

A whole systems approach to infection prevention and control for drug-resistant tuberculosis in South Africa

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TB is one of the leading causes of death in South Africa.

According to the WHO, 19,000 people were diagnosed in 2016 with



BACKGROUND

DR-TB transmission happens in hospitals and clinics, but it is not known how much this exposure contributes to transmission overall. Existing guidelines for airborne infection prevention and control (IPC) in health facilities are poorly implemented.

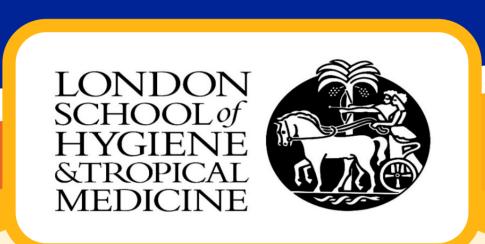
AIM

This project aims to inform, develop and project the potential impact of a health systems intervention to improve IPC for DR-TB taking into account infection risk, clinic infrastructure, work practices, and facility stewardship in Western Cape and KwaZulu-Natal provinces.

Using an interdisciplinary approach, it will examine the social, biological and infrastructural dynamics of transmission.

Umoya omuhle

means 'good air' in Zulu, and embodies the project vision of bringing a 'breath of fresh air' to current thinking on infection prevention and control



RQ 2
Estimate
contribution of
facilities to DR-TB
transmission

RQ 3
Examine effect
of clinic design,
working
practices on IPC







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findings

RQ 1
Describe IPC
policy and
systems context

RQ 6
Mathematical
modelling project effect on
interventions

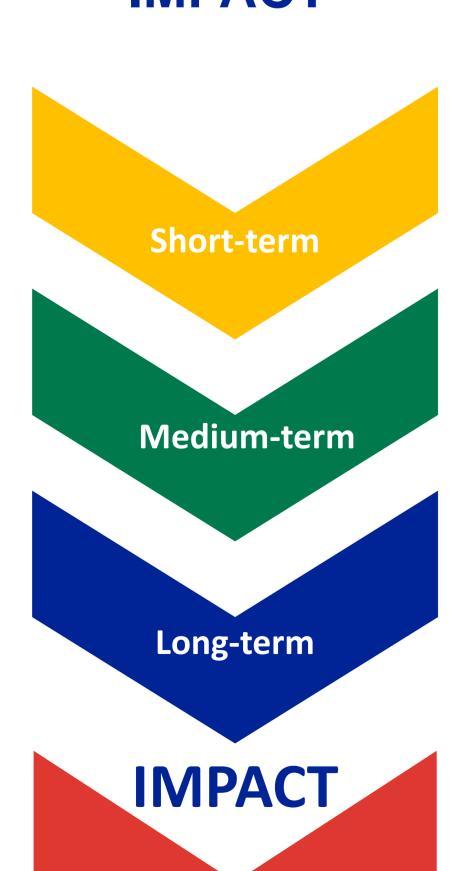
RQ 5
Design whole systems interventions to improve IPC

of responsibility and risk for IPC

RQ4

RESEARCH QUESTIONS RQ 7
Estimate
economic impact
of reduced
transmission

PATHWAYS TO IMPACT



POLICY
(policy and decision makers)
December findings valeted to not ont

Research findings related to potential policy changes

Proposals for changes to national or provincial policy

Policy changes informed by research

Strengthen the evidence base around IPC interventions; trace policy-to-practice process; prioritise investments

PATHWAYS TO IMPACT

PRACTICE

(programme managers)
iscussion of infection risk and
itigating strategies

Proposals for changes to national or provincial practice guidelines

Practice changes informed by research findings

Inform the development of IPC intervention design and elements

ADVOCACY (healthcare workers, people with DR-TB)

Discussion of enablers and barriers to IPC for DR-TB

Proposals for positive shift to promote IPC for DR-TB as an occupational health issue

Change of risk perceptions and behaviours related to IPC for DR-TB

Foster a paradigm shift towards local stewardship and effective use of information to prevent nosocomial transmission of DR-TB





in partnership with other funders.







