KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Overview of TB in KZN Province: Provincial Council on AIDS

Date: 19 October 2022
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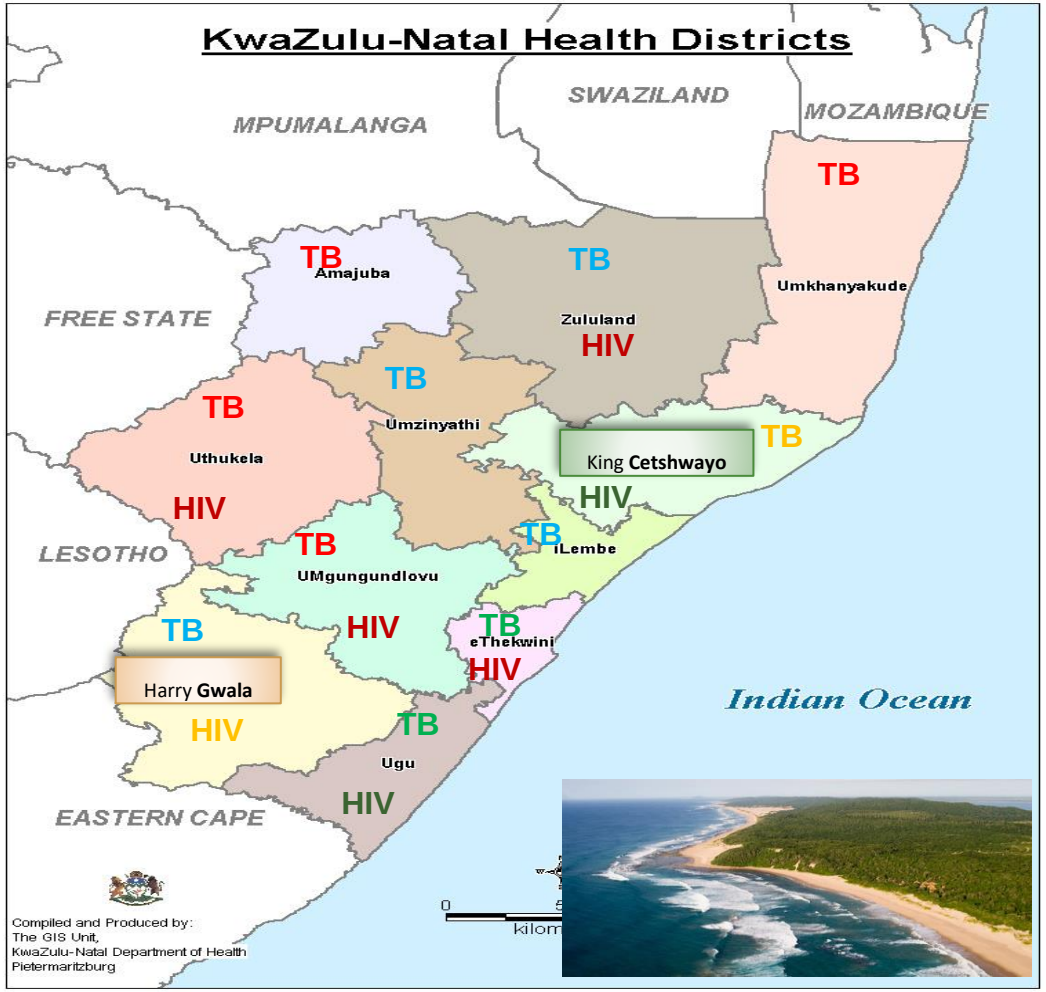
Presentation Outline

- Provincial Profile
- End TB Strategy by 2030
- Types of TB
- TBCP (DS-TB)
- TB Notifications
- Drug Susceptible and Resistant TB Burden in KZN
- Community based TB Interventions
- Treatment outcomes
- Proposed TB Stakeholders
- Update on the HIV Care Cascade
- Planned Interventions

Provincial Profile



- Population 11, 4m – 51.2% females and 48.8% males, KZN is the second most populous province after Gauteng (Stats SA, 2019)
- Age distribution, 0-14yrs (28%), 15-34yrs (35%), 35-59yrs (27%) and 60 plus (9%)
- Life expectancy at birth – 62yrs males and 68yrs females
- 54% of population live in rural areas
- 5.3 Million Living in Poverty: 1.2 Million on less than 1 USD a day, (Global Insight Poverty Indicators)
- Has 10 districts and 1 metro, bordered by Swaziland, Mozambique and Lesotho as well as other provinces.
- HIV Population prevalence adults 15-49 yrs is 27% (Stats SA, 2019)
- TB Notification Rate is 372/100 000 population
- MUS (STI) Incidence – 34.5/1000

TBCP Partner Collaboration: THINK -TB, Aurum-TB, Isibani-TB , ARHI-TB

HIV Partner Collaboration: HST-HIV , Broad Reach - HIV , MAtCH - HIV

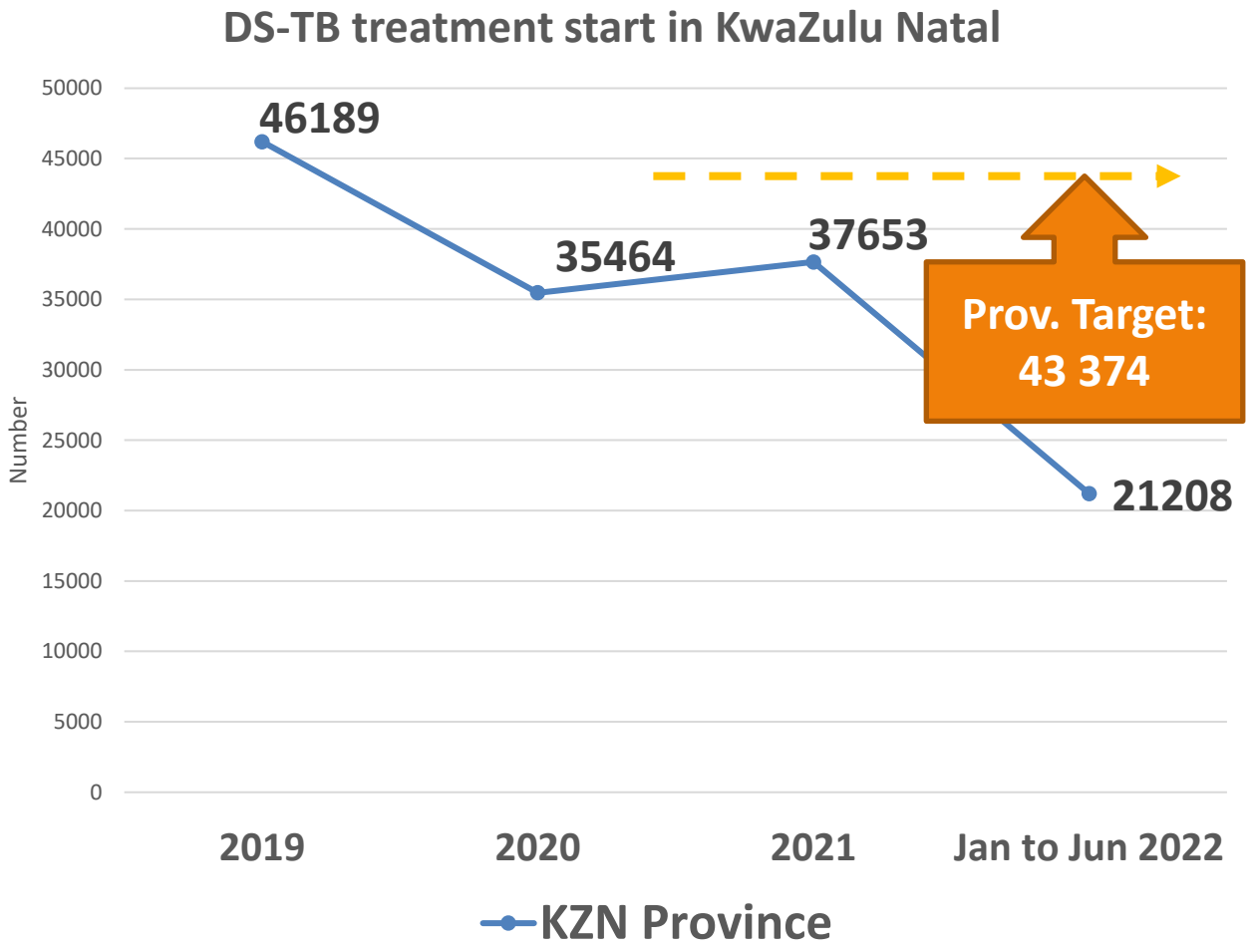
End TB Strategy by 2030

1. Better implementing the basics of TB diagnosis and treatment including contact tracing
2. Scaling up the use of Xpert MTB/RIF (GeneXpert TB testing) as a replacement for sputum smear microscopy
3. Strengthening case finding in and beyond healthcare facilities
4. A greater focus on TB prevention for people living with HIV, particularly earlier initiation of and scaling up antiretroviral therapy and scaling up continuous isoniazid preventive therapy, will have a substantial impact on TB control.
5. New TB drugs, diagnostics and vaccines are required to further accelerate progress towards improved TB control in SA and beyond.

Types of TB

- **Susceptible TB (DS-TB)** is a normal TB that can be treated with a standard six-month course of four anti-TB medication.
- **Multidrug resistant tuberculosis (MDR-TB)** is a strain of TB that cannot be treated with the two most powerful first-line treatment anti-TB drugs. Treatment is longer course of treatment of nine (9) months to 18 months with more medication.
- **Extensively drug resistant tuberculosis (XDR-TB)** is a form of TB caused by bacteria that are resistant to several of the most effective anti-TB drugs. The treatment period is two years or more depending on the extent of disease.

TB Initiations in KwaZulu-Natal Vs Finding Missing TB Patients Targets.



World Health Organisation (WHO) model estimates that South Africa treats less patients every year as a result of TB patients that are not diagnosed, not notified, or never enrolled in treatment programmes.

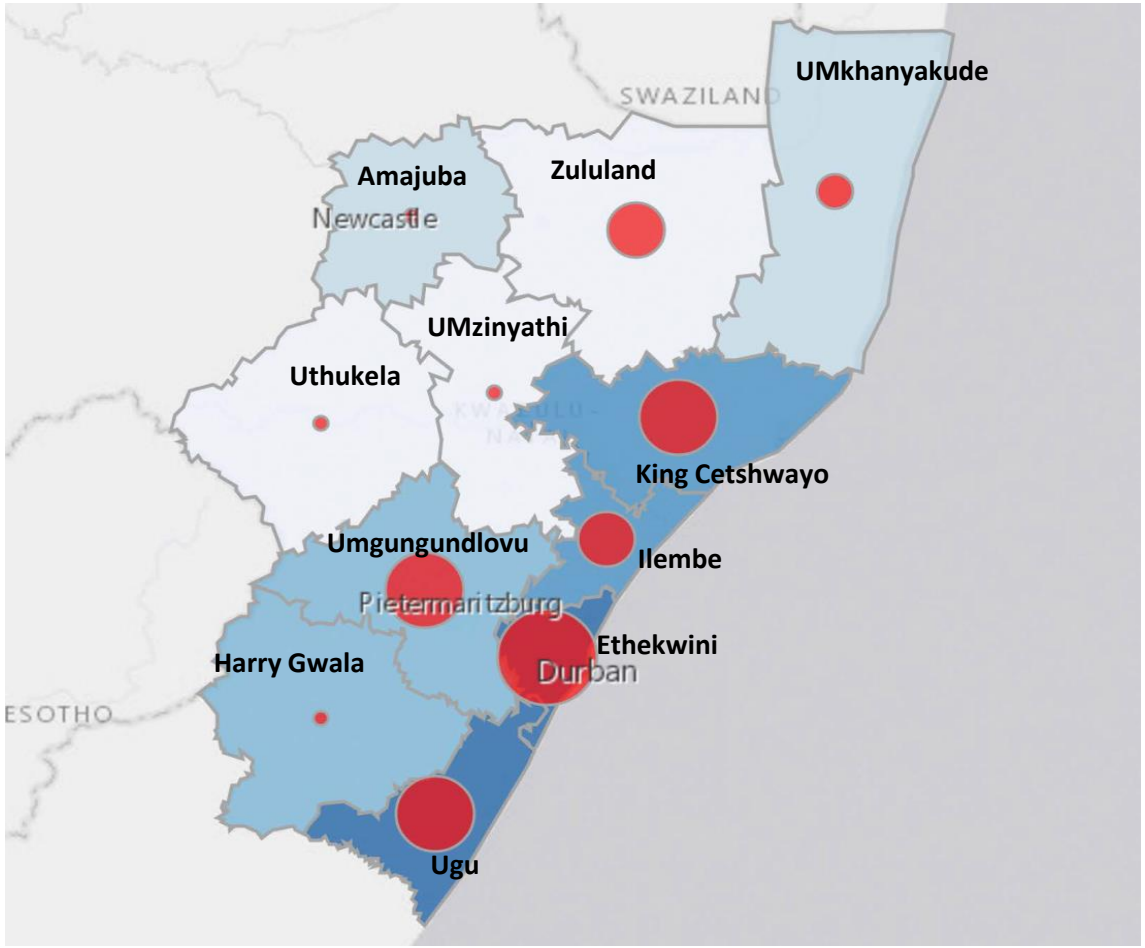
KZN was given a target of **43 374** patients to find this Financial year **2022/23**

KZN province has a target of **43 374** this financial year for finding TB missing patients as at the end of **June 2022** the province was at **49%**, it is projected that this target will be achieved. There has been a marked decline from **46 189** patients notified in **2019 to 35 464 in 2020**, recovery started in **2021** where **37 653** patients were notified.

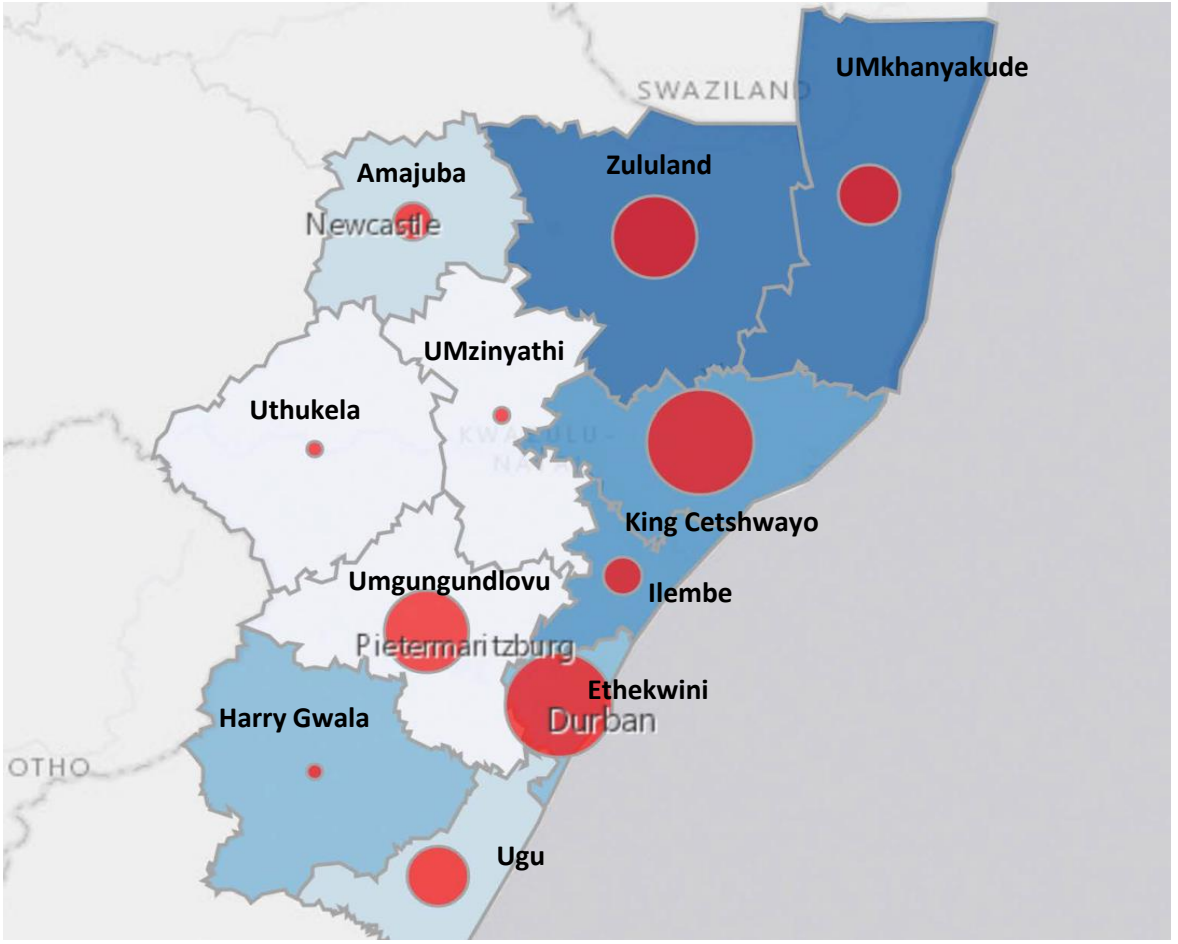
Source: District Health Information System (DHIS)

Drug Susceptible & Resistant -TB Burden in KZN by District: 2021 – Source: NICD

DS-TB burden (circles) and incidence rates (shading), KwaZulu-Natal: spatial distribution



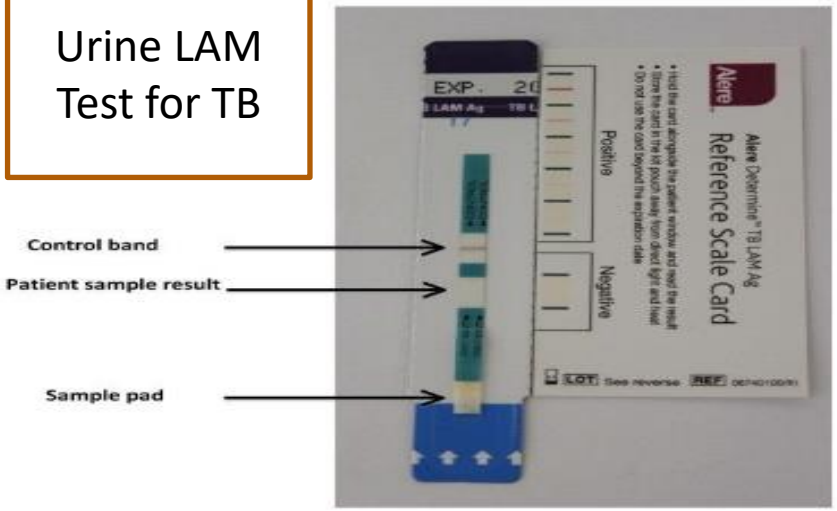
DR-TB burden (circles) and incidence rates (shading), KwaZulu-Natal: spatial distribution



Community Based TB Intervention

Mobile laboratory

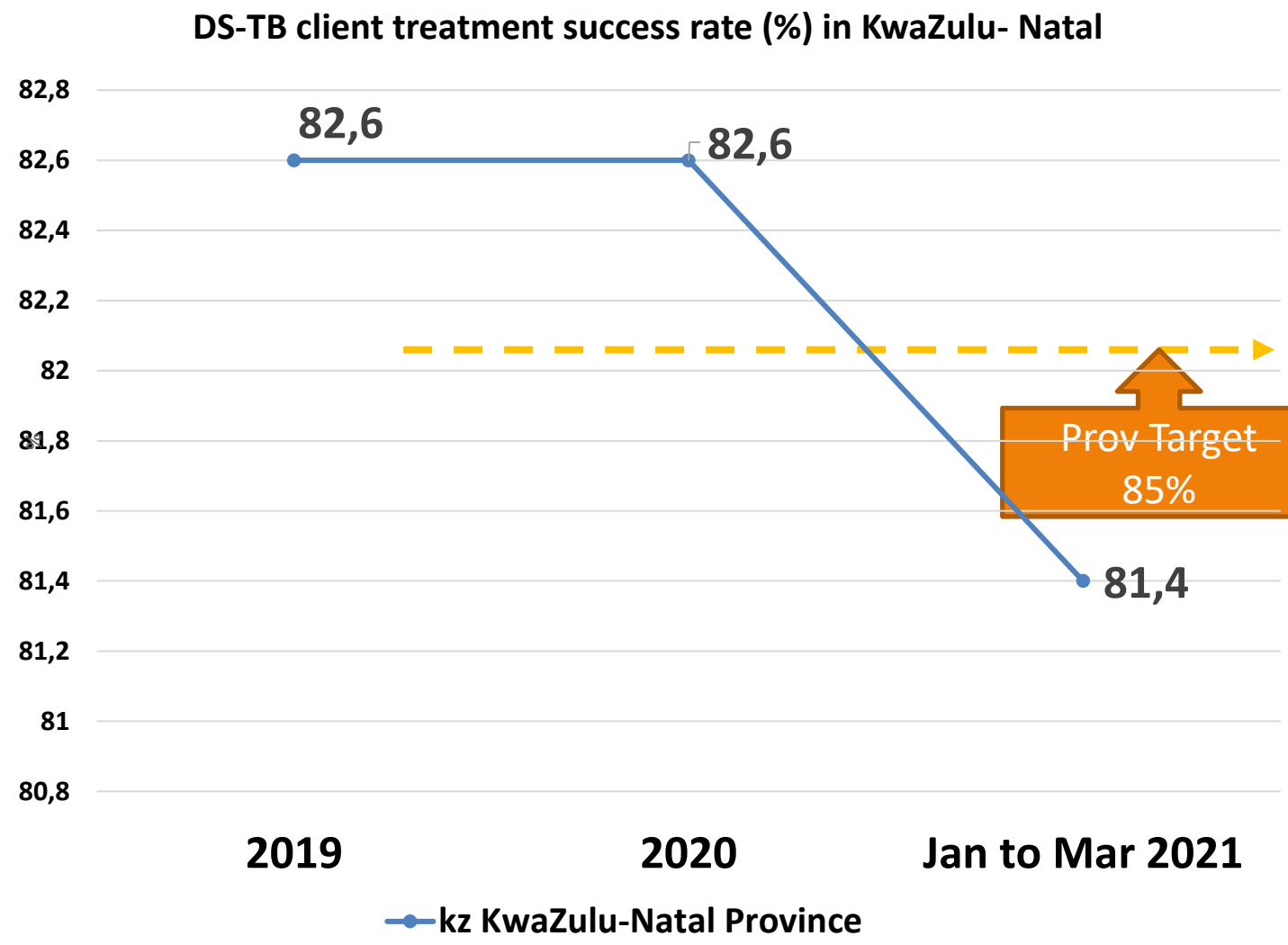
Urine LAM Test for TB



Activities Yielding Results

- TB screening campaigns implemented in all districts, screening for TB for all people visiting health during community outreach health services especially in informal settlements. This includes use of digital X-ray TB screening.
- Contact tracing of people with tuberculosis, especially children aged five years or less and people living with HIV, diabetes and other conditions decreasing immune system for prompt treatment.
- Ensuring universal access to early and accurate diagnosis of tuberculosis (GeneXpert ultra, Urine LAM TB Testing).
- Ensuring that at least 90% of population is screened for TB symptoms, 90 of the symptomatic people are diagnosed and put on treatment and 90% are successfully treated.

DS-TB Treatment success rate in KwaZulu-Natal



Source: District Health Information System (DHIS)

Reasons For Deviation

The provincial TB success rate has been stagnant at 82,6% for the past two years (2019 and 2020) and a slight decline in March 2021. The set target is not met as a result of high loss to follow up (average of 3 600 patients per quarter) and death rate (3 050 patients per quarter).

Remedial Action

- Intensify patient education and support treatment adherence
- Integrate mental health to deal with increasing rate of substance abuse
- Institutionalize patient tracking and tracing to improve loss to follow.
- Apply multi-sectoral approach to address patients psycho-social challenges resulting in loss to follow up
- Conduct community awareness and education improve early diagnosis and treatment improving deaths.

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Drug Susceptible (DS) -TB Treatment Outcomes

GROWING KWAZULU-NATAL TOGETHER

Source: District Health Information System (DHIS)

2019

District	Client treatment success rate	Client death rate	Client lost to follow-up rate
Amajuba	75,5% (1 396/1 848)	14,2% (262/1 848)	9,4% (174/1 848)
eThekwini	82.6% (15 316/18 549)	4.5% (839/1 8549)	12.5% (2314/18 549)
Harry Gwala	80.45% (1 435/1 784)	9.5% (170/1 784)	9.7% (173/1 784)
iLembe	77.5% (2 832/3 655)	6.8% (250/3 655)	15.1% (553/3 655)
King Cetshwayo	80.3% (4 080/5 080)	8.8% (445/5 080)	10.4% (529/5 080)
Ugu	76.7% (3 227/4 208)	10.7% (449/4 208)	12.1% (511/4 208)
uMgungundlovu	**86.1% (3 928/4 562)**	**6% (272/4 562)**	**7.8% (356/4 562)**
UMkhanyakude	**87.2% (3 063/3 511)**	**8.7% (306/3 511)**	**3.4% (120/3 511)**
UMzinyathi	**84.7% (2 121/2 504)**	**14.1% (354/2 504)**	**0.88% (22/2 504)**
Uthukela	81.4% (2 255/2 769)	10.5% (290/2 769)	7.4% (206/2 769)
Zululand	**88.2% (3 608/4 090)**	9% (369/4 090)	2.5% (102/4 090)
Province	**82.3% (43 261/52 560)**	**7.6% (4 006/52 560)**	**9.6% (5 060/52 560)**

2020

	Client treatment success rate	Client death rate	Client lost to follow-up rate
	74.6% (1 385/1 856)	14.1% (261/1856)	9.9% (184/1 856)
	83.5% (16 198/19 389)	4.6% (887/19 389)	11.2% (2 174/19 389)
	80.5% (1 628/2 022)	9.1% (184/2 022)	9.5% (193/2 022)
	77.5% (2 714/3 500)	6.4% (224/3 500)	15.4%(539/3 500)
	80.5% (3 711/4 609)	9.6% (444/4 609)	9.4% (433/4 609)
	78,1% (3 006/3 848)	8,9% (341/3 848	12,6%(483/3 848)
	84,7% (3 904/4 610)	**7,4% (340/4 610)**	**7,7%(354/4 610)**
	88,2% (2 971/3 368)	**7,7% (261/3 368)**	**3,1% (104/3 368)**
	83,1% (1 689/2 032)	15,3% (311/2 032)	1,4%(28/2 032)
	81,7% (2 053/2 513)	12,1% (305/2 513)	5,3%(134/2513)
	87,9% (3 256/3 706)	**8,9% (328/3706)**	**2,9%(109/3706)**
	82,6% (42 515/51 453)	**7,6% (3 886/51453)**	**9,2% (4 735/51 453)**

Jan - Mar 2021

	Client treatment success	Client death rate	Client lost to follow-up rate
Amajuba	80,3% (396/493)	11,4% (56/493)	7,1% (35/493)
eThekwini	**86,9% (4 113/4 734)**	**4,2% (200/4 734)**	**8,5% (402/4 734)**
Harry Gwala	81,6% (391/479)	9,2% (44/479)	8,4% (40/479)
iLembe	75,8% (667/880)	6,6% (58/880)	17,2% (151/880)
King Cetshwayo	81,4% (857/1 053)	9,8% (103/1 053)	8,4% (88/1 053)
Ugu	79,5% (740/931)	8,4% (78/931)	11,8% (110/931)
uMgungundlovu	82,6% (904/1 095)	6,3% (69/1095)	11,1% (121/1 095)
UMkhanyakude	**88,4% (631/714)**	**7,4% (53/714)**	**3,6% (26/631)**
UMzinyathi	83,1% (384/462)	14,7% (68/462)	1,5% (7/462)
Uthukela	84% (435/518)	10,6% (55/518)	4,6% (24/518)
Zululand	**86,4% (649/751)**	**10,1% (76/751)**	**3,5% (26/751)**
Province	**84% (10 167/12 110)**	**7,1% (860/12 110)**	**8,5% (1030/12 110)**

- UMkhanyakude and Zululand have consistently had a treatment success rate above 85% as a result of low loss to follow up (3.6% & 3.5% respectively), the two districts have invested in patient education, treatment support, tracking and tracing.
- UMgungundlovu's loss to follow up increased from 7.7% to 11%, decreasing their treatment success rate to less than 85%
- The improvement in loss to follow up in Ethekwini has increased their treatment success rate and boosting provincial performance because of high patient load.

Loss to Follow up

The greatest challenge impacting on good TB treatment outcomes is loss to follow up and this will lead to:

- TB transmission and spread,
- Increased risk of drug resistance,
- Relapse and possible death

Factors associated with loss to follow up

- Traveling for treatment refills and follow up, consequently missing scheduled appointment or running short of medication.
- Inadequate food as reason for their default, use of herbal medication and low income
- Ignorance on need for treatment compliance, coupled with inadequate knowledge about tuberculosis
- Recurring use of alcohol (alcohol abuse) and consequently forgetting to take drugs and eventually defaulting
- Anti-tuberculosis drug side-effects

TB Stakeholders

The formation of a TB Stakeholders Forum is necessary to:-

- Bring together all the role-players,
- Need both internal stakeholders and external stakeholders from both Non Government Organisations and other Government Departments.

Objectives:

- Create awareness of the problem of TB (and that it is not just the responsibility of the DOH TB Programme)
- Assist each Programme / role player understand what role they can play in the fight against the scourge of TB
- Upscale intensified targeted case finding
- Review TB health systems
- Develop unified educational material and messages
- Work towards eliminating the causes of TB
- Elicit commitment from all stakeholders to implement actions that will work towards ending the pandemic of TB.

Proposed TB Stakeholders

Office of the Premier	Lobby to elevate the status of World TB Day and all activations to be on par with World AIDS Day and receive the same attention from Cabinet.
Housing & Human Settlements	People need to live in homes that have good ventilation and sanitation and not overcrowded – TB spreads in informal settlements. This need to be considered when the department builds houses.
Safety & Security	People need to be able to open their windows, both night and day, without fear of being robbed and looted.
Transport	Taxis and busses need to travel with open windows, drivers need to be screened regularly for TB and trained on the signs and symptoms of TB – in order to counsel any passengers that are coughing
Education	Learners need to be taught about TB as part of the curriculum, screening for TB needs to take place regularly at schools, teachers need to be screened and educated to know the signs and symptoms of TB. Plus the Department of Education needs to address overcrowded classrooms and ventilation issues at schools. Tertiary Institutions that offer residences to students must make sure rooms are well ventilated, there is suitable sanitation and health screening needs to be offered at the start of each term.
Social Development	Assist with grants to people living below the bread line (according to the policy on addressing catastrophe caused by TB). Give access to children at crèche/ pre-primary: colouring in pictures with TB messages are available and can be distributed to pre-primary schools. The most important message for this age group is cough hygiene.
Agriculture	Need to target farmers to living conditions for farm workers. Farmers also need to assist their employees with accessing health care services for testing and treatment and to support them through treatment. We also need a partnership to encourage food gardens for TB and MDR TB patients. Long term food security must be encouraged.

Proposed TB Stakeholders

Economic Development	To reach the business sector. Small to medium size business who cannot afford to pay long term sick leave to employees with TB and retrench workers, this adds to the cycle of poverty and TB. This sector needs to be educated that employees are not infectious after two weeks of treatment and feel better. The Banking Sector needs to be encouraged to broadcast TB educational messages on their in-house communication systems.
Correctional Services	Are high transmission areas because of overcrowding. We need to scale up educational campaigns in Correctional Service Facilities with mass screening and testing. The Department of Health has a good relationship with Correctional Services and inmates are screened for TB upon entry and periodically and receive supported TB treatment if required. There are still gaps in continuity of care as the linkage to care on discharge from a correctional facility.
South African Police Services	There is a major problem with TB and the possibility of TB transmission in Police Holding cells. When the police arrest people, the suspects are taken directly to the police station, where they (the suspects) are kept in cells until transferred to court/correctional service centre. Sometimes the suspects spend several days and months in a cell at the police station. As the suspects are not taken via their home to collect their belongings they (the suspects) don't take their medications to the police station with them, often family/friends are unable to take the suspects medication to them. It is this time spent in police holding cells that patients default on their chronic medication like TB, ARV and other treatment.
Judicial Services	Suspects released on bail or awaiting trial detainees are found not guilty are often released without being screened or medical records transferred to their local clinic.
Home Affairs	To allow Health to offer screening services at Home Affairs offices, to provide tissues and masks to clients who are coughing in the queues.
COGTA	Political and Traditional leaders are powerfully influential and can assist in persuading people to seek medical care for early screening, testing and treatment, adhere to medication and actively take part in the

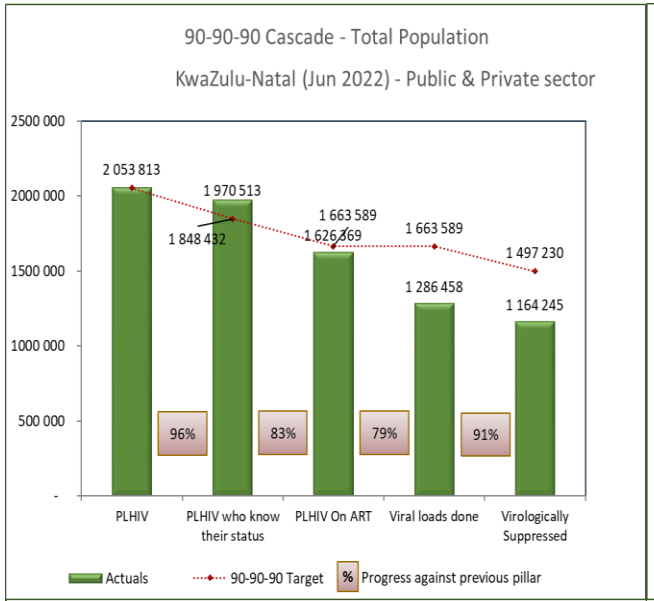
Proposed TB Stakeholders

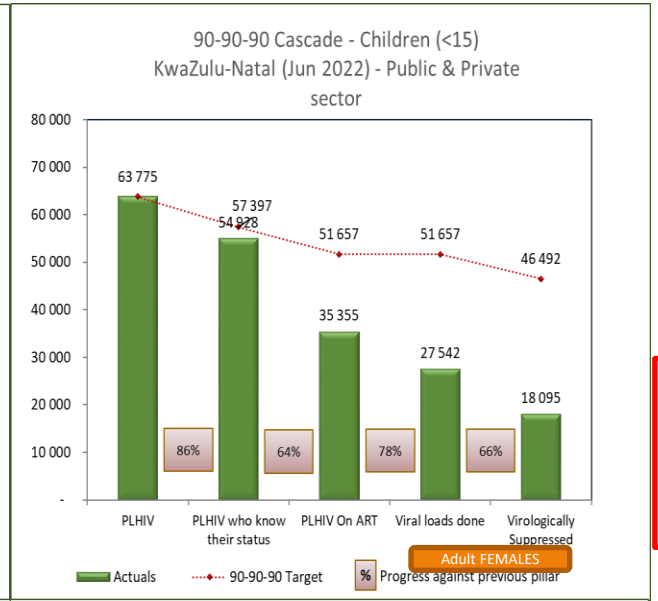
Sports & Recreation	Promote exercise and healthy living. Start sports clubs and provide facilities for the youth in communities.
Non-Governmental Organisations (NGOs)	To encourage all NGOs in the HIV field to include TB awareness and education in their activities. To get NGO's on board for targeted intensified case finding and ensuring linkage to care. To determine which NGO's are working in which areas and reduce the gaps and overlaps.
Faith Based Organizations	Churches are an ideal place for TB to spread with the congregations singing and often windows closed. Priests need to be educated on signs and symptoms, churches could become places for TB patients to collect monthly medication from and the church community can offer adherence support. Health officials can also get involved in offering screening at their churches.
Media	To use their media to educate the community about TB, to print/broadcast positive stories about TB to eradicate stigma, to be kept updated with statistics to understand the dire situation that TB poses in the province. Different communities have different communication styles and needs, dialects differ from area to area – community radio and newspaper are best suited to provide information that suits their area/region.
Traditional Healers	Many people first consult a traditional healer for health assistance before coming to the health facility, their buy in is crucial to refer patients with TB symptoms to the health facilities for screening, testing and prompt treatment.
Private sector	Private hospitals, private laboratories and general practitioners to follow the national TBCP treatment guidelines, and to provide the health department with statistics for an accurate reflection of TB in the province. Pharmaceutical companies that manufacture TB medication can assist with advocacy and social mobilisation and progressive research for new diagnostics and improved medication.

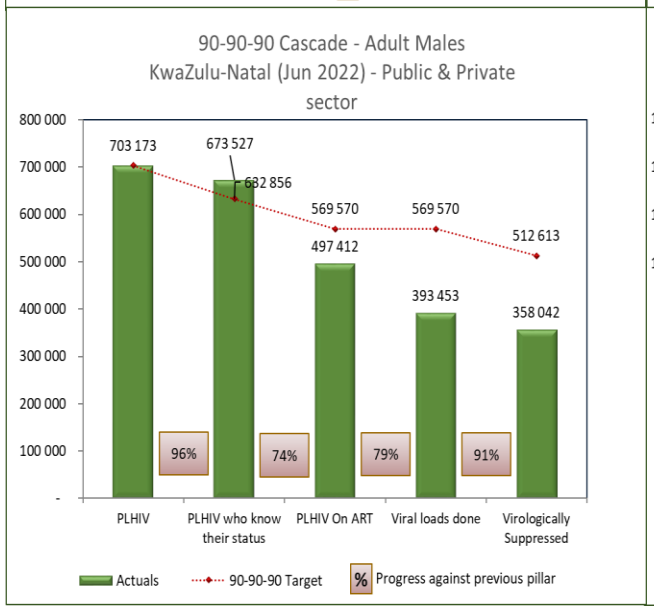
Arising from previous PCA minutes

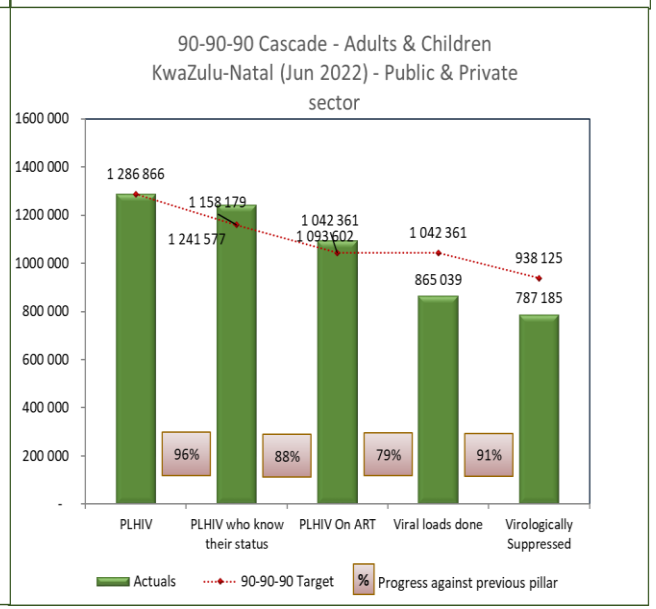
Update on the KZN HIV Care Cascades

90-90-90 HIV Treatment Cascades – KZN (Q1-22/23)









KZN is currently at **94-83-91** for the total population serviced through the public and private sector.

Results for each of the sub-populations vary, with

- Adult females at **96-88-91**,
- Adult males at **96-74-91**,
- Children at **86-64-66**

Urgent Attention!!!!

To achieve 90-90-90 targets, KZN must **increase the number** of
- Adult men on ART by 72,158
- Children 16,302

Data available in the **private sector** (including cash paying clients) indicates that an additional

- 51,937 Adult Females,
- 28,584 Adult Males, and
- 868 Children are receiving ART through private medical aid schemes.

Highlights /Progress to date:
4/11 district (Ugu, UMzinyathi, UMkhanyakude and Harry Gwala) met 90-90-90
6 of KZN are in TOP TEN best districts in South Africa

Source: District Health Information System (DHIS)

Planned Interventions

To address gaps in HIV Treatment Cascades: -

- Build community awareness on the importance of index contact testing of all patients, especially those with high viral loads.
- Encourage communities to participate in targeted HIV testing for men and children /adolescents through providing men's health and Adolescent Youth Friendly services.
- Encourage formation of community structures (Support groups and Chronic medication clubs) and conduct literacy classes to improve retention to care.

Last Words

TB and HIV are a societal problem and warrants a collective effort to mitigate them. We need to leverage on the fact that TB is curable and that we can minimize the transmission of HIV. The multi-sectoral approach can be instrumental in addressing the scourge

THANK YOU

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