Private Sector Delivery Opportunities for the Dual Prevention Pill: Kenya, South Africa and Zimbabwe

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HALCYON

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Abbreviations

AGYW	Adolescent Girls and Young Women	MOHCC	Ministry of Health and Child Care
AI	Artificial Intelligence	MOSAIC	Maximizing Options to Advance Informed Choice for HIV Prevention
AIDS	Acquired Immuno Deficiency Syndrome	MPT	Multi-Purpose Prevention Technology
ART	Anti-Retroviral Therapy	NACOSA	National AIDS Committee of South Africa
ATM	Automated Teller Machine	NASCOP	National AIDS and STI Control Program
BMGF	Bill & Melinda Gates Foundation	NATPHARM	National Pharmaceutical Company
		NGO	Non–Governmental Organization
CARG	Community ART Refill Group	NHI	National Health Insurance Scheme
CBO	Community Based Organization	NHIF	National Health Insurance Fund
CeSHHAR	Centre for Sexual Health and HIV/AIDS Research Zimbabwe	NIMART	Nurse Initiated Management of ART
CHAI	Clinton Health Access Initiative	NPPPTWG	National HIV/AIDS, STI and TB Public Private Partnership Technical Working Group
CHW	Community Health Worker	OPHID	Organization for Public Health Interventions and Development
CIFF	Children's Investment Fund Foundation	PEP	Post-Exposure Prophylaxis
CPA	Community Pharmacies Association	PEPFAR	U.S. President's Emergency Plan for AIDS Relief
cRCT	Cluster Randomized Control Trial	PHRD	Partners in Health Research and Development
DHS	Demographic and Health Survey	PPB	Pharmacy and Poisons Board
DPP	Dual Prevention Pill	PPDRM	Public-Private Drug Refill Model
D2C	Direct to Consumer	PPP	Public Private Partnership
EHR	Electronic Health Record	PrEP	Pre–Exposure Prophylaxis
EC	Emergency Contraceptives	PSH	Population Services for Health
FBO	Faith Based Organization	PSMI	Premier Service Medical Investments
FP	Family Planning	PSZ	Population Services Zimbabwe
F&Q	Forecasting & Quantification	SAMRC	South African Medical Research Council
GP	General Practitioner	SMS	Short Message Service
HIV	Human Immunodeficiency Virus	SOP	Standard Operating Procedure
HPCSA	Health Professions Council of South Africa	SRH	Sexual and Reproductive Health
ICPA	Independent Community Pharmacies Association	SRHR	Sexual, Reproductive Health and Rights
IDI	In-Depth Interview	STI	Sexually Transmitted Infection
JKUAT	Jomo Kenyatta University of Agriculture and Technology	STM	Short-Term Method
KEMRI	Kenya Medical Research Institute	TASQC	Target, Accelerate and Sustain Quality Care
KEMSA	Kenya Medical Supplies Authority	TPT	Tuberculosis Preventive Treatment
KII	Key Informant Interview	TWG	Technical Working Group
KMET	Kenya Medical and Education Trust	UZ -CRTU	University of Zimbabwe–Clinical Trials Research Unit
KMPDC	Kenya Medical Practitioners and Dentist	VCAT	Values Clarification for Action and Transformation
KP	Premier Service Medical Investments	VHW	Village Health Worker
LARC	Long Acting and Reversible Contraceptive	VMMC	Voluntary Medical Male Circumcision
LVCT	LVCT Health	WHO	World Health Organization
MDPPZA	Medical and Dental Private Practitioners of Zimbabwe Association	Wits RHI	Wits Reproductive Health and HIV Institute
M&E	Monitoring and Evaluation	ZACH	Zimbabwe Association of Church Related Hospitals
MIS	Management Information System	ZHI	Zimbabwe Health Interventions
MOH	Ministry of Health	ZNFPC	Zimbabwe National Family Planning Council

Clarifications on the private sector delivery channels

It is important to firstly provide some clarifications on the private sector "delivery channels" that are covered throughout this report. The focus of the assessment was to scope private sector delivery channels in Kenya, South Africa and Zimbabwe, with a greater focus on certain channels, specifically pharmacies, mobile health, direct to consumer (D2C) and other approaches including community distribution.

As summarized in Table i, some of the "delivery channels" do physically deliver health services and products, including pre-exposure prophylaxis (PrEP) and oral contraceptives (OCs), and therefore offer potential to deliver the dual prevention pill (DPP) and potentially other multi-purpose prevention technologies (MPTs). Such channels can be considered as "supply-side delivery channels" and including pharmacies, clinics and others outlined in Table i. However, other "delivery channels" such as telehealth or telemedicine do not always physically deliver health services and products, including PrEP and OCs. These "demand-side delivery channels" create demand for and/or prescribe and refer clients to other supply-side delivery channels for OCs and PrEP. As described in the report, these channels play an important role in supporting the delivery of OCs and PrEP and should play an important role in supporting the delivery of the DPP and other MPTs, but they should not be considered the same as supply-side delivery channels.

Table i. Distinctions between supply-side and demand-side channels that can support the delivery of the DPP, and other MPTs

Delivery channel distinctions	Channel	Definition
Supply-side Channels that currently physically deliver OCs and PrEP, and could therefore physically deliver the DPP and other MPTs	**Pharmacy**	A physical private shop or dispensary where medicinal drugs are prepared or sold to clients over the counter. The drugs and health products that a pharmacy can provide differs between countries and is dependent on national laws and regulations.
	E-pharmacy	A virtual shop or dispensary where drugs and products are prepared or sold online and dispensed by direct delivery to clients through various means including post, courier service and other newer methods such as "drop-off lockers." The drugs and health products that an e-pharmacy can provide differs between countries and is dependent on national laws and regulations.
	D2C	The selling of health products and some products directly to customers, thereby bypassing any third-party and typically making it quicker and more efficient for clients. D2C includes several channels including pharmacies and e-pharmacies that deliver product as well as others such as telehealth.
	Community distribution	The distribution of health products and services by a trained community health worker. This is the lowest level of health care and the services and products that can be provided differs between countries and is dependent on national laws and regulations.

	Mobile outreach	The physical delivery of health services and products to communities that are typically more remote and harder to reach. Mobile outreach is typically delivered by trained medical providers who move between locations and interim or pop-up clinics.
	Non-Governmental Organization (NGO)	Not-for-profit organizations that provide health services through numerous channels, including hospitals and clinics, mobile outreach services, community distribution and, in some cases, provide support to other private providers such as franchised networks. Many NGOs provide health services in urban and semi-urban areas.
	Faith-Based Organization (FBO)	Similar to NGOs, except their delivery channels are supported by an organization that is driven by their faith and religious beliefs. Unlike NGOs, FBO tend to operate in rural areas where they provide essential services. Some faiths may not support certain health services to be provided, for examples Catholic FBOs may not offer family planning (FP).
	Networked private providers	A group of private clinics and hospitals that make up an association or network. Such networks can be run by one company which runs several clinics or hospitals, or they can be part of private sector associations.
	Social franchise clinic	Private clinics that are part of a branded and franchised chain or network. Typically these private networks are supported by a third party, which is often an NGO.
	Telemedicine (South Africa only)	A sub-set of telehealth which focuses on use of telecommunication and information technology for the purpose of providing remote health assessments and therapeutic interventions. In South Africa, some telemedicine companies are also dispensing pharmaceutical products including FP commodities, as well as PrEP.
Demand-side Channels that currently create demand for and/or prescribe and refer clients to other physical delivery channels for OCs and PrEP, and potentially the DPP and other MPTs	**Telehealth**	The provision of healthcare remotely by means of telecommunications technology. Includes a wide range of providers and channels that support the consultation, referral and delivery of services and products, such as mobile apps, online training for health workers and consultations with online medical providers. Telehealth is not typically a delivery channel as it does not actually provide the physical service or product, but refers and prescribes to clients who then obtain a service elsewhere.
	Telemedicine	A sub-set of telehealth which focuses on use of telecommunication and information technology for the purpose of providing remote health assessments and therapeutic interventions.

It is important to also note that not all channels are distinct and standalone in all cases; there is a lot of integration and mixing of the channels and approaches. Such distinctions are important to note early in this report in order to ensure clarity in the full findings, analysis and recommendations. For example, some NGOs run their own networks of private sector clinics and support networks of social franchised clinics and may increase demand for services and products through telehealth and telemedicine channels. Many FBOs also support large networks of clinics as well provide healthcare through community distribution and mobile outreach. E-pharmacies rely heavily on approaches that are very closely related to telehealth and telemedicine.

Going further and as shown in Table ii, while community distribution and mobile outreach channels can be seen as D2C channels, many of them may not deliver a full range of FP services and products, or PrEP, and they are often linked to other indirect channels such as an NGO or FBO. Other channels that are less direct and more reliant on a third-party, include NGOs, FBOs, networked private providers (clinics and hospitals) as well as those that are socially franchised. D2C incorporates several channels including pharmacies and e-pharmacies that deliver product as well as others such as and telehealth and telemedicine.

Table ii. The scoped private sector channels viewed as D2C and indirect categories

D2C						Indirect to consumer/access through a third party			
Pharmacy	E-pharmacy	Tele-health	Tele-medicine	Community distribution	Mobile outreach	NGO	FBO	Networked private providers	Social franchise clinic

Legend	Full D2C channel	Partial D2C channel

1.Executive summary

This scoping report provides an updated assessment of the private sector delivery options for the dual prevention pill (DPP) in the three countries that are targeted for the initial roll out of the DPP: Kenya, South Africa, and Zimbabwe. The report builds upon previous assessments and analysis that the DPP Consortium[1] have carried out recently, specifically the *Service Delivery Strategy for the DPP* (Kenya, South Africa and Zimbabwe) and the *Private Sector Analysis for the DPP* (Kenya and South Africa) from 2020, and the *Market Preparation and Introduction Strategy* in 2021. The findings from this scoping assessment will be used to guide the development of the forthcoming *DPP Delivery and Financing Strategy,* and the future delivery planning for other multi-purpose prevention technologies (MPTs).

Why this scoping has been carried out Since the initial private sector analysis was conducted in 2020, the evidence on the private sector channels has remained largely fragmented, and Zimbabwe's private sector was also not scoped previously. COVID-19 contributed to the growth of self-care and technology-based private sector channels, including pharmacies, telemedicine, e-pharmacies, direct-to-consumer (D2C) and other innovations. These channels were not extensively scoped previously and were considered as later-phase priorities for the DPP roll out, but have been prioritized for this scoping assessment as they could present greater and more immediate "get-ahead" opportunities for the delivery of the DPP than previously thought. Lastly, since the previous private sector landscaping, new and important pilot studies on pre-exposure prophylaxis (PrEP) are underway, which could inform the delivery of the DPP through pharmacies and e-pharmacies earlier than previously anticipated.

Methodology A mixed methods approached was used to carry out the scoping. A comprehensive desk review of the available literature and data was complemented by in-country primary data collection and scoping of the private sector channels. The scoping explored the main private sector delivery channels, but focused more deeply on pharmacies, telemedicine, e-pharmacies, D2C and other innovations. The scoping also considered other cross-cutting themes, which are critical to the delivery of the DPP, including: policy and regulation; public-private coordination; monitoring and evaluation (M&E); supply chain; financing, and; scalability. Eighty-five interviews were held with key informants in Kenya, South Africa and Zimbabwe, and some at the regional and international levels. Interviews were held with national and sub-national governments, especially Ministries of Health (MoH) and their departments responsible for Family Planning (FP) and HIV prevention, as well as donors, technical implementing partners and key private sector organizations and representatives.

Data gaps While the landscaping has extensively scoped the private sector channels, it has not been possible to obtain comprehensive private sector data for all channels. Private sector data is often not captured within national health management information systems (HMIS) that are coordinated and managed by the public sector. This means that for some channels, especially the newer channels that are not as integrated into the national system, data on the quantity and types of products sold remains speculative. In addition, private sector channels are often reluctant to share data externally as such

1 The DPP Consortium is coalition of organizations, including AVAC, CHAI, Mann Global Health, Viatris and the Population Council, that are implementing market preparation and introduction activities for the DPP. These efforts are supported by CIFF, the Bill & Melinda Gates Foundation (BMGF), the U.S. Agency for International Development (USAID) and WCG Cares.

information is often seen as business-sensitive intelligence. In other instances, there are financing information gaps, including on the willingness of consumers to pay for the DPP and data on the financing options for recommended channels. Gaps in data will, to the best extent possible, be addressed during the development of the forthcoming *DPP Delivery and Financing Strategy*.

Recommended channels Opportunities for many private sector channels to deliver the DPP are greater and more immediate in all countries than was previously scoped in 2020. It is possible that some private sector channels which were previously recommended for phase 2 roll out (2025 - 2026) could be included earlier alongside the public sector roll out in phase 1 (2024 - 2025). The priority channels are listed in Table 1. Summaries and recommendations are provided below.

Table 1. Recommended private sector delivery channels for the DPP

Kenya	South Africa	Zimbabwe
1. Pharmacies 2. E-pharmacies 3. Networked private providers 4. Telehealth	1. Pharmacies 2. Telemedicine 3. Networked private providers	1. Pharmacies 2. Networked private providers 3. Public-private provider models

Pharmacies offer discreet and confidential services, often which are quicker and lower in cost than clinics. In all countries, pharmacies serve as an important and at-scale frontline channel that is highly popular with clients. In Kenya and South Africa, there are important pilot studies underway that are exploring the feasibility and preferred delivery options for PrEP provision through pharmacies. In Kenya and South Africa, new models that incorporate technology innovations such as artificial intelligence (AI) are being used to verify HIV self-testing for PrEP dispensing. In South Africa, the roll out of Pharmacist Initiated Management of Anti-Retroviral Therapy (PIMART) and an expanded FP scope of practice for pharmacists allowing initiation of OCs are significant opportunities for the DPP. More than 1,000 pharmacists are already trained and in excess of 300 pharmacies are initiating PrEP. In Zimbabwe, the Community Pharmacies Association (CPA) is in advanced stages of engaging the MoH on task-shifting for PrEP initiation to pharmacists. Pharmacies already distribute OCs widely.

Headline recommendations:

a. Support Jhpiego's advocacy with the government to increase support for pharmacy-based delivery and modifying task sharing guidelines to allow pharmacists to prescribe PrEP (Kenya, 2022-2023)
b. Support the Southern Africa HIV Clinicians Society (SAHCS) and Independent Community Pharmacies Association (ICPA) to defend PIMART against its current court case (South Africa, 2022)
c. Advocate for inclusion of DPP training module into PIMART training. Work with SAHCS and ICPA to advocate for the inclusion of DPP training into PIMART training and certification (South Africa, 2023)
d. Engage with CPA to support task-shifting policy development (Zimbabwe, 2022-2023)

E-pharmacies are increasing in size and scope across Kenya and they make up a quickly growing and increasingly important private sector channel for SRH and HIV products including OCs, emergency contraception (EC), HIV self-test kits, post-exposure prophylaxis (PEP) and PrEP. E-pharmacies are available 24/7 and deliver products across the country. Some e-pharmacy networks such as MyDawa, now sells 25% of all HIV self-test kits in country and therefore shows a strong market for prevention products through their platform.

Headline recommendations:

a. Advocate for the progressive eHealth Bill to become law by partnering with e-pharmacy organizations, partners and pharmacy representation bodies (Kenya, 2022-2023)
b. Advocate for coverage of HIV and FP services and task-shifting to pharmacists covered in regulations for virtual services (Kenya, 2022-2023)
c. Increase interest in the DPP delivery by engaging with e-pharmacy networks and promising models and organizations (Kenya, 2022)
d. Support e-pharmacies and the MoH to engage more on the delivery of PrEP and the DPP, sharing data on sales, reach and future plans (Kenya, 2022-2023)

Telehealth and telemedicine In Kenya, telehealth (including telemedicine, demand creation and counselling) is a rapidly growing sector. There are currently around 40 providers with countrywide reach – a significant increase from only 10 providers in 2020. Telehealth platforms do not currently dispense but are a key entry point for service provision and referrals to physical pharmacies or e-pharmacies for FP, sexually transmitted infections (STI) and HIV services, such as PEP and PrEP. However, some platform such as Zuri Health is in the process of obtaining a license that will enable them to consult and dispense, which could pave the way for other telehealth platforms to also dispense in the near future. In South Africa, online telemedicine allows virtual consultations between a clinician and client, with a growing number of dispensing commodities directly to consumers. Telemedicine platforms are widely accessed and offer a rapidly growing market that is accessible countrywide and provides FP and HIV products. Whilst PrEP is not currently offered through telemedicine in South Africa, providers interviewed indicated that they are considering offering it in the future.

Headline recommendations:

a. Advocate for the eHealth Bill to become law by partnering with telemedicine organizations (Kenya, 2022-2023)
b. Support discourse to strengthen discussions with public sector on updating 2014 telemedicine guidelines and regulations to ensure delivery advances seen during COVID-19 continue (South Africa, 2022-2023)
c. Improve data availability by working with local partners to gather data on telemedicine providers on current OC, EC, HIVST, STI, PEP and PrEP consultations and referrals (Kenya and South Africa, 2022)
d. Get telehealth to participate in national dialogues and share data in planning processes to increase support from the governments including technical working groups (TWGs), forecasting and quantification (F&Q) meetings and annual planning (Kenya and South Africa, 2022-2023)

Networked private providers are important delivery channels in each country. In Kenya and Zimbabwe the networked providers includes social franchised clinics, non-governmental organization (NGO) and faith-based organization (FBO) clinics, including their community health worker and mobile outreach initiatives, as well as private provider clinics. In South Africa, NGO, FBO and social franchised clinics are less prevalent than private for-profit networks. In all cases, networked private providers are significant in number and have reach across most of the countries, including in some rural areas. They have strong relationships with the national and sub-national governments and are increasingly integrating PrEP into the delivery of other health services. In Kenya, newer networks of private providers are also increasing and which offer lower-cost services than traditional private provider networks. Telehealth is also increasingly supporting networked private providers through referrals. In

South Africa, important private provider models exists, such as the general practitioner (GP) Care Cell pilot between private GPs and the National Health Insurance (NHI) scheme which is a model of contracting private GPs to provide HIV services on behalf of the Department of Health (DoH) using government stock of commodities, including PrEP. SAHCS has created an accredited GP provider network which currently has over 1,800 private sector doctors and have also developed digital solutions enabling pharmacists and doctors to interact with patients remotely. In Zimbabwe, networked private providers deliver integrated FP and HIV services, including PrEP, to key populations but there are opportunities to expand to the general population.

Headline recommendations:

a. Increase interest in DPP delivery by engaging with private provider networks and promising models and organizations (all countries, 2022)
b. Increase interest among private provider networks in PrEP delivery to the general population (South Africa, 2023)
c. Use GP Care Cell results to advocate for inclusion and scale–up of private GPs to provide PrEP to NHI clients (South Africa, 2023)
d. Start advocating for the DPP inclusion in NHI by partnering with networked private provider networks (Kenya, 2023)
e. Address provider bias through client-centered care training of selected private providers in preparation for rollout (all countries, 2023)

Public private partnership (PPP) models

In Zimbabwe, the promotion and use of PPP models are increasingly important and offer a potential delivery channel for the roll out of the DPP. A de-medicalization of OCs and distribution of MoH commodities through private sector channels has been successful and could be replicable for the DPP. Some donors, such as USAID/PEPFAR, are actively supporting PPP models for HIV epidemic control which the DPP could build from. While there are no PPP models for PrEP yet, pilot projects are starting for antiretroviral therapy (ART) delivery and which will generate lessons that can be used in scale-up of PrEP or roll out of the DPP such as the Organization for Public Health Interventions and Development's (OPHID's) public-private drug refill model project. The Maximizing Options to Advance Informed Choice for HIV Prevention (MOSAIC) project is focused on creating PPPs for the provision of PrEP, so pilot models will be developed.

Headline recommendations:

a. Closely follow PPP models for lessons learnt to apply to the DPP rollout (Zimbabwe, 2022-2024)
b. Consider supporting specific PPP pilot models of integrated FP/PrEP delivery that would pave the way for the delivery of the DPP and other MPTs (Zimbabwe, 2023-2024)

Conclusions and next steps

This scoping indicates that the opportunities for the private sector delivery of the DPP in the three focus countries is greater and more immediate than previously considered. Pharmacies and private provider networks that were previously recommended for phase 2 delivery offer good potential to be introduced in phase 1 (2024 – 2025), as do e-pharmacies, telehealth and telemedicine in Kenya and South Africa. However, deeper analysis of the recommended private sector models with more data will be important. The forthcoming *DPP Delivery and Financing Strategy* will address these considerations to confirm which private sector channels can be introduced in phase 1.

2. Introduction

This section of the report provides a short summary on why the scoping of the private sector has been carried out, the methodology and limitations.

2.1 The importance of the private sector for the delivery of the DPP

Since the initial private sector analysis was conducted in 2020, the evidence on the private sector channels has remained largely fragmented, and Zimbabwe's private sector was also not scoped previously. COVID-19 contributed to the growth of self-care and technology-based private sector channels, including pharmacies, telemedicine, e-pharmacies, direct-to-consumer and other innovations. These channels were not extensively scoped previously and were considered as later-phase priorities for the DPP roll out, but have been prioritized for this scoping assessment as they could present greater, more immediate "get-ahead" opportunities for the delivery of the DPP than previously thought. Lastly, since the previous private sector landscaping, new and important pilot studies on PrEP are underway, which could inform the delivery of the DPP through pharmacies and e-pharmacies earlier than previously anticipated.

Key highlights of the DPP Consortium's previous findings, 2020 - 2021

Whilst HIV and FP clinics were identified as having the greatest potential to deliver and scale the DPP in the public sector, NGO models and private pharmacies showed the most potential in Kenya and South Africa, and mobile clinics and private pharmacies showed the most potential in Zimbabwe. These channels were recommended for phase 2 roll out (2025 – 2026). Private providers, D2C, telehealth and community distribution were recommended for phase 3 roll out (2026+).

2.2 Scope of the assessment

This assessment has been carried to better understand the emerging evidence and promising practices for delivering PrEP in the private sector and implications for the DPP to better align with OC delivery approaches. The assessment will refine the DPP service delivery strategy to reflect advances in the private sector, telemedicine, D2C and other novel approaches, including community-based distribution, in Kenya, South Africa and Zimbabwe. Findings provide up-to-date and on-the ground insights and experiences with PrEP and OCs, present localized views and opinions and scope prioritized private sector channels. These will support the development of a future *DPP Delivery and Financing Strategy*, which will to commence later in 2022, and provide important learnings and experiences which can support the roll out of other MPTs.

2.3 Methodology summary

A mixed-methods approached was used to carry out the scoping. A comprehensive desk review of the available literature and data was complemented by in-country primary data collection and scoping of the private sector channels. The scoping explored the main private sector delivery channels, but focused more deeply on pharmacies, telemedicine, e-pharmacies, direct-to-consumer and other innovations. The scoping also considered other cross-cutting themes, which are critical to the delivery of the DPP, including: policy and regulation; public-private coordination; M&E; supply chain; financing, and; scalability. Eighty-five interviews were held with key informants in Kenya, South Africa and Zimbabwe, and some at the regional and international levels. Interviews were held with national and sub-national governments, especially MoH and their departments responsible for FP and HIV prevention, as well as donors, technical implementing partners and key private sector organizations and representatives.

2.4 Methodology limitations

While the landscaping has extensively scoped the private sector channels, it has not been possible to obtain comprehensive private sector data for all channels. Private sector data is often not captured within national HMIS that are coordinated and managed by the public sector. This means that for some channels, especially the newer channels that are not as integrated into the national system, data on the quantity and types of products sold remains speculative. In addition, private sector channels are often reluctant to share data externally as such information is often seen as business-sensitive intelligence. In other instances, there are financing information gaps, including on the willingness of consumers to pay for the DPP and data on the financing options for recommended channels. Gaps in data will, to the best extent possible, be addressed during the development of the forthcoming *DPP Delivery and Financing Strategy*.

3. Cross-country analysis

This section of the provides a summary of findings, themes and analysis that cut across the three scoped countries.

The opportunities for the delivery of the DPP, and potentially other MPTs, across the three counties are summarized in Table 2. Table 2 also summarizes all the private sector channels that have been scoped and assessed, including against key market criteria that are critical for the roll out of the DPP, such as financing, and other criteria such as scalability.

Notes on the inclusion criteria presented in Table 2

a. **Overall opportunity** Whether or not the delivery channel is recommended or not for each country
b. **Policy and regulation** The formal policies, strategies, plans, regulations and guidelines that are in place to support the effective delivery of PrEP and OCs, the DPP and other MPTs
c. **Public-private coordination** The extent to which the public and private sector actively and effectively plan and coordinate their activities to support the delivery of PrEP and OCs, and the extent to which they might coordinate around the DPP and MPT delivery
d. **M&E** The extent to which market data on PrEP and OCs is currently being monitored, tracked and available - and subsequently shared and used to improve overall delivery
e. **Supply chain** The availability of PrEP and OCs through the public and private sectors, and the overall strength and reliability of the country's supply chain system
f. **Financing** The extent to which the DPP will need to be subsidized in order for demand and use of the product to be significant
g. **Scalability** To what extent the delivery channel could be scaled (depending on and incorporating a range of factors including the pricing of product, continued support from donors, the extent to which markets remain balanced and healthy, and several other considerations)
h. **Sustainability** To what degree the channel is or might be financially sustainable in the future (depending on and incorporating a range of factors including the pricing of product, continued support from donors, the extent to which markets remain balanced and healthy, increased, and maintained demand for products, among others)
i. **Geographic coverage** To what extent the channel reaches across the country, including urban and rural locations and clients

Kenya and South Africa currently offer the most options for delivering the DPP, and potentially other MPTs, though the private sector as both counties have a larger and more diverse number of private sector options than Zimbabwe. In addition, the number of private sector channels, especially including new technology-driven innovations, are greatest in South Africa, followed by Kenya, although such channels do not exist yet in Zimbabwe. In Kenya, pharmacies, e-pharmacies and private networked clinics (including social franchise clinics, FBOs and mobile outreach) emerge as the priority channels for delivering the DPP and other MPTs, supported by a growing and important telehealth channel. In South Africa, pharmacies are also prioritized, as well as private networked clinics (not including social franchise or FBOs) and a very large and critical telemedicine channel that delivers PrEP. In Zimbabwe, private pharmacies, networked clinics and PPP models and prioritized.

Table 2. Snapshot of the delivery channels in each country, combined with market and other key criteria and considerations

		Scoped delivery channels																														
		D2C channels																		Indirect to consumer/ access through a third party												
		Pharmacy			E-pharmacy			Telehealth			Tele-medicine			Community distribution			Mobile outreach			NGO			FBO			Private network clinics			Social franchise networks		
Country		Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim	Ken	SA	Zim
Recommended for DPP delivery																																
Market considerations	Policy and regulation																															
	Public-private coordination																															
	M&E																															
	Supply chain																															
	Financing																															
Other key criteria	Scalability																															
	Sustainability																															
	Geographic coverage																															

Legend	Ken = Kenya	SA = South Africa	Zim = Zimbabwe	Recommended channel for the delivery of the DPP/performs highly against market criteria and other key criteria	Has potential, but not currently a recommended channel for the delivery of the DPP/performs averagely against market criteria and other key criteria	Does not currently have much potential and not recommended for the delivery of the DPP/performs poorly against market criteria and other key criteria

3.1 Policy and regulation

As shown in Table 3, the regulations on which cadres of staff can provide OCs and PrEP varies between countries, and also varies when compared with the WHO guidelines. This means that for countries with more medicalized environments in which task-sharing has not been actioned, the potential for which providers can and cannot provide the DPP will be more challenging.

Table 3. Summary of which cadres of providers can provide OCs and PrEP in each country

	Kenya		South Africa		Zimbabwe	
	Prescribe	**Dispense**	**Prescribe**	**Dispense**	**Prescribe**	**Dispense**
OC	Doctors Nurses Midwives *Pharmacists are not allowed to prescribe but it is easy to bypass	Doctors Nurses Midwives Pharmacists Community Health Workers (CHWs) (refills)	Doctors Nurses Pharmacists with expanded FP permit	Doctors Nurses Pharmacists	No prescription required	Doctors All categories of nurses & midwives Pharmacists CHWs (refills)
PrEP	Doctors Nurses Midwives Clinical Officers	Doctors Nurses Midwives Clinical Officers Pharmacists	Doctors NIMART* trained nurses Nurses with PIMART** permit Pharmacists with PIMART permit	Doctors Nurses Pharmacists	**Public sector:** Doctors All categories of nurses (long as they are trained on HIV care and treatment) **Private sector:** Doctors only	Doctors Nurses Pharmacists

* NIMART – Nurse Initiated Management of ART
** PIMART – Pharmacist Initiated Management of ART

In Kenya, e-pharmacies require additional regulation. They will ultimately be regulated by a new eHealth Bill which has been developed and gazetted but not yet passed into law. However, there is currently no regulatory framework for e-pharmacies to abide by, leaving the industry open to risky practices and concerns over sustainability. Specific guidelines are also planned to guide the actual operations of the e-pharmacies but are not yet in place.

Over the last two years in South Africa, there have been two significant changes in pharmacy regulations that will guide how OCs and PrEP can be accessed through pharmacies. When fully effected, these changes will have positive implications for the roll out of the DPP and other MPTs.

In 2019, the government printed the PIMART gazette allowing pharmacists to dispense first-line ART drugs, including PEP and PrEP. The SAHCS has developed a curriculum and online training course to enable pharmacists and pharmacy nurses to prescribe and initiate ART, PEP and PrEP. Once they have passed the course, they must apply for and receive a PIMART permit, which once granted, allows a pharmacist or nurse to screen individuals for ART, PEP or PrEP. Unfortunately, the DoH put a hold on PIMART as it was being rolled out, due to a court case that was raised at the end of 2021 by a group of

GPs who are against pharmacists being allowed to initiate ART, PEP and PrEP as they see it as a duty of doctors and NIMART (Nurse Initiated Management of ART) nurses. While this has been a setback, partners supporting the PIMART program are relatively confident that the court case will not be successful and that PIMART will ultimately be implemented.[2]

In addition to PIMART, the South African Pharmacy Council has refreshed a scope of practice for pharmacists to provide expanded FP services. This allows a pharmacist who has completed supplementary training on FP to obtain a permit to be allowed to prescribe and administer medicines for FP, including OCs, injectables and implants, and perform consultations with patients at a pharmacy or in an approved setting. As PIMART is currently on hold, this cannot yet be implemented but it is expected that once PIMART is allowed to continue that the expanded implementation of FP services by pharmacists will also be initiated.

3.2 Public-private coordination

Formalized, intentional and well-planned coordination is still lacking in all countries, with doubts and limited trust. In all countries, the potential for private sector channels to deliver the DPP and other MPTs will be best realized through more formalized and regular joint planning processes with the MoH, regulatory bodies and HIV control bodies. The opportunity should be taken through forums such as TWGs, used by the implementing partners and donors to bring the public and private sectors together. In all countries, it remains unclear which MoH department would be responsible for the delivery of the DPP and other MPTs as both the FP and HIV departments are partly responsible.

3.3 M&E

In all countries, M&E, especially the tracking of private sector data, as well as the availability and use of good data when it is available, remains constrained. The private sector are typically reluctant to share data as they are often concerned about regulations, competition from other providers as well as potential tax complications. In all countries, systems are not fully established for private pharmacies to report into the national HMIS, and many other channels also do not report data, especially the newer channels such as mobile health and e-pharmacies, or those that are unregulated. In Kenya, for example, anecdotal reports suggest that only two out of the over 40 telemedicine providers currently report any data to the MoH as the systems are cumbersome and time consuming. Without proper reporting systems it will be challenging to engage telemedicine providers in the dispensing of the DPP and other MPTs.

However, some opportunities do exist. NGOs who support the social franchises have strong expertise in M&E and build the capacity of the social franchise sites to report appropriately and accurately through the HMIS. Given their online nature, telemedicine companies have good electronic data and options for reporting could be explored. The systems set up to manage the COVID-19 vaccines through pharmacies in Kenya and South Africa allows pharmacies to receive and report on government commodities, and the model in South Africa and also has a reimbursement feature which allows for payments for subsidies if required. These mechanisms will be an important M&E consideration if the DPP is subsidized and made available in private facilities, as providers will have an incentive to report to obtain their reimbursements of the DPP.

[2] A timeline for the resolution of the court case is not known but it is hoped that it will be resolved during 2022. Whilst waiting for the resolution, pharmacists who have received their permit are still initiating PrEP, with an additional step of using off-site clinicians, contacted via telemedicine to provide the final sign-off on prescriptions.

3.4 Supply chain The supply chains for both OCs and PrEP differ slightly between the focus countries. In Zimbabwe, the government is the main supplier of OCs, including through the private sector, although branded and subsidized supplies of socially marketed OCs are available through pharmacy and clinical channels. Private sector PrEP is not widely found in Zimbabwe, which is largely due to the cost and the availability of free supplies in the public sector. In Kenya, the government supplies the majority of the OCs and commands the largest share of the OC market. OCs are provided by the government to registered private, NGO and FBO clinics who subsequently report to the MoH. There is a thriving private sector supply of OCs in Kenya, both with lower cost and subsidized social marketed variants, to more expensive brands. However, for PrEP, the very high cost in the private sector inhibits demand. Government supplies of PrEP dominate the Kenyan market, and many private sector providers are reliant on governments supplies. South Africa is similar to Kenya, except that the government is a major purchaser and supplier of PrEP. There are more supplies of PrEP available in the private sector than in Kenya, although demand is still low due to high costs.

3.5 Financing of the DPP In all countries, financing is a critical consideration for the future roll out of the DPP, and potentially other MPTs, especially as no willingness-to-pay studies have been conducted yet and delivery cost models will be carried out subsequently.[3] The cost of subsidized and non-subsidized OCs and PrEP in all countries varies significantly[4] – and markets and clients in all three countries are very sensitive to prices. While there are several opportunities to deliver the DPP, and potentially other MPTs, through selected private sector channels, the extent of how effective the DPP will be rolled out, to which clients and to what scale will be highly dependent on aspects relating to financing. Such considerations in addition to the willingness-to-pay include the extent to which the DPP will need to be subsidized in each country and per channel, what the actual purchase and retails costs will be, how these will be financed, and whether or not the DPP and other MPTs could be included in national health insurance service packages.

3.6 Scalability The private sector in all three countries offers significant opportunities for scaling the delivery of the DPP and other MPTs. Private sector channels have nationwide reach and, some networks such as the private pharmacies, have several thousand registered providers in Kenya and South Africa. In all countries, the private networked clinics, including NGOs, FBO, social franchise hospitals and clinics, operate also in the hundreds, and they reach both urban and rural clients. COVID-19 catalyzed the scale-up of innovative delivery models, especially in Kenya and South Africa, where e-pharmacies, telemedicine and telehealth have significantly expanded. These channels have the potential for further scaling, both in terms of their reach nationwide and their breadth of health products they can distribute, including the DPP and MPTs, although distribution points for commodities and mobile phone signal would be required countrywide.

[3] Willingness to pay studies may be planned in subsequent planning phases for the introduction of the DPP. Cost considerations will be explored further in the forthcoming DPP Delivery and Financing Strategy.

[4] Currently the cost of OCs through pharmacies ranges from $1.30 a month for subsidized commodities to $26 for original, branded commodities. HIV self-test kits cost between $4 and $6.5 and PrEP costs between $45 and $80 for a one-month supply, which is very high cost for the vast majority of Kenyans. So a user for both OCs and PrEP would spend between $50 and $77 a month, including HIV self-testing, a significant cost for even those with a higher income or on medical insurance. A previous study done on willingness to pay for PrEP among young adults in Western Kenya found that 61% were willing to pay, with 78% reporting the maximum amount they would pay would be less than $5[4] which is just 11% of the actual current cost.

3.7 Sustainability

Inherently, the private sector, especially the for-profit private sector, aims to be sustainable without external support as it relies on investments and profit to be sustainable. Typically, the older channels tend to be more mature and sustainable, although several channels such as social franchise clinics, NGOs and FBOs are often reliant on donor funds to maintain operations. In all countries, pharmacies are generally sustainable as they are busy, cross-sell multiple products, have low operating costs and can make reasonable margins on many health products. Many of the newer channels, such as e-pharmacies, telehealth and telemedicine in Kenya and South Africa are attracting significant amounts of finances to help scale and sustain commercially-viable businesses – both from donors and private investors. In all three countries, the sustainability of the DPP, and potentially other MPTs, will largely depend on the pricing structures that are allocated and apply at all stages of the manufacturing and supply chain until the products reach end users. It will be critical that realistic and robust sustainability plans are developed in tandem with the DPP delivery and financing strategies and country introduction plans. Equally critical will be complementary and integrated multi-sector coordination and planning, which must include private sector stakeholders.

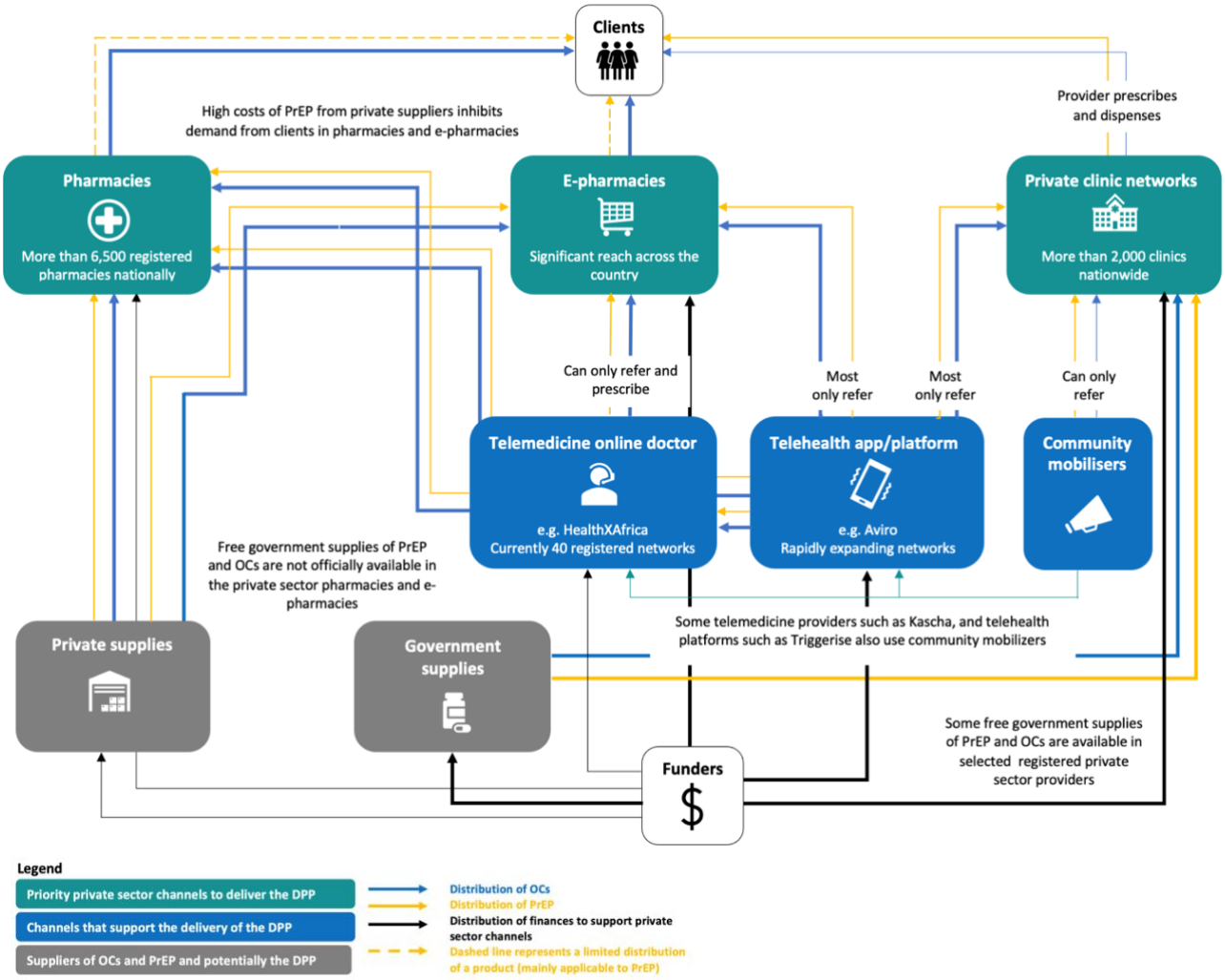
4. Country specific analysis

This section of the report provides specific analysis against the recommended private sector delivery channels for the three scoped countries.

4.1 Kenya

Half of health facilities are either private-for-profit (38%) or run by NGOs and FBOs (12%).[i] Approximately 25% of Kenyans have health insurance covered by private, public or community-based schemes meaning that the majority (75%) end up paying out of pocket. Whilst 57% of OC users access their commodities through the private sector (predominantly pharmacies), this is mostly in urban areas, with 51% accessing OCs through the private sector in urban areas, compared to 29% in rural areas.[ii] OCs, however only account for 14.1% of the modern contraceptive method mix.[iii] PrEP is accessible in all 47 counties, however, the main focus of roll out has been in the high HIV incidence counties. Currently PrEP is almost exclusively delivered at either HIV or FP clinics in the public sector or through NGOs.[5] PrEP and FP service provision remains largely siloed.

Figure 1. Kenya's current PrEP and OC private sector market



[5] Data on the quantities of PrEP distributed through the private sector was not available during the scoping. It is anticipated that the forthcoming *DPP Delivery and Financing Strategy* will gather data on the scale of PrEP distribution through the private sector.

Table 4. Snapshot of the delivery channels in Kenya, combined with market and other key criteria and considerations

		Scoped delivery channels									
		Direct to consumer (D2C)						Indirect to consumer/access through a third party			
		Pharmacy	E-pharmacy	Tele-health	Tele-medicine	Community distribution	Mobile outreach	NGO	FBO	Private network clinics	Social franchise networks
Recommended for DPP delivery											
Market considerations	Policy and regulation										
	Public- private coordination										
	M&E										
	Supply chain										
	Financing										
Other key criteria	Scalability										
	Sustainability										
	Geographic coverage										

Legend	Recommended channel for the delivery of the DPP/performs highly against market criteria and other key criteria	Has potential, but not currently a recommended channel for the delivery of the DPP/performs averagely against market criteria and other key criteria	Does not currently have much potential and not recommended for the delivery of the DPP/performs poorly against market criteria and other key criteria

4.1.1 Priority private sector channels

The private sector scoping has identified the three top channels to deliver the DPP in Kenya to be pharmacies, e-pharmacies and private providers networks, which includes social franchise networks, FBOs and their associated mobile outreach. These three channels are the most important supply-side channels that are central to the physical distribution of OCs and PrEP, and therefore critical to the future roll out of the DPP and potentially other MPTs. In addition, telemedicine is a recommended initiation point and demand-side channel that is important for referring clients to delivery channels.

Priority 1. Pharmacies Pharmacies are considered the first and most important priority for the roll out of the DPP, and other MPTs, in Kenya. Pharmacies are recommended as there are good relationships established between the pharmacies and the MoH during the roll out of HIV self-test kits in pharmacies, which can be built on. There are productive and ongoing engagements between the Pharmacy and Poisons Board (PPB) and pharmacy-related pilot projects, and important research being carried out with pharmacies that will guide the future delivery of the DPP and potentially other MPTs.

There are over 6,500 registered pharmacies in Kenya, with an estimated additional 6,000 unregistered pharmacies or drug shops. Previous household surveys have identified that the first point of contact of about 90% of patients, when confronted with illness, was a chemist or pharmacy.[iv] Pharmacies are spread throughout the country, in all geographic areas and are often based near key transport networks, making them accessible even in rural areas. In the main cities and large towns, there are also several reputable pharmacy chains with multiple branches country-wide, some of which are ensuring they also target "emerging consumers" that they classify as the low to lower-middle income population segments.[v]

Physical pharmacies are typically recognized as a popular choice for FP/HIV services as they provide a greater level of anonymity, are less stigmatizing and can often provide longer operating hours. It is often easier and quicker for clients to obtain certain products from pharmacies than from clinics as waiting times are generally shorter. Clients only have to pay for the medication and not for a consultation, which makes pharmacies a more cost-efficient way for many Kenyans to access healthcare. Clients at pharmacies also feel less scrutinized by staff on aspects of age, appropriateness of products and their behaviors. By providing services such as FP commodities and PrEP, pharmacies can help to decongest public facilities which is an important approach that supports task-sharing and enables essential products to get into the hands of clients quickly and with reduced barriers.

Kenya's private pharmacies can provide a strong entry point for engaging potential users of the DPP – and potentially other MPTs - when clients visit pharmacies to access their FP commodities, PEP or HIV self-tests. The strong potential for pharmacies to deliver PrEP is also recognized and supported by the national government bodies, including the National AIDS and STI Control Program (NASCOP) and the PPB. In early 2020, a PrEP stakeholder meeting was held to specifically develop a pharmacy-based model for delivery of PrEP. This model received strong support from both NASCOP and PPB and led to the development of a care pathway for pharmacy-based delivery of PrEP.[vi] Since the development of this pathway, pilot projects have been developed to test the model, the results of which will have significant implications for the roll out of the DPP through pharmacies – which are presented in the promising practices below.

Table 5. Overview of key market considerations for pharmacies in the distribution of the DPP and other MPTs in Kenya

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Pharmacies are a popular entry point for health care for the majority of the population, including the poorest. Currently distribute OCs, ECs, HIV self-test kits, PEP and PrEP. They are discreet, accessible and are perceived to stigmatize and judge less. Preliminary results of some pharmacy PrEP studies will be presented at AIDS 2022 conference – opportunity for early learnings.	National PrEP guidelines allow dispensing and refilling through pharmacies. Currently PrEP only accessed with a prescription but ongoing pilot studies will influence task shifting to allow pharmacists to initiate PrEP with use of HIV self-test at the pharmacy. OCs should be accessed by a prescription but are accessible without through most pharmacies.	Engagement between PPB and MoH for HIV self-testing through pharmacies and as part of pilot pharmacy PrEP studies. TWGs (PrEP and FP) have recommended inclusion of pharmacy representatives but not yet actioned. PrEP pilot research partners can influence this.	Private pharmacies are not required to report their data through government MIS. Current processes required for reporting are lengthy and time consuming.	Currently procure OCs and PrEP through pharmaceutical wholesalers. Concerns over steady supply chain if commodities come through government systems.	Willingness to pay for the DPP unknown, but previous studies indicate willingness for a heavily subsidized commodity. Without subsidies unlikely to have a high uptake. Subsidies need to consider costs for HIV testing as well as the DPP. Use lessons learnt from Maisha Meds on management of subsidies and costing studies as part of pharmacy PrEP pilots. Cost recovery requirements from service delivery for the pharmacies unknown and needs to be considered to ensure their time and expenses are covered and service provision is also beneficial to them.	Would require significant training and capacity building of pharmacists – consider online trainings and lessons learnt from PIMART in SA. Addition of managing risk assessment, counselling and HIV self-testing prior to initiation could add on a significant time burden to the pharmacists and needs to be considered, as does the space requirements to ensure privacy and confidentiality. Apps such as the Aviro Pocket Clinic could assist with reducing the time burden. Need to consider lessons learnt from pilot pharmacy PrEP studies.	Pharmacies cover the whole country and currently distribute OCs, ECs, HIV self-tests, PEP and PrEP. Roll out of the DPP rand other MPTs could be another FP/HIV service added to those currently offered by pharmacies. Strong pharmacy networks exist as well as coordination of independent pharmacies through the Pharmaceutical Society of Kenya, and platforms such as Maisha Meds.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Promising model 1. Pharmacy network models that offer extended reach of DPP delivery Maisha Meds provides healthcare through a network of 663 pharmacies in the country (around 10% of all registered pharmacies) which provides significant reach to a large proportion of the population, particularly in the peri-urban areas, including for FP and HIV products. Almost 500 of the pharmacies they support are in the Lake Victoria region and western counties where HIV prevalence is the highest. They are building financial and technology platforms that will enable global health funders to pay for health outcomes at the last mile. They focus on malaria case management, injectable contraceptives, prenatal care, HIV pre-exposure prophylaxis, and COVID testing and vaccination. Maisha Meds pharmacies currently sell HIV self-test kits for users to take home and run themselves but they are not involved in any counselling or referrals after a user has tested, although one of their supported pharmacies is part of the PrEP pilot being carried out in Kisumu. With support from CIFF, Maisha Meds manages a digital platform that offers subsidized FP commodities at pharmacies and clinics across Kenya, reimburses providers and tracks their dispensation to verified patients.[6] Through this project, in 2021 Maisha Meds supported technology platforms for 875 facilities which resulted in 2.6 million patient encounters and directly paid for FP care of approximately 30,000 patients in 154 facilities across Kenya.[vii] In addition, Maisha Meds is looking at geographic analysis for efficiency in healthcare subsidies. This targeting project is currently focused on malaria and consolidates data on disease burden, relative wealth and access to healthcare by region to create an index that optimally determines which regions to target and potentially what level of subsidies to provide in various regions. The purpose of this is to make sure that funding is optimized to reach patients who most need the subsidies. The Maisha Meds platform offers good potential for the roll out of the DPP through pharmacies if they were sold at a subsidized rate as their focus is on low-income clients.

Promising model 2. Important research that will inform the delivery of the DPP through pharmacies An initial pilot ran from November 2020 to December 2021[viii] and was funded by the National Institutes of Health and implemented as a collaboration between the University of Washington Seattle, Kenya Medical Research Institute (KEMRI) and Jomo Kenyatta University of Agriculture and Technology (JKUAT)/Partners in Health Research and Development (PHRD). It was implemented by KEMRI in two pharmacies in Kisumu in western Kenya and by PHRD in two pharmacies in Thika near Nairobi with the aim of piloting a care pathway for pharmacy-based PrEP delivery. Some of the outcomes of the first phase focused on PrEP initiation, continuation, feasibility and acceptability of the model. The results (which are not yet publicly available) of this pilot have fed into the design of a six month pilot extension to July 2022, with modifications to address client and provider challenges, policy makers concerns and opportunities for improvement. It is funded by BMGF, and led by Jhpiego. This pilot extension will then lead into a cluster randomized control trial (cRCT) that will continue for three years from 2022 to 2025 and will further evaluate the model of PrEP delivery across 60 pharmacies (30 in Nairobi and neighboring Kiambu and 30 in Kisumu and surrounding counties). The pilot extension has been looking at different aspects of pharmacy initiation of PrEP, including use of HIV self-test kits, transitioning from PEP to PrEP, STI testing uptake and self-administration of a HIV risk assessment screening tool as well as policy and costing implications of PrEP delivery through pharmacies and will inform the design of the cRCT. The cRCT will have multiple phases, the results of which will be disseminated throughout the project by the study partners, and will inform the subsequent phases of the cRCT.

[6] Additional data from Maisha Meds on uptake of FP products & HIV self-test kits currently not available but will be accessed during Phase 2.

Priority 2. E-pharmacies E-pharmacies are considered the second most important priority channel for the roll out of the DPP, and other MPTs. E-pharmacies are recommended because they are an increasingly popular entry point for ECs, OCs, HIV self-test kits, PEP and even PrEP, with all these commodities currently available from selected e-pharmacies that deliver countrywide.

The first e-pharmacy business was formally registered in Kenya in 2013[ix] with additional registration of businesses being slow up to around 2020 when, due to COVID-19, e-pharmacies grew rapidly although to-date the total number of e-pharmacy businesses registered has not been quantified. E-pharmacies include pure e-pharmacy businesses as well as physical pharmacies with an e-pharmacy component. The e-pharmacy business is still predominantly focused on urban settings, but expansion among physical pharmacy chains with branches country-wide and innovations in delivery methods have led to clients across the country to use their services. Users can access e-pharmacies anytime of the day or night, making them easily accessible and, as for many services users do not have to interact with a service provider, they are discreet and confidential. Delivery times from e-pharmacies can range from a matter of hours in urban settings to up to 24 hours for those in rural areas.

Promising model 3. MyDawa's e-pharmacy reach across Kenya MyDawa, Kenya's first registered online pharmacy provides health, wellness and beauty products. Initially set up as a purely commercial business with a focus on the management of chronic infections, the high demand they received from customers for sexual and reproductive health (SRH) products led them to expand in this area. They report a pattern of increased sales of condoms and lubricants on Thursdays and Fridays followed by an increase in sales of HIV self-test kits and ECs on Saturdays and Sundays. They now sell 25% of all HIV self-test kits sold in Kenya, the largest market share, and EC comprise a large part of their sales, demonstrating there is a market for prevention products, including the DPP and other MPTs. This sales pattern has shown them the huge need for integrated FP and HIV services among their customers. Most of the OCs that they sell are without a prescription. PrEP also requires a prescription which must be uploaded on to their system before the sale goes through.

Promising model 4. Kasha's online reach and referrals to other private sector delivery channels Kasha is a FemTech platform that offers a wide range of services specifically for women, such as pharmaceuticals, sexual health products, menstrual care and beauty and body products through its Unstructured Supplementary Service Data (USSD) platform,[7] WhatsApp chat and call center hotline. Due to the high demand, they have developed a contraceptive forum on their website where women can access information on different contraceptive methods and, as part of their USSD platform and WhatsApp chat, they can speak to a nurse for further information on products. They are able to provide ECs but for OCs they partner with Triggerise who provide online consultations and provide prescriptions for customers. Triggerise will also refer their clients seeking OCs to Kasha with a prescription for delivery of the commodity. HIV self-tests are among their best-performing products, which they receive from PS Kenya at subsidized prices. They do not currently offer PrEP but would be interested to if regulations allow or they can develop appropriate partnerships for prescribing and initiating. Beyond their telemedicine services, they partner with private sector organizations, such as Marie Stopes Kenya, Penda Health, Ponea and Triggerise to provide mobile and pop-up clinics in communities. They also have a network of agents who raise awareness in communities and are paid on commission. These community agents drive more than 90% of their income.

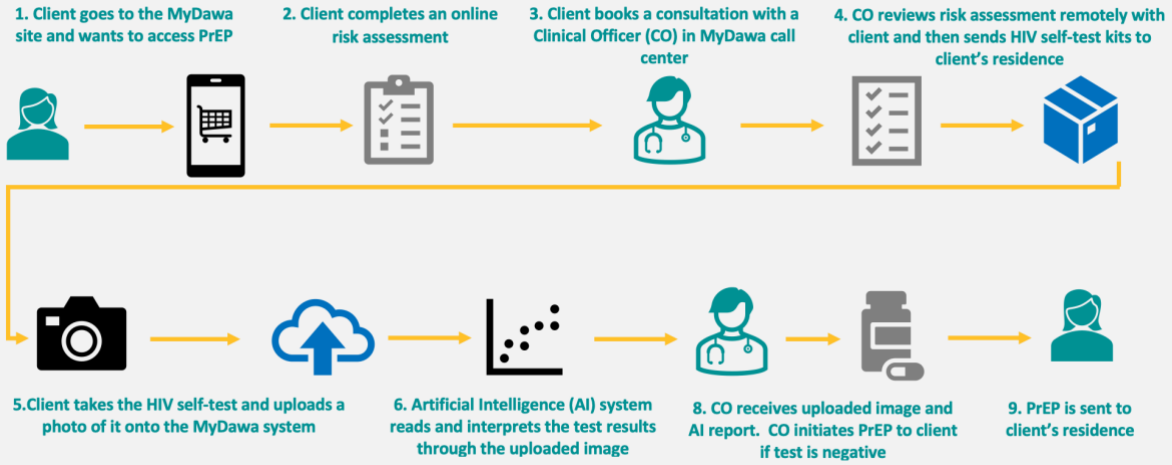
[7] A USSD platform is Global Systems for Mobile Communications (GSM) protocol that is used to send text messages. It is a menu based information system.

Table 6. Overview of key market considerations for e-pharmacies in the distribution of the DPP and other MPTs in Kenya

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
E-pharmacies are a growing entry point for SRH and HIV services and can be accessed 24/7 with deliveries country wide, however they require access to the internet either through a smartphone or computer. They are discreet and involve no face-to-face engagement reducing fear of stigma and discrimination. Currently selected e-pharmacies distribute OCs, ECs, HIV self-test kits, PEP and PrEP (in limited numbers currently).	They county and national eHealth Bill has been developed but not yet passed into law. Existing policies for eHealth and mHealth exist but specific policies for e-pharmacies need to be developed. National PrEP guidelines allow dispensing and refilling through pharmacies, but e-pharmacies are not covered. Currently PrEP is only accessed with a prescription but ongoing pilot studies will influence task shifting as well as viability of virtual care models that can be replicated for the DPP and other MPTs. OCs accessible through e-pharmacies.	The demand that e-pharmacies are getting for FP and HIV commodities should be seen as an entry point for increased engagement with the public sector. Pilot study on virtual care model for PrEP provision through e-pharmacies can be an entry point for dialogue with the MoH. Development of e-pharmacy policies and guidelines is a further opportunity for engagement with the public sector and for ensuring FP and HIV commodities are covered in these policies and guidelines.	E-pharmacies are not required to report their data through government MIS. Current processes required for reporting are lengthy and time consuming.	Concerns exist over supplies of government provided commodities.	Willingness to pay for the DPP unknown, but previous studies indicate willingness for a heavily subsidized commodity. Without subsidies, uptake is likely to be low. Use lessons learnt from Maisha Meds on management of subsidies and costing studies as part of pharmacy PrEP pilots. Cost recovery requirements from service delivery for the e-pharmacies is unknown and needs to be considered to ensure their time and expenses are covered and service provision is also beneficial to them.	Would require significant training and capacity building of pharmacists – consider online trainings and lessons learnt from PIMART in SA. Addition of managing risk assessment, counselling and HIV self-testing (and verification of results) prior to initiation could add on a significant time and cost burden to the pharmacists and users and needs to be considered. Need to consider lessons learnt from e-pharmacy virtual care model for PrEP.	Whilst not all e-pharmacies dispense FP and HIV commodities currently, their ability to cover the whole country offers a significant opportunity for scalability if areas of cost, supply chain and reporting are addressed along with the results of the e-pharmacy PrEP study. Roll out of the DPP and other MPTs through e-pharmacies has the opportunity for country-wide reach but only to those with access to a smartphone. Opportunity exists for hybrid pharmacies/e-pharmacies to initiate clients through a physical facility with refills through the online platform.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Promising model 5. Important research that will inform the delivery of the DPP through pharmacies Another arm of the pharmacy PrEP pilot led by Jhpiego and funded by BMGF (outlined in the Kenya pharmacies section above) will be carried out with MyDawa. This pilot will evaluate and optimize a virtual care model for the delivery of PrEP, with the aim of creating an end-to-end customer service for PrEP clients. The pilot is anticipated to run for two years, from late 2021/early 2022 to the end of 2023/early 2024 once all ethical approvals are received.



PrEP users will follow the standard of care guidelines for PrEP refills and will need to re-test for HIV at the relevant time points. PrEP commodities will come through the public sector, with BMGF subsidizing the costs of the HIV self-test kits. Like the pilot in physical facilities, part of this study will look at user willingness to pay. Jhpiego is training the clinical officers, providing all relevant clinical information, working with NASCOP and the MoH on policy implications as well as working with WHO to inform guidance on PrEP delivery.

Priority 3. Networked private providers, including social franchise and FBO networks

Networked private providers are considered the third most important priority channel for the roll out of the DPP, and other MPTs. They are recommended because they are very significant in number across Kenya, including FBOs in rural areas, and are for many clients an important point of health care delivery, despite the currently low distribution of PrEP and greater focus on LARCs rather than STMs such as OCs.

Private-for-profit medical providers account for 38% of the health facilities in Kenya and NGOs, FBOs and community-based organizations (CBOs) account for a further 12%.[x] Private-for-profit medical providers currently prescribe and dispense OCs but have very little involvement in the provision of PrEP, as those interviewed said that private providers see PrEP as a government program. Providers who do provide PrEP are generally those that have an established ART program. Interviewees also noted that most of the OCs that private medical providers prescribe and distribute are those procured privately and are not those from government-subsidized programs. Amongst the private-for-profit providers, there are some networks that have developed with a specific focus on providing services to low-income communities, although these are mostly in and around Nairobi.

NGO and FBO facilities range from large hospitals through to small primary healthcare clinics and include SRHR/HIV focused facilities such as those run by NGOs as well as the social franchise sites that they support. Many social franchise facilities provide free or subsidized services for users and are a popular

access point for those who do not want to use public sector facilities but do not want to pay the full fees of a private for-profit facility. Users pay a small service fee for accessing subsidized or government provided commodities. Social franchise facilities are widespread across the country and are well established. Their focus has been mainly on the provision of FP services, but many are now integrating PrEP into their integrated service delivery package. Whilst they distribute OCs, many of the social franchise sites supported by NGOs focus on delivery of long acting and reversible contraceptives (LARCs) rather than short term FP methods, which could impact their ability to distribute the DPP and other MPTs.

Promising model 5. Access Afya. Access Afya is a healthcare enterprise that delivers high-quality and localized general healthcare, designed specifically to serve the needs of low-income communities in and around Nairobi. This is done by providing government commodities as well as Access Afya passing on the benefits of pooled procurement and affordable medicine prices as well as charging lower costs for consultation and user fees. They offer services through primary healthcare clinics, their Curafa franchise network, and their telemedicine app, mDaktari. mDaktari is an integrated digital healthcare platform that allows its users to access services either through a simple chat function for one-off consultations or through different health plans. They run five Access Afya primary healthcare clinics and seven Curafa social franchise facilities within informal settlements in Nairobi. They provide FP services including dispensing OCs that they obtain through the government. They do not currently offer PrEP due to low demand, but if demand for subsidized PrEP in the private sector can be increased then such private networks clinics and platforms can offer potential for the delivery of the DPP.

As franchised and networked private providers are involved in the distribution of FP and HIV services, including PrEP, there is a role for them to play in the distribution of the DPP and other MPTs. When private providers are doing routine counselling for FP initiation, they have an opportunity to discuss HIV prevention options for their clients as an entry point to introduce the DPP and other MPTs if they believe their client is at risk for HIV transmission. Franchised and networked providers also have existing relationships with the government for commodities and for the most part are set up to report through the government MIS. As many of the social franchises are supported by NGOs, there is monitoring of the reporting and so the quality is generally high. The NGOs also support with supply chain and act as a link between the government and the facilities, meaning that the PPP is strong. The franchised and networked private providers also have existing subsidized models in place, as well as provide government commodities, which would make for a smooth entry point for the DPP through similar models. With the support of the NGOs, coordination for training of providers on the initiation of the DPP and other MPTs would be well supported as clinical quality in franchised networks is typically high.

Table 7. Overview of key market considerations for networked private providers in the distribution of the DPP and other MPTs in Kenya

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Social franchise sites are well known across the country and been providing FP and HIV services for many years. Currently initiate FP methods. Some initiate PrEP but not all, although number is growing. They are supported by technically focused NGO partners who have strong relationships with the MoH and are key partners to advance research and evidence to support the planning and future roll out of the DPP and other MPTs. Many franchise and networked sites have CHWs attached to them providing an additional opportunity for accessing potential users.	Policies that support the franchised and networked private providers exist and are generally fit for purpose and reference the private sector but there are opportunities for specific guidelines to be developed and/or modified to incorporate private providers as a specific delivery channel for the DPP and other MPTs. Without these, PrEP is currently seen as a public sector priority.	Coordination and engagement between technically-focused implementing partners and the public sector have taken place over many years and before the introduction of PrEP took place. The DPP can build on these relationships. For the non-NGO supported networks, dialogue between the government and the providers needs to be improved.	NGOs who support the social franchises have strong expertise in M&E and build the capacity of the social franchise sites to be able to report appropriately and accurately through the government MIS. For the non-NGO supported networks, they consider the reporting requirements to be cumbersome and quality of their reporting is unclear.	The provision of OCs and PrEP from the public sector to social franchise sites through the coordination of the NGOs is possible, presenting opportunities for NGOs to support these sites with the roll out of the DPP and other MPTs. Supplies of OCs from the public sector can be erratic. In addition, while the free supply of government (or sometimes UNFPA) commodities to franchise/network sites has benefits to creating more access, it often presents disadvantages to the wider market as free supplies are harder to account for and can be resold to clients through other channels.	Free supplies from the MoH (and sometimes UNFPA) create greater access to OCs and PrEP. The same benefits would be assumedly gained if the DPP and other MPTs were provided for free from the MoH to franchised/ networked private facilities. Free or subsidized supplies require financing from external donors which can have sustainability and large-scale challenges. Free supplies can also inadvertently undermine private sector health markets.	While social franchise sites are popular with many client segments, they are not typically the preferred source for OCs, especially when compared to pharmacies. Some NGOs in Kenya have suffered from negative press coverage over the last three to four years which makes some service providers in NGO supported sites wary of providing contraception and related services to clients under the age of 18.	Social franchise sites are spread across all counties of Kenya and serve low income communities, so have a large geographic reach. Their models of service provision are set up to incorporate a commodity such as the DPP and other MPTs, however the focus on LARCs and concerns around sustainability of financing could limit scalability. Private network providers are mostly focused in and around Nairobi, so have a small geographic reach.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Priority 4. Telehealth Telehealth providers are also a priority for the roll out of the DPP, even though at present many do not dispense commodities directly, although this could change in time for the phase 1 roll out of the DPP. Telehealth includes the telemedicine providers as well as the software apps and online tools available that assist with providing users and potential users of FP or HIV services with key product information, where services are available, and even can provide online counselling services.

Measuring mobile and smartphone penetration is difficult, but the Kenya Communications Authority estimates that there are 64.4 million mobile SIM card subscriptions in Kenya which is a 132% market penetration in 2021, and a doubling from 65% in 2011. Smartphone penetration in Kenya is estimated to be approximately 80%.[xi] This data indicates that a large proportion of the population could access telehealth services. In Kenya there are currently over 40 telemedicine providers currently, ranging from standalone telemedicine companies with their own apps providing a comprehensive range of virtual services, to add-on services from established private facilities, to SMS and chatbot services focusing on specific health needs. Most of the telemedicine providers do not have dispensing facilities as part of their service offering currently although this is expected to change over the next few years. Many do however have relationships with physical or e-pharmacies, providing clients with a smooth process from prescribing to dispensing and receiving their commodities.

Online tools, chatbots and apps providing supportive services and information include Nivi, Triggerise, Aviro Pocket Clinic as well as user journey tool that is being developed by the MOSAIC consortium. These tools form a key part of the journey for a potential user of the DPP or other MPTs as they are sometimes the first point of contact that a user may have when taking up an FP or HIV service and are an essential part of the package to be considered in the private sector for the roll out of the DPP or other MPTs.

All telemedicine providers interviewed indicated that they receive a large number of requests for and consultations on FP and PrEP and/or PEP, showing that they are a channel that users feel secure accessing for consultation on these services. Interviewees reported that telemedicine and virtual consultations allow for discreet and easily accessible service provision. There is far less stigma of accessing services through an online provider, and services often have longer operating hours than many public or even private facilities, with some telemedicine services operating services 24/7. Many of the telemedicine providers also partner with physical and e-pharmacies as they do not have their own pharmacy attached to them. Telemedicine providers therefore have a key role to play in the initiation of the DPP by providing consultations and risk assessment and can then refer to a physical or e-pharmacy for actual provision of the DPP, or other MPTs.

Table 8. Overview of key market considerations for telehealth in the distribution of the DPP and other MPTs in Kenya

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Telehealth, including telemedicine and demand creation tools is a rapidly growing sector in Kenya. Most platforms do not currently dispense commodities so do not directly provide FP or HIV commodities, just prescribe, or refer, but this is likely to change in the next few years. Can prescribe FP & PrEP. Most providers not trained on HIV services and currently refer, but online training modules similar to those in SA could be developed to address this. Online demand creation, information and counselling tools offer a strong supportive tool at all points of a user's pathway from interest to initiation and follow up.	eHealth Bill not yet passed into law but various policies in place supporting telemedicine. MyDawa pilot an opportunity to engage with government further on ensuring the eHealth Bill is appropriate for virtual FP and HIV services.	Engagement between telemedicine companies and the government has been limited and opportunities need to be identified to strengthen the relationship.	Anecdotal reports suggest that only two out of the over 40 telemedicine providers currently report any data to the MoH as the systems are cumbersome and time consuming. Without proper reporting systems it would be hard to engage telemedicine providers in actual commodity dispensing. Given their online nature telemedicine companies have good electronic data and options for reporting could be explored.	Most telemedicine companies do not currently dispense commodities and those that do purchase privately. They report concerns around stock outs of government commodities.	Willingness to pay for the DPP unknown. A growing number of medical insurance companies cover telemedicine and some have specific contracts or relationships with selected telemedicine providers. NHIF does not currently cover telemedicine although this is an area that is being explored. Online tools and apps that support demand creation, linkages and counselling are predominantly donor funded.	Telemedicine is currently a strong entry point for users to be prescribed FP or HIV commodities. Some providers raise concerns that consultations and counselling for FP and HIV services takes long. However, this is where the online counselling tools such as the Aviro Pocket Clinic could be utilized.	Telemedicine has the opportunity to cover the whole country although as most do not currently dispense this brings in limitations. If more formal relationships were developed between telemedicine companies and e-pharmacies or physical pharmacies, this opens up the opportunities. However, if the pharmacy PrEP pilots prove successful, this may cut out the need for potential users of the DPP or other MPTs to need to have a consultation with a clinician, when they could go directly to a pharmacy or e-Pharmacy. Online demand creation and counselling tools are scalable across the whole country, but funding needs to be considered.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Online demand creation, information and counselling tools can strengthen the user pathway at all stages. Users can access information about potential commodities or services they require, can be linked or referred to services, receive counselling online through the HIV self-testing process and also receive follow up support, reminders and communications. Different tools exist for different parts of this pathway, but all have a key role to play. Nivi offers an interactive chat service for users, allowing them to explore health topics of interest to them and to provide them with guidance on health products and services. Triggerise offer the Tiko program that creates ecosystems made up of pharmacies, retailers and on-the-ground mobilisers and clinics, with the aim of improving the SRH of adolescent girls and to prevent unwanted pregnancies.

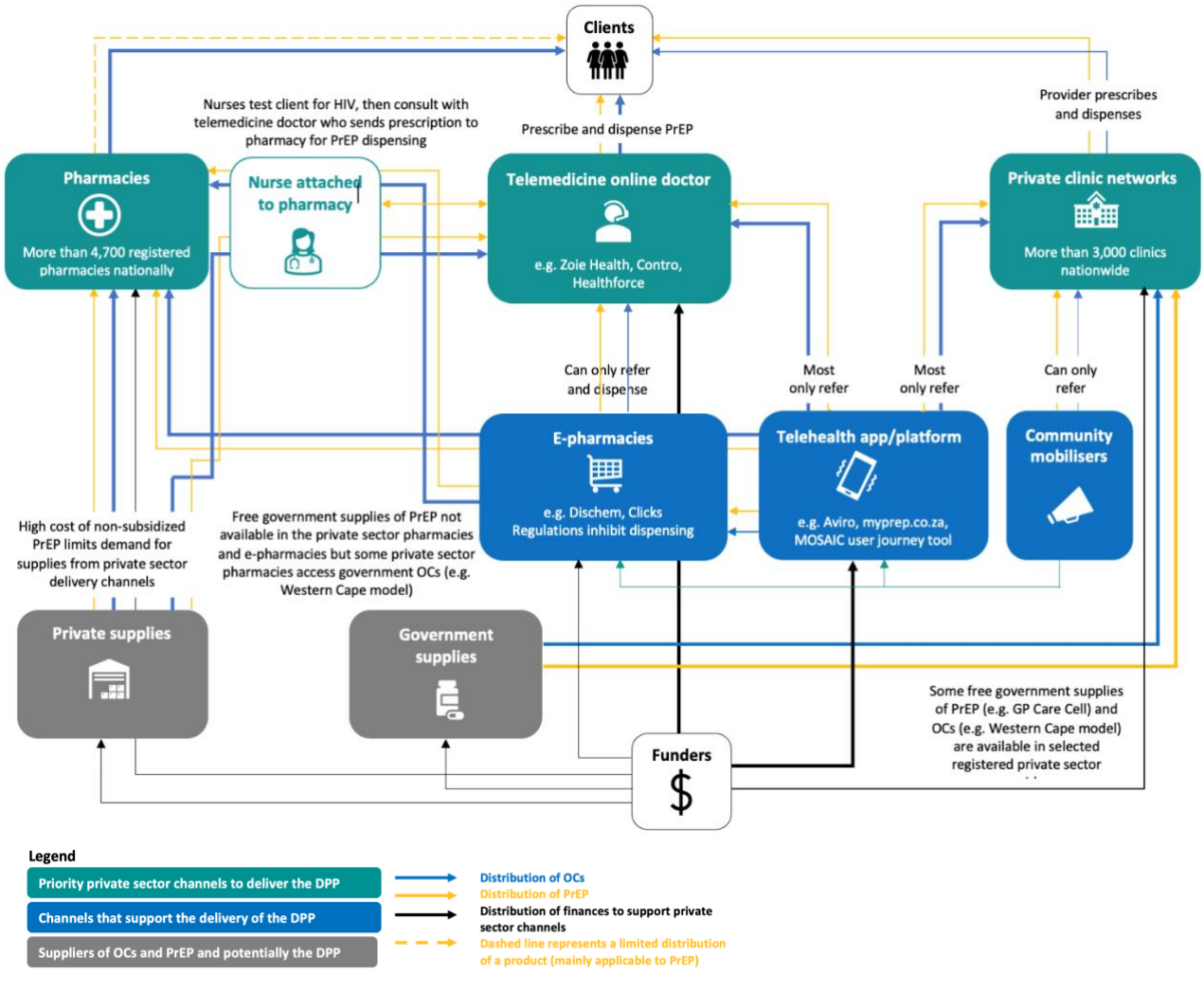
Table 9. Promising telehealth models in Kenya

Affordable and accessible online healthcare solutions	Zuri Health aims to provide affordable and accessible healthcare solutions via mobile phones with dedicated apps, websites and SMS services easily and quickly. They provide telemedicine, e-pharmacy, doctor-on-duty services and allow booking for labs and diagnostic services online. Costs can be as low as KSh.10 a day for unlimited chat with a provider on the SMS system, which is targeted to those not having access to a smartphone or data. They estimate that about 50% of the SMS requests that they receive are for FP services and they are able to prescribe and deliver the commodities directly to their customers through their network of pharmacies. Zuri Health also partner with community facilities to provide outreach services for primary healthcare and screening of non-communicable diseases. As Zuri Health targets low-income clients and is able to provide a "one-stop-shop" of online or mobile phone based services, they would be able to provide required services for initiation of the DPP or other MPTs.
MOSAIC user journey tool	The MOSAIC consortium is developing a paper-based and digital HIV prevention user journey tool that will be distributed for free. It is a client and provider facing tool that supports the uptake of methods to achieve combination HIV prevention. As well as having features to ensure prevention methods recommended to users align to their needs, lifestyle and preferences, it can allow users to find PrEP and FP service providers throughout the countries that roll it out. It can also offer an online booking system if one is used. This tool can easily include the DPP and other MPTs once they are ready to be rolled out and should be considered as a key tool to be incorporated into the planning.
Online counselling for HIV self-testing	The Aviro Pocket Clinic is a tool that supports users through the HIV self-testing process either at home through a WhatsApp chat service or online at a health facility, pharmacy, or community pop up site. When a client goes to a site for HIV self-testing, they can have an initial brief consultation with a clinician or pharmacist but then go through the process of the pre-and post-counselling with the online tool in a separate room or booth. This frees up the time of the clinician and also ensures consistent quality of counselling and information and is a tool that could be considered for use in pharmacies and could reduce the time required of the pharmacist during the HIV testing process, which is currently one of the concerns of pharmacy initiation of PrEP. Aviro are starting a study with Triggerise on using the Aviro Pocket Clinic as an entry point for PrEP, and the results of this study will provide key information for how a tool such as the Aviro Pocket Clinic could be integrated into pharmacy or other private sector sites as part of PrEP and ultimately the DPP and other MPT initiation processes.

4.2 South Africa

Half of all total healthcare expenditure in South Africa is spent on 85% of the population who use the public sector, and the other half is spent on the 15% who use the private sector. 16% of South Africans that use private healthcare providers are medical scheme members, 18% are employed but uninsured and the remaining 67% are unemployed and uninsured, 3.5 million people living with HIV are treated by the public sector, whereas the private sector, despite the huge resources, treats only 200,000.

Figure 2. South Africa's current PrEP and OC private sector market



PrEP is now available in approximately 63% of public health facilities[8] in South Africa, but this ranges from 8% in the Western Cape to 97% in KwaZulu Natal (which has the highest HIV prevalence in the country).[xii] OCs are available widely across the country but are not seen as a very popular method of contraception, with only 10.5% of women who use modern FP methods, using OCs.[xiii] However, private sector uptake method mix appears to be more skewed towards OCs, with the largest medical aid provider claiming that around 70% of contraceptive claims were for OCs.[xiv] The DoH, with support from the *SheConquers* Campaign, have a dedicated PrEP website – www.myprep.co.za – which provides information for users and providers, including linkages to services and trainings for service providers. The training is open to all providers from public and private sectors.

[8] The availability of PrEP in private facilities is not yet known, but will be sourced further during the development of the forthcoming *DPP Delivery and Financing Strategy*.

Table 10. Snapshot of the delivery channels in South Africa, combined with market and other key criteria and considerations

		Scoped delivery channels									
		Direct to consumer (D2C)						Indirect to consumer/access through a third party			
		Pharmacy	E-pharmacy	Tele-health	Tele-medicine	Community distribution	Mobile outreach	NGO	FBO	Private network clinics	Social franchise networks
Recommended for DPP delivery											
Market considerations	Policy and regulation										
	Public- private coordination										
	M&E										
	Supply chain										
	Financing										
Other key criteria	Scalability										
	Sustainability										
	Geographic coverage										

Legend	Recommended channel for the delivery of the DPP/performs highly against market criteria and other key criteria	Has potential, but not currently a recommended channel for the delivery of the DPP/performs averagely against market criteria and other key criteria	Does not currently have much potential and not recommended for the delivery of the DPP/performs poorly against market criteria and other key criteria

4.2.1 Priority private sector channels

The three channels that should be prioritized for the roll out of the DPP in South Africa are pharmacies, telemedicine and networked private providers.

Priority 1. Pharmacies Pharmacies are considered the first and most important priority for the roll out of the DPP, and potentially other MPTs. The introduction of PIMART and the scope of practice to allow pharmacists to provide expanded FP services offers great opportunities for the roll out of the DPP - and the PIMART guidelines could be expanded to offer MPTs. As many pharmacies have a nurse on site, injectable contraceptives are also provided which expands the opportunities for other MPTs.

The South African Pharmacy Council, which regulates and licenses pharmacies in South Africa, has over 4,700 pharmacies registered across the country with 3,794 of those being community private pharmacies. As the pharmacy industry in South Africa is heavily regulated, there are very few unlicensed pharmacies or drug shops and those identified are quickly shut down. There are approximately 30 pharmacists for every 100,000 South Africans. Private pharmacies are a first port-of-call for many people seeking health services and are accessible in urban and rural areas.

OCs and PrEP are both only available by prescription in South Africa. Prescription of OCs is governed by the *Contraception Policy & Service Delivery Guidelines, 2012* and PrEP by the *South African PrEP Guidelines, 2020.* Accessing data on the exact numbers of commodities distributed is challenging, however, between February and July 2020, IQVIA reported that the private sector sold over 1.5 million prescriptions of OCs and, in the same period, pharmacies dispensed 28,328 monthly supplies of PrEP.[xv] The 2016 DHS found that over 77% of women obtain their OCs from the public sector, with no differentiation within the private sector by type of channel. PrEP has predominantly been rolled out in the public sector or through networks of private providers, mostly to key populations. There are many indications that if the products were more readily available through pharmacies, the uptake of both OCs and PrEP would be higher. As an example, over 100,000 ECs are sold per month by all pharmacies.[xv] This presents opportunities for conversations around PrEP, FP and ultimately the DPP and other MPTs. Current guidelines for dispensing FP and HIV commodities are very conservative and referral systems have to be in place in case of adverse events.

Promising model 6. Important research that will inform the delivery of the DPP through pharmacies
To support the roll out of PIMART and answer some of the questions relating to safety, efficiency and willingness to pay, there are various studies being undertaken that provide PrEP from an online or physical pharmacy. One such project in design phase and not yet named, is funded by BMGF and is similar in design to the studies being undertaken in Kenya. The main difference is that in South Africa, as well as a negative HIV test, blood tests are required to be taken before PrEP initiation (although the results of the blood tests are not required before initiation) and at various timeframes as stated in the country guidelines. It is hoped that by the time the pilot is completed in the next few years, the WHO guidelines for Hepatitis B and Creatinine will have changed and will not be required for those who under the age of 50 and are vaccinated against Hepatitis B. Participants in the pilot will receive free PrEP for one year.

To support PIMART, the USAID-funded EPIC Consortium (Expanding Access to PrEP and ARVs Innovation Consortium) has rolled out the *#4EachOther* program. The consortium is led and managed by the SAHCS in partnership with Independent Community Pharmacy Association (ICPA), Ezintsha, Digital Health Cape Town and Vula Mobile. Their aim is to make PrEP more available in all mainstream and community pharmacies.

Table 11. Overview of key market considerations for pharmacies in the distribution of the DPP and other MPTs in South Africa

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Roll out of PIMART and expanded FP scope of work for pharmacists offers a significant opportunity for the DPP. Over 1,000 pharmacists are already trained and initiating PrEP in pharmacies through telemedicine links to prescribing clinicians. Pharmacies dispense FP commodities and those certified in expanded FP provision can initiate OCs. Efforts and concerns exist with the court case to stop PIMART which could reverse gains made. Online training to support PIMART licensing has been rolled out despite the hold on services. This could be expanded to include training on FP.	Pharmacies are heavily regulated by the South African Health Products Authority (SAHPRA) and the South African Pharmacy Council. The development of the PIMART bill provides clear guidance on how pharmacies can and should initiate PrEP and how pharmacists can become accredited. Expanded scope of practice allowing pharmacists to prescribe certain contraceptives, including OCs, after additional training and application for a permit. Requirements for Hep B and Creatinine screening prior to PrEP initiation are burdensome but partners working with WHO and DoH are to amend this.	Engagement between pharmacies and government was strengthened during COVID-19 as pharmacies became a key distribution point for COVID-19 vaccines. PIMART has also involved the significant engagement of pharmacies, service delivery partners and government. As a result, the relationships and coordination are in place and which can be built upon.	The systems set up to manage the COVID-19 vaccines through pharmacies allows pharmacies to receive and report on government commodities and also has a reimbursement feature which allows for payments for subsidies if required. Data on PrEP through the various private sector channels is still quite limited, however, and in some cases not openly shared among competing private sector competitors.	Currently pharmacies access most of their FP commodities and all of their PrEP through private suppliers. Some pharmacies access government OCs – e.g. Western Cape. Access to government commodities comes with concerns over supply chain logistics and reliability which the pharmacies have no control over.	Willingness to pay for the DPP remains unknown. Medical insurance policies currently cover/reimburse pharmacy consultations (if done by nurse or pharmacist) and online consultations. Challenges and delays exist with government reimbursements if pharmacies manage services/stock on behalf of the government. Reimbursement models have not always been favorable to pharmacies who are focusing on profit making. FP is not part of the prescribed minimum benefit for medical aid, but PrEP is. The private sector does not currently benefit from pricing structure under government tenders.	With the PIMART Bill, and if court case goes in favor of PIMART, initiation of the DPP and some other MPTs will be extremely feasible through pharmacies. The addition of managing risk assessments, counselling and HIV self-testing prior to initiation could add on a time burden to the pharmacists and needs to be considered, as does the space requirements to ensure privacy and confidentiality. Similar to Kenya, apps such as the Aviro Pocket Clinic could help to address some of these time burdens.	Pharmacies cover the whole country and currently distribute OCs, ECs, HIV self-tests, PEP and PrEP. Roll out of the DPP and other MPTs could be another FP/HIV service added to those currently offered by pharmacies. Strong pharmacy networks exist as well as coordination of independent pharmacies through the Independent Community Pharmacies Association.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Priority 2. Telemedicine Telemedicine is considered the second most important priority channel for the roll out of the DPP, and potentially other MPTs. Telemedicine is recommended because it is an increasingly popular entry point for ECs, OCs and HIV self-test kits and, with the rollout of PIMART, telemedicine providers are prescribing PrEP for clients to access through pharmacies. With this progress being made on PIMART and the expectation for the change in regulations for Hepatitis B and Creatine testing by the time the DPP is rolled out, the regulations and policies are likely to be in place to allow for the DPP to be prescribed and dispensed through a virtual platform.

The telemedicine sector in South Africa has grown significantly since the guidelines were first developed in 2014, and particularly since COVID-19. Research from *Hello Dr* found that 75% of users of a telehealth consultation platform with the DoH in the Western Cape were women and 64% users aged 18 to 35. The telemedicine providers range from virtual consultations with providers from static facilities to primary healthcare apps, to highly specialized services such as cardiology and dermatology. Some telemedicine providers also dispense prescribed medications, such as OCs. In addition, telemedicine is also used within primary care facilities to connect a patient to doctor or specialist whilst in a consultation with a nurse.

With an estimated 90% smartphone penetration in South Africa, telemedicine presents an opportunity for users of OCs and PrEP to access their commodities without having to go to a health facility. Telemedicine and virtual consultations allow for discreet and easily accessible service provision with less stigma. They are often accessible for longer hours than a static facility. Doctors providing telemedicine services can provide a prescription after having provided a consultation and risk assessment to users.

Dispensing commodities is more challenging, as it can only be done directly if the telemedicine provider has their own dispensing pharmacy and can courier commodities to the client. Dispensing OCs is feasible, though if the telemedicine provider cannot dispense OCs, the user must take their prescription for OCs to a pharmacy to collect them, which can still be preferable to going to a static facility for some users. For oral PrEP, the required tests for HIV, Hepatitis B and Creatinine require the client to be linked to a laboratory for physical testing and a negative HIV test is required before PrEP can be dispensed. This can create a complicated network for users if it cannot all be managed by the telemedicine provider directly.

Table 12. Overview of key market considerations for telemedicine in the distribution of the DPP and other MPTs in South Africa

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Telemedicine is widely accessed in South Africa and is a rapidly growing market. Telemedicine offers SRH platforms specializing in prescribing and dispensing of FP and SRH commodities. PrEP is not currently offered but some have plans to include PrEP in offerings. Telemedicine offers SRH platforms specializing in FP and SRH commodities. Online training modules are available for PrEP prescribing and initiation so telemedicine providers can easily access training. This could be expanded for the DPP and other MPTs. There is some concern that telemedicine regulations could impact growth of the market and services allowed.	The waiver of the Telemedicine Guidelines (2014) during COVID-19 to allow first-time consultations without an established relationship between a provider and a user could be revoked by the HPCSA at any time. However, the telemedicine industry is working closely with the HPCSA to update the guidelines. Current requirements for Hep B and Creatinine screening prior to PrEP initiation is burdensome but partners working with WHO and DoH to amend this. Prescription required for PrEP and OCs but with new PIMART and FP permits for pharmacists this will become less of a concern.	Engagement between telemedicine companies and the government have been limited but the discussions on updating the guidelines are an entry point to strengthen the relationship. The Southern African HIV Clinicians Society (SAHCS) has been a critical partner for public private dialogue for HIV services for many years and has strong relationships with both the private sector and the government.	The systems set up to manage COVID-19 vaccines through pharmacies allows pharmacies to receive and report on government commodities and also has a reimbursement feature which allows for payments for subsidies if required. This same system could be adopted by the telemedicine companies if they are receiving government commodities.	Currently the telemedicine companies with pharmacies access their FP commodities through private suppliers. PrEP will follow the same route unless telemedicine companies have agreement with the government to supply government commodities. Access to government commodities comes with concerns over supply chain which the telemedicine companies have no control over.	Willingness to pay for the DPP remains unknown. Most medical insurance policies cover telemedicine but FP is not part of prescribed minimum benefit for medical aids, but PrEP is. Private sector do not currently benefit from pricing structure under government tenders. Challenges and delays with government reimbursements if they manage services/stock on behalf of the government. Reimbursement models have not always been favorable to pharmacies who are focusing on profit making.	A change in guidelines to remove the requirement for Hep B and Creatinine testing would be required for telemedicine to be a fully feasible option. If this is removed, and the pilots on Artificial Intelligence verification for HIV self-testing for PrEP initiation are successful, then telemedicine providers could initiate PrEP by following having a system to verify a HIVST prior to dispensing PrEP to the client.	Telemedicine has the opportunity to cover the whole country although distribution points for commodities would be required countrywide. National coverage would, however, only be feasible for those with access to an internet connection through a smartphone or other device.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Table 13. Promising telemedicine models in South Africa

Healthforce videomed GP system	Healthforce is a videomed GP system that aims to make healthcare quicker to access and easier to afford. At clinics and pharmacies that are powered by Healthforce, a patient benefits from the hands-on care of a nurse and can connect to a doctor via a video call within minutes. A patient can currently access a nurse at over 450 clinic rooms in South Africa, many of which are based within pharmacies, where they have an initial consultation with the nurse who can then connect to a GP if required by a video screen. By early 2022, over 20% of the consultations were for contraceptive management. As many of the Healthforce partner clinics are in pharmacies, a client is able to see a nurse, who connects with a GP for prescription that can then be immediately dispensed in the pharmacy. This same system can be used for the initiation of PrEP within these clinics, but data is not currently available on this as it requires the GPs to be trained on PrEP initiation. Once PIMART is fully rolled out, the use of Healthforce for PrEP initiation and, ultimately the DPP, may not be necessary. However, Healthforce is currently proving to be very successful in providing relatively low-cost services for users to access a GP for their prescription.
Kena Health app	Kena Health is telemedicine app that also is developed by Healthforce. With the app, a user can talk directly to a nurse, doctor or health professional using text, voice or video. The first three consultations are free, with subsequent consultations costing approximately $10, which is generally less than a consultation at a private medical facility. Amongst many other services, users of the Kena app are able to access prescriptions for contraception and access ongoing support for chronic conditions including HIV. OCs can be prescribed through the app and a user can then take their prescription to a pharmacy for their OCs to be dispensed. Data on PrEP prescription is not yet known from Kena but is being explored.
Zoie health's women's health wellness clinic	Zoie Health is South Africa's first digital women's health wellness clinic. It is an app that allows for virtual connections with medical providers, group consultations and community forums. Users can have virtual consultations as well as book home consultations with a medical specialist, and order FP commodities, HIV self-tests and other test kits. They can also access a community of clinicians and women for advice and support and can join exclusive events with medical experts. They currently prescribe OCs but do not currently offer PrEP. However, they are in the process of getting their pharmacy license, which would enable PrEP prescribing, particularly if PIMART is approved.
Contro's sexual health and confidence products	Contro is an online prescription and delivery service for sexual health and confidence products such as erectile dysfunction and hair loss treatment[9]. When they initially launched they started as providing prescriptions for FP and erectile dysfunction. However, after launching they were overwhelmed with requests for STI treatment, HIV and PrEP services. They have since launched STI treatment services with PrEP planned as the next product launch. Contro claim that 30% of their customers are from low-income communities.
Aurum Artificial Intelligence (AI) test validation model	Aurum, in partnership with CareWorks, is carrying out a pilot similar to the Kenyan pilot with MyDawa. As in the case with the pilot in Kenya, a potential PrEP user can purchase an HIV self-test kit through the CareWorks e-pharmacy. The test results are validated through an AI platform on the app and also by the clinical team at CareWorks and Aurum, and if negative the client will go through the PrEP risk assessment and can be initiated on PrEP, which is couriered to them.

[9] Current data on products prescribed and delivered not yet available but being sourced for Phase 2.

Priority 3. Networked private providers The third most important priority channel for the roll out of the DPP and other MPTs is networked private providers, which includes formal networks of franchised facilities and chains of facilities, the network of the SAHCS and GPs supporting HIV programs. Networked private providers cover the whole of country and are an important part of health care delivery. It is important to note that social franchised networks and FB networks are not as critical in South Africa as they are in Kenya and are therefore not covered in this section.

70% of medical doctors in South Africa work in the private sector,[xvi] and private medical providers currently provide both OCs and PrEP. The 2016 DHS found that 23% of women obtain their OCs from the private sector but this is not differentiated between provider type. There is no data available on PrEP provision in the private sector, however, what is provided is generally led by GP facilitators to key populations such as men who have sex with men. Doctors' networks pushed hard for medical insurance providers to include PrEP in their coverage, yet three years after including it, one of the biggest medical insurance providers reported having only 18 patients on PrEP. The challenge is reported to be due to a combination of poor demand generation and the GPs and private sector not knowing enough about PrEP. There are various networks of medical providers in South Africa that provide FP and HIV services to the communities they serve, with a number of these being located in or near to low-income communities and having franchise models. In addition, the SAHCS have online training modules for doctors and nurses on ART including PrEP. This is accessible to any clinician at a fee, with subsidized opportunities available. A module on the DPP or other MPTs could be added to these trainings.

Promising model 7. Accredited GP provider networks The SAHCS has created an accredited GP provider network which currently has over 1,800 private sector doctors managing more than 340,000 patients on ART. They have the largest influence to improve quality of care and lower overall costs within the industry. They have also developed digital solutions enabling pharmacists and doctors to interact with patients remotely, facilitate treatment and monitor care. They have mostly been focused on the provision and management of ART and PrEP for key populations, but as demand for PrEP in the general population is growing, it is anticipated that PrEP provision through private providers will also increase.

Promising mode 8. Unjani Clinic Network A network of all black, women-owned and -operated primary healthcare clinics that provide accessible, affordable and quality healthcare to communities in low-income areas. They have created community-based healthcare structures at the point of need and work to address the inequality which exists between public and private healthcare services in South Africa. There are almost 100 clinics across the country, all located in low-income communities. Services cover primary health care including family planning and HIV services. They also have laboratory blood services so can run tests required for PrEP initiation.

Table 14. Overview of key market considerations for private provider networks in the distribution of the DPP and other MPTs in South Africa

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
GP and clinic networks are spread across the country and have been involved in FP and HIV service provision for many years, although slow to roll out PrEP (mostly focused on key populations to date but starting to increase service provision to general population). Some networks supported by the Southern African HIV Clinicians Society (SAHCS) who have strong relationships with the DoH and provide significant training and development opportunities.	Supportive policies exist for the private sector on HIV programming, including PrEP. Provision of FP commodities and PrEP from the public sector to private providers is feasible and demonstration models will share important lessons for potential scale up.	The SAHCS is a key partner to work with to enhance public-private coordination and dialogue as they have been engaging with the government for many years. Coordination and dialogue between the public sector and the private providers on PrEP has been minimal and would need to be improved before the roll out of the DPP or other MPTs.	Data sharing is feasible, and models exist for learning and scale up. The GP Care Cell pilot project will share important lessons for sharing of data. Lessons can be learnt from the models in the Western Cape on the supply of government FP commodities through private providers.	Private providers access their commodities through private pharmaceutical wholesalers although a few access OCs through the government, e.g. Western Cape model. Concerns exist about stockouts as supplies of OCs from the government can be erratic. The GP Care Cell pilot project will share important lessons about supply chain.	Lessons on financing will also be learnt through the GP Care Cell pilot project and opportunities for PrEP and ultimately the DPP will be financed through the NHI when it is rolled out. Medical aid providers already cover PrEP as part of prescribed minimum benefits, but contraception is paid for from the medical savings fund portion of the medical aid[10] making many insured users ultimately paying for it out of pocket.	Many are already involved in ART programs and either have or can access appropriate training for PrEP initiation easily. They have been slow to take up initiation of PrEP but this could be addressed for the DPP and other MPTs.	GP and network clinics have a reach across the whole country and cover all socio-economic levels, with many focusing on low-income communities. If subsidized models are available, they offer the opportunity to roll out the DPP across the whole country, and could target high priority areas.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

[10] The medical savings fund is part of the medical aid. When clients pay their monthly contributions for their medical aid, a portion of it goes into the medical savings fund or account. When clients claim for services, the cost comes out of this fund (except registered and approved chronic meds, radiology, pathology). When the fund runs out, clients are forced to start paying out of pocket. Some funds have a self-payment gap which means once clients have paid a certain amount out of pocket then the medical aid will cover services again.

Promising model 9. Pilot to determine feasibility of linking GPs with the NHI scheme The GP Care Cell is a pilot initiative linking private sector GPs with the NHI and is being carried out in Gauteng and Sedibeng with 65 providers. It is funded by USAID and PEPFAR and is a model of contracting private GPs to provide HIV services on behalf of the DoH using government stock of commodities, including PrEP. It is not for those covered by medical insurance, but for people who would be covered by the NHI once it is fully rolled out. It has demonstrated that when properly organized, supported and overseen, private GPs can manage and report on the stock effectively and efficiently, thus playing a vital role in the national HIV response and future NHI and support a universal health system.

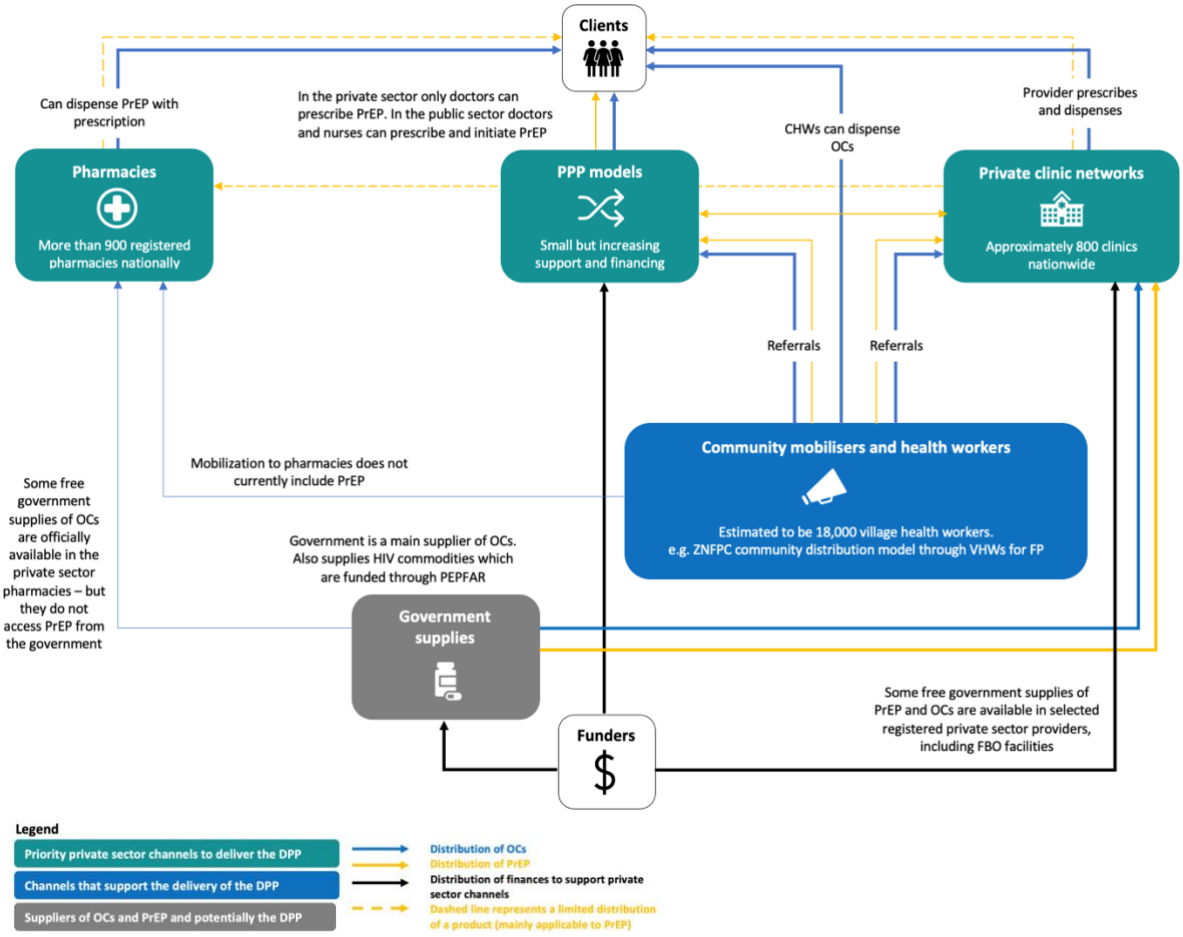
The initiative recruits GPs through pposerve.co.za who are responsible for managing GPs and making sure they have the necessary software, skills and training to operate within the prescribed standard treatment guidelines within the DoH. They are currently providing ARVs, PrEP, tuberculosis preventive treatment (TPT) and some FP commodities. The program tracks activities based on specific client care plans and indicates what specific medication to dispense to a client pending a diagnosis. As noted by the implementers of the GP care cell pilot, "the government is very sensitive in sending their stock into the private sector". However the pilot has been able to prove that private providers can manage the government stock effectively and efficiently by batch and expiry date from the time it is collected from regional pharmacy. GPs get reimbursed for their clinical services and are paid monthly.

4.3 Zimbabwe

Zimbabwe has highly pluralistic health service access, whereby individuals will make use of the public sector for services, including HIV care, free of charge, but the private sector - including pharmacies - for other services, such as FP, to avoid service fees. This is both an opportunity and a challenge, particularly for commodities, such as with PrEP or the DPP, for which adherence and outcomes are key measures.

Obtaining data on the utilization of private health care in Zimbabwe is challenging as there are no official reports or assessments that provide this data, but private and mission facilities are estimated to make up approximately 17% of all health facilities in Zimbabwe.[xvii] For HIV services, DHS data from 2010 showed 25.8% of women and 18.6%[xviii] of men received their last HIV test in the private sector, and this number is anticipated to be higher currently given that HIV self-tests are now widely available in private sector pharmacies, although no data exists. The OPHID Private Sector Scoping in 2019 which covered 24 districts showed the scale of services with 57% of private sector health providers (excluding pharmacies) providing HIV tests. In the same study, 75% of all providers not providing HIV testing expressed an interest in doing so. However, 75% of private providers offering HIV testing in the OPHID study were not reporting any data to the MoH. In addition, OPHID documented a disconnect between the provision of some services and not others (for example, only 34% of private providers delivering HIV testing were also providing ART initiations). This suggests that if someone tests HIV positive at a private facility there is a strong likelihood that they would need to go to a different private sector provider for ART initiation, which breaks the continuity of care from testing to ART initiation. This also needs to be considered as part of planning for a private provider model for the DPP, as some of those testing for HIV prior to the DPP initiation may test positive and would need to be linked to care.

Figure 3. Zimbabwe's current PrEP and OC private sector market



The provision of contraceptives in Zimbabwe has been successfully decentralized and they are widely available through multiple distribution channels, including public health facilities, community-based distribution through village health workers (VHWs), private facilities, and pharmacies. Supply has also been relatively consistent although some disruptions to the supply chain were experienced 2019, and access to contraceptives was impacted due to COVID-19 lockdowns. PrEP decentralization is ongoing, with the pilot phase in 2018/2019 followed by a national roll out 2020 so is relatively new and the country is still learning how best to increase demand, uptake and continuation among specific populations-at-risk (i.e., adolescent girls and young women (AGYW), general population, female sex workers), whereas the FP program is mature and OC access highly decentralized and normalized. The exception to this is with AGYW who many interviewees said are often stigmatized when trying to access OCs as they feel judged about being sexually active at a young age. NGOs and implementing partners in Zimbabwe have played the largest role in the distribution of PrEP to date. Distribution of PrEP is almost exclusively provided in the public sector, primarily through funding from PEPFAR and Global Fund – there is limited data or coordination with the private sector with regards to planning for PrEP decentralization and increasing coverage of private-sector supply.

Table 15. Snapshot of the delivery channels in Zimbabwe, combined with market and other key criteria and considerations

		Scoped delivery channels									
		Direct to consumer (D2C)						Indirect to consumer/access through a third party			
		Pharmacy	E-pharmacy	Tele-health	Tele-medicine	Community distribution	Mobile outreach	NGO	FBO	Private network clinics	Social franchise networks
Recommended for DPP delivery											
Market considerations	Policy and regulation										
	Public- private coordination										
	M&E										
	Supply chain										
	Financing										
Other key criteria	Scalability										
	Sustainability										
	Geographic coverage										

Legend	Recommended channel for the delivery of the DPP/performs highly against market criteria and other key criteria	Has potential, but not currently a recommended channel for the delivery of the DPP/performs averagely against market criteria and other key criteria	Does not currently have much potential and not recommended for the delivery of the DPP/performs poorly against market criteria and other key criteria

4.3.1 Priority private sector channels

Whilst the private sector in Zimbabwe is significantly involved in OC provision, they are currently not involved to any significant degree in the provision of PrEP. Unlike Kenya and South Africa, newer and more innovative delivery channels such as e-pharmacies, telehealth and telemedicine, do not exist in Zimbabwe. Overall recommendations for priority channels in Zimbabwe are therefore more "traditional" and focused on which present the best possible future opportunity for involvement in the roll out of the DPP, and not necessarily what models currently exist for PrEP that could be expanded upon. In addition, it is important to note that a common theme that came out across many of the interviews was regarding the "demedicalization" or task-sharing of PrEP, whereby PrEP could be delivered more effectively outside of the medical facilities if rules and regulations were modified to enable this practice to happen. The same task-sharing opportunities would apply to the DPP and other MPTs, building from Zimbabwe's strong track record of effectively distributing OCs through a decentralized and demedicalized systems. If a similar model could be utilized for the DPP and potentially other MPTs, it would significantly catalyze opportunities for the DPP in Zimbabwe through the private sector than currently exist.

Priority 1. Pharmacies Pharmacies in Zimbabwe can currently dispense OCs and EC without a prescription however PEP and PrEP require a prescription. The benefit of being able to dispense OCs directly from the pharmacy without a prescription is that anyone can walk in and access them, making it an extremely accessible model of demedicalized service delivery. In addition, users will rarely have to queue for long to get their OCs, will not have to pay a consultation fee and are generally not stigmatized. Pharmacies can access donated OCs from the government and sell them at minimal cost, but in the past major stock outs have led to may purchasing from private supplies and selling at a much higher cost.

The government provided ART to private pharmacies through the National Pharmaceutical Company, although the arrangement was short-lived and was during a period when PrEP was not yet available. PEP and PrEP are now available in the private pharmacies with supplies from private distributors, but have not been available from government that would enable clients access low prices as has happened with OCs. PrEP availability was initiated by doctors who were prescribing once the product became available on the international pharmaceutical market, resulting in private distributors procuring and distributing the product. However, knowledge of variations of the products available on the market amongst doctors remain low, as most prescriptions are just written "PrEP", with no specification on the medicines required. A survey conducted by the Community Pharmacies Association (CPA) amongst approximately 250 pharmacies exploring PrEP distribution volumes found that these range from 5 – 300 bottles of 30 tablets per month, with more PrEP being distributed along transport corridors and borders.

Promising model 10. Task shifting PrEP initiation to pharmacists (demedicalization) CPA, a membership-based association with 250 private pharmacy members, is currently working with the government to allow pharmacists to initiate PrEP. They are working with the regulator to categorize pharmacies into four: **Category A** - pharmacy with a consultation room and provide services that include vaccinations, immunizations and client consultations with prescribing pharmacists; **Category B** – pharmacy with quiet room and some of the services offered through category A; **Category C** - pharmacies that will continue with status quo with no quiet room or any other services beside medicine dispensing; and **Category D** – dispensaries at workplaces such as mines. This categorization of pharmacies provides opportunities for the DPP if Category A and B pharmacies are targeted as these can provide services such as testing and consultation before initiation. The CPA reports that they would be interested in being part of the roll out of the DPP through the pharmacies. The main challenges they foresee are the resistance of the government, regulatory approvals are slow and that task-shifting for pharmacists would be required.

Table 16. Overview of key market considerations for pharmacies in the distribution of the DPP and other MPTs in Zimbabwe

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
CPA in advanced stages of engaging the government on task shifting of PrEP initiation to pharmacists. Pharmacists can already initiate OCs. Dispense PrEP but cannot yet initiate it.	Policy does not currently allow pharmacists to initiate PrEP but they can initiate OCs. A consultant has been engaged to work with the government on the task shifting to pharmacists, but regulatory approvals can take significant time.	CPA is currently working well with the government on the task shifting.	Data reporting systems for PrEP initiation including HIV testing would need to be developed but lessons could be learnt from the decentralization of OCs.	Concerns exist about stockouts as supplies of OCs from the government can be erratic. Lessons can be learnt from the decentralization of OCs and distribution through the private sector.	Pharmacies currently only sell PrEP from private suppliers as they do not have access to government commodities. Decisions would need to be made if the pharmacies could access government supplies of commodities and who would finance that.	If Zimbabwe can learn lessons from the roll out of PIMART in South Africa, the demedicalization of PrEP and ultimately the DPP and other MPTs in Zimbabwe is feasible, especially given the work being done by the CPA currently.	If task shifting to pharmacists is allowed and they are able to access government commodities of the DPP, this could be a very scalable channel with reach across the whole country.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

In addition to the work that the CPA is doing with the government on PrEP, OPHID's pilot of a public, private drug refill model (PPDRM) for ART, can influence a model of working with private pharmacies for the DPP. The availability of PrEP as a pharmacist-initiated medicine presents an opportunity for the DPP. The DPP must be registered as a pharmacist-initiated medicine from the outset if the product is to benefit from the current CPA efforts. This will allow wider distribution without the need for a prescription.

Priority 2: Networked private providers, especially social franchises, FBO and NGO clinics (with outreach models) Several effective models exist from both OC and PrEP introduction and national scaling that can be adapted and leveraged for the introduction of the DPP. However, many of these models exist through the public sector, such as the Zimbabwe National Family Planning Council (ZNFPC) community-based distribution model that works at scale through VHWs. Most implementing partner models are almost exclusively within the donor-funded, public sector programs, with limited evidence on effective models within the private sector. However some implementing partners also operate outside of the public sector, through their own privately managed clinics, social franchise clinics, community and one-on-one distribution as well as outreach services. FBOs also run private clinics and provide FP and HIV services.

Social franchise, NGO and FBO clinics cover the whole of the country. Whilst many of the social franchise and NGO clinics are based in more densely populated and urban areas, the FBO clinics have a wide rural coverage. NGO supported social franchise networks such as the Population Services for Health (PSH) supported ProFam network as well their own static facilities, along with the Population Services Zimbabwe static facilities create networks of over 100 facilities across the country. All provide FP services, although there is often a focus on LARCs, and many also offer HIV services, although PrEP has not yet been rolled out to the general population significantly through these clinics. FBO hospitals and clinics in Zimbabwe contribute 68% health care delivery in Zimbabwe and 35% nationally, although can be considered an extension of the public health system as they receive almost all of their commodities from the government as well as some staff. Most FBO hospitals and clinics are located in remote and hard to reach areas and provide services to underserved, marginalized and vulnerable communities.[xix]

Table 17. Overview of key market considerations for private sector networks in the distribution of the DPP and other MPTs in Zimbabwe

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Private sector networks, made up of FBOs and NGO sites, social franchises and community-based and outreach distribution models have a wide geographic reach and focus on low-income, high density urban areas as well as rural parts of the country. These networks have good relationships with the government and have been involved in FP and HIV programming for many years.	Supportive policies for the private providers on HIV programming, including PrEP. Provision of FP commodities to the private providers is successful and also for HIV commodities so lessons could be learnt for similar models for the DPP.	Coordination and dialogue between the public sector and the selected private sector networks is good and offers opportunities for expanding dialogue for the DPP. Coordinate with MOSAIC partners as they engage the MoHCC on PrEP to initiate discussions on the DPP or other MPTs	Data sharing is feasible, as the selected private sector networks currently report data to the MoH.	Concerns exist about stockouts as supplies of OCs from the government can be erratic. Private providers are currently able to access government commodities as part of the decentralization of OC delivery in Zimbabwe. PrEP has to be procured privately through pharmaceutical wholesalers.	Concerns exist around sustainability of social franchising and NGO funded models. PrEP is mostly funded by PEPFAR who do not fund FP commodities. Concerns exist around how the DPP would be financed as a government commodity.	Many are already involved in FP ART programs and either have or can access appropriate training for PrEP initiation. They have been slow to take up initiation of PrEP but this could be addressed for the DPP and other MPTs. Most social franchises focus on LARCs and not OCs so would need to determine if the DPP would be a priority for them to distribute.	These networks of facilities have a broad geographic coverage and can reach the community level so opportunities exist for reaching high volumes of users. If subsidized models are available, they offer the opportunity to roll out the DPP across the whole country and could target high priority areas.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

Table 18. Promising private sector network models in Zimbabwe

Lessons learnt and opportunities from key populations projects	PSH has an integrated FP/PrEP service delivery model providing both PrEP and OCs in their static "New Start" sites and through their mobile outreach. Their target population is primarily key populations (KPs) with a small part of the general population – mostly clients or partners of KPs. They also have a community-led, cluster-based implementation approach with multidisciplinary teams led by a nurse clinician working with a community health worker or enhanced peer mobilisers. The peer mobilisers are members of the KP community to lead demand creation for HIV testing, PrEP, peer support and retention. The project increases FP and cervical cancer screening to non-HIV positive women through outreaches, integrated with HIV testing and PrEP referrals. It is expected that this initiative will provide valuable lessons that could be considered for rolling out the DPP and other MPTs through private or NGO facilities with outreach capabilities.
Outreach and community distribution models	The Centre for Sexual Health and HIV/AIDS Research Zimbabwe (CeSHHAR) have static sites in Harare and Bulawayo where they provide OCs and PrEP to female sex workers. They also provide integrated OC/PrEP services through mobile outreach to a network of 80 facilities once a week within major cities and highway/transit routes. The COVID-19 restrictions forced them to scale up community-based initiation of PrEP and to dispense refills at a meeting point or even home delivery. This is a similar model to the community ART refill group model for differentiated service delivery (DSD). They do community-based refills through PrEP support groups with cohorts of users. These support groups also act as adherence platforms which have proved effective for improving access and continuation rates with one-month continuation rates increasing from 30% to 80% among new initiations. Whilst this model is focused on KPs, the lessons that can be learnt from its implementation could also be considered when designing models for the roll out of the DPP outside of the public sector. Population Services Zimbabwe (PSZ) have a network of nurses and midwives (MS Ladies) who are community based, mobile single providers, providing contraceptive services and advice to women in their homes. As nurses and midwives are able to prescribe and initiate PrEP (with the appropriate training), the MS Ladies are well placed to be able to provide the DPP.
HIV Prevention Care and Treatment Faith Community Initiative	The Zimbabwe Association of Church Related Hospitals (ZACH) is a membership organization made up of 130 hospitals and clinics country-wide and has presence in all rural districts of Zimbabwe. ZACH receives PEPFAR funding to improve and expand HIV and AIDS prevention, treatment and care services within a network of 75 hospitals and clinics. Services include HIV testing and PrEP initiation.
Social franchise sites supporting PrEP scale up	PSH support the ProFAM network of social franchise sites across Zimbabwe. They partner with clinicians from the private sector (GPs, nurse-led clinics) and build their capacity to be able to provide FP on site, with the sites charging a discounted user fee using social marketing approaches. The client pays a significantly reduced fee with the balance being invoiced to PSH. Whilst the social franchise models are focused on increasing uptake of LARCs for FP, the lessons learnt from the introduction of the discounted user fees through the social franchise sites could be built into a model of distributing the DPP and other MPTs through social franchise sites, although this is dependent on how funding for the DPP will work and who

	would ultimately pay that additional cost as well as the willingness of organizations such as PSH to engage in the distribution of short acting methods.

Priority 3. PPP models PPP models are supported by NGOs and are a young but growing service delivery platform in Zimbabwe, which are also increasingly supported by important donor-funded projects, and so have been considered as the third priority. There is increasing recognition of the need to strengthen linkages between public and private providers to generate the demand and uptake of HIV prevention, care and treatment products and services required to reach and sustain HIV epidemic control in Zimbabwe. Large PEPFAR-funded mechanisms are now explicitly integrating PPP building into the core objectives of traditionally public-sector and community-based programs.

Promising model 11. OPHID's PPP model The USAID-funded Target, Accelerate and Sustain Quality Care (TASQC) program for HIV epidemic control (2020-2025) operating in five provinces of Zimbabwe implemented by OPHID. A strategic objective of the program is to promote PPPs that contribute to the building of MoH facility, district, and provincial level capacity to deliver innovative, technology-driven, evidence-based and results oriented HIV clinical services. OPHID and partner provincial teams are in the process of identifying, engaging, capacitating, and monitoring the participation of private practitioners, health facilities and pharmacies within the MoH's network of HIV care and treatment service providers.

Promising model 12. PZAT's delivery of PrEP through PPPs Pangaea Zimbabwe AIDS Trust (PZAT) are funded by USAID through the MOSAIC project, which aims to create PPPs for the provision of PrEP together with implementing partners such as OPHID. They are conducting research to support evidence-informed and user-centered introduction of new HIV biomedical prevention products including the dapivirine vaginal ring (PrEP ring) and long-acting injectable cabotegravir (CAB PrEP). Such efforts and evidence can be leveraged to support roll out of the DPP in Zimbabwe.

Promising model 13. Public private drug refill model OPHID runs a community-based program through which community cadres distribute HIV self-test kits and screen and mobilize for HIV prevention (including PrEP, testing and treatment services). OPHID is also working on a public-private drug refill model (PPDRM) project for their ART program, the lessons of which will provide an important model of stepwise processes required for PPP and private sector engagement. They have a DSD model in ART delivery that the MoH wants to implement with public facilities and private pharmacies. The public facility identifies clients on ART, including those virally suppressed and with an understanding of adherence issues. Clients are then offered to be part of the PPDRM model, if the client consents, then the public facility provider fills out a prescription with the details of the pharmacy where the client can then go and collect medicines. The medicines go through the normal pathways, i.e. public facility or clinic pre-packs ARVs, and OPHID delivers them to the private pharmacy. The public facility will be responsible for receiving and completing documentation and filling them in. OPHID collects the documents and obtains signatures to confirm the quantity of drugs that have been delivered with confirmation of receipt which is then sent back to the public facility to enable monitoring of stock status. If the client collects their drugs from the pharmacy it is then flagged in the system and provided back to the public facility to allow tracking of clients. The Mpilo Drug Refill Application is a digital application to be used for this process and is being co-developed with FHI360 and OPHID, with SOPs currently in development. It could act as a model for the DPP in Zimbabwe. The application will generate dashboards and reports on uptake, and stock status and will also be able to track stock movement to ensure there are no leaks. The application is integrated into the electronic health record systems, so data is subsequently available through the public sector.

Table 19. Overview of key market considerations for public private partnership models in the distribution of the DPP and other MPTs in Zimbabwe

Headlines	Regulatory and Policy	Public-Private Coordination	M&E	Supply Chain	Financing	Feasibility	Scalability
Promotion of public private partnerships is a strategic objective of current USAID/PEPFAR TASQC program for HIV epidemic control (2020-2025). Pilot projects starting to be implemented or designed. No current models on PrEP/OCs.	Specific design of PPP models will determine whether policy change is required before full scale up The logistics and approvals for some PPP models can be complex and time consuming to address.	As the pilot projects are being run by existing implementing partners, they already have strong relationships with the government.	Data reporting is included in pilot projects as models are new. The OPHID PPP pilot model will help to inform sharing and reporting of uptake and commodity data.	Concerns exist about stockouts as supplies of OCs from the government can be erratic. Lessons can be learnt from the decentralization of OCs and distribution through the private sector.	As PPP models are new, and in pilot phase, financing and financial sustainability need to be considered as part of the models. PrEP is mostly funded by PEPFAR who do not fund FP commodities. Concerns around how the DPP would be financed as a government commodity.	PPPs are a new concept and are in the very early stages of development. Lessons will really only be learnt in the next one to two years.	PPP models are at a very small scale currently and it will be a few years until any lessons learnt for potential scale up.

Legend	The channel performs well against the criteria/not many issues need addressing	The channel performs averagely against the criteria/a few key issues need addressing	The channel performs poorly against the criteria/several issues need addressing

5. Roadmap

Table 20. 2022 – 2024 roadmap to supporting private sector delivery of the DPP in Kenya, South Africa and Zimbabwe

Country	Priority delivery channel	Recommendation	2022		2023				2024			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
All	Cross-cutting	Assess potential and due diligence requirements for providing financial support to identified private sector channels to roll out the DPP										
	Cross-cutting	Develop and cost country introduction strategies and plans together with partners MoHs (which incorporates all priority delivery channels and specific strategies for each channel)										
	Cross-cutting	Develop DPP private sector costing guidelines										
	Cross-cutting	Continue to explore telehealth/online demand creation, information sharing and counselling tools that could support the DPP roll out - and work with selected identified providers to build specific content for the DPP										
	Cross-cutting	Work with each country MoH to determine system requirements for private sector channels to access the DPP through government supplies and to report on usage and uptake										
Kenya	Pharmacies & e-Pharmacies	Increase interest in DPP delivery by engaging with pharmacy and e-pharmacy networks and promising models/organizations										
	Pharmacies & e-Pharmacies	Support Jhpiego's advocacy with GoK to increase support for pharmacy-based delivery and modifying task sharing guidelines to allow pharmacists to prescribe PrEP										
Kenya	Pharmacies	Get pharmacies to participate in national PrEP dialogues and share data in planning processes to increase support for pharmacies including TWGs, forecasting and quantification (F&Q) meetings and annual operational planning										
Kenya	E-pharmacies	Support e-pharmacies and MoH to engage more on the delivery of PrEP and the DPP, sharing data on sales, reach and future plans										
	E-pharmacies	Advocate for progressive eHealth Bill to become law by partnering with e-pharmacy organizations, partners and pharmacy representation bodies										

Country	Priority delivery channel	Recommendation	2022		2023				2024			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		(e.g. Pharmaceutical Society of Kenya, Pharmacy and Poisons Board) to strengthen development										
Kenya	Private provider networks	Increase interest in DPP delivery by engaging with private provider networks and promising models/organizations										
	Private provider networks	Partner with Kenya Medical Association and other cadre-specific associations to increase support for PrEP and the DPP through private sector networks										
	Private provider networks	Start advocating for DPP inclusion in national health insurance by partnering with networked private provider networks (and others such as the Kenya Health Federation)										
	Private provider networks	Address provider bias by piloting VCAT and client-centered care training of selected private providers in preparation for the DPP rollout										
Kenya	Telehealth	Improve data quality by working with the Kenya Medical Practitioners and Dentists Council and others to gather data on telemedicine providers on current OC, EC, HIVST, STI, PEP and PrEP consultations and referrals										
	Telehealth	Get telehealth to participate in national dialogues and share data in planning processes to increase support from GoK including TWGs, F&Q meetings and annual operational planning										
	Telehealth	Advocate for eHealth Bill to become law by partnering with telemedicine organizations. Advocate for coverage of HIV and FP services and task-shifting to pharmacists covered in regulations for virtual services										
South Africa	Pharmacies	Advocate for PIMART to be reinstated by supporting the Southern Africa HIV Clinicians Society (SAHCS) and Independent Community Pharmacies Association (ICPA) in defending PIMART against court case										
	Pharmacies	Increase interest in DPP delivery by engaging with pharmacy networks such as ICPA and promising models/organizations										
	Pharmacies	Advocate for inclusion of DPP training module into PIMART training. Work with SAHCS and ICPA to advocate for development and inclusion of DPP training into PIMART training and certification										
South Africa	Telemedicine	Improve data availability by working with Africa Telehealth Collaboration, Health Professions Council of SA (HPCSA) and others to gather data on current FP and HIV service provision consultations and prescriptions										

Country	Priority delivery channel	Recommendation	2022		2023				2024			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Telemedicine	Support discourse to strengthen discussions with public sector on updating the 2014 telemedicine guidelines and regulations to ensure delivery advances seen during COVID-19 continue										
South Africa	**Private provider networks**	Address provider bias by piloting VCAT and client-centered care training of selected private providers in preparation for the DPP rollout										
	Private provider networks	Increase interest among private provider networks in PrEP delivery to the general population										
	Private provider networks	Use GP Care Cell Pilot results to advocate for the inclusion and scale-up of private GPs to provide PrEP to National Health Insurance Scheme clients										
Zimbabwe	**Pharmacies**	Engage with the Community Pharmacies Association (CPA) to support task-shifting to pharmacists policy development										
	Pharmacies	Increase interest in DPP delivery by engaging with pharmacy networks such as the CPA and promising models/organizations										
	Pharmacies	Get pharmacies to participate in national PrEP dialogues and share data in planning processes										
Zimbabwe	**Private provider networks**	Increase interest in PrEP and DPP delivery by engaging with private networks										
	Private provider networks	Partner with the Medical and Dental Private Practitioners of Zimbabwe Association, Zimbabwe Association of Church Related Hospitals, Zimbabwe Medical Association and other cadre-specific associations to increase support for PrEP and the DPP through private sector networks										
	Private provider networks	Address provider bias by piloting VCAT and client-centered care training in preparation for the DPP rollout										
Zimbabwe	**Public private partnership models**	Closely follow PPP models for lessons learnt to apply to the DPP rollout. If PPPs continue to show promise, consider supporting specific PPP pilot models of integrated FP/PrEP delivery that would pave the way for the delivery of the DPP and other MPTs										

List of organizations interviewed and scoped

Multi Country

- FHI 360
- FHI 360 MOSAIC
- Jhpiego
- CHAI
- Audere

Kenya

National & sub national governments, MoH, regulatory bodies, logistics & supply bodies

- KEMSA
- NASCOP
- NHIF
- Kenya Medical Association
- Kenya Pharmaceutical Association
- Pharmaceutical Association of Kenya
- Pharmacies and Poisons Board
- Country Youth Advisory Council

Key donors and development partners, implementing agencies

- Bill and Melinda Gates Foundation
- USAID
- FHI 360
- Jhpiego
- LVCT Health
- KEMRI
- WACI Health

Private sector organizations, networks and associations

- Access Afya
- Penda Health
- Kenya Association of Private Hospitals

Pharmacies and drug shops

- Maisha Meds
- Goodlife Pharmacy
- Lifemed Pharmacy
- MyDawa

Telehealth

- HealthXAfrica
- Zuri Health
- Byon8
- Kasha

- Aviro
- Triggerise

NGOs & FBOs with a focus on community-based distribution & mobile outreach

- Marie Stopes Kenya
- PS Kenya
- KMET
- Tunza

South Africa

National & sub national governments, MoH, regulatory bodies, logistics & supply bodies/organizations

- Discovery Health (Insurance Provider)
- DoH Western Cape
- DKT
- AIDS Unit Programme Manager
- National Department of Health

Key donors and development partners, implementing agencies

- USAID
- CHAI
- FHI 360
- Wits RHI
- Francois Venter – representing Ezintsha & Southern African HIV Clinicians Society
- WomanCare Global
- Right to Care

Private sector organizations, networks and associations

- Unjani clinics
- Foundation for Professional Development – GP Care Cell
- Clinix Health Group
- Private Doctor

Pharmacies and drug shops

- Independent Community Pharmacies Association
- Private Pharmacist
- Private Pharmacist

Telehealth

- Contro
- Zoie Health
- Audere (Artificial Intelligence)
- Aviro
- Attended SA telehealth webinar

NGOs & FBOs with a focus on community-based distribution & mobile outreach

- Marie Stopes South Africa
- Desmond Tutu Foundation
- Aurum Institute
- Wits RHI

Zimbabwe

National & sub national governments, MoH, regulatory bodies, logistics & supply bodies/organizations

- USAID Global Health Supply Chain Program Procurement and Supply Management (GHSC-PSM) (previously Chemonics)
- MoHCC

Key donors and development partners, implementing agencies

- Pangaea Zimbabwe AIDS Trust (PZAT)
- The Organization for Public Health Interventions and Development (OPHID)
- CHAI

Private sector organizations, networks and associations

- Medical and Dental Private Practitioners of Zimbabwe Association (MDPPZA)
- Premier Services Medical Services
- Dr M Sibanda – Private Doctor
- Citmed Hospital

Pharmacies and drug shops

- Supermed Pharmacy
- M&M Friendly Care Pharmacy
- BR Pharmacy
- Community Pharmacies Association

Telehealth

- Zimbabwe Telemedicine Network

NGOs & FBOs with a focus on community-based distribution & mobile outreach

- The Centre for Sexual Health and HIV/AIDS Research Zimbabwe (CeSHHAR)
- London School of Hygiene and Tropical Medicine
- The Organization for Public Health Interventions and Development (OPHID)
- Population Services for Health (PSH) – formerly PSI Zimbabwe
- University of Zimbabwe – Clinical Trials Research Unit (UZ-CRTU)
- Zimbabwe Health Interventions (ZHI

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