Promising Practices Service Delivery and Utilization

Brief #5 in the Promising Practices in Supply Chain Management Series



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This brief is part of the *Promising Practices in Supply Chain Management* series, developed by the Supply and Awareness Technical Reference Team (TRT) of the <u>UN Commission on Life-Saving</u> <u>Commodities for Women's and Children's Health</u> (the Commission or UNCoLSC). As part of the <u>Every</u> <u>Woman Every Child</u> movement and efforts to meet the health-related Millennium Development Goals by 2015 and beyond, the Commission is leading activities to reduce barriers that block access to essential health commodities. The Supply and Awareness TRT developed this set of briefs on promising practices in supply chain management to guide countries in identifying and addressing key bottlenecks in the supply and distribution of the Commission's 13 life-saving commodities across the reproductive, maternal, neonatal, and child health continuum of care.

This series of briefs has been developed for use by in-country stakeholders. The briefs provide both *proven* and *promising* practices that may be used to address specific supply chain barriers faced by each country.

• *Proven practices* are defined as interventions with proven outcomes in improving health commodity supply chains in low- and middle-income countries tested using experimental or quasi-experimental evaluation designs. Examples of proven practices are identified by this symbol throughout these briefs.



• *Promising practices* are defined as interventions showing progress toward improving health commodity supply chains in low- and middle-income countries.

To view all the briefs in the Promising Practices in Supply Chain Management Series, visit <u>http://siapsprogram.org/publication/promising-practices-in-supply-chain-management</u>

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Abbreviations and Acronyms

ACT AL AMFm CBD CHW CORDAID	artemisinin-based combination therapy artemether/lumefantrine Affordable Medicines Facility-malaria community-based distribution community health worker Catholic Organisation for Relief and Development Aid	LMIC MOH NGO PBF SDP SIAPS	low- and middle-income country Ministry of Health nongovernmental organization performance-based financing service delivery point Systems for Improved Access to Pharmaceuticals and Services
DMPA DRC	depot medroxyprogesterone acetate Democratic Republic of the Congo	SMS TRT	Short Message Service Technical Reference Team
Global Fund	Global Fund to Fight AIDS, Tuberculosis, and Malaria	UNICEF	United Nations Children's Fund
HSA	Health Surveillance Assistants	USAID	US Agency for International Development
JSI	John Snow, Inc.		·

Background

Service delivery and utilization is the last step in the supply chain, where all the inputs at higher levels of the chain, such as procurement and distribution, become the output to be consumed by the beneficiaries of the health system. Without effective service delivery, none of the commodities moved through the supply chain reach the people who need them.

Service delivery and utilization are complex because they occur at several levels of the public health system and also in the private sector. Basic commodities and care are delivered at health centers (public and private). More specialized commodities and care are administered at hospitals. With increasing frequency, individuals are able to receive health services and consume commodities at the community level through such mechanisms as public sector community health workers (CHWs) or volunteers, community-based distribution agents, and private sector shops and pharmacies.

There are numerous barriers at the level of the service delivery point (SDP) that inhibit successful service delivery and utilization. The barriers are presented in the table below. While the practices highlighted in this brief are a good starting point for addressing common barriers to service delivery and utilization, creating demand for commodities that successfully make it through the supply chain is a larger issue that is addressed in greater detail by the UN Commission on Life-Saving Commodities for Women's and Children's Health's <u>Demand and Utilization Technical Reference Team</u>. In addition, because service delivery happens in so many locations throughout a country, insufficient human resources to staff and support each SDP may be a significant barrier. Detailed information on addressing human resource issues is available in the <u>Promising Practices in Human Resources</u> brief.

Barriers	Description	Promising Practice(s) that Address the Barriers
Competing priorities for health center staff	Health workers in low- and middle-income countries are often overworked and under-resourced. Health workers are often responsible for multiple jobs, including clinical care, reporting, ordering and managing commodities, and cleaning and maintenance of equipment and the facility.	 Performance-based financing at the SDP
Difficulty accessing hard-to- reach communities	For individuals living in remote and rural areas, the time, money, and effort it takes to reach the nearest health facility may be prohibitive and limit access to care.	 Community-based distribution Subsidizing underutilized commodities
Lack of community engagement	Inadequate information provided to the community on service delivery and product availability issues, leading to low or nonexistent community engagement and limited accountability.	Increase community participation in service delivery accountability
Unfavorable pricing for the private sector	Private sector entities face challenges when trying to supply products at a price that is affordable for the consumer while still profitable for the entity. This is sometimes exacerbated in an environment where the public sector secures donated commodities and provides products at no cost.	Subsidizing underutilized commodities

Performance-Based Financing at the SDP

To address competing priorities for staff

Performance-based financing (PBF)—also known as "pay for performance" or "results-based financing"—involves the provision of incentives (monetary or non-monetary) in return for meeting well-defined and measurable targets. The incentives may be given to individuals or to groups and institutions. PBF has long been used in private sector supply chains but used in a more limited capacity in public sector supply chains.

PBF has the potential to improve health worker performance and strengthen health systems. It has been used to improve quality, timeliness, and accuracy of reporting and increase commodity availability. While PBF may lead to positive outcomes, it may also lead to unintended negative consequences. For example, a program that incentivizes health workers based on the number of commodities distributed could unintentionally encourage health workers to focus on regions where demand for products is high, providing a disincentive to work in rural and hard-to-reach regions or areas where demand is low. In some cases, health workers may even inflate or falsify records to earn incentives. There is also concern about whether PBF is sustainable, particularly at scale, when resources are needed both for incentives and for ongoing monitoring and verification of targets.

When should performance-based financing be considered?

Countries that are struggling to manage their supply chains may also face challenges implementing a successful PBF scheme because it requires reliable systems to ensure accountability, monitoring and verification of performance, and timely distribution of incentives. However, a successful PBF scheme has significant potential to improve the very factors that contribute to struggling supply chains, such as poor information exchange and low productivity. The main issue to consider when contemplating the introduction of PBF is whether the resulting benefits justify the resources put into funding implementation and incentives.

Incentives that are well-designed are large enough to affect behavior, desired by the majority of recipients, foster team work, and may be adjusted to reflect the level of performance and replicable elsewhere. Incentives designed without input from stakeholders, with unexplained or complicated rules, unmeasurable or unreachable targets, implemented without consideration for system capacity, or are poorly monitored, are unlikely to work.

RWANDA

In the early 2000s, user fees for health services were re-introduced in Rwanda, leading to a significant decline in service utilization. Adding to the problem, health workers had fixed low salaries that were not tied to performance. Many public sector health workers left for the private sector where working conditions were better and salaries higher. In 2002, two PBF initiatives were introduced, one by HealthNet TPO, a Dutch aid agency, and one by the Catholic Organisation for Relief and Development Aid (CORDAID) and its Memisa fund. A third scheme was introduced in 2005 by Belgian Technical Cooperation. Based on the success of these initiatives, a national PBF scheme was introduced countrywide in 2006. The scheme incentivized progress on 14 maternal and child output indicators. Some indicators were based on visits (such as prenatal care visits or facility-based births) while others were based on services provided during visits (such as delivering the tetanus vaccine during antenatal care visits). Facilities reported monthly to a district steering committee that was responsible for authorizing payments. Payments were issued based on the facility's structural measures (such as having adequate medicines, supplies, and human resources to provide services) and process measures (such as the content of care provided during visits). The committee conducted unannounced quarterly visits to verify records and conduct interviews with patients. Very little false reporting was discovered. Incentives could be used at the discretion of the facility. Approximately 20% went to increasing facility spending while about 80% went to increasing staff salaries.

The scheme was effective in spurring progress on some indicators. Not surprisingly, indicators less in the control of the provider (such as timing of a woman's first antenatal visit) were less likely to show improvement than those more directly in the power of the provider (such as providing tetanus vaccination during antenatal care). Facility-based births, however, were so highly incentivized that providers not only encouraged women to deliver at the facility during prenatal visits but also sent CHWs on outreach visits to encourage pregnant women to deliver at the facility. Building on the success of the PBF system at the community level for clinical outcomes, in 2011 the Ministry of Health (MOH) and the Supply Chains 4 Community Case Management Project tested the introduction of nine supply chain indicators to improve product availability with CHWs. After a year of implementation and a midline assessment, three of the tested indicators were seen to have significant improvement across all quarters in all three test districts. Based on these results, a supply chain indicator (stock card accuracy) has been added to the national community PBF scheme to help draw attention to the importance of supply chain tasks and improve supply chain data recording practices at the community level.

- <u>Rwanda: Performance-Based Financing in the Public Sector</u>
- Rwanda: Community Health Supply Chain Midline Evaluation



DEMOCRATIC REPUBLIC OF THE CONGO

The Democratic Republic of the Congo (DRC) is one of the poorest countries in the world. Recently, the DRC was deemed a "failed state" due to political instability, lack of functioning public services, and criminality and corruption. In some parts of the country, the public health system has disintegrated, leaving people to rely on an informal private sector for medicines and health services. In 2005, the Health Authority of South Kivu, the Bureau des Oeuvres Médicales (a local nongovernmental organization [NGO]), and CORDAID partnered to launch a PBF scheme with an experimental design to test its effectiveness. Two intervention districts (Katana and Idjwi) and two control districts (Kalehe and Kabare) were chosen to participate. The control districts received essential medicines and supplies and fixed staff bonuses but no performance-based payments.

The PBF scheme entitled health facilities in the intervention districts to cash subsidies for progress on 16 indicators, including the number of outpatient visits, number of women using modern contraceptives, and number of fully-immunized children by 12 months. Monthly payments to facilities varied from \$200 to \$4,000 depending on progress on the indicators. Progress was verified by district authorities on a quarterly basis as well as by community groups. In addition to payments for providing predetermined health services, health facility managers in the intervention districts were invited to develop business plans, analyze revenues, and improve their decision-making process for spending. Managers were also allowed to negotiate user fees with their communities while control districts had user fees set by higher-level health system authorities or by supporting NGOs. Intervention facilities were also given cash support to directly purchase commodities from competitive distributors in their district while control facilities relied on the traditional system of receiving distributions from the central-level health system.

Between 2005 and 2008, stock availability was significantly better at the intervention facilities compared to the control facilities. There were also statistically significant improvements in the intervention districts compared to the control districts for the following indicators:

- 21 percentage point increase in childbirth at a health facility
- 10 percentage point increase in the use of a modern health facility or pharmacy
- 37 percentage point increase in patient-perceived medicine availability
- 15 percentage point increase in patient-perceived quality
- 12 percentage point increase in respect for patients by facility staff

This progress was seen despite the fact that the intervention districts actually received less external support than the control districts (approximately \$2 per capita compared to \$9-12 per capita in the control districts). The intervention districts saw a 25% increase in revenues from user fees during the study period whereas the control districts saw a 45% decrease. This is likely due to the fact that intervention facilities could determine their own user fees. Also, an increased perception of quality at intervention facilities led to increased use (and therefore payment of user fees) at those locations. Household surveys found that user fees were most likely to affect relatively wealthy households (which saw an increase in health spending) but not the poorest quartile, which actually saw a 14% decrease in household health expenditure during the study period.

- <u>Performance-Based Financing Experiment Improved Health Care in the</u>
 <u>Democratic Republic of Congo</u>
- <u>Review of the Results-Based Financing Experiences in the Democratic Republic of</u>
 <u>the Congo</u>

Community-Based Distribution

To address poor access to care among hard-to-reach communities

Community-based distribution (CBD) relies on community-based individuals (often non-professionals) to distribute commodities directly to people who use them. CBD agents are often responsible for increasing demand and providing education about the commodity as well as distribution. Some programs use unpaid volunteers, some use salaried workers, and others allow CBD agents to keep profit from the sale of commodities. Some programs charge consumers for the commodities and others provide commodities at no-cost to the consumer. Some CBD agents are also CHWs trained in health education, prevention, and community-based care for common health issues. CBD has the potential to drastically improve access and use of vital medicines. This is particularly true in hard-to-reach areas and among underserved populations.

When should community-based distribution be considered?

CBD is designed to increase convenience and accessibility of commodities for the end user. It may also be used in conjunction with demand generation and social marketing, simultaneously increasing supply and demand. Because CBD is designed to increase demand and consumption, over-consumption of commodities needs to be considered. For this reason, some would argue that CBD is best for preventative commodities (such as insecticide-treated bed nets or family planning commodities) that everyone needs and where there are not concerns about over-consumption. When CBD is done by paraprofessionals and/or lay individuals, it works best for commodities that require limited diagnosing and dispensing expertise. When CBD agents are well-trained or serving dual roles as CHWs, they may safely and effectively dispense commodities, such as injectable contraceptives and essential medicines, used in community case management.

CBD does not address any higher-level supply chain barriers and is only effective when supplies are available at the SDP.

UGANDA

Living Goods supports networks of CBD agents who go door-to-door teaching families how to improve their health and economic status by selling products, such as simple treatments for diarrhea and malaria, fortified foods, safe delivery kits, clean cook stoves, and solar lights. Similar to the "Avon" direct-sales model, the CBD agents bring the market straight to consumers' doors, and capitalize on existing local networks in the communities where Living Goods operates. By delivering essential health education and selling essential health products, Living Goods agents improve the health and productivity of poor families while earning a modest income from the sale of goods.

Living Goods works to create a sustainable distribution platform for a wide spectrum of products designed to improve the health and lives of poor individuals and families. Living Goods aims to not only grow its own sustainable networks but also help global NGOs and businesses replicate the model throughout the developing world. To that end, Living Goods created an Advisory Services Division in 2012.

Living Goods engaged the Poverty Action Lab to conduct a randomized controlled trial focused on Living Goods impact on reducing mortality and morbidity of children under five. Final results will be available in 2014. However, a qualitative study in 2012 found that competitive pressure from Living Goods actually helps improve local markets by improving quality and reducing price. When Living Goods and its partner, BRAC, enter a community, the broader market responds with a 20% reduction in fake medicine sales and 18% lower prices, leading to a 39% increase in antimalarial medicine use.

To learn more:

LivingGoods

MALAWI

In Malawi, fewer than half of married women use any kind of contraception. The contraceptive prevelance rate is 46%, with 42% of women using modern contraception (pills, sterilization, injectables, etc.) and 4% using a traditional method (rhythm method, withdrawl, etc.) In 2008, the Malawi MOH, supported by the USAID | DELIVER PROJECT, started a CBD pilot to distribute depot medroxyprogesterone acetate (DMPA), also known as Depo-Provera. In this pilot, Health Surveillance Assistants (HSA) were trained in DMPA administration as well as product management. During the six-day training, only four hours were dedicated to supply chain management. Although there was initially some resistance to the pilot among clinicians, pharmacists, and regulatory bodies, who were unsure whether paraprofessional HSAs were qualified to dispense DMPA, it was eventually well-received. The Reproductive Health Unit of the MOH, numerous NGOs, and other stakeholders were involved in advocating for and implementing the pilot. The MOH also released a written policy directive stating that anyone trained in DMPA may provide it, opening the door for CBD and allowing HSAs or any other trained CBD agents to distribute DMPA.

Problems at other levels of the supply chain greatly affected DMPA availability and thus the success of the pilot. HSAs were supposed to report to their MOH health center once per month to meet as a group, access supervision, and resupply. In practice, the frequency of supervision and restocking varied and stock-outs were common.

Despite implementation challenges, the program was well-received by the community, which cited the ease of access to DMPA as one of the biggest benefits of the program. Program records reveal that between December 2008 and January 2010, HSAs served over 2,000 new DMPA users, an estimated 7% of whom had never used family planning until receiving DMPA from an HSA. The pilot also demonstrated that DMPA could be safely administered by HSAs. Observations of HSAs administering DMPA showed that, on average, HSAs successfully followed 13 of 16 recommended safety guidelines. Guideline adherence ranged from 100% adherence (for opening the package to get a new sterile syringe) to only 47% adherence (for washing hands with soap and water).

- Evaluation of Community-based Distribution of DMPA by Health Surveillance Assistants in Malawi
- Malawi: Distribution of DMPA at the Community Level—Lessons Learned

Subsidizing Underutilized Commodities

To address poor access to care among hard-to-reach communities and unfavorable pricing for the private sector

A commodity subsidy is financial support (usually in the form of decreased price) given to individuals or institutions to promote the purchase and use of the commodity. Health commodities may be subsidized at multiple levels of the supply chain, from global subsidies that reduce costs for first-line buyers (those who buy directly from manufacturers) to subsidies at the SDP that reduce costs for the end user. Subsidies may be distributed as purchase subsidies (reducing the cost of the product) or as sales subsidies (increasing the revenue made from each sale by giving the distributor a subsidy payment for each commodity sold or distributed). Subsidies really address the cross-cutting issue of supply chain financing, but are discussed here due to their impact on access and use of commodities at the SDP.

When should subsidies for underutilized commodities be considered?

Increasing low-cost medicine availability may increase consumption of important live-saving treatment. However, it runs the risk of driving up demand for commodities without also driving up demand and supply for diagnostics. Therefore, similar to CBD, subsidies are best used for commodities that are needed by most people and that may be safely dispensed by lay individuals, otherwise there is a risk of dispensing to those who do not need the commodity. In addition, subsidies that require consumers to pay a fee, even a small fee, as highlighted in the examples below, may be unaffordable to very poor families.

The examples listed below highlight subsidies for artemisinin-based combination therapies (ACT) for malaria treatment that increased access at private sector shops as part of the Affordable Medicines Facility-malaria (AMFm), a financing mechanism of the Global Fund to Fight AIDS, Tuberculosis and Malaria. These examples were chosen because they meet the criteria for a proven practice and have significant evidence of their effectiveness. The AMFm program, however, has not been without controversy. While presumptive treatment of malaria for individuals presenting with fevers is common practice in many low- and middle-income countries (LMICs), in 2010 the World Health Organization recommended moving toward parasitological diagnosis before treatment, calling into question the practice of encouraging ACTs purchased in the private sector without diagnosis.

While AMFm is highlighted here due to strong evidence that it increases access to and use of an underutilized commodity, there is emerging evidence that subsidies for other commodities are also effective. For example, Bayer HealthCare and Merck have recently agreed to halve the price of their contraceptive implants for qualifying LMICs.



TANZANIA

ACTs are the recommended treatment for malaria because they are highly effective and have the potential to quell the development antimalarial resistance. In some LMICs, as many 60% of individuals seek treatment for malaria outside the public health system. buying medication at private sector shops where ACTs are sold at higher prices than alternate treatment regimens, making them less attractive for consumers. In 2008, the Global Fund launched AMFm, which offers first-line buyers highly subsidized ACTs, with the goal of making low-cost ACTs more widely available. In anticipation of its rollout, a pilot was conducted in Tanzania from 2007 to 2008 to test the effectiveness of subsidies on ACT availability and utilization. In this intervention, the project managers procured artemether-lumefantrine (AL), which is the recommended first-line ACT, and sold the commodity to a pharmaceutical wholesaler at the highly subsidized price of \$0.11 per dose (88% below the price offered to public buyers). The wholesaler received no instructions or restrictions other than to sell the ACTs to medicine shops in the two intervention districts according to standard practices. It was made clear that the project managers would not monitor or hold the wholesaler accountable for pricing, stocking, or other practices.

The pilot was successful in increasing access to ACTs. During the pilot, the number of private shops stocking ACTs in the treatment group went from 0% at baseline to 72% at endline, while the control districts saw negligible changes. The proportion of antimalarial consumers purchasing ACTs (versus other products) rose from 1% to 44% in the treatment districts, while no change was seen in the control districts.

To learn more:

• <u>Piloting the Global Subsidy: The Impact of the Subsidized Artemisinin-Based</u> <u>Combination Therapies Distributed Through Private Drug Shops in Rural Tanzania</u>



UGANDA

From 2007 to 2010, the Uganda MOH and Medicines for Malaria Venture provided a 95% subsidy for AL as a first-line ACT treatment. Subsidized ACTs were branded during the pilot to differentiate them from the non-subsidized brands available in the public sector. The subsidized product had a leaf on the packaging and was known as "ACT with a leaf." A comprehensive communication campaign (community mobilization, community events, radio spots and talk shows, posters, point of sale advertising) was conducted to increase brand recognition in the community. A third party was responsible for supply chain management of "ACT with a leaf" in intervention districts, although the supply chain was designed to replicate existing supply chains for antimalarial commodities. However, to ensure availability at rural shops, licensed medicine shops received their "ACT with a leaf," medicine shop attendants received comprehensive training in malaria case management, safety monitoring, and supply logistics.

Exit surveys done with consumers leaving private shops at baseline and endline found that consumers in the treatment district experienced a six-fold increase in ACT purchase within 24 hours of fever onset relative to the comparison district. Subgroup analysis found an even greater effect (tenfold increase relative to the comparison district) when ACTs were purchased for children under five.

To learn more:

<u>Closing the access barriers for effective anti-malarials in the private sector in rural</u>
 <u>Uganda: Consortium for ACT private sector subsidy (CAPSS) pilot study</u>

Increasing Community Participation in Service Delivery Accountability

To address the lack of community engagement

Community participation in service delivery accountability is the process of engaging communities in holding service delivery providers accountable for providing quality services. For the process to work, communities should be knowledgeable about the services to which they are entitled and have a mechanism to ensure that those services are provided. In cases of corruption or blatant incompetence, the community may serve as a watchdog over service delivery providers. However, in many cases, the relationship between communities and service providers is a collaborative one in which both parties agree on their priorities, determine the biggest barriers to quality service delivery, and how, when, and by whom those barriers may be addressed.

When should community participation in service delivery accountability be considered?

Community participation in service delivery accountability works best when the service delivery problems are within the control of service delivery staff. For example, holding staff accountable for stock availability may improve such issues as poor stock management, inaccurate or late requisitions, and commodity loss or theft. However, if stock-outs are caused by commodity shortages at higher levels of the supply chain, an accountability intervention at the SDP level will be ineffective. Community participation in service delivery accountability also requires community engagement and works best when addressing issues the community cares about. Issues visible to patients accessing services, such as long wait times, rude treatment by health staff, and commodity availability, are much more likely to be important to the community as compared to behind-the-scenes issues, such as on-time reporting.

UGANDA: UREPORT

Funds for development, including cash and commodity donations for maternal and child health, are usually distributed in a top down fashion, leaving communities with limited knowledge of what is supposed to be reaching their community and few mechanisms to hold the public sector or NGOs accountable. In 2010, the United Nations Children's Fund (UNICEF)/Uganda introduced an initiative called Ureport, which gives communities a mechanism to report on the development of their communities. The program started by training Boy Scouts across the country as "social monitors" to report on issues important to their community via Short Message Service (SMS). Since then, more organizations have become involved, helping to recruit over 130,000 social monitors. Social monitors receive weekly polls and are updated on their results. Data collected from Ureport are shared with the public health sector as well as government officials, civil society groups, social media, and local media. Here are some examples of Ureport messages sent to social monitors:

- "Hello Ureporters! We want to know if the health center near your home is stocked with medicine? Please respond with YES or NO. It's FREE! UNICEF"
- "25% of U-reporters say service at their local health center is bad. We shall share this with the Ministry of Health and ask for a response. I will update you."

Ureport covers a wide range of development issues, however, reducing stock-outs, particularly for ACTs, is a key aspect of the program. Data collected from Ureport are used to check official data and hold the public sector accountable for addressing supply chain and stock-out issues in a timely manner.

- Ureport Poll Results
- Ureport: Community empowerment via RapidSMS-Uganda



UGANDA: COMMUNITY-BASED MONITORING OF PRIMARY HEALTH CARE PROVIDERS

To determine whether community-based monitoring of primary health care providers is effective in improving service delivery, a randomized field experiment was conducted in 50 communities in Uganda. Leaders from local NGOs facilitated meetings in each community to share "report cards" on the community's health facility, including service quality and utilization, and comparisons to other facilities. During the meeting, the community compiled suggestions for improvements into an action plan that could be enacted without additional resources. The plans varied by community, but the most common complaints raised dealt with absenteeism, long wait times, lack of attention from health workers, and differential treatment. Health workers had a separate meeting where facilitators highlighted differences in reported service delivery from the providers and the community. Finally, a meeting with community representatives and health workers was held and created a "community contract" in which community members and health workers agreed on what needed to be improved, how, when, and by whom. Six months later, health workers and community members were brought back together to discuss progress in the implementation of the community contract.

The intervention improved service utilization and health outcomes. Of particular relevance to this brief, intervention facilities saw statistically significant improvements in stock-outs for three of four tracer commodities. There was no systematic difference in the supply of medicines between the treatment and control group. The control facilities actually served fewer patients, therefore, the authors hypothesize that the observed difference in stock-outs was due to decreased leakage of medicines at the treatment facilities.

To learn more:

 <u>Power to the People: Evidence from a Randomized Field Experiment on</u> <u>Community-Based Monitoring in Uganda</u>

Conclusion

Effective service delivery and utilization rely heavily on all aspects of the supply chain to ensure that medicines and supplies are ready for the health workers and patients who need them. But service delivery and utilization also go beyond the supply chain, relying on qualified clinical and pharmacy personnel to diagnose and treat illnesses, clean and comfortable facilities with enough space to see patients and store commodities, appropriate packaging and formulation of medicines to make them easy to dispense and easy to adhere to, proper community education on medication adherence, demand generation, and SDPs that are accessible to people living in rural and remote areas. While some of these factors are beyond the scope of this brief, interventions that take an integrated approach, including those addressing supply issues and broader care and demand issues, are more likely to be successful.

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