

every person counts



Simprints: Continuity of Care in TB programs

Continuity of Care in TB programs

At the United Nations high-level meeting on TB, world leaders acknowledged that although tuberculosis is preventable and curable, 40% of people newly affected by TB are missed by public health reporting systems, and millions do not receive quality care each year ¹. The inability to reliably identify a patient repeatedly across the course of their treatment can lead to inadequate continuity of care, which causes poor health outcomes and death as well as an ineffective allocation of scarce resources. Biometrics can provide a reliable method of identification, strengthening continuity of care and enabling improved outcomes in TB treatment programs.

Health outcomes with **ineffective** identification



Solomon is working as a miner in South Africa.



He is diagnosed with drug-resistant TB by a doctor employed by the mine



He begins treatment, and his employee ID number is used to bring up his medical records each time he visits.



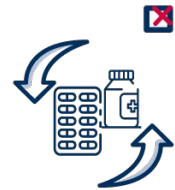
He returns to Eswatini when his contract ends. At first, he does not report his diagnosis to anyone, because he knows he may experience stigma. When he does see a doctor, he has no health record there, so is retested.



Weeks later he returns to the doctor. They cannot confidently link him to any test results.



In the absence of reliable records, he is given the incorrect drug.



Each time he receives an incorrect treatment, it becomes less likely that Solomon will successfully complete treatment, and more likely that he will develop resistance to one or more of the available drugs.

¹ Resolution A/RES/73/3 adopted by the United Nations General Assembly on 10 October 2018

Health outcomes with **effective** identification



Solomon is working as a miner in South Africa.



He is diagnosed with drug resistant TB by a doctor employed by the mine.



He begins treatment, and is enrolled biometrically using Simprints. His biometrics are used to bring up his medical records each time he visits.



He returns home to Eswatini when his contract ends. When he sees a doctor there, his biometrics pull up the correct medical record.



He is put on the correct treatment regimen.



Each time Solomon returns to his local health clinic, he is correctly identified and the correct treatment administered.



Solomon's TB is successfully treated.

Correct patient identification is a challenge because:

1. Beneficiaries often do not have easy ways to help health workers uniquely identify them
 - Names are spelled inconsistently, and many individuals have the same name: >60% of males in a few geographies are called some variation of the same name
 - Many beneficiaries do not know their exact DOB
 - Slums and villages lack formal postcodes
 - ID cards are frequently lost, damaged or forgotten ²
2. Patients desire anonymity, due to the stigma around TB
 - **86%** of patients prefer to keep their distance from others and **75%** of patients feel hurt by the way people react when they find out about their disease ³

² Gelb, A. & Clark, J. Identification for development: the biometrics revolution. Cent. Glob. Dev. Work. Pap. (2013)

³ https://pdf.usaid.gov/pdf_docs/pa00jwp6.pdf

Simprints offers a way to bypass identification methods that rely on typical identifiers that are frequently subject to error

Theory of change

Inputs	Mobile biometric system is integrated into TB programs.
Activities	When health workers see patients, they use biometrics to identify patients & record diagnoses or treatments.
Outputs	Patient is correctly identified.
Outcomes	<p>Continuity of treatment: Reliable identification means that a patient can be linked to their diagnosis and treatment regimen from visit to visit. Health workers can reliably add data to the correct patient file.</p> <p>Biometric identification can allow health workers to immediately identify patients who started and discontinued treatment, and put them on MDR protocol.</p> <p>Continuity over time: A patient can be connected easily with test results, even where there is a long delay between testing and when results are received.</p> <p>Continuity across locations: Migratory populations, such as migrant workers, can still be identified and connected to their health records.</p> <p>Accurate data: Health systems have reliable individual-level information about diagnoses, locations and treatments.</p>

Simprints offers a way to bypass identification methods that rely on typical identifiers that are frequently subject to error

Impact

Improved treatment outcomes:

Biometrics can help ensure that the correct drugs are administered to patients across the span of their treatment, improving their chances of survival. Patients who have discontinued treatment and are at risk of developing drug-resistant TB can be identified and given the correct treatment.

Improved disease management:

The ability to accurately treat each patient reduces the number of cases of drug-susceptible TB that become drug-resistant TB due to incorrect drug administration.

Improved use of funding:

Linking patients correctly with their test results, even where there is a delay between testing and results, reduces the need for costly retesting.

Improved information to systemically fight TB:

By reliably linking diagnoses with treatment outcomes, and locations, biometric identification can provide timely insight to central governments on key health data, which can be useful for public health decisions and supply chain management.

Goal

Sustainable Development Goal 3.3: "By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases".