within the family planning and health commodity supply chain; identifies how lack of access to financing constrains their ability to contribute to health outcomes; and provides an overview of their financing needs. It then presents a case study on programming in Nigeria designed to address these needs and concludes with recommendations for future programming to expand their access to financing. This brief consolidates learning from two projects—USAID-funded Sustaining Health Outcomes through the Private Sector (SHOPS) Plus and a predecessor, Strengthening Health Outcomes through the Private Sector Nigeria project (SHOPS Nigeria)—about approaches that have yielded positive results to increase financing along the supply chain for family planning commodities.

Keywords: access to finance, family planning, financing, Nigeria, Tanzania, partnerships, pharmacies, reproductive health, supply chain


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The availability of health commodities, especially at the “last mile” and other hard-to-reach areas, is key to expanding access to family planning and reducing unintended pregnancies. While profiles differ across countries, drug shops are typically privately owned pharmaceutical outlets selling nonprescription drugs. Pharmacies are larger than drug shops, carry a wider range of products, and are staffed by licensed pharmacists who can legally sell both prescription and nonprescription drugs (Corroon et al. 2016). A private health sector assessment conducted in Nigeria in 2005 under the legacy Private Sector Partnerships-One (PSP-One) project estimated 200,000 patent and proprietary medicine vendors (drug shops) and 2,639 registered pharmacies (drug shops) and 2,639 registered pharmacies (Barnes, Chandani and Feeley 2008).¹

Both tend to be small: 92 percent of drug shops and 70 percent of pharmacies are staffed by five people or fewer. Both are important sources of family planning methods, with 78 percent of drug shops and 96 percent of pharmacies providing family planning products and services (Corroon et al. 2016).

Private pharmacies and drug shops typically serve as the first point of contact for health care, including family planning services, in most low- and middle-income countries (LMICs) (Chin-Quee, Stanback and Orr 2016). For example, a national survey in Nigeria found that 38 percent of all contraceptive users and 13 percent of injectable users received their method from a drug shop (Ishaku 2017). A SHOPS Plus data analysis of women surveyed in 36 LMICs found that 41 percent get their method from pharmacies or drug shops and 11 percent from general shops or markets (Bradley and Shiras 2020).

¹ Drug shops in Nigeria are known as PPMVs.
Despite their importance, drug shops and pharmacies face a number of constraints, including stockouts, which hinder their ability to deliver commodities to the communities they serve. Interviews conducted by SHOPS Plus indicate that lack of access to finance is one of several factors driving stockouts. Without access to a regular supply of working capital, drug shops and pharmacies can struggle to maintain an adequate inventory of drugs and other supplies.

Working capital is the money available for meeting day-to-day obligations of an entity. Positive working capital is required for the entity to continue its operations.

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2 For the purpose of this brief, the term access to finance refers to the ability of entities (pharmacies and drug shops) to obtain credit (loans).

3 SHOPS Plus has conducted interviews with pharmacies and drug shops in Tanzania, Senegal, Madagascar, and Nigeria. Other factors causing stockouts include inefficient inventory management practices and preferences for stocking products for which there is more substantial, consistent demand.

4 A recent SHOPS Plus assessment of pharmacies and PPMVs (drug shops) in Nigeria indicated that they experience stockouts due to lack of access to finance.
Needs and sources of financing for pharmacies and drug shops

Pharmaceutical supply chain

As shown in Figure 1, the pharmaceutical supply chain consists of the actors through which commodities reach patients. Manufacturers source commodities to wholesalers and/or distributors, which deliver them to pharmacies and/or drug shops that then dispense them to patients. There are many variations on this basic structure, as the players in the supply chain are constantly evolving, and commercial relationships vary considerably by geography, type of medication, and other factors (Mendelson, the Health Strategies Consultancy LLC 2005).

Figure 1. Pharmaceutical supply chain
Pharmacies

SHOPS Plus interviews with pharmacists in several countries determined that their most consistent need for financing is to purchase stock. Pharmacies often face stockouts due to lack of finance, and interviews with pharmacists in Nigeria indicated that increased access to finance would enable them to expand the volume and range of pharmaceuticals they offer. Their primary sources of financing tend to be supplier credit (typically from wholesalers and/or distributors) and loans from commercial bank and/or microfinance institutions.

**Supplier credit terms**: Form of credit (financing) where supplier provides goods on deferred payment terms. Terms could include number of days by which full payment is due and, potentially, the cost of credit.

Levels of supplier credit vary significantly based on strength, reach, and capabilities of the private wholesalers/distributors in each country and the environment in which they operate. In Nigeria and Tanzania, these arrangements are often unstructured and informal—amounts are small, and repayment periods are short. In interviews, wholesalers and distributors said limited access to working capital is a factor constraining their ability to extend supplier credit to pharmacies.

Interviews with financial institutions in multiple LMICs indicate that banks often see the market potential of serving this sector, although only a few have developed tailored products. Those that do provide credit to pharmacies tend to be cautious and have mixed experiences. While loans from microfinance institutions (MFIs) are easier for pharmacies to acquire, the available loan amounts are usually significantly smaller and interest rates are higher. As a result, their preference is to borrow from commercial banks.
**Drug shops**

Drug shops are retail pharmaceutical outlets that do not require the presence of a pharmacist and that sell a limited range of drugs and commodities. They are often one of the only health providers in underserved geographies and one of the most popular sources for voluntary contraceptive services. In several LMICs, governments have recognized the potential role that drug shops can play in expanding access and are implementing accreditation schemes that enable drug shops to sell an expanded range of medicines, as do accredited drug dispensing outlets (ADDOs/drug shops) in Tanzania. There is also a move in some countries to expand accreditation of drug shops with national health insurance schemes, as in Ghana.

Like pharmacies, drug shops experience stockouts, partly due to lack of access to capital. SHOPS Plus interviews with drug shops across multiple countries in Africa indicate that drug shops’ primary use of financing is to expand the volume and range of products they sell.

Similar to other types of microenterprises, drug shops often access financing from informal sources, such as savings, family and friends, and savings groups. But amounts are limited, and larger loans are mainly available from formal financial institutions. Both smaller banks and microfinance institutions report interest in serving this sector, although they are concerned about the level of informality and low levels of business and financial management capacity. SHOPS Plus interviews indicate that drug shops are often hesitant to borrow from formal financial institutions due to what they consider high interest rates, hefty collateral, and inflexible repayment requirements. In some markets, supplier credit is available to drug shops, but this is limited and mostly available to more formal drug shops that operate near large cities.
Case study: Expanding access to finance for pharmacies and drug shops in Nigeria

SHOPS Nigeria was a five-year associate award funded by USAID/Nigeria. The project’s goal was strengthening private sector family planning, reproductive health, and maternal and child health product and service delivery in Nigeria. Additionally, SHOPS Nigeria was designed to address constraints by increasing access to finance for private health providers and improving their business and financial management capacity.

SHOPS Nigeria provided technical assistance to financial institutions to develop lending products and methodologies that mitigated their concerns (see box). The project worked with USAID to identify and structure Development Credit Authority (DCA) guarantees with two financial institutions, Diamond Bank and Accion Microfinance Bank, and provided technical assistance to support utilization of the guarantees.\(^5\) SHOPS Nigeria also provided technical assistance to Fidelity Bank, which had received technical support under its predecessor project, PSP–One.

Financial institutions’ concerns with pharmacies and drug shops include:
- Perceived sector risk
- Lack of market information
- Limited collateral
- Concerns about business model
- Financial sector policies
- Transaction costs

\(^5\) USAID’s Development Credit Authority is a risk-sharing agreement used to incentivize financial institutions to lend to underserved sectors, in this case, the private health sector. In early 2020, it was combined with the Overseas Private Investment Corporation to become the U.S. International Development Finance Corporation.
Results and findings

While SHOPS Nigeria supported financing to the private health sector broadly, it also targeted improved finance for pharmacies and drug shops by focusing on formal financial institutions, primarily commercial banks, and microfinance institutions. Table 1 presents the loan amounts resulting from these approaches.

### SHOPS Nigeria Lending

<table>
<thead>
<tr>
<th></th>
<th>Diamond Bank</th>
<th>Accion MfB</th>
<th>Fidelity Bank</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of loans</td>
<td>92</td>
<td>2,694</td>
<td>360</td>
<td>3,146</td>
</tr>
<tr>
<td>Amount of loans</td>
<td>$2,426,220</td>
<td>$4,189,958</td>
<td>$9,428,770</td>
<td>$16,044,948</td>
</tr>
<tr>
<td>Average loan amount</td>
<td>$26,372</td>
<td>$1,555</td>
<td>$26,191</td>
<td></td>
</tr>
</tbody>
</table>

Source: SHOPS Nigeria project lending statistics, December 2016

Pharmacy Association Loan Product. With support from SHOPS Nigeria and its predecessor project, Fidelity Bank designed a product targeting pharmacies in partnership with the Association of Community Pharmacists of Nigeria (ACPN). The association vets potential borrowers from its membership and assists with loan recovery when borrowers fall behind in their payments. This model reduces risk to the bank and helps lower transaction costs. The assessment found that since SHOPS Nigeria ended, Sterling Bank has established a similar relationship with ACPN. A variety of respondents—representing associations, banks, pharmacies and drug shops—endorsed this type of linkage for opening up access to finance for borrowers and reducing risk and transaction costs for financial institutions.

Partnerships between pharmacy associations and banks can expand access to finance by lowering transaction costs and risks.

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6 The ACPN represents private, independent (not within hospitals) pharmacies. Community pharmacies are separate from drug shops, which are regulated differently and have their own associations.
**Microfinance for Smaller Pharmacies and Drug Shops.** Over the life of SHOPS Nigeria, Accion Microfinance Bank significantly expanded financing to smaller pharmacies and drug shops—exhausting its DCA guarantee three years ahead of schedule—and continued to increase lending to the health sector without the guarantee. In interviews with SHOPS Nigeria, six smaller pharmacies that received financing from Accion all reported an increase in client visits, and 83 percent reported an increase in family planning visits. In more recent interviews with SHOPS Plus, all pharmacy and drug shop respondents (12 out of 12) confirmed the financing “led to an increase in monthly cash flow.”\(^7\) Eleven out of 12 confirmed that the funds enabled them “to expand the range of family planning products [they] are able to offer,” and 10 out of 12 indicated that they believe the funds “led to an increase in average monthly family planning clients.”\(^8\) Accion borrower respondents said they often took out several loans according to their cash flow needs.\(^9,10\)

The SHOPS Plus assessment found that Accion has continued lending to the health sector since the end of the project, creating a long-term sustainable source of financing for the sector. The number of loans increased by 48 percent from 2016 (the last year of the project) to 2017, and by 25 percent from 2017 to 2018, for a total of $2,578,530 disbursed since the project ended (see Figure 2).\(^11\) Accion continues to use the SHOPS Nigeria loan assessment tools and loan officer training materials. The tools assist the bank to properly evaluate the creditworthiness of health sector applicants, and the training enable the loan officers to understand the structure of the private health sector, their financing needs, and the opportunities and risks of lending to these businesses. In the case of Accion, the DCA guarantee, coupled with SHOPS Nigeria support, served its purpose of demonstrating the commercial viability of the sector.

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7 Respondents included five drug shops and seven pharmacies.

8 More research is required to verify these claims.

9 The microfinance business model is to provide small, short-term loans to borrowers, demonstrating the value of financing and attracting them back to borrow again.

10 Unfortunately, data from the financial institutions did not indicate the extent to which loans were given to new or repeat borrowers, so we are unable to determine the total number of discrete borrowers.

11 Breakdown of pharmacy versus drug shops was not available.
The DCA guarantee, coupled with technical assistance, demonstrated the commercial viability of lending to small pharmacies and drug shops. As financial institutions build confidence in the sector, expectations are they continue to lend without a DCA requirement.

Figure 2. DCA Spurred Further Accion Lending to Private Health Providers

Source: Accion
Lessons Learned

Based on the findings from the assessment and learning from access to finance programming, several conclusions emerge to expand financing within the private sector supply chain, enabling more health commodities—including family planning commodities—to reach local communities.

**Technical assistance coupled with a DCA guarantee helped demonstrate the commercial viability of the private health sector to financial institutions, supporting the journey to self-reliance.** SHOPS Nigeria supported a lending approach that generated increased access to finance for drug shops and pharmacies. The model built the capacity of local partners and leveraged USAID’s DCA to address risks and costs associated with financial institutions entering the sector. This model helped demonstrate the repayment capacity of the sector and increased financial institutions’ recognition of the strategic value of pharmacies and drug shops. Ultimately, this intervention helped create a long-term, sustainable source of funding for pharmacies and drug shops.

**This programming increased access to credit for drug shops and pharmacies.** Interviews with staff of drug shops and pharmacies indicated that improved access to financing addressed cash flow constraints, enabling them to expand the range and quantity of family planning products.

**Financial institution selection is a key ingredient to successful programming to expand access to finance for drug shops and pharmacies.** A partner financial institution must be interested in the sector, have the capacity to enter a new market, and have management buy-in. Drug shops and/or pharmacies need to fit into the financial institution’s broader market strategy. In Nigeria and Tanzania, financial partner selection has been a key factor in success. In both countries, microfinance institutions proved the most appropriate partners for reaching drug shops and smaller pharmacies, whereas commercial banks were most appropriate for medium and large pharmacies.

Photo: Sama Jahanpour, DDC for SHOPS Plus
Partnerships between associations and financial institutions (and suppliers) are an effective strategy for lowering risks and transaction costs and expanding financing. As demonstrated by the partnership between ACPN and Fidelity Bank in Nigeria, linkages between associations and financial institutions can lower the financial institution’s risks and transaction costs and generate strong results in terms of lending to pharmacies and drug shops. In Nigeria, there is an opportunity to expand this model beyond ACPN to the National Association of Patent and Proprietary Medicines and microfinance institutions.

Future efforts to replicate this model in Nigeria and other countries should also consider linking suppliers to the partnership model. In Tanzania, SHOPS Plus structured a partnership with an MFI and a regional drug shop association, and unlike Nigeria, added an additional partner in the form of a pharmaceutical supplier. Under the partnership, loan funds are disbursed directly to the supplier against an invoice, and the drug shop then repays the loan directly to the MFI. This arrangement ensures that cash is not diverted to other activities, reducing credit risk for the bank. In addition, the direct link between supplier and drug shop helps ensure the quality of commodities and reduces the cost to drug shops by bypassing the distributor markup. Table 2 details various partners’ roles and benefits they bring.
## Partners’ roles and benefits

<table>
<thead>
<tr>
<th>Role of Association</th>
<th>Task</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market loan product to its members</td>
<td>Communicate to members partnership with the MFI. Provide guidance on process to apply for credit.</td>
<td>Increases value of membership to association. Reduces costs associated with sales process.</td>
</tr>
<tr>
<td>Vetting of members</td>
<td>Ensure that applicants are in good standing with association. Ensure that applicants meet MFI minimum requirements.</td>
<td>Supports MFI credit analysis process. MFI gains market knowledge. Reduces risk for MFI.</td>
</tr>
<tr>
<td>Assist with loan recovery</td>
<td>In case of default, provide MFI with support in loan recovery efforts.</td>
<td>Reduces MFI costs associated with loan recovery. Reduces MFI loan losses.</td>
</tr>
</tbody>
</table>

### Role of Bank/MFI

<table>
<thead>
<tr>
<th>Task</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop targeted product</td>
<td>Provides drug shops with specialized loan product and loan process. Ensures that payment terms are based on sector realities. Potential for lower fees, rates, and collateral requirements. Makes loan process more efficient.</td>
</tr>
</tbody>
</table>

### Role of Supplier

<table>
<thead>
<tr>
<th>Task</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share information</td>
<td>Develop internal processes. Provide MFI with detailed confirmed invoice against which loan will be disbursed. Increases sales to pharmacies/drug shops.</td>
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</tbody>
</table>

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**There is an opportunity to strengthen supply chain financing more broadly to scale supplier credit.** The assessment identified an opportunity to improve supply chain financing among wholesalers, distributors, pharmacies, and drug shops. As mentioned previously, supplier credit does exist in most LMICs, but the arrangements are often small and informal, largely due to limited liquidity throughout the supply chain. There is an untapped opportunity to optimize the management of working capital and liquidity at different entry points within the supply chain—such as at the distributor and wholesaler level—that will ultimately enable them to increase supplier credit to drug shops and pharmacies.
Financing models

Two options for increasing supply chain financing include accounts receivable (A/R) financing and distributor financing.

A/R financing: When distributors extend formal supplier credit to their pharmacy customers, they generate accounts receivable (money owed to them). The challenge to the sellers is that these A/Rs are taking the place of cash and so are reducing their working capital. With A/R financing, a financial institution can provide a loan (in this case to the distributor) with the account’s receivables serving as repayment source and collateral. Figure 3 explains this process.

Figure 3. How A/R financing works

A/R financing has a number of benefits. One of the most important is that, as noted in Figure 3, it gives the distributor the opportunity to convert A/Rs into cash through a loan, which then increases the distributor’s cash position and the ability to extend additional supplier credit. At the same time, supplier credit allows the pharmacy time to sell commodities and then repay the distributor. The end result for the distributor is higher sales to pharmacies and for pharmacies, the ability to increase stock and sales. A/R financing is applicable at different points in the supply chain, including between wholesalers and distributors and between distributors and pharmacies.

1 Accounts receivable are a form of movable collateral, and many markets do not have movable collateral laws and regulation.
**Distributor financing:** Financing for a distributor linked to a specific manufacturer bridges the liquidity gap until receipt of funds following sale of commodities to a pharmacy. Distributor financing is provided through a commercial bank. The bank’s risk analysis considers the strength of the manufacturer and the relationship between manufacturer and distributor, rather than just the strength of the distributor. Risk mitigators may include manufacturer agreement on a first-loss repayment in the case of default and/or agreement to establish a stop-supply clause. Figure 4 explains this process.

The benefits of distributor finance can cascade down the entire supply chain and enable the distributor to purchase more stock from the manufacturer than if financing were not available. It expands the distributor’s ability to offer supplier credit to pharmacies and drug shops, which in turn boosts their ability to purchase more inventory, grow sales, and reduce the potential for stockouts. It is worth noting that large international distributors tend to have access to finance, often at low cost. Midsize and smaller local distributors in fragmented markets are the ones that would most benefit from this type of instrument.

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**Figure 4. How distributor financing works**

1. Commodities sold and invoice submitted to distributor
2. Distributor accepts commodities and invoice
3. Manufacturer submits invoice to financial institution
4. Financial institution disburses loan based on accepted invoice
5. Distributor submits funds from sales to repay funds disbursed to Manufacturer
Going forward

Private drug shops and pharmacies are often the first point of contact with the health care system for many people in developing countries. Expanding access to finance addresses stockouts and can help increase the reliable supply of family planning products to underserved communities. More interventions need to be developed and tested to isolate family planning commodities and ensure that access to loans leads to decisions to expand family planning products and volumes specifically. Lending in many markets remains underdeveloped, and more efforts are needed to develop solutions to the constraints faced by private health sector providers as a whole and pharmacies and drug shops specifically.

In evaluating the full pharmaceutical supply chain, opportunities exist to structure innovative approaches and/or specialized financing instruments that address challenges faced by pharmacies and drug shops as well as financial institutions. These options hold promise for injecting liquidity along the supply chain for family planning commodities, enabling wider selection and access for customers, including those at the last mile.
References


Photo: KC Nwakalor for SHOPS Plus
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