

# COVID Impact on ART Program in South Africa

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# Outline

1. HIV and COVID-19 epidemics in South Africa
2. Impact of COVID-19 on health services in South Africa
3. CDC response to COVID-19 in South Africa
4. Site-support/monitoring in the context of COVID-19

# HIV and COVID-19 Epidemics in South Africa

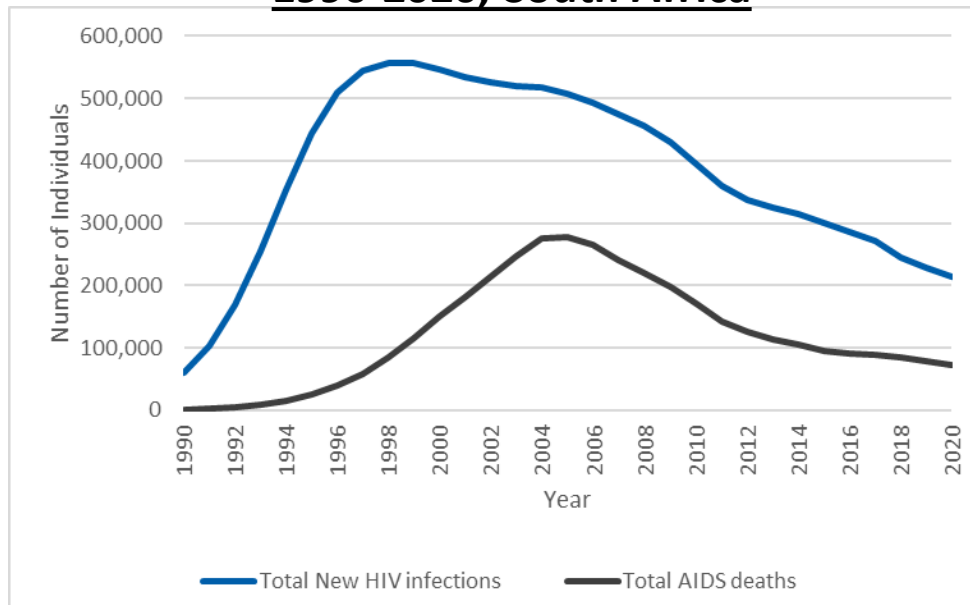


# South Africa HIV Epidemic & Program Context

## HIV in South Africa

- Total Population: **58.7 million**
- PLHIV: **7.7 million**
- Adult (15+) HIV prevalence: **18%**
- New HIV infections: **166,000 per year**

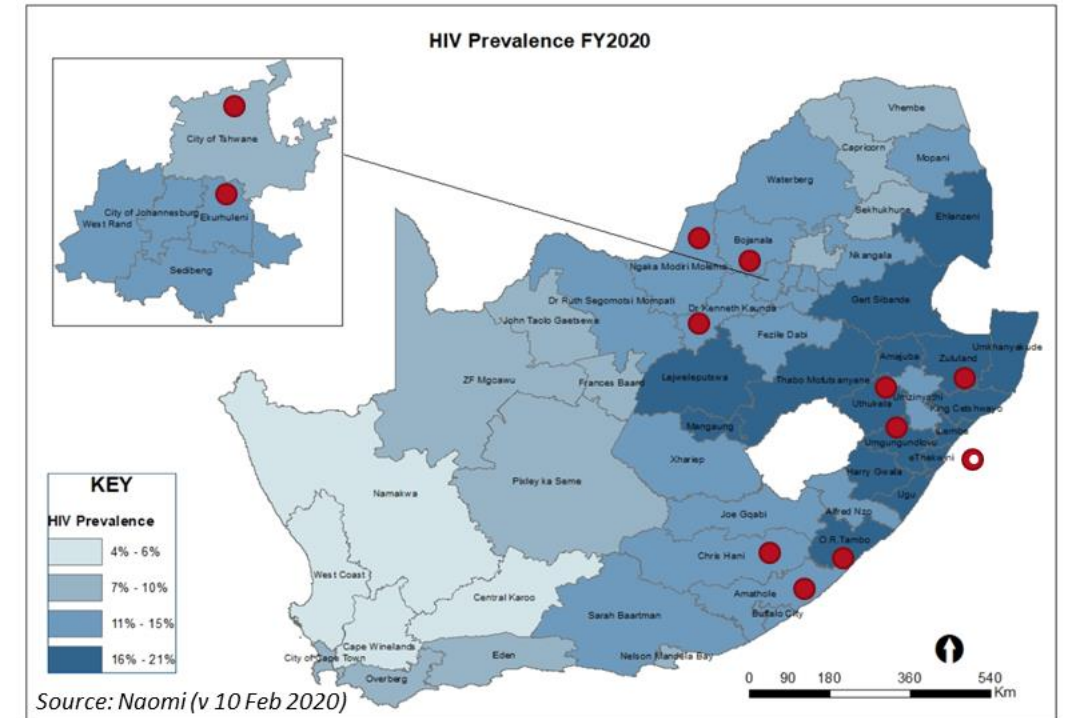
## New HIV infections and Total AIDS deaths, 1990-2020, South Africa



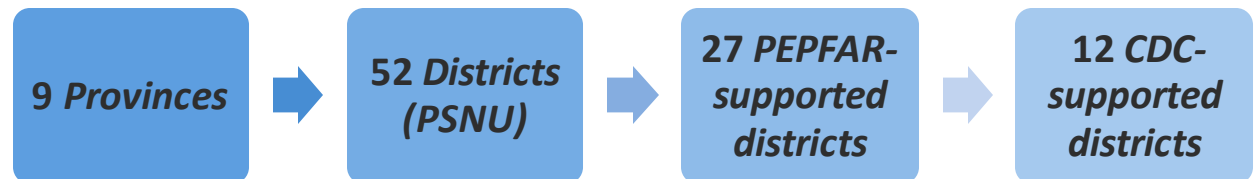
HIV statistics reported are projections for mid-2020

Source: Thembisa 4.3 (June 2020)

## HIV prevalence by district, Sept 2020

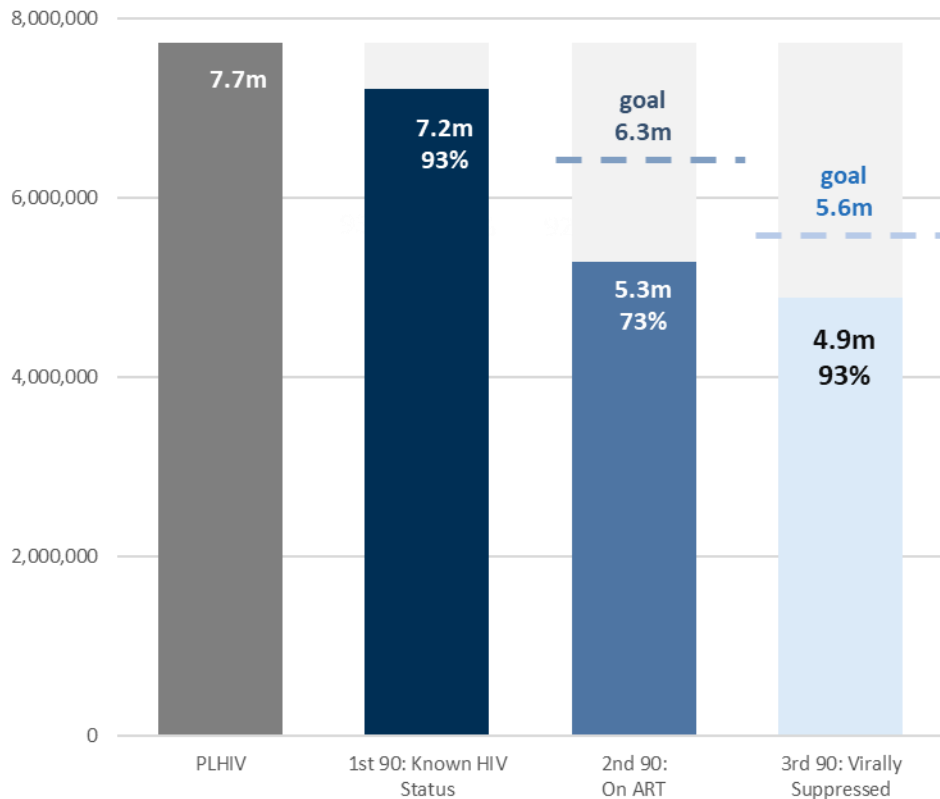


● CDC-supported district    ○ CDC- and USAID-supported district; transition to full CDC support in FY21

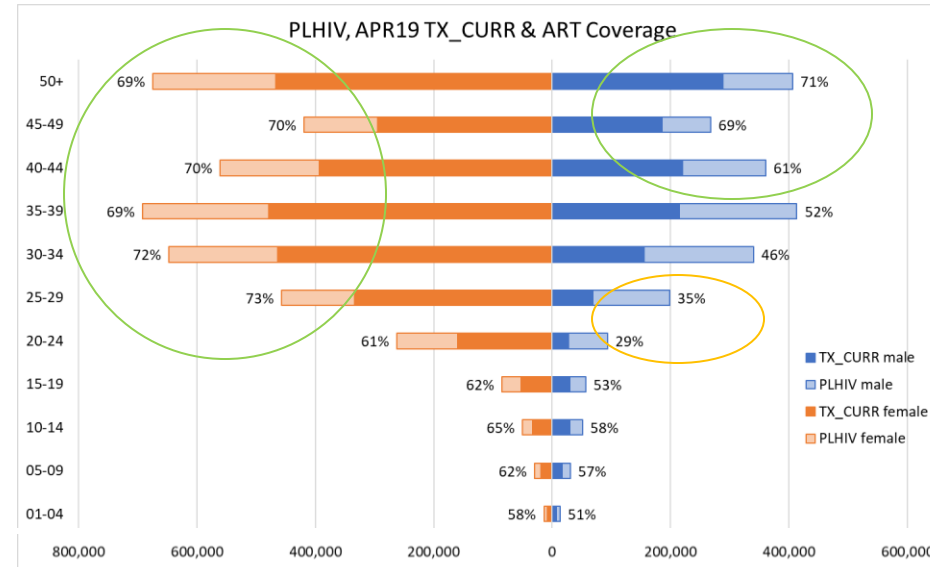


# South Africa HIV Epidemic & Program Context

**2<sup>nd</sup> 90 remains largest barrier to epidemic control in South Africa, with an estimated 2.4 million PLHIV not on ART**

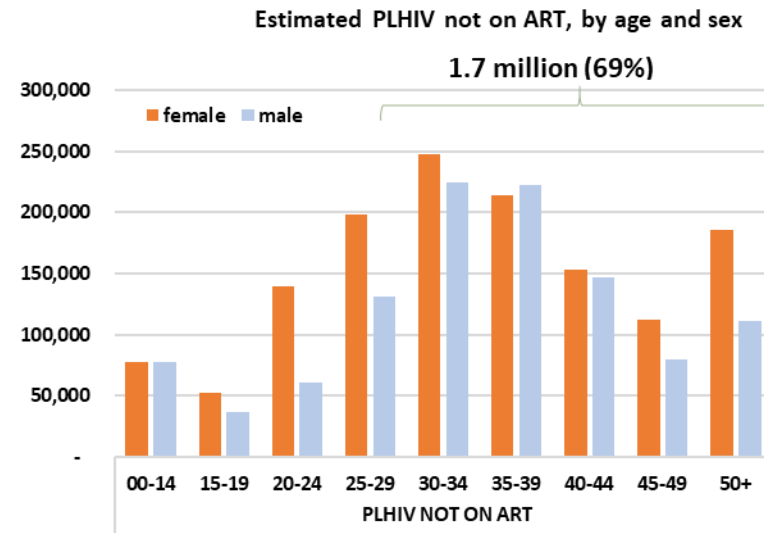


Source: Thembisa 4.3 (June 2020)



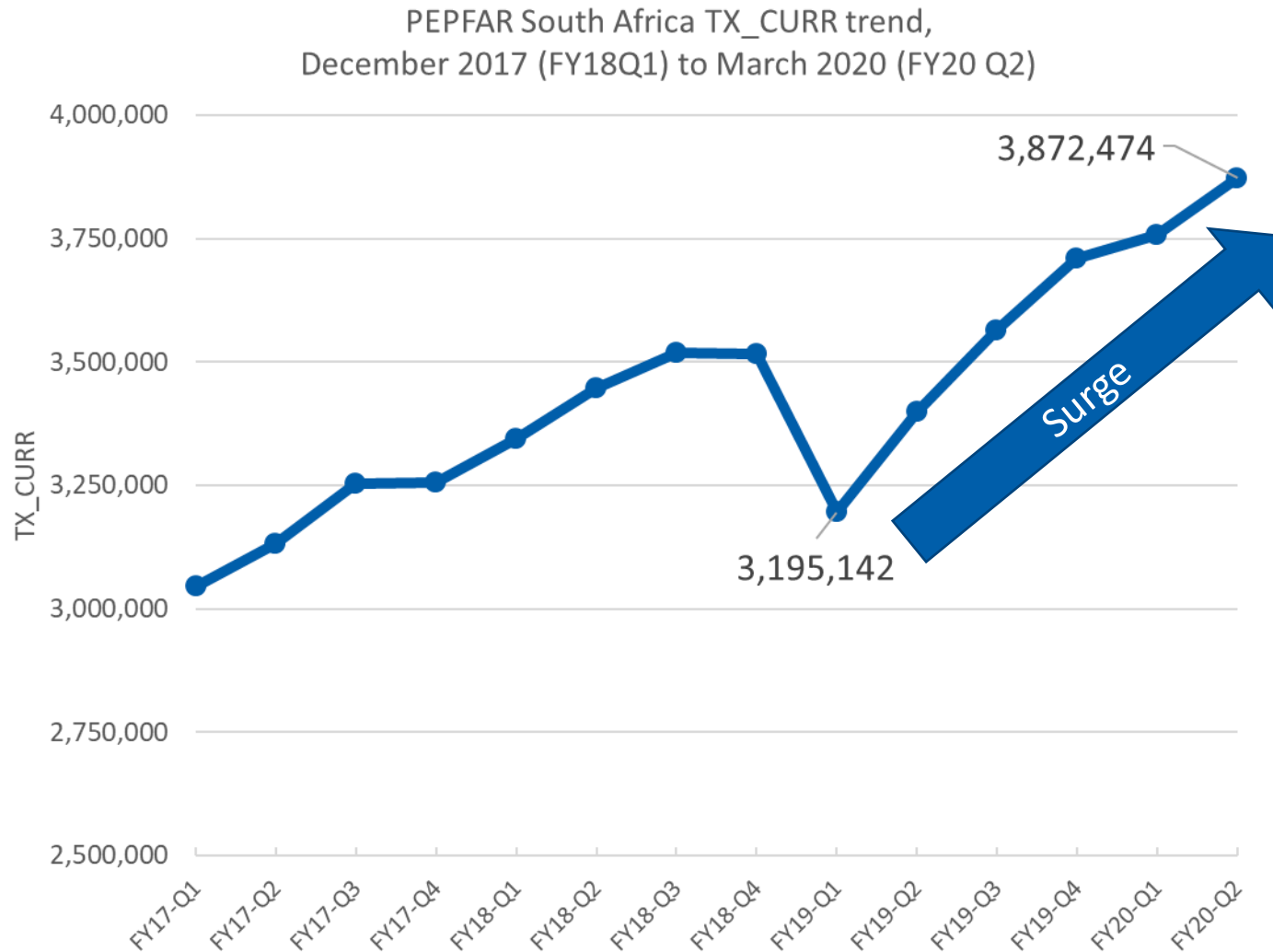
ART Coverage is the **highest in women 25+** and in **men 40+** years of age

ART Coverage is lower in men compared to women, **with lowest coverage in men 20-29 years of age.**



More than **2/3 (69%)** of untreated PLHIV are **over 30 years old**, and **50%** are over 35 years old

# South Africa PEPFAR Program Recent History



- PEPFAR South Africa is supporting a 2-year surge in FY19 and FY20
- Approximately 50% of the PEPFAR treatment program is supported by CDC in South Africa
- The program **increased TX\_CURR by over 700,000** in the first 18 months of the surge
- Gains were achieved through implementation of the “Siyenza” program, which involves intensive site support and close monitoring of core program areas

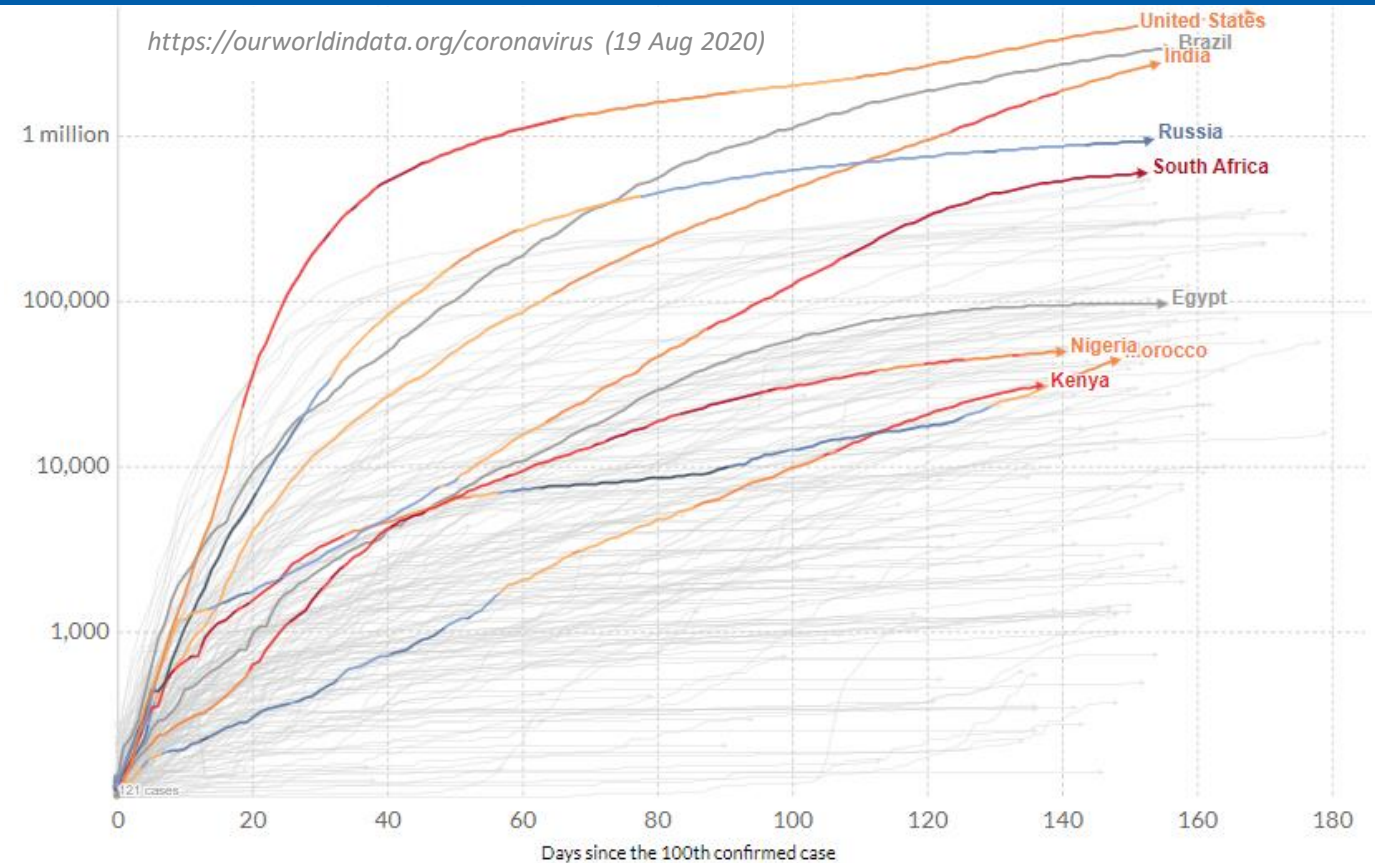


# South Africa has the 5<sup>th</sup> highest global burden of COVID-19

## COVID-19 STATISTICS IN SA

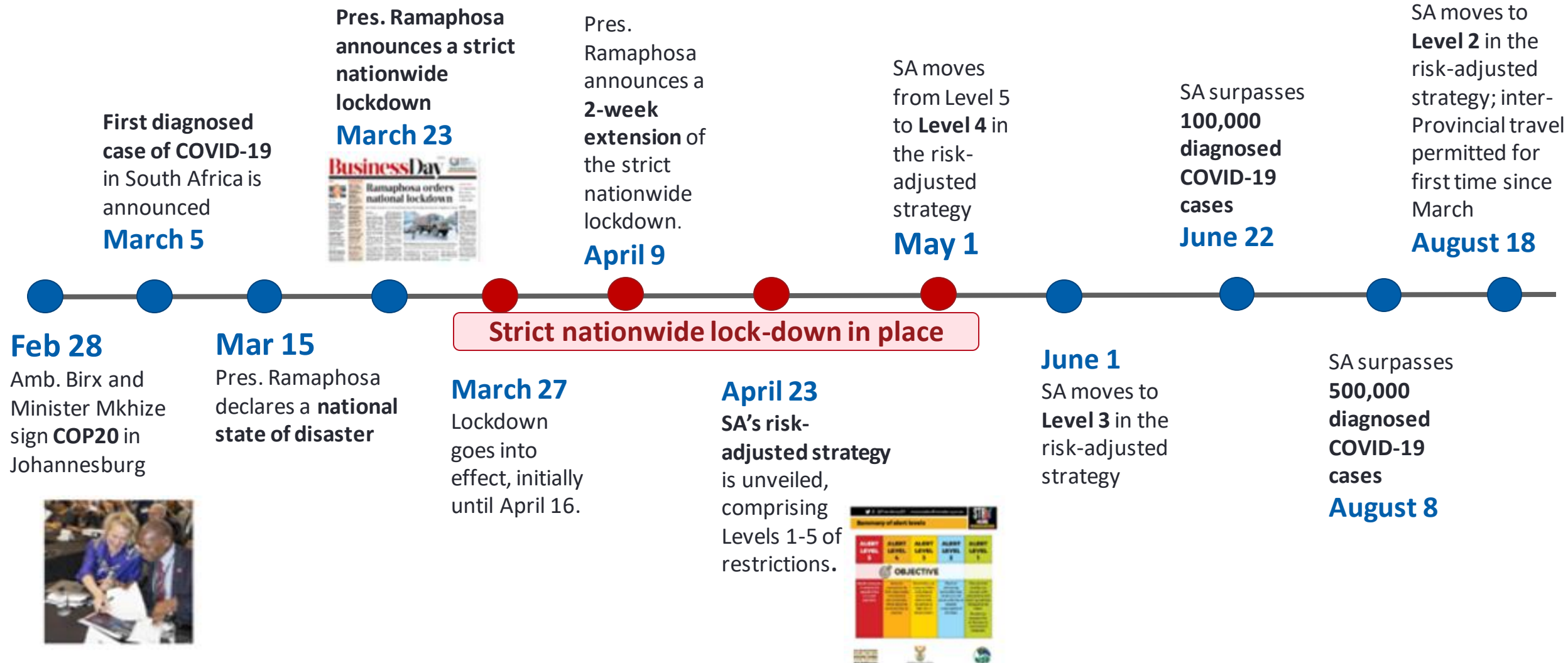
				
3 430 347	592 144	485 468	12 264	2 258
TESTS CONDUCTED	POSITIVE CASES IDENTIFIED	TOTAL RECOVERIES	TOTAL DEATHS	NEW CASES

TUESDAY  
**18**  
AUGUST  
2020



- South Africa's COVID-19 burden is the **5<sup>th</sup> highest in the world**, below only US, India, Russia, and Brazil
- There have been **over 590,000 cases** and **over 12,000 deaths** since the beginning of March
- There have likely been **24,000 deaths due to TB** over the same time period

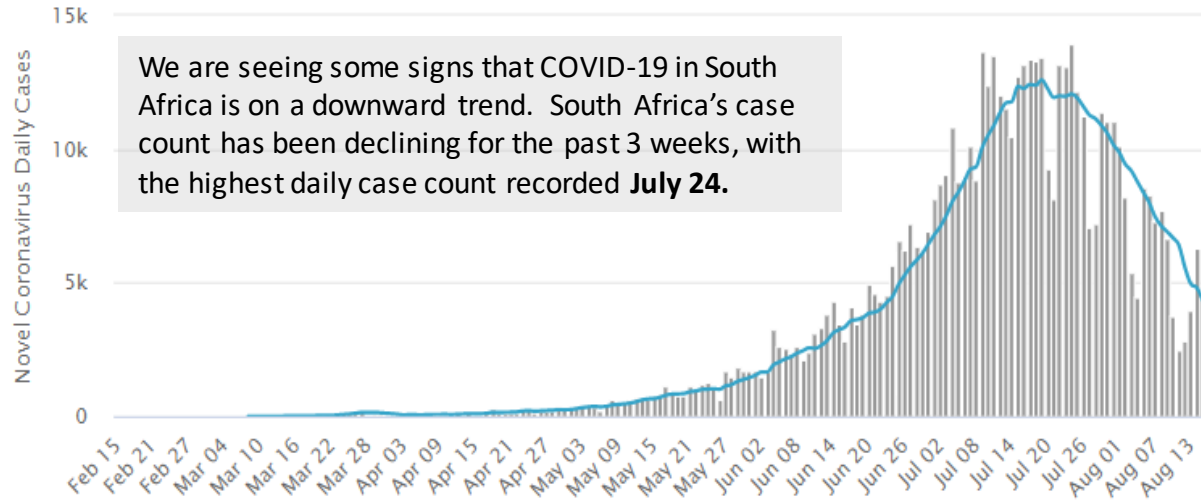
# COVID-19 in South Africa



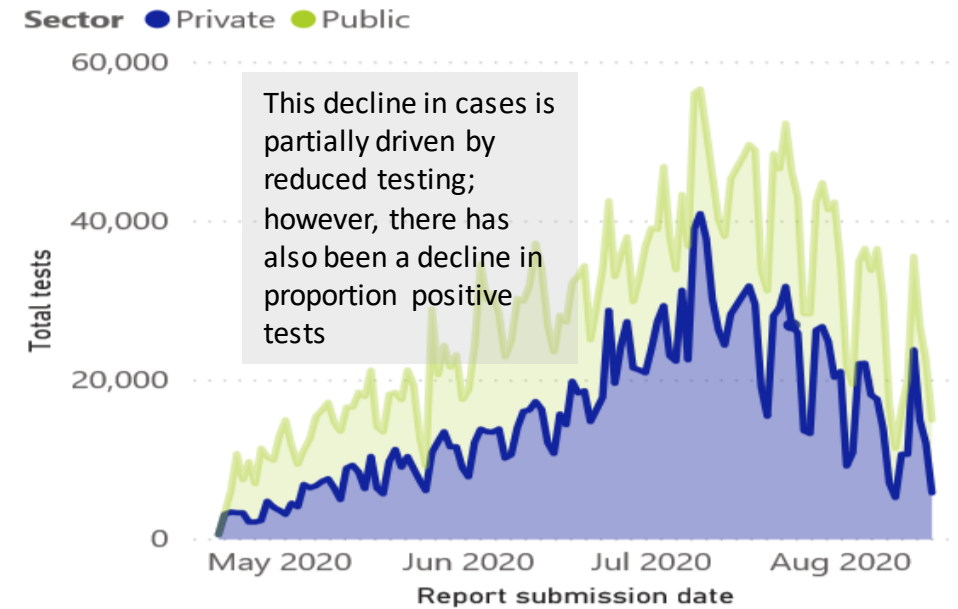


# COVID-19 Cases, Tests, Hospitalizations, and Deaths

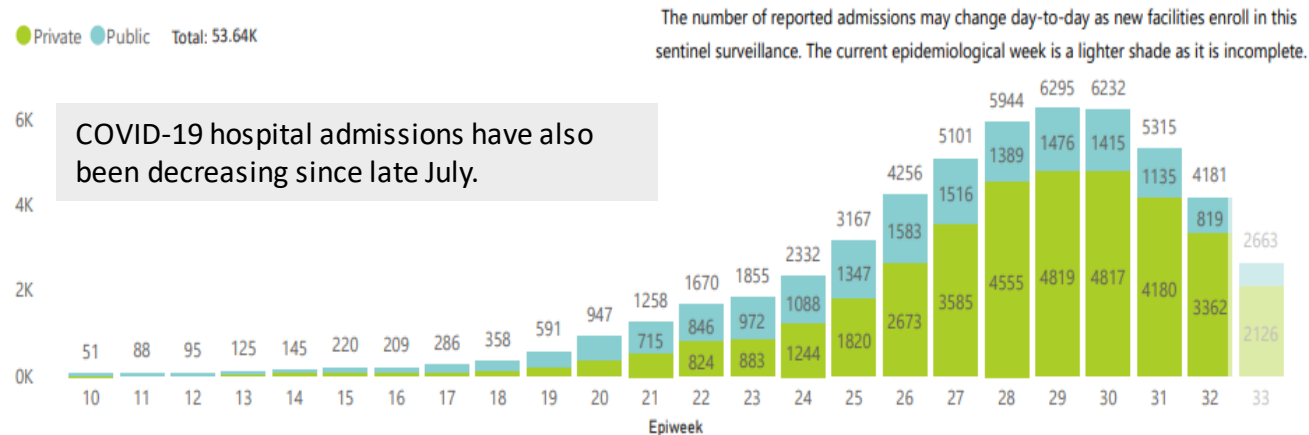
## Daily case count with 7-day moving average, South Africa



## COVID-19 tests, by health sector, South Africa



## COVID-19 hospital admissions in sentinel facilities, by health sector, South Africa

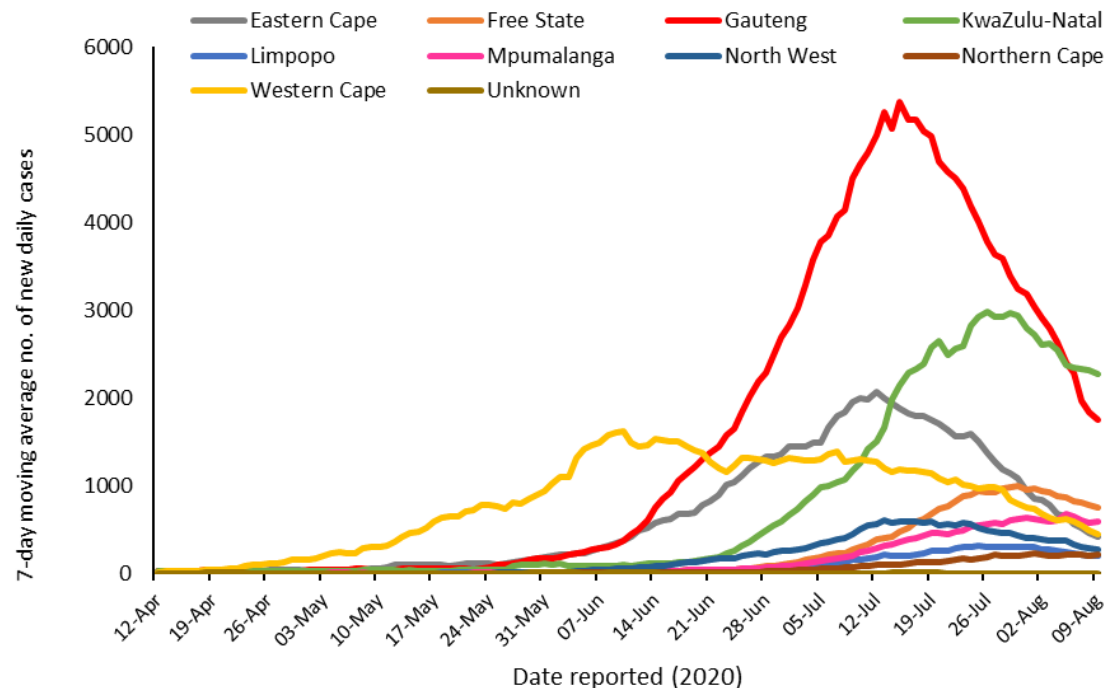


## COVID-19 deaths, South Africa

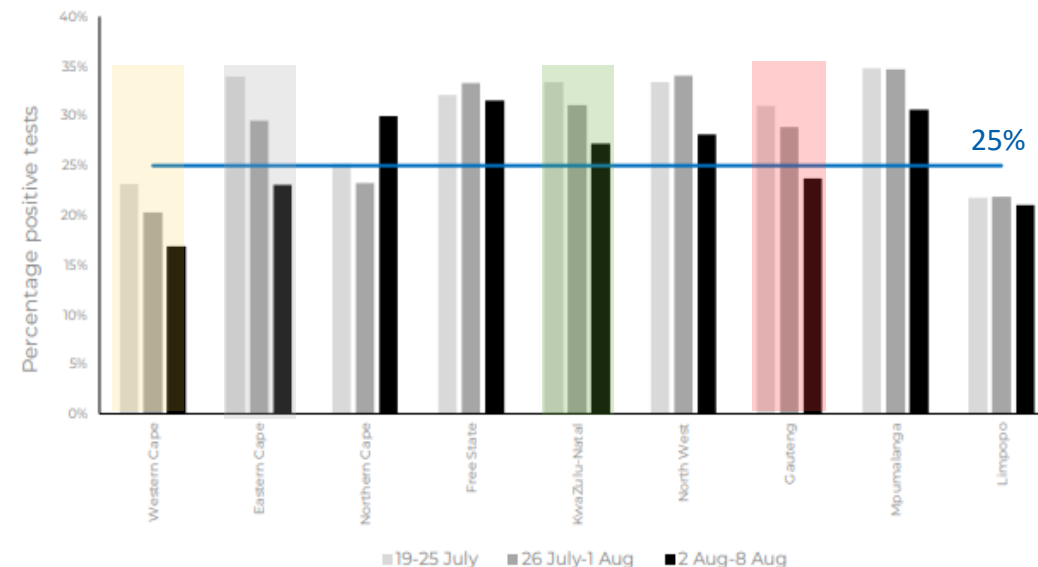


# COVID-19 by Province

Daily Case Count, by Province



Change in % Positive, by Province

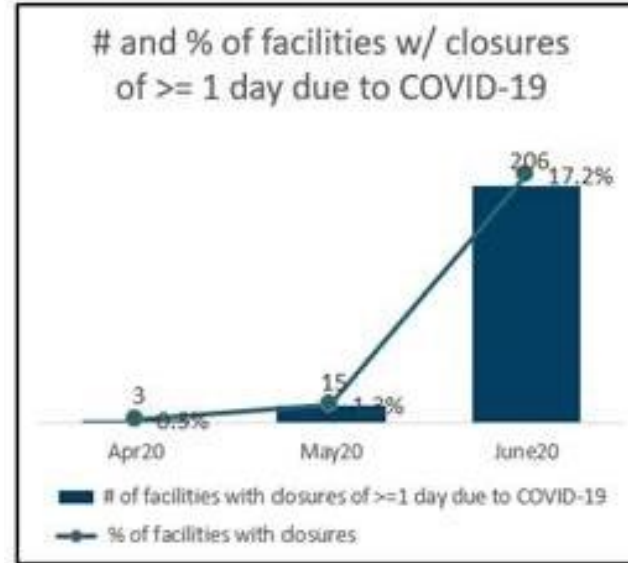
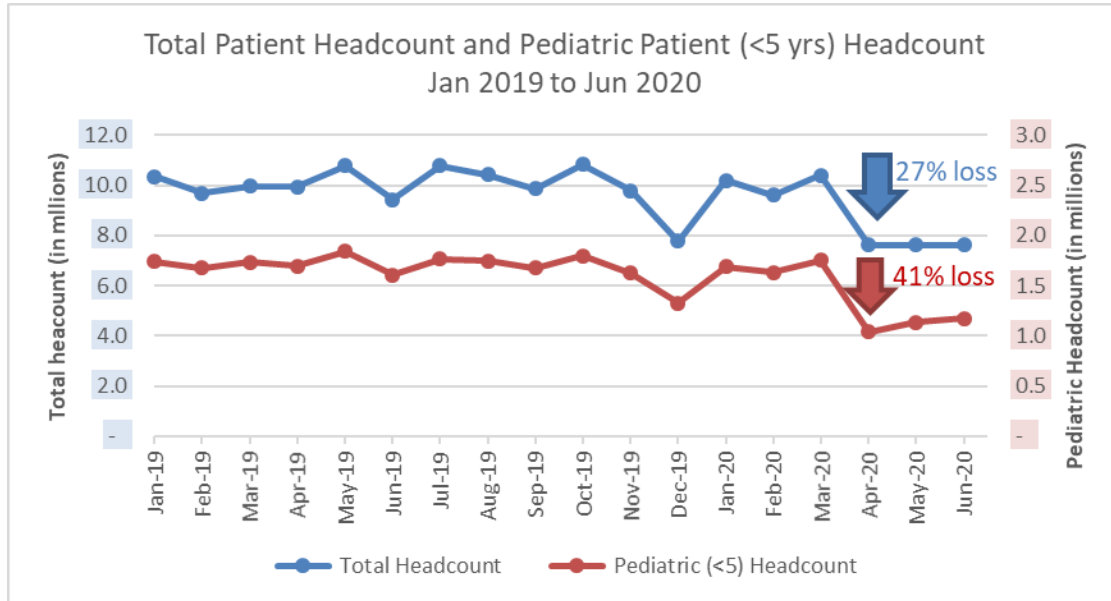


- There are Provincial differences in the timing of the epidemiologic peak; Western Cape led the epidemic, and has been followed by Gauteng, Eastern Cape, and KZN.
- The decline in cases partially explained by shift to focused testing strategy and long turnaround times.
- However, decline in proportion positive in WC, EC, KZN, GP and decline in COVID-19 hospital admissions (not shown) indicate improvement.

# Impact of COVID-19 on Health Services in South Africa



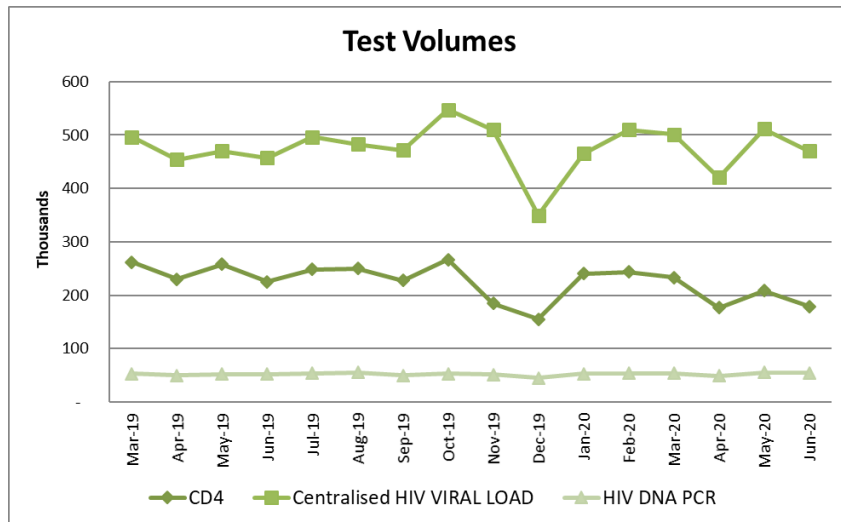
# Impact Of COVID-19 Felt Across The Health Sector



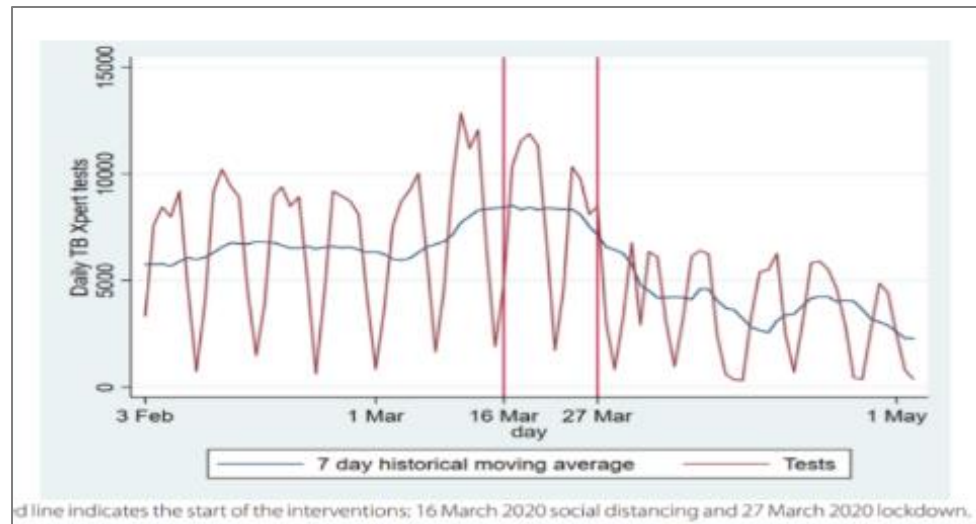
## Key lockdown statistics:

- Facility attendance dropped from **41% in children <5yrs** and **27% overall** in March 2020
- ~ **17% of CDC-supported facilities were closed** at least 1-day due to COVID
- TB, VL, and CD4 tests all reported **significant declines** during the month of April
- Increased **HCW infections** among DOH and partner staff from May to June

## VL, CD4, and EID Trend, Feb – May 2020

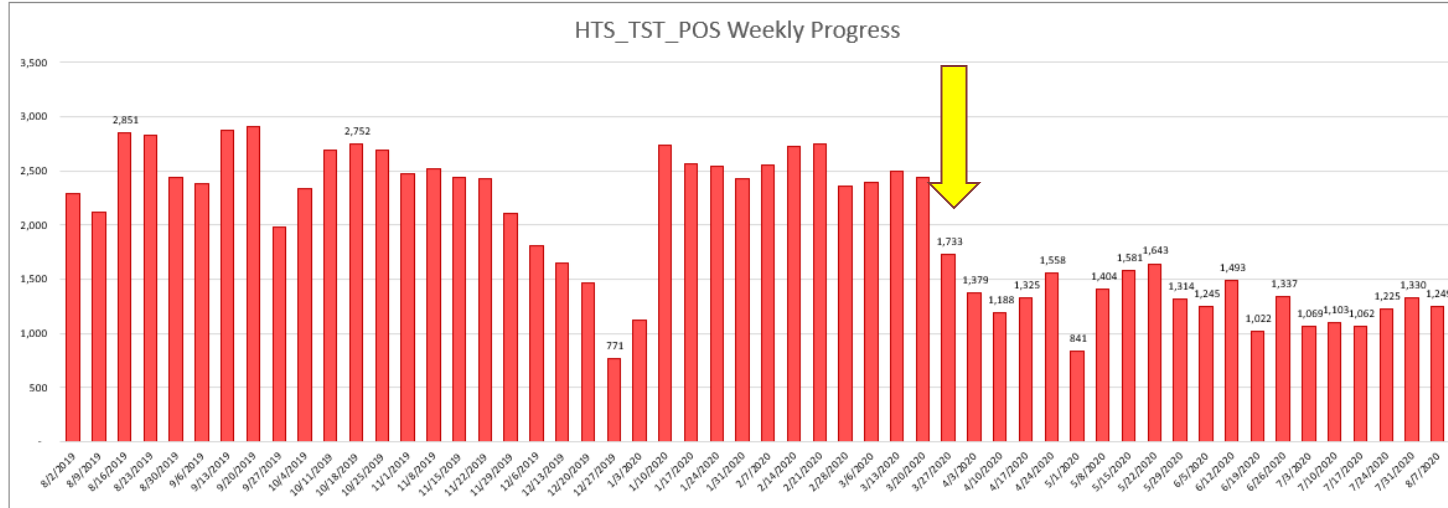


## TB Xpert Test Trend, Feb – May 2020



# Impact of COVID-19 on Treatment Initiation

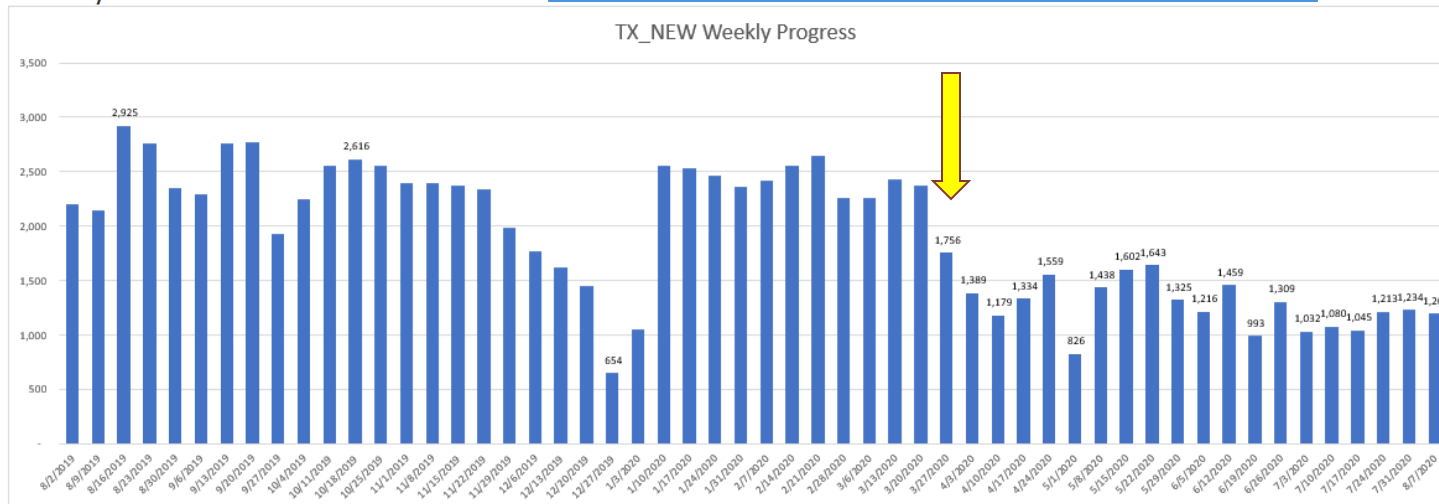
1<sup>st</sup> day of COVID-19 Lockdown



- HTS\_POS and TX\_NEW dropped from the first day of lock down
- Proxy linkage remained high
- TPT initiations also decreased

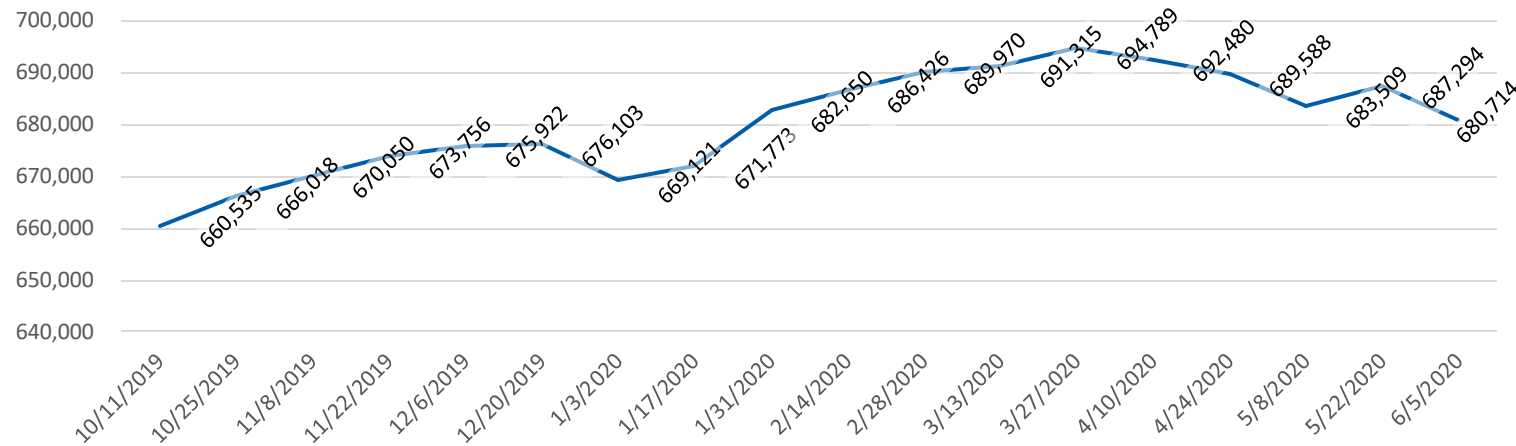
1<sup>st</sup> day of COVID-19 Lockdown

7. Newly Initiated on ART

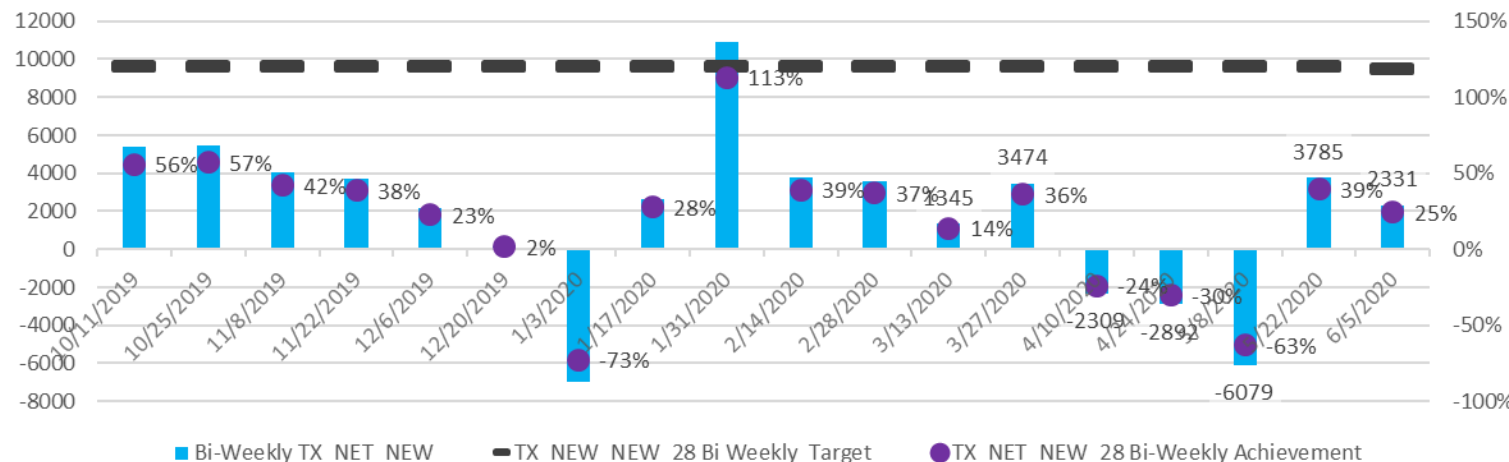


# Effects of COVID-19 on Retention on ART

TX\_CURR\_28 Progress



Net New on ART, progress toward Bi-Weekly PEPFAR-Phuthuma target

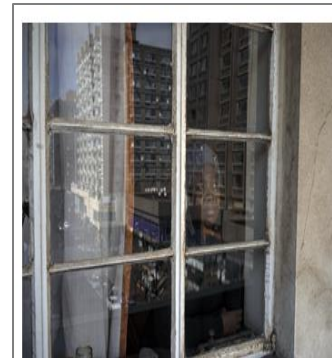
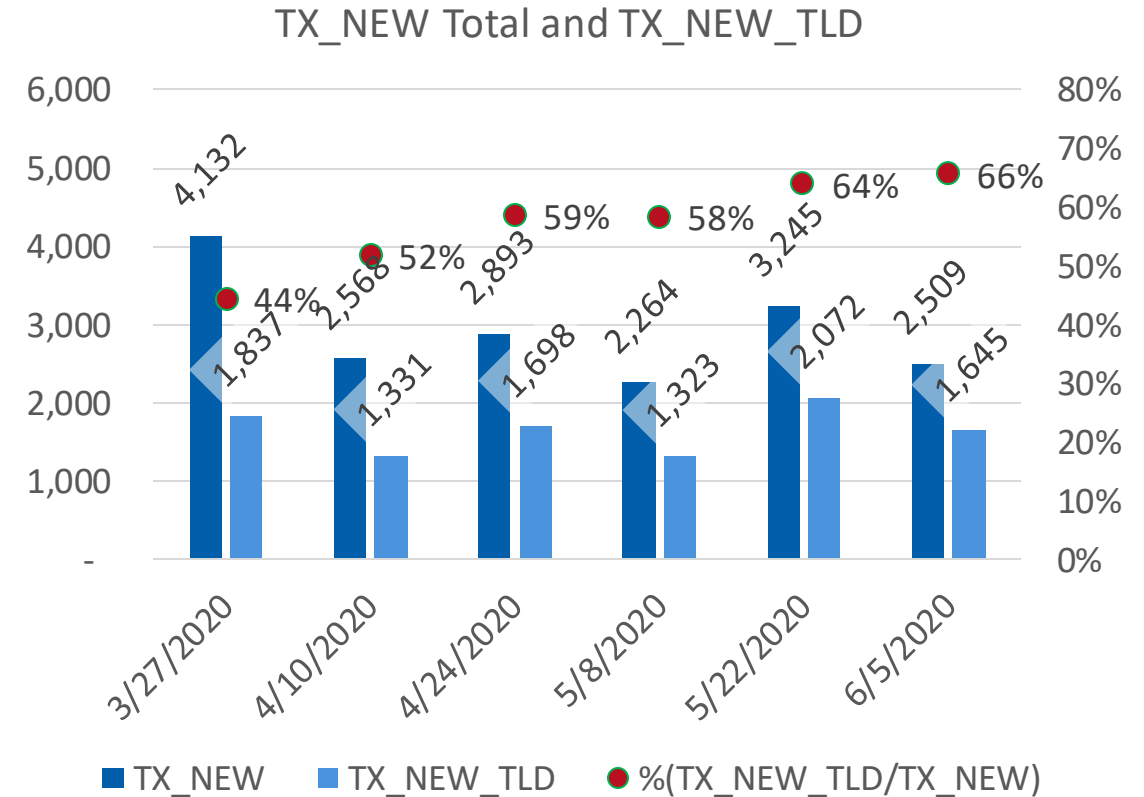


- Data from CDC-supported Siyenza sites
- Most substantial declines noted corresponded with start of lockdown on **27 March and continued through May 8<sup>th</sup>**
- Variable recovery and worsening of status afterward dependent on significance of outbreak in affected province



# Supply Chain Roses and Thorns

- TLD transition began in Dec 2019 and moved very slowly for the first 3-months of implementation
- Prior to COVID-19 PEPFAR team working closely with NDOH on 3MD, 6MD, and accelerating roll-out of TLD
- In the setting of COVID, TLD uptake initially increased & 3MD was launched
- COVID-related challenges remain significant with critical shortages of both first-line ARVs now making it difficult to continue with the rapid roll-out of MMD



South Africa's poor scramble  
for anti-HIV drugs amid virus

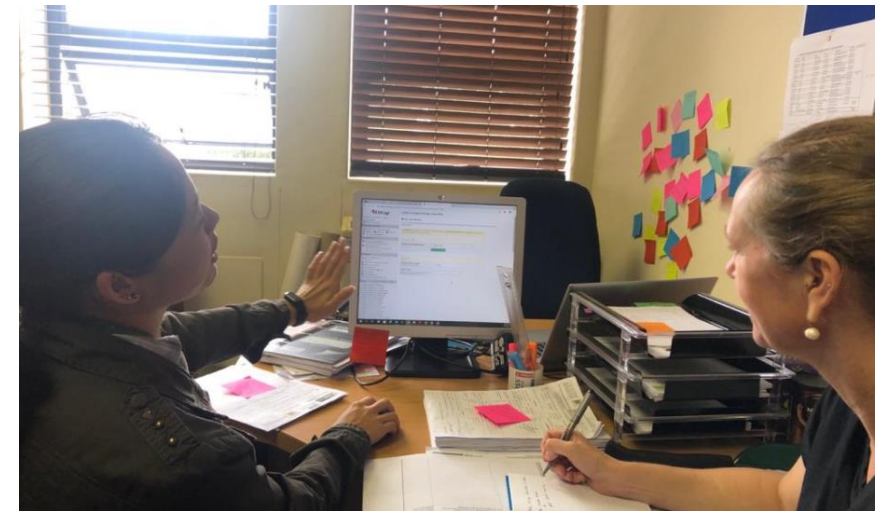
JOHANNESBURG (AP) — When her regular clinic ran out of her government-funded HIV medications amid South Africa's COVID-19 lockdown, Sibongile Zulu panicked. A local

# CDC Response to COVID-19 in South Africa



# Coordinated USG Response To COVID-19

- Close interagency collaboration on leveraging of PEPFAR resources and application for **supplemental funding**
- Initially instituted **weekly calls** with partners to discuss PEPFAR guidance and other updates
- PEPFAR community healthcare workers (CHW) supported the DOH in **nationwide household COVID-19 campaign** integrating HIV/TB education and screening
- Comms campaigns updated to incorporate COVID-19
- **eLABS mobile application** updated to include COVID-19 tracking; now rolling out to more than 2,500 PEPFAR-supported facilities
- **CDC deployment of >30 staff** to national and provincial incident management teams to support development of guidance, epidemiologic analysis, data support, etc.



# PEPFAR CHWs Support for an Integrated Response

- **Staff and Materials**

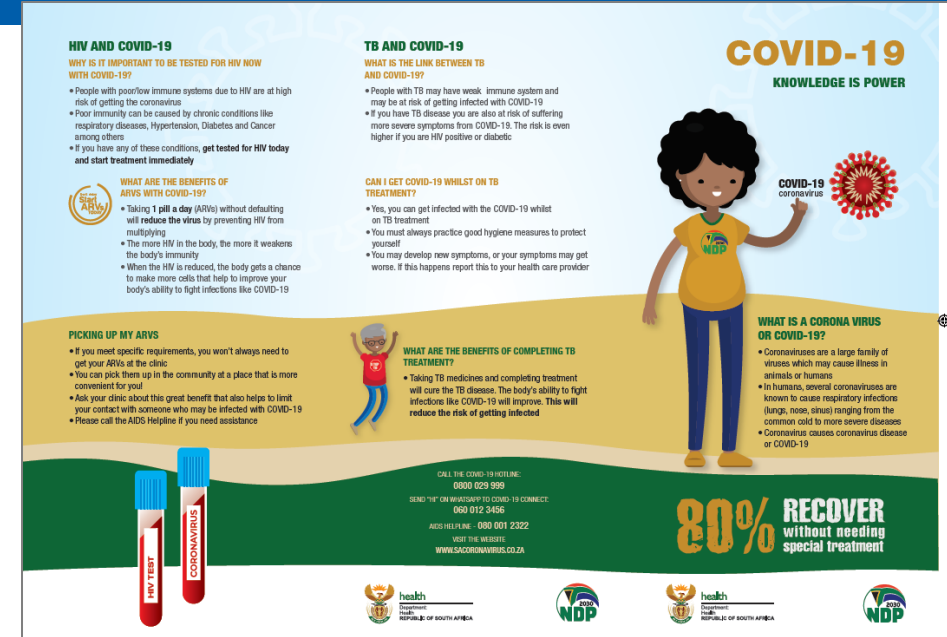
- 3,538 PEPFAR **CHW's** provided no-touch household screening
- 5,417 PEPFAR **devices** distributed to partner-supported CHWs
- T-shirts, caps, and **educational materials** in 11 national languages, distributed nationwide

- **Training**

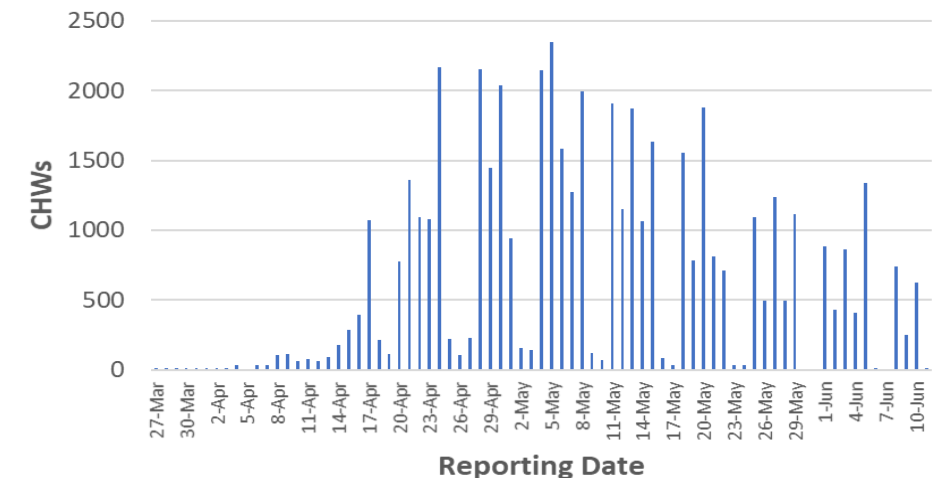
- Guidance documents, presentations and videos for COVID-19 household screening developed
- DSPs trained in COVID-19 Basics, COVID-19 response, Conducting home visits, Personal safety and infection control

- **Accomplishments (27 March to 11 June):**

- 240,027 households visited
- 652,982 individuals screened
- Referrals
  - 4,084 referred for COVID-19 testing
  - 13,677 referred for HIV/TB testing
- Distributions
  - 287,374 condoms distributed
  - 345 self-screening kits distributed



**Total PEPFAR CHWs Screening for COVID-19**





# eLABS to Monitor VL and COVID-19 Results Return

## North West

- **95 facilities**
- 221 nurses
- 30 drivers
- 2 testing lab
- 5 Hubs

## Free State

- **117 facilities**

## Eastern Cape

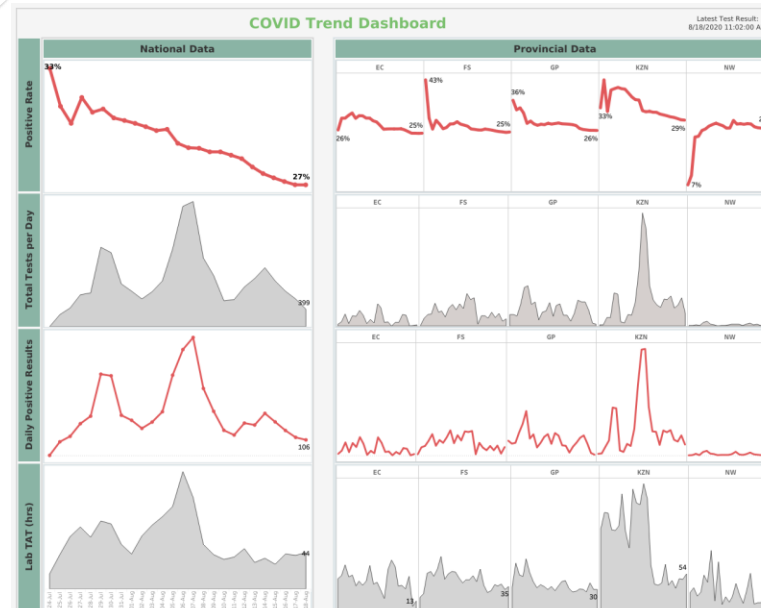
- **578 facilities**
- 186 nurses
- 38 drivers
- 2 testing lab
- 9 Hubs

## Gauteng

- **102 facilities**
- 546 nurses
- 94 drivers
- 1 testing lab
- 6 Hub

## KwaZulu-Natal

- **190 facilities**
- 425 nurses
- 96 drivers
- 3 testing lab
- 10 Hubs



## Executive Dashboard - COVID Testing

(since 24-July 2020)

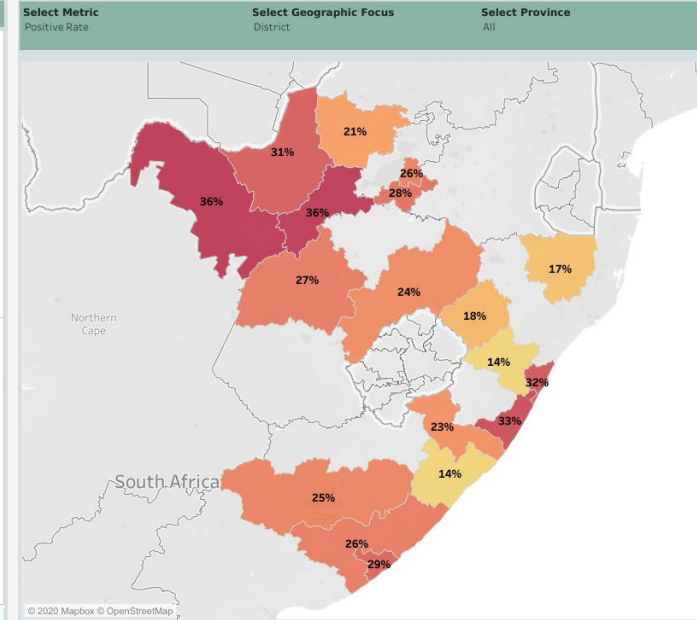
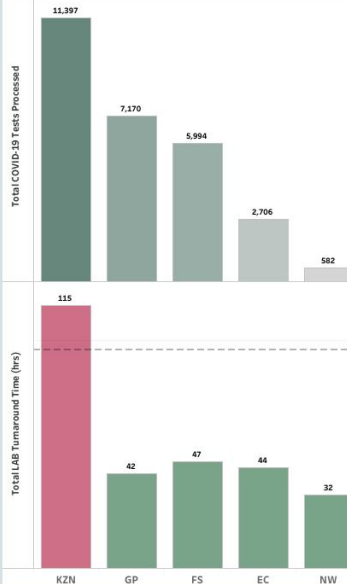
Latest Update:  
2020/08/18 (11:02)

**COVID-19 Tests Processed (on eLABS)**

**27,599**

Total Positive Results	Positive Rate %	Total Tests Awaiting Processing
7,490	27%	1,436

### Tests Processed and LAB TAT per Province



- eLABS scaled-up to 1082 facilities to date
- Addition of COVID-19 specimen tracking and results return
- COVID-19 monitoring dashboard developed

# Provincial Deployer Support

## NORTH WEST

21,837 cases      542 per 100,000

**2 deployers | 79 person days**

**Key accomplishments:** [1] Conducted data analysis for provincial and national reporting. [2] Trained staff on guidelines and reporting processes. [3] Conducted field visits to assess data process flow and improve data quality.

## WESTERN CAPE

99,959 cases      1,461 per 100,000

**4 deployers | 154 person days**

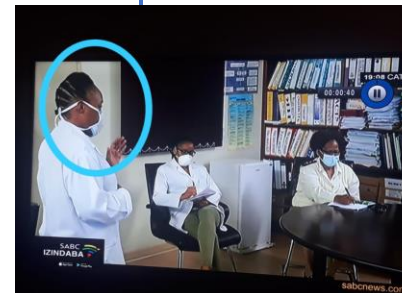
**Key accomplishments:** [1] Supported case and hospitalization surveillance efforts. [2] Standardized reporting tools. [3] Developed daily situational reports.

## EASTERN CAPE

82,401 cases      1,228 per 100,000

**4 deployers | 143 person days**

**Key accomplishments:** [1] Developed a data reporting tool for contact tracing. [2] Trained contact tracing teams. [3] Conducted data analysis and supported development of epidemiology daily reports.



## LIMPOPO

10,546 cases      176 per 100,000

**2 deployers | 82 person days**

**Key accomplishments:** [1] Revised screening tools and plans. [2] Supported development of guidelines for return to work/school and IPC. [3] Facilitated trainings on mapping, screening, data flow, and reporting.

## GAUTENG

192,767 cases      1,270 per 100,000

**4 deployers | 151 person days**

**Key accomplishments:** [1] Supported development of guidelines and trainings for prisons, schools, and transportation hub. [2] Conducted data analysis and hotspot mapping. [3] Supported development of data quality strategy.

## KWAZULU-NATAL

98,068 cases      869 per 100,000

**3 deployers | 165 person days**

**Key accomplishments:** [1] Streamlined community screening and contact tracing tools. [2] Worked on district plan for cluster outbreak and management of hotspots. [3] Provided epi and surveillance district support.

## FREE STATE

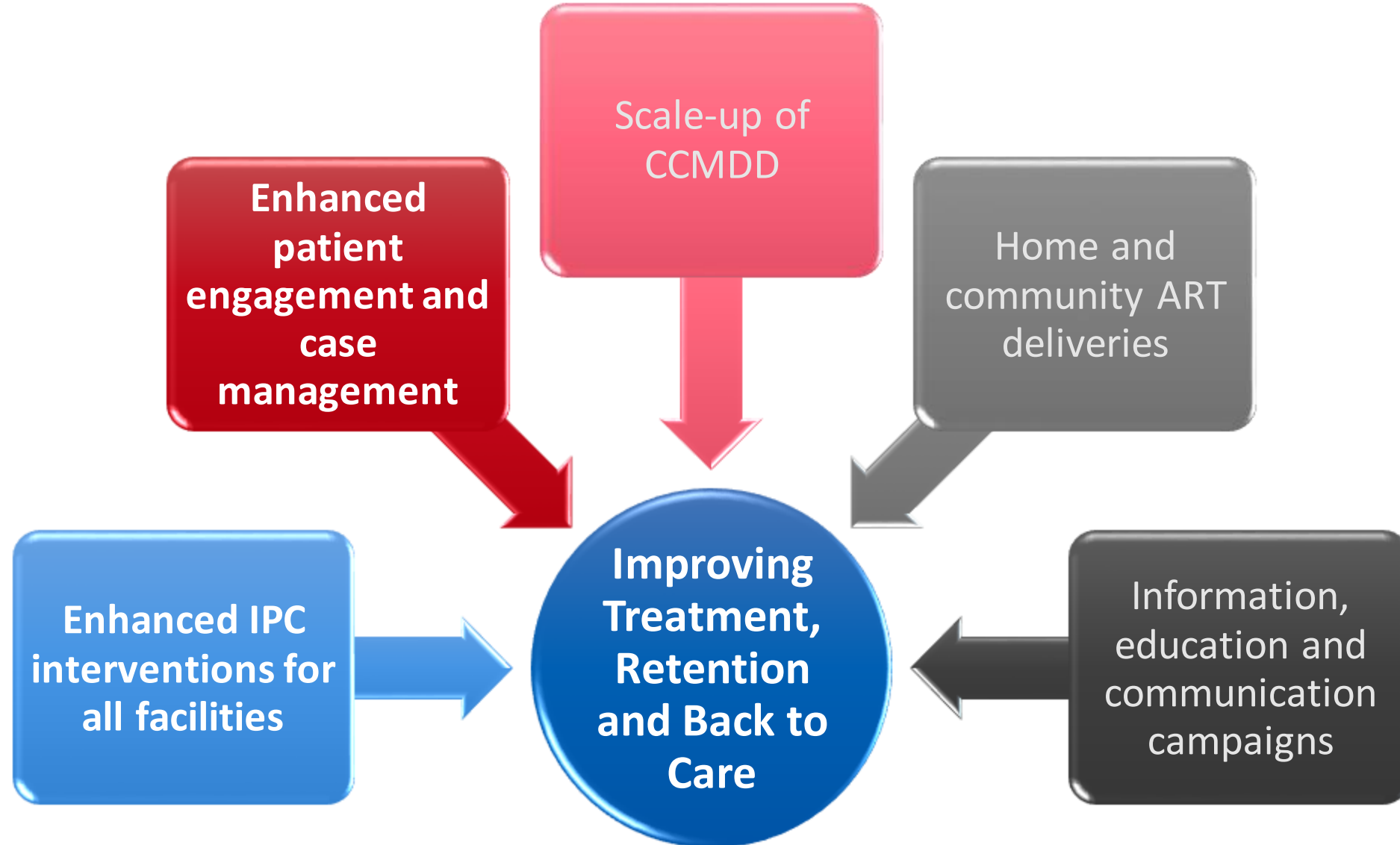
28,370 cases      983 per 100,000

**2 deployers | 89 person days**

**Key accomplishments:** [1] Enabled electronic data entry of cases lists and case investigation tools. [2] Provided TA on contact tracing efforts. [3] Prepared provincial reports.



# Interventions to Improve Treatment and Retention



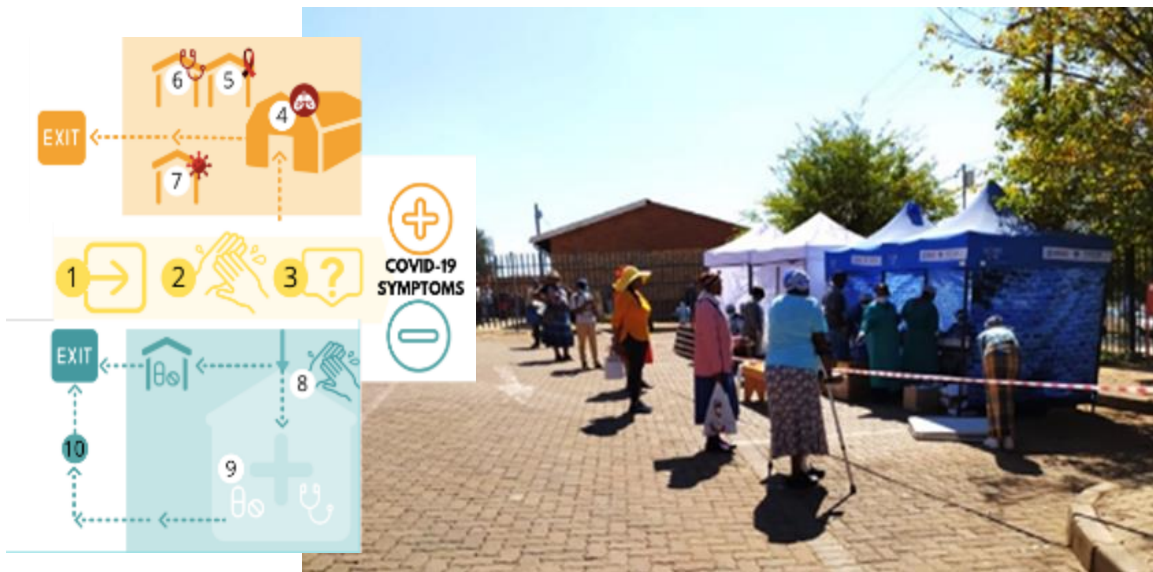
# Enhanced IPC To Prevent COVID-19 Infections

In April and May, PEPFAR team worked with IAS to host IPC webinars for implementing partners

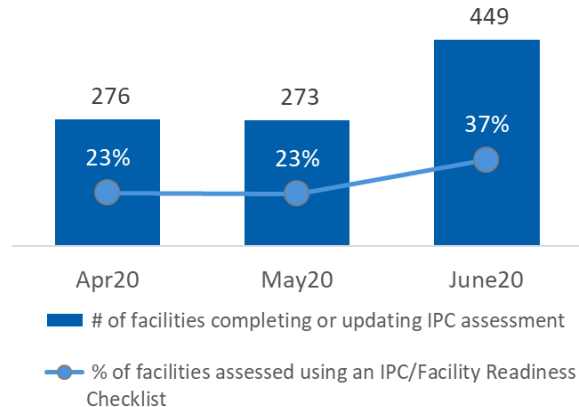
- Focused on **facility flow**, mgmt. of **patient ques**; **screening, triage, and separation**; and **social distancing**,

Subsequently CDC developed dashboard of key IPC minimum requirements that partners now report on monthly

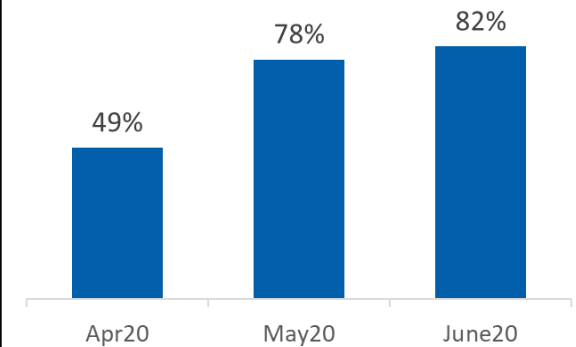
- Assesses **handwashing**; availability of **PPE**, **screening, triage, and separation**; **cleaning**; and **social distancing**



Facilities Assessed Using an IPC/Facility Readiness Checklist



Average score (%) amongst facilities assessed (see "IPC Minimum Requirements")

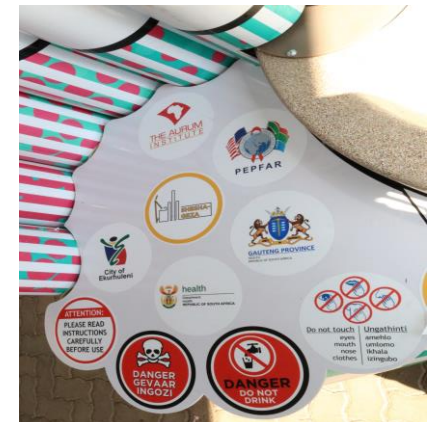


# Improving infection control during COVID-19

Utilized COVID-19 specific funds to roll-out innovative **stand-alone handwashing stations** through PEPFAR implementing partner



- Handwashing stations reach many people quickly in public places near health facilities
- Enables the client to be part of the solution
- Aurum deployed 15 units with >50 more planned
- Each unit does 20,000 washes before needing water change
- Excellent initial user and facility leadership feedback





# Improving HTS Services in Setting of COVID-19



HTS provided outside facilities through gazebos and mobile units – minimizing entry into clinics for clients only needing an HIV test

Adapting HTS programming and facilities to govt directives or policies on social distancing-



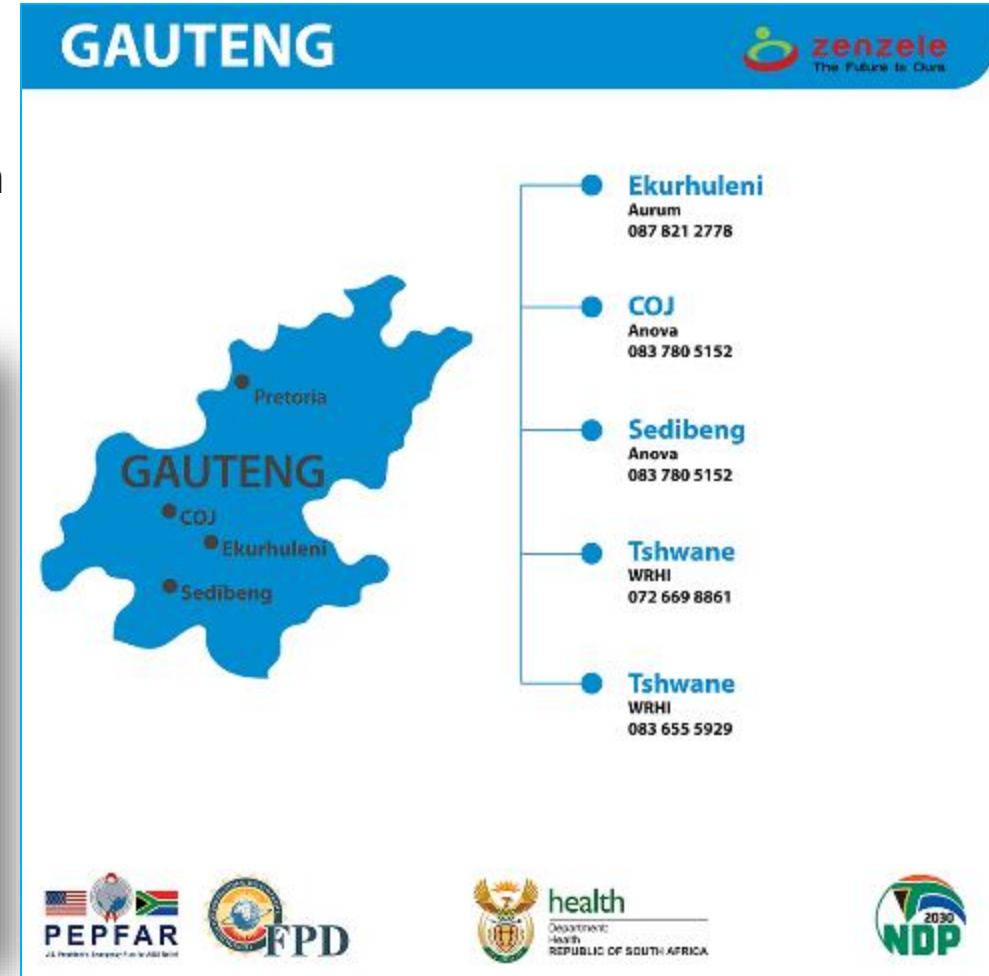
Ensuring adequate PPE is provided for staff and adjusting the facility clinic flow

Stronger partnership with UNAIDS for HIV Self Screening mentorship for our IP's and donated kits during shortages

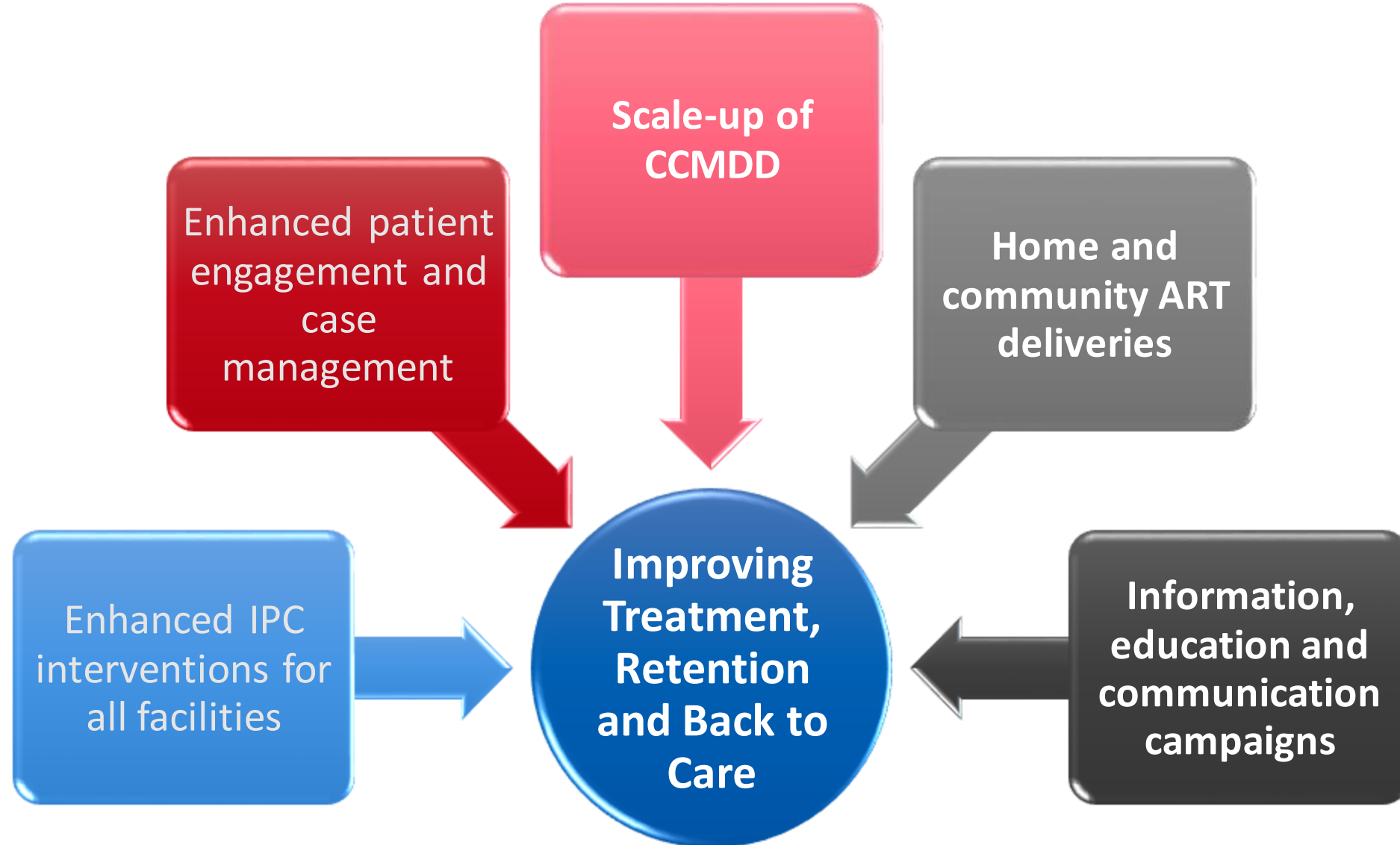


# Enhanced Patient Outreach to Improve Retention

- Flyers created per province with contact numbers per district to help link people separated from home to treatment
- DOH and Partners have enhanced all patient engagement through remote channels, including WhatsApp groups and SMS
- Community Facebook Pages have been used to:
  - Communicate facility service access
  - Engage with patients who message privately about returning to care

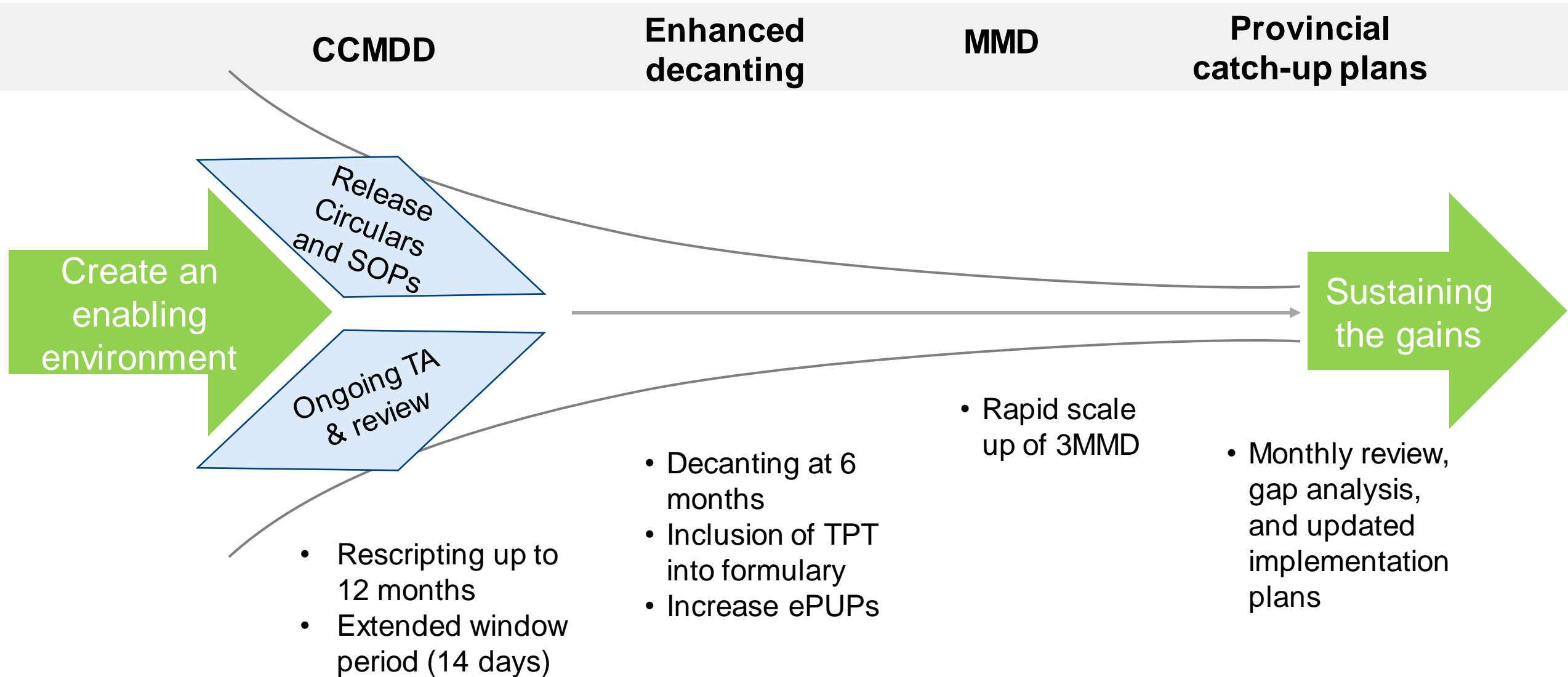


# Interventions to Improve Treatment and Retention





# Scaling-up Patient-Centered Care for ART Clients



# NDOH Circulars/SOPs for ART clients during COVID

health Department of Health REPUBLIC OF SOUTH AFRICA			
<b>SyNCH CHANGE CONTROL FORM</b>			
<p>The purpose of this change control form is to provide the National Department of Health a standardised process to manage change requests for the SyNCH system. Users must complete and submit change requests on this standard form and submit it to the National Department of Health for consideration.</p> <p><b>Note:</b> This is purely a mechanism for logging and recording requests. All requests must go through a formal and rigorous change control review process.</p>			
<b>Requested By</b>	Ms. S. Mazibuko	<b>Date</b>	28 April 2020
<b>Facility</b>	N/A	<b>District</b>	Umzinyati
<b>Request No</b>	0001	<b>Name of Request</b>	PMP Uplift
<b>Change Request</b>	Amend extension of PMP upliftment to 14 days		
<b>Change Reason*</b>	To provide the patient an additional week to collect their medicines during the COVID-19 lockdown constraints		

health Department of Health REPUBLIC OF SOUTH AFRICA			
<b>STANDARD OPERATING PROCEDURE</b>			
<b>TITLE</b>	CCMDD: HOME DELIVERY SERVICE		
<b>INSTITUTION</b>	DEPARTMENT OF HEALTH		
<b>REFERENCE NUMBER</b>	CCMDD SOP 22	<b>EFFECTIVE DATE</b>	June 2020
<b>PURPOSE</b>			
Outline the CCMDD Home Delivery Model			
<b>PERSONS AFFECTED</b>			
<ul style="list-style-type: none"> <li>Province/District</li> <li>Facility staff/ Authorised prescriber/ CCMDD Champion</li> <li>CCMDD service provider</li> <li>PuP service provider</li> <li>Home delivery Couriers</li> </ul>			

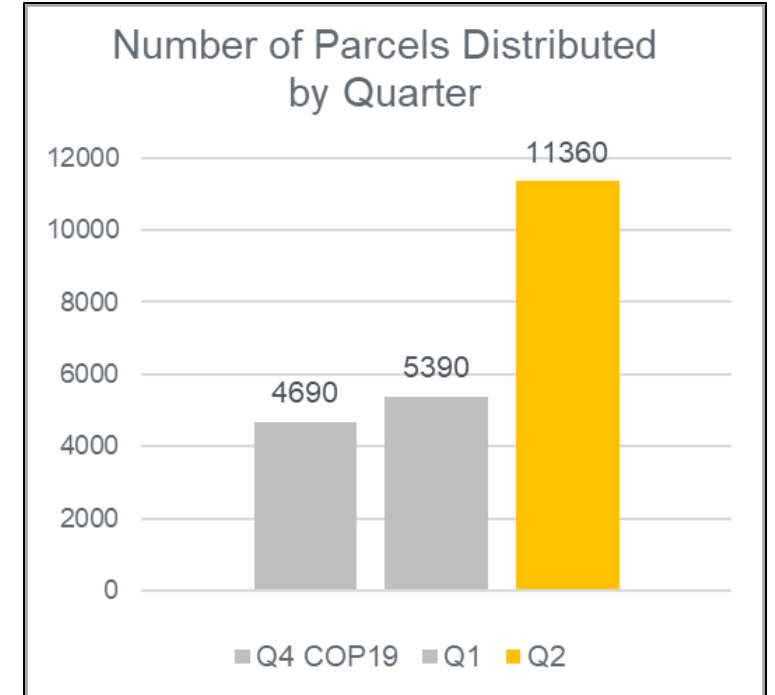
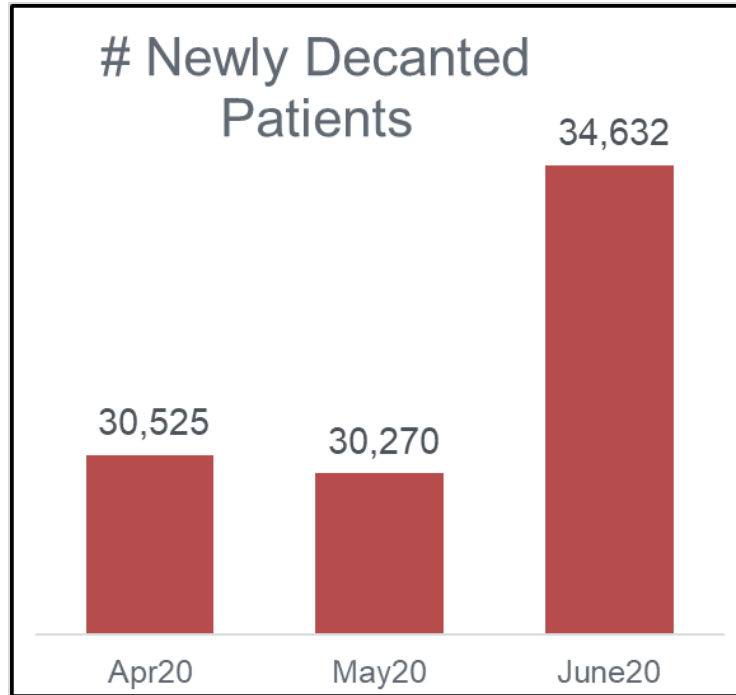
NDOH streamlined circulars and SOPs to improve access and retention during COVID-19

- Allowing **CCMDD clients extra days** to pick up ART
- Allowing for **12-month rescripting** of ART
- Encouraging new and current ART patients to **switch to TLD**
- Permitting **home delivery** of ART

health Department of Health REPUBLIC OF SOUTH AFRICA			
<b>STANDARD OPERATING PROCEDURE</b>			
<b>TITLE</b>	CCMDD: TENOFOVIR & LAMIVUDINE & DOLUTEGRAVIR (TLD) - PATIENT REGISTRATION OR TRANSITION		
<b>INSTITUTION</b>	NATIONAL DEPARTMENT OF HEALTH		
<b>REFERENCE NUMBER</b>	CCMDD SOP-16	<b>EFFECTIVE DATE</b>	December 2019
<b>PURPOSE</b>			
Outlines the process for switching stable adult patients on ART from first line regimen <b>TEE (Tenofovir + Emtricitabine + Efavirenz)</b> to TLD ( <b>Tenofovir + Lamivudine + Dolutegravir</b> ) in the CCMDD programme and the process for registration of new patients into CCMDD with regards to TLD.			
<b>PERSONS AFFECTED</b>			
<ul style="list-style-type: none"> <li>Health Facility staff</li> <li>Authorised Prescribers</li> <li>Patients</li> <li>CCMDD service provider staff</li> </ul>			

health Department of Health REPUBLIC OF SOUTH AFRICA			
<b>STANDARD OPERATING PROCEDURE</b>			
<b>TITLE</b>	CCMDD OPERATIONS DURING COVID-19		
<b>INSTITUTION</b>	NATIONAL DEPARTMENT OF HEALTH		
<b>REFERENCE NUMBER</b>	CCMDD SOP 24	<b>EFFECTIVE DATE</b>	MARCH 2020
<b>PURPOSE</b>			
Outline the process to be followed by all stakeholders with regard to CCMDD operations during the COVID-19 pandemic			
<b>PERSONS AFFECTED</b>			
<ul style="list-style-type: none"> <li>Authorised prescribers</li> <li>CCMDD service providers</li> <li>CCMDD PuP service providers</li> <li>Districts</li> <li>Facility pharmacy personnel (pharmacist/PA)</li> <li>Health Facilities</li> <li>NDOH</li> <li>Provinces</li> </ul>			

# PeleBoxes as the Preferred External Pick-Up Point

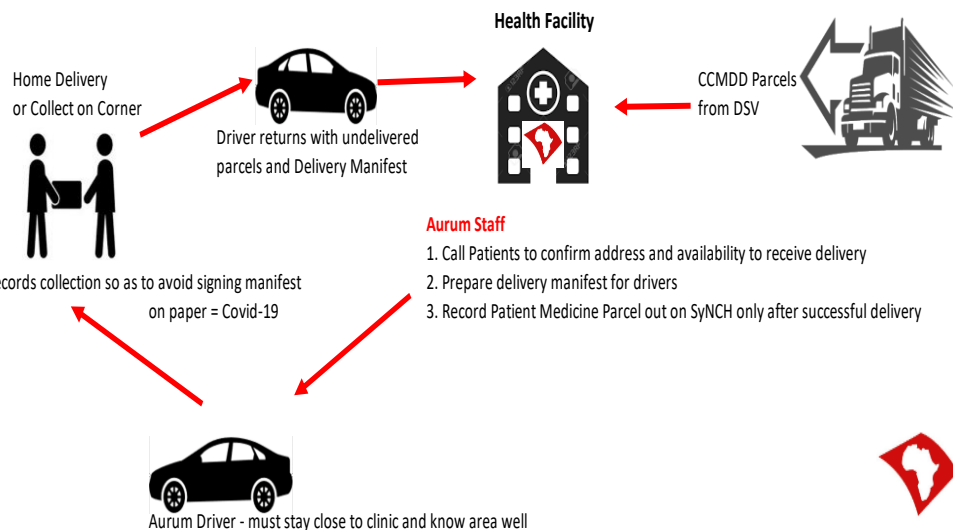


## Results

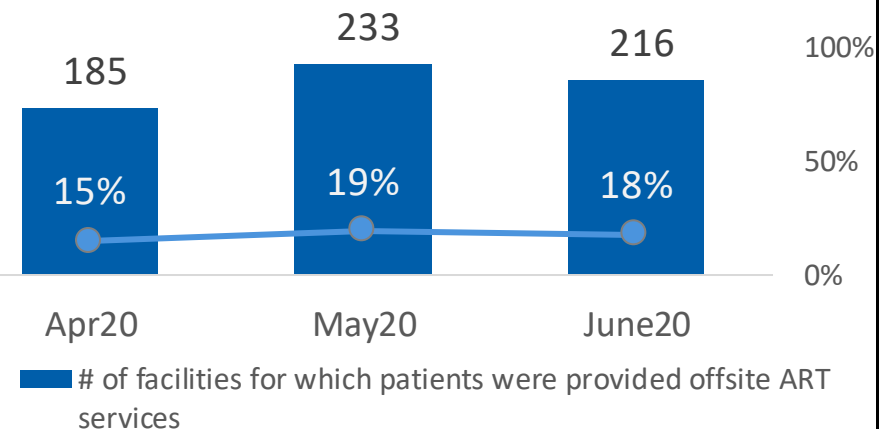
- 18 Peleboxes installed in all Aurum-supported Districts (12 in EKN; 4 in BOJ; 1 in DKK and NMM, respectively)
- Majority of Pelebox users are men
- Patient Survey in Q1:
  - >59% of all users stated Pelebox as preferred mode of external Pick-up Point
  - Preferred by decanting staff

# Home Delivery of ART to Reduce LTFU

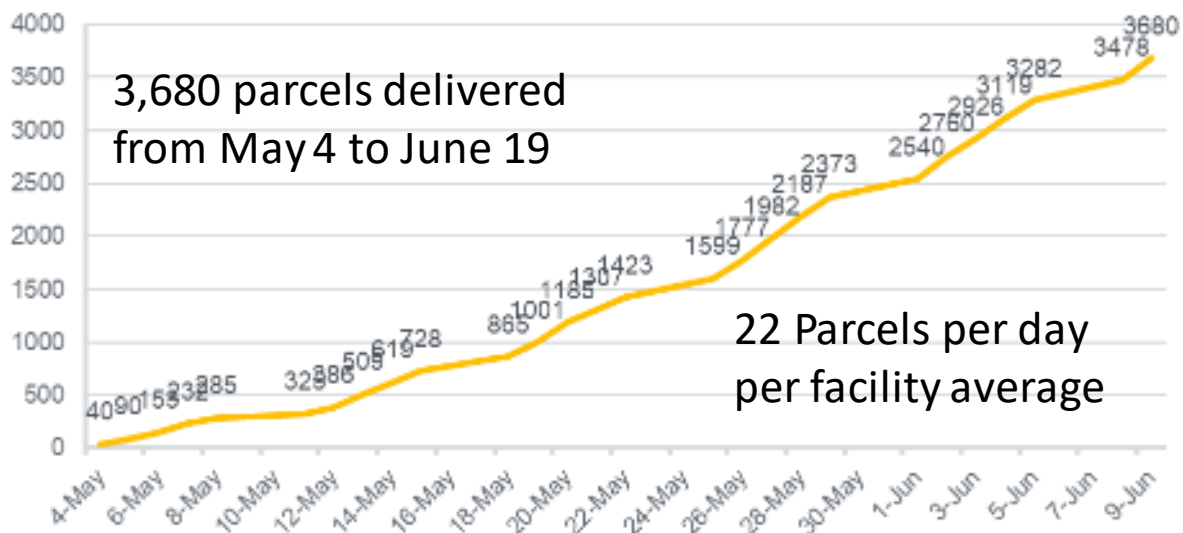
CCMDD Patient Medicine Parcel Home Delivery



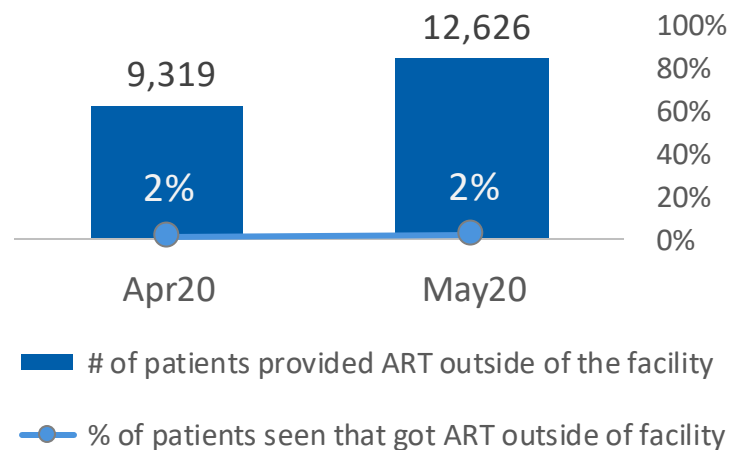
Total CDC-supported facilities that provided offsite ART services



Ekurhuleni Home Deliveries - Parcels Successfully Delivered



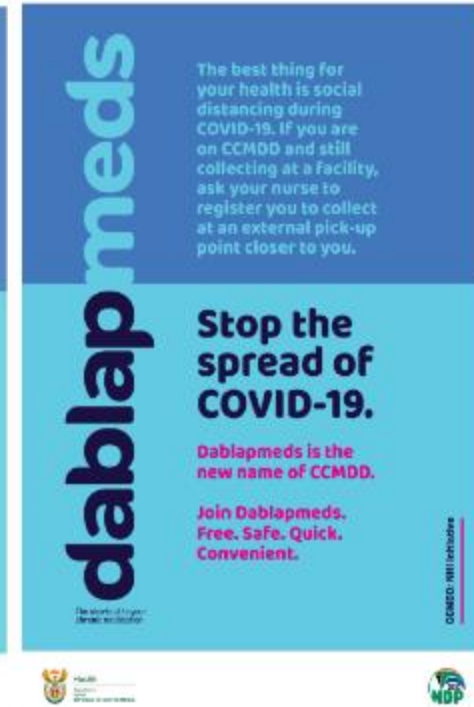
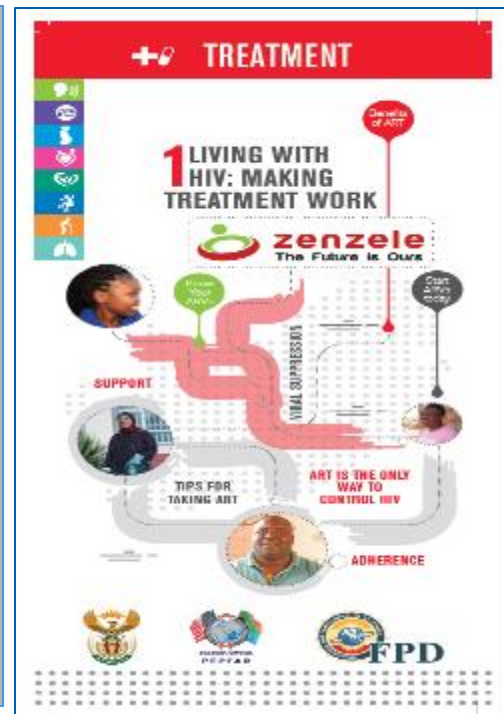
Patients provided offsite ART services





# Campaigns Newly Launched to Regain Losses

- The **Zenzele** campaign focuses on welcoming patients back to care
- The **DablapMeds** campaign was launched with COVID messaging to promote CCMDD and alternative PuPs outside of the facility.
- “Dablap” is a commonly used colloquial term for a **shortcut**



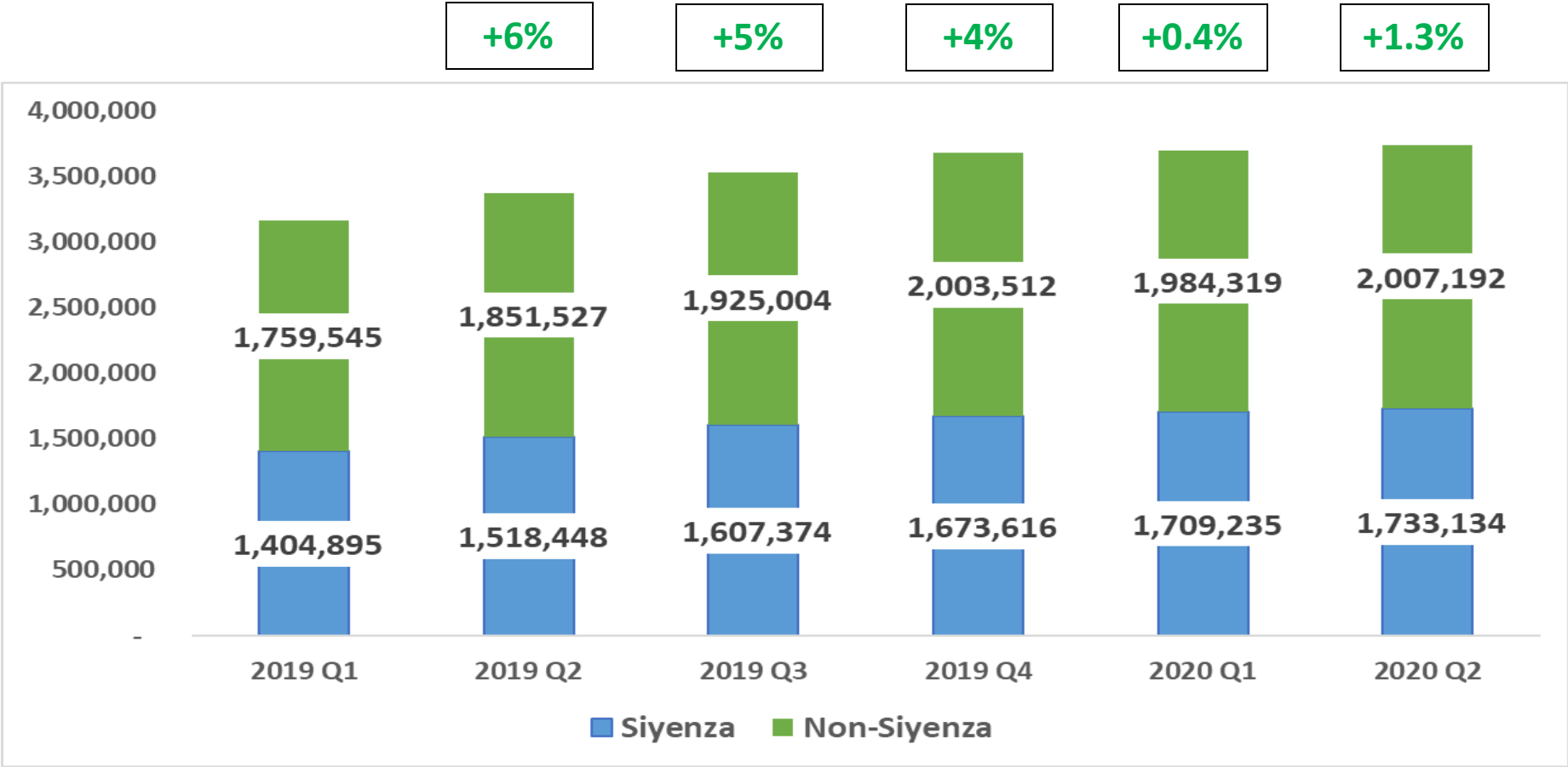
# Site-support/Monitoring in the Context of COVID-19





# Siyenza-Driven Increases in TX\_CURR Since FY19

Increase in TX\_CURR in PEPFAR SA program quarter-on-quarter from FY19Q1 - FY20Q2



14% increase in *non-Siyenza* sites from FY19Q1-FY20Q2

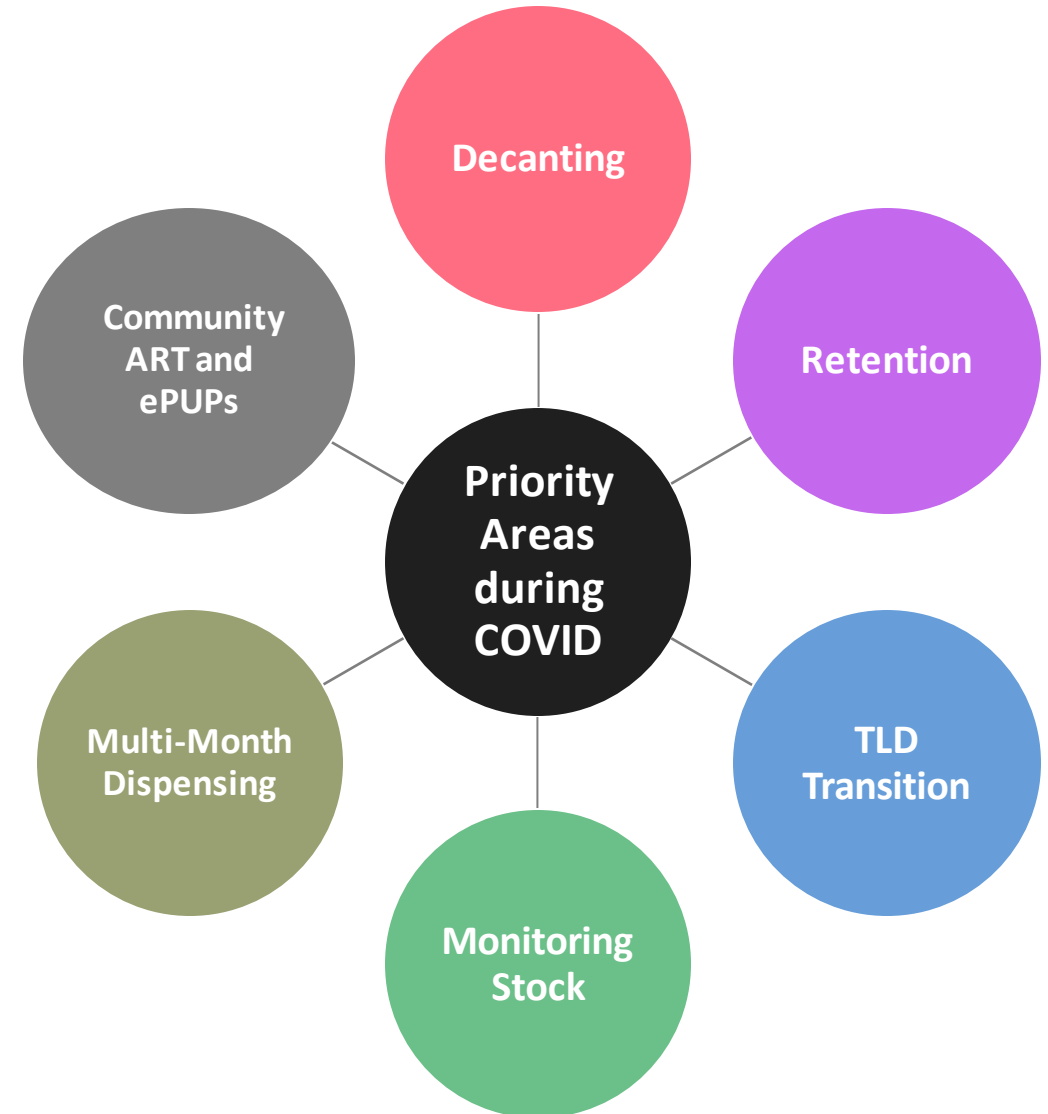
23% increase in *Siyenza* sites from FY19Q1-FY20Q2

Source: PAWS Siyenza-MER Dossier, accessed 11 June 2020



# Adapted Strategies In Light Of COVID-19

- During **biweekly Virtual Visits**, Siyenza Site Leads focus on 6 key priority areas:
  - Recommended action items
  - Mitigation plans and best practices
  - Challenges that require intervention from district, province, or national DOH
- Virtual Visits continue to involve a variety of stakeholders, including:
  - Facility staff, Operations Managers, and Sub-district and District Management Teams



# CDC's Siyenza Support Transitioned to 100% Virtual

## Implementation Timeline

Siyenza launched **Feb. 2019**

Lockdown begins  
**March 27, 2020**

Remote monitoring calls  
introduced **Oct 2019**

100% virtual site visits **March 2020 - present**

**3,806 CDC** total visits/calls  
from Feb 2019 – Aug 2020

**219**

in-person visits  
in Q2

**0**

in-person visits  
in Q3

**0**

in-person visits  
in Q4

**192**

calls in Q2

**452**

calls in Q3

**175**

calls in Q4 (as of  
Aug 13)



17 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS

# Adapted Siyenza Approach in Light of COVID-19

**New  
strategies  
make virtual  
visits more  
efficient and  
feasible**

## **1. Maximizing a variety of platforms,**

- Including WhatsApp, Zoom, Skype, Webex, etc.
- Often low bandwidth settings
- Ensures consistent communication

## **2. Establishing new routines**

- Requires flexibility, patience, creativity
- Teamwork - Site Leads are working together, allowing facilities to learn from the strengths of PEPFAR Site Leads

## **3. Employing a new “roundtable” approach**

- Multiple sites participate on the same Virtual Visit
- Many sites face similar challenges
- New innovation to cross-pollinate ideas
- Receiving positive feedback from facility staff who rarely have the opportunity to interact and learn from colleagues at other facilities

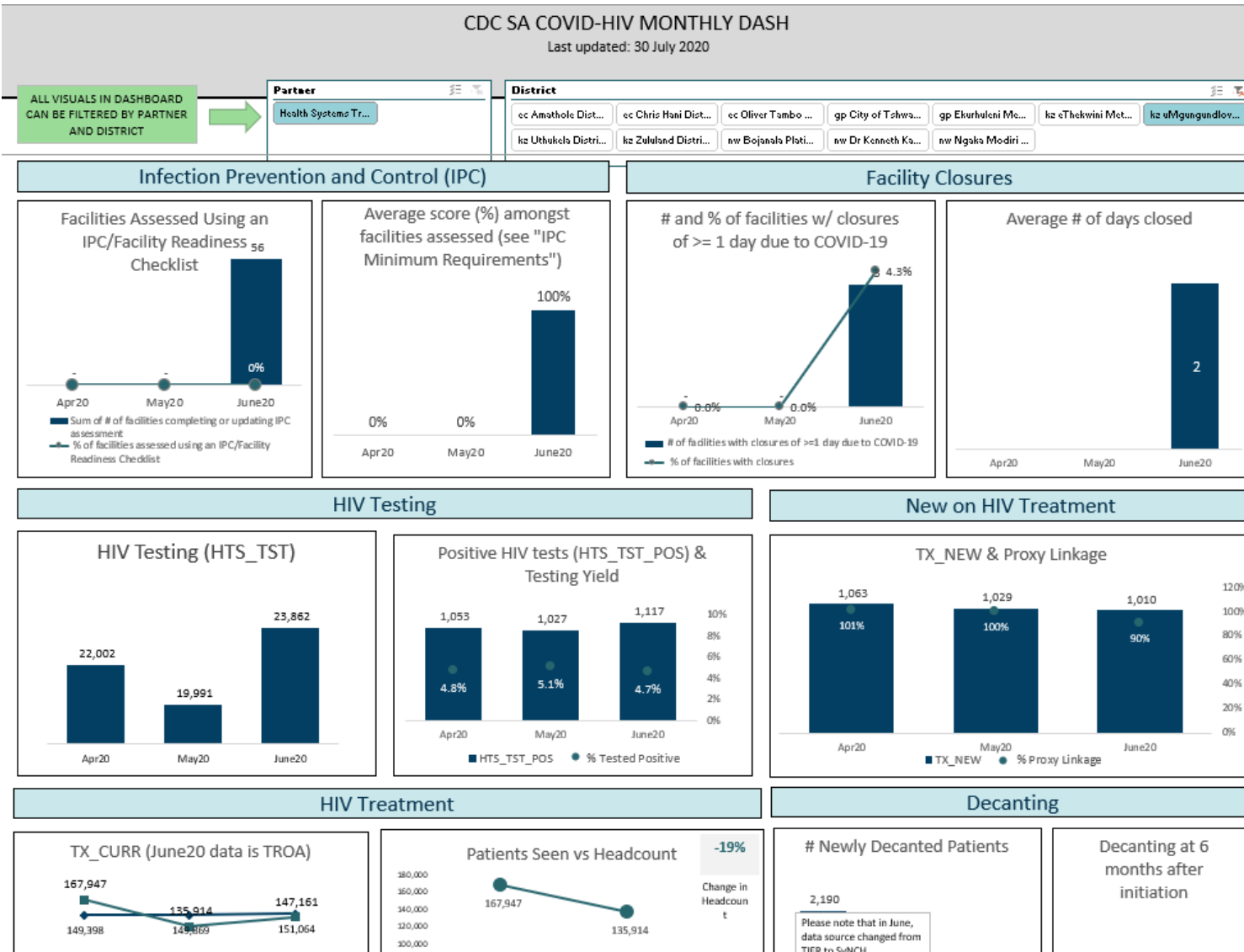


# Monitoring COVID-19 Impact on HIV Program

- **Weekly and Monthly data from CDC-supported Siyenza facilities**
  - Trends in case identification, treatment initiation, total on treatment
  - Total number of patients visiting facilities
- **New monthly HIV-COVID indicators to track impact on partner, sites, and changes in approaches**
  - Site closures
  - Partner staff affected by COVID
  - Novel approaches employed under COVID
- **National data sources tracking trends in access to services**
  - Laboratory test data from SA National Health Laboratory Services (NHLS)
    - Trends in HIV VL tests completed, Infant PCR tests
  - National health indicator data

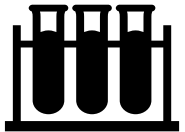


# COVID-19 Dashboard



- On a monthly basis, partners report key process indicators and program outputs at district (PSNU) level.
- Program staff use this data to understand the impact of COVID on the HIV program and scale-up of priority activities

# Summary of CDC-SA Response To COVID-19



- Providing Clinical, M&E, and admin staff to support national and provincial incident management
- Working closely with the National Department of Health to Scale-up ART Provision Outside of Facilities through both Existing and Innovative New Approaches
- Provided Key Leadership in the Area of Infection Prevention and Control
- Deploying the innovative eLABS mobile application at more than 2,500 PEPFAR-supported facilities to track COVID-19 specimens and results
- Monitoring through remote Siyenza, COVID-specific dashboards to allow rapid feedback and implementation of new solutions

# Thank you for your attention



The American Government in partnership with the South African Government  
to wage war against HIV and COVID-19 pandemic