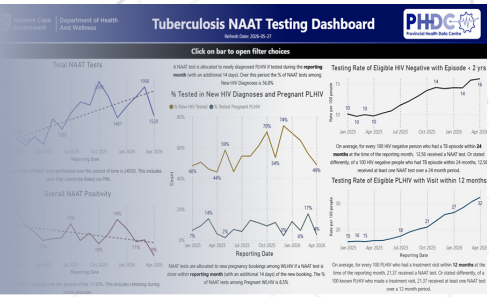
Scaling use of health data: A decentralised approach

EXECUTIVE SUMMARY

People

Organisation

Data



01 March 2021 - 30 September 2026

Western Cape Government
FOR YOU

THE HEALTH FOUNDATION
SOUTH AFRICA

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Foreword

The Scaling Data Use grant, funded by the Gates Foundation, was implemented by the Health Foundation (THF), Western Cape Government Health and Wellness (WCGHW), City Health Department, City of Cape Town (CCT), Metro Health Services (MHS), Rural Health Services (RHS), Emergency and Clinical Services Support (ECSS), and the Provincial Health Data Centre (PHDC). The grant from 2021 – 2026, implemented over 2 phases, strengthened the use of health data to improve HIV and TB outcomes across the Western Cape. Over this period, the grant partners helped build the tools, skills, governance, and culture needed to turn data into better decisions and better care.

Grant implementation took place across the Cape Metropolitan District (Khayelitsha, Eastern, Klipfontein, Mitchells Plain, and Tygerberg sub-districts) and the rural Drakenstein sub-district. During Phase 2 between October 2023 and May 2026, more than 50,000 ART patients across Metro Health Services, City Health, and Drakenstein started six-month dispensing, several times the national targets allocated to these areas. TB testing across the province doubled, and positivity rates fell from above 15% to below 10% for the first time. These outcomes were underpinned by cleaner, more trustworthy data and the now-routine use of the Single Patient Viewer (SPV) and related data tools. Across the health system, staff have increasingly shifted from viewing data as a reporting requirement to using it as a tool for learning and ongoing improvement.

Alongside better data and tools, the grant leaves behind the foundations of a Learning Health System (LHS): the training platforms, governance forums, policy instruments, and quality improvement practices that will continue to support services. The grant partners have documented implementation lessons in case studies and distilled practical guidance into change packages for TB case-finding and TB linkage to care, so that other facilities can adopt and adapt proven approaches. The change packages provide a practical, evidence-based roadmap for implementation and scale-up in local contexts.

As the department, we would like to take this opportunity to thank the Gates Foundation for the generous funding and technical support. We also acknowledge the sub-district and district staff who supported implementation, as well as the partners, project leads, and seconded teams.

Dr Saadiq Kariem
Chief of Operations (COO) WCDHW and Chair of the Scaling Data Use grant steering committee

Impact of the project

Tools and Data use

Patient searches on the **Single Patient Viewer (SPV)** reached over 2.5 million in the first half 2026, almost 15 times the second half of 2023. (Figure 1). The introduction of E-prescribing helped drive this growth, with 676 unique users generating over 570 000 scripts in the grant supported areas between July 2023 and July 2026.

The release of a 2025 provincial circular endorsing the **TB Treatment Action List (TTAL)** and the **HIV Treatment Action List (HTAL)** further embedded the use of line list reports across the healthcare system. TTAL is now used in 100% of facilities across the metro and in Drakenstein, either through individual clinic draws or drawn centrally at the sub-district level and circulated to clinics.

SPV training evolved from basic access and navigation support to tool-specific modules, ongoing mentoring, and quality-focused guidance. Training was migrated to the provincial training platform the People Development Centre (PDC) and introduced as a prerequisite for health system staff, driving completion rates up to 70% and ensuring future access.

Figure 1: SPV Registration and Usage, Q3 2023 - Q2 2026

Establishing a LHS, with QI embedded within management systems and processes

Year three marked a shift from compliance-based reporting to routine, data-informed learning across the health system. The emergence of this Learning Health System rests on three pillars (Figure 2).

Data: The PHDC, housing SPV, along with source systems that feed into it, forms the core infrastructure. Teams strengthened source-system data quality, improved the usability of reports, and built dashboards suited to different users.

People: As the tools matured, training and mentorship moved from standalone technical sessions to targeted support embedded in routine workflows. Clinicians, clerks, and managers now use SPV reports to identify service gaps and track the impact of their interventions.

Organisation: Quality Improvement (QI) is the practical method through which this learning happens. Forums at every level enable teams to review their data, develop QI plans, and share insights across partners. The provincial Framework for Clinical Governance and Quality Improvement (Circular 109/2025) formalised QI as a management responsibility across the Western Cape Department of Health and Wellness.

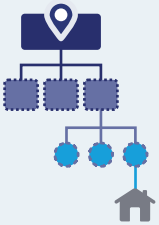
Figure 2: The Pillars of a Learning Health System

People

Data alone are not enough: People need support, motivation and opportunity to learn

Regular mentorship sessions build the confidence and agency to use data

Organisation



QI is embedded in policy and in governance forums at every level:

- **Provincial** — *Pause and Reflect; Learning Exchanges; Task Teams (Clinical Governance, Reports Refinement, etc.)*
- **District** — *Population Hubs & Communities of Practice; Plan-Do-Reviews; Campaign & Programme-specific Forums*
- **Sub-District** — *QI Huddles; Information Management & Programme-specific Forums*
- **Facility** — *QI Teams; Data Review Meetings*

Data

PHDC and SPV as core infrastructure: standard dashboards alongside user support drives "data to action"

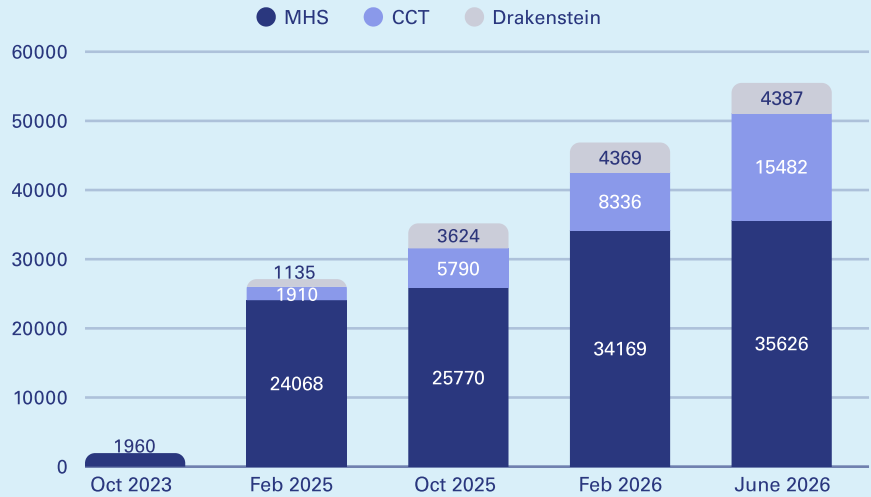
Partners distilled implementation experience into change packages for TB case finding (TUTT) and TB linkage to care (TTAL). Each sets out the interventions that proved most effective and the conditions that enabled them, giving other facilities a practical guide for implementation. The TTAL package drew on three partner sites, where the hospital-to-PHC linkage rate rose from a pre-intervention median of 73.8% to 78.1%. The TUTT package captured experiences from three sites, all of which recorded increases in TB testing volumes alongside falling positivity rates.

Improving Linkage to and retention in care for PLHIV, including through DMOC

Between Q2 2023 and Q2 2026, the total number of clients on Antiretroviral Treatment (ART) rose 7.5% to over 274 000. A significant lever was six-month multi-month dispensing (6MMD), accelerated by the national Close the Gap campaign. By June 2026, 55,495 ART patients across MHS, CCT, and Drakenstein were receiving 6MMD, reflecting rapid expansion since 2023 (Figure 3).

Rollout far exceeded nationally allocated targets: CCT implemented across 17 facilities against 1 allocated; MHS implemented across all facilities against 9 allocated; and at least five facilities joined the rollout in Drakenstein. By Q2 2026, 6MMD coverage as a proportion of total on ART reached 22% at MHS, 13% at CCT, and 36% in Drakenstein. The SPV supported 6MMD monitoring and reporting at the provincial and national levels.

Figure 3: Total Clients Receiving 6MMD, October 2023 – June 2026



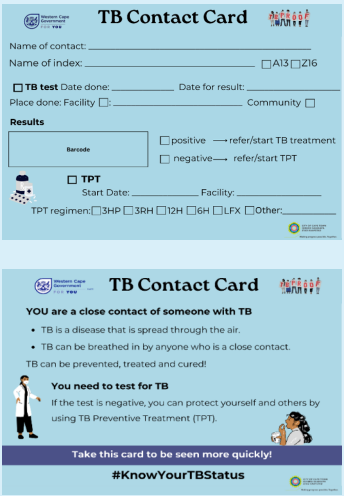


Figure 4: TB contact card (front and back)

Increase TB case finding, including through TUTT

From 2023 to 2025, TB testing increased 1.8 times and positivity rates fell from above 15% to below 10%, reflecting the wider testing net cast by Targeted Universal Testing for TB (TUTT). In October 2025, the Western Cape achieved 88% of the national TB Nucleic-acid-amplification-testing (NAAT) target — its highest monthly achievement to date. By June 2026, the partners had rolled out TUTT across and beyond the grant focus facilities.

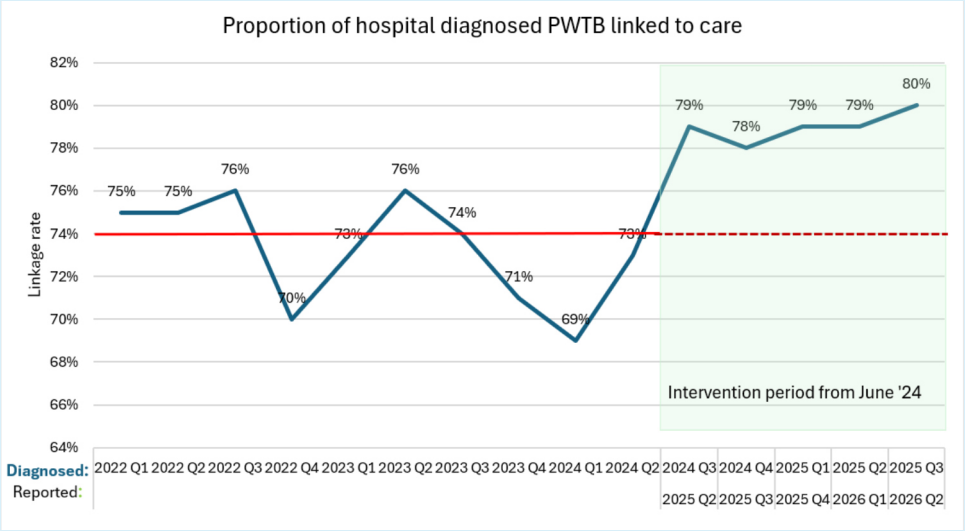
Across the Metro and Drakenstein, TB episodes rose 11% from 30,638 in 2022–23 to 33,889 in 2025–26. Against a backdrop of declining TB incidence, this increase shows that TUTT is finding cases that would otherwise have gone undetected.

Close contacts of TB clients are a TUTT priority group, but often hard to reach. To strengthen contact tracing, MHS co-developed personalised contact cards and piloted the approach in KESS before rolling it out across all MHS facilities (Figure 4). CCT scaled a similar intervention across the city sub-districts.

Improve TB treatment initiation and retention in care, including through TTAL

Individual clinic draws of the TTAL increased from 11% of facilities in the Cape Metro and Drakenstein in Q3 2023 to 43% by Q2 2026. Across all facilities, hospital-to- Primary Health Care (PHC) linkage improved slightly over the grant period, from 59% to 62%. But where TTAL was implemented alongside structured QI, linkage reached a high of 80%, up from a baseline median of 74%. The difference between the two linkage figures shows the value of pairing data tools with quality improvement, staff empowerment, and routine feedback (Figure 5). Partners also co-produced multilingual TB counselling videos to support people linking to TB care, in response to a policy shift that redeployed facility-based counsellors to community roles. Over 20 facilities have implemented the videos across the province, and survey findings show that 97% of interviewed patients found the video reassuring and 94% of health workers found them helpful, largely due to perceived time-saving and improved consistency of counselling.

Figure 5: TB hospital linkage to care
(32 facilities across MHS, CCT, and Drakenstein)



Red solid and dashed line: baseline median (Q1 2022- Q2 2024) = 74%

Case Studies and change packages

Facilities performing well were studied so that their practices could be spread to others. In addition, a small number of high-burden, low-performing facilities were supported intensively to demonstrate impact and generate learning. Findings were drawn together into an integrated booklet containing the case studies and change packages which records what worked, where, and what it would take for similar interventions to succeed elsewhere.

This can be accessed through the QR code and hyper link provided here which will take you to THF's website, Scaling data use project page: Dissemination of Key Grant Outputs section.

Acknowledgements

Steering Committee members

Chair: Saadiq Kariem
CCT: Lenny Naidoo, Natacha Berkowitz and Sue-Ellen Van Niekerk
MHS: Patti Olckers, Annie Janse Van Rensburg, Hassan Mohamed and Donovan Hopkins
RHS: Lizette Phillips and David Pienaar
ECSS: Juanita Arendse and Hilary Goeiman
HI/PHDC: Lesley Shand, Adam Loff and Andrew Boulle
Gates Foundation: Gaurang Tanna and Liesl Page-Shipp
Technical lead: Pren Naidoo
THF: Harry Grainger and Bridgette Prince

We wish to take this opportunity to acknowledge Gio Perez for his role on the grant right from its inception until his passing. He served on the Steering Committee and chaired the Phase 2 Project Management Committee (PMC).

Extended Project Management Committee

CCT: Natacha Berkowitz, Damian Hacking, Suhair Solomon, Mabatho Sebola, Johnny Daniels, Cwayita Nkwentsha and Nokukhanya Cele
MHS: Annie Janse Van Rensburg, Claudine Bill, Jesse Werner, Kim-Lee Solomons-Jacobs, Nyameka Mbula, Tebogo Masekela and Zamuxolo Mshweshwe
RHS: David Pienaar, Amy Collyer, Lutu Mngqibisa and Keith Isaks
ECSS: Hilary Goeiman and Karen Jennings
HI/PHDC: Adam Loff, Meagan Stuurman, Leigh Snyman and Chante Adonis
THF: Bridgette Prince, Mu-arfia Jonas and Fazlin Nicholson

Sub-district management and HAST teams and colleagues on the service platform