

# Key Considerations in Planning for Sustaining the Decentralized Drug Distribution Approach for HIV Programs

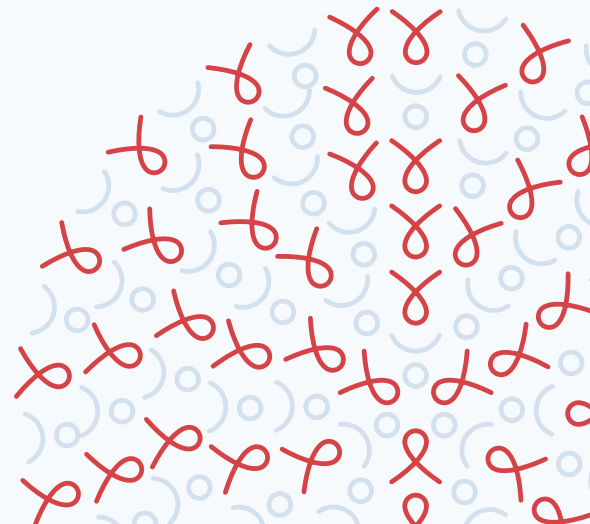




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## **SUGGESTED CITATION**

Meeting Targets and Maintaining Epidemic Control (EpiC). Key Considerations in Planning for Sustaining the Decentralized Drug Distribution Approach for HIV Programs. Washington (DC): FHI 360; 2024.

## **ACKNOWLEDGMENTS**

The development of this guide was led by Lirica Nishimoto. Susan Duberstein, Iwimbong Kum Ghabowen, Deborah Carpenter, Chris Akolo, Mary Kariuki, Caterina Casalini, Hind Satti, Chamberlain Diala, Amita Mehrotra, and Andrew Maranga provided invaluable support and review. Andrea Surette led coordination of the guide. Editing and graphic design were provided by Marty Jarrell and FHI 360 Design Lab. This work was made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the EpiC project and do not necessarily reflect the views of USAID or the United States Government. EpiC is a global cooperative agreement (7200AA19CA00002) led by FHI 360 with core partners Right to Care, Palladium International, and Population Services International (PSI).



# Purpose

*Key Considerations in Planning for Sustaining the Decentralized Drug Distribution (DDD) Approach for HIV Programs* supports countries to effectively strategize for sustainable maintenance and scale-up of DDD approaches in advocating for political buy-in and domestic resource mobilization, especially as countries continue discussions on HIV Response Sustainability Roadmaps<sup>1</sup>. For this document, DDD sustainability is defined as the ability of a country to use

domestic resources and financing to implement DDD models with diminished dependence on external support.

“HIV response sustainability implies that a country has and uses, in an enabling environment: (a) people-centered systems for health and equity; (b) empowered and capable institutions and community-led organizations; and (c) adequate and equitably distributed resources to end AIDS and sustain that accomplishment in ways that uphold the right to health for all.”

~ UNAIDS, HIV Response Sustainability Roadmap Part A Companion Guide

**This guidance is for program implementers, policymakers, donors, and governments. It outlines the three domains necessary for DDD sustainability, as well as the considerations for assessing and identifying gaps, and planning for sustainability.** It offers considerations for

countries in different phases of their “DDD journey,” including those that are starting to think of designing DDD models, as well as those that are implementing and need to transition from

donor funding to domestic funding and scale-up. This document is based on the USAID-funded Meeting Targets and Maintaining Epidemic Control (EpiC) project’s experience working with stakeholders to design and roll-out DDD models across multiple countries.

1. HIV Response Sustainability Roadmap outlines a country-led path for achieving the global AIDS targets for 2025, ending AIDS by 2030 and sustaining the impact of those achievements beyond 2030. It lays out the steps that can transform both health- and HIV-related political leadership, policies, finances, systems, and services. ([HIV Response Sustainability Roadmap Part A Companion Guide](#))

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# Introduction

Effective, sustainable, and person-centered delivery of antiretroviral therapy (ART) to people living with HIV (PLHIV) requires innovative and acceptable approaches that will make accessing services more convenient for clients, minimize the burden on overstretched health care systems, and enable HIV programs and countries to sustain the services with diminishing dependence on donor funding. Amid competing priorities, many countries have insufficient resources to sustain HIV treatment services for PLHIV, including for key and vulnerable populations, and other individuals needing chronic care. This is particularly more evident during emergencies such as during times of disease outbreaks, political or climate crises, and other events of service disruptions.

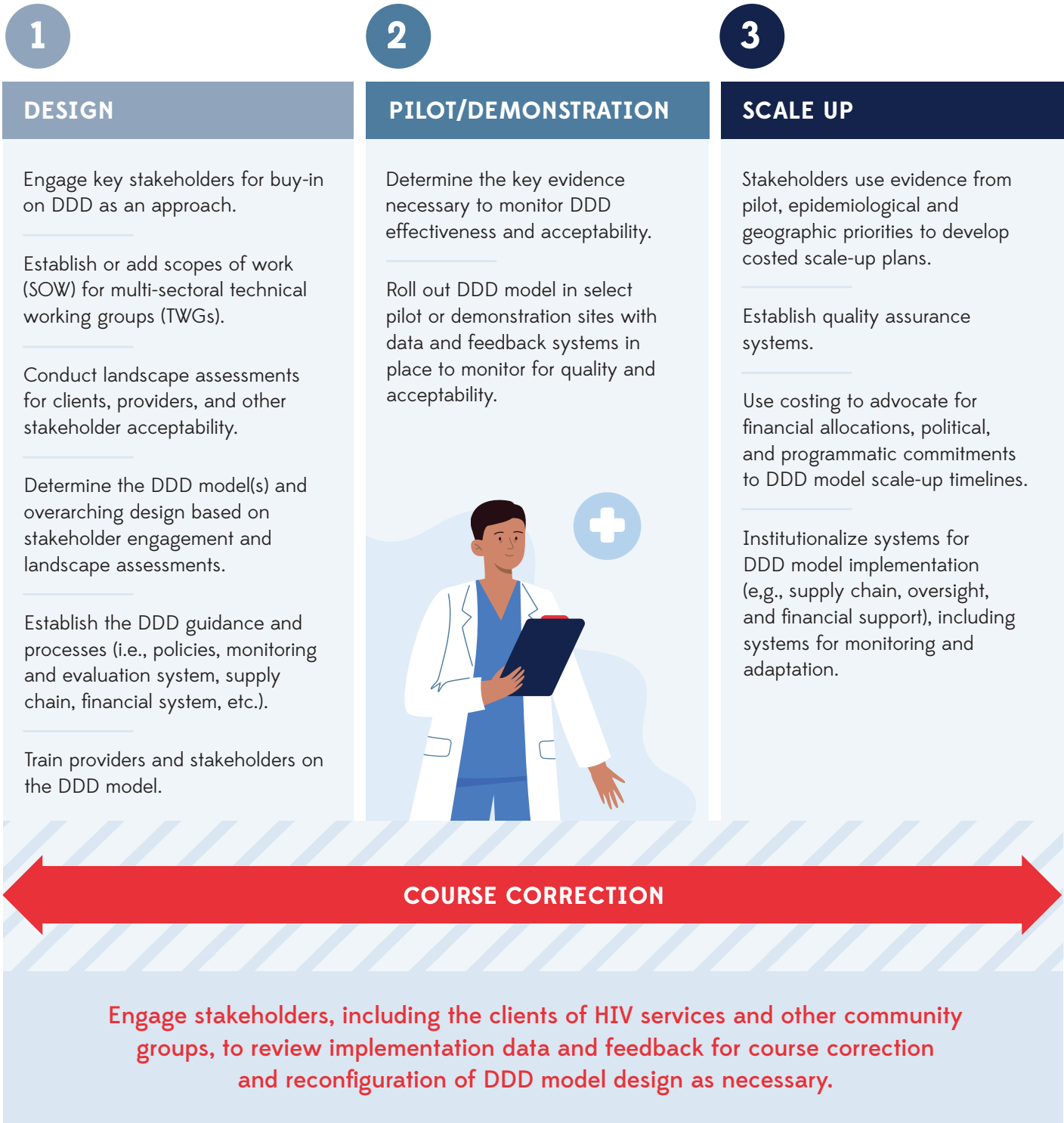
DDD models present solutions that leverage locally existing infrastructure to provide equitable HIV and other health care services. DDD is an out-of-facility differentiated service delivery (DSD) model that allows individuals who are at risk of HIV or are established on treatment to access HIV services — including antiretrovirals (ARVs) for pre-exposure prophylaxis (PrEP) or HIV treatment — outside a public health facility in community locations where it may be more convenient and acceptable for them. In some DDD approaches, individuals may also initiate services at the decentralized location instead of starting at a public health facility. Potentially, other services and commodities — condoms, lubricants, post-exposure prophylaxis (PEP), HIV self-test (HIVST) kits, tuberculosis prevention and treatment pharmaceuticals, and other treatments for opportunistic infections — can be incorporated into the package of services provided through DDD. In addition to the HIV services and commodities, DDD can also be a platform to provide other commodities or services — like family planning and reproductive health, non-communicable diseases, and other infectious diseases — facilitating health services integration and improving person-centered care. DDD approaches leverage community or private pharmacies, private clinics, automated community lockers or automated machines (ATMs), drop-in centers, community-based organization service delivery points, and home delivery by health care workers, peers, or through a third-party, including courier services. Linkage with public health facilities can be retained as necessary for sustained quality care of clients, such as laboratory testing and clinical review.

The key considerations for sustainability highlighted in this document are applicable across the full DDD journey, from designing the DDD model through scale-up<sup>2</sup>. Sustainability factors such as equity and quality should be considered at each phase (Figure 1).

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2. Adapted from: Insights on Scaling Innovation. June 2017. <https://www.idiainnovation.org/resources/scaling-innovation>

**Figure 1.** Phases of the DDD Journey













## Benefits of DDD for clients and the health system

DDD can improve access to HIV services for clients, including oral PrEP and HIV treatment ARV refills, by reducing travel distance, transportation cost, and time needed to access HIV services. DDD can also improve client clinical outcomes and clients' perception of quality of care. Due to these advantages, DDD also holds the potential to improve equity of health services by reaching people who may not be reached through standard services, including key and priority populations, or those who live far from public health facilities. DDD also supports health systems by decongesting health facilities and reducing the workload and strain on under-resourced staff at public health facilities. Because the number of people accessing HIV prevention services or who are on HIV treatment is growing, this support can reduce wait times for clients who continue to receive care at the public health facilities.<sup>i, ii, iii</sup>

Generally, modelling has found DSD improves client clinical outcomes and is more cost-effective compared to conventional care from the health system.<sup>iv</sup> Modeling of the potential market size, epidemiological impacts, and cost savings to funders and clients in Zimbabwe also showed that transferring clients to private sector facilities would reduce the number of clients discontinuing treatment, and potentially reduce new infections and AIDS-related deaths<sup>v</sup>. The modeling also found that DDD can reduce costs for clients, and in the long-term, reduce costs for governments and donors as the program is scaled-up. But there may be increased initial investment costs for governments. Additional select data on private sector capacity, acceptability among PLHIV of accessing services through the private sector, and PLHIV willingness to pay for decentralized services are available in Annex 1.

### Clients enrolled in a DDD model by country\* under the EpiC project:

COUNTRY	MODEL	TIMEFRAME	# OF CLIENTS ENROLLED
Botswana	 • Home delivery by postal service eLockers	As of July 2024	607
Burundi	 • Home delivery • Community ART refill groups (PODI)	As of September 2023	1,650
Cameroon	 • Private pharmacy	As of September 2023	717
Cote d'Ivoire	 • Private pharmacy	As of June 2024	309
DRC	 • Private pharmacy	As of July 2024	4,450
Eswatini	 • Community ART refill	As of January 2021	652
Lesotho	 • Private pharmacy • Health posts eLockers	As of October 2022	11,242
Liberia	 • Private pharmacy	As of July 2024	2,619
Malawi	 • Private clinics	As of July 2024	2,038
Mozambique	 • Private pharmacy	As of July 2024	17,538

\*Countries listed are those that were supported under Headquarters Operational Funds (HOP) and Sustainable Financing Initiative (SFI) from the United States Agency for International Development (USAID)





## Cameroon DDD model evaluation demonstrated effectiveness of the model

The USAID- and PEPFAR-funded Meeting Targets and Maintaining Epidemic Control (EpiC) project and the Government of Cameroon evaluated a DDD model in which some health facilities offered clients the option to receive antiretroviral (ARV) drug refills at community-based organizations (CBOs). **The evaluation found improvements in client clinical outcomes among those who enrolled in the DDD model.** Clients receiving ARV refills at 50 CBO pick-up sites (n=293 clients) had higher treatment continuity than those receiving ARV refills at health facilities offering DDD (n=557 clients) at 3 (94% vs. 90%, p-value<0.000), 6 (91% vs. 86.1%, p-value<0.000), 12 (86.6% vs. 81.1%, p-value<0.000), and 24 (86.1% vs. 72.2%, p-value<0.079) months. Similarly, viral load suppression was higher among clients receiving ARV refills at CBOs than at health facilities each year, but significantly only in 2018 (98.6 vs. 92.4%, p-value<0.00) and 2020 (95.1% vs. 92.3%, p-value=0.02). **Improvements were also found in clinical outcomes among clients receiving ARV refills at three health facilities offering DDD compared to those who received ARV refills at three comparable health facilities not offering DDD.** Clients receiving ARV refills at health facilities offering DDD had higher treatment continuity than clients receiving ARV refills at health facilities that were not offering DDD (n=170 clients), significantly at 3 (100% vs. 93.1%, p-value=0.0013) and 24 months (90.5% vs. 79.0%, p-value=0.0127).

**Improvements in clinical outcomes among clients who continued to receive ARV refills at health facilities that offered DDD may be due to reduced workload for health facility staff allowing them additional time to provide care with increased quality.** The evaluation also compared client-reported wait time for HIV services and perceived client satisfaction between clients receiving ARV refills at health facilities compared to those at the CBO pick-up sites. Wait time and satisfaction were also assessed at health facilities that did not offer the DDD model. CBO dispensation was associated with shorter wait times. Average wait time for clients receiving ARV refills from CBOs was 37.5 minutes less (CI:29.05–45.95, p-value=0.000) than at health facilities offering DDD, and wait time for clients receiving refills at facilities offering DDD was 12.9 minutes less than at health facilities that did not (CI:26.29–44.31, p-value<0.000).

Additionally, clients receiving refills at CBOs were 4.5 times more likely to report satisfaction with services than those at the health facilities (97.3% vs. 89.1%, CI:2.12–9.42, p-value ≤0.000). Similarly, clients receiving refills at facilities offering DDD were 6.26 times more likely to report satisfaction with services than those at health facilities that did not offer DDD (94.4% vs. 73.1%, CI: 3.13 - 12.54, p-value <0.000).

**These results indicate that DDD may have decongested health facilities (indicated by the reduced wait times), and improved quality of care provided (indicated by the higher client satisfaction) for those continuing to receive services at the health facility. DDD has the potential to improve perceived service quality both for clients who receive ARV refills at CBOs and those who continue to obtain refills at the offering facilities.**



## Mozambique DDD model evaluation demonstrated high satisfaction among those enrolled and improved workload among health facility providers

Findings like those found in the Cameroon case example on page 5 were found as part of a study of DDD client satisfaction and provider perspectives on receiving refills at private pharmacies (*manuscript in development for publication in a scientific journal*). The quantitative surveys and qualitative interviews conducted in Mozambique found that the experience with the private pharmacy model, both among clients currently enrolled and those who are no longer enrolled, were overall very positive: over 95% of the clients participating in the study reported high satisfaction across all assessed variables of quality and access. Through qualitative interviews, multiple health facility providers shared that the wait time of services at the health facilities and complaints about the wait time from clients have decreased. This has allowed the providers more time to attend to clients with higher quality of care. Interviews with clients have also validated the reduced wait time at the health facilities since the implementation of DDD.

over

**95%**

of the clients participating in the study reported high satisfaction across all assessed variables of quality and access.



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# Description of the key considerations

In their sustainability framework, UNAIDS defines key domains of sustainability, including political leadership, enabling policies, effective and equitable access to high-impact services and solutions, systems capacities, and sustainable and equitable financing<sup>vi</sup>. In this document, the domains have been adapted and simplified to the following three:

- 1 Political leadership and enabling policies.**
- 2 Access to effective and equitable services and system capacities.**
- 3 Sustainable and equitable financing.**

The three domains represent the intended results of sustainable DDD models that influence how DDD models are designed and implemented. The considerations are framed around how partnerships, including those with the private sector, can interact within each domain to provide a platform favorable for sustainable effective innovations.

This document is intended to facilitate discussions and planning towards the sustainability of DDD approaches in specific domains and to sustain the HIV impact of DDD when the capabilities of the government and local partners are strengthened.

The process through which national programs, donors, and other stakeholders leading implementation of DDD can prioritize and sequence actions for sustaining DDD follows:

- Document status of DDD models and progress towards sustainability across each domain.
- Identify next steps in the current efforts.
- Develop sustainability plans which include action steps and milestones towards DDD sustainability.
- Prioritize and track progress towards the inclusion of identified actions steps in the national policies and strategies.
- As sustainability invariably depends on specific contexts, this document is intended to provide key considerations for each domain of sustainability for DDD, rather than provide prescriptive guidance and steps.



## Tip

While this document focuses on the implementation of DDD, a health system-wide perspective that looks to expand and sustain the gains through the efficient allocation and use of resources across the entire system – not only within HIV programs or the DDD intervention – is also important. The causes of inefficiencies are country-specific and any health intervention, including DDD, should align with the way health programs are articulated in each health system. Identifying efficiencies from a health system perspective can also contribute to improving efficiencies for HIV programming.

## Political leadership and enabling policies

UNAIDS defines the political leadership domain as the “*commitment to shared responsibility and effective, inclusive and participatory multisectoral governance and policies, with communities of people living with and affected° by HIV at the centre,*” and defines enabling policies as “*laws and policies that support equitable, accessible and high-quality HIV services which leave no one behind and come with strong community leadership and engagement.*”<sup>vi</sup>

Decisions about national health program priorities and resource allocations are inherently political, and therefore influenced by political and stakeholder will. Political will and local ownership are vital for the supportive, enabling, and equitable policies and clear guidance which are critical to scaling-up and sustaining DDD approaches. Strong political ownership may require leaders to see the DDD intervention as part of the health care system and an opportunity for supporting and complementing country health systems.

Country institutions, governmental, non-governmental, private for-profit and non-profit sectors, and community bodies are the primary vehicles for implementation, including management. Various government bodies and sectors, PLHIV associations, community groups (including those for key and vulnerable populations) and other stakeholder engagement (including through TWGs), throughout the DDD journey is critical for strong buy-in and sustained equitable innovations. While national level government leadership is important, the engagement of and buy-in from subnational authorities, and health facility and community-level leaders is equally critical. The feedback and inputs, especially from the community, and key and priority population representatives can provide critical insight into the model for equity, including around decisions on locations of the selected decentralized sites.

[Engaging PLHIV](#) through their associations and other community groups can be the starting point for both designing the DDD model and planning its sustainability. Interventions can only be sustained to the extent that they are equally accessible and used by all those intended. Many DDD models have been found to be acceptable for key populations. Strong, early, and continuous engagement of the community of PLHIV and other service users in political advocacy can help to ensure the DDD intervention and policies are supportive, acceptable, equitable, and helpful. In turn, they can become strong advocates to sustaining interventions they helped design. The buy-in and advocacy by PLHIV and other service users can drive the demand creation necessary for sustaining service delivery. In sustaining DDD, prioritization of the key components ensuring its acceptability and accessibility among key and vulnerable populations may be necessary.

A clear vision and coordination among leaders and stakeholders are also strong enablers for sustained impact. Governments should lead efforts to develop the necessary policy framework that creates an enabling environment for DDD implementation by the design agreed on through the TWG and other



### Tip

**While DDD is currently specific to HIV services, DDD can be framed as an additional platform for health services beyond HIV, in line with the provision of person-centered care. Engaging stakeholders related to other health areas, and possibly other sectors (i.e., education, economic development), to explore potential collaborations through the DDD platform may help to boost political will across sectors and health areas, and therefore, local ownership.**

stakeholders. For example, policies that allow for the decentralization of services and for nongovernmental entities to offer public services are needed and must be outlined. Some countries may decide to include DDD service delivery points into the national supply chain management system, in which case, policies for incorporation into the distribution and reporting network would need be established.

The government, in close collaboration with the TWG, especially the community representatives, should also provide leadership for establishing policy direction, develop program guidelines, establish a clear monitoring and quality mechanisms to enforce accountability, and lead coordination between implementing organizations, donors, community groups, clients, providers and other government and nongovernmental sectors. Establishing a sustainable DDD model requires close engagement of multiple stakeholders of various sectors and government departments, and their early and continuous engagement from the planning phase can ensure the necessary buy-in. Engaging in the ongoing policy efforts within the other sectors and identifying alignment in priorities can help keep DDD on the policy agenda. As much as possible, discussions on sustaining DDD should also align with any respective Sustainability Roadmap discussions.

## CASE EXAMPLE



### **Coordination of the private pharmacy model through a TWG across the DDD Journey allowed a successful national roll-out in Mozambique**

In Mozambique, the private pharmacy model was rolled out through 33 health facilities and 71 private pharmacies. A technical working group (TWG) was formed to design, plan and implement the model. The TWG included the various entities of the Ministry of Health (MOH), including the National Medicines Regulatory Authority, the Central Medical Stores, the National STI-HIV/AIDS Program, and the Provincial Directorates of Health Services of the 11 provinces in Mozambique. Other members of this TWG included United States Government (USG) funders, and PEPFAR implementing partners. The National Association of Private Pharmacies, FARMAC (a state-linked chain of community pharmacies), and projects supporting key populations were consulted during the DDD model development process through meetings and in-depth interviews. Telephone interviews were conducted with PLHIV to inform the DDD model development process. Literature on previously conducted acceptability studies with PLHV were reviewed. Continuous and collaborative engagement of each stakeholder from the design and planning phases through implementation was instrumental to ensuring their buy-in and support for the model. Training materials, standard operating procedures, demand creation materials, and a technical assistance and supervision guide were validated through the TWG. Course corrections for the model designs were made to improve efficiencies. Over 20,000 clients were enrolled in the private pharmacy model in three years.



## Access to effective and equitable services and systems

This domain combined two of the UNAIDS identified domains and is defined as systems “*built on strong local and institutional capacities to deliver effective, context-specific, people-centered and integrated HIV services for equitable and sustained results... by using data, human resources and service delivery that go beyond HIV (across health, community, and social systems), without compromising quality or effectiveness*” to support “*science-driven, effective and high-impact HIV prevention and treatment services and solutions for ensuring the well-being of people living with HIV.*”<sup>vi</sup>

This domain encompasses how health care organizations, committees, sectors, structures, and associations collaborate and support the models and provide oversight on equitable practices which sustain the DDD initiative. It also relates to the capacity of the direct implementers of the DDD model, including the provincial or district health authorities, health care providers, including facility- and community-based cadres, supply chain system managers, and data clerks among others, to continue quality implementation without the mentorship and guidance from implementing partners.

The reliable supply of commodities and medicines through DDD is necessary to ensure equitable quality of care for clients. Clear procedures with roles and responsibilities detailing how the supply chain management (e.g., how commodities will be packaged and delivered, how commodities will be stored at various service delivery points, and whether private space is available to provide counseling or other services, among others), commodity tracking and accountabilities, and reporting should be handled and who is responsible for each task are useful tools for improved coordination.

Similarly, appropriate data sharing and information management systems for delivering quality care, and monitoring and programmatic decisions are needed. As DDD decentralizes commodities and clients from one location to another, establishing an effective and reliable supply chain and client reporting and tracking systems at decentralized service delivery points that allow for stakeholders to provide the necessary oversight and accountability is an important component for this domain. Procedures, roles, and responsibilities for secure and confidential communication between service delivery points on client information should be established.

Integrating supply chain and reporting systems for DDD into existing MOH-led data systems, rather than creating parallel reporting systems, can help to improve efficiencies and support processes for continuous, collaborative stakeholder oversight. It can ensure that all service delivery locations are accessing the same, up-to-date client and supply data for appropriate service delivery. In designing systems and planning towards sustainability, efficient processes and reducing administrative burden should be



### Tip

**Private pharmacies and other private entities, which often serve as DDD pick-up points, are not dependent on national public sector supply chains. Their own procurement, distribution, and transportation mechanisms (e.g., private warehouses or trucks) could serve as alternatives to the public sector supply chain systems or complement the national supply chain in times of shortages or stock outs of specific commodities. This can lead to overall resilience of DDD supply chain by offering alternate options for commodity supply.**

considered. While manual and paper-based systems are feasible to support DDD models, electronic information systems linked directly to existing national electronic medical records systems can improve efficiency, effectiveness, and sustainability of the data system, especially for scale-up. Determining decisions around the design of the data systems for DDD through the TWG and other coordinating structures can also improve coordination. Involvement of those reporting (e.g., private sector, CHWs) in designing appropriate reporting requirements is also critical.

This domain also encompasses the local capacity to train, mentor, and supervise for quality implementation. This includes training of the direct implementers, as well as training of trainers who can ensure the skills and knowledge needed for implementation can be provided to new staff to strengthen technical capacities, promote collaboration, and support oversight. Trainings and supervision for DDD should be incorporated into existing mechanisms as much as possible. Trainers can include the national and subnational government, health facility management, and private sector management among others. Refresher training can be done through regular joint (MOH, private sector, and other appropriate stakeholders) technical assistance and support visits, where relevant existing national trainings and national certification systems can be leveraged. [Necessary trainings and orientations](#) should be conducted on procedures of service delivery, data collection and reporting systems, and supply chain management among others.

An effective workforce and established processes for collaborative functions across stakeholders and workforce cadres also improves efficiency of implementation to achieve outcomes. Establishing best practices and procedures, including through standard training materials, clear standard operating procedures, job aides, supportive supervision guides and checklists, and other tools to promote the continuation of quality programs can be instrumental. The training materials, technical resources and tools that can be made available to facilitate and guide the implementation and scale-up of DDD should be developed or adapted from or incorporated into existing materials in close collaboration with stakeholders.

## CASE EXAMPLE



### **Client and supply chain electronic data systems adapted for DDD in Mozambique**

In Mozambique, the health and logistics electronic information management systems (intelligent Dispensing of Antiretroviral Treatment – iDART mobile and – SIGFAP) were adapted from existing information systems (iDART and Sistema de Informação de Gestão Logística das Unidades Sanitárias - SIGLUS) used in health facilities by PEPFAR health information systems and supply chain partners, Friends in Global Health (FGH) and the Global Health Supply Chain-Procurement and Supply Management (GHSC-PSM) project. iDART mobile allows for paperless and real-time referral of clients, guides provision of the service package, including dispensing, and enables real-time updates of the clients' electronic medical records at the health facility by pharmacies. SIGFAP supports medication management and tracks stock at the private pharmacy.

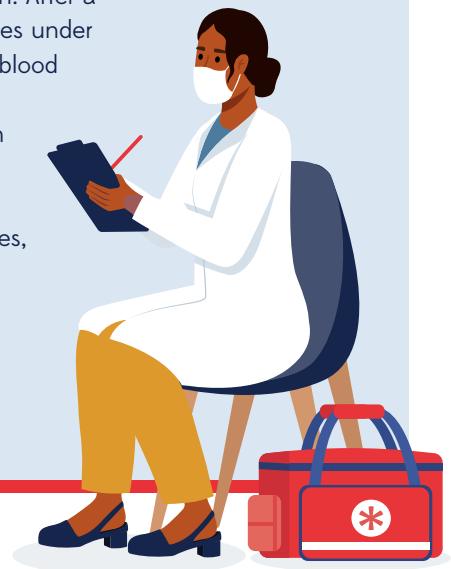
Finally, DDD can be framed as an integrated differentiated health service delivery model to advance universal health coverage goals, rather than a model specific to HIV services. These are existing platforms that can be leveraged to provide other health services which reduces the need and associated costs to start-up other access points for different health conditions. Considerations can also be made to expand the DDD service package to include services beyond HIV — including tuberculosis (TB), sexual and reproductive health (SRH), noncommunicable disease management, and vaccinations — to ensure appropriate transversal systems for supply chain management and clinical data sharing and reporting, encompassing the vertical programs across ministry departments, comprehensive client care, monitoring, and programmatic decisions.

## CASE EXAMPLE



### Existing training, certification, and quality assurance systems were leveraged to incorporate DDD in Malawi

In Malawi, with support from the MOH and Malawi Business Coalition Against HIV and AIDS (MBCA), all selected private clinic providers received the National Certification on HIV/AIDS Management training to equip them with skills needed to offer the standard package of care per the national treatment guidelines and protocols, including HIV testing and counseling (HTC), and ARV dispensation. The trained private providers were a cadre of nurses and clinicians registered by the Nurses and Midwives Council of Malawi (NMCM). The training was conducted by certified trainers from the MOH and MBCA. Additionally, providers were trained on viral load (VL) management and procedures to ensure clients transferred to private clinics still accessed VL testing. Select private clinic providers were also trained on oral PrEP dispensation. As part of the training, private providers were paired with public facility ART coordinators during ART days for VL sample collection. After a week of observation, private providers practiced collecting blood samples under the supervision of the ART coordinators to ascertain they could collect blood on their own at their clinics and follow the relevant SOPs for sample collection, processing, and transfer to collection points. In collaboration with the MOH, EpiC reviewed and adopted the MOH quality assurance (QA) system for DDD and rolled it out to the private clinics. District Health Office (DHO) ART coordinators supported the QA activities, specifically supervision and mentorship, as part of routine activities. The public health facilities from which clients were transferred are also included in two national ART supervision teams' quarterly visits.





## Sustainable and equitable financing

The sustainable and equitable financing domain articulates that “*financing must be made adequate, sustainable and equitable, including by: increasing domestic resources; integrating HIV financing into benefit packages and public budgets; ensuring sustainable financing for community-led programmes; closing the funding gap for key and vulnerable populations; and maintaining donor funding.*”<sup>vi</sup>

Domestic resources for DDD can stem from various sources, including the central government, regional government, philanthropists, the private sector, community organizations, the community itself, and individual clients who are willing to pay. Health resources include financial, human, and material resources, all of which must be considered in the DDD model’s approach to service fees, workload, supply chain and equipment management, infrastructure, internet and communication costs, and other necessities.

As many DDD models rely, at least in part, on donor funding, alternative financing or incentive mechanisms should be explored, including existing insurance mechanisms and assessing clients’ willingness to pay for services. Additionally, advocacy with governments and ministries of health and finance to increase allocation of funding and public spending on health to support DDD may also be necessary.

Resources mobilized from public sector budgets, earmarked taxes, and cost recovery are heavily dependent on political will and the perceived social value of the intervention. Useful evidence to support this advocacy to key stakeholders to make decisions can include demonstration of the cost-effectiveness or cost-efficiency of DDD. Costing analysis of the various DDD models should document (a) the resources required to start-up DDD program; (b) the resources required to sustain and support the delivery of DDD services; (c) how the DDD approach could affect the entity financing the resources being used; and (d) how the DDD approach could affect the cost to clients receiving services. These analyses can also help determine how to increase efficiency of the DDD model and whether scale-up is viable. In addition to the cost analyses, key advantages or benefits of DDD to stakeholders involved in its implementation should be understood and documented. For example, by increasing foot traffic of PLHIV clients to private sector facilities, the private sector facilities may see an increase in their business due to other pharmaceutical and non-pharmaceutical commodities available for purchase to the PLHIV clients during their ARV refill appointments.

A central lead for discussions on the financial model and to guide implementation of the best financial model should be identified through engaging various stakeholders, preferably through a TWG.



### Tip

**Strategies to improve cost-efficiency or lower the cost of service is critical in planning towards financial sustainability of interventions. Organizing multiple entities into stronger bargaining units (franchising) is one such strategy. For example, when private health facilities and other service delivery sites are organized into a single network, they can leverage their collective scale of demand to negotiate lower prices, thus lowering the cost of HIV care which can lead to more affordable pricing for clients. Lowering costs to provide health services can contribute to its sustainability.**

Engagement of the ministry of finance and DDD clients in these discussions should be strongly considered. Several options can be explored, and any unique, domain-specific opportunities should be identified. Some examples of financial models include:

- **Client-paid (out-of-pocket) fee for service:** It has been established in several countries that many clients are willing and capable of paying for decentralized services. Programmatic data from the EpiC project has found that 44-90% of PLHIV in four sub-Saharan Africa (Annex 1) indicated willingness to pay for decentralized services between \$0.05-9.11 per ARV refill visit. Willingness to pay by clients and the appropriateness of client-paid service fee models vary from country to country and may not be appropriate in some domains.
- **Partnership model:** Governments may decide to establish partnerships with entities with no fee payments to community partners, private sector or otherwise, to provide decentralized services. For the private sector, there is a potential that the increase in foot traffic from people living with HIV may contribute to increased business. While this could be an incentive enough for the private sector to participate in the model, there may be challenges in negotiating for expansion of the package of services made available as additional services increases private sector workload.
- **Public-sector paid contracting:** Service fees can also be paid by the public sector from the MOH budget. Service fees can be negotiated between decentralized service providers and the MOH based on frequency, amount, or any other type of compensation. This financial model may necessitate annual budget negotiations and advocacy.
  - » **Tax breaks and other government fee reductions or benefits:** Public-sector paid contracting models are not limited to direct payments and can include other types of compensation include tax breaks, reduction of business fees, support for infrastructure and utilities, business loans, and specific licensing or certification among others. Each country should explore potential areas of negotiation that could be leveraged to determine a sustainable contract and partnership with community and private partners.
- **Social or private health insurance schemes:** Overall HIV treatment costs can be negotiated to be incorporated into packages offered under health insurance schemes, including DDD pick-up fees.

## CASE EXAMPLE



### Financial models determined through TWGs in Liberia

Stakeholders engaged in designing the private pharmacy model in Liberia settled on a no-fee model where private pharmacies provide ARV refills to PLHIV clients at no cost. While initial buy-in on the arrangement took time, after a few months of implementation the private pharmacists were well-engaged in the model and in some (anecdotal) cases, private pharmacists provided transport fees for clients who were struggling to arrive at the pharmacies. In one city, the program enrolled over 2,500 clients in the private pharmacy model as of June 2024.

## CASE EXAMPLE



### **Perceived advantages of participating in DDD among private providers in Mozambique**

In Mozambique, through qualitative interviews, advantages perceived by private pharmacy providers for participating in DDD was documented. Perceived advantages included gaining new skills and training in HIV service delivery; obtaining the capacity to support the overloaded health facilities and efforts towards HIV epidemic control and support health facilities; and training of public sector data and supply chain systems which gave private providers transferrable skills if they switch to public sector positions.

## CASE EXAMPLE



### **Transitioning financial support for CBO-provided HIV services from international funding to domestic government reimbursement in Thailand**

EpiC, in Thailand FHI 360 supported the transition of HIV services from international funding sources to domestic government reimbursement from Thailand's National Health Security Office (NHSO). To achieve this transition, implementation science and advocacy efforts for the revision of the Ministry of Public Health's regulations to allow key population lay providers to perform key HIV service delivery tasks, such as HIV testing and PrEP, was provided. To begin, local and national Thai government counterparts set quality standards for HIV counseling and testing services and allowed select community-based organizations (CBOs) to deliver HIV services. Government counterparts then conducted yearly audits of local CBOs' HIV testing and counseling activities. LINKAGES Thailand worked with local health care providers to conduct training and provide follow-up mentoring where deficiencies were identified.

Over time and through implementation science, CBOs improved and maintained the quality of HIV services and generated recognition from health sector partners for community-based HIV service delivery, which led to CBO partners being accredited as testing clinics by the government and making them eligible to receive NHSO reimbursement for HIV testing and counseling costs. Demonstration of high-quality, community-led HIV testing with the support of the provincial quality assurance/quality improvement (QA/QI) committees additionally helped clear the way for formal regulatory approval of lay-provider testing by the Ministry of Public Health. Once lay providers have completed the training and CBOs have met the HIV/STI quality service standards, they are eligible for direct reimbursement from the NHSO.

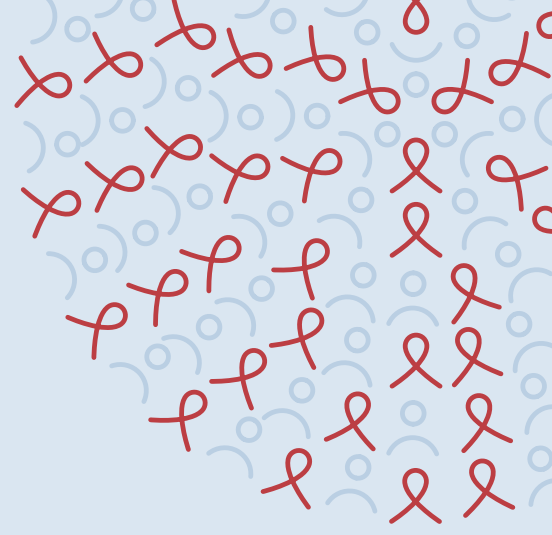
Between October 2018 – September 2019, CBOs supported by FHI 360 to achieve quality standards contributed 52 percent of all HIV testing and 28 percent of case finding among men who have sex with men and transgender people for the entire country.



## DDD KEY CONSIDERATIONS

The key considerations and questions implementers and programs can consider throughout their DDD journey by each of the sustainability domains are summarized below.

DOMAINS FOR SUSTAINABILITY	KEY CONSIDERATIONS
<b>Political leadership and enabling policies</b>	<ul style="list-style-type: none"><li>• Which stakeholders (government departments/ministries, community representatives, private sector entities, etc.) should be engaged?</li><li>• What TWGs and other structures exist to support stakeholder engagement and introduction of and coordination around DDD?</li><li>• What are the policy gaps that must be filled to implement quality and equitable DDD?</li><li>• What are the current political priorities, and how can DDD be aligned to these priorities?</li></ul>
<b>Access to effective and equitable services and systems</b>	<ul style="list-style-type: none"><li>• What is the current landscape of systems to support HIV and other health services (i.e., supply chain, data systems, infrastructure, personnel, referral systems, health integration policies, etc.), and how can DDD be incorporated into existing health systems?</li><li>• How does the design of the DDD model need to be adapted to better align with the existing systems?</li><li>• What roles and responsibilities must be filled by which workforce cadres to support continued and efficient implementation of DDD?</li><li>• Which workforce cadres created and trained for DDD implementation and continued support?</li><li>• What task shifting or task sharing is feasible to support efficient implementation?</li><li>• For which services beyond HIV can DDD serve as a platform for integrated health care to improve efficiencies, service quality, and client-centered care?</li><li>• How can DDD be integrated into the MOH continuous quality monitoring structures?</li><li>• What quality and equity assurance structures (e.g., inclusion of decentralized service delivery points in community-led monitoring) are needed to continuously document client feedback?</li></ul>
<b>Sustainable and equitable financing</b>	<ul style="list-style-type: none"><li>• What are the benefits of implementing DDD or participating in DDD for various stakeholders?</li><li>• What are the associated costs for each of the stakeholders, and how will the costs be covered?</li><li>• Which financial or compensation models should be implemented to ensure effective partnerships and sustainability of the model and of each stakeholder?</li></ul>



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# ANNEX & ENDNOTES

## Annex. 1 Additional Evidence

**Table 1.** Selected results from private pharmacy and clinic surveys (conducted at various points between June 2020 – January 2021)

COUNTRY	SURVEY DATES	# OF PRIVATE PHARMACIES/ CLINICS SURVEYED	% WILLING TO DISPENSE ARVS	% OPEN AFTER 5 P.M.	% OPEN ON SATURDAY AND SUNDAY	% WITH PRIVATE COUNSELING SPACE
<b>Botswana</b>	July – August 2020	43	100%	100%	100%; 88%	100%
<b>Cameroon</b>	November 2020	82	86%	–	98%; 23%	64%
<b>Cote d'Ivoire</b>	September 2020	104	74%	–	–	100%
<b>DRC</b>	July – August 2020	957	100%	85%	98%, 77%	83%
<b>Eswatini</b>	August – September 2020	24	54%	67%	80%; 60%	83%
<b>Liberia</b>	December 2020 – January 2021	198	97%	75%	95%, 35%	60%
<b>Malawi</b>	September – October 2020	28	100%	100%	25%; 80%	96%
<b>Mozambique</b>	June 2020	176	91%	95%	97%; 35%	78%

**Table 2.** Selected results from client surveys (June 2020 – January 2021)

COUNTRY	SURVEY DATES	# OF CLIENTS ON ART INTERVIEWED/ SURVEYED	% INTERESTED IN ACCESSING ARVS AT PRIVATE PHARMACY/ CLINIC	% WHO SPENT OVER 1 HOUR TRAVELLING TO PICK UP ARVS AT HFS	% WHO SPENT OVER 1 HOUR WAITING AT THE FACILITY FOR ARVS AT HFS
<b>Botswana</b>	July – August 2020	61	61%	15%	37%
<b>Eswatini</b>	December 2020 – January 2021	325	72%	14%	17%
<b>Liberia</b>	January 2021	58	78%	59%	92%
<b>Malawi</b>	November 2020	82	72%	60%	73%
<b>Mozambique</b>	June 2020	15	73%	33%	53%

**Table 3.** Willingness to pay results from client surveys and interviews (June 2020 – January 2021)

COUNTRY	INTEREST IN PHARMACY MODEL	WILLING TO PAY A FEE	AMOUNT WILLING TO PAY PER REFILL
<b>Botswana</b> n=61	61%	44%	4.55-9.11 USD twice/year
<b>Eswatini</b> n=325	72%	90%	0.05 – 6.61 USD
<b>Malawi</b> n=82	72%	79%	Avg. 0.64 USD
<b>Mozambique*</b> n=15	73%	~50%	< 0.67 USD

\*Results of qualitative interviews instead of quantitative survey

## ENDNOTES

<sup>i</sup>Understanding client experience and acceptability of a decentralized drug distribution model for antiretrovirals through private pharmacies in Mozambique: a mixed-methods analysis. Poster. Presented at AIDS 2024 – The 25th International AIDS Conference. [https://aids2024.iasociety.org/cmVirtualPortal/\\_iasociety/aids2024/eposters#/PosterDetail/542](https://aids2024.iasociety.org/cmVirtualPortal/_iasociety/aids2024/eposters#/PosterDetail/542).

<sup>ii</sup>Community antiretroviral therapy dispensation in Cameroon associated with improved perceived service quality: a national evaluation. Poster. Presented at AIDS 2022 – The 24th International AIDS Conference. <https://programme.aids2022.org/Abstract/Abstract/?abstractid=6414>.

<sup>iii</sup>Community antiretroviral therapy dispensation in Cameroon associated with improved perceived service quality: a national evaluation. Poster. Presented at AIDS 2022 – The 24th International AIDS Conference. <https://programme.aids2022.org/Abstract/Abstract/?abstractid=6414>.

<sup>iv</sup>Moiana Uetela DA, Zimmerman M, Chicumbe S, et al. Cost-effectiveness and budget impact analysis of the implementation of differentiated service delivery models for HIV treatment in Mozambique: a modelling study. *Journal of the International AIDS Society* 2024; 27:e26275. Available from: <https://doi.org/10.1002/jia2.26275>.

<sup>v</sup>James B, Moses B, and Yacobson I. Decentralized distribution of antiretroviral therapy through the private sector. A strategic guide for scale up. Meeting Targets and Maintaining Epidemic Control Project; 2019. Available from: <https://www.fhi360.org/sites/default/files/media/documents/epic-project-strategic-guide-scale-up.pdf>.

<sup>vi</sup>UNAIDS. HIV response sustainability roadmap – Part A companion guide. Geneva: UNAIDS; 2024. Available from: [https://www.unaids.org/sites/default/files/media\\_asset/hiv-response-sustainability-roadmap-part-a-companion-guide\\_en.pdf](https://www.unaids.org/sites/default/files/media_asset/hiv-response-sustainability-roadmap-part-a-companion-guide_en.pdf).

<sup>vii</sup>World Health Organization. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: WHO; 2016. Available from: <https://www.who.int/publications/i/item/9789241511124>.

