



Data Use Innovations and Best Practices Meeting

Data integration and visualization to Focus for Impact

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Focus for Impact

- Data integration and visualisation to support the Focus for Impact approach for South Africa's HIV, TB and STI response
- Scalable and sustainable tools and platform for coordination, monitoring and decision-making for implementation of NSP 2017 to 2022





Key questions we answer through Focus for Impact approach

1

Key question 1 - Where are the high burden areas?

Identify geographical areas with a high HIV, TB and STI burden areas using routine health data

2

Key question 2 - Why is this a high burden area?

Profile epidemiology and associated risks using secondary data and community dialogue

3

Key question 3 - Who is at risk in this high burden area?

Identify key or vulnerable population to focus on as well as who is not accessing services adequately (access and availability)

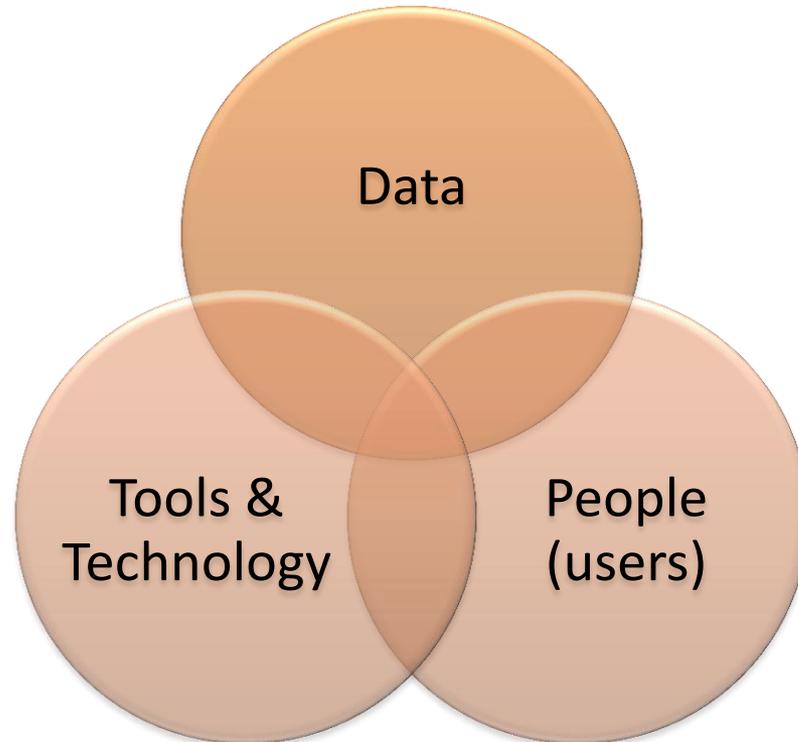
4

Key question 4 - What are we going to do to reduce the burden in this area?

Multi-sectoral Implementation plans and interventions



Focus for Impact brings together 3 important components



to support coordination, monitoring and decision-making in the HIV, TB and STI response



Reaching consensus



planning, monitoring
and evaluation

Department:
Planning, Monitoring and Evaluation
REPUBLIC OF SOUTH AFRICA



social development

Department:
Social Development
REPUBLIC OF SOUTH AFRICA



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



rural development
& land reform

Department:
Rural Development and Land Reform
REPUBLIC OF SOUTH AFRICA



premier

Department:
Office Of The Premier
PROVINCE OF KWAZULU-NATAL



HSRC
Human Sciences
Research Council

Health Economics and Epidemiology Research Office

HERO

Wits Health Consortium
University of the Witwatersrand



CENTERS FOR DISEASE
CONTROL AND PREVENTION



Western Cape
Government

Health



Health Information Systems Program - SA





Data



Geospatial data – demarcation board, roads, cities and towns, services, PHC facility catchment area

National - Thembisa – HIV prevalence trends per age group

Province - Thembisa - HIV trend data for mortality, incidence, prevalence & prevention per age group

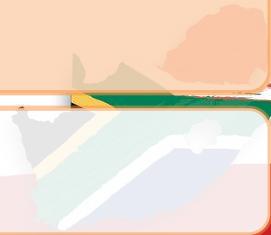
District - HSRC Behavioural survey

Local municipality - AIDS and TB mortality

Ward - Census 2011 demographic dynamics, SAMPI (Poverty Index)

PHC Facility - PHC facility routine data from DHIS

Community - community assets, associated risks





Routine health data

OUTCOMES <

HIV Positivity ^

- All (Combined)
- 6 weeks
- 10 weeks
- 18 months
- 1 - 4 years
- 5 - 14 years
- 15 - 49 years
- Antenatal 1st Visit
- Antenatal Re-test

ART ^

- Antenatal on ART (at 1st visit)
- Antenatal client initiated (rate)
- Total on ART (month end)
- Total on ART (during month naive)

STI ^

- Male Urethritis Syndrome rate

Condom Distribution ^

- Female Condoms
- Male Condoms

Teenage Pregnancy ^

- Delivery < 18

TB ^

- Identified
- Sputum Test Rate
- Tested Positive
- Treatment Initiation

labels v

options v

opacity

SPATIAL LAYERS

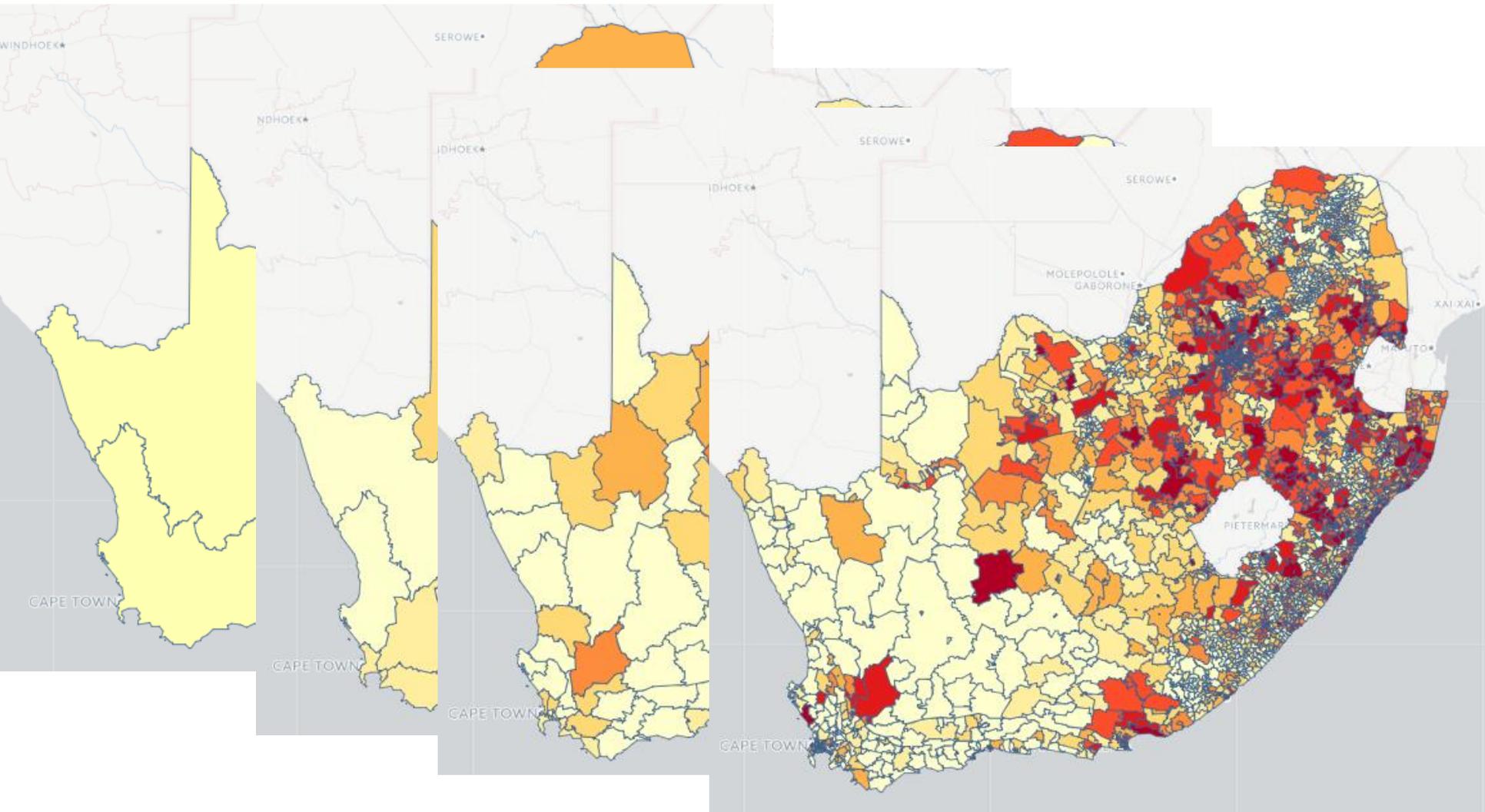
Fixed Layers v

Calculated Layers v





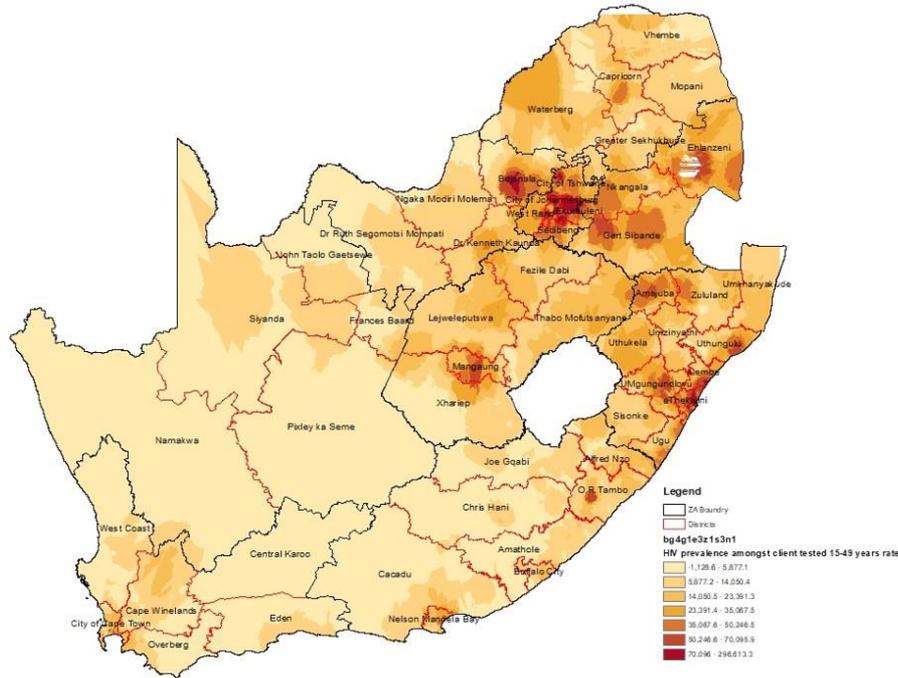
Data visualisation



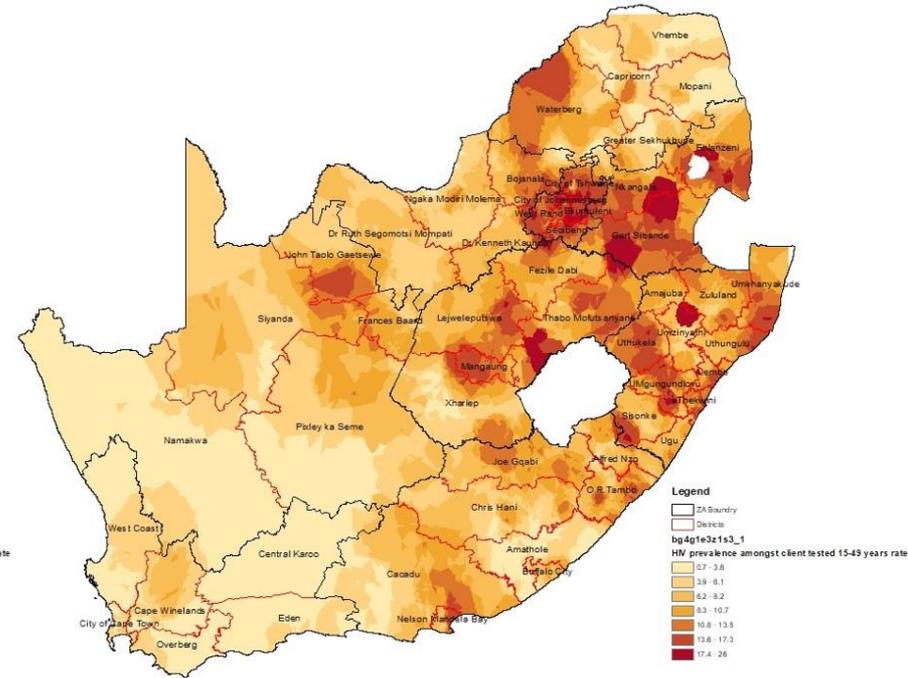


Data analysis

Numerator Value



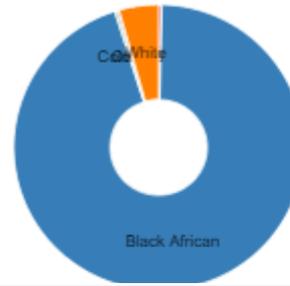
Indicator Value





Data Analysis

Population Groups (2011)



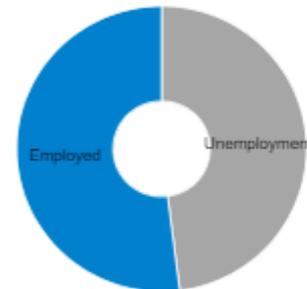
Asian	204	0.4%
Black African	53,178	94.7%
Coloured	147	0.3%
Other	129	0.2%
White	2,472	4.4%

Female Un/Employment (2011)



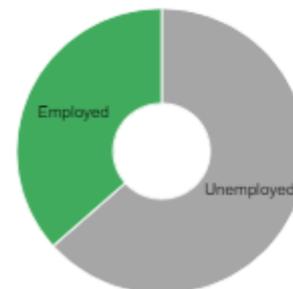
Unemployment	0.64	64.0%
Employed	0.36	36.0%

Male Un/Employment (2011)



Unemployment	0.48	48.0%
Employed	0.52	52.0%

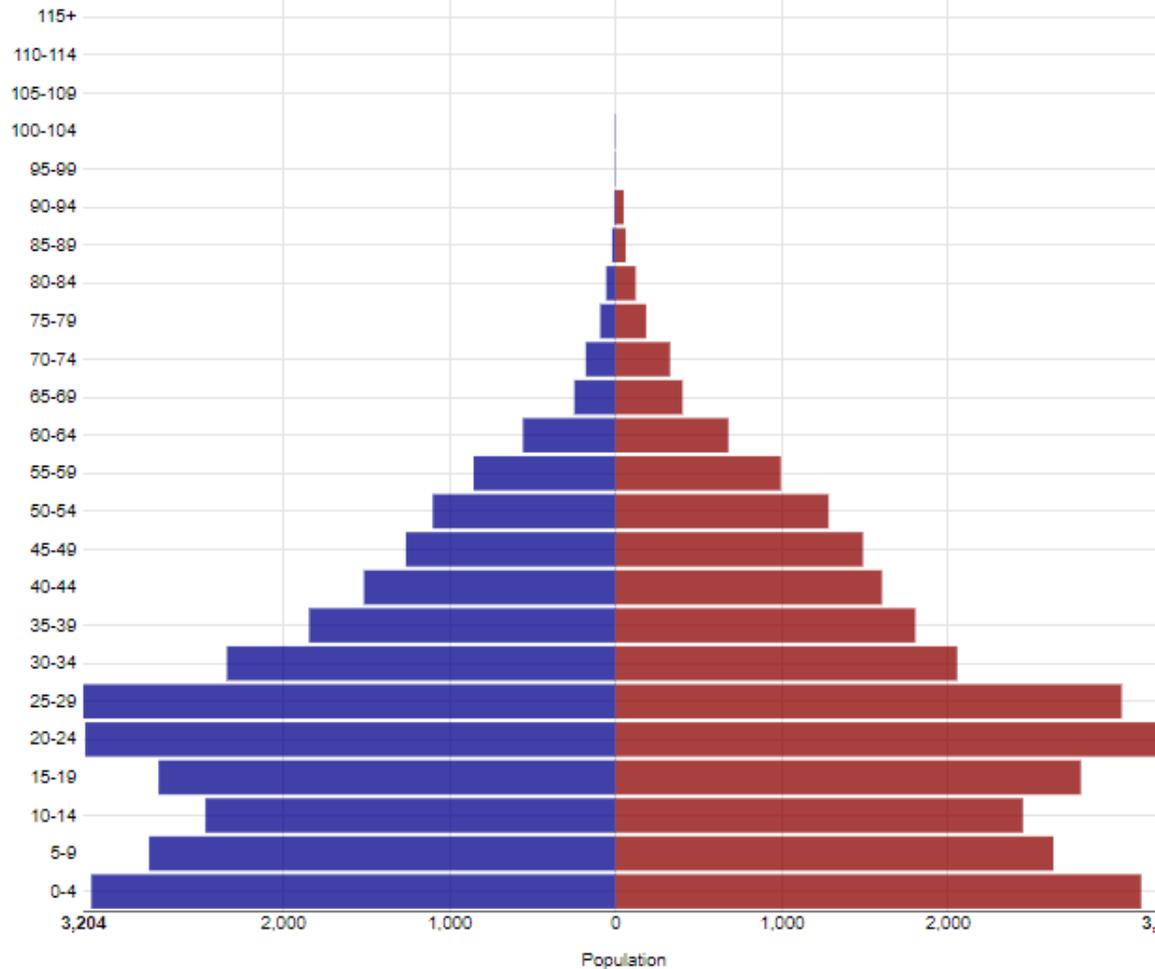
Youth Un/Employment (2011)



Unemployed	2,057.9	63.5%
Employed	1,185	36.5%

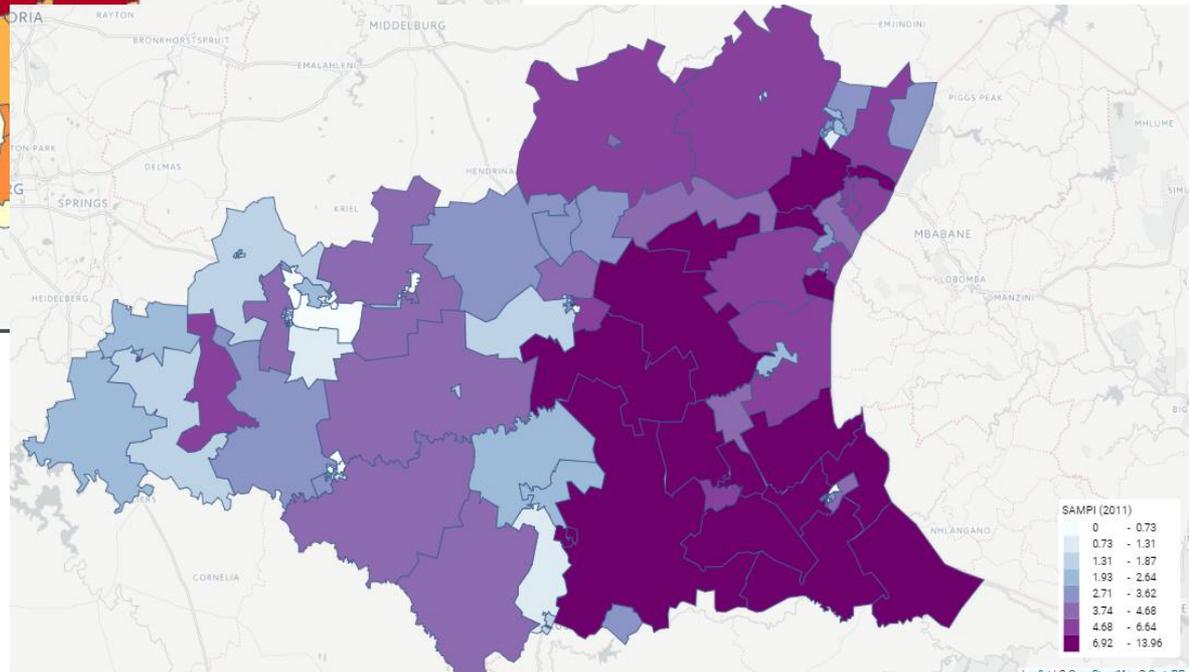
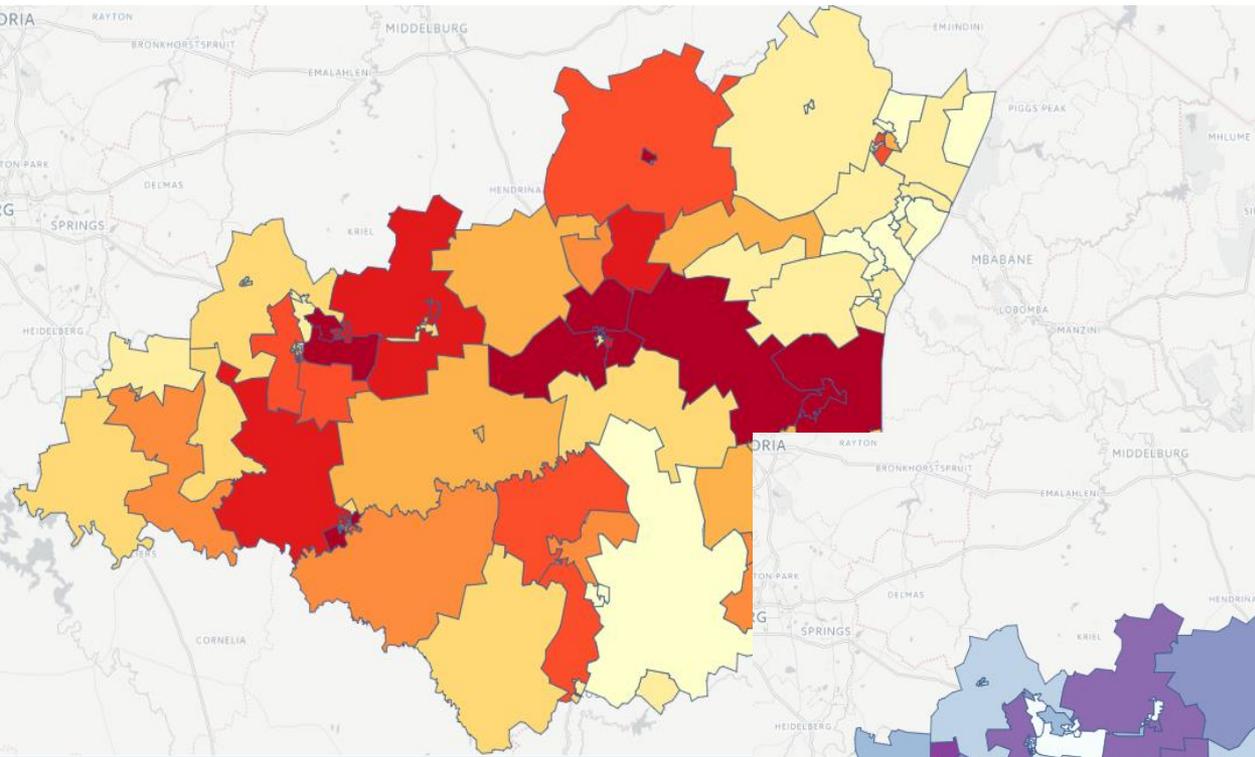
○ Grouped ● Stacked

● Male ● Female





Exploring relationships





Tools and Technology

- F4I toolkit
- Web-application that focuses on **interoperability** and **sustainability**
- Visualise key data and associated information - combination of **open source technology** and **propriety software**
- Caters for **variety of source data formats** and supported on both **desktop** and **mobile platforms**
- **User registration** (secure access) – administration at national, provincial and district level



People (users)

- Integrate approach into planning PIP and MDIP
- Access to web-application
 - ***Managers from Government and Donor Implementation organisation*** – to view, access and export relevant detail as maps, graphs and summary reports for decision making
 - ***Provincial, District and Local AIDS Councils*** – to view, access and export relevant detail as maps, graphs and summary reports for oversight and decision making at the relevant level
 - ***General public*** – to view and engage with non-sensitive data as an advocacy and empowerment tool





Lessons learnt

- **Buy-in** at **all levels** (National, Provincial, District and Local) is **critical** for the approach to be successful
- Use **existing structure** for engagement, especially at a community level
- While “perfect” data may not exist, enough **reliable data** are available to **guide broad decisions**
- **Hard to reach populations** are difficult to recruit for participation in community workshops – needs a **different strategy**
- **NB** – one **version** of the **truth** for a given point in time!!





A healthy future is within our grasp

“The ‘focus for impact’ approach outlined in this NSP offers a roadmap for fully leveraging scientific advances, while greater engagement of affected communities and all sectors frames the response. Through this NSP we can set a path that ensures that our country will be free from the burden of HIV, TB and STIs.”

Source NSP 2017-2022; Page xx





Acknowledgement

- Funding for Phase 1 development and testing of the HIV geospatial mapping and profiling through Focus for Impact through CDC funding and in-kind contribution from NDoH (link to NHIRD development)
- Further development through GF funding for Phase 2

