HPTN Lab 0Site ProbeTec – Lusaka

PROBE-Tec Chlamydia trachomatis and Neisseria gonorrhoeae Amplified DNA Assay

- Presented by
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- Centre for Infectious Diseases Research in Zambia.

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The Probe Tec

- BD Probe Tec provides a procedure for qualitative detection of CT/GC.
  - The assay uses SDA technology

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SPECIMEN TYPE

- Urine-Neat/UPP
- Endocervical swabs

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LYSED SAMPLES - Stability

Either urine or Endocervical Swabs

- RT up to 6 hrs at 18-30 degrees celcius
- Store up to 5 days at 2-8 degrees celcius, ensure vortexing prior to testing.
- Store up to 98 days at -20 degrees. Prior to testing thaw at RT,vortex and re-lyse

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REAGENT STORAGE

- Store all the reagents at 2-33 °C

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PROCEDURES
Sample Processing Urine Assay -Neat

- Collect 15-60mls 1st void urine
  - If stored at 2-30 °C, process within 30 hrs.
- Review the incomplete test work list - LIMS.
- Pipette 4.0mls into tube and cap
- Insert tube into lysing rack and pre-warm samples for 10 minutes.
- Cool at RT for 15 min up to 6 hrs
- Centrifuge at 2000 Xg for 30 min
- Decant and add 2mls diluent and proceed as per SOP

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Sample Processing Urine Assay - UPP

-Clean forceps with alcohol and remove the urine PP from envelope.

-Do not contaminate the forceps by touching the urine container.

-Process one urine at a time, recap before opening the next sample.

-Allow the UPP to be in urine for at least 2 hrs

-Pipette 4mls and centrifuge for 30 min at 2000Xg.

-Decant and add 2.0 mls of diluent and proceed as per your SOP

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Q.C

- Positive and Negative controls are run with each run
- Place the Positive control before the negative control

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RESULTS REPORTING

- Negative- MOTA count less than 2,000
- Low Pos-MOTA count between 2000 and 9,999
- High Pos- MOTA count equal or greater than 10,000
- All positive samples are repeated.

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FACTORS AFFECTING RESULTS

- Disinfection
- Pipetting
- Changing of gloves
- Inadequate blotting of urine from tubes after centrifugation

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THANK YOU

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Proposed CIDRZ Strategic Plan

Lusaka Province

- Kafue District Hospital

Eastern Province

- Chipata Regional Hospital
- Petauke District Hospital
- Lundazi

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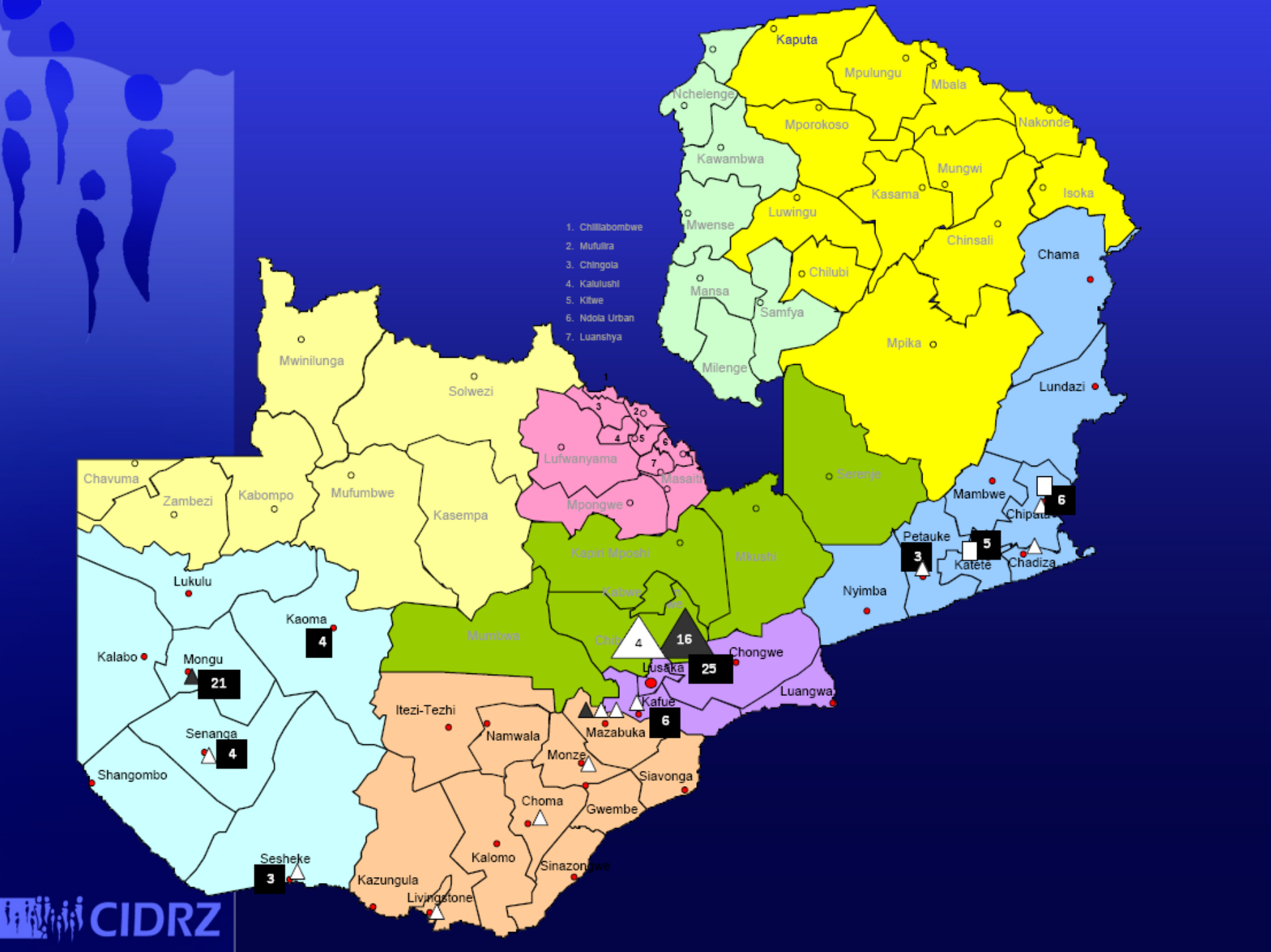
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2. Mufulira
3. Chingola
4. Kalulushi
5. Kitwe
6. Ndola Urban
7. Luanshya
Kaputa
Mpulungu
Mbala
Nchelenge
Mporokoso
Nakonde
Kawambwa
Mungwi
Kasama
Isoka
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Chinsali
Chama
Chilubi
Mansa
Samfya
Mpika
Milenge
Lundazi
Mwinilunga
Solwezi
Lufwanyama
Serenje
Chavuma
Zambezi
Kabompo
Mufumbwe
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Chongwe
Luangwa
Kafue
6
Itezi-Tezhi
Namwala
Mazabuka
Monze
Senanga
4
Siavonga
Shangombo
Choma
Gwembe
Kalomo
Sesheke
3
Sinazongwe
Kazungula
Livingstone
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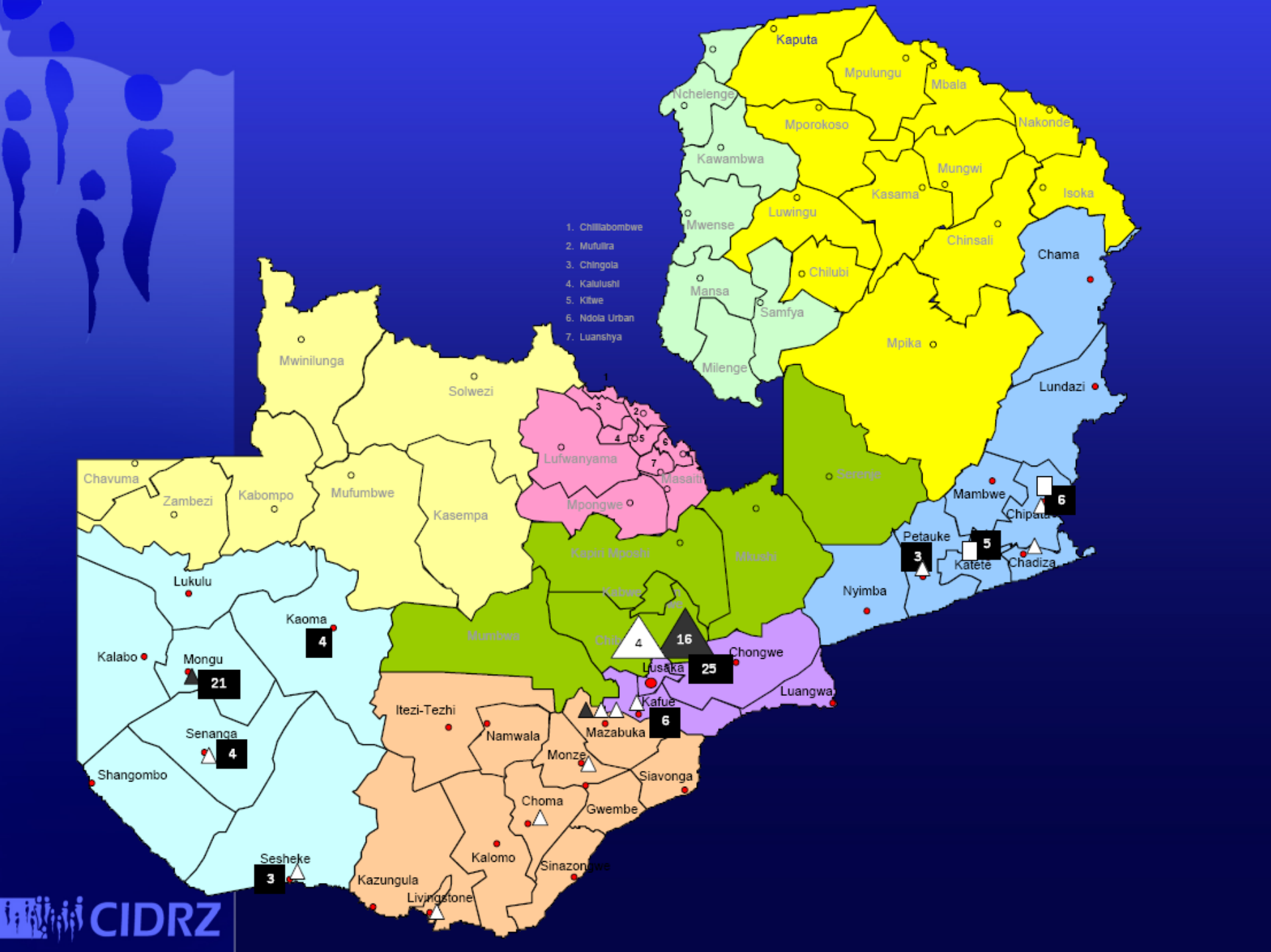
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Proposed CIDRZ Strategic Plan

Western Province

- Lewanika
- Sesheke
- Senanga
- Kalabo

Southern Province

- Chikankata
- Monze
- Choma
- Mazabuka
- Nakambala
- Livingstone

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Proposed CIDRZ Lab Support for Provinces

Instruments

- Reagents
- Service contract

Training

- QA/QC
- Instrumentation
- Lab systems

Monitoring

- QA/QC
- Reagent, supplies and equipment

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Instruments

CIDRZ will work with MoH and other partners to:

- Coordinate the purchase of appropriate CD4 testing or other lab capacity for regional & district facilities
- Service contract

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CD4 instrument analysis

- BD FACSCaliber and FACSCount
- BC Epic XL
- Sysmex POCHI – hematology plus CD4
- Guava

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Machine summary
2 existing and 3 new BC Epix (no cost)
3 existing and 3 new GRZ purchased Facscounts
6 new Sysmex POCHIs

Summary	FACSCount	POCHI	FACSCalibur	Epics XL
Machine capacity	12,000	6,000	60,000	60,000
Reagent estimate	18,395	24,902	-	209,662
Total machines	4	6	-	5

Region	Collection Site	On ART End Sept 06	CD4 tests/ART patient	Collection volume	FACSCount instruments	POCHI instruments	FACSCalibur instruments	EPICS XL Instruments	Testing site	CD4 tests run	Capacity utilization
Southern	Monze Mission Hospital	1,063	7.15	7,596		1			Monze Mission Hospital	7,596	127%
Southern	Nakambala Sugar	268	7.15	1,915					Mazabuka District Hospital	-	
Southern	Mazabuka District Hospital	443	7.15	3,165	1				Mazabuka District Hospital	5,080	42%
Southern	Chikankata	570	7.15	4,073		1			Chikankata	4,073	68%
Southern	Choma General Hospital	549	7.15	3,923		1			Choma General Hospital	3,923	65%
Southern	Livingstone General Hospital	1,132	7.15	8,089	1				Livingstone General Hospital	8,089	67%
Southern	Sesheke Yeta District Hospital	390	7.15	2,787	1				Sesheke Yeta District Hospita	2,787	23%
Southern	COP 06 New S Kalomo?	54	7.15	386						-	
Southern	COP 07 New S	392	7.15	2,801						-	
Western	Lewanika General Hospital	2,265	7.42	16,812				1	Lewanika General Hospital	16,812	28%
Western	Senanga District Hospital	390	7.42	2,895		1			Senanga District Hospital	2,895	48%
Western	COP 06 New W Kalabo?	392	7.42	2,910						-	
Western	COP 07 New W		7.42	-						-	
Eastern	Petauke District Hospital	597	6.11	3,649		1			Petauke District Hospital	3,649	61%
Eastern	Chipata General Hospital	1,564	6.11	9,559				1	Chipata General Hospital	9,559	16%
Eastern	Lundazi District Hospital	399	6.11	2,439	1				Lundazi District Hospital	2,439	20%
Eastern	COP 06 New E	399	6.11	2,439						-	
Eastern	COP 07 New E		6.11	-						-	
Lusaka	Kalingalinga	2,737	5.76	15,775				3	Kalingalinga	183,291	102%
Lusaka	Kanyama	4,157	5.76	23,960					Kalingalinga	-	
Lusaka	Chelstone	2,767	5.76	15,948					Kalingalinga	-	
Lusaka	Mtendere	1,396	5.76	8,046					Kalingalinga	-	
Lusaka	OLH	1,612	5.76	9,291					Kalingalinga	-	
Lusaka	MT	468	5.76	2,697					Kalingalinga	-	
Lusaka	Kamwala	2,991	5.76	17,239					Kalingalinga	-	
Lusaka	MateroRef	2,557	5.76	14,738					Kalingalinga	-	
Lusaka	George	2,094	5.76	12,069					Kalingalinga	-	
Lusaka	Chilenje	1,537	5.76	8,859					Kalingalinga	-	
Lusaka	Kara	896	5.76	5,164					Kalingalinga	-	
Lusaka	Bauleni	524	5.76	3,020					Kalingalinga	-	
Lusaka	UNZA	569	5.76	3,280					Kalingalinga	-	
Lusaka	UTH	1,560	5.76	8,991					Kalingalinga	-	
Lusaka	Chipata	1,120	5.76	6,455					Kalingalinga	-	
Lusaka	Chawama	556	5.76	3,205					Kalingalinga	-	
Lusaka	UTH Peds	234	5.76	1,349					Kalingalinga	-	
Lusaka	Makeni	540	5.76	3,112					Kalingalinga	-	
Lusaka	Ngombe	432	5.76	2,490					Kalingalinga	-	
Lusaka	MateroMain	432	5.76	2,490					Kalingalinga	-	
Lusaka	Kabwata	540	5.76	3,112					Kalingalinga	-	
Lusaka	PMTCT	12,000	1.00	12,000					Kalingalinga	-	
Lusaka	Kafue District Hospital	480	5.76	2,767		1			Kafue District Hospital	2,767	46%

Reagents

- CIDRZ will endeavor to supplement the existing government system where short falls exist

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Training

Support & improve existing systems

- Instrument operation
- Trouble shooting
- Preventive maintenance techniques
- Testing procedures
- Quality control testing and analysis
- Good Lab Practices
- Quality assurance

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Monitoring

- QA/QC - ongoing
- Instrument service program
- Reagent and supplies
- Competency of technologist

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QA/QC Program

- Ensure standardized mode of operation
- Enrollment in External QA Programs
- Competency check programs for Lab Staff
- QC/QA Program is “full time” commitment

To ensure proper ART patient care CIDRZ will implement in conjunction with CDC & MoH

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Summary

Lab support is an integral part of ART scale-up for safe patient care and requires:

- Proper systems
- Ongoing quality control monitoring
- Adequate logistical support

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Discussion

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