Strategic Information – a comprehensive approach to DDD

Decentralized Drug Distribution (DDD) Learning Collaborative

October 8, 2020

PEPFAR

USAID
FROM THE AMERICAN PEOPLE

EpiC
Meeting Targets and Maintaining Epidemic Control

Session 6: Learning Collaborative Agenda (7-8:30 am EST)

- **DDD USAID/OHA Custom Indicators**
  Juan Flores: Data Analyst, Supply Chain for Health Division, USAID
- **DDD Reporting Systems: Data Collection**
  Amy Gottlieb, PhD, MPH Deputy Director-SI FHI 360
- **Designing data-driven decentralized distribution systems**
  Tawanda Dube: Technical Specialist - Pharmaceutical Services, Right to Care
- **Mapping and Spatial Analysis for DDD: What resources and methods are available through GIS to support planning the devolvement of ART clients**
  Caleb Parker: MA: Senior Research Associate/GIS Analyst, FHI 360
- **Including decentralized drug delivery in community-led monitoring systems**
  Meg DiCarlo: MPH, Deputy Director- Program Acceleration, FHI360

PANELISTS

Juan Flores
Data Analyst, USAID

Tawanda Dube
Technical Specialist, Right to Care

Caleb Parker, MA
Senior Research Associate/ GIS Analyst, FHI 360

Amy Gottlieb, PhD, MPH
Deputy Director, FHI 360

Meg DiCarlo
Deputy Director, FHI 360

FACILITATORS

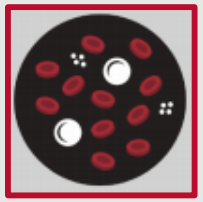
Amy Gottlieb, PhD, MPH
Deputy Director, FHI 360

Hannah Marqusee
Health Economics Advisor, USAID

DDD USAID/OHA Custom Indicators

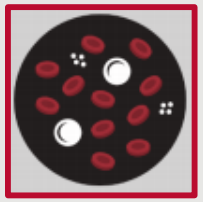
Juan Flores, Data Analyst
USAID/OHA/SCH

The Custom Indicators



Program Area	#	Indicator	Organizational unit	Reporting Frequency
Health Systems	1	DDD_HF	PSNU	Quarterly
	2	DDD_PuP		
	3	HRH_DDD		
	4	SC_ARVDISP_DDD	Facility	
Prevention	5	PrEP_NEW_DDD		
	6	PrEP_CONT_DDD		
Treatment	7	TX_CURR_DDD		
	8	TX_ML_DDD		
Viral Suppression	9	TX_PVLS_DDD		

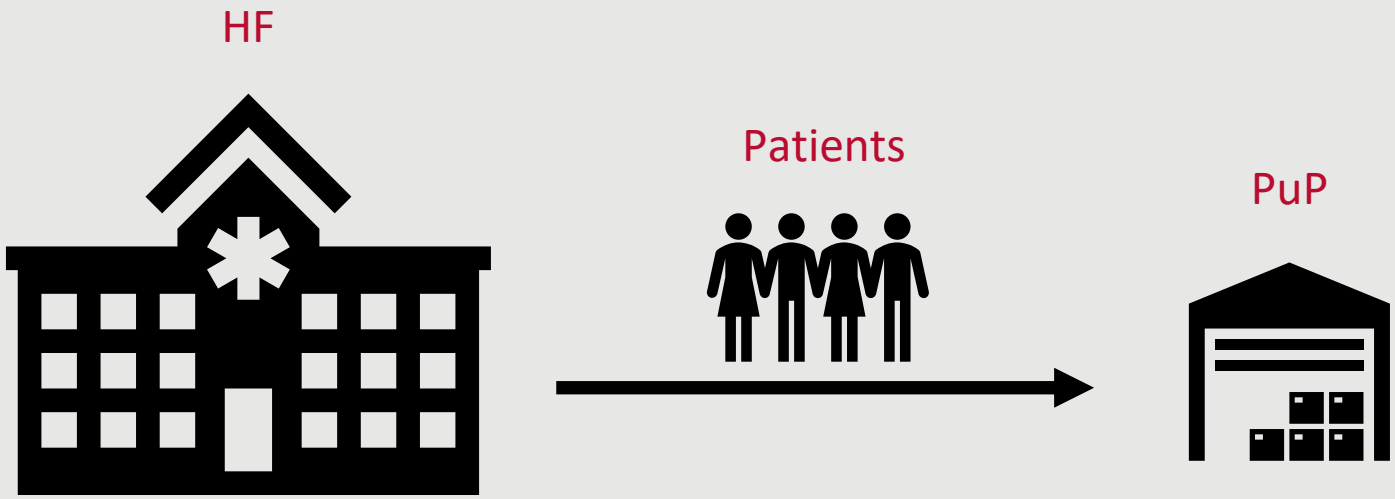
High Priority Custom Indicators



Program Area	#	Indicator	Organizational unit	Reporting Frequency
Health Systems	1	DDD_HF	PSNU	Quarterly
	2	DDD_PuP		
	3	HRH_DDD		
	4	SC_ARVDISP_DDD	Facility	
Prevention	5	PrEP_NEW_DDD		
	6	PrEP_CONT_DDD		
Treatment	7	TX_CURR_DDD		
	8	TX_ML_DDD		
Viral Suppression	9	TX_PVLS_DDD		

DDD_HF

Number of health facilities from which patients are devolved to decentralized drug delivery (DDD) pick-up points (PuP) or other DDD modalities for treatment ARVs and/or PrEP



Reporting Frequency:
Quarterly

Reporting Level:
PSNU

Disaggregate:
Dispensation Drug Type

1. ARVs and PrEP
2. Only ARVs
3. Only PrEP

DDD_PuP

Number of decentralized drug distribution (DDD) pick-up points (PuP) and other DDD modalities providing ARVs and/or PrEP to patients devolved from health facilities

<u>Reporting Frequency</u>:
Quarterly

<u>Reporting Level</u>:
PSNU

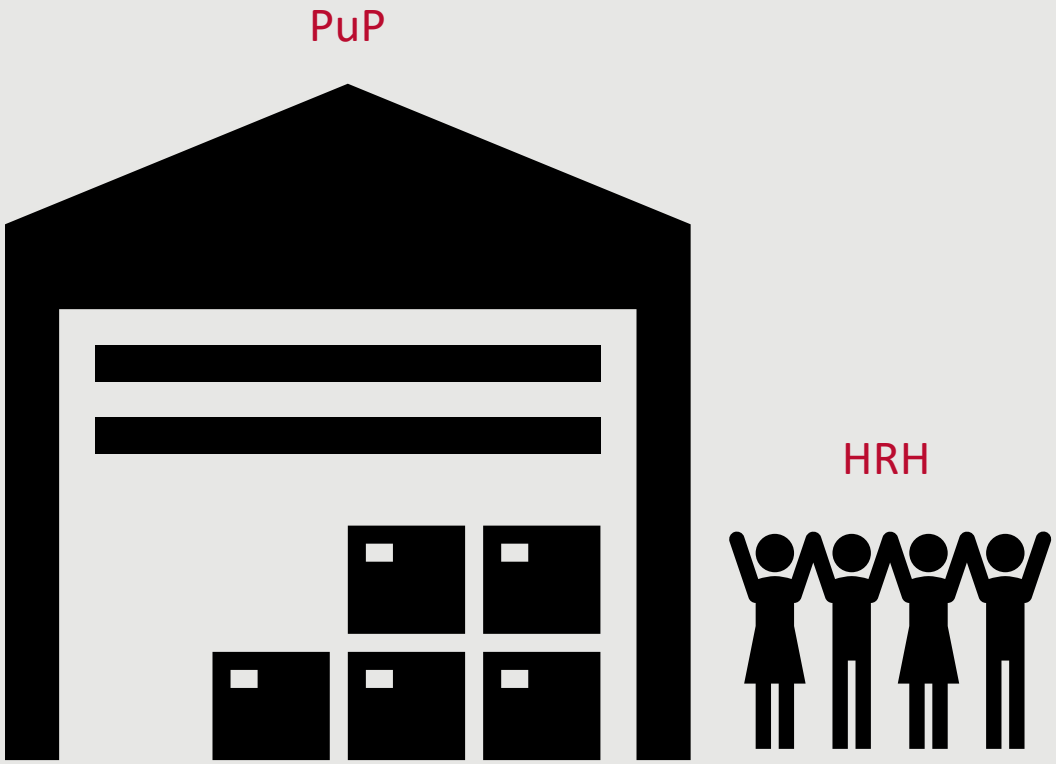
<u>Disaggregate</u>:
Dispensation Drug Type

1. ARVs and PrEP
2. Only ARVs
3. Only PrEP

<u>Sub-disaggregate:</u>
PuP type or modality

HRH_DDD

Number of individuals dispensing ARVs or PrEP at DDD pick-up points (PuP) or through other DDD modalities



Reporting Frequency:
Quarterly

Reporting Level:
PSNU

Disaggregate:
Worker Cadre

1. Clinical Cadre
2. Pharmacist Cadre
3. Lay Workers

Sub-disaggregate:
Worker Type

Sub-disaggregates

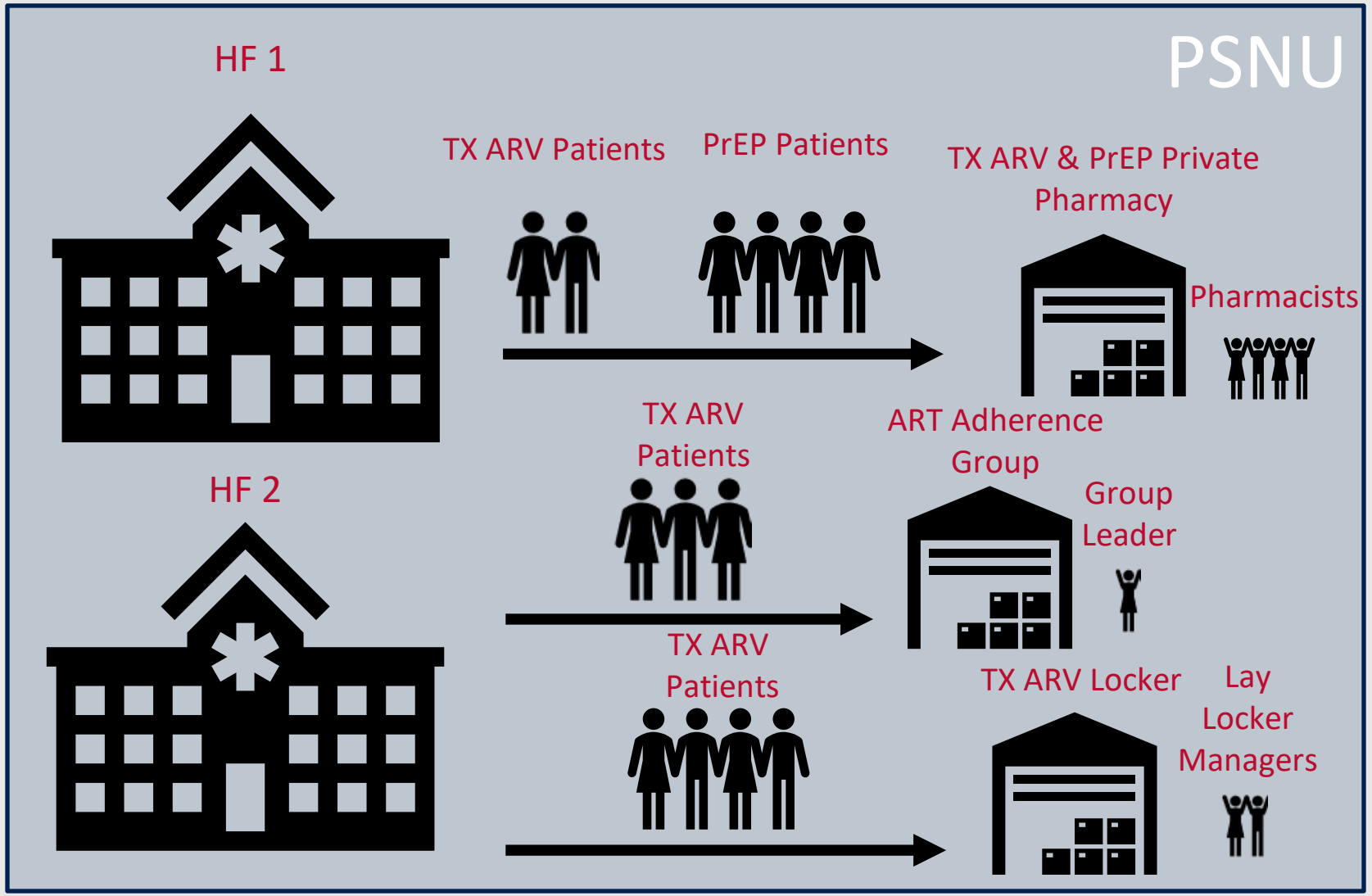
DDD_PuP

PuP Type (Choose only 1)
1. Private hospital/clinic/practice
2. Private or community pharmacy
3. Auto-dispenser units (e.g., PDUs, CDUs, PCUs/lockers)
4. Fixed or ad hoc pick-up points (e.g., retail shops, schools, faith-based spaces, other community spaces)
5. Group delivery (e.g., adherence club)
6. Individual delivery (home-based)
7. Mobile van/other vehicle
8. Other

HRH_DDD

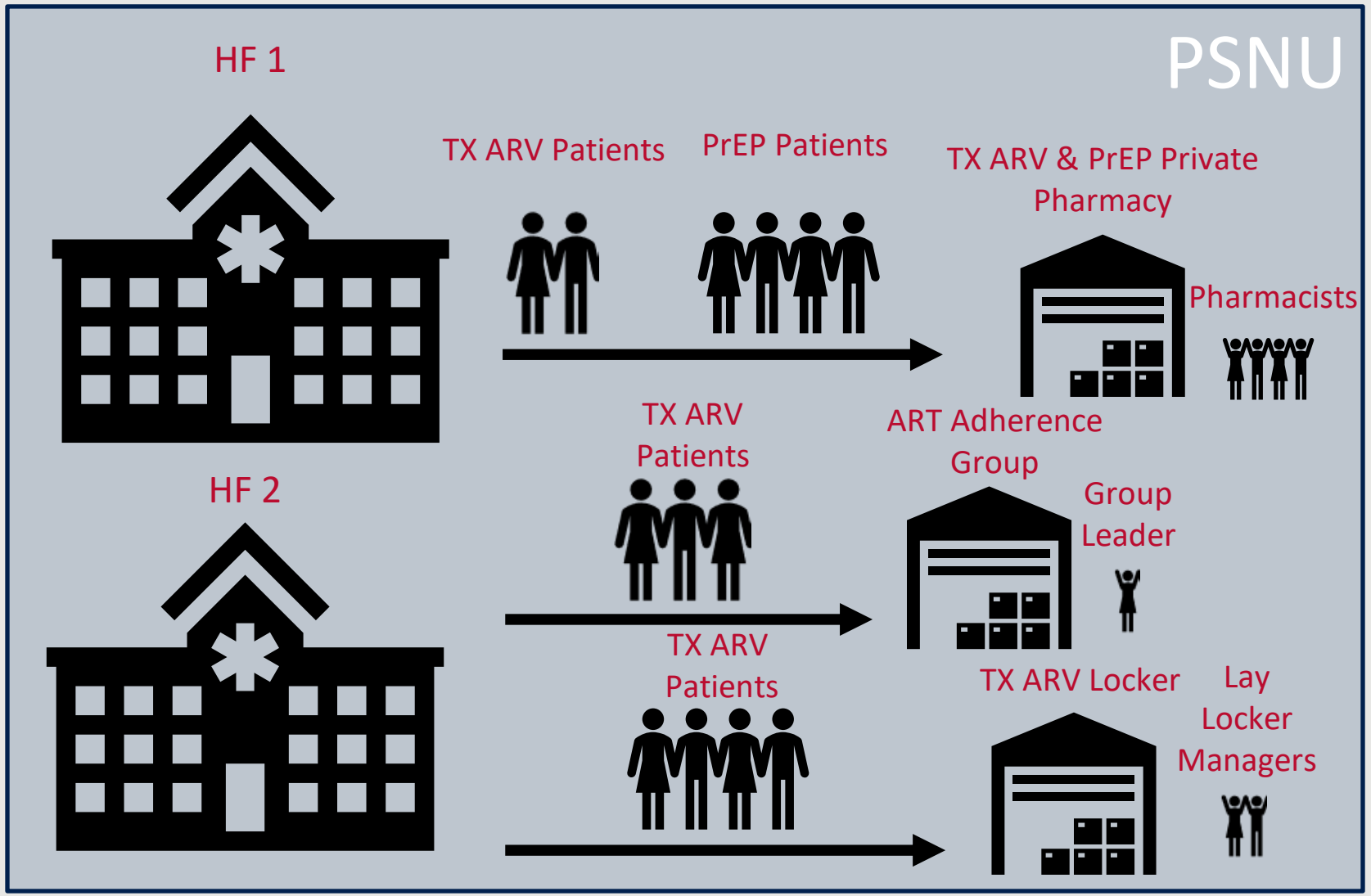
Worker Type (Choose only 1)
1. Dispenser at a private hospital/clinic/practice
2. Dispenser at a private or community pharmacy
3. Auto-dispenser unit manager
4. Dispenser at fixed or ad hoc pick-up points
5. ARV deliverer for groups (e.g., adherence club)
6. ARV deliverer for individuals (home-based)
7. Dispenser at a mobile van/other vehicle
8. Dispenser at a different DDD pick-up point or modality type

Tying it all together: **DDD_HF**



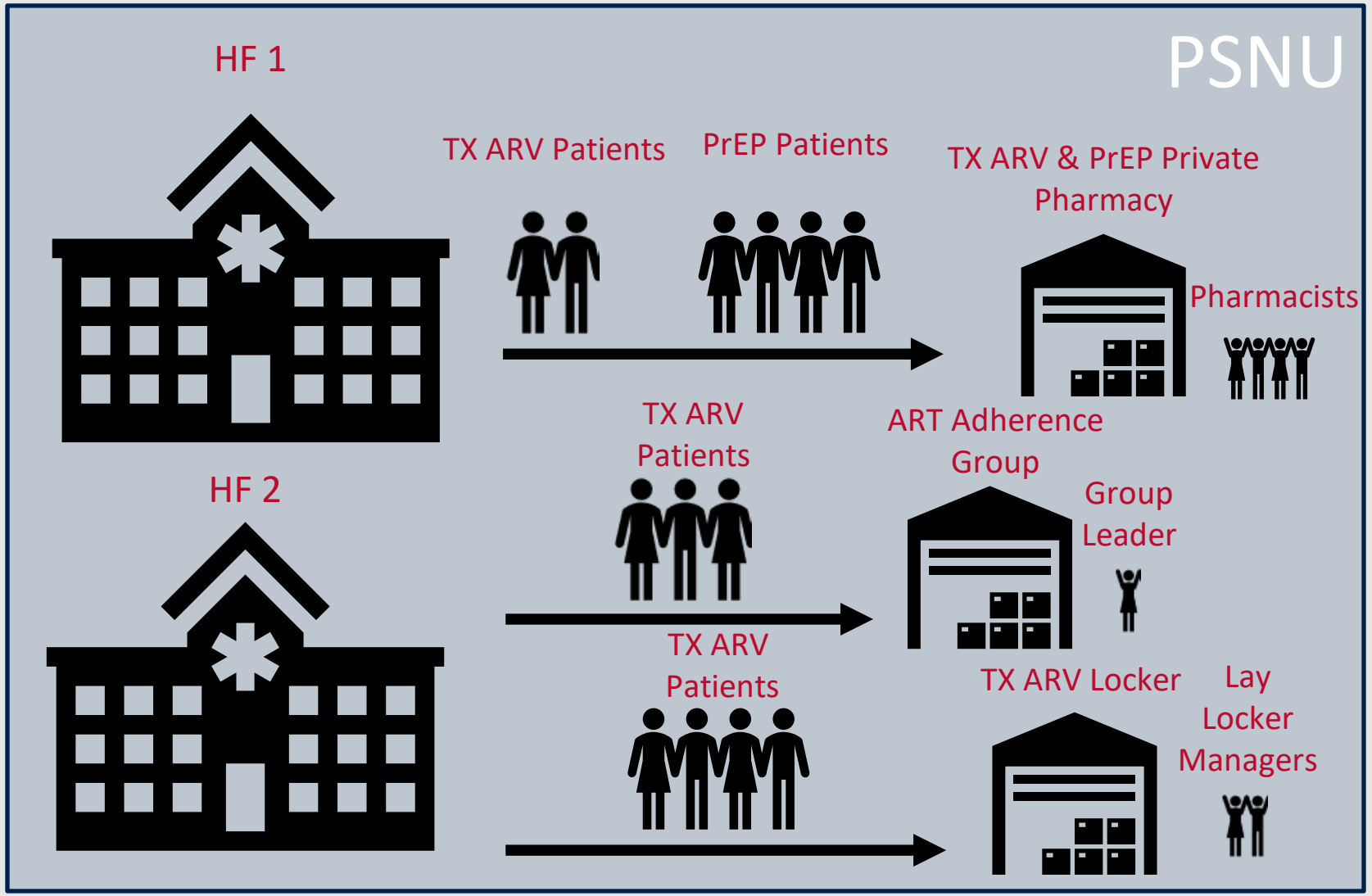
DDD_HF	Total: 2
ARVs and PrEP:	1
Only ARVs:	1

Tying it all together: **DDD_PuP**



DDD_PuP	Total: 3
ARVs and PrEP:	1
Private Pharmacy	1
Only ARVs:	2
Group delivery	1
Auto-disp unit	1

Tying it all together: **HRH_DDD**



HRH_DDD	Total: 7
Pharmacy Cadre:	4
Dispenser at private pharmacy	4
Lay Cadre:	3
ARV deliverer for groups	1
Auto-dispenser unit manager	2

Thank you!

Juan Flores, jflores@usaid.gov

USAID
FROM THE AMERICAN PEOPLE

DDD Reporting Systems: Data Collection

Decentralized Drug Distribution (DDD) Learning Collaborative

Amy Gottlieb, PhD, MPH

Deputy Director, SI, EpiC

PEPFAR

USAID FROM THE AMERICAN PEOPLE

EpiC Meeting Targets and Maintaining Epidemic Control

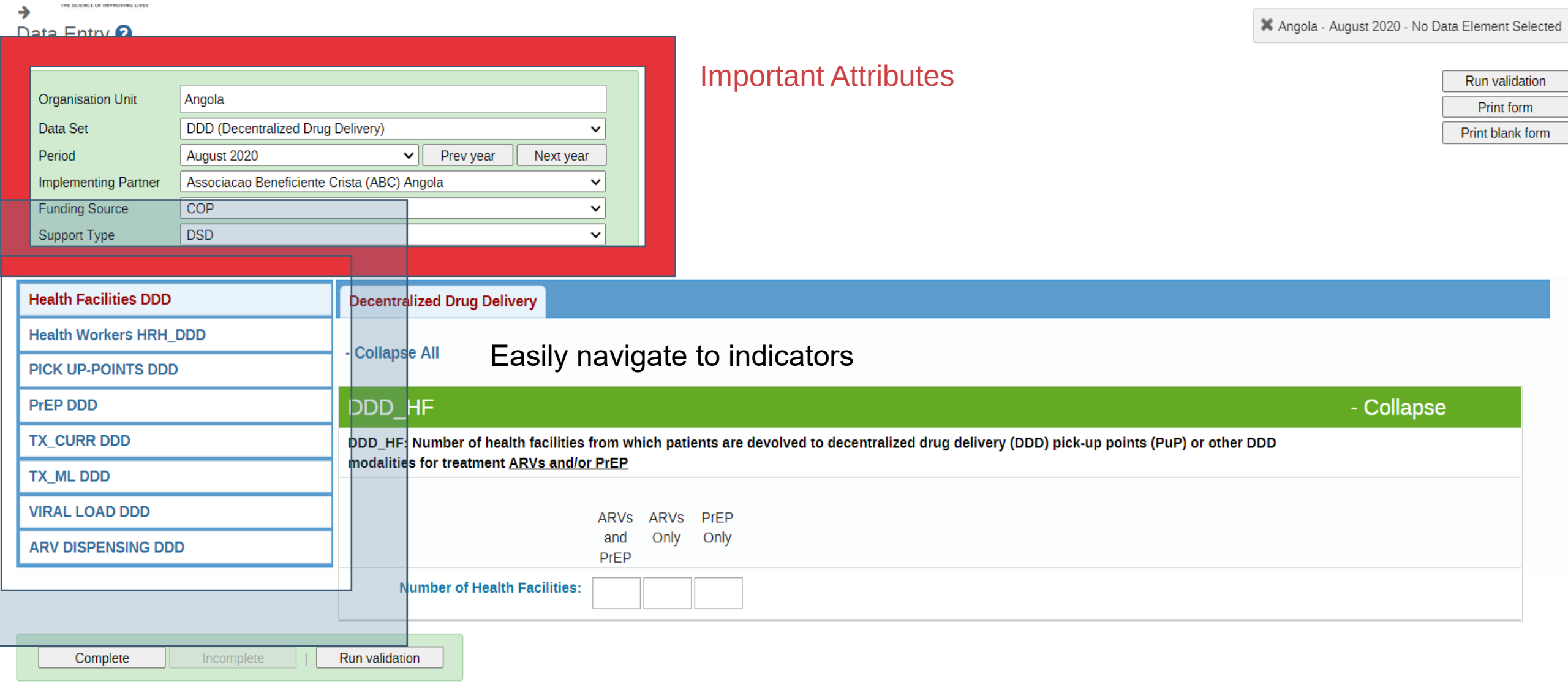
Important to Keep in Mind

- Nine new DDD indicators
  - Refer to Indicator Reference Sheets
- Disaggregated by 8 PuP types
  - Private hospital/clinic/practice
  - Private or community pharmacy
  - Auto-dispenser units (e.g., PDUs, CDUs, PCUs/lockers)
  - Fixed or ad hoc pick-up points (e.g., retail shops, schools, faith-based spaces, other community spaces
  - Group delivery (e.g., adherence club)
  - Individual delivery (home-based)
  - Mobile van/other vehicle
  - Other
- New Age Ranges
  - <15
  - 15 – 24
  - 25+
- Monthly Reporting – InfoLink (EpiC/LINKAGES) and Bilateral Systems

Reporting Levels

Indicator	Indicator Description	DHIS 2 Reporting Level
DDD_HF	Number of health facilities/stand alone sites from which patients are devolved to decentralized drug delivery (DDD) pick-up points (PuP) or other DDD modalities for treatment ARVs and or PrEP	**PSNU (DISTRICT)**
DDD_PuP	Number of decentralized drug distribution (DDD) pick-up points (PuP) and other DDD modalities providing ARVs and PrEP to patients **devolved from health facilities**	**PSNU (DISTRICT)**
HRH_DDD	Description: Number of health workers employed for dispensing treatment or PrEP ARVs at decentralized drug distribution (DDD) pick-up points (PuP) or through other DDD modalities	**PSNU (DISTRICT)**
PrEP_NEW_DDD	Number of individuals who were newly enrolled on oral antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV infection in the reporting period at a DDD pick-up point or other DDD modality	Facility
PrEP_CONT_DDD	Number of individuals who return for a refill of oral pre-exposure prophylaxis (PrEP) to prevent HIV infection in the reporting period at a decentralized drug distribution (DDD) pick-up point or other DDD modality	Facility
SC_ARVDISP_DDD	Number of adult and pediatric ARV bottles (units) dispensed at DDD pick-up points (PuP) and through other DDD modalities, by ARV drug category at the end of the reporting period	Facility
TX_CURR_DDD	Number of adults and children currently accessing ARVs through decentralized drug dispensing (DDD) pick-up points (PuP) or other DDD modalities	Facility
TX_ML_DDD	Number of ART patients (who were on ART at the beginning of the quarterly reporting period) and then had no clinical contact since their last expected pick up	Facility
TX_PVLS_DDD	Percentage of DDD ART patients with a suppressed viral load (VL) result (<1000 copies/ml) documented in the medical or laboratory records/laboratory information systems (LIS) within the past 12 months	Facility

Select Screenshots from InfoLink


Data Entry
Angola - August 2020 - No Data Element Selected
Organisation Unit
Angola
Data Set
DDD (Decentralized Drug Delivery)
Period
August 2020
Prev year
Next year
Implementing Partner
Associacao Beneficiente Crista (ABC) Angola
Funding Source
COP
Support Type
DSD
Run validation
Print form
Print blank form
Important Attributes
Health Facilities DDD
Health Workers HRH_DDD
PICK UP-POINTS DDD
PrEP DDD
TX_CURR DDD
TX_ML DDD
VIRAL LOAD DDD
ARV DISPENSING DDD
Decentralized Drug Delivery
- Collapse All
Easily navigate to indicators
DDD_HF
- Collapse
DDD_HF: Number of health facilities from which patients are devolved to decentralized drug delivery (DDD) pick-up points (PuP) or other DDD modalities for treatment ARVs and/or PrEP
ARVs and PrEP
ARVs Only
PrEP Only
Number of Health Facilities:
Complete
Incomplete
Run validation

- Collapse All

Angola - August 2020 - No Data Element Sele

PICK UP-POINTS DDD

PrEP DDD

TX_CURR DDD

TX_ML DDD

VIRAL LOAD DDD

ARV DISPENSING DDD

- Collapse

other DDD modalities providing ARVs and/or PrEP to patients devolved from health facilities

	ARVs and PrEP	ARVs Only	PrEP Only
Private hospital/clinic/practice			
Private or community pharmacy			
Auto-dispenser units (i.e., PDUs, CDUs, PCUs/lockers)			
Fixed pick-up points (retail shops, schools, faith-based spaces, community spaces)			
Group delivery (i.e., adherence club)			
Individual delivery (home-based)			
Mobile van/other vehicle			
Other			
Total ARVs and PrEP	0		
Total ARVs Only	0		
Total PrEP Only	0		

Disaggregated by PuP Type and Drug Type

Data Entry

Angola - August 2020 - No Data Element Selecte

Run validation
Print form
Print blank form

Organisation Unit	Angola
Data Set	DDD (Decentralized Drug Delivery)
Period	August 2020 Prev year Next year
Implementing Partner	Associacao Beneficiente Crista (ABC) Angola
Funding Source	COP
Support Type	DSD

- Health Facilities DDD
- Health Workers HRH_DDD
- PICK UP-POINTS DDD
- PrEP DDD
- TX_CURR DDD
- TX_ML DDD
- VIRAL LOAD DDD
- ARV DISPENSING DDD

Decentralized Drug Delivery

+ Expand All

PrEP_NEW_DDD + Expand

PrEP_CONT_DDD + Expand

Complete | Incomplete | Run validation

Health Facilities DDD
Health Workers HRH_DDD
PICK UP-POINTS DDD
PrEP DDD
TX_CURR DDD
TX_ML DDD
VIRAL LOAD DDD
ARV DISPENSING DDD

+ Expand All

PrEP_NEW_DDD - Coll

PrEP_NEW_DDD: Number of individuals who were newly enrolled on oral antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV infection in the reporting period at a DDD pick-up point or other DDD modality

Overall Total of PrEP_NEW_DDD: 0

Private hospital/cl…practice Unknown

Age	<15	15-24	25+
Female				
Male				

Private or community pharmacy Unknown

Age	<15	15-24	25+
Female				
Male				

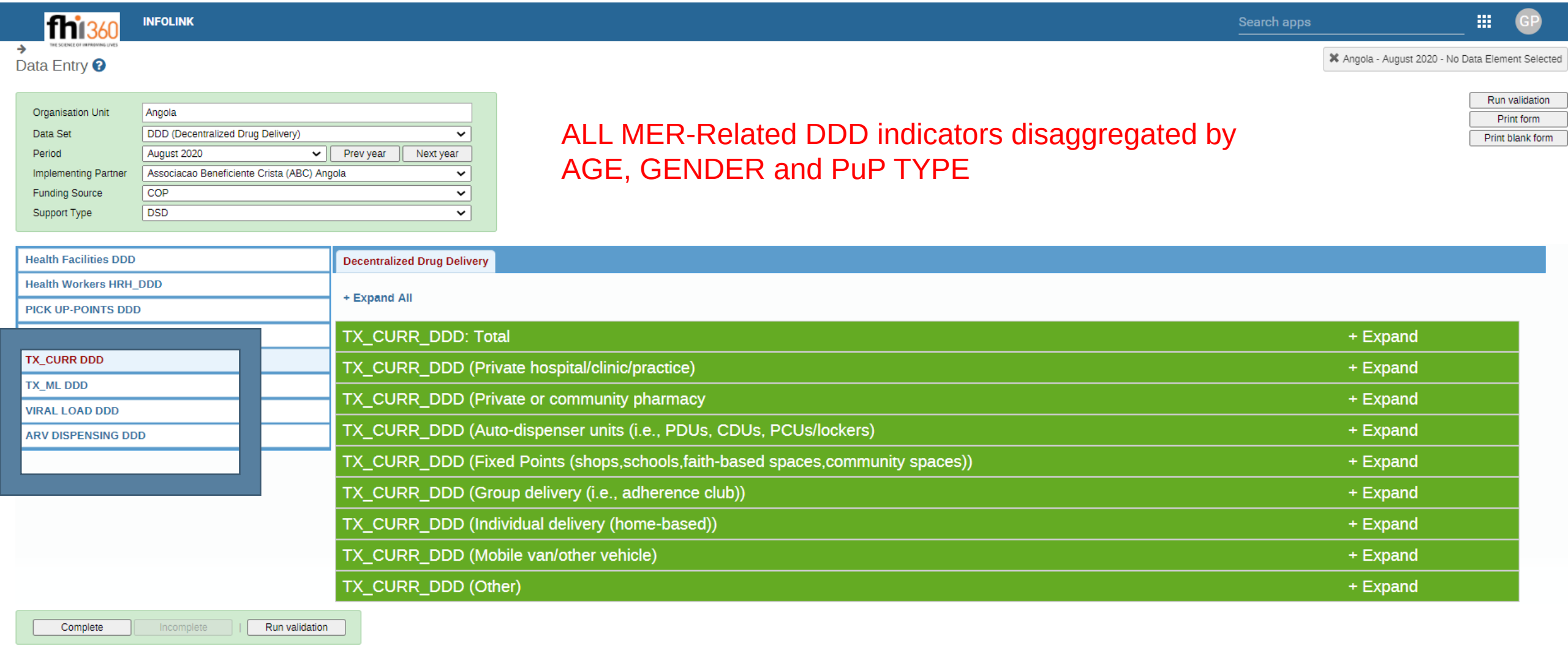
Auto-dispenser units (i.e., PDUs, CDUs, PCUs/lockers) Unknown

Age	<15	15-24	25+
Female				
Male				

Fixed pick-up points (retail shops, schools, faith-based spaces, community spaces) Unknown

Age	<15	15-24	25+
Female				

New Age Bands


fhi360
INFOLINK
Search apps
GP
Data Entry
Angola - August 2020 - No Data Element Selected
Organisation Unit
Angola
Data Set
DDD (Decentralized Drug Delivery)
Period
August 2020
Prev year
Next year
Implementing Partner
Associacao Beneficiente Crista (ABC) Angola
Funding Source
COP
Support Type
DSD
Run validation
Print form
Print blank form
ALL MER-Related DDD indicators disaggregated by AGE, GENDER and PuP TYPE
Health Facilities DDD
Health Workers HRH_DDD
PICK UP-POINTS DDD
TX_CURR DDD
TX_ML DDD
VIRAL LOAD DDD
ARV DISPENSING DDD
Decentralized Drug Delivery
+ Expand All
TX_CURR_DDD: Total
TX_CURR_DDD (Private hospital/clinic/practice)
TX_CURR_DDD (Private or community pharmacy
TX_CURR_DDD (Auto-dispenser units (i.e., PDUs, CDUs, PCUs/lockers)
TX_CURR_DDD (Fixed Points (shops,schools,faith-based spaces,community spaces))
TX_CURR_DDD (Group delivery (i.e., adherence club))
TX_CURR_DDD (Individual delivery (home-based))
TX_CURR_DDD (Mobile van/other vehicle)
TX_CURR_DDD (Other)
+ Expand
Complete
Incomplete
Run validation

Data Entry

Angola - August 2020 - No Data Element Selected

Organisation Unit	Angola
Data Set	DDD (Decentralized Drug Delivery)
Period	August 2020 — Prev year — Next year
Implementing Partner	Associacao Beneficiente Crista (ABC) Angola
Funding Source	COP
Support Type	DSD

Run validation
Print form
Print blank form

- Health Facilities DDD
- Health Workers HRH_DDD
- PICK UP-POINTS DDD
- PrEP DDD
- TX_CURR DDD
- TX_ML DDD
- VIRAL LOAD DDD
- ARV DISPENSING DDD

Decentralized Drug Delivery

+ Expand All

TX_CURR_DDD: Total — - Collapse

TX_CURR_DDD: Number of adults and children currently accessing ARVs through decentralized drug dispensing (DDD) pick-up points (PuP) or other DDD modalities

Overall Total of TX_CURR_DDD:	0

TX_CURR_MMD_DDD: Total ARV Dispensing quantity

< 3 Months of ARVs (not MMD) dispensed to patients (Total):	0
3-5 months of ARVs dispensed by patient (Total):	0
6 or more months of ARVs dispensed to patient (Total):	0

Total Auto-sums across PuP Types

TX_CURR_DDD (Private hospital/clinic/practice) — + Expand

TX_CURR_DDD (Private or community pharmacy) — + Expand

TX_CURR_DDD (Auto-dispenser units (i.e., PDUs, CDUs, PCUs/lockers) — + Expand

TX_CURR_DDD (Fixed Points (shops,schools,faith-based spaces,community spaces)) — + Expand

TX_CURR_DDD (Group delivery (i.e., adherence club)) — + Expand

- Health Workers HRH_DDD
- PICK UP-POINTS DDD
- PrEP DDD
- TX_CURR DDD
- TX_ML DDD
- VIRAL LOAD DDD
- ARV DISPENSING DDD

+ Expand All

TX_CURR_DDD: Total + Expand

TX_CURR_DDD (Private hospital/clinic/practice) - Collapse

TX_CURR_DDD: Number of adults and children currently accessing ARVs through decentralized drug dispensing (DDD) pick-up points (PuP) or other DDD modalities

	Unknown Age	<15	15-24	25+
Female				
Male				

TX_CURR_MMD_DDD: ARV Dispensing quantity

< 3 Months of ARVs (not MMD) dispensed to patients	Unknown Age	<15	15+
Female			
Male			

3-5 months of ARVs dispensed by patient	Unknown Age	<15	15+
Female			
Male			

6 or more months of ARVs dispensed to patient	Unknown Age	<15	15+
Female			
Male			

TX_CURR_DDD (Private or community pharmacy + Expand

Designing data-driven decentralized distribution systems

Tawanda Dube
Technical Specialist – Pharmaceutical Services
Right ePharmacy

Leveraging technology to create supply chain efficiencies and facilitate data flows

Traditional Model

National Warehouse → Regional Warehouse → District Warehouse → Health facilities → Community ART Group (CAGs) or Pick-up Point

Separate systems at all levels *- government, supply chain, health facility, pick-up points systems – often paper-based*

Right ePharmacy's Automated Model

National Warehouse or District Warehouse → Centralized Dispensing Unit (CDU) → Health facilities; CAGS; Pick-up Points

E.g. Right ePharmacy's Pharmacy Dispensing Unit (PDU) and Prescription Collection Unit (PCU)

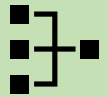
Cloud mobile logistics system *integrated into existing EMR and supply chain systems with one data pool to support updates in national government and 3rd party implementing partner systems*

#ATMpharmacy @rightepharmacy @righttocare

Right ePharmacy systems are set-up to support integration with government reporting systems

Baseline assessment of existing government systems (manual / electronic) to establish data flow requirements

Set-up software development task team with all stakeholders managing government systems and **propose integration of various systems with REP systems as bridge**



Outline project scope and costs in collaboration with Ministry and donors

Project implementation - transition to new solution once proves stable

Training and operational maintenance of system

Right ePharmacy's system supports easy reporting to USAID and PEPFAR

Systems are customized to align with the programs, partners, and donors' M&E expectations, ensuring:

- indicators reflect any new PEPFAR initiatives and/or emerging programmatic areas;
- indicators align with multilaterals and partner governments to avoid duplication of data collection, where possible;
- continuous alignment within PEPFAR data streams ;
- redundancies are reduced between indicators where possible; and
- MER guidance and training materials reinforce the relationships within and between indicators.

Examples of Patient-related Indicators

New enrollments - TX_NEW, TLD_NEW

Repeat clients - TX_CURR, TLD_CURR

Deactivated and rejected clients

Examples of DDD Indicators

Number of health facilities/stand alone sites from which patients are devolved to decentralized drug delivery (DDD) pick-up points (PuP) or other DDD modalities for treatment ARVs and or PrEP

Number of decentralized drug distribution (DDD) pick-up points (PuP) and other DDD modalities providing ARVs and PrEP to patients devolved from health facilities

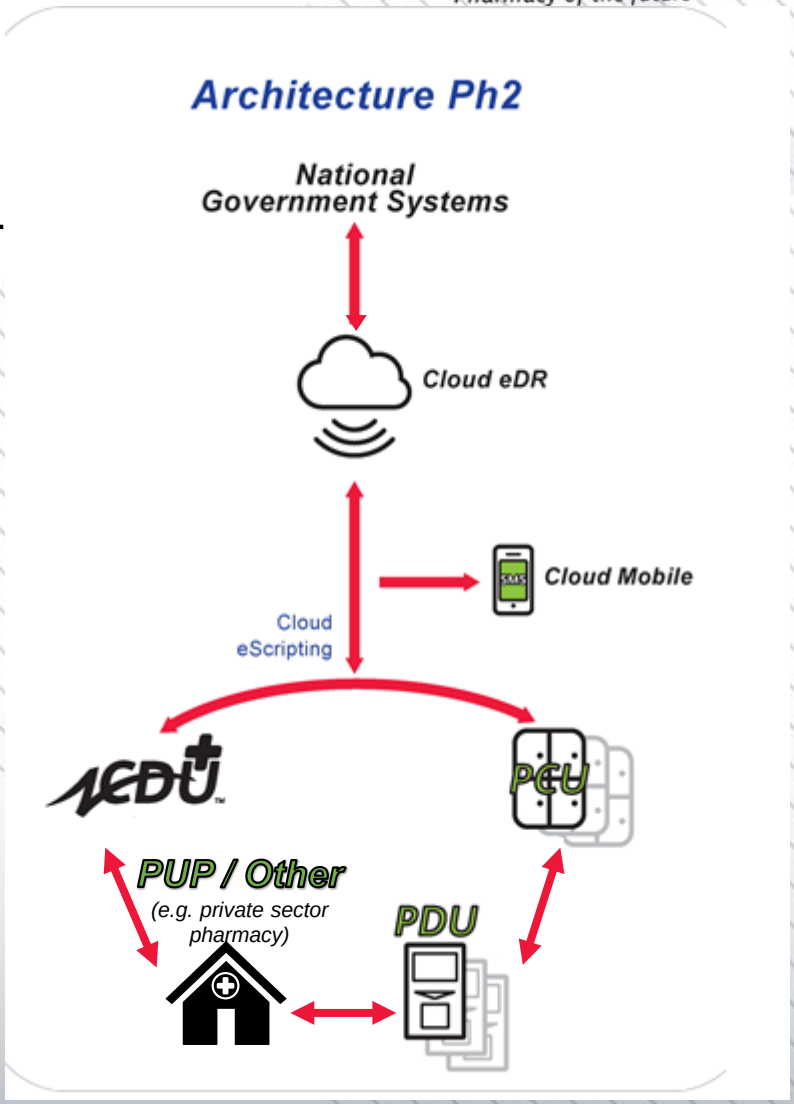
Number of patients at these facilities that are currently receiving ART

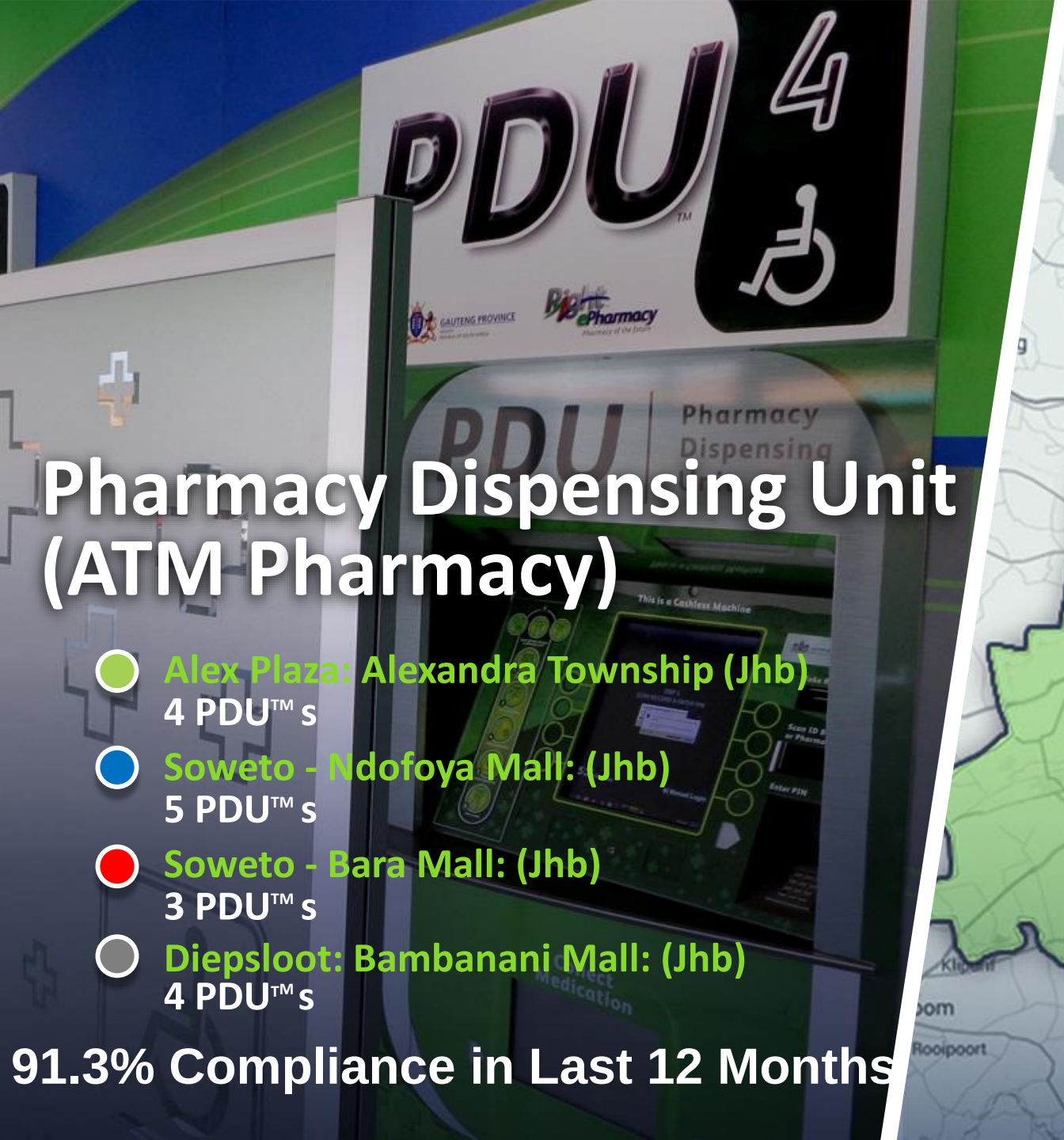
Number of patients who will be devolved by March 2021

Number of persons trained/retrained in DDD

Right ePharmacy's data systems in South Africa provide a full picture at the last-mile

- **Data integration:**
  - Interface with NHLS system ensuring scripts captured via other program partners are linked with NHLS viral load results
  - Data combined in a centralized repository under eRx Cloud solution with data from Tier.net, Lynx testing and NHLS viral load results at patient level
- **Data mining for patient tracking:**
  - Triangulate patients using peripheral pick-up points to ensure continuous patient tracking, minimizing unconfirmed lost to follow up at the facility
  - Benchmark patients against similar patients in cohort
- **Tracking impact on patient care per MOH and donor priorities:**
  - % patients decanted per facility
  - Retention in care
  - Treatment outcomes: viral load suppression





Pharmacy Dispensing Unit (ATM Pharmacy)

- **Alex Plaza: Alexandra Township (Jhb)**
  4 PDU™ s
- **Soweto - Ndofoya Mall: (Jhb)**
  5 PDU™ s
- **Soweto - Bara Mall: (Jhb)**
  3 PDU™ s
- **Diepsloot: Bambanani Mall: (Jhb)**
  4 PDU™ s

91.3% Compliance in Last 12 Months

Right ePharmacy PDU Dashboard

Collection Compliance

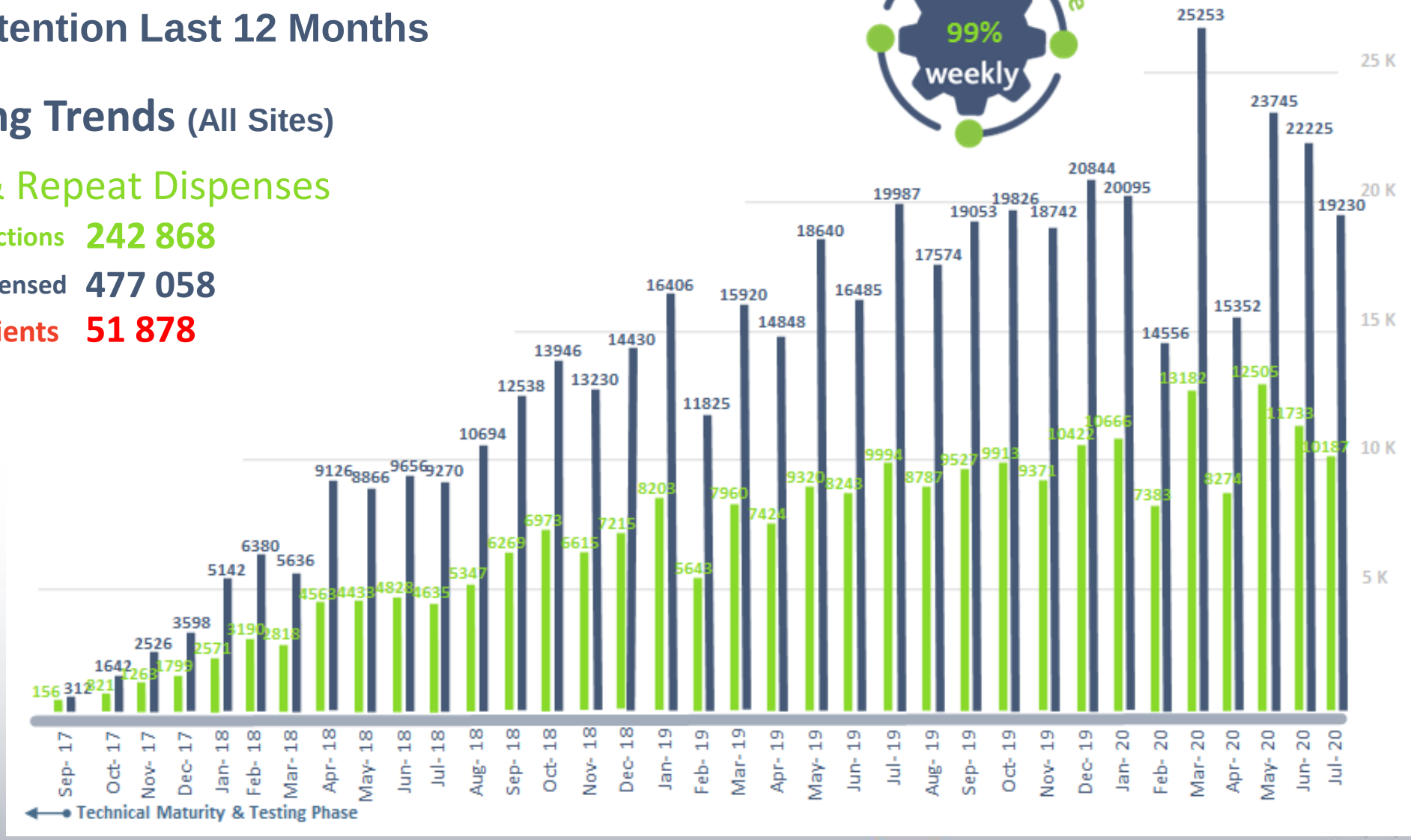
91.3% Retention Last 12 Months

System up time 99% weekly

Dispensing Trends (All Sites)

Patients & Repeat Dispenses

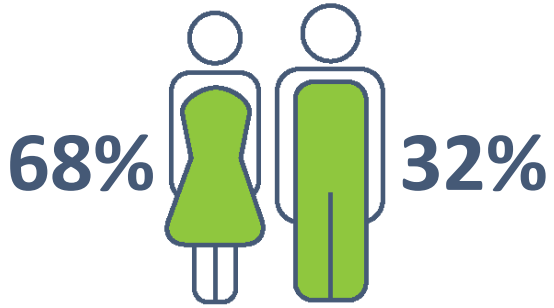
- Patient Collections **242 868**
- Repeats Dispensed **477 058**
- Unique Patients **51 878**



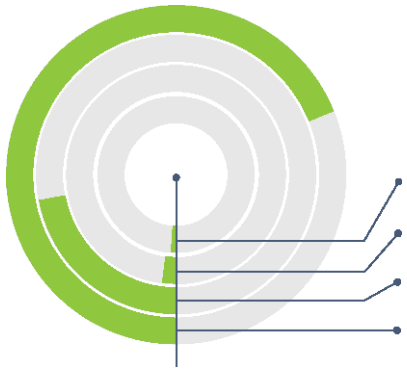
#ATMpharmacy @rightepharmacy @righttocare

Right ePharmacy PDU Dashboard

Therapeutic Level (All Sites)

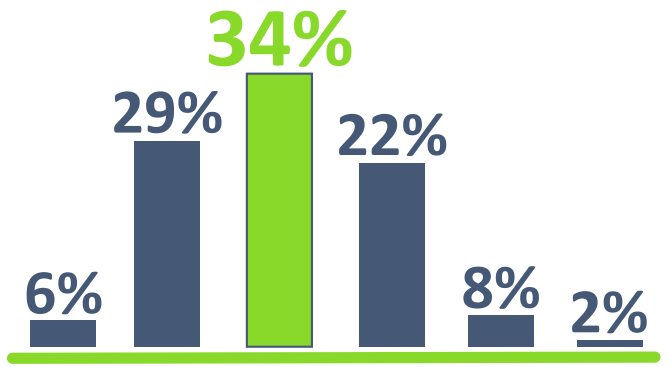


Gender Distribution



1% First Line ART OTHER
2% Second Line ART
22% NCD
69% First Line ART FDC

Therapeutic Categories Dispensed



Update - Apr 2019

Nationality

87.3%	South African
10.4%	Zimbabwean
1.1%	Botswana
1.1%	Mozambican
.2%	Swazi

Other conditions covered include:

- Asthma
- Hypertension
- Diabetes Mellitus Type 2
- Hyperlipidaemia
- Epilepsy
- Gout
- TB Prophylaxis

Collect & Go™ Smart Lockers

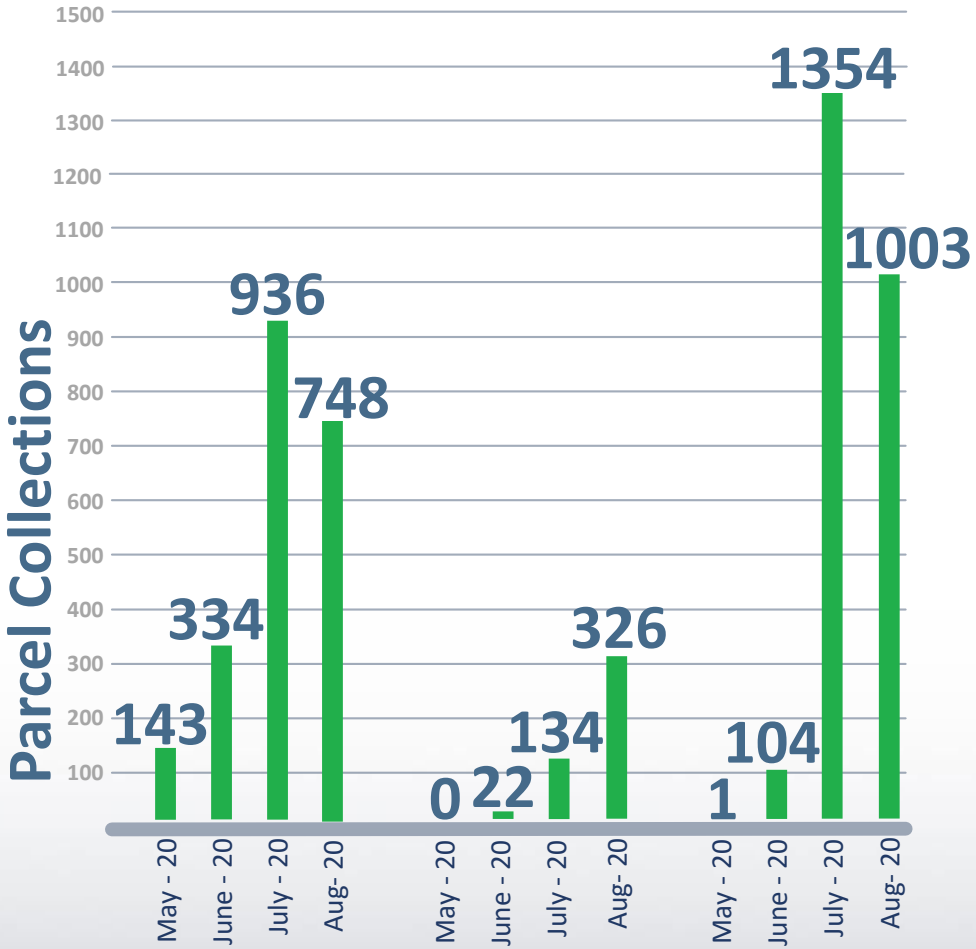
- **Gauteng**
  40 Collect & Go Smart Lockers
- **Mpumalanga**
  11 Collect & Go Smart Lockers
- **FreeState**
  13 Collect & Go Smart Lockers

5,105 Collections in First 120 Days

CSIR
our future through science

Right ePharmacy Collect and Go Dashboard

DDD Collection and Real-time Product Tracking



GAUTENG GP	FREE STATE FS	MPUMALANGA MP
2161	482	2462
40	13	11

Total Collections
5105

Sites

Update:
May – 25 Aug 2020

#ATMpharmacy @rightepharmacy @righttocare

Tracking products to the last mile with integrated data systems can be transformative in terms of ROI

- **Transparency** – track products from warehouse to patient pick-up
- **Accountability** – identify bottlenecks, account for exact product count, manage fraud
- **Data-driven decision making** – dashboards facilitate effective district and pick-up point level stock management based off real-time need and consumption

#ATMpharmacy @rightepharmacy @righttocare

Looking forward: strong governance and continued investments are key to scaling integrable technologies and data use at the last-mile

- In order to achieve real-time insight into the last mile, we need to take a more systematic approach to investing in data systems with a focus on **system integration across supply chain and service delivery partners and MOH and donor systems to reduce the reporting burden while maximizing the return on investment of data collection**.
- Governance is key – **donors and MOH must spearhead the coordination of digital infrastructure and human resource capacity-building efforts to drive efforts toward common systems** to ensure all actors involved in last-mile HIV/AIDS service and drug delivery are able to report and use data in an efficient, effective and accurate manner.

Manual Patient Information Records

Monthly Facility Level Stock Information

Real-time Patient Data

Real-time Medicine Availability

System Integration with Donor and Ministry Reporting Systems

#ATMpharmacy @rightepharmacy @righttocare

Tawanda Dube
Technical Specialist - Pharmaceutical Services
Right ePharmacy
Tawanda.Dube@right-epharmacy.co.za

Lauren R.K. Weir
Right to Care US Director
Lauren.Weir@righttocare.org

Mapping and Spatial Analysis for DDD: What resources and methods are available through GIS to support planning the devolvement of ART clients

Decentralized Drug Distribution (DDD) Learning Collaborative

Caleb Parker

Senior Research Associate/GIS Analyst

USAID FROM THE AMERICAN PEOPLE

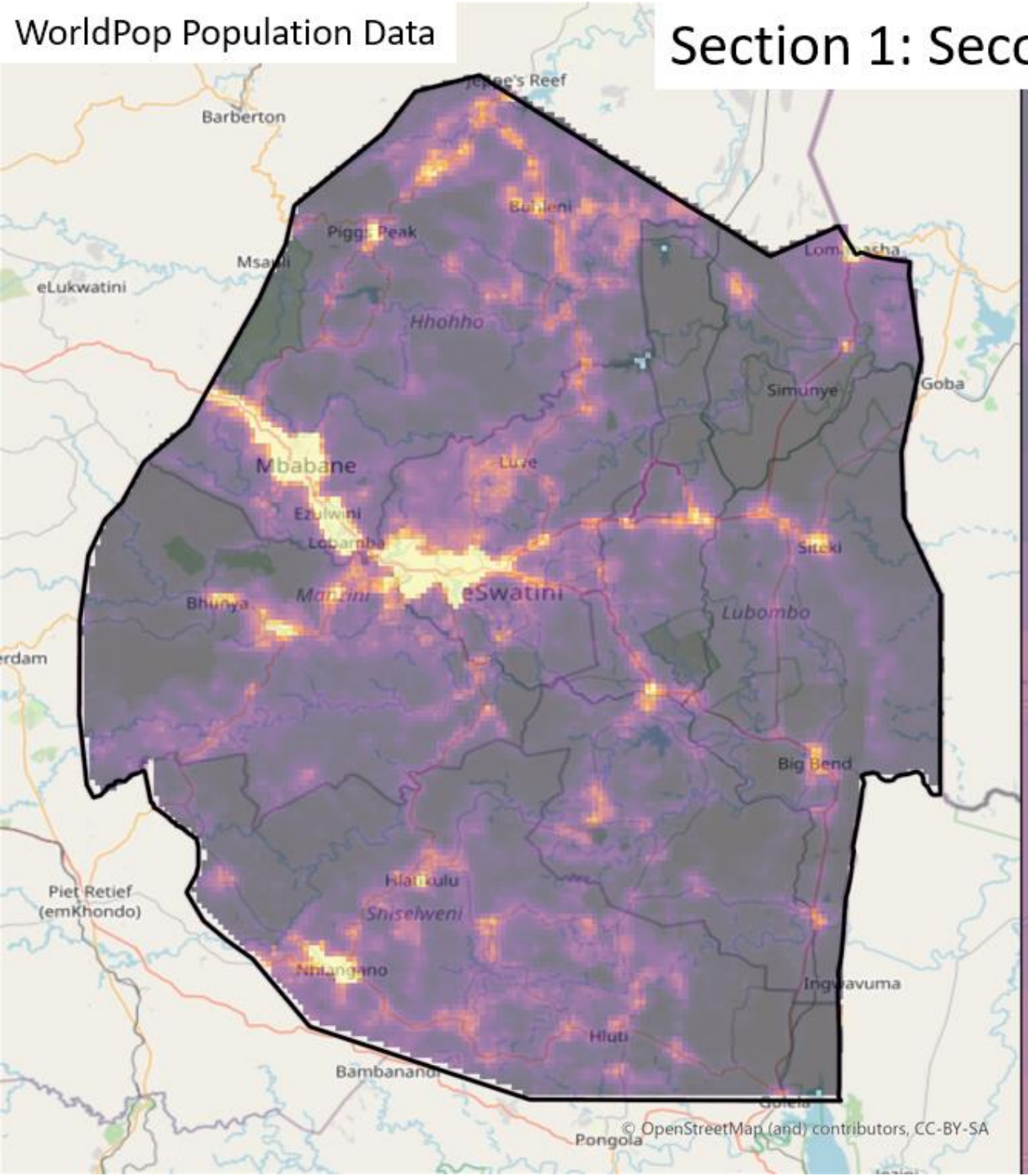
PEPFAR

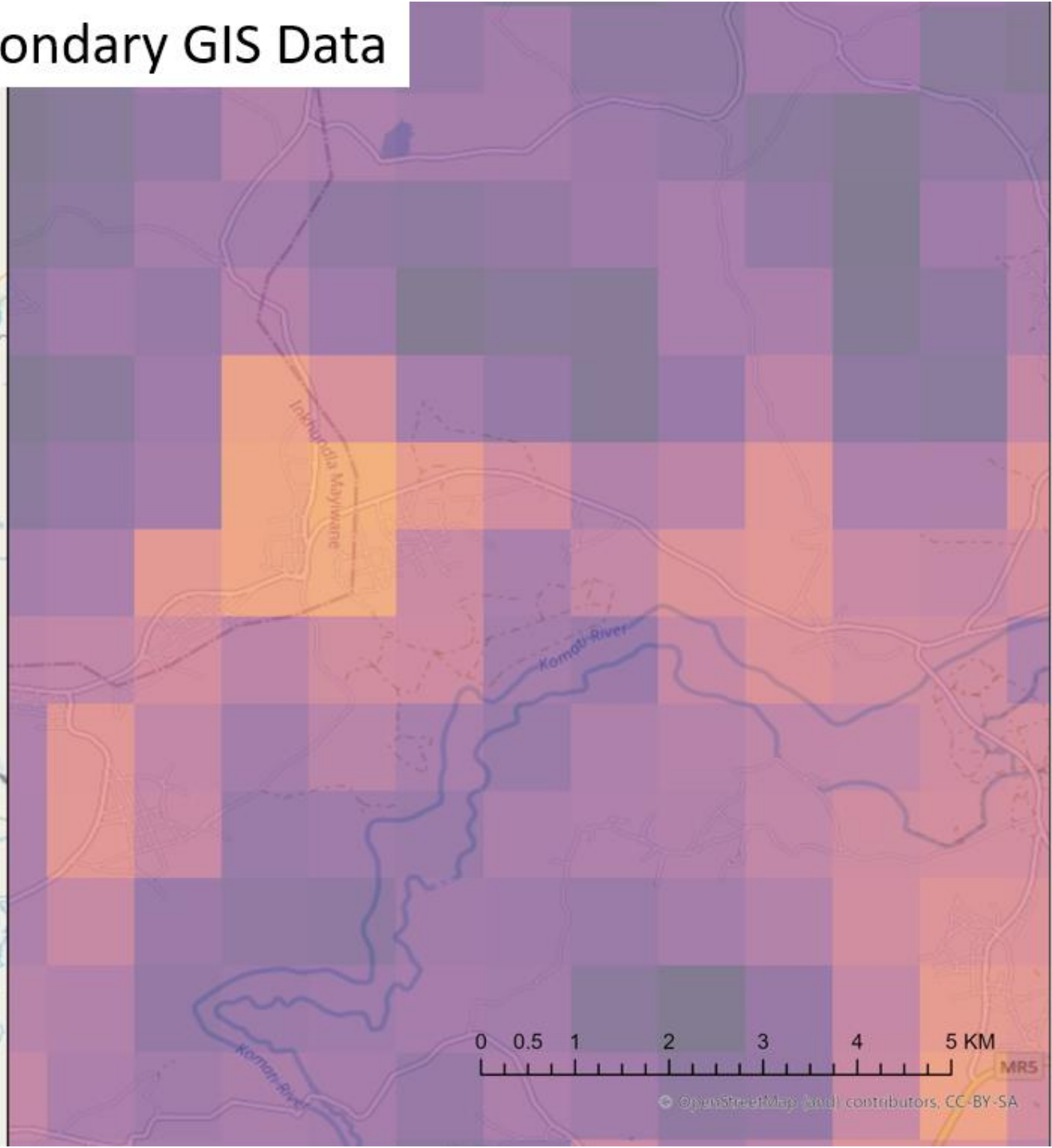
EpiC Meeting Targets and Maintaining Epidemic Control

GIS Resources and Methods

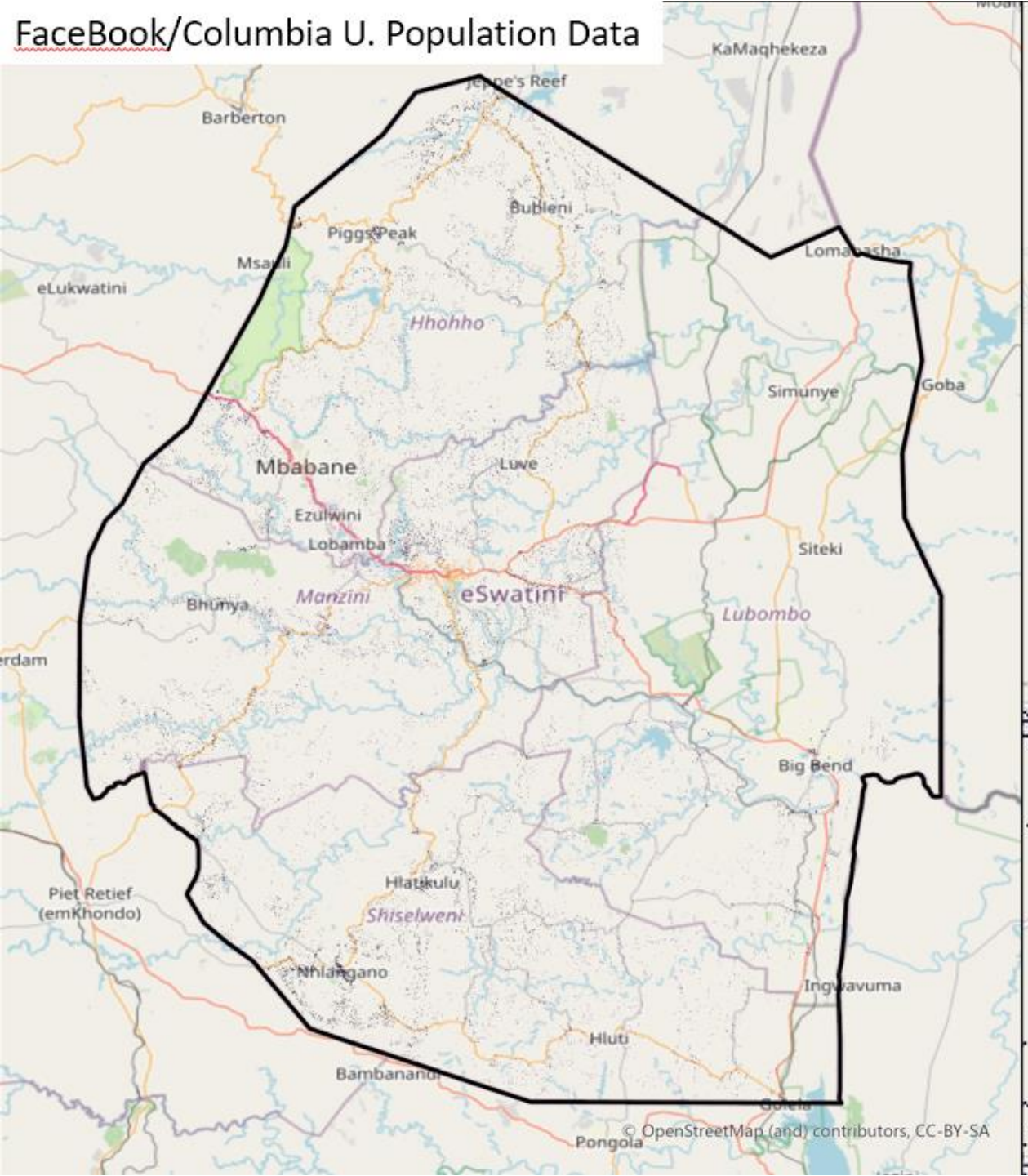
1. Secondary GIS Data: What's new?
   - Population
   - Satellite imagery
   - Road networks
2. Georeferencing Primary Program Data
   - ART client numbers (TX_CURR) by health facility
     - Health facility coordinates
     - Neighborhood locations
3. Spatial Modeling Approaches
   - Using program data + secondary data
   - Disaggregation of ART clients across community
   - Understanding distance to services in travel time

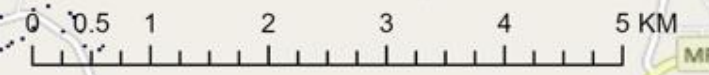
Section 1: Secondary GIS Data



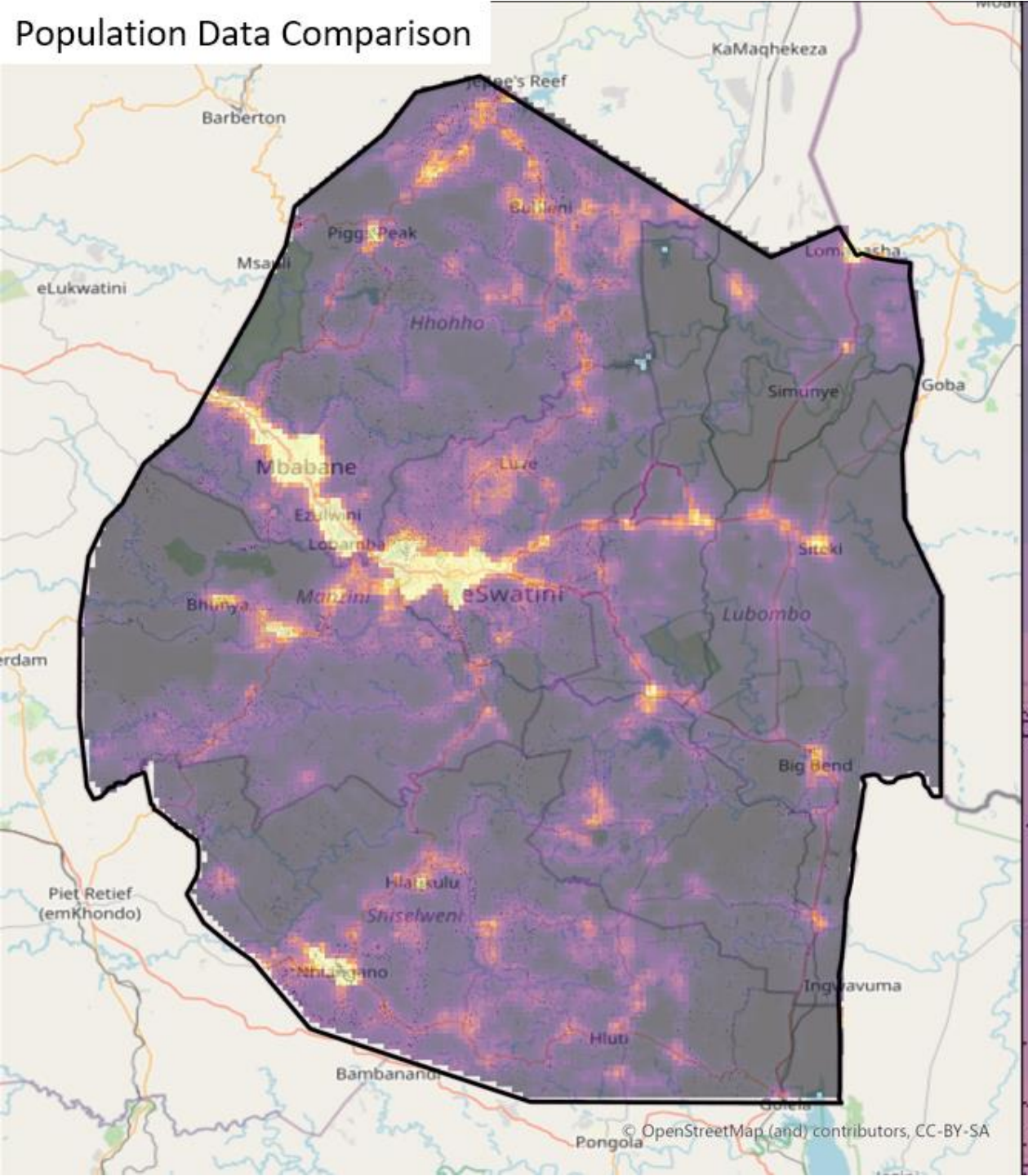


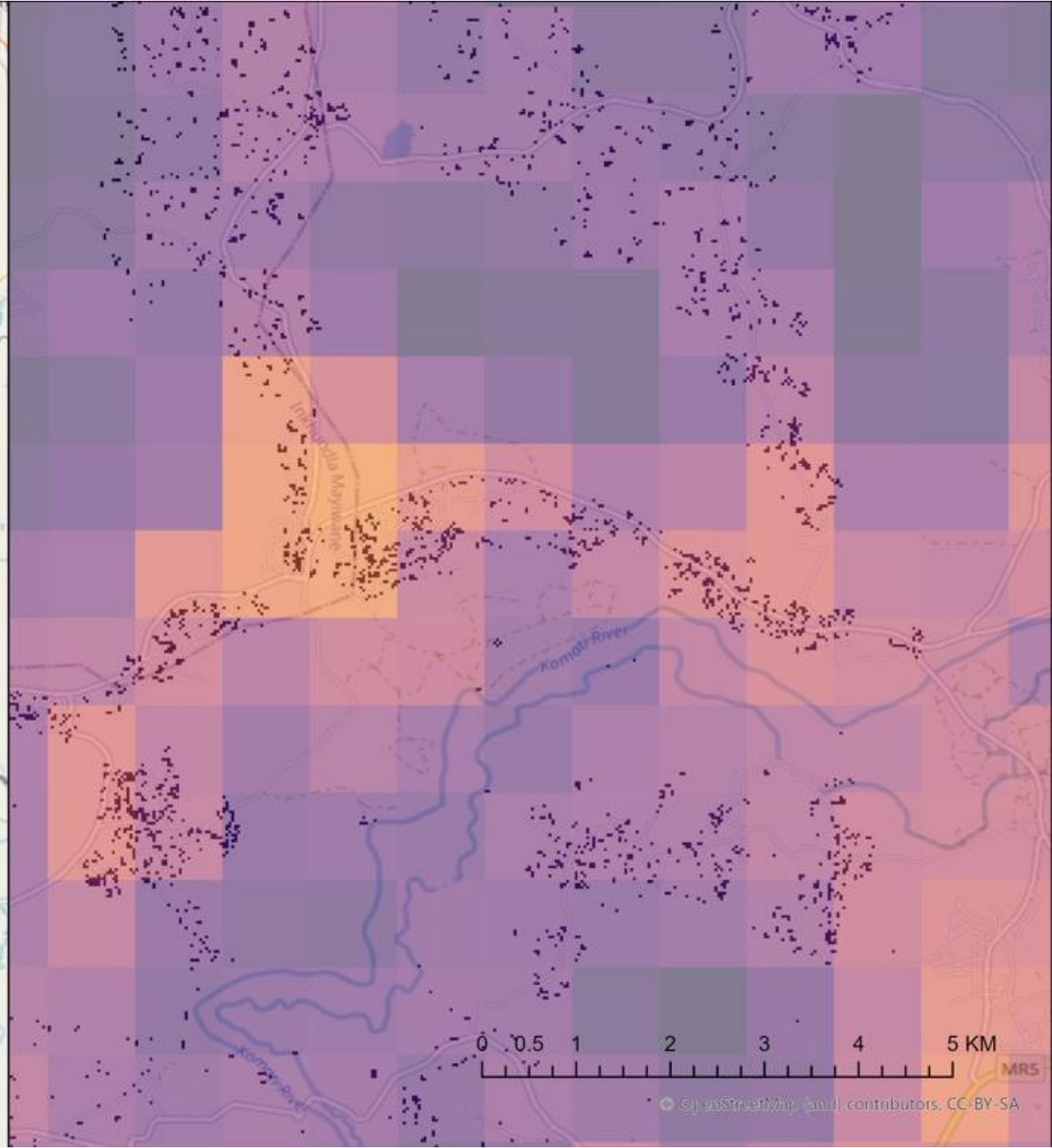
FaceBook/Columbia U. Population Data

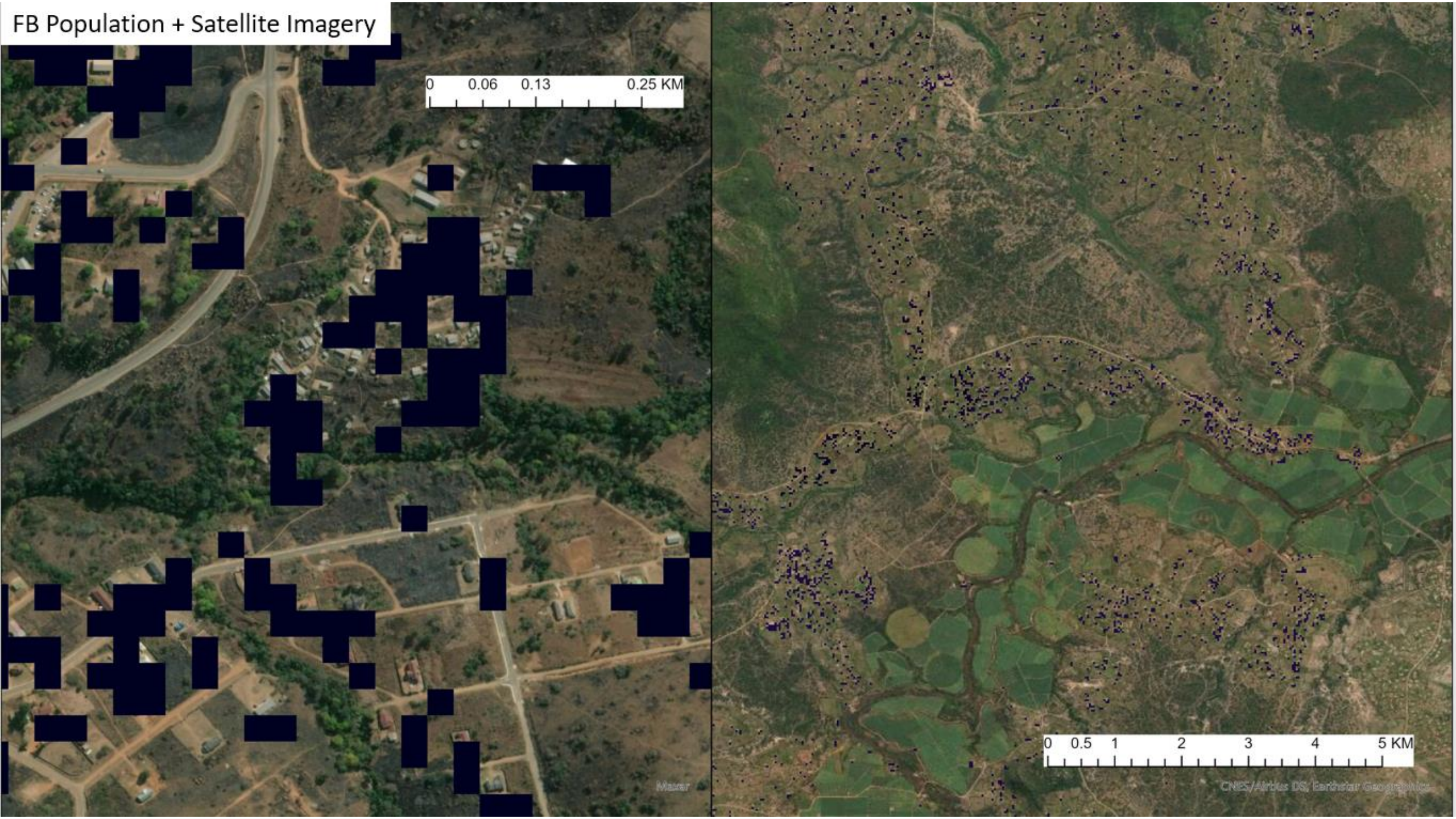




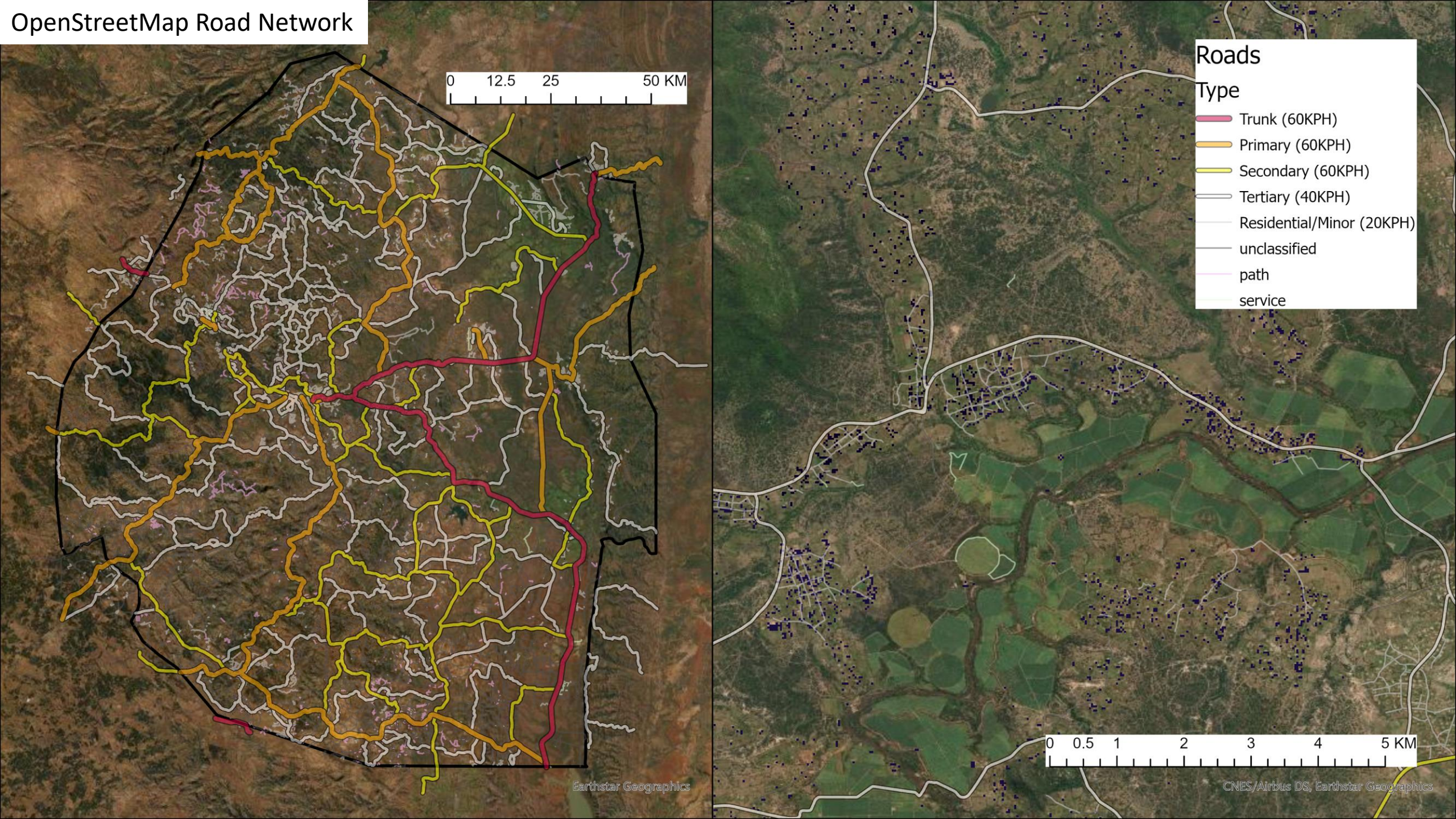
Population Data Comparison





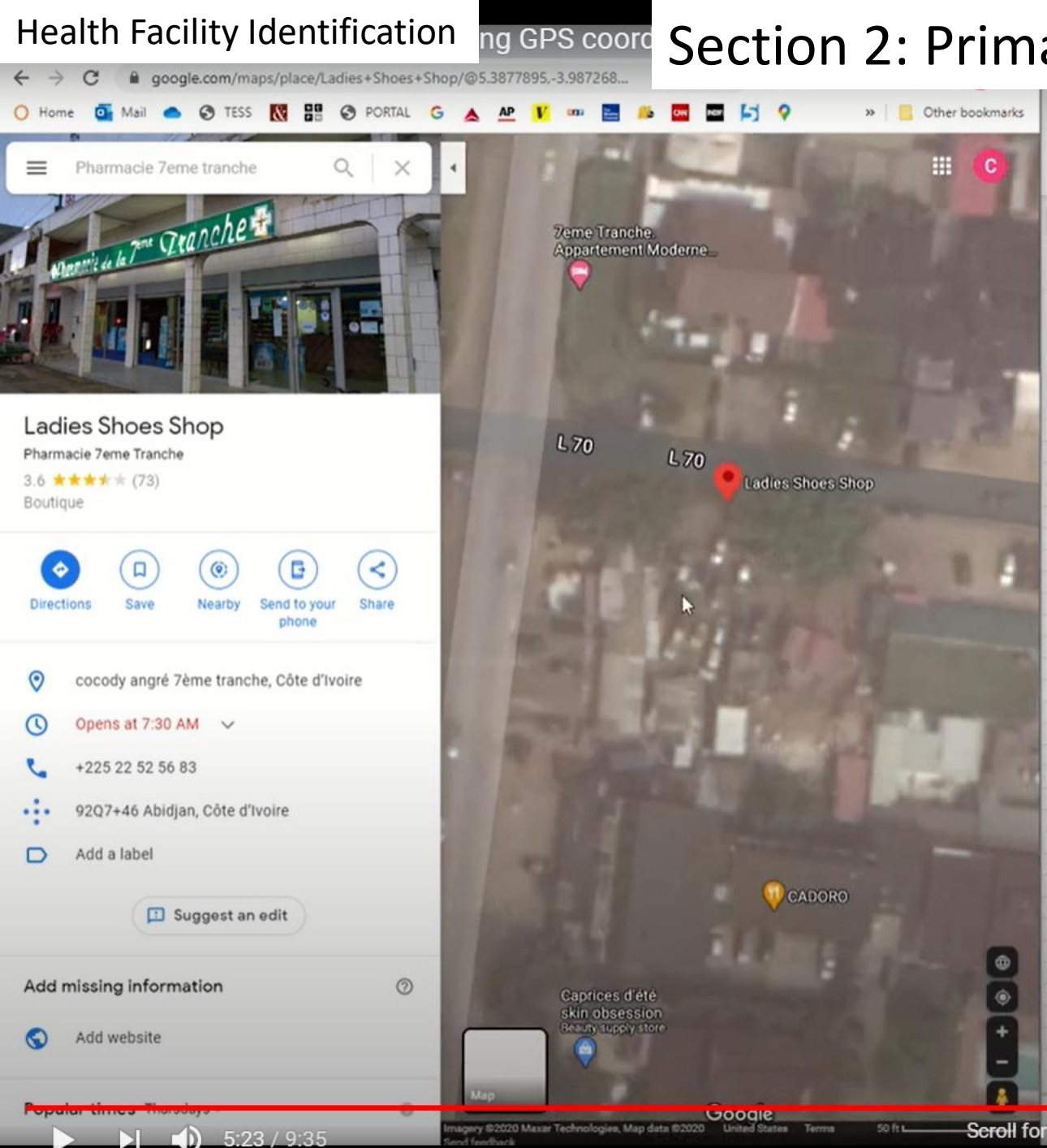

FB Population + Satellite Imagery
0 0.06 0.13 0.25 KM
0 0.5 1 2 3 4 5 KM

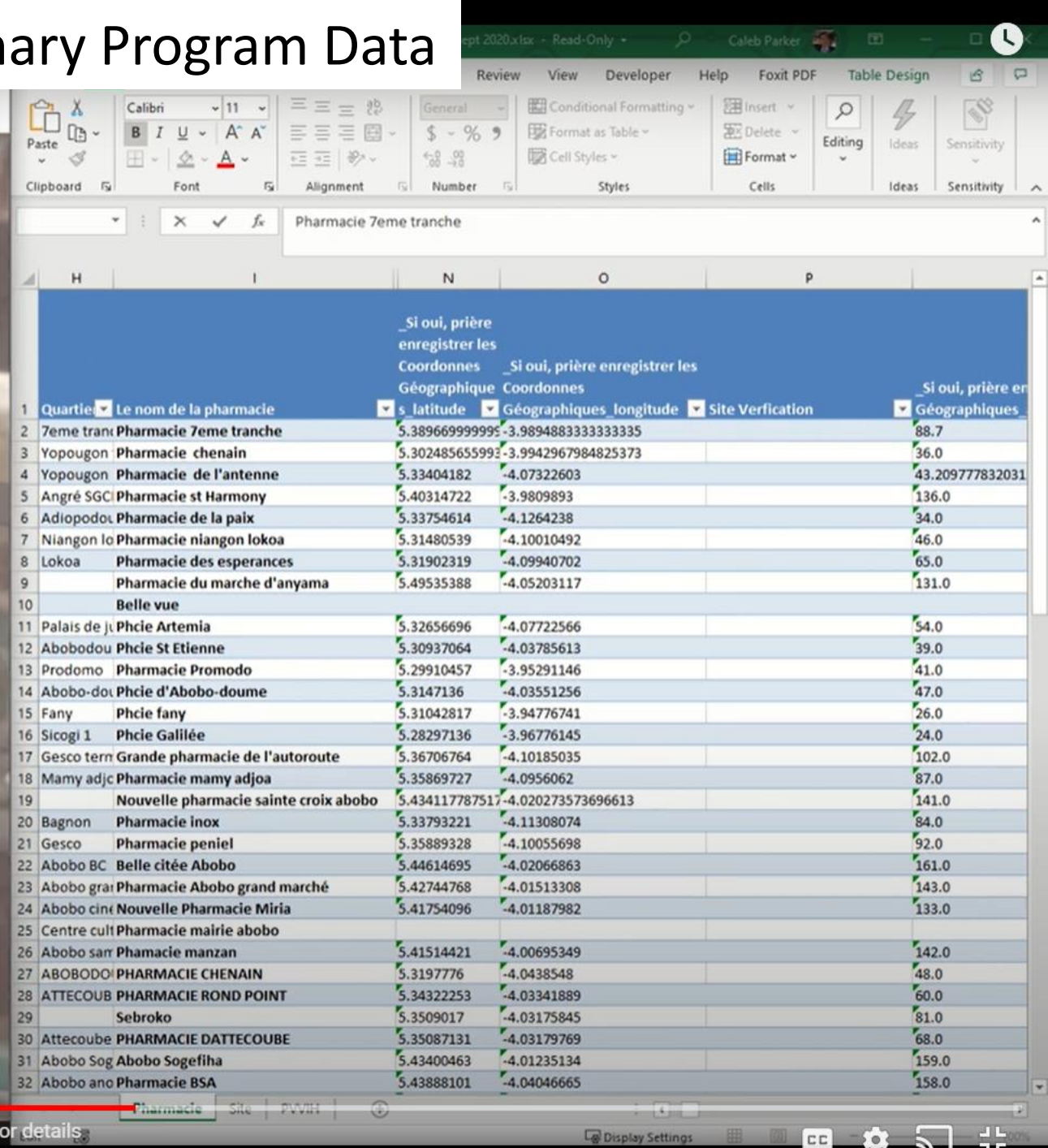
OpenStreetMap Road Network



Health Facility Identification

Section 2: Primary Program Data





Pharmacie 7eme tranche

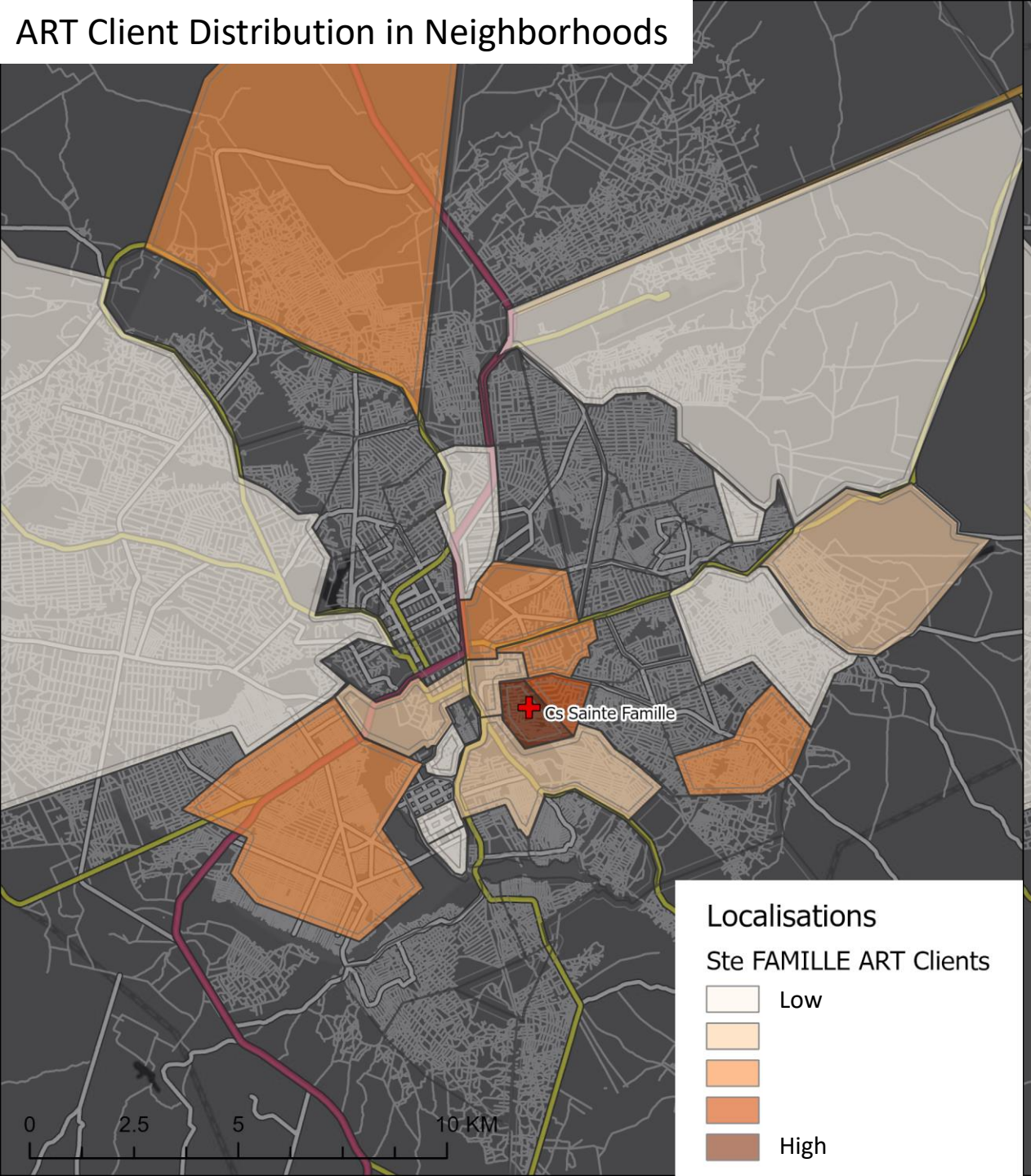
	H	I	N	O	P	
1	Quartie	Le nom de la pharmacie	_Si oui, prière enregistrer les Coordonnes Géographique s_latitude	_Si oui, prière enregistrer les Coordonnes Géographiques_longitude	Site Verfication	_Si oui, prière en Géographiques
2	7eme tran	Pharmacie 7eme tranche	5.389669999995	-3.9894883333333335		88.7
3	Yopougon	Pharmacie chenain	5.302485655993	-3.9942967984825373		36.0
4	Yopougon	Pharmacie de l'antenne	5.33404182	-4.07322603		43.209777832031
5	Angré SGC	Pharmacie st Harmony	5.40314722	-3.9809893		136.0
6	Adiopodou	Pharmacie de la paix	5.33754614	-4.1264238		34.0
7	Niangon lo	Pharmacie niangon lokoa	5.31480539	-4.10010492		46.0
8	Lokoa	Pharmacie des esperances	5.31902319	-4.09940702		65.0
9		Pharmacie du marche d'anyama	5.49535388	-4.05203117		131.0
10		Belle vue				
11	Palais de ju	Phcie Artemia	5.32656696	-4.07722566		54.0
12	Abobodou	Phcie St Etienne	5.30937064	-4.03785613		39.0
13	Prodomo	Pharmacie Promodo	5.29910457	-3.95291146		41.0
14	Abobo-dou	Phcie d'Abobo-doume	5.3147136	-4.03551256		47.0
15	Fany	Phcie fany	5.31042817	-3.94776741		26.0
16	Sicogi 1	Phcie Galilée	5.28297136	-3.96776145		24.0
17	Gesco tern	Grande pharmacie de l'autoroute	5.36706764	-4.10185035		102.0
18	Mamy adjc	Pharmacie mamy adjoa	5.35869727	-4.0956062		87.0
19		Nouvelle pharmacie sainte croix abobo	5.434117787517	-4.020273573696613		141.0
20	Bagnon	Pharmacie inox	5.33793221	-4.11308074		84.0
21	Gesco	Pharmacie peniel	5.35889328	-4.10055698		92.0
22	Abobo BC	Belle citée Abobo	5.44614695	-4.02066863		161.0
23	Abobo grai	Pharmacie Abobo grand marché	5.42744768	-4.01513308		143.0
24	Abobo cin	Nouvelle Pharmacie Miria	5.41754096	-4.01187982		133.0
25	Centre cult	Pharmacie mairie abobo				
26	Abobo san	Phamacie manzan	5.41514421	-4.00695349		142.0
27	ABOBODO	PHARMACIE CHENAIN	5.3197776	-4.0438548		48.0
28	ATTECOUB	PHARMACIE ROND POINT	5.34322253	-4.03341889		60.0
29		Sebroko	5.3509017	-4.03175845		81.0
30	Attecoube	PHARMACIE DATTECOUBE	5.35087131	-4.03179769		68.0
31	Abobo Sog	Abobo Sogefiha	5.43400463	-4.01235134		159.0
32	Abobo ano	Pharmacie BSA	5.43888101	-4.04046665		158.0

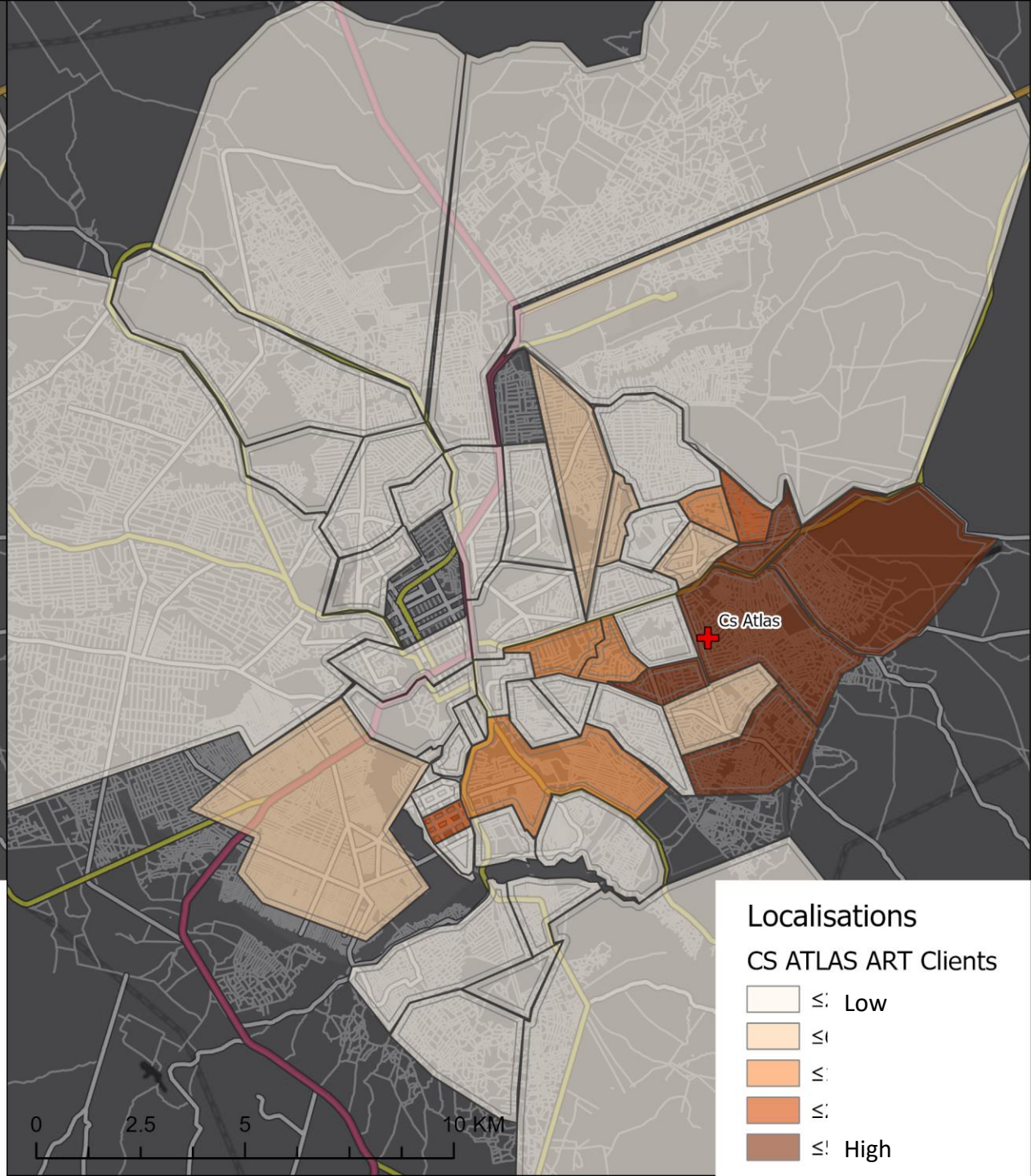
Pharmacie | Site | PVVH

Scroll for details

5:23 / 9:35

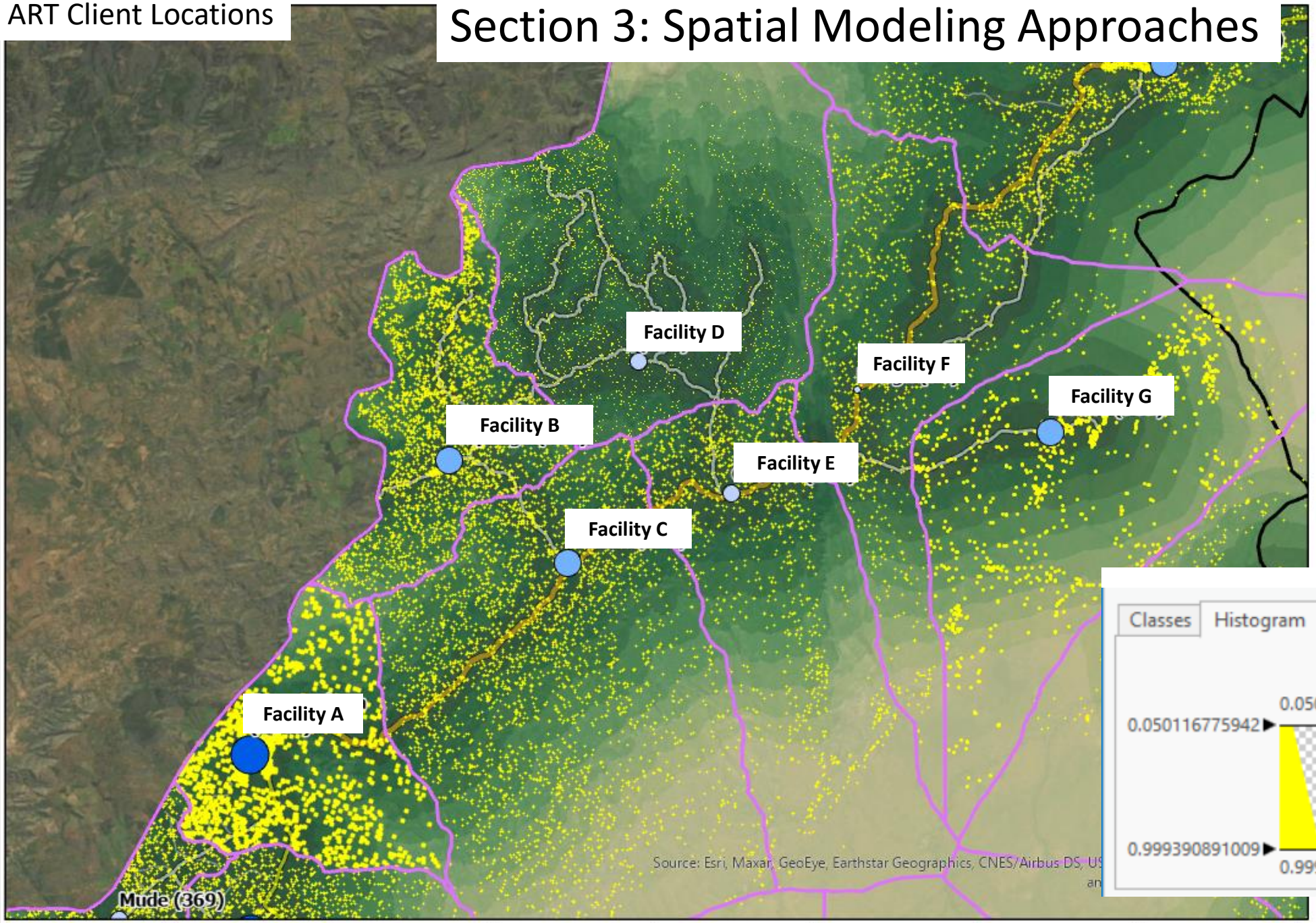
ART Client Distribution in Neighborhoods





ART Client Locations

Section 3: Spatial Modeling Approaches



ART Client Distribution
Modeling Example

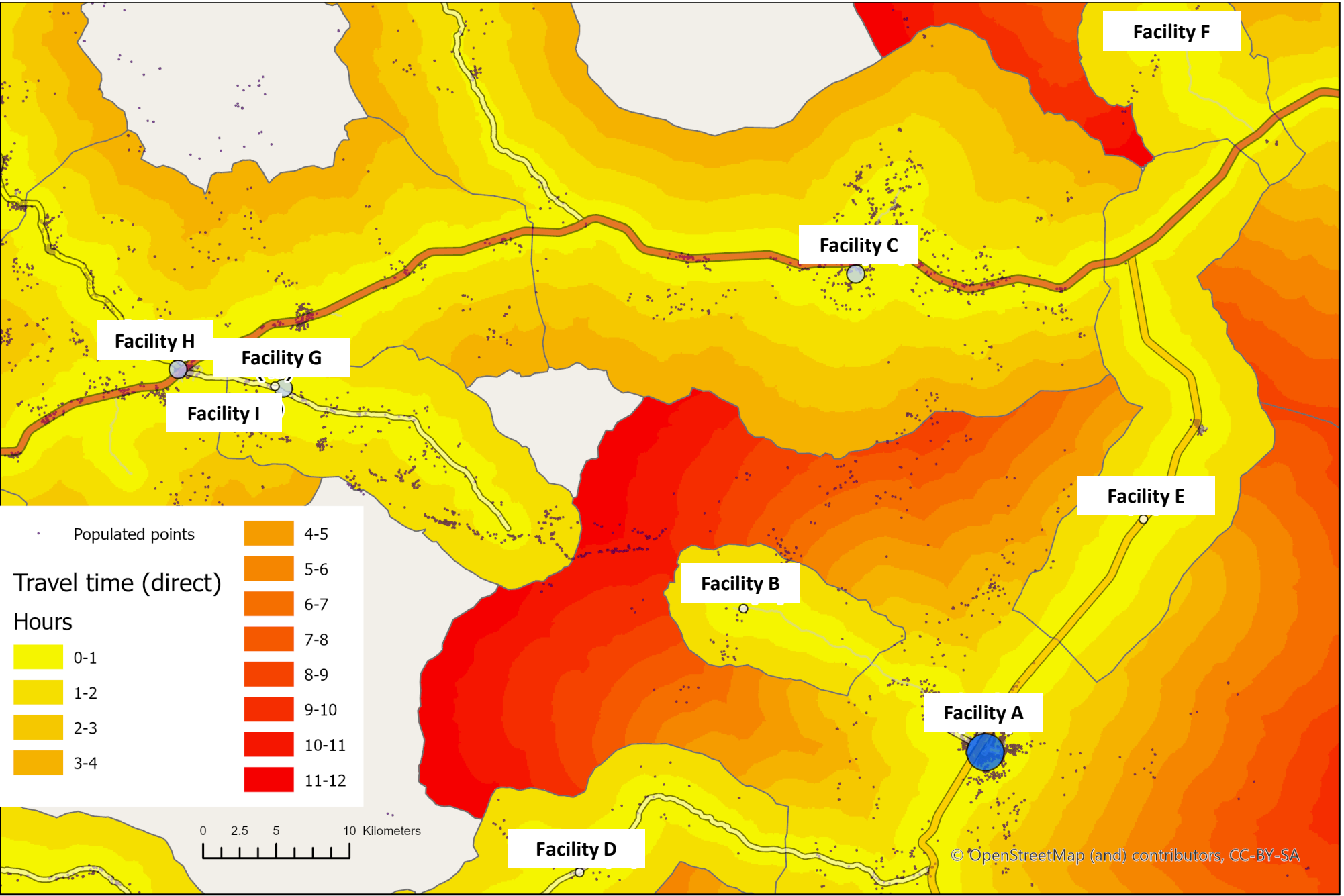
Client distribution calculation:

Number of TXCURR in the catchment area / Total population = ART Client Prevalence

Catchment area ARV Client Prevalence * Population per pixel in Catchment Area = ART Clients per pixel

RESULTS
ART Clients as yellow points. Each point ranges from 0.05 to 0.99 clients per point.

Travel time access modeling



Zoomed in section example: Because of the assumption in the model that facilities with smaller TXCURR values have a smaller service area than ones with larger areas, the resulting catchment areas vary greatly with their total surface area.

Facility A, with a large TXCURR value of shows its boundaries extending outward up to 12 hours; but it is also interrupted a few times with the catchment areas of smaller facilities like Facility B, which has very few clients. Notice that the hourly bands for Facility B only stretch to two hours, since they have fewer than 100 clients.

Facility C, however has between 100 and 500 clients, so their hourly threshold is higher, stopping at 4 hours.

Limitations: While clearly some populations (the dark dots) fall into one catchment area, the models cannot account for other human behaviors that may cause one to visit a facility other than the one they're closest to.

Including decentralized drug delivery in community-led monitoring systems

Decentralized Drug Distribution (DDD) Learning Collaborative

Meg DiCarlo

USAID FROM THE AMERICAN PEOPLE

PEPFAR

EpiC Meeting Targets and Maintaining Epidemic Control

What are community-led monitoring systems?

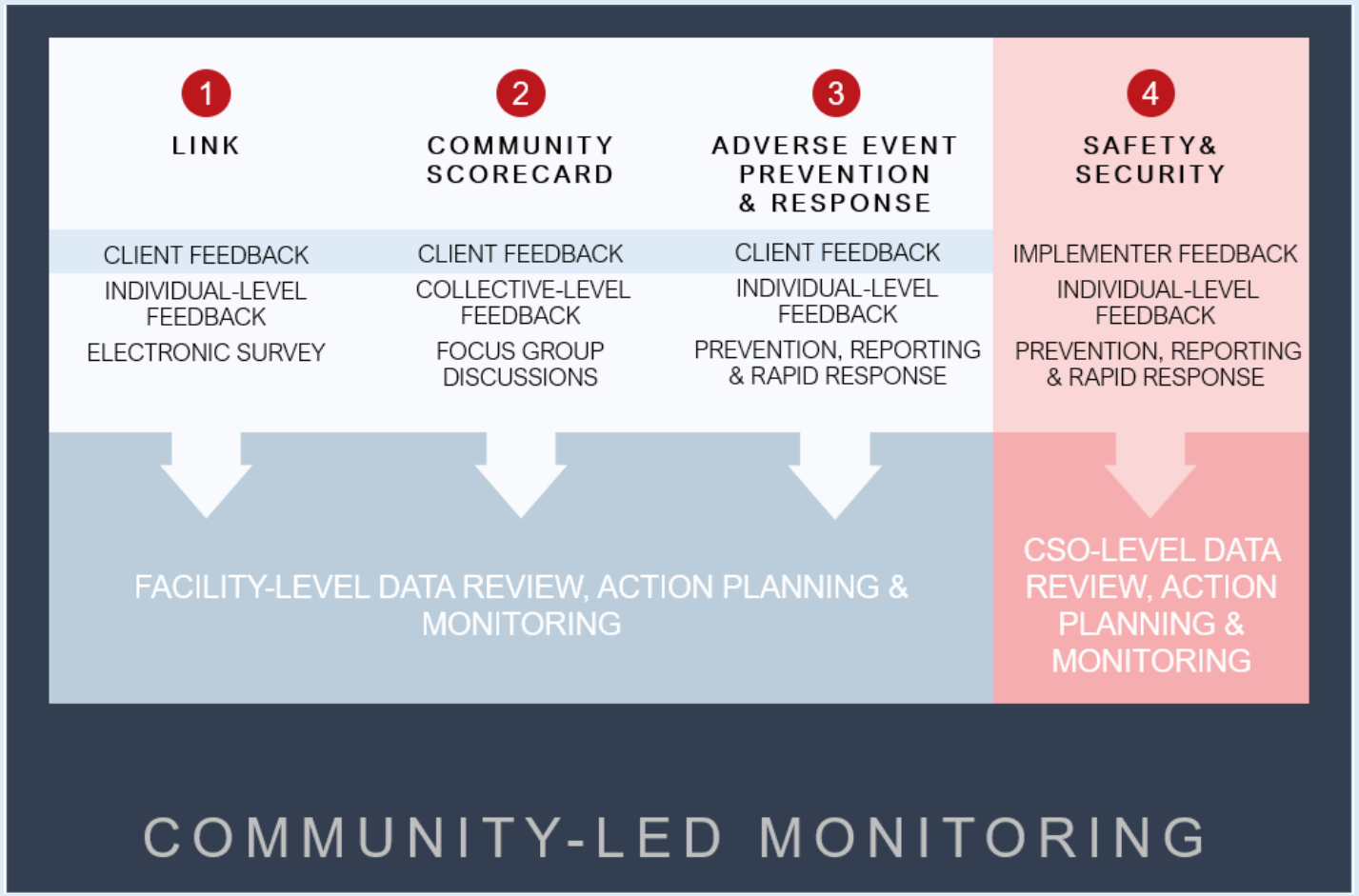
Definition

Community-led monitoring systems are:

- Mechanisms to facilitate key stakeholder oversight and feedback on services and programs
- Stakeholders primarily mean community members and networks (of KP and other affected populations)
- Can use a range of methods and tools

Comprehensive community-led monitoring mechanisms

EpiC's Comprehensive Approach to Community-led Monitoring Systems



Community score cards

Community Score Cards

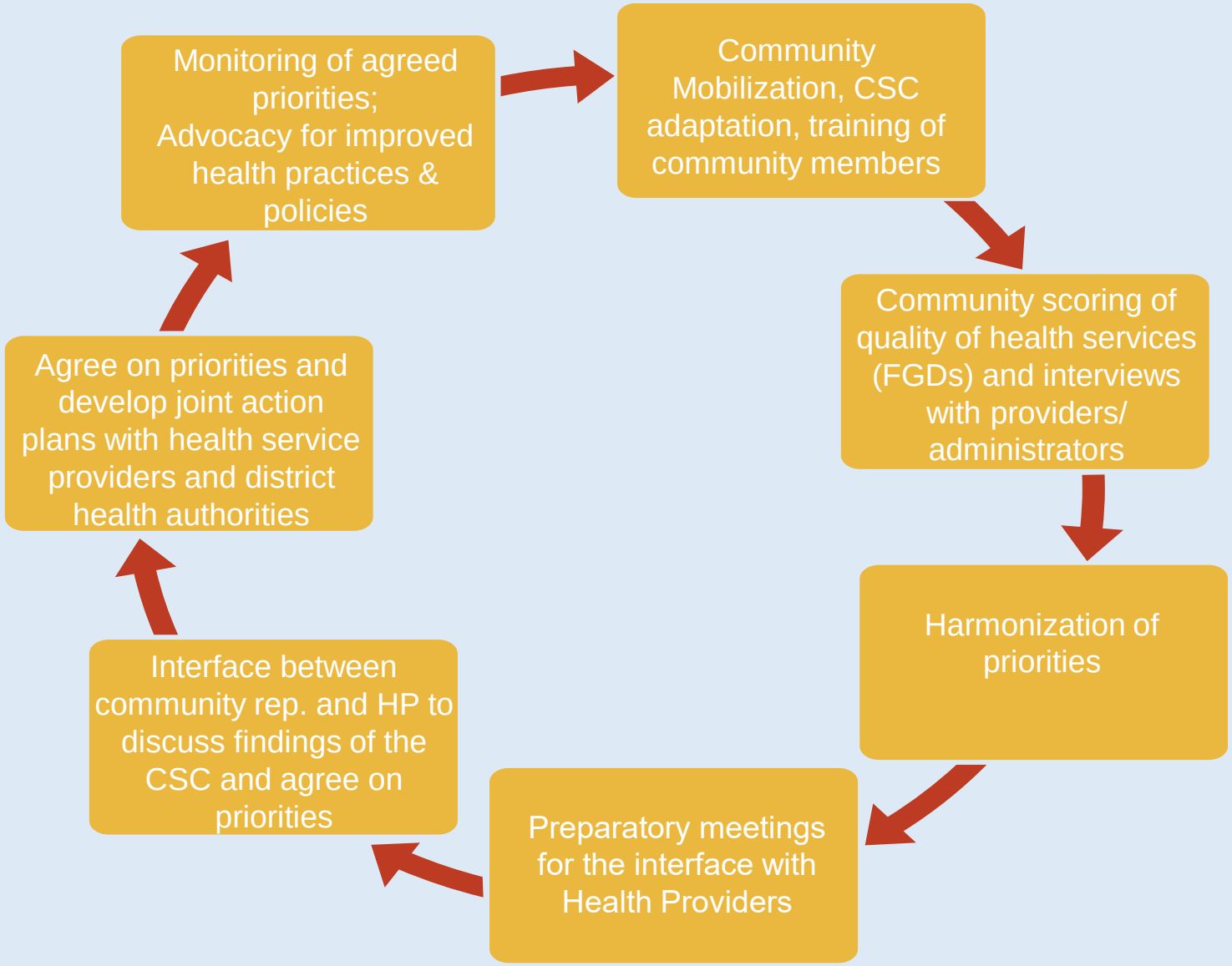
- Use the *collective* as its unit of analysis, in contrast to individual client feedback
- Focus on monitoring at the local/facility levels
- Rely on the information generated by scoring and focus group discussions and key informant interviews, rather than surveys
- Rely heavily on the participation and leadership of community members in the assessment of service quality/performance and negotiating the findings with service providers

CSC Tools

Community Scorecard	Key Informant Interview
▪ Access to services ▪ Quality of health center services ▪ HIV/AIDS Commodities availability and accessibility ▪ Stigma & Discrimination ▪ HCW attitudes towards KP and PP ▪ Index testing: ○ Counselling ○ Voluntariness/informed consent ○ Confidentiality ○ IPV and other adverse events ○ Follow-up	▪ Challenges in providing services ▪ Stockouts ▪ Strategies and ideas for improving HIV service uptake ▪ Services provided ▪ Confidentiality/Private spaces ▪ Index testing process ▪ Stigma & Discrimination

Not applicable	Needs Urgent Remediation	Needs Improvement	Meets Expectations	Surpasses Expectations
0	1	2	3	4
Not Available or Does Not Exist	Very poor	Poor	Good	Excellent
				

The CSC process



CSC participation and timeline

- Participation includes:
  - Focus groups with PLHIV, key populations, AGYW
  - Key informant interviews with heads of the assessed health facilitates/sites, providers of assessed health facilities/sites and/or heads of administrative posts
- Repeat CSCs on 6 monthly basis (resources allowing), with monthly/quarterly action plan monitoring

Example CSC: Malawi

Health Center A | FGD with FSW, including PLHIV

Results Overview - Areas for Improvement

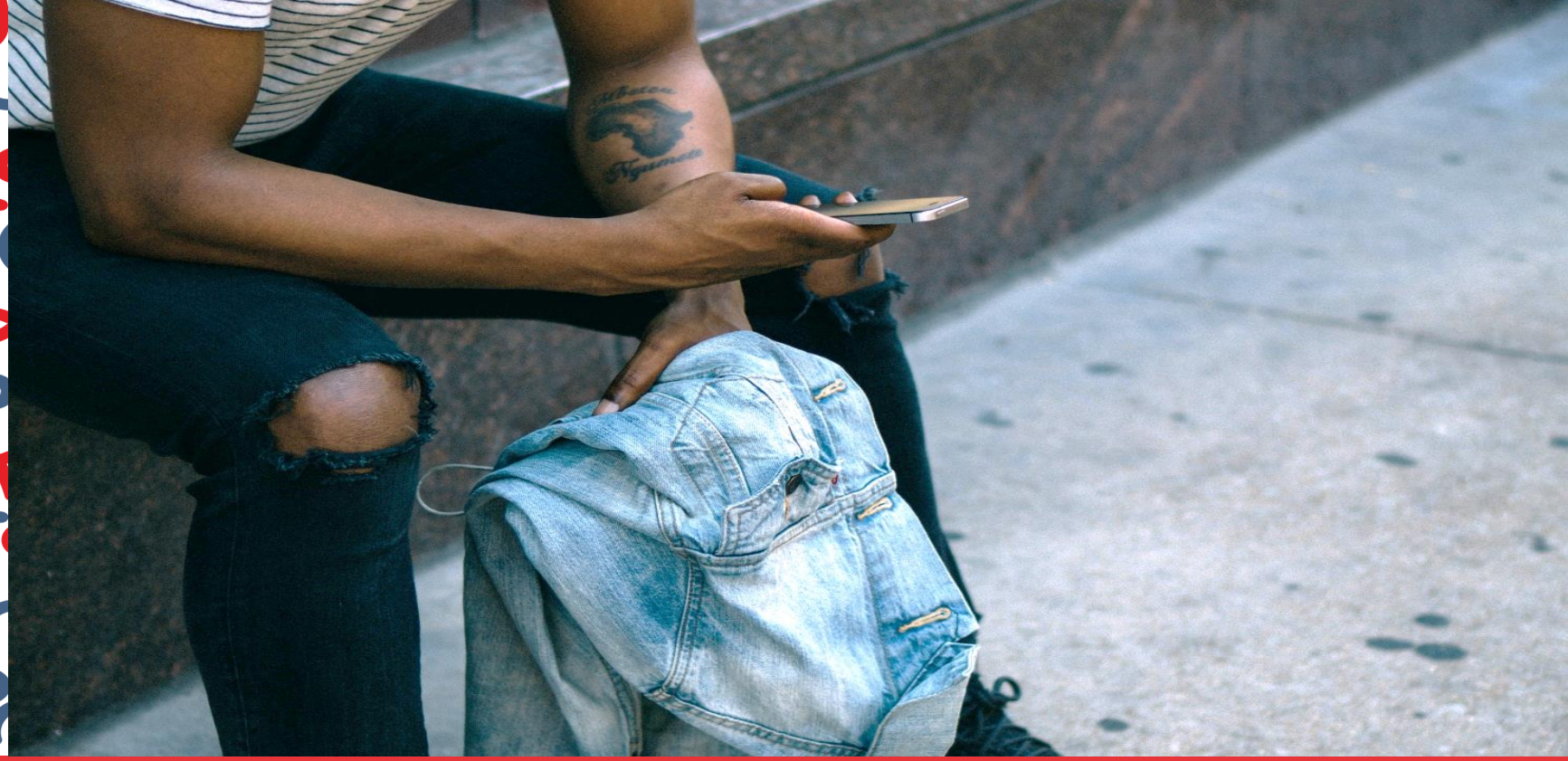
Question	Score	Reason for Score	Suggested Improvements
How convenient is the location of the site/facility from where you live and the surrounding structures/in relation to to other clinical services?	2 - Poor	ART clinic is close to OPD so everyone sees us and know we are on ART	Move the services to another room thats away from OPD
How easily can you access prevention commodities such as condoms and lubricant?	1 - Very Poor	They dont provide enough for our needs though they give adequate information	They should consider needs for the condoms
How available are Syphilis tests when you need them?	1 - Very Poor	Not adequate for our needs	order enough and give out enough
How well do sites/facilities keep services confidential and private?	2 - Poor	Confidentiality is affected because of the site where ART is provided where everyone sees you	Consider another room thats not open to more people

Example CSC: Kenya

Facility A | FGD with PWID (HIV negative or unknown status)

Access to Services

Question	Score	Reason for Score	Suggested Improvements
How convenient are times of site/facility hours?	4 - Excellent	Open from 8 to 5, the peers were okay with the hours	None
How convenient are times of outreach services?	3 - Good	Some sites need time adjustment, NS are sold to some peers, Some hours the Syringes are not available	Syringes to be available all the day and night, Suggested the gate man to be available at at the site earliest 6am
How convenient is the location of the site/facility?	4 - Excellent	Its convenient	None
How convenient are locations of outreach services if offered by the site/facility?	4 - Excellent	Strategically located	
How easily can you access HIV services (pre-exposure prophylaxis [PrEP], HIV testing, HIV treatment, viral load testing)?	3 - Good	Lack of Awareness on PreP at the site	Avail Prep and Create awareness for Prep to PWIDs at the site
How easily can you access sexually transmitted infection (STI) services?	2 - Poor	Peers not aware if screening services are available at the site,	Awareness creation on STI services, Need to do STI screening as recommended in the country guidelines
How easily can you access violence response services (such as post-exposure prophylaxis, crisis response teams, or a trained counselor)?	2 - Poor	Lack of Hotline number for reporting cases of Violence. Peers are not aware of the Paralegals in the program	Awareness creation on Violence reporting, Peers need to be introduced to the Paralegal and Establish a functional Hotline number
How effectively are people reached in the community navigated in the site/facility?	4 - Excellent	Escorted referral	

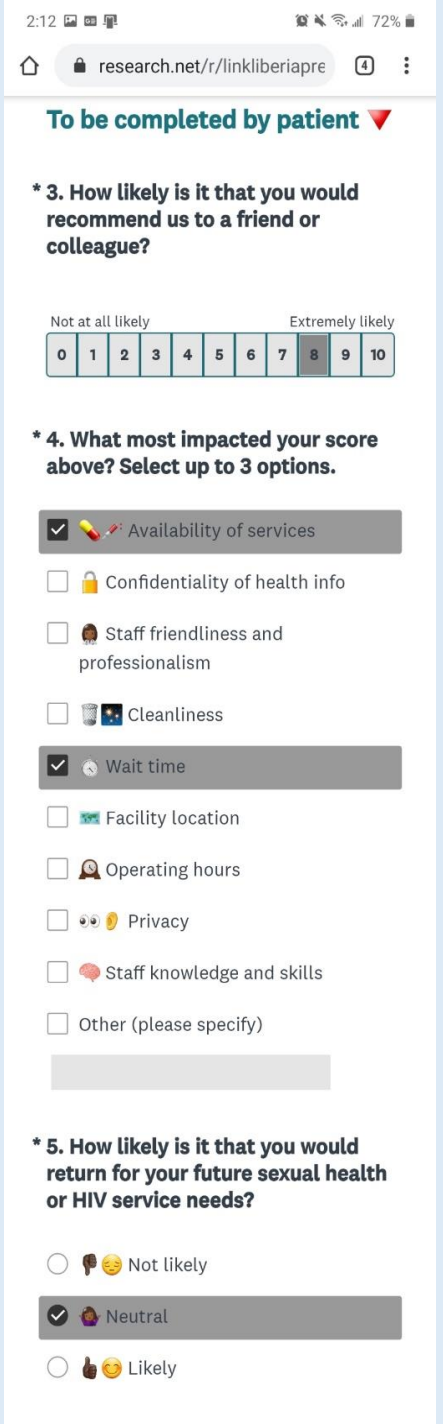


Collection of individual client feedback and adverse event reporting

LINK tool example

The simple LINK survey tool is used on facility-based tablets or a client's own smartphone.

View screenshot (right) or pretest here: https://research.net/r/link2020test



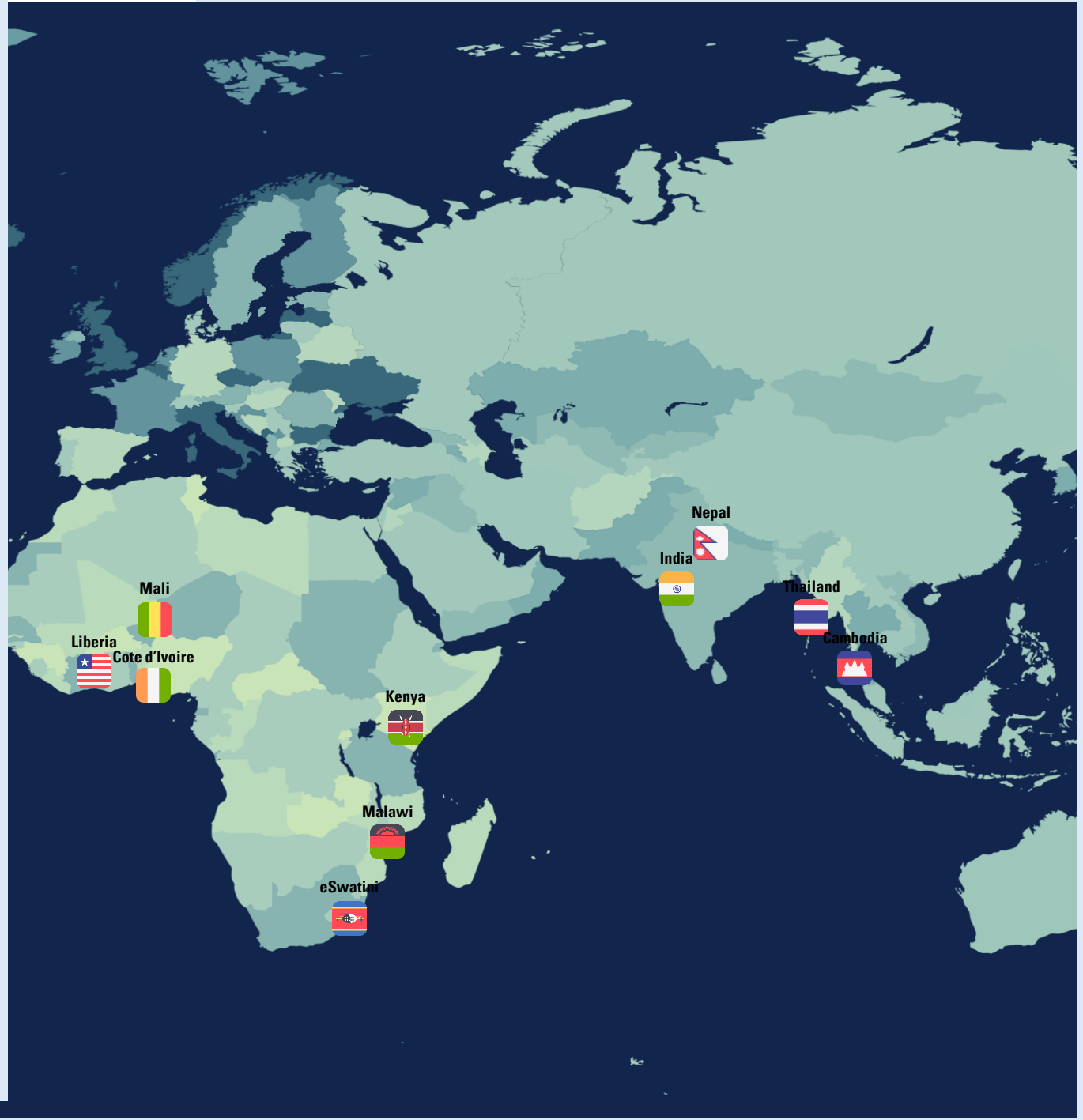
LINK tool features

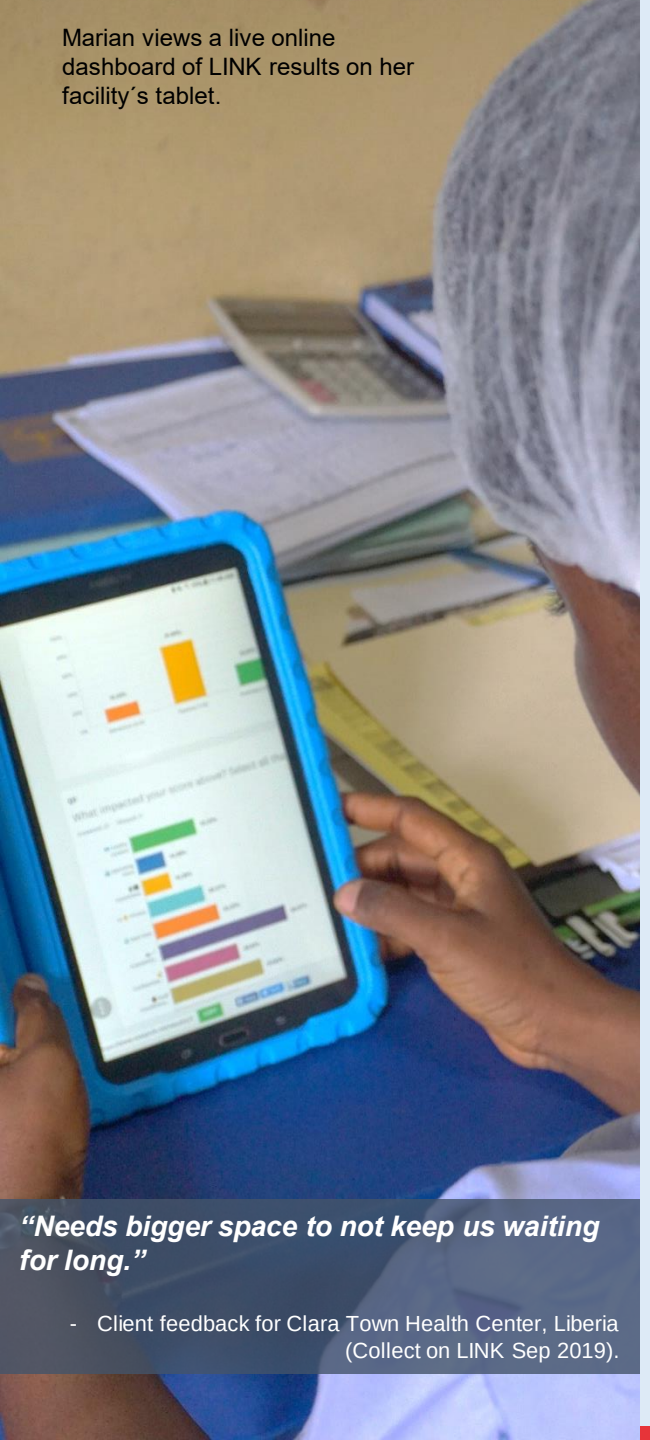
- Short
- Tailored to clients
- Multiple data collection methods
- Attribute feedback to facility/services
- Attribute feedback to populations
- PEPFAR client complaint form
- Uses emojis 😍👩‍⚕️👫
- Uses Survey Monkey, but adaptable to other software

LINK experience

LINK is a simple electronic client feedback tool that can be flexibly and rapidly deployed across varied global contexts.

- **Malawi:** Since 2017 implemented through outreach teams
- **Cote d´Ivoire:** In 2017-2018 implemented through outreach team
- **Cambodia:** Since 2018, implemented by MoH at 8 ART sites
- **Nepal:** Since 2018, implemented by LINKAGES at various community and government clinics
- **Thailand:** Since 2018, integrated with eCascade and implemented by 7 CSO partners for outreach, mobile and facility services
- **Mali:** In 2018-2019 using phone surveys with tech partner (Viamo). Relaunched with Survey Monkey 2020.
- **Liberia:** Since 2019, implemented by 13 government and NGO health facilities
- Several countries implementing small scale pilots or LINK integrations: LINK integrated into Step1.co.ke online booking app in Kenya, Yes4Me.net in India.





Marian views a live online dashboard of LINK results on her facility´s tablet.

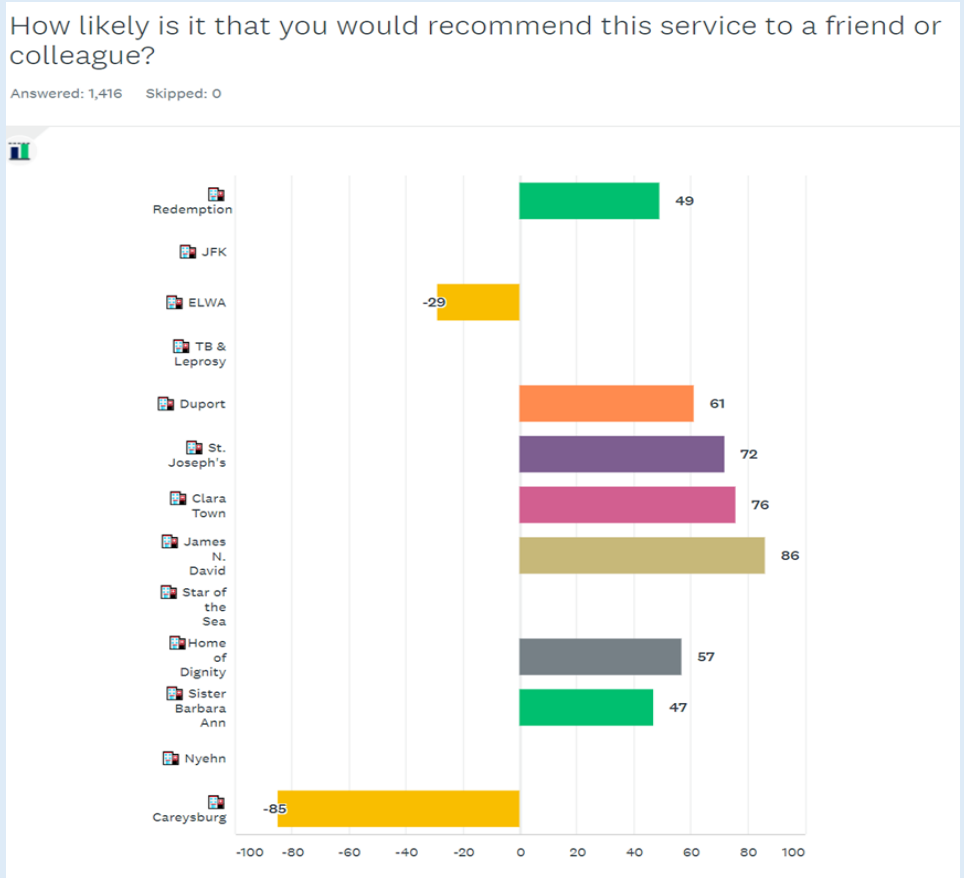
"Needs bigger space to not keep us waiting for long."

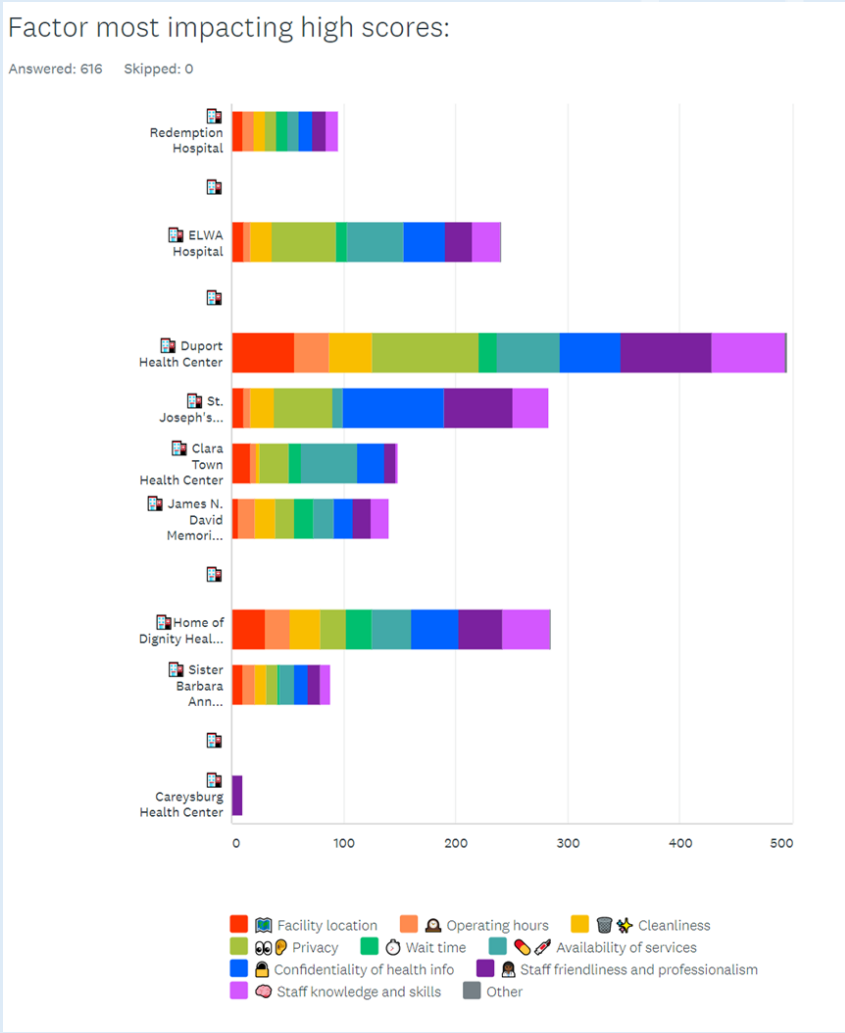
- Client feedback for Clara Town Health Center, Liberia (Collect on LINK Sep 2019).

LINK in Liberia

- LINK used by 13 HIV service facilities near Monrovia
- Facility-based tablets with mobile data internet and a Survey Monkey tool
- Clients submitted 1860 short surveys (7 questions) since Nov 2019 (including 64% PLHIV, 3.2% MSM, 2.4% FSW, 2.1% TG, 1% PWID)
- Facility management access their dashboard from a shortcut on their tablet home screen (also accessible by NACP)
- Monthly dashboard reviews
- Click to view LINK Liberia data use dashboards:
  - Facility comparison dashboard
  - ELWA Hospital dashboard

Obtaining individual client feedback in Liberia





Thank you!

Upcoming Session

Improving decision-making for DDD with GIS mapping and spatial modeling

Thursday, November 12, 2020

7:00 AM-8:30 AM EST | 13:00-14:30 CAT | 14:00-15:30 EAT

Register here