

How do we ensure linkage to care and follow-up

Lessons from the LINKEDin and LINKEDup studies

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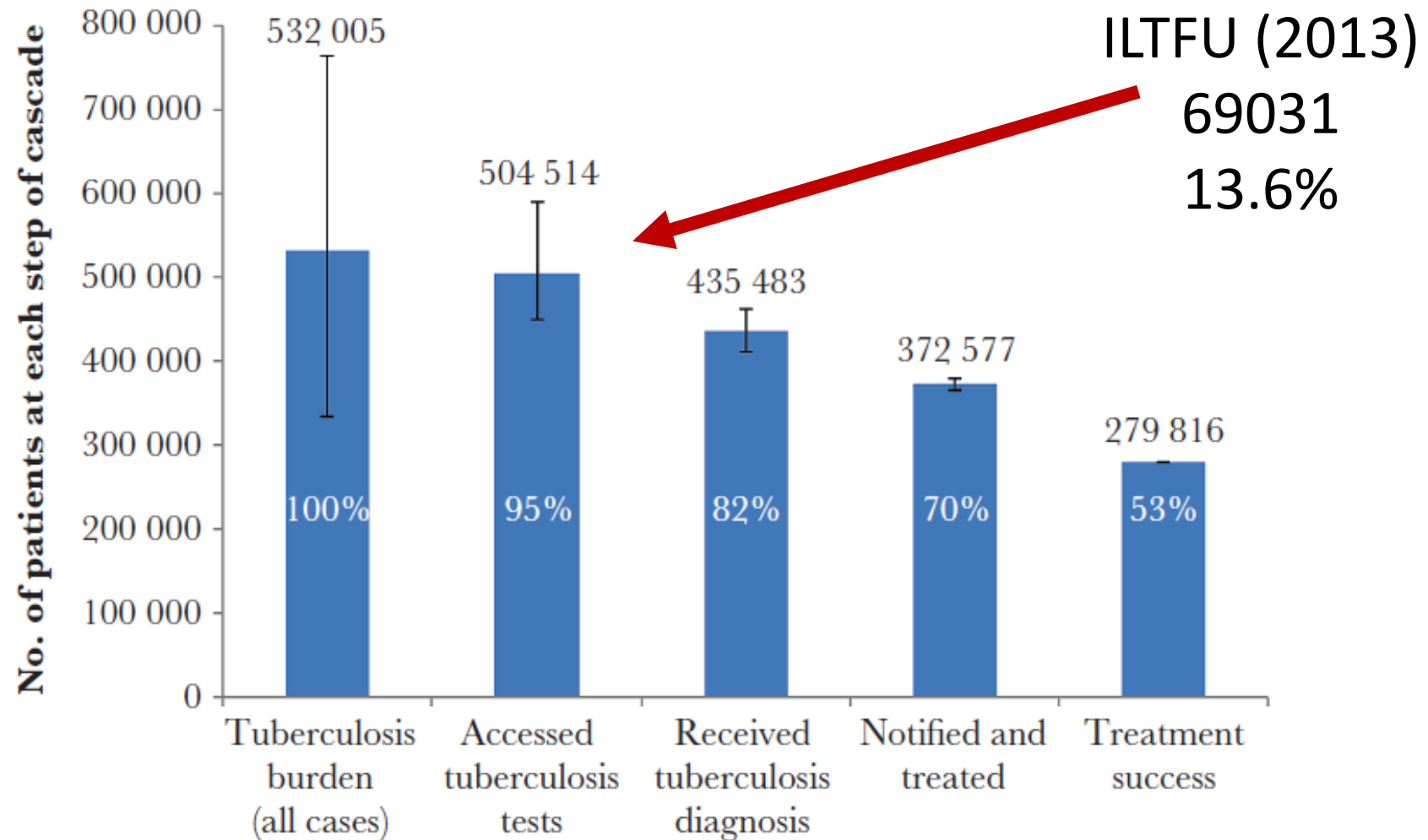
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Does linkage to TB care matter?

- Ongoing disease
 - Morbidity
 - Chronic disease
 - Impact on life and function
- Transmission
 - Home
 - Healthcare settings
 - Work place
 - Community
- Part of a continuum of care
 - TB services in South Africa

South African TB care cascade



Naidoo P, Theron G, Rangaka MX, et al. The South African Tuberculosis Care Cascade: Estimated Losses and Methodological Challenges. *J Infect Dis* **2017**; 216(suppl_7): S702-S13.

Update

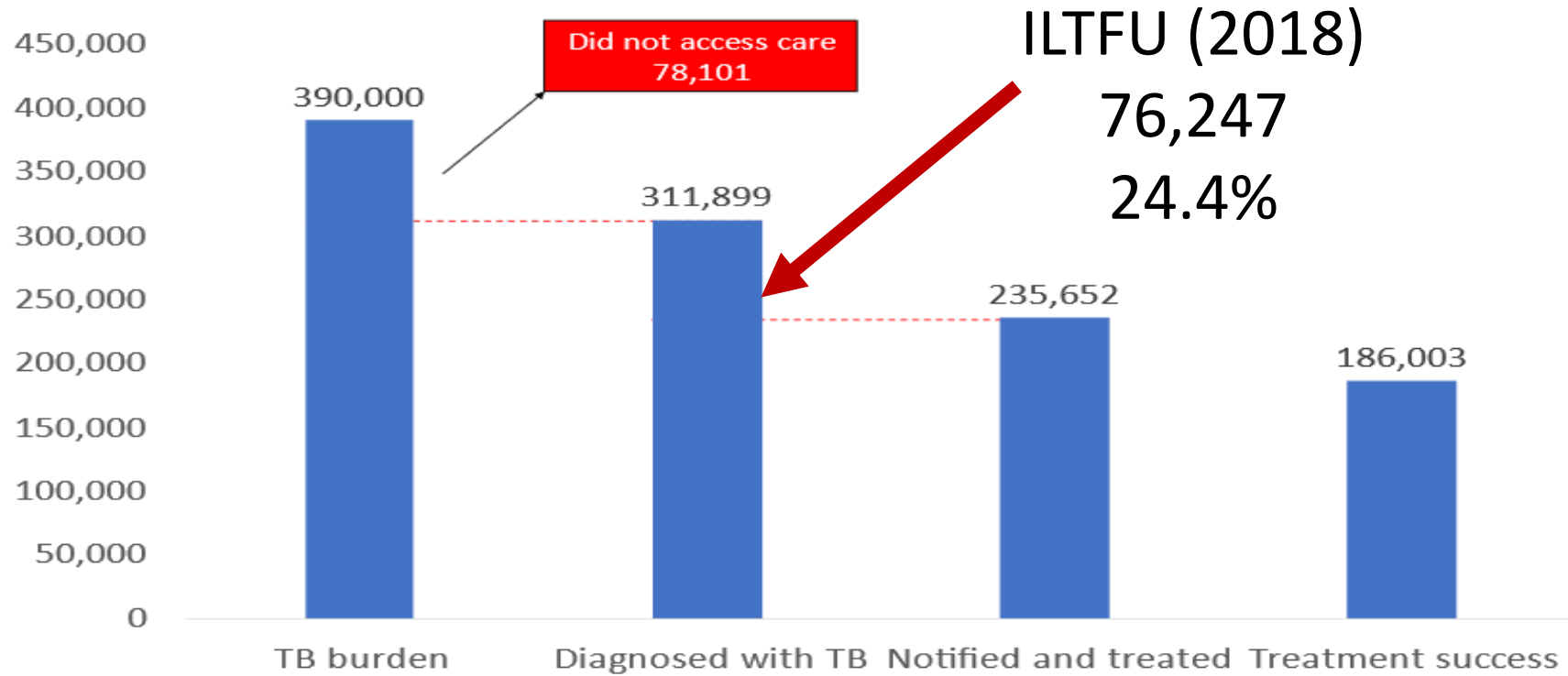


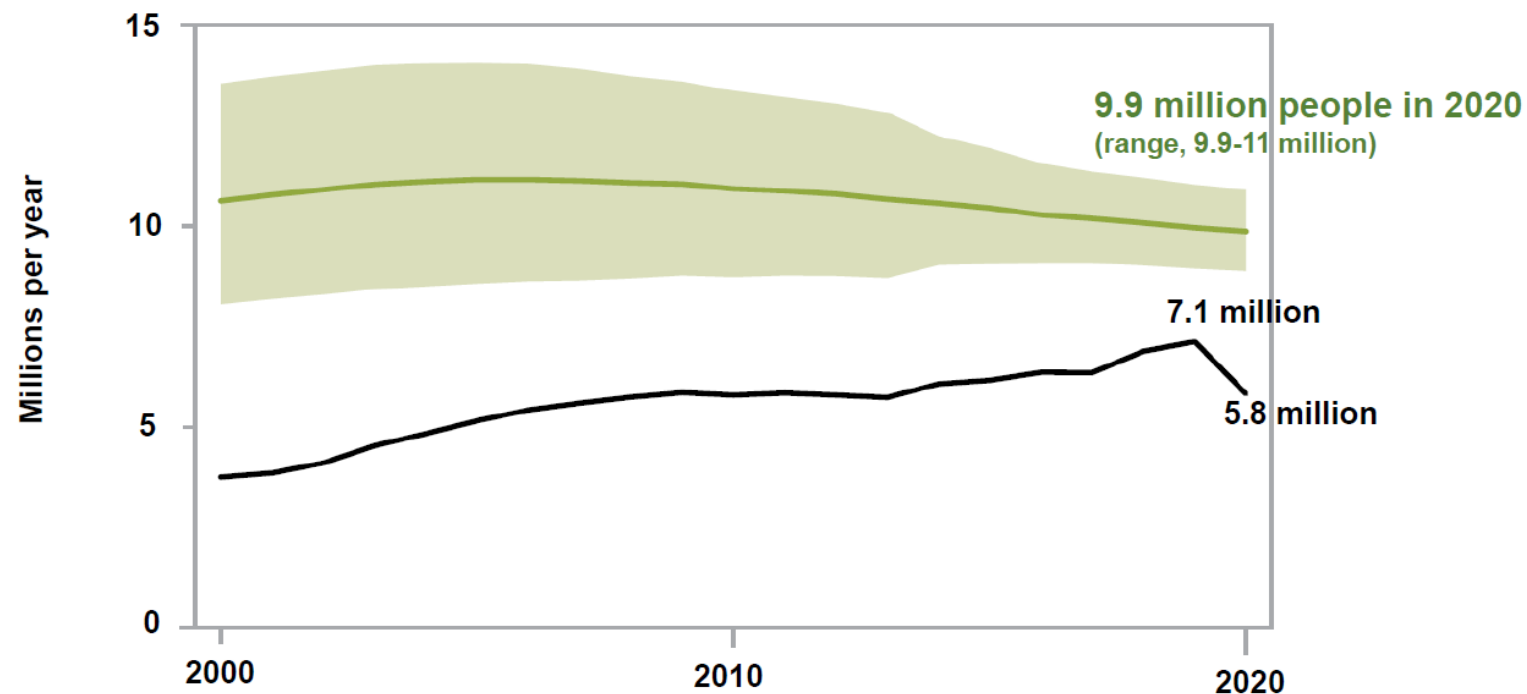
Figure 5. South African TB care cascade for all TB in South Africa in 2018 using published methodology (7)

TB burden (pillar 1) based on the 2018 South African TB prevalence survey (3);
Diagnosed with TB (pillar 2) based on TB case-finding data from the National Health Laboratory Services (courtesy H. Moultrie, National Institute Communicable Diseases) and number of empirically diagnosed patients from the National TB reports (courtesy S.S. Dlamini and N. Ndjeka, National Department of Health);
Notified and treated (pillar 3) and *Treatment success* (pillar 4) based on National TB reports (courtesy S.S. Dlamini and N. Ndjeka, National Department of Health)

Courtesy, Pren Naidoo

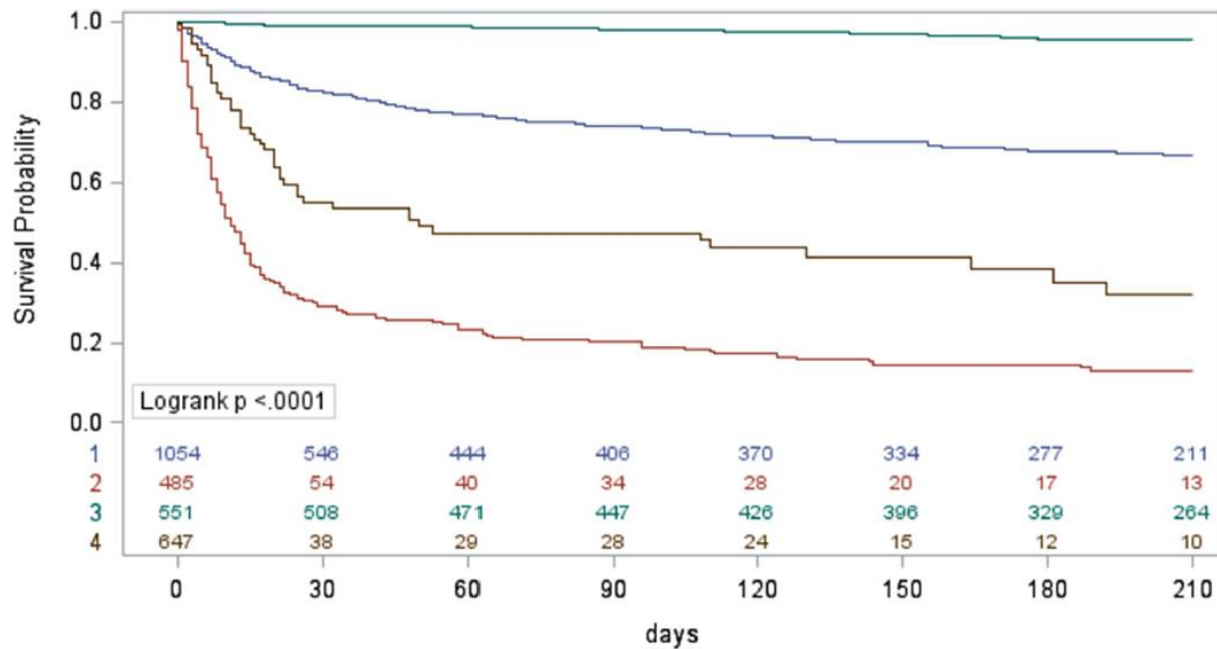
Impact of COVID-19 on TB globally

Widened gap between number of people falling ill with TB (green) in 2020 and the number diagnosed and reported (black line)

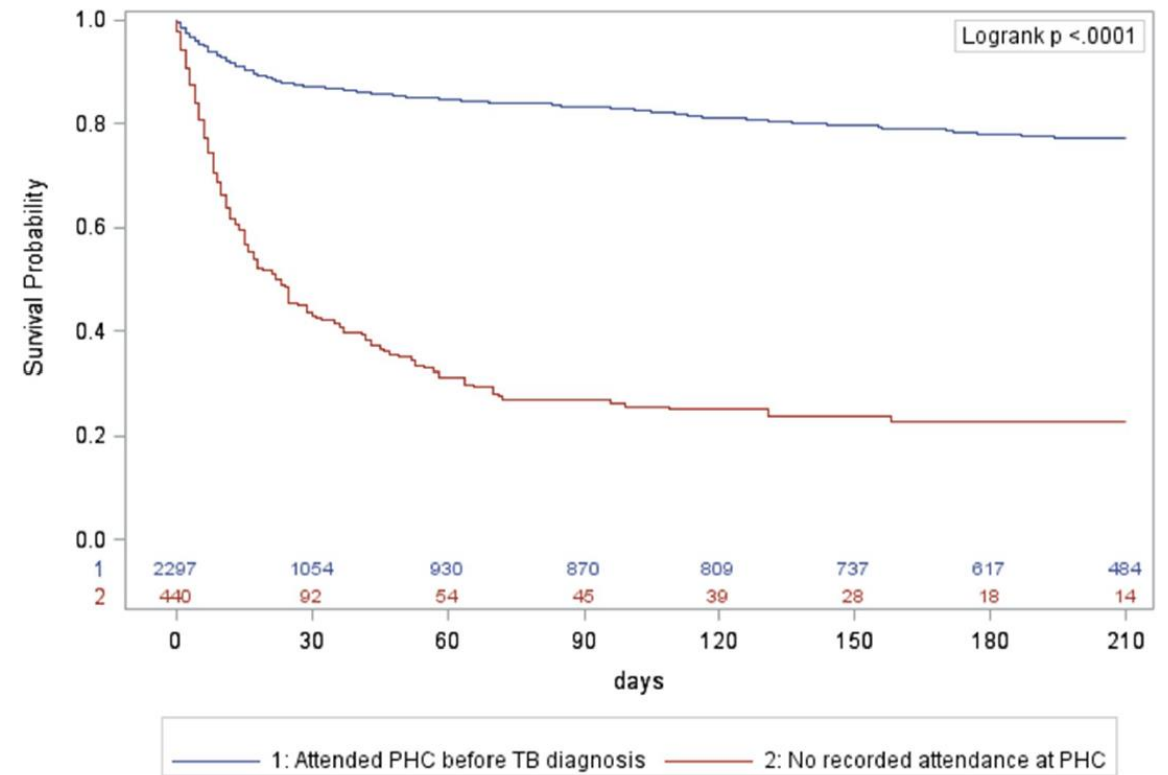


What about hospital-diagnosed TB

Special attention is needed for people diagnosed with TB in hospital especially those not in routine care



- 1: Diagnosed in hospital & started on treatment
- 2: Diagnosed in hospital not started on treatment
- 3: Diagnosed in primary health care & started on treatment
- 4: Diagnosed in primary health care not started on treatment



Osman, M, et al. "Early mortality in tuberculosis patients initially lost to follow up following diagnosis in provincial hospitals and primary health care facilities in Western Cape, South Africa." PLOS ONE 16.6 (2021): e0252084. <https://doi.org/10.1371/journal.pone.0252084>

What can we do?

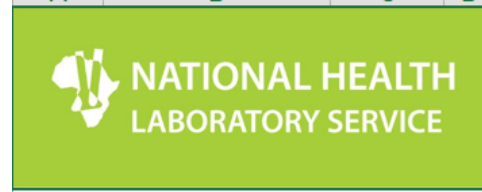
People with TB have real and lived experiences

“I knew it was TB from the beginning, but I could not bring myself to be injected every day and take those horrible tablets” (man, 42-years-old).

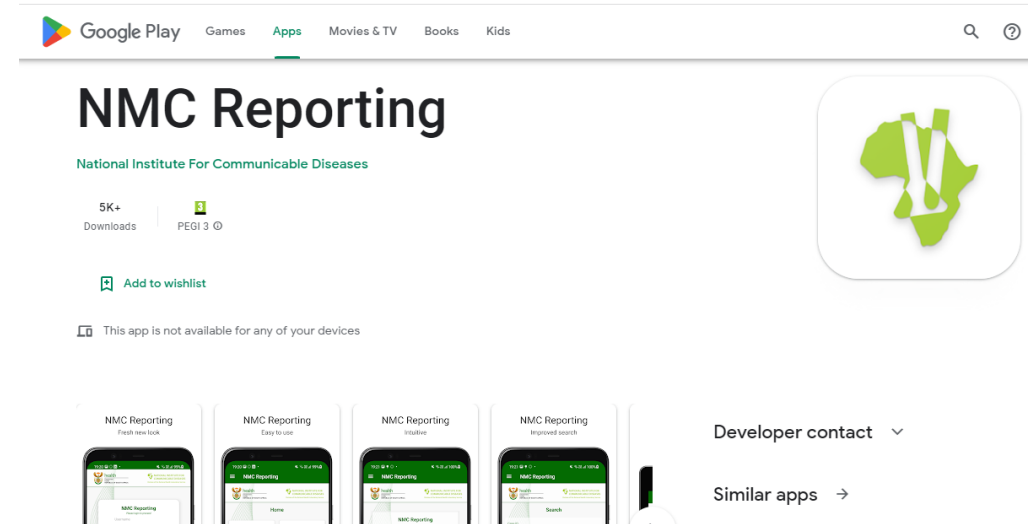
“I have so many illnesses and taking medication for HIV, and I didn’t go there for TB I broke my leg, I know how TB feels like, when they told me about TB I didn’t care. I already had TB 6 times remember, so what must I do?” (woman, 60-years-old).

Health services strengthening including recording and reporting

- TB diagnosis
 - At any level of care
 - Predominantly laboratory based
 - Results recorded on digital system
- TB treatment initiation and outcome
 - At primary health care level
 - Recorded in TIER.Net and EDRWeb



GeneXpert Register - Rifampicin Susceptible



TIER.Net



Digital solutions?

- Resources for follow up
 - SMS
 - Phone calls
 - Referral to CHW
 - apps

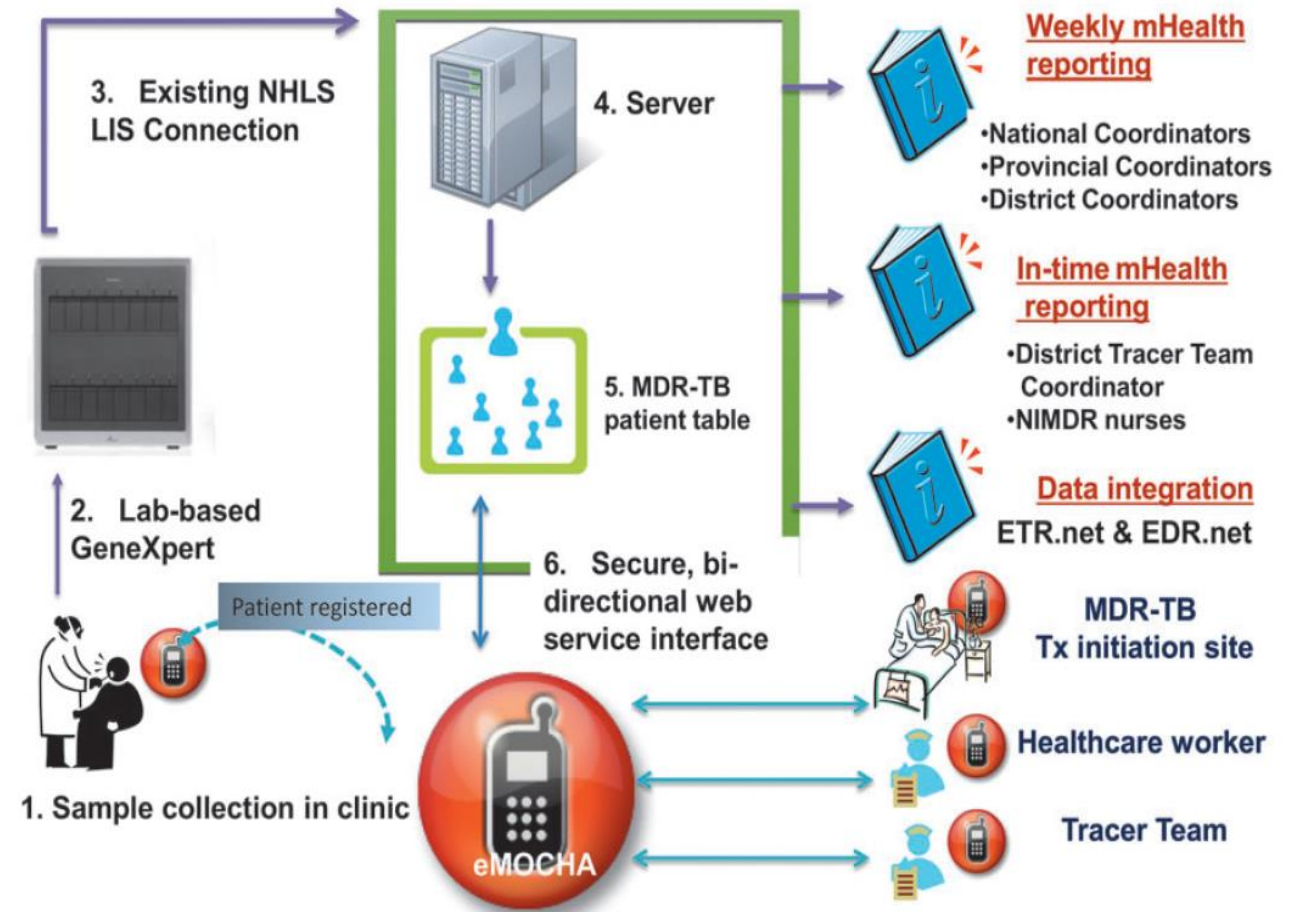


FIGURE 3 Linkage-to-care using analyzer interface, SMS result distribution, and m-Health solution combined with training of nurses to trace contacts and administer MDR care.

Stevens WS, et al. Cloud-based surveillance, connectivity, and distribution of the GeneXpert analyzers for diagnosis of tuberculosis (TB) and multiple-drug-resistant TB in South Africa. *Molecular microbiology: diagnostic principles and practice*. 2016 Apr 28;707-18. <https://doi.org/10.1128/9781555819071.ch49>

Digital solutions

- Patient registration system
 - In progress
- Presence of PHDC (data centre)

Health Patient Registration System

This machine is not registered with a facility



Western Cape Government FOR YOU

Dictionary Search

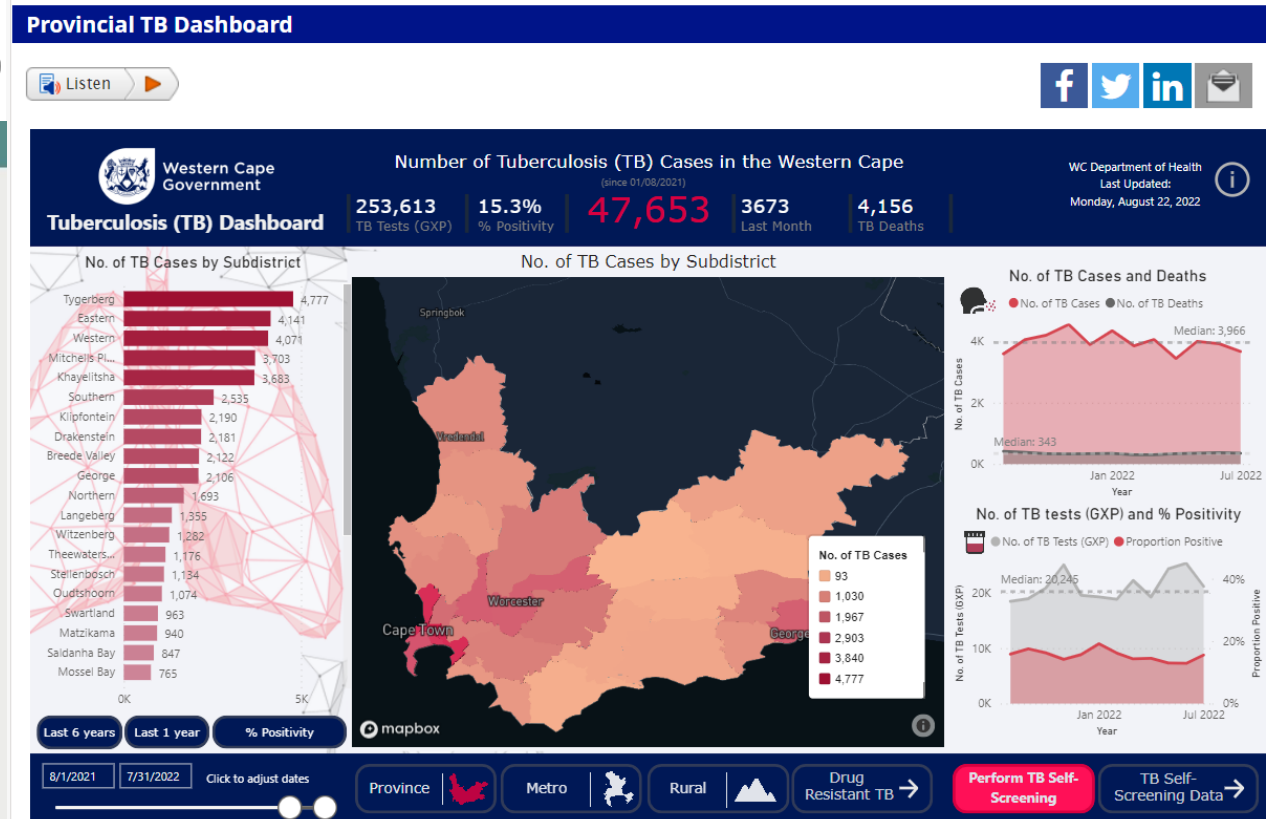
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TB Information and Dashboard [View TB information](#)

Home > Documents > Public Information > P > Provincial Health Data Centre

Provincial Health Data Centre



How can we involve the broader community?

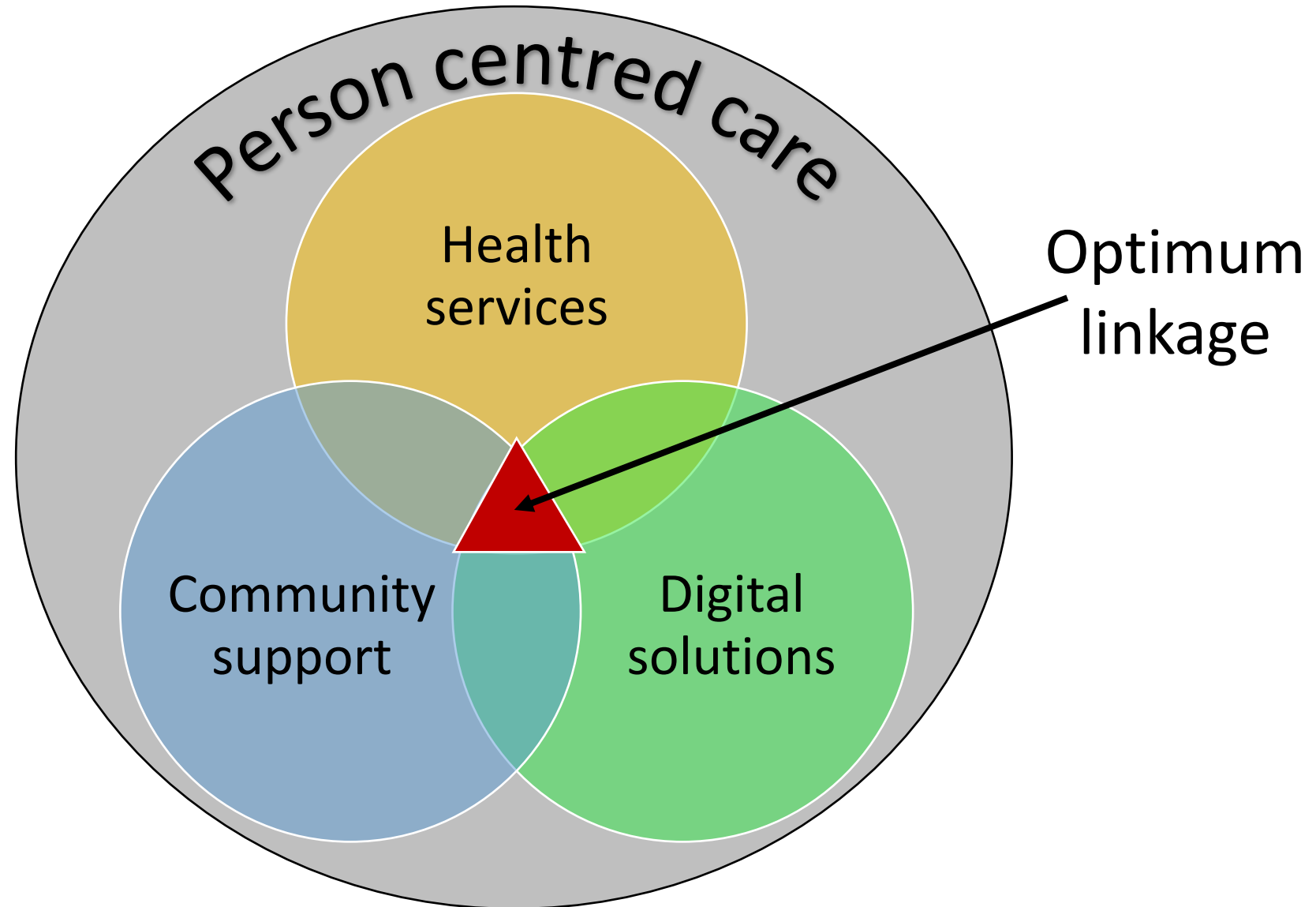
- Support from people who have previously had TB
 - Advocates for finding, linking and staying on treatment (and TPT)
- Fora to address negative experiences of health services or treatment
 - Opportunity to see and believe change will occur
- Engagement with existing health beliefs
 - Clarity on diagnosis and treatment (vs. TPT)
 - Collaboration with traditional healers
 - Common goals to achieve better health for individuals, families and communities

Take away messages

- Consider individual/personal and HCW perspectives
- Focus on highly vulnerable populations
 - People diagnosed with TB in hospitals
 - People with no previous attendance at PHC services
- Health services need to be strengthened
 - Across TB care cascade
 - Changes in TB reporting systems (include pre-treatment losses)
 - With commitment to integration of digital solutions
- Support from broader TB community

MORE THAN JUST A DIGITAL SOLUTION

Linkage to care - a change in perspective



Acknowledgments

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Nosivuyile Vanqa, Lario Viljoen

LINKEDin and LINKEDup Study teams



BETTER TOGETHER.

