Focus for Impact

Community profile
Catchment area for Ntabamhlophe Clinic
(Ward 3, 4 and 5 Imbabazane)

iNkosi Langalibalele Local Municipality
uThukela District
KwaZulu-Natal

July 2017

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CCG	Community Care Givers
CDC	Centres for Disease Control and Prevention
CHC	Community Health Centres
DAC	District AIDS Council
DHIS	District Health Information System
HIV	Human Immunodeficiency Virus
HTS	HIV Testing Services
KZN	Kwa-Zulu Natal
LAC	Local AIDS Council
LGBTI	Lesbian Gay Bisexual Transgender and Intersex
MSM	Men Who Have Sex with Men
NDOH	National Department of Health
NHIRD	National Health Information Repository and Data warehouse
PEP	post-exposure antiretroviral prophylaxis
PLHIV	People living with HIV/AIDS
PrEP	pre-exposure antiretroviral prophylaxis
PWID	People Who Inject drugs
SAMPI	South Africa Multidimensional Poverty Index
SANAC	South Africa National AIDS Council
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis

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Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Funders.

Focus for Impact – understanding the background

At the heart of the NSP 2017-2022, is the strategy to "focus for impact" using the more detailed information and insights which have become available. While comprehensive prevention and care will be provided countrywide, intensified, concentrated efforts will be made in HIV and TB high burden areas. In these high-burden areas, redoubled efforts will draw on detailed, innovative data sources (such as geospatial mapping) to identify those most at risk. This will lead to saturation of high-impact prevention and treatment services and strengthened efforts to address the social and structural factors that increase vulnerability to infection. Nationally, but especially within these high-burden areas, key and vulnerable populations most heavily affected by the epidemics will receive intensified focus to empower them, improve service access and reduce barriers to service uptake. The "focus for impact" approach represents a new, transformative way to achieve reductions in the morbidity and mortality associated with HIV and TB and morbidity from STIs. In line with the evidence, there will be a substantially stronger focus on adolescent girls and young women as well as key and vulnerable populations, not forgetting adolescent boys and young men.

The process for identifying high-burden areas for intensification of efforts dates back to September 2015, when the SANAC Secretariat established the Hotspot Mapping Advisory Committee. The Committee – including governmental and non-governmental epidemiological experts as well as international partners – was tasked with developing a transparent, multi-sectoral, locally informed and user-friendly approach to Focus for Impact.

An approach was developed that use geospatial mapping and risk profiling to allow stakeholders to have a more granular understanding of geospatial variations in HIV, TB and STI burden. The ***model aims to answer four key questions***:

(a) ***Where*** in a particular district ***are the areas with the highest HIV and/or TB burden***?

(b) ***Why*** does a ***specific area*** have a higher HIV and/or TB burden (i.e. what are the contributing/associated factors)?

(c) ***Who*** are the most vulnerable populations?

(d) ***Which multi-sectoral interventions*** may be deployed in the high-burden area to reduce associated HIV and/or

To maximise the impact of efforts, the NSP introduces this more intensified, more strategic focus at provincial, district and ward levels. There will be a greater priority on primary prevention and on strategies to address the social and structural drivers of the three infections in a thoroughly multi-sectoral manner. South Africa's recent success in scaling up prevention and treatment programmes will be complemented by an equivalent focus on improving service quality and on reducing loss to follow-up among people who initiate care, while simultaneously implementing the new "test and treat" policy. Recognising that different people require different prevention approaches, differentiated care models will be scaled up to tailor interventions to each person's needs, including increased link with community-centred service delivery. Priority is given to ensuring that treatment programmes are holistic and address each person's health needs, including co-morbidities. The success of this approach will stem from the collection and timely use of high-quality data to guide and inform programmes and policies.

The ultimate success of the NSP 2017 – 2022, relies on effective implementation at the provincial, district and ward levels. From the national to the local context, three levels of focus will accelerate implementation of the Plan and optimise its impact:

- ***Spatial location:*** The NSP calls for steps to ensure the delivery of comprehensive services to all who need them, regardless of where they live. In cognisance of the marked geographic variation in disease burden, intensified action is required in localised areas of high burden for intensified action. In each of these high-burden areas:
  1) ambitious coverage targets will be set;
  2) current and new programmes will focus strategically on those in greatest need; and
  3) other strategies will be intensified to address the social and structural factors that increase individual and community vulnerabilities which contribute to the disease burdens.

  This component links with the first question that the Focus for Impact model aims to answer: *"Where in a particular district are the areas with the highest HIV and/or TB burden?"*

- ***Population and community profile:*** The community profile is completed once a high burden area is identified using secondary data from multiple sources (health, education, socio-economic) and the provision and utilisation of services is described. The engagement with the community is to identify priorities of the risks for HIV, TB and STIs in that specific area and gaps in service delivery to address these priorities.

  In each of these high-burden areas, programmatic efforts will be strategically targeted towards the populations among whom the need is greatest, and where the impact of efforts will be most pronounced. Given the degree to which transmission among adolescent girls and young women is driving HIV across the country, *every* province, district and ward must take steps to intensify efforts to reduce new HIV infections and increase service access for adolescent girls and young women, including addressing the social and structural factors that increase their vulnerability. Guided by local data and circumstances from geospatial mapping and profiling, provincial and local responses should prioritise key and vulnerable populations.

  This component links with the second question that the Focus for Impact model aims to answer: *"Why does a specific area have a higher HIV and/or TB burden (i.e. what are the contributing/associated factors)?"*

- ***Multi-sectoral interventions:*** Enhanced focus is also needed on the combination of interventions that are prioritised for scale-up. Priority will be placed on implementing the right mix of high-value, high-impact interventions that will maximise the number of new infections and deaths averted.

  This component links with the third question that the Focus for Impact model aims to answer: *"Which multi-sectoral interventions may be deployed in the high-burden area to reduce associated HIV and/or TB risks?"*

> **Multi-sectoral** refers to deliberate collaboration among various stakeholder groups (e.g., government, civil society, and private sector) and sectors (e.g., health, environment, economy) to jointly achieve a common goal. In this case reducing the associated risks in high burden areas

Introduction to Profile

This profile presents secondary (public and non-public) data on the HIV and TB epidemics and population demographic profile, enriched with information collected from the community identified associated risk factors, services and assets in iNkosi Langalibalele Local Municipality in the uThukela district, KwaZulu Natal. The latest available ward level population data is that from Census 2011. This is used as the basis for the population data and aligned with boundaries within this report.

The profile is intended to give the AIDS Councils and any other planning groups a thorough understanding of the HIV, TB and STI related context within this district. By reflecting who is at risk of becoming HIV infected and where they are within a specific location, the profile assists to identify the people who need prevention and care services

The profile highlights factors that influence the risks of HIV and TB infection. Such factors include the socio-economic status e.g. structural measures of poverty; sexual risk behaviours such as condom use, multiple sexual partnerships and transactional sex in a given population in a specific service area and/or administrative area. The same applies to data on exposure to psycho-active substances, report or history of sexually transmitted infections (STIs). Data is presented at the level that it is available. The risk factors are explored within the categories of the socio-demographic data (e.g., age, sex, race, educational status) at wards level.

The profile for this specific area includes two types of data: 1) secondary (public and non-public) data and 2) local knowledge and understanding of what influences the associated risk profile. Information that reflects the local knowledge and understanding of the associated risk profile for the area is collected through community engagement through stakeholder and community workshops in the specific catchment area. More detail on the approach is described in Appendix C: Methodology for stakeholder engagement to explore local level data.

For this profile, the catchment area for Ntabamhlophe Clinic, iNkosi Langalibalele Local Municipality is defined as iNkosi Langalibalele Wards 3, 4 and 5. For this specific profile, two stakeholder and community workshops held on 27 and 28 July 2017 in Imbabazane Municipality Council Chamber, Ntabamhlophe. The workshops were attended by 73 stakeholders and community members during these two days. As more local level profiles are completed within the Local Municipality, a richer picture of the context within iNkosi Langalibalele Local Municipality will evolve. The same applies to more granular data that becomes available for this specific catchment area. This profile will be updated accordingly and should therefore be considered a living document.

During the workshops participants identified the following priorities for consideration during the implementation of multi-sectoral interventions and focus of key and vulnerable populations to reduce the HIV associated risk in the Ntabamhlophe clinic catchment area:

- Key and vulnerable populations:
  - Young women and girls
  - Sex workers
  - Orphans and vulnerable children
- Interventions that address:
  - Sexual abuse and gender based violence – especially where men feel they have the right to coerce women into having unprotected sex
  - Stigma and discrimination (educating family and social networks on acceptance of an individual who is HIV positive)
  - Continue using condoms after circumcision
  - Continuous HIV education especially men and people who live in outlying rural areas which do not have access to services or educational programs
  - High rate of substance abuse and drugs that triggers high risk behaviour

1. Socio-demographic profile

1.1 Demarcated boundaries

Uthukela District is one of the 11 district municipalities of KwaZulu-Natal province. The iNkosi Langalibalele Local Municipality is one of the three Local Municipalities in Uthukela district. iNkosi Langalibalele (formed by the merging Imbabazane and uMtshezi) Local Municipality as shown in Figure 1: Local Municipalities Uthukela district. The data represented in this report is directly linked to the previous municipality and ward determinations and will therefore be visualised as such.

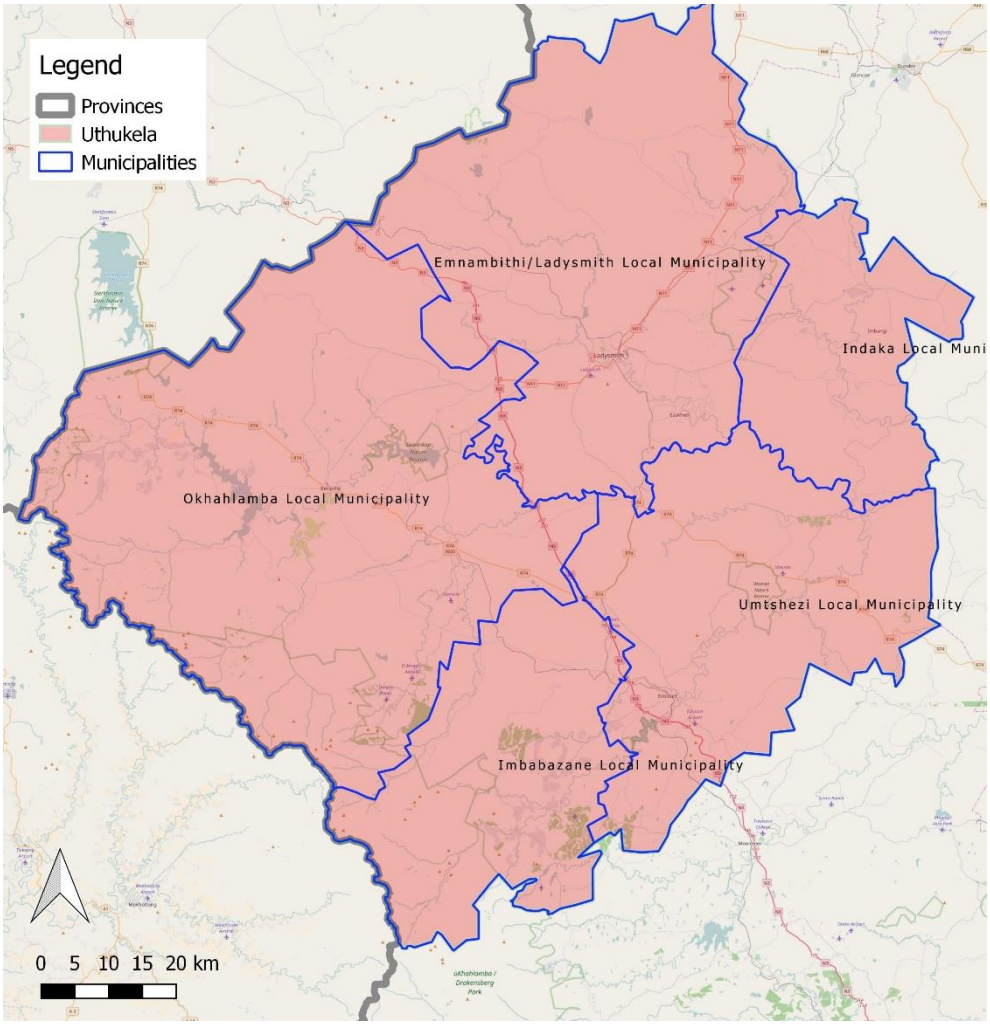

Figure 1: Local Municipalities Uthukela district

The iNkosi Langalibalele Local Municipality constitute of 22 administrative wards (see Figure 2).

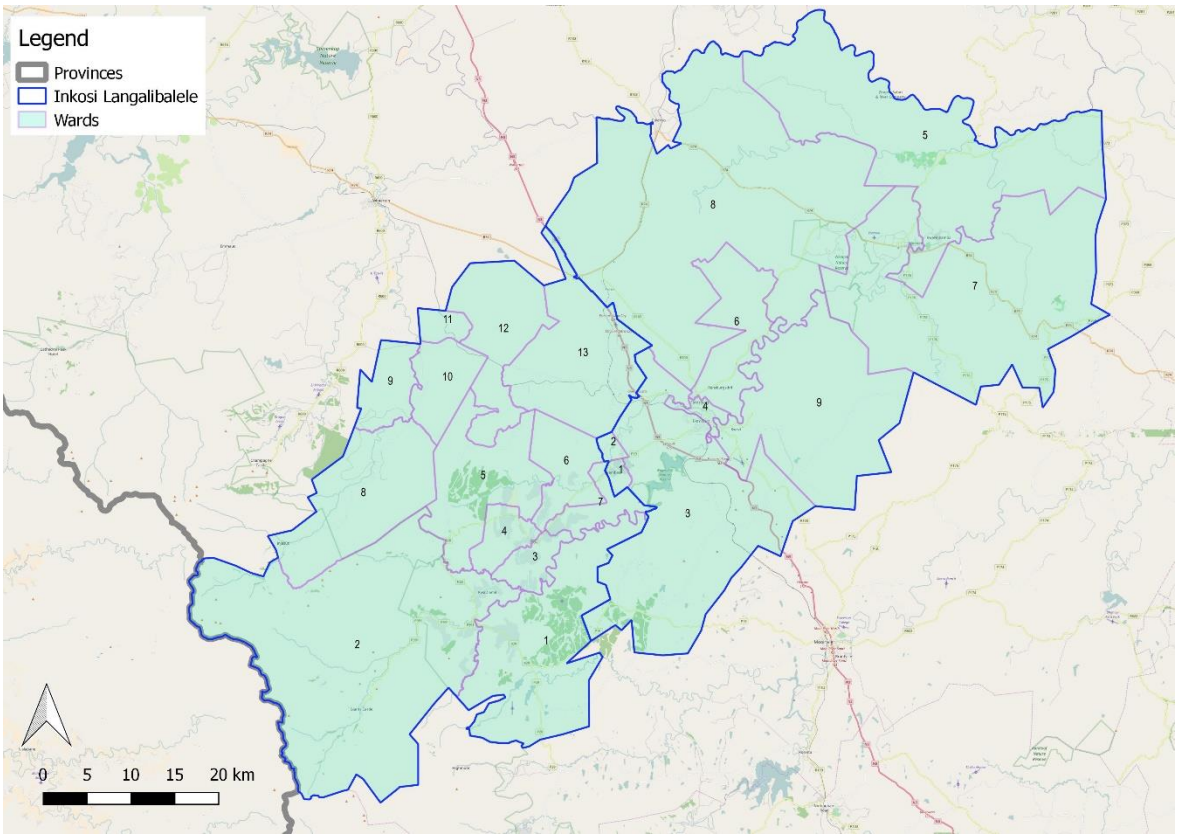

Figure 2: Distribution of Wards in the INkosi Langalibalele (Imbabazane and uMtshezi) Local Municipality

1.2 Population by sex and age

During the 2011 Census 196 251 people were counted in the 22 wards. Table 1 summarises the age and sex per population in these wards. Females constitute 53% of population, compared to males at 47%. Young people ≤ 25 years (57%) make up most of population in the Local Municipality. The detail for Wards 3, 4 and 5 that forms the catchment area for Ntabamhlophe Clinic, is highlighted in the table below.

Table 1: Population per age groups per ward, INkosi Langalibalele (Imbabazane and uMtshezi) Local Municipality

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Imbabazane										
Ward 001	2010	924	1014	819	2295	1377	**8439**	4542	3897	**8439**
Ward 002	1932	858	936	723	1938	1245	**7632**	4032	3600	**7632**
Ward 003	1893	912	927	693	1800	1170	**7395**	3852	3543	**7395**
Ward 004	2337	1119	1176	816	2427	1353	**9228**	4962	4266	**9228**
Ward 005	1872	801	792	651	1878	1062	**7056**	3672	3384	**7056**
Ward 006	2199	1062	984	816	2313	1206	**8580**	4728	3852	**8580**
Ward 007	1659	780	900	804	2010	1098	**7251**	3810	3441	**7251**
Ward 008	2733	1218	1248	984	2232	1008	**9423**	4923	4500	**9423**

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Ward 009	2718	1236	1293	1023	2763	1314	**10347**	5508	4839	**10347**
Ward 010	3348	1419	1512	1149	3033	1458	**11919**	6477	5442	**11919**
Ward 011	2202	1002	1050	843	2415	1278	**8790**	4788	4002	**8790**
Ward 012	1800	804	867	723	1986	828	**7008**	3711	3297	**7008**
Ward 013	2409	1149	1128	906	2988	1446	**10026**	5262	4764	**10026**
Umtshezi										
Ward 001	2103	918	1002	1017	3249	1224	**9513**	5058	4455	**9513**
Ward 002	1992	996	930	894	2610	945	**8367**	4635	3732	**8367**
Ward 003	1914	978	948	936	3555	1737	**10068**	5256	4812	**10068**
Ward 004	1233	672	711	849	3330	1419	**8214**	4131	4083	**8214**
Ward 005	2742	1287	1038	882	2484	1233	**9666**	5343	4323	**9666**
Ward 006	1800	867	786	741	2388	951	**7533**	4104	3429	**7533**
Ward 007	2655	1245	1065	807	2571	1206	**9549**	5391	4158	**9549**
Ward 008	2940	1332	1251	1140	3153	1527	**11343**	6057	5286	**11343**
Ward 009	1992	906	951	933	3147	975	**8904**	4572	4332	**8904**
	48483	**22485**	**22509**	**19149**	**56565**	**27060**	**196251**	**104814**	**91437**	**196251**
	25%	11%	11%	10%	29%	14%		53%	47%	

Table 2: Youth population per sex and five-year age groups per ward, iNkosi Langalibalele (Imbabazane and uMtshezi) Local Municipality

Ward	Female					Male					
	10-14	15-19	20-24	25-29	30-34	10-14	15-19	20-24	25-29	30-34	
Imbabazane											
Ward 001	462	522	417	387	252	462	492	402	297	225	**3918**
Ward 002	423	459	363	324	222	435	477	360	279	183	**3525**
Ward 003	444	444	324	291	225	468	483	369	258	162	**3468**
Ward 004	612	582	420	393	288	507	594	396	309	225	**4326**
Ward 005	366	387	324	297	231	435	405	327	279	204	**3255**
Ward 006	531	507	441	375	309	531	477	375	303	180	**4029**
Ward 007	393	453	402	294	216	387	447	402	327	216	**3537**
Ward 008	579	615	543	405	258	639	633	441	327	210	**4650**
Ward 009	582	639	531	495	345	654	654	492	414	279	**5085**
Ward 010	699	780	636	567	378	720	732	513	420	291	**5736**
Ward 011	507	519	441	435	291	495	531	402	345	234	**4200**
Ward 012	408	447	378	318	246	396	420	345	303	189	**3450**
Ward 013	546	603	441	435	366	603	525	465	432	315	**4731**
Umtshezi											
Ward 001	435	519	492	504	378	483	483	525	516	309	**4644**
Ward 002	525	471	480	453	324	471	459	414	354	240	**4191**
Ward 003	504	468	465	462	351	474	480	471	426	396	**4497**
Ward 004	357	387	396	381	309	315	324	453	507	375	**3804**
Ward 005	630	504	474	465	333	657	534	408	282	210	**4497**
Ward 006	429	420	381	366	267	438	366	360	288	237	**3552**
Ward 007	657	570	468	453	336	588	495	339	258	198	**4362**

Ward	Female					Male					
	10-14	15-19	20-24	25-29	30-34	10-14	15-19	20-24	25-29	30-34	
Ward 008	684	636	555	537	390	648	615	585	432	309	**5391**
Ward 009	459	492	432	450	366	447	459	501	498	324	**4428**
	11232	**11424**	**9804**	**9087**	**6681**	**11253**	**11085**	**9345**	**7854**	**5511**	**93276**

Figure 3 below reflects the population pyramid for iNkosi Langalibalele Local Municipality. This figure visualises sex (male and female) and age in five-year age bands for this population. It is noted that the biggest group is in the 0-4 years age group, followed by the age group 5-9 and 10-14 years old.

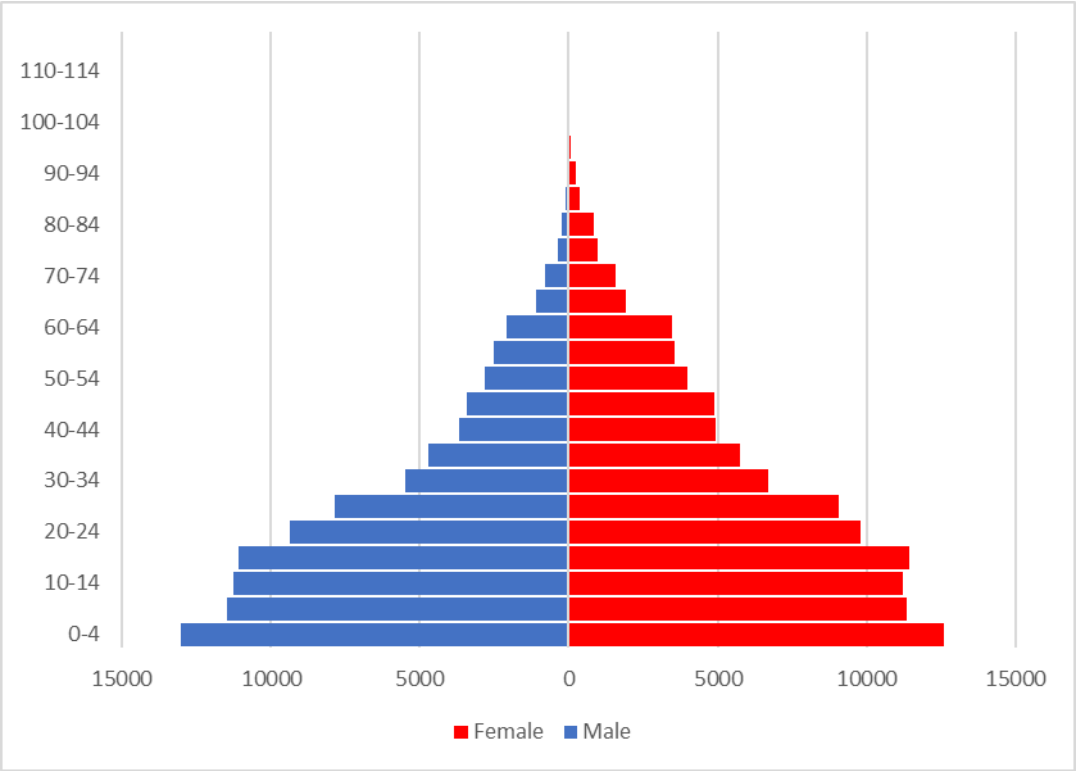

Figure 3: Population Pyramid INkosi Langalibalele Local Municipality

From this population, 36% children and 5% elderly are dependent on the 59% potentially economically active population of the iNkosi Langalibalele Local Municipality (Figure 4).

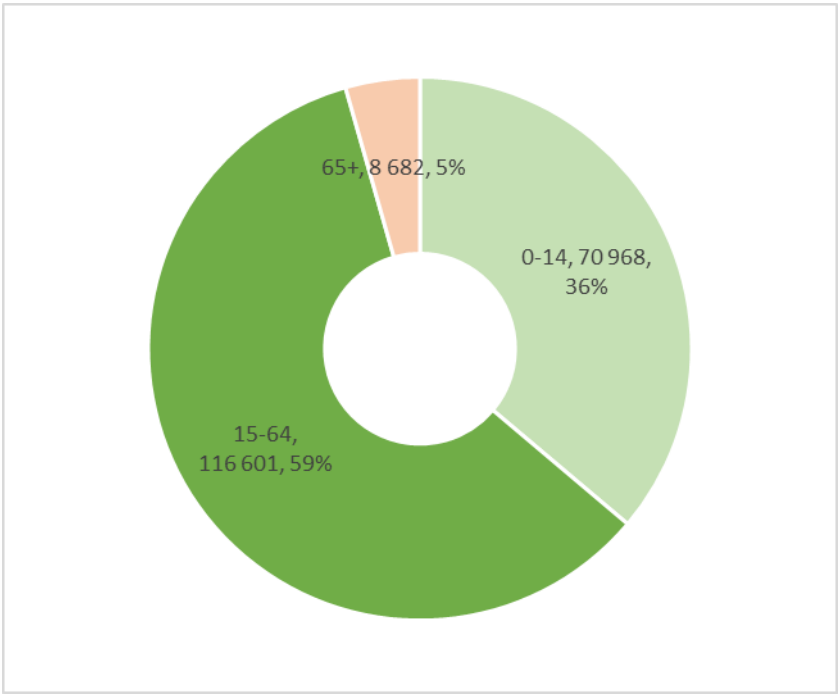

Figure 4: Dependency ratio INkosi Langalibalele Local Municipality (Source Census 2011)

In the catchment area for the Ntabamhlophe Clinic (iNkosi Langalibalele Wards 3, 4 and 5) there is a slight change in the population profile (Figure 5) with a different age group and male to female distribution to that seen in the iNkosi Langalibalele Local Municipality population pyramid in Figure 3.

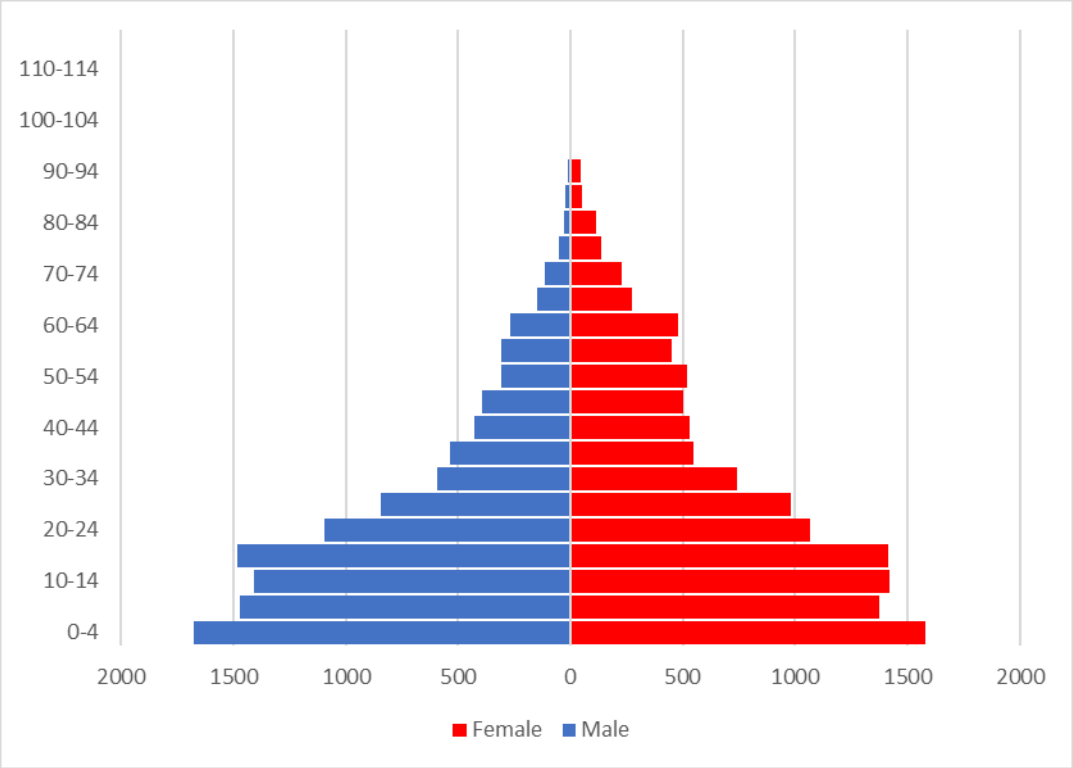

Figure 5: Population Pyramid Ntabamhlophe clinic catchment area (Source Census 2011)

In the same catchment population, 38% children and 5% elderly are dependent on the 57% economically active ages (Figure 6).

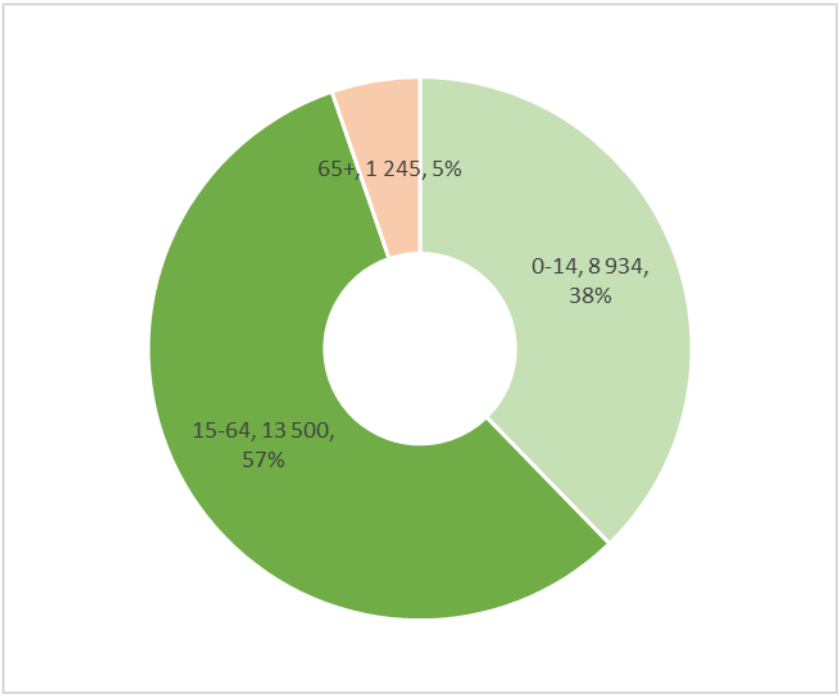

Figure 6: Dependency ratio Ntabamhlophe clinic catchment area (Source Census 2011)

1.3 Population by race

The dominant population group in iNkosi Langalibalele Local Municipality is Black African at 95.6% followed by Asian at 2.5% (detail in Figure 7 and Table 2).

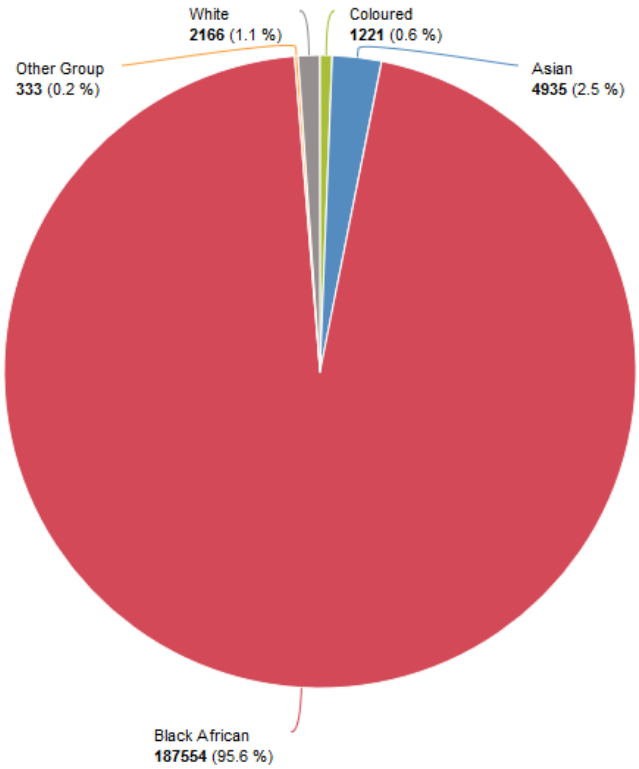

Figure 7: Population group distribution in iNkosi Langalibalele Local Municipality (Source Census 2011)

The detail for Ward 3, 4 and 5 that form the catchment area for Ntabamhlophe Clinic are highlighted in the table below.

Table 3: Ward level population distribution by Race in iNkosi Langalibalele Local Municipality

Ward	Asian	Black African	Coloured	Other	White	Total
Imbabazane						
Ward 001	12	8337	9	9	78	**8445**
Ward 002	3	7602	3		27	**7635**
Ward 003	12	7374	6	3		**7395**
Ward 004	6	9207	3	6	6	**9228**
Ward 005		7020	12	15	6	**7053**
Ward 006	6	8568	3	3		**8580**
Ward 007	6	7233		3		**7242**
Ward 008	9	9387	12		12	**9420**
Ward 009	12	10311	6	3	3	**10335**
Ward 010	6	11883		15	3	**11907**
Ward 011	9	8757	9	3	3	**8781**

Ward	Asian	Black African	Coloured	Other	White	Total
Ward 012	6	6981	3	18	6	**7014**
Ward 013	18	9870	12	6	120	**10026**
Umtshezi						
Ward 001	12	9471	18	3	3	**9507**
Ward 002	9	8346	12	6		**8373**
Ward 003	816	7746	162	57	1293	**10074**
Ward 004	3279	3849	780	138	177	**8223**
Ward 005	15	9582	12	12	36	**9657**
Ward 006	456	7008	57	12	6	**7539**
Ward 007	189	9075	75		204	**9543**
Ward 008	48	11136	9	3	144	**11340**
Ward 009	6	8811	18	18	39	**8892**
Total	**4935**	**187554**	**1221**	**333**	**2166**	**196209**

2. Epidemiological profile

2.1 Causes of death

With the roll out of ART in South Africa, AIDS is now considered a chronic disease since many people living with HIV are living longer. The main causes of death, the uThukela district is TB (%) followed by HIV (xxxx%) (Table 4). The profile would also show five year series to show the trend of deaths over the past 5 years comparing AIDS related deaths and all-cause mortality at a local level.

Table 4: Main cause of deaths in the uThukela District (Source STATSSA)

Cause	Number of deaths	Percent deaths

2.2 HIV

The figures that follow below reflects the HIV positivity rate based on the routine health data collected, collated and reported in health facilities in the uThukela district. The definitions for these indicators can be found in Appendix B.

Due to the small numbers at a local level, it is not included at ward level in this report. See note on small number in Appendix A: Selecting Data for the Profile.

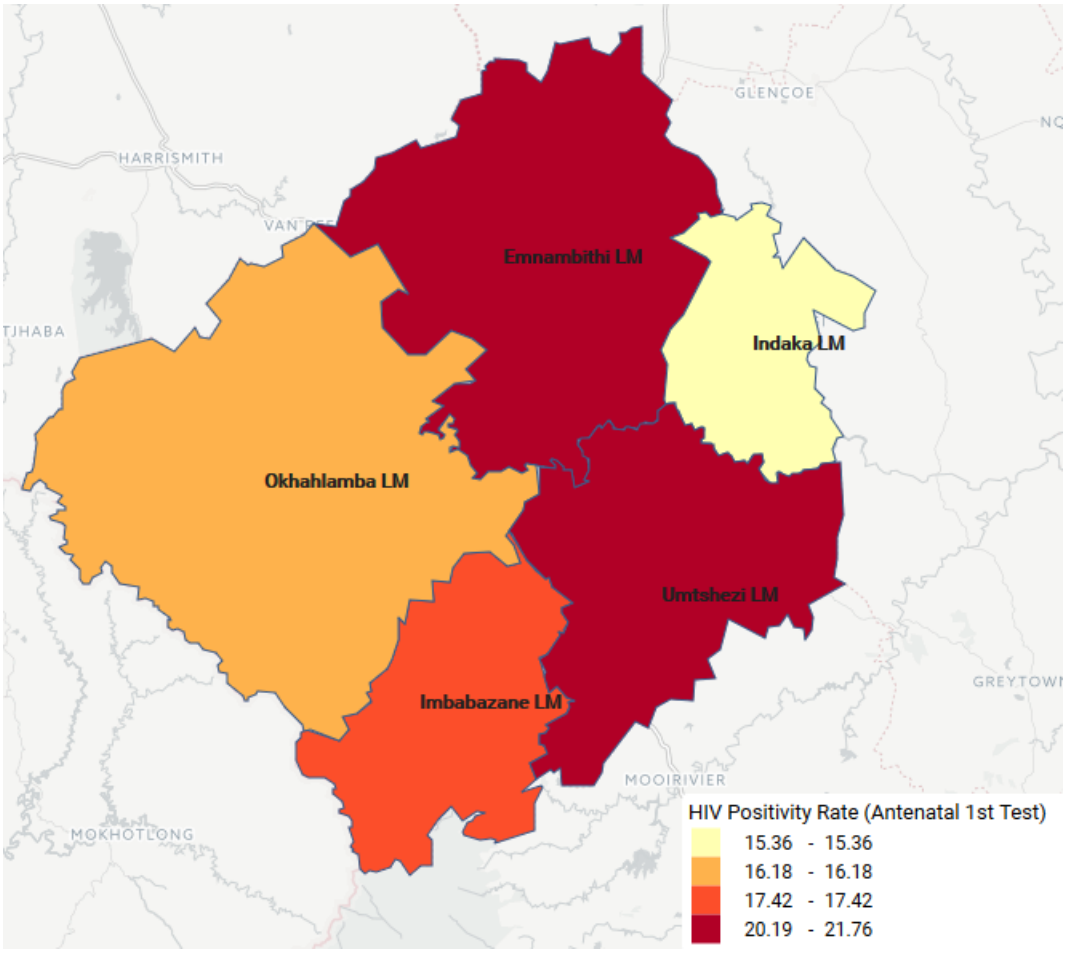

Figure 8: ANC client HIV 1st test positive rate Uthukela district (Source: KZN DHIS 2015)

Table 5: HIV Positivity Rate (Antenatal 1st Test) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **18.5 %**								
	Local Municipality	**2015 : HIV Positivity Rate (Antenatal 1st Test)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	15.36	%	(239	/	1556)	11.86 %	14.25 %
2	kz Okhahlamba Local Municipality	16.18	%	(368	/	2275)	18.25 %	20.84 %
3	kz Imbabazane Local Municipality	17.42	%	(289	/	1659)	14.34 %	15.20 %
4	kz Emnambithi Local Municipality	20.19	%	(786	/	3893)	38.99 %	35.66 %
5	kz Umtshezi Local Municipality	21.76	%	(334	/	1535)	16.57 %	14.06 %

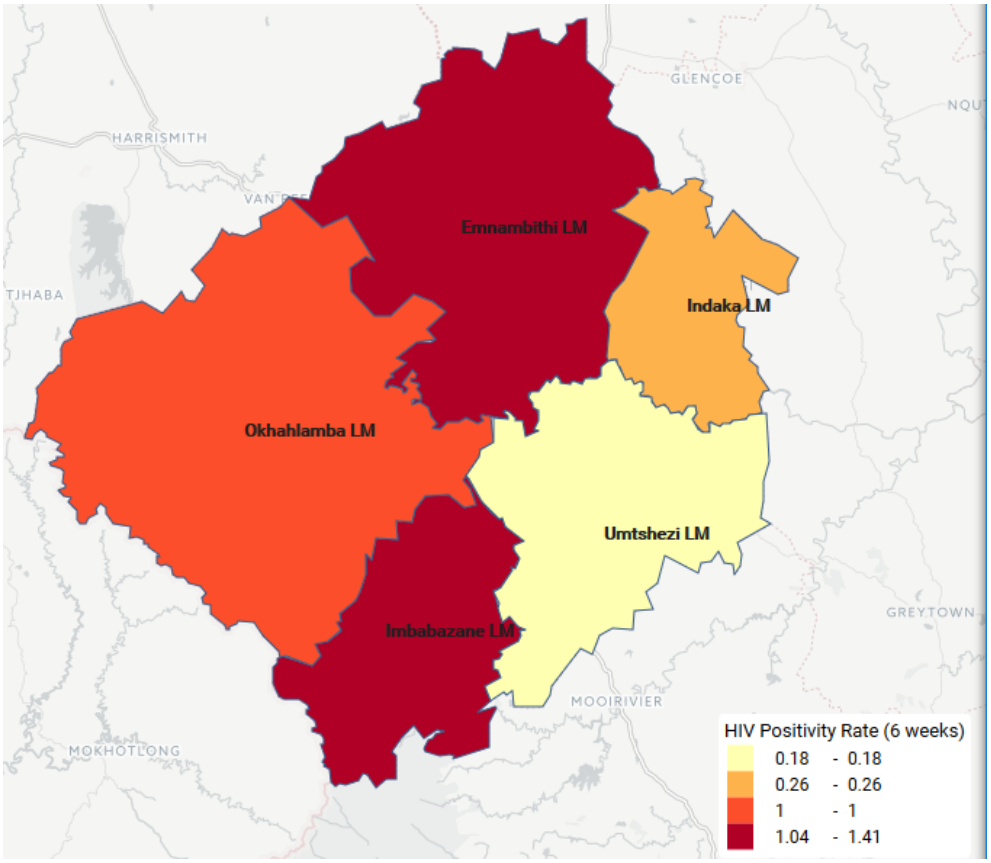

Figure 9: Infant 1st PCR test positive around 6 weeks rate Uthukela district (Source: KZN DHIS 2015)

Table 6: HIV Positivity Rate (6 weeks) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **0.9 %**									
	Local Municipality	**2015 : HIV Positivity Rate (6 weeks)**						**NUM %**	**DEN %**
1	kz Umtshezi Local Municipality	0.18	%	(1	/	544)		3.03 %	15.54 %
2	kz Indaka Local Municipality	0.26	%	(1	/	381)		3.03 %	10.88 %
3	kz Okhahlamba Local Municipality	1	%	(7	/	699)		21.21 %	19.97 %
4	kz Imbabazane Local Municipality	1.04	%	(7	/	672)		21.21 %	19.19 %
5	kz Emnambithi Local Municipality	1.41	%	(17	/	1205)		51.52 %	34.42 %

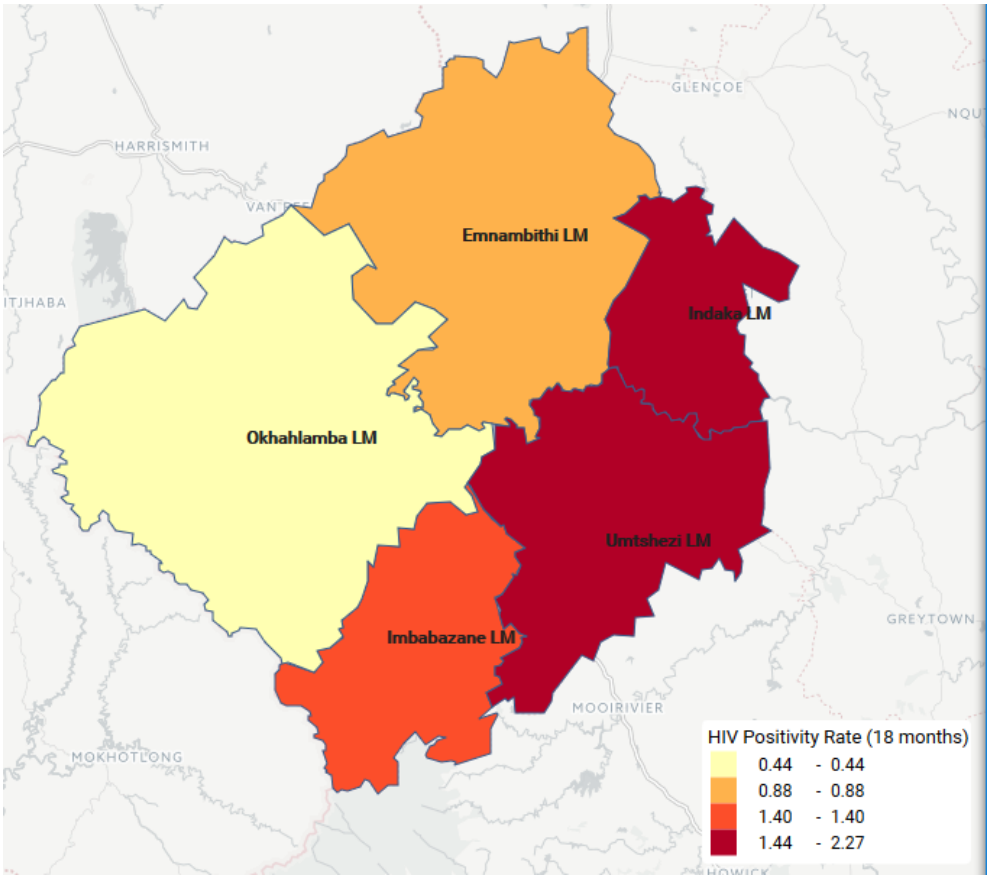

Figure 10: Infant rapid HIV test around 18 months positive rate Uthukela district (Source: KZN DHIS 2015)

Table 7: HIV Positivity Rate (18 months) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **1.1 %**								
	Local Municipality	**2015 : HIV Positivity Rate (18 months)**					**NUM %**	**DEN %**
1	kz Okhahlamba Local Municipality	0.44	%	(7	/	1582)	10.45 %	26.10 %
2	kz Emnambithi Local Municipality	0.88	%	(16	/	1824)	23.88 %	30.09 %
3	kz Imbabazane Local Municipality	1.40	%	(15	/	1071)	22.39 %	17.67 %
4	kz Indaka Local Municipality	1.44	%	(12	/	834)	17.91 %	13.76 %
5	kz Umtshezi Local Municipality	2.27	%	(17	/	750)	25.37 %	12.37 %

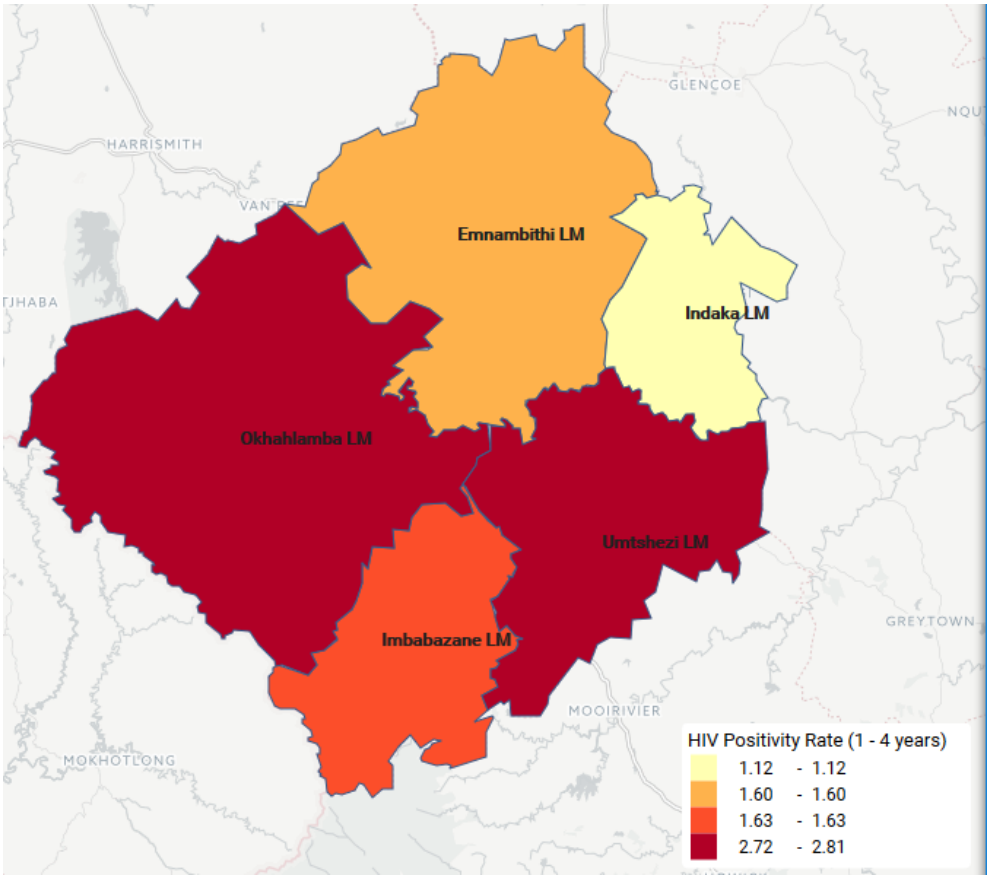

Figure 11: HIV test positive child 12-59 months rate Uthukela district (Source: KZN DHIS 2015)

Table 8: HIV Positivity Rate (12-59 months) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **1.9 %**								
	Local Municipality	**2015 : HIV Positivity Rate (1 - 4 years)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	1.12	%	(19	/	1693)	9.27 %	15.77 %
2	kz Emnambithi Local Municipality	1.60	%	(60	/	3750)	29.27 %	34.93 %
3	kz Imbabazane Local Municipality	1.63	%	(30	/	1839)	14.63 %	17.13 %
4	kz Umtshezi Local Municipality	2.72	%	(28	/	1031)	13.66 %	9.60 %
5	kz Okhahlamba Local Municipality	2.81	%	(68	/	2423)	33.17 %	22.57 %

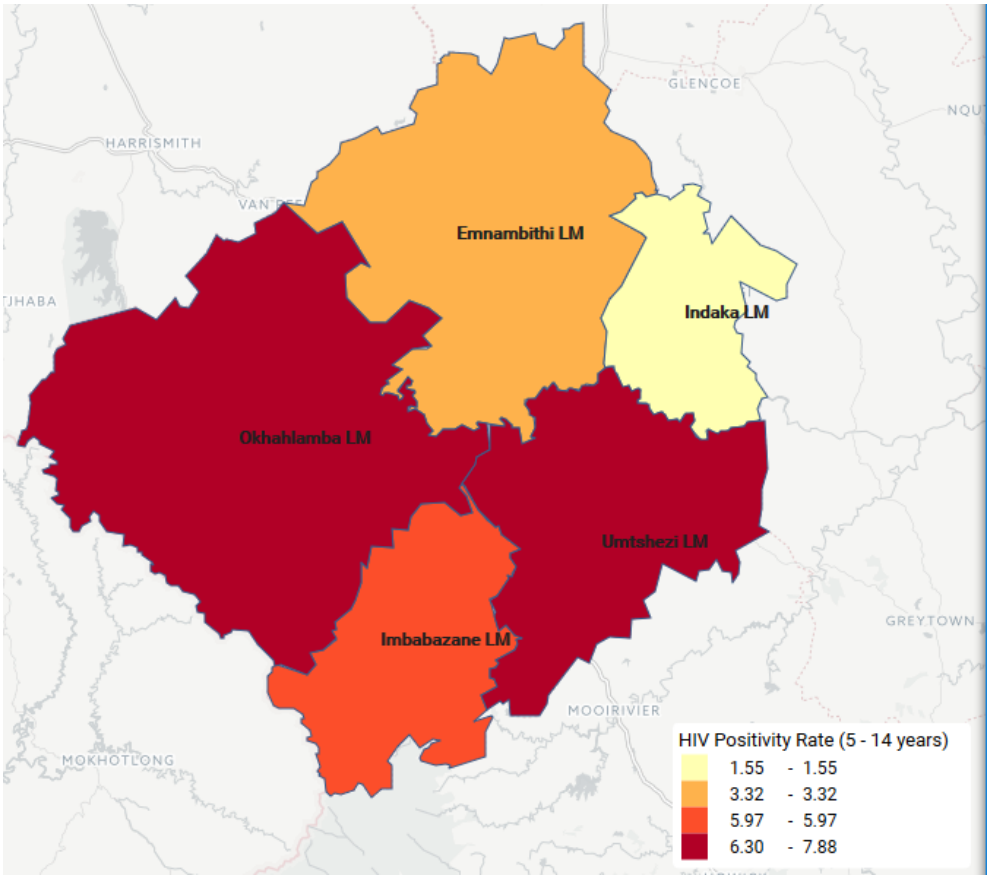

Figure 12: HIV test positive child 5-14 years rate Uthukela district (Source: KZN DHIS 2015)

Table 9: HIV Positivity Rate (5 - 14 years) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **4.7 %**								
	Local Municipality	**2015 : HIV Positivity Rate (5 - 14 years)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	1.55	%	(16	/	1032)	6.18 %	18.75 %
2	kz Emnambithi Local Municipality	3.32	%	(67	/	2017)	25.87 %	36.65 %
3	kz Imbabazane Local Municipality	5.97	%	(37	/	620)	14.29 %	11.27 %
4	kz Umtshezi Local Municipality	6.30	%	(22	/	349)	8.49 %	6.34 %
5	kz Okhahlamba Local Municipality	7.88	%	(117	/	1485)	45.17 %	26.99 %

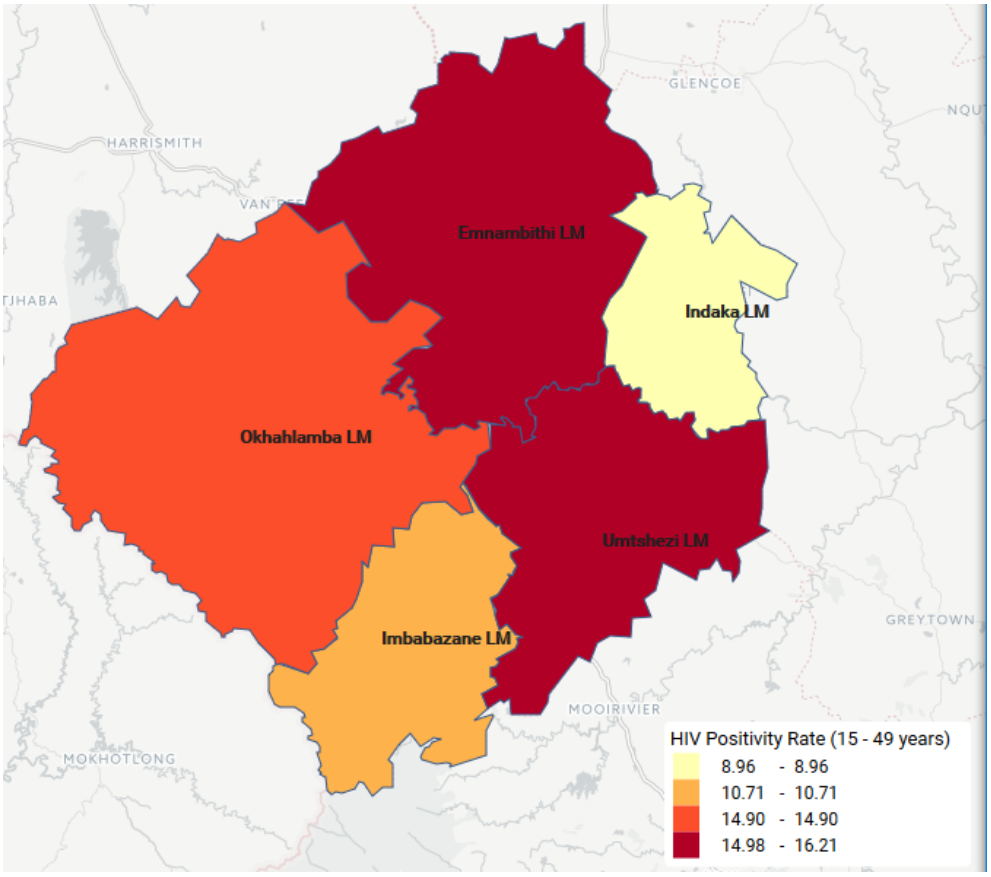

Figure 13: HIV prevalence amongst client tested 15-49 years rate Uthukela district (Source: KZN DHIS 2015)

Table 10: HIV Positivity Rate (15 - 49 years) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **13.7 %**								
	Local Municipality	**2015 : HIV Positivity Rate (15 - 49 years)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	8.96	%	(1031	/	11509)	9.14 %	13.95 %
2	kz Imbabazane Local Municipality	10.71	%	(1275	/	11908)	11.30 %	14.43 %
3	kz Okhahlamba Local Municipality	14.90	%	(2392	/	16051)	21.20 %	19.46 %
4	kz Emnambithi Local Municipality	14.98	%	(4754	/	31728)	42.13 %	38.46 %
5	kz Umtshezi Local Municipality	16.21	%	(1833	/	11307)	16.24 %	13.70 %

2.3 TB

The figures that follow reflect the TB burden based on the routine health data collected, collated and reported in health facilities in the uThukela district. The definitions for these indicators can be found in Appendix B. Due to the small numbers at a local level, it is not included at ward level in this report. See note on small number in Appendix A: Selecting Data for the Profile.

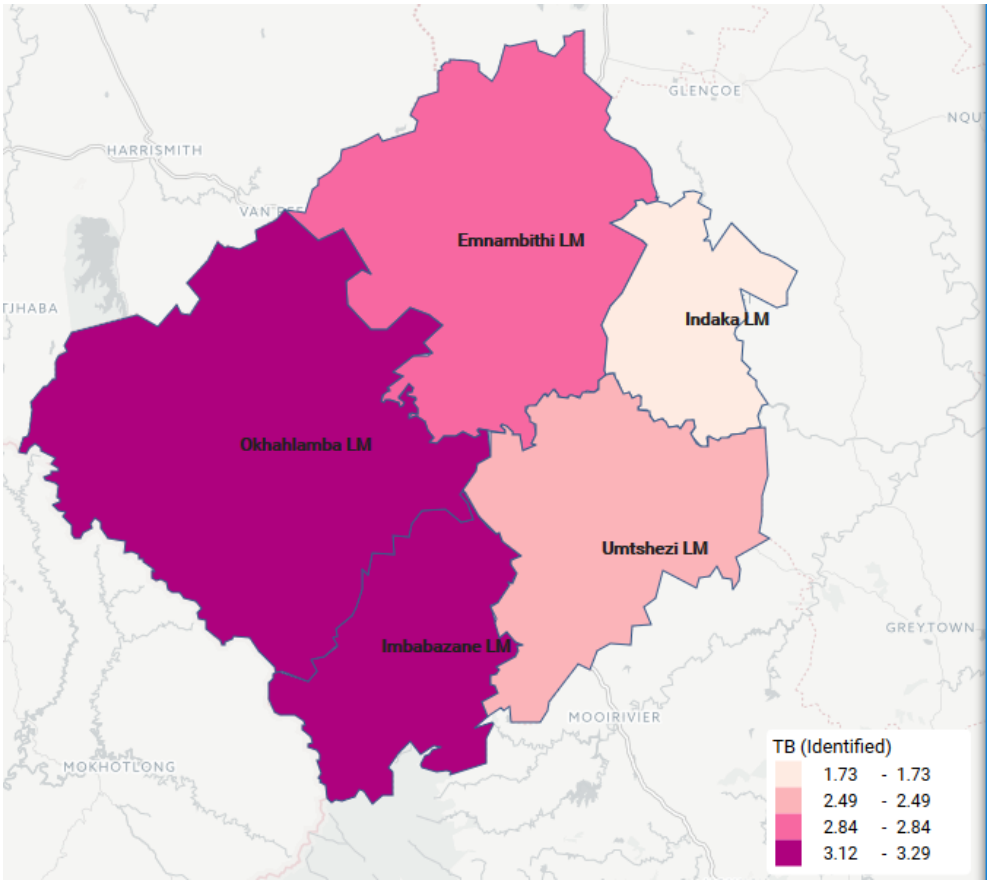

Figure 14: TB (pulmonary) case finding index Uthukela district (Source: KZN DHIS 2015)

Table 11: TB (pulmonary) case finding index Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **2.8 %**								
	Local Municipality	**2015 : TB (Identified)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	1.73	%	(3422	/	197494)	9.17 %	14.56 %
2	kz Umtshezi Local Municipality	2.49	%	(4310	/	172829)	11.54 %	12.74 %
3	kz Emnambithi Local Municipality	2.84	%	(15680	/	551726)	42 %	40.67 %
4	kz Okhahlamba Local Municipality	3.12	%	(6697	/	214530)	17.94 %	15.82 %
5	kz Imbabazane Local Municipality	3.29	%	(7228	/	219895)	19.36 %	16.21 %

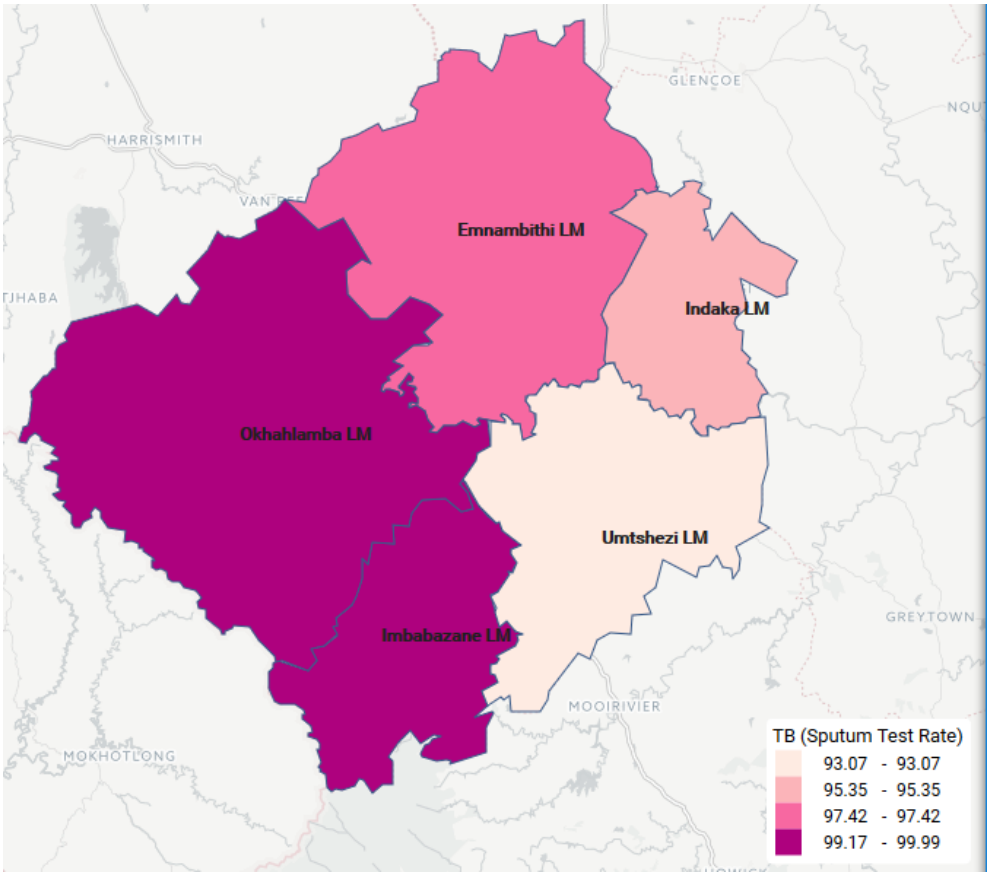

Figure 15: TB suspect sputum test rate Uthukela district (Source: KZN DHIS 2015)

Table 12: TB (Sputum Test Rate) Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **97.5 %**								
	Local Municipality	**2015 : TB (Sputum Test Rate)**					**NUM %**	**DEN %**
1	kz Umtshezi Local Municipality	93.07	%	(4310	/	4631)	11.54 %	12.09 %
2	kz Indaka Local Municipality	95.35	%	(3422	/	3589)	9.17 %	9.37 %
3	kz Emnambithi Local Municipality	97.42	%	(15680	/	16095)	42 %	42.03 %
4	kz Okhahlamba Local Municipality	99.17	%	(6697	/	6753)	17.94 %	17.63 %
5	kz Imbabazane Local Municipality	99.99	%	(7228	/	7229)	19.36 %	18.88 %

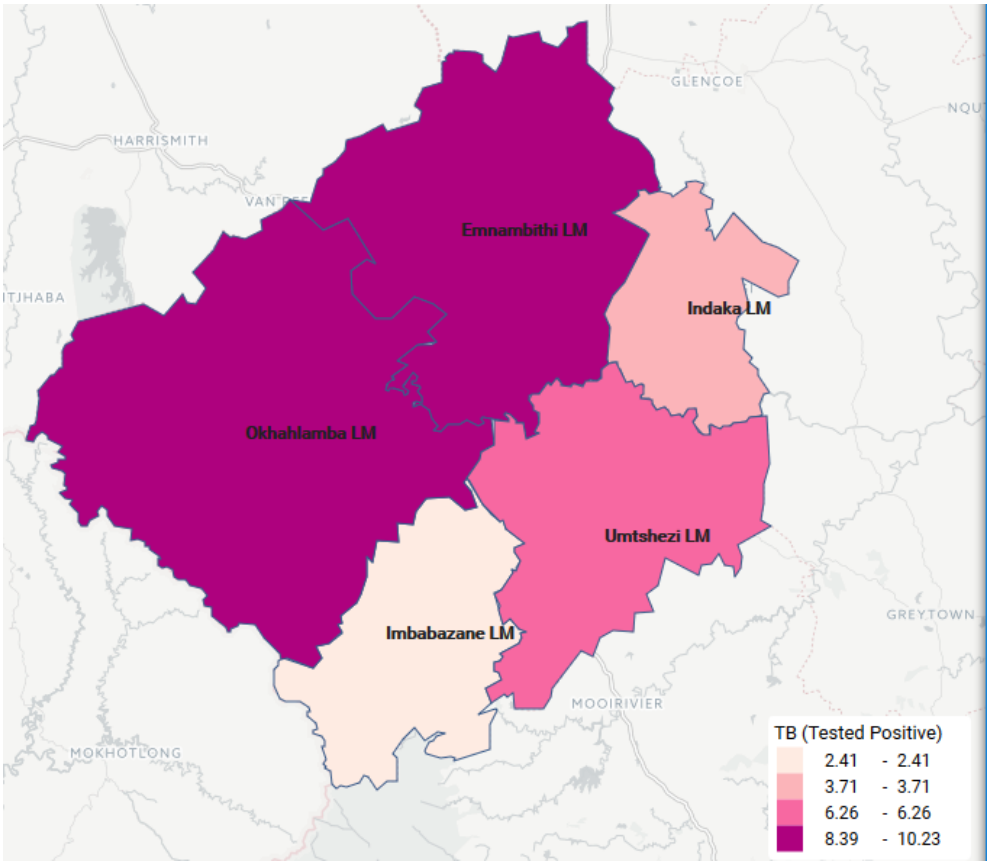

Figure 16: TB suspect smear positive rate Uthukela district (Source: KZN DHIS 2015)

Table 13: TB suspect smear positive rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **6.9 %**									
	Local Municipality	**2015 : TB (Tested Positive)**						**NUM %**	**DEN %**
1	kz Imbabazane Local Municipality	2.41	%	(174	/	7228)		6.77 %	19.36 %
2	kz Indaka Local Municipality	3.71	%	(127	/	3422)		4.94 %	9.17 %
3	kz Umtshezi Local Municipality	6.26	%	(270	/	4310)		10.50 %	11.54 %
4	kz Emnambithi Local Municipality	8.39	%	(1316	/	15680)		51.17 %	42 %
5	kz Okhahlamba Local Municipality	10.23	%	(685	/	6697)		26.63 %	17.94 %

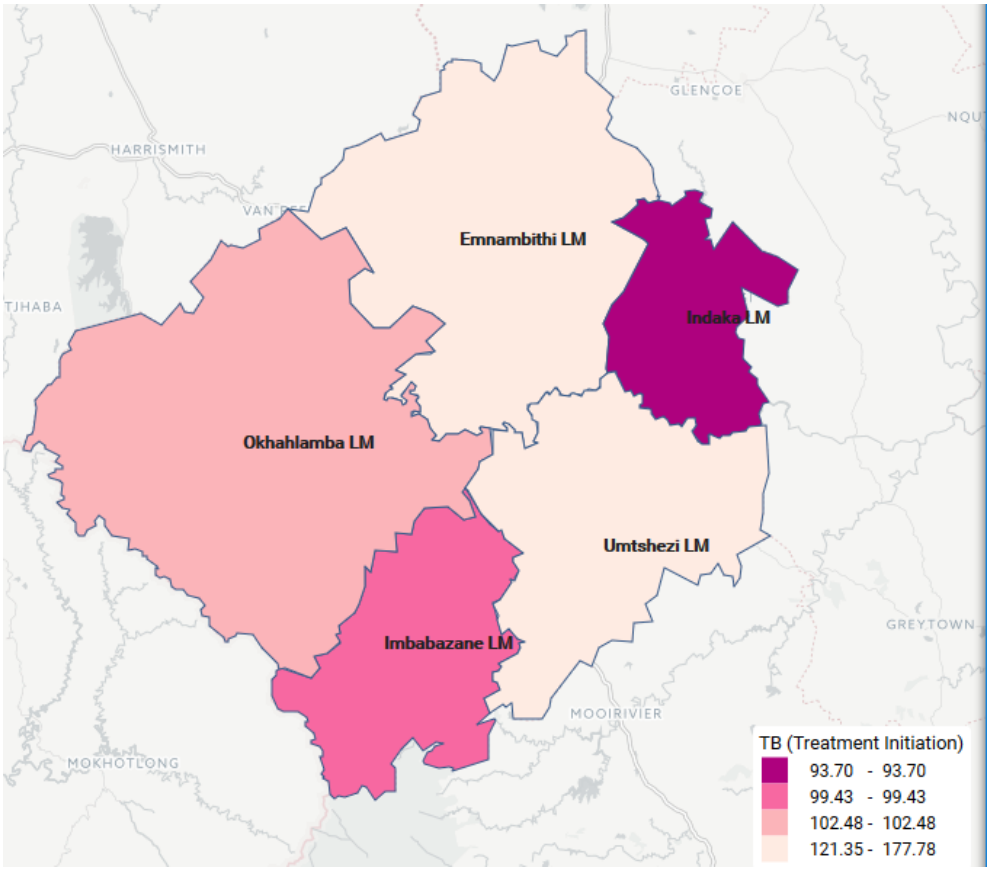

Figure 17: TB suspect treatment initiation rate Uthukela district (Source: KZN DHIS 2015)

Table 14: TB suspect treatment initiation rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **119.4 %**									
	Local Municipality	**2015 : TB (Treatment Initiation)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	93.70	%	(119	/	127)	3.87 %	4.94 %
2	kz Imbabazane Local Municipality	99.43	%	(173	/	174)	5.63 %	6.77 %
3	kz Okhahlamba Local Municipality	102.48	%	(702	/	685)	22.86 %	26.63 %
4	kz Emnambithi Local Municipality	121.35	%	(1597	/	1316)	52 %	51.17 %
5	kz Umtshezi Local Municipality	177.78	%	(480	/	270)	15.63 %	10.50 %

2.4 STIs

Sexually transmitted infections (STIs) are a major risk factor to the human immunodeficiency virus (HIV) epidemic[1]. The presence of a sexually transmitted infection, such as syphilis, gonorrhoea, or herpes simplex virus infection, greatly increases the risk of acquiring or transmitting HIV infection (by two to three times, in some populations). The HIV-1 infected persons with STIs are at increased risk of transmitting HIV-1 because genital tract shedding of HIV-1 is elevated in the presence of genital tract inflammation[23]. v. In 2014, HIV co-infection amongst STI patients remained relatively high with a HIV co-infection of 30.1% [45] among those with male urethritis syndrome, 40.3% among those with vaginal discharge syndrome and 46.3% among those with genital ulcer syndrome[6] Location is also a factor. Ramjee et.al confirms the high prevalence and incidence of STIs among women living in rural and urban communities of KwaZulu-Natal. Therefore, STI control programmes need to be embedded in HIV care and treatment programmes and vice-versa to achieve optimal benefit in ameliorating the impact of HIV, AIDS and STIs.

The figure below reflects the STI burden based on the routine health data collected, collated and reported in health facilities in the uThukela district. At this point the most robust data is for Male urethritis syndrome rate. As the data quality for other STI routine health indicators improve, it will be included in updated profiles. The definitions for this indicator can be found in Appendix B. Due to the small numbers at a local level, it is not included at ward level in this report. See note on small number in Appendix A: Selecting Data for the Profile.

[1] Naidoo, S., Wand, H., & Ramjee, G. (2014). High prevalence and incidence of sexually transmitted infections among women living in Kwazulu-Natal, South Africa. *AIDS Research and Therapy*, 11–31. http://doi.org/10.1186/1742-6405-11-31

[2] Cohen, M., Hoffman, I., Royce, R., Kazembe, P., Dyer, J., & Daly, C. (1997). Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. AIDSCAP Malawi Research Group. *Lancet*, *349*(9096), 1868–73.

[3] Johnson, L., & Lewis, D. (2008). The effect of genital tract infections on HIV-1 shedding in the genital tract: a systematic review and meta-analysis. *Sex Transm Dis*, *35*(11), 946–59.

[4] Cohen, M., Hoffman, I., Royce, R., Kazembe, P., Dyer, J., & Daly, C. (1997). Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. AIDSCAP Malawi Research Group. *Lancet*, *349*(9096), 1868–73.

[5] Johnson, L., & Lewis, D. (2008). The effect of genital tract infections on HIV-1 shedding in the genital tract: a systematic review and meta-analysis. *Sex Transm Dis*, *35*(11), 946–59.

[6] Naidoo, S., Wand, H., & Ramjee, G. (2014). High prevalence and incidence of sexually transmitted infections among women living in Kwazulu-Natal, South Africa. *AIDS Research and Therapy*, 11–31. http://doi.org/10.1186/1742-6405-11-31

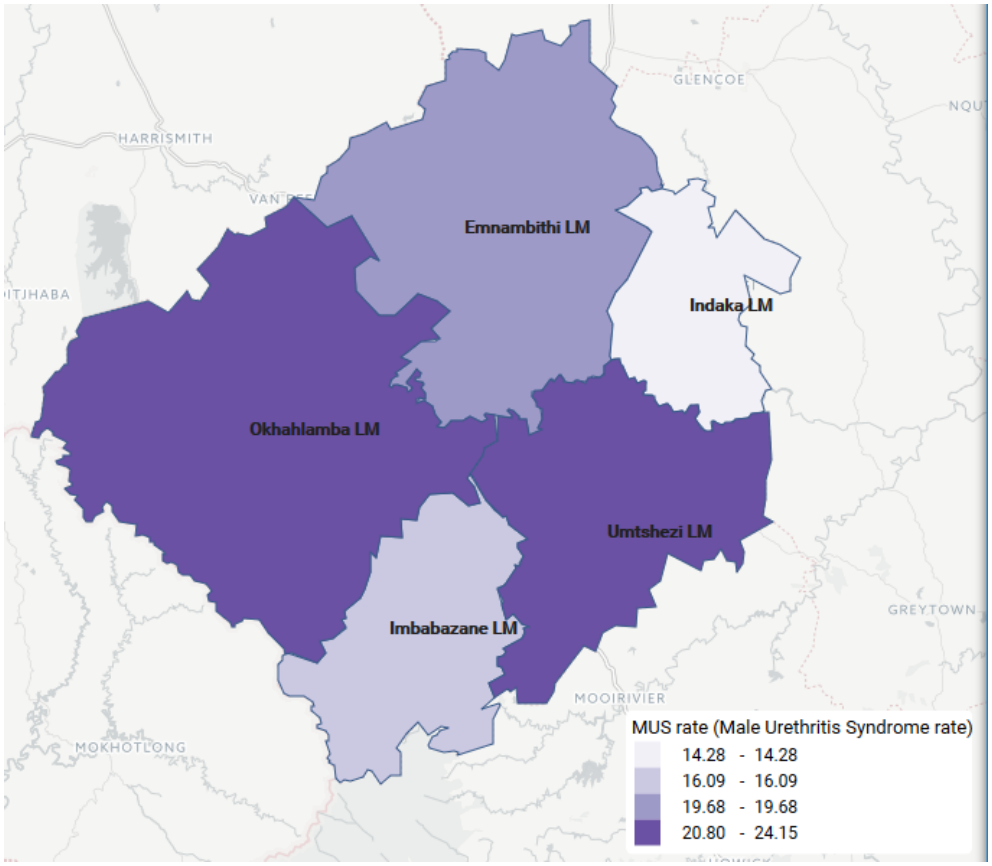

Figure 18: Male urethritis syndrome rate Uthukela district (Source: KZN DHIS 2015)

Table 15: Male urethritis syndrome rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **19.4 %**								
	Local Municipality	**2015: MUS rate (Male Urethritis Syndrome rate)**					**NUM %**	**DEN %**
1	kz Indaka Local Municipality	14.28	%	(411	/	2879)	8.92 %	12.10 %
2	kz Imbabazane Local Municipality	16.09	%	(439	/	2729)	9.52 %	11.47 %
3	kz Emnambithi Local Municipality	19.68	%	(2269	/	11530)	49.23 %	48.46 %
4	kz Umtshezi Local Municipality	20.80	%	(726	/	3490)	15.75 %	14.67 %
5	kz Okhahlamba Local Municipality	24.15	%	(764	/	3163)	16.58 %	13.29 %

3. Associated risk profile

3.1 Biomedical Profile

3.1.1 HIV Testing

Awareness of one's HIV status through HIV Testing Services (HTS) is pivotal to accessing prevention, care services, and ARV treatment which mitigate the impact of HIV [7]. It is therefore important to determine the success of routine HIV testing and counselling by the department of health. From the National 2013 HIV testing campaign, nearly two-thirds of respondents (65.5%) indicated that they had tested for HIV with females reporting higher rates of testing (71.5%) than of males (59%)[8]. 78% of adults aged 25–49 years reported testing compared to youth aged 15–24 years (50.6%) and the elderly (aged 50 years and older) (54.8%)[9].

- HIV Testing is available in the community through the different service providers.

3.1.2 Circumcision

Voluntary medical male circumcision (VMMC) is being scaled up in the country because it has been shown to be partially effective in reducing HIV infection among males[10]. Nationally, there are reported about 46.4% circumcisions, with a significant lower percentage of men aged 15–19 years compared to all age groups. High percentage of black Africans (52.4%) reported that they were circumcised compared to the other three race groups[11].

Stakeholder and community engagement workshops revealed the following about ***circumcision*** in the area:

- Medical circumcision is the method most used and well known in this community. It is also considered to be the safest;
- Traditional circumcision rituals encourage good behaviour in growing young men, in order for them to become men of substance in the future;
- Medical circumcision in health facilities is most common, as there are awareness campaigns in schools, where parents' permission is acquired;
- Young boys seem to be happy to go through circumcision at health facilities;
- According to the faith of the Church of Nazareth, circumcision is carried out; and
- In terms of cultural/traditional beliefs, some people do not believe in circumcision.

[7] Shisana, O., T. Rehle, et al. (2014). South African National HIV Prevalence, Incidence and Behaviour Survey,2012. Cape Town, HSRC Press.
[8] ibid
[9] ibid
[10] SANAC. 2011. NSP 2012–2016
[11] Shisana, O., T. Rehle, et al. (2014). South African National HIV Prevalence, Incidence and Behaviour Survey,2012. Cape Town, HSRC Press.

3.1.3 ARV treatment

Stakeholder and community engagement workshops revealed the following about ***ARV treatment*** in the area:

- ARV Treatment is available in the community;
- There isn't enough emphasis placed on the importance of adherence;
- Some people give away, or sell their medication;
- Some people fail to adhere due to lack of food, as a result of unemployment;
- At times, ARVs are not available at clinics. Therefore, those who live too far away from the hospital are not able to collect their treatment;
- Some people provide the clinics with the wrong information, which makes it difficult to follow up with them. At other times, people move to a different address without notifying the clinic;
- Sometimes clinics lose patient files, which can also make it difficult to follow up on patients;
- The type of area makes it difficult for some people to reach clinics to collect their treatment; and
- Some people avoid going to health facilities, and prefer to go to traditional healers.

3.1.4 PEP and PrEP

The following was discussed around ***post-exposure antiretroviral prophylaxis (PEP) and pre-exposure antiretroviral prophylaxis (PrEP) during*** the stakeholder and community engagement workshops in the area:

- PrEP is not available in the clinics. There is no knowledge about what it is, or who uses it; and
- PEP is available at government facilities within the community. People are aware that the treatment needs to be administered within 72 hours, in the event of a rape, assisting the injured, or accidental injection while working as a nurse.

3.1.5 Lubricant

During the stakeholder and community engagement workshops it was noted that in general the community do not have access and do not know about ***lubricants***.

3.2 Behaviour that can influence risk for HIV infection

The reported high incidence among young women aged women aged 15–24 years (2.54; 2.04–3.04) approximately 116 000 new infections compared to young men (0.55; 0.45–0.65) approximately 26 000 new infections[12] calls for need to address the associated social factors such as age-disparate relationships, particularly at a much local level. However, data on factors influencing risk of HIV infection e.g. condom use, multiple sexual partnerships, intergenerational sex, transactional sex, risky sexual practices (anal sex) are not routinely collected. Such data are mostly obtained from independent behavioural surveys[13], and are reported at provincial level which is much higher that district, Local Municipalities, and high burden areas. There is need for the department of health to devise approaches to routinely collect quantitative data on sexual risk behaviours in identified local levels and/or high burden areas.

3.2.1 HIV Knowledge

The following was discussed around ***HIV knowledge*** during the stakeholder and community engagement workshops in the area:

- People are well informed about HIV, but they are deliberately ignorant as they do not want to confront the reality of the illness and how it will impact their lives;
- However, people who live in outlying areas where there are no fieldworkers to raise awareness, are not well informed about HIV;
- The issue of sharing of instruments like razor blades between clients during ritual cutting ceremonies can contribute to the spread of HIV;
- At times, people are afraid to disclose their status to others or to discuss the issue as they fear discrimination from their community;
- There is still unprotected sex happening in the communities (sex without a condom), even though people are aware that this increases the risk of infection;
- People are not willing to take on abstinence as a lifestyle choice;
- Some people believe that they can be cured of HIV by eating certain foods;
- At times, when people have been on treatment for a certain length of time, and they start to feel healthy again, they default on their medication; and
- Some people believe that there are traditional healers and religious leaders who are able to cure HIV.

[12] Shisana, O., T. Rehle, et al. (2014). South African National HIV Prevalence, Incidence and Behaviour Survey,2012. Cape Town, HSRC Press.
[13] ibid

3.2.2 Sexual risky behaviours

The following was discussed around ***risky sexual behaviour*** during the stakeholder and community engagement workshops in the area:

- People enter into relationships with multiple partners at the same time. Sometimes it is because they are already HIV positive and are seeking revenge by spreading it to others;
- When people are under the influence of alcohol in taverns, they tend to engage in unsafe sex, as they do not think clearly while they are intoxicated;
- The media is seen as perpetuating sexual curiosity as there does not seem to be enough monitoring of the content that is accessible to young and old people. This is seen as placing temptation in front of people who will then want to practice what they have observed on the television.
- There is a lot of undisclosed sex work, due to lack of employment opportunities and poverty. Males and females enter in to relationships to obtain money or material goods. There are "blessers" in the community who entice people with money, and can then demand sex without the use of protection; and
- In the area, there are few employment opportunities, as a result, some women exchange sexual favours in the hopes of getting employment.

3.2.3 Substance abuse

Men and women often frequent taverns as there are no other forms of entertainment, as well as a high level of unemployment. Once they are intoxicated, they engage in unprotected sex which can lead to them engaging in sex without using protection. This can also cause them to default on their treatment.

3.2.4 Condoms

In Figure 19 and Figure 20 the condom distribution for females and males (annualised) are reflected at Local Municipality level in uThukela district. The definitions for these indicators can be found in Appendix B: Terms, Definitions and calculations. Due to the small numbers at a local level, it is not included at ward level in this report. See note on small number in Appendix A: Selecting Data for the Profile.

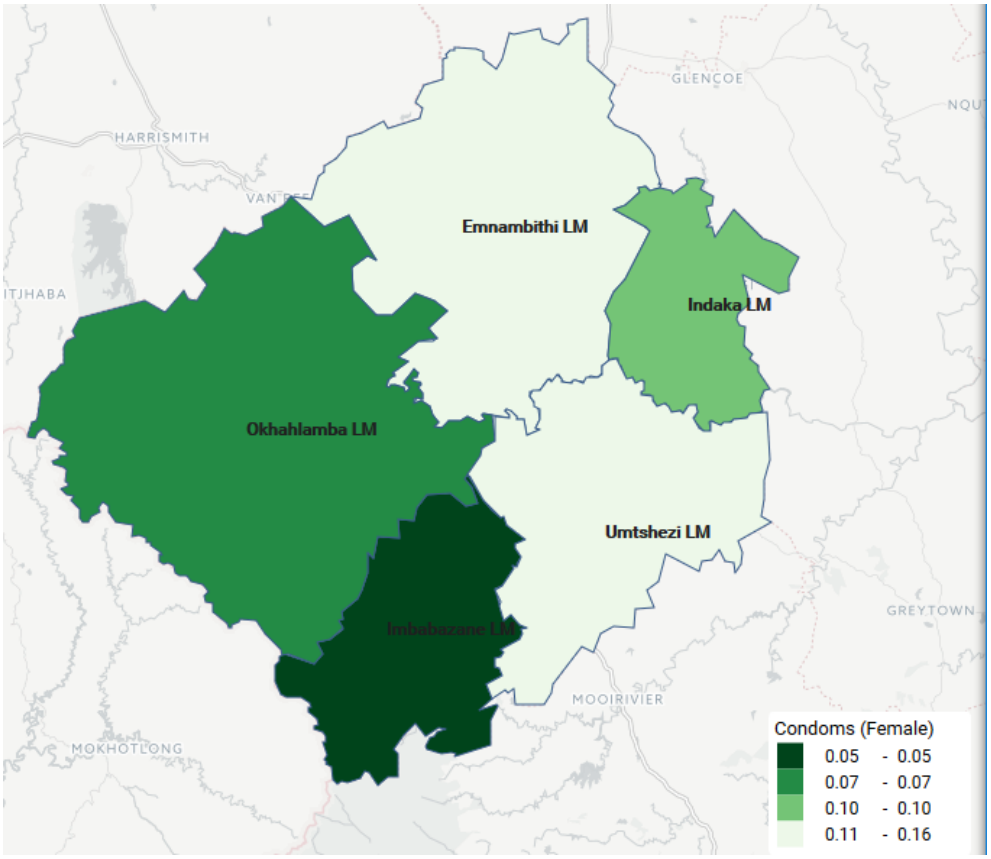

Figure 19: Female condom distribution rate Uthukela district (Source: KZN DHIS 2015)

Table 16: Female condom distribution rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **9.9 No**								
	Local Municipality	**2015 : Condoms (Female)**					**NUM %**	**DEN %**
1	kz Imbabazane Local Municipality	0.05	No	(26112	/	510084)	8.59 %	16.63 %
2	kz Okhahlamba Local Municipality	0.07	No	(43335	/	584640)	14.25 %	19.07 %
3	kz Indaka Local Municipality	0.10	No	(43568	/	452340)	14.33 %	14.75 %
4	kz Emnambithi Local Municipality	0.11	No	(128121	/	1126548)	42.14 %	36.74 %
5	kz Umtshezi Local Municipality	0.16	No	(62890	/	392856)	20.69 %	12.81 %

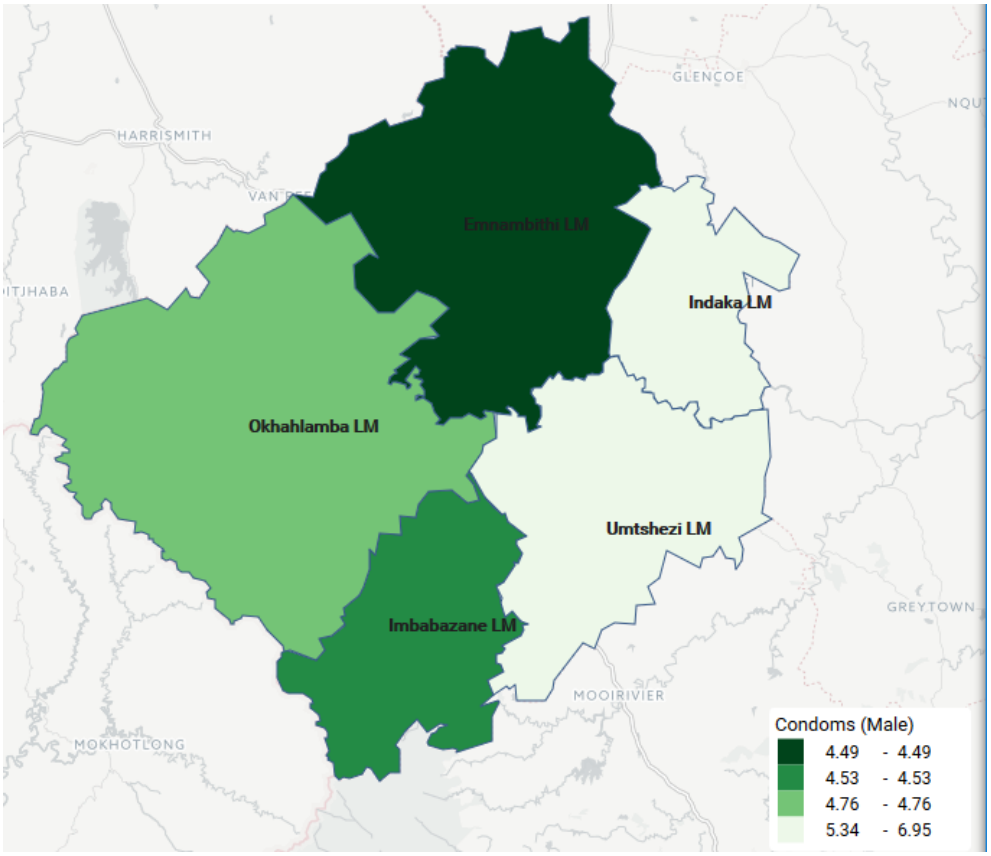

Figure 20: Male condom distribution (Source: KZN DHIS 2015)

Table 17: Male condom distribution rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **497.6 No**									
	Local Municipality	**2015 : Condoms (Male)**						**NUM %**	**DEN %**
1	kz Emnambithi Local Municipality	4.49	No	(4168640	/	928872)		34.94 %	38.74 %
2	kz Imbabazane Local Municipality	4.53	No	(1817152	/	401328)		15.23 %	16.74 %
3	kz Okhahlamba Local Municipality	4.76	No	(2147988	/	450840)		18 %	18.80 %
4	kz Indaka Local Municipality	5.34	No	(1616796	/	303000)		13.55 %	12.64 %
5	kz Umtshezi Local Municipality	6.95	No	(2180916	/	313908)		18.28 %	13.09 %

Stakeholder and community engagement workshops revealed the following about ***condoms use and availability*** in the area:

- Male condoms are available everywhere, including in clinics;
- People did not like the condoms that were available long ago (choice condom). However, the more recent varieties have been more well received;
- Women do not use female condoms as they feel that they are not user friendly. In addition to that, there is the possibility that the man may not want to engage in sex even when the woman has worn the condom; and
- Female condoms are not as widely available as male condoms, and there isn't enough information available about how to use them correctly.

3.2.5 Key and vulnerable populations

Figure 21 is a reflection of under 18-year-old girls that deliver in facilities. This is a proxy for teenage pregnancies in the community. The indicator definition is included in Appendix B. Due to the small numbers at a local level, it is not included at ward level in this report. See note on small number in Appendix A: Selecting Data for the Profile.

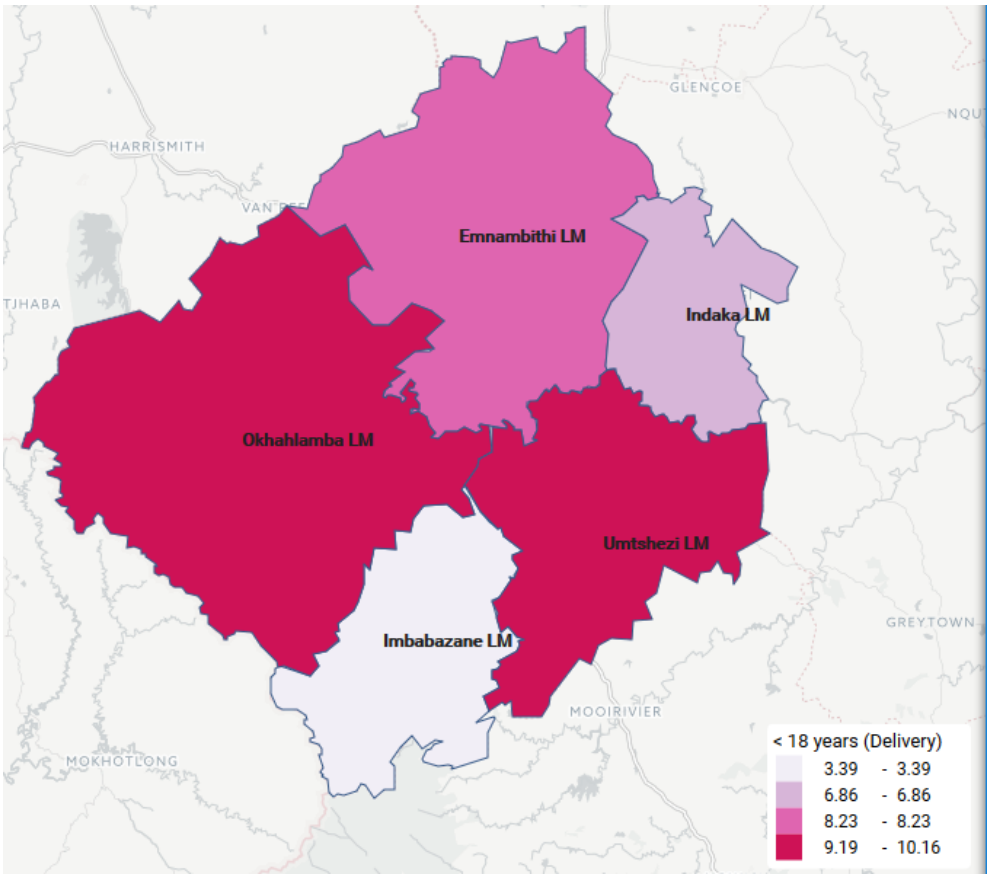

Figure 21: Teenage Pregnancy rate Uthukela district (Source: KZN DHIS 2015)

Table 18: Teenage Pregnancy rate Uthukela district (Source: KZN DHIS 2015 report 1 August 2017)

KZ UTHUKELA DISTRICT MUNICIPALITY: **8.6 %**								
	Local Municipality	**2015 : < 18 years (Delivery)**					**NUM %**	**DEN %**
1	kz Imbabazane Local Municipality	3.39	%	(26	/	768)	2.49 %	6.29 %
2	kz Indaka Local Municipality	6.86	%	(7	/	102)	0.67 %	0.84 %
3	kz Emnambithi Local Municipality	8.23	%	(508	/	6173)	48.66 %	50.57 %
4	kz Okhahlamba Local Municipality	9.19	%	(205	/	2231)	19.64 %	18.28 %
5	kz Umtshezi Local Municipality	10.16	%	(298	/	2933)	28.54 %	24.03 %

Table 19 reflects different discussions during the community engagement that relates to key and vulnerable populations specifically.

Table 19: Key and vulnerable population groups

Key and vulnerable population group	Stakeholder and community feedback
Young women	Sometimes a young girl will have a partner who is older and provides for her financially, as well as a partner of the same age. If she does not use condoms with either of them, it can increase the risk of infection
Youth	There are young people who live on their own and they can fall victim to rape, or even being used as sex slaves.
Sex workers	Although there is knowledge about the existence of sex workers, they are working in secret.
Orphans and vulnerable children	There are orphans in the area, and sometimes they fall victim to men who offer to provide them with food and other necessities in exchange for sex. In homes where there is no adult supervision, young people will tend to gather and engage in risky sexual behaviour
People with disability	Disabled people are abused sexually in some cases. At other times, disabled people themselves seek out sex as they feel a physical need for it. If they do not have the proper understanding about how to protect themselves, they can contribute to the spread of HIV
Migrant workers	People who come to the area for construction work, who are not based there, can contribute to the spread of HIV. They come from other provinces or countries to work, and form relationships with people in the community.

3.3 Social and structural factors that influence HIV risk

3.3.1 Orphan hood

In 2011, the proportion of orphans was especially high in the rural Wards. High level of HIV prevalence in KwaZulu-Natal has been associated with high proportion of orphans[14] , albeit at provincial level. The detail for Ward 3, 4 and 5 that form the catchment area for Ntabamhlophe Clinic are highlighted in the table below.

[14] Shisana, O., T. Rehle, et al. (2014). South African National HIV Prevalence, Incidence and Behaviour Survey,2012. Cape Town, HSRC Press.

Table 20: Orphan hood for Census 2011 at Ward level in iNkosi Langalibalele Local Municipality

Ward	Maternal orphans			Paternal orphans			Double orphans		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Imbabazane									
Ward 001	80	62	142	269	271	540	121	123	245
Ward 002	75	66	141	237	238	475	107	96	203
Ward 003	95	87	182	244	229	473	113	113	226
Ward 004	91	105	196	303	289	592	106	112	218
Ward 005	75	58	132	207	218	425	68	66	134
Ward 006	103	101	204	321	309	631	91	111	203
Ward 007	79	89	168	205	182	386	87	79	165
Ward 008	59	57	116	480	393	873	111	161	272
Ward 009	81	78	158	376	371	747	124	130	253
Ward 010	100	101	201	428	464	891	188	201	390
Ward 011	73	100	173	292	329	621	121	110	231
Ward 012	44	63	107	216	234	450	70	78	148
Ward 013	74	94	167	315	309	624	122	98	220
Umtshezi									
Ward 001	76	96	172	325	293	617	112	154	266
Ward 002	65	62	127	361	364	725	103	119	222
Ward 003	63	74	137	235	231	467	91	100	190
Ward 004	21	28	49	118	97	214	23	32	56
Ward 005	99	106	204	398	381	779	169	200	368
Ward 006	56	56	112	215	261	477	71	67	138
Ward 007	31	36	68	273	290	563	60	77	137
Ward 008	75	107	181	363	360	723	133	116	249
Ward 009	70	54	125	281	280	561	93	87	180

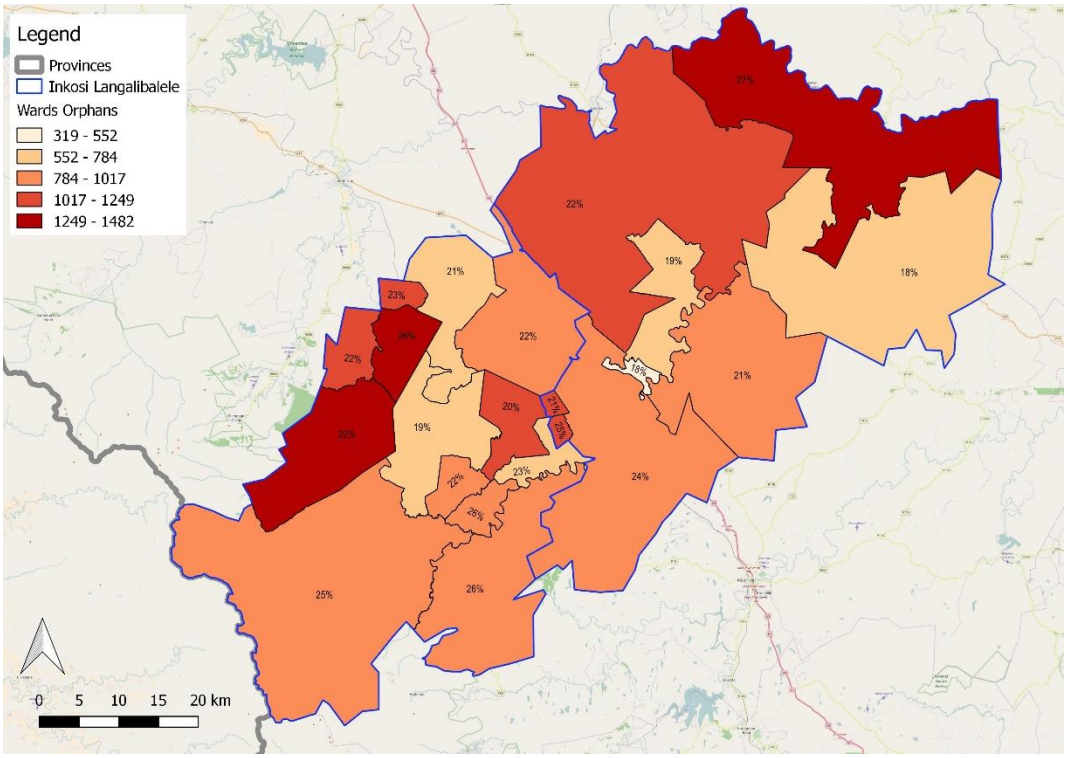

Figure 22: Total number of Orphans with percentage that are double orphans per ward (Source Census 2011)

Sexual abuse of vulnerable groups such as orphans is rife in this area. Child headed household suffer because a child who is heading a household is sometimes forced to have sex with an older person in order to get food. Older men are seen to prey on children in these situations as they do not have an adult to supervise or protect them.

3.3.2 Cultural and Religious Norms

Stakeholder and community engagement workshops revealed the following about ***cultural and religious norm***s:

- Religious leaders are afraid to address issues of sex and gender based violence, and only discuss what is contained in the bible. A religious leader present at the meeting stated that moral regeneration and social cohesion should be driven by religious leaders. They also need to address issues of gender and economic inequality, and the patriarchal system that exists
- The use of a single razor for multiple people during traditional rituals is seen as a contributor to the spread of HIV. As well as forced ritual cutting; and
- There is a tradition of “ukungenana”, meaning when a woman is expected to sleep with her husband’s brother, whether she consents or not.

3.3.3 Gender norms and gender-based violence

Stakeholder and community engagement workshops revealed the following about ***gender norms and gender-based violence*** in the area:

- Men are seen to be in denial about the existence of HIV;

- In the rural areas, men expect their word to be the law, and will refuse to use a condom;
- Physical violence within the home can be traumatic to children. Especially if they are not the biological children of the man; and
- Elderly women as well as young girls fall victim to rape as there is a belief that sleeping with them can cure one of HIV.

3.3.4 Stigma

Stakeholder and community engagement workshops revealed the following about ***stigma*** and how this affects HIV in the area:

- Stigma is still a prevalent issue in the area; and
- People end up "self-stigmatising" because they expect special treatment as a result of being HIV positive.

3.3.5 Poverty

Poverty is measured through the South Africa Multidimensional Poverty Index (SAMPI)[15]. The detail for Wards 3, 4 and 5 (Imbabazane) that forms the catchment area for Ntabamhlophe Clinic is highlighted in the table below.

Table 21: Poverty measures for Census 2011 at Ward level in iNkosi Langalibalele Local Municipality

	Poverty Headcount (H)	Intensity of Poverty (A)	SAMPI (HxA)
kz Imbabazane Ward 001	14.3	40	0.057
kz Imbabazane Ward 002	17.9	40.7	0.073
kz Imbabazane Ward 003	12.2	41.4	0.051
kz Imbabazane Ward 004	13.7	43	0.059
kz Imbabazane Ward 005	13.6	41.6	0.057
kz Imbabazane Ward 006	15.1	42.5	0.064
kz Imbabazane Ward 007	15.3	41	0.063
kz Imbabazane Ward 008	26.6	42.2	0.112
kz Imbabazane Ward 009	13.2	40.6	0.054
kz Imbabazane Ward 010	21	41.1	0.086
kz Imbabazane Ward 011	10.8	42.2	0.046
kz Imbabazane Ward 012	20.3	41.7	0.085
kz Imbabazane Ward 013	14.8	41.8	0.062
Imbabazane	**16.1**	**41.5**	**0.067**
kz Umtshezi Ward 001	2.1	40.9	0.009
kz Umtshezi Ward 002	9.5	41.1	0.039
kz Umtshezi Ward 003	4.7	41.3	0.019
kz Umtshezi Ward 004	1.6	41.2	0.007
kz Umtshezi Ward 005	38.9	43.9	0.171
kz Umtshezi Ward 006	22.9	44.6	0.102

[15] SAMPI is the product of the headcount (proportion of households defined as multi-dimensionally poor using the poverty cut-off) and intensity of poverty (average proportion of indicators in which poor households are deprived). The SAMPI constitute weighted education, health, assets, and economic activity (unemployment rates) indicators.

	Poverty Headcount (H)	Intensity of Poverty (A)	SAMPI (HxA)
kz Umtshezi Ward 007	39.8	44.3	0.176
kz Umtshezi Ward 008	21.5	43.4	0.093
kz Umtshezi Ward 009	16.1	41.5	0.067
Umtshezi	**17.4**	**42.5**	**0.074**

Ward 7 (Umtshezi) was the poorest Ward in iNkosi Langalibalele Local Municipality with 39.8% households being poor (Table 21, Appendix B). Ward 4 (Umtshezi) had the lowest head count at 1.6%. The greatest contributors to high poverty measures in KZN are health (measured by child mortality) and education (measured by years of schooling and school attendance). The Multidimensional Poverty Index for iNkosi Langalibalele Local Municipality changed between 2001 (Figure 23) and 2011 (Figure 24). In 2001 the highest Poverty Index was 33.48. This reduced to 22.63 in 2011.

In the catchment area for Ntabamhlophe clinic, the highest poverty index and poverty headcount is in ward 4 at 13.7% with an intensity of 43%, making it the second highest in iNkosi Langalibalele Local Municipality. This is visible with the darker shading in Figure 26 for the SAMPI poverty headcount for the ward level.

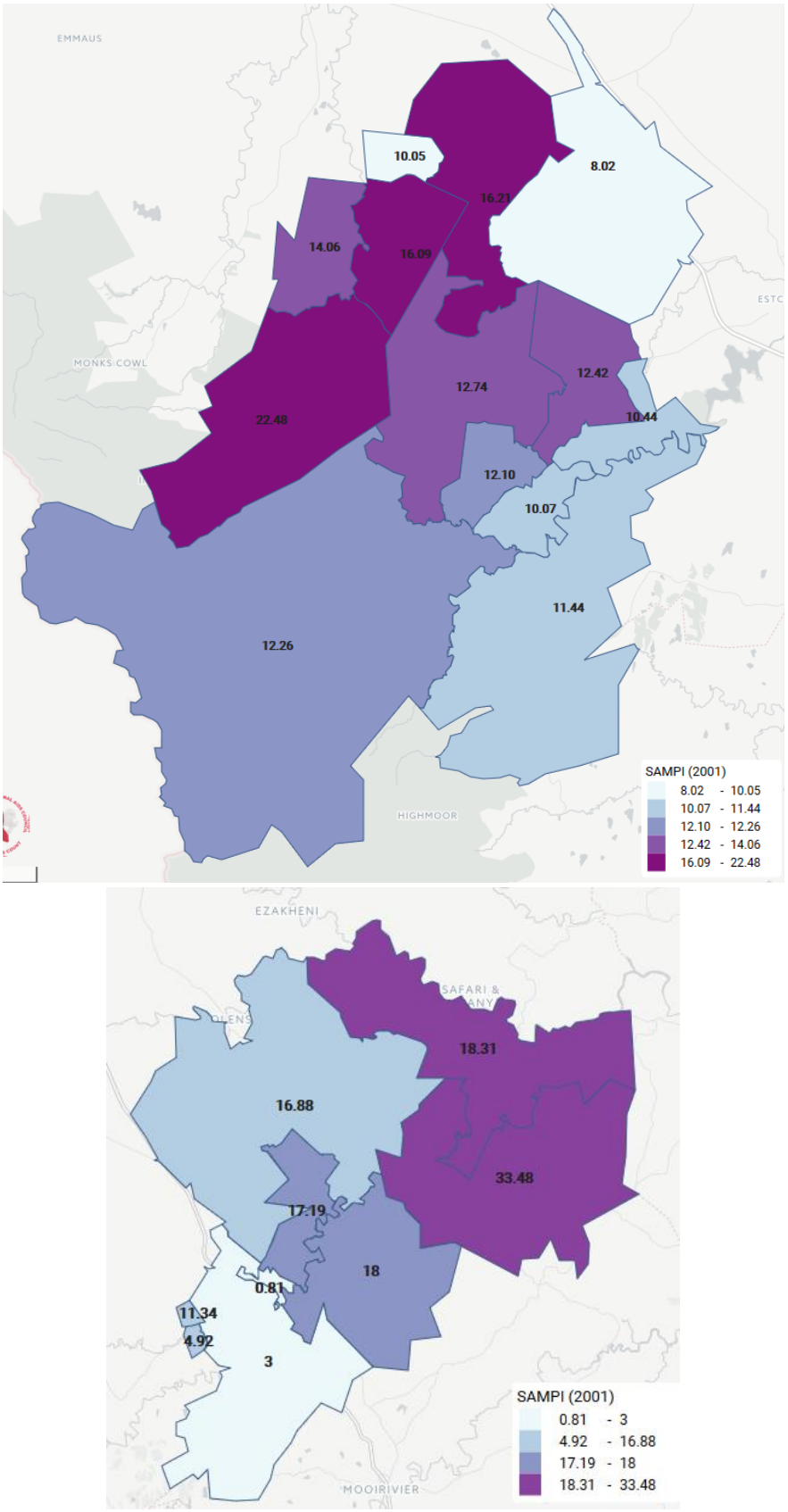

Figure 23: SAMPI (poverty Index) 2001 - ward level, iNkosi Langalibalele Local Municipality

Table 22: SAMPI (poverty Index) 2001 - ward level, iNkosi Langalibalele Local Municipality

KZ IMBABAZANE LOCAL MUNICIPALITY: **12.3 %**						
	Ward (2011)	**SAMPI (2001)**				
1	kz Imbabazane Ward 013	8.02	%	(8	/	100)
2	kz Imbabazane Ward 011	10.05	%	(10.1	/	100)
3	kz Imbabazane Ward 003	10.07	%	(10.1	/	100)
4	kz Imbabazane Ward 007	10.44	%	(10.4	/	100)
5	kz Imbabazane Ward 001	11.44	%	(11.4	/	100)
6	kz Imbabazane Ward 004	12.10	%	(12.1	/	100)
7	kz Imbabazane Ward 002	12.26	%	(12.3	/	100)
8	kz Imbabazane Ward 006	12.42	%	(12.4	/	100)
9	kz Imbabazane Ward 005	12.74	%	(12.7	/	100)
10	kz Imbabazane Ward 009	14.06	%	(14.1	/	100)
11	kz Imbabazane Ward 010	16.09	%	(16.1	/	100)
12	kz Imbabazane Ward 012	16.21	%	(16.2	/	100)
13	kz Imbabazane Ward 008	22.48	%	(22.5	/	100)
KZ UMTSHEZI LOCAL MUNICIPALITY: **16.9 %**						
	Ward (2011)	**SAMPI (2001)**				
1	kz Umtshezi Ward 004	0.81	%	(0.8	/	100)
2	kz Umtshezi Ward 003	3	%	(3	/	100)
3	kz Umtshezi Ward 001	4.92	%	(4.9	/	100)
4	kz Umtshezi Ward 002	11.34	%	(11.3	/	100)
5	kz Umtshezi Ward 008	16.88	%	(16.9	/	100)
6	kz Umtshezi Ward 006	17.19	%	(17.2	/	100)
7	kz Umtshezi Ward 009	18	%	(18	/	100)
8	kz Umtshezi Ward 005	18.31	%	(18.3	/	100)
9	kz Umtshezi Ward 007	33.48	%	(33.5	/	100)

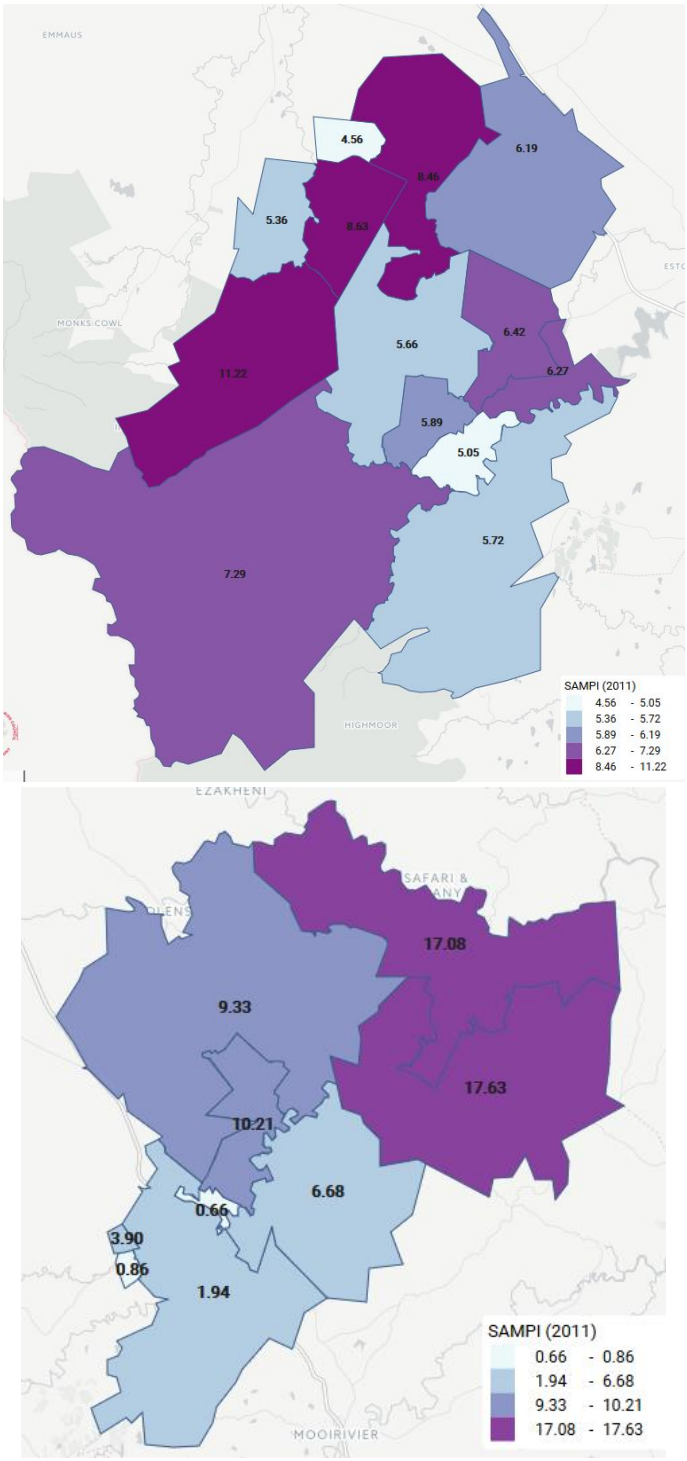

Figure 24: SAMPI (poverty Index) 2011 - ward level, iNkosi Langalibalele Local Municipality

Table 23: SAMPI (poverty Index) 2011 - ward level, iNkosi Langalibalele Local Municipality

KZ IMBABAZANE LOCAL MUNICIPALITY: 6.2 %						
	Ward (2011)	**SAMPI (2011)**				
1	kz Imbabazane Ward 011	4.56	%	(4.6	/	100)
2	kz Imbabazane Ward 003	5.05	%	(5.1	/	100)
3	kz Imbabazane Ward 009	5.36	%	(5.4	/	100)
4	kz Imbabazane Ward 005	5.66	%	(5.7	/	100)

KZ IMBABAZANE LOCAL MUNICIPALITY: 6.2 %						
	Ward (2011)	**SAMPI (2011)**				
5	kz Imbabazane Ward 001	5.72	%	(5.7	/	100)
6	kz Imbabazane Ward 004	5.89	%	(5.9	/	100)
7	kz Imbabazane Ward 013	6.19	%	(6.2	/	100)
8	kz Imbabazane Ward 007	6.27	%	(6.3	/	100)
9	kz Imbabazane Ward 006	6.42	%	(6.4	/	100)
10	kz Imbabazane Ward 002	7.29	%	(7.3	/	100)
11	kz Imbabazane Ward 012	8.46	%	(8.5	/	100)
12	kz Imbabazane Ward 010	8.63	%	(8.6	/	100)
13	kz Imbabazane Ward 008	11.22	%	(11.2	/	100)
KZ UMTSHEZI LOCAL MUNICIPALITY: **6.7 %**						
	Ward (2011)	**SAMPI (2011)**				
1	kz Umtshezi Ward 004	0.66	%	(0.7	/	100)
2	kz Umtshezi Ward 001	0.86	%	(0.9	/	100)
3	kz Umtshezi Ward 003	1.94	%	(1.9	/	100)
4	kz Umtshezi Ward 002	3.90	%	(3.9	/	100)
5	kz Umtshezi Ward 009	6.68	%	(6.7	/	100)
6	kz Umtshezi Ward 008	9.33	%	(9.3	/	100)
7	kz Umtshezi Ward 006	10.21	%	(10.2	/	100)
8	kz Umtshezi Ward 005	17.08	%	(17.1	/	100)
9	kz Umtshezi Ward 007	17.63	%	(17.6	/	100)

It is important to note that changes between the 2001 (Figure 25) and 2011 (Figure 26) for SAMPI at ward level. In 2001 the highest headcount amongst the wards in iNkosi Langalibalele was 68.90 (Umtshezi), and 52.90 (Imbabazane). This reduced to 26.60 (Imbabazane), and 39.80 (Umtshezi) in 2011.

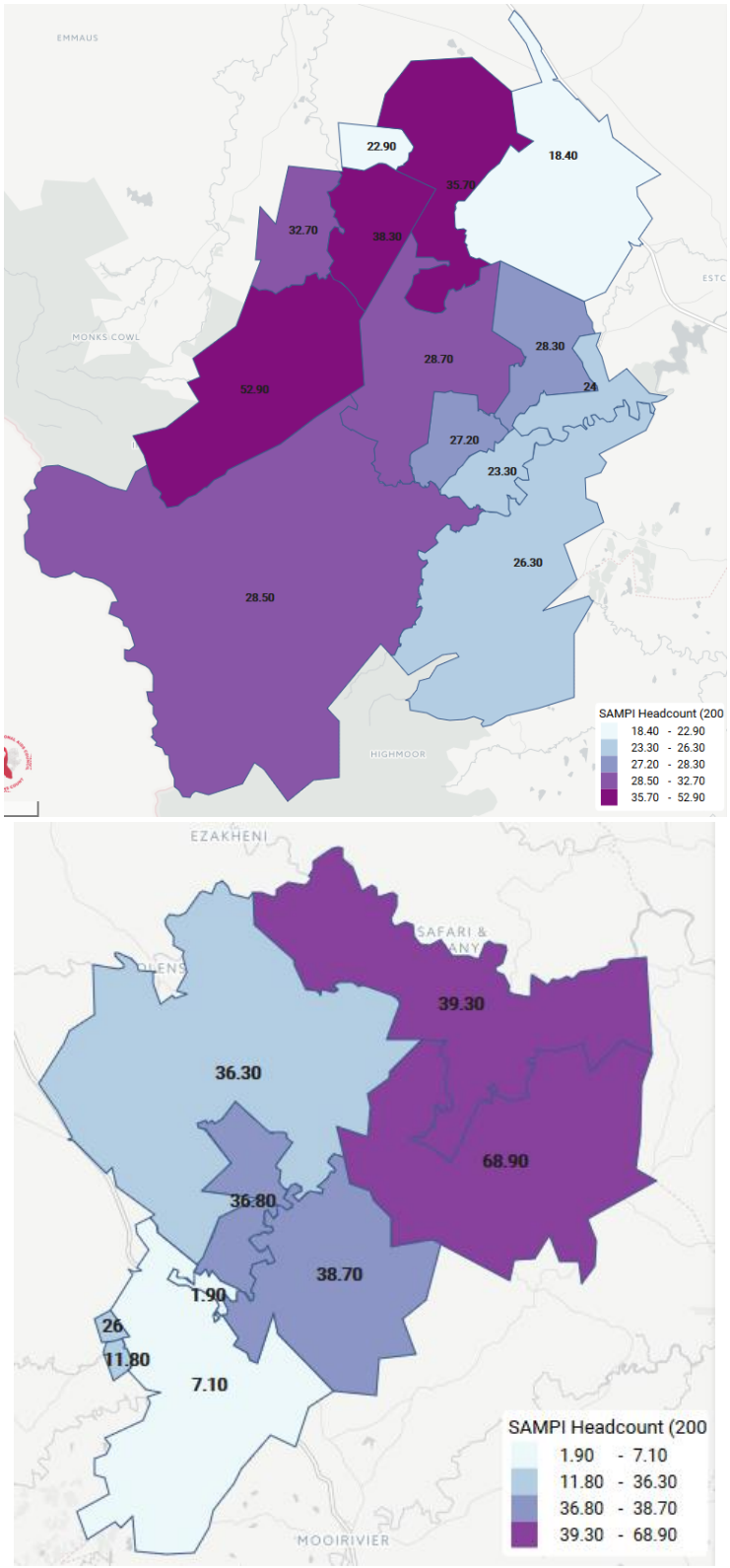

Figure 25: SAMPI 2001 poverty headcount - ward level, iNkosi Langalibalele Local Municipality

Table 24: SAMPI 2001 poverty headcount - ward level, iNkosi Langalibalele Local Municipality

KZ IMBABAZANE LOCAL MUNICIPALITY: **28.3 %**						
	Ward (2011)	**SAMPI Headcount (2001)**				
1	kz Imbabazane Ward 013	18.40	%	(18.4	/	100)
2	kz Imbabazane Ward 011	22.90	%	(22.9	/	100)
3	kz Imbabazane Ward 003	23.30	%	(23.3	/	100)
4	kz Imbabazane Ward 007	24	%	(24	/	100)
5	kz Imbabazane Ward 001	26.30	%	(26.3	/	100)
6	kz Imbabazane Ward 004	27.20	%	(27.2	/	100)
7	kz Imbabazane Ward 006	28.30	%	(28.3	/	100)
8	kz Imbabazane Ward 002	28.50	%	(28.5	/	100)
9	kz Imbabazane Ward 005	28.70	%	(28.7	/	100)
10	kz Imbabazane Ward 009	32.70	%	(32.7	/	100)
11	kz Imbabazane Ward 012	35.70	%	(35.7	/	100)
12	kz Imbabazane Ward 010	38.30	%	(38.3	/	100)
13	kz Imbabazane Ward 008	52.90	%	(52.9	/	100)
KZ UMTSHEZI LOCAL MUNICIPALITY: **36.3 %**						
	Ward (2011)	**SAMPI Headcount (2001)**				
1	kz Umtshezi Ward 004	1.90	%	(1.9	/	100)
2	kz Umtshezi Ward 003	7.10	%	(7.1	/	100)
3	kz Umtshezi Ward 001	11.80	%	(11.8	/	100)
4	kz Umtshezi Ward 002	26	%	(26	/	100)
5	kz Umtshezi Ward 008	36.30	%	(36.3	/	100)
6	kz Umtshezi Ward 006	36.80	%	(36.8	/	100)
7	kz Umtshezi Ward 009	38.70	%	(38.7	/	100)
8	kz Umtshezi Ward 005	39.30	%	(39.3	/	100)
9	kz Umtshezi Ward 007	68.90	%	(68.9	/	100)

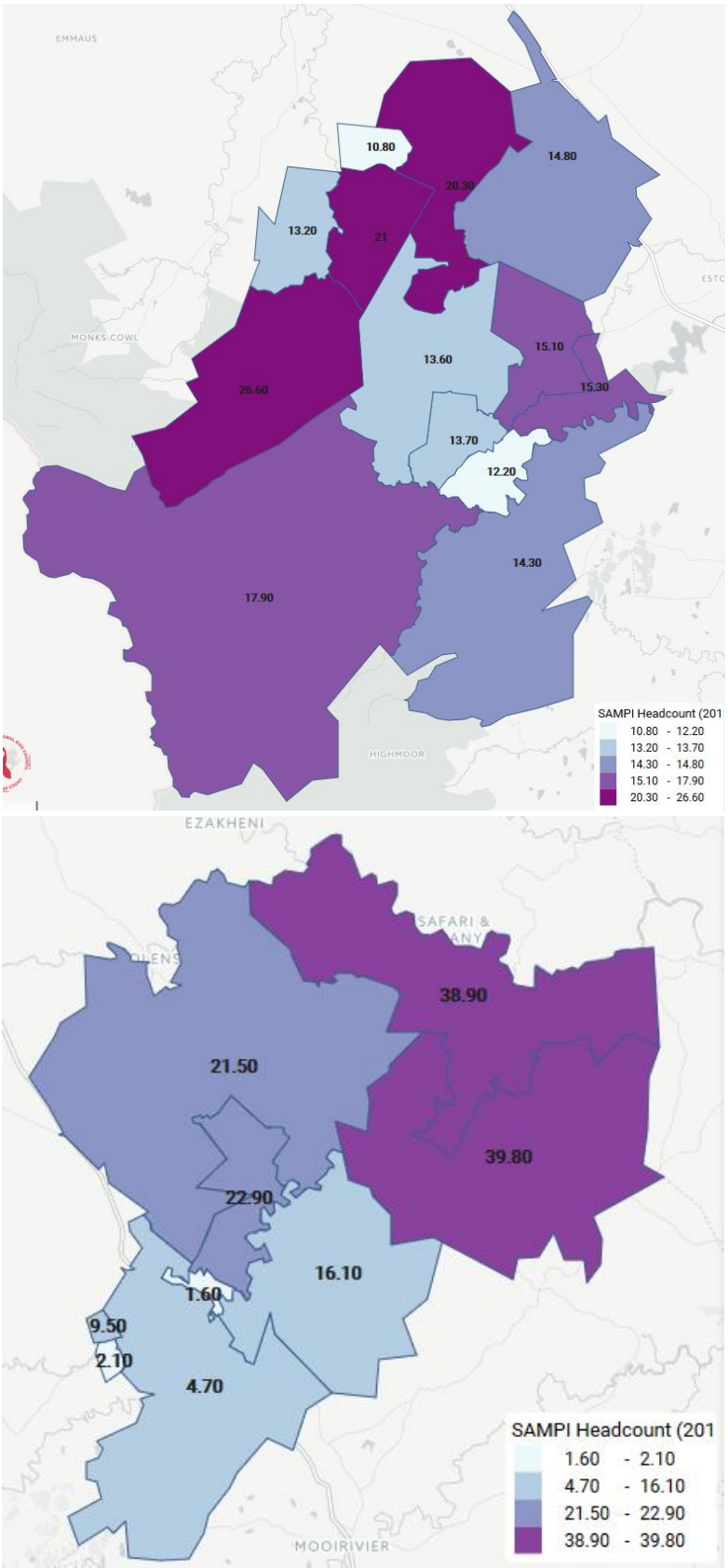

Figure 26: SAMPI 2011 poverty headcount - ward level, iNkosi Langalibalele Local Municipality

Table 25: SAMPI 2011 poverty headcount - ward level, iNkosi Langalibalele Local Municipality

KZ IMBABAZANE LOCAL MUNICIPALITY: **14.8 %**						
	Ward (2011)	**2015 : SAMPI Headcount (2011)**				
1	kz Imbabazane Ward 011	10.80	%	(10.8	/	100)
2	kz Imbabazane Ward 003	12.20	%	(12.2	/	100)
3	kz Imbabazane Ward 009	13.20	%	(13.2	/	100)
4	kz Imbabazane Ward 005	13.60	%	(13.6	/	100)
5	kz Imbabazane Ward 004	13.70	%	(13.7	/	100)
6	kz Imbabazane Ward 001	14.30	%	(14.3	/	100)
7	kz Imbabazane Ward 013	14.80	%	(14.8	/	100)
8	kz Imbabazane Ward 006	15.10	%	(15.1	/	100)
9	kz Imbabazane Ward 007	15.30	%	(15.3	/	100)
10	kz Imbabazane Ward 002	17.90	%	(17.9	/	100)
11	kz Imbabazane Ward 012	20.30	%	(20.3	/	100)
12	kz Imbabazane Ward 010	21	%	(21	/	100)
13	kz Imbabazane Ward 008	26.60	%	(26.6	/	100)
KZ UMTSHEZI LOCAL MUNICIPALITY: **16.1 %**						
	Ward (2011)	**2015 : SAMPI Headcount (2011)**				
1	kz Umtshezi Ward 004	1.60	%	(1.6	/	100)
2	kz Umtshezi Ward 001	2.10	%	(2.1	/	100)
3	kz Umtshezi Ward 003	4.70	%	(4.7	/	100)
4	kz Umtshezi Ward 002	9.50	%	(9.5	/	100)
5	kz Umtshezi Ward 009	16.10	%	(16.1	/	100)
6	kz Umtshezi Ward 008	21.50	%	(21.5	/	100)
7	kz Umtshezi Ward 006	22.90	%	(22.9	/	100)
8	kz Umtshezi Ward 005	38.90	%	(38.9	/	100)
9	kz Umtshezi Ward 007	39.80	%	(39.8	/	100)

Stakeholder and community engagement workshops revealed the following about ***poverty*** and how this affects HIV in the area:

- Poverty can influence behaviour negatively;
- Young girls are going in to marriage at an early age because they are trying to escape from poverty in their homes;
- Young people are entering in to relationships with much older partners (blessers);
- Some people are engaging in undisclosed sex work;
- Some men forbid their wives from working, and then they do not provide for them adequately; and
- Some men leave home to work in Johannesburg, and never return home.

3.3.6 Employment

In iNkosi Langalibalele Local Municipality, 14% of the female population at economically active age are employed while 19% of the economically active males are employed. See Figure 27 below.

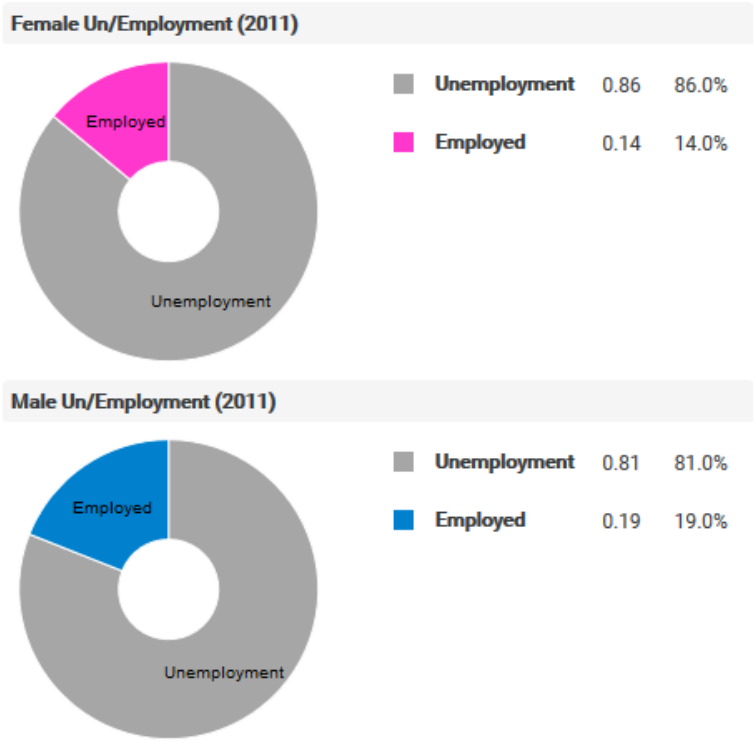

Figure 27: Female and Male employment iNkosi Langalibalele Local Municipality (Source Census 2011)

Unemployment of youth in iNkosi Langalibalele Local Municipality is at 87.8%. More than three quarters of the youth in the area were therefore unemployed at the time of the Census.

Figure 28: Youth unemployment iNkosi Langalibalele Local Municipality (source Census 2011)

In comparison with the iNkosi Langalibalele Local Municipality the same percentage of females and males are employed from the total population in the Ntabamhlophe clinic catchment area (see Figure 29)

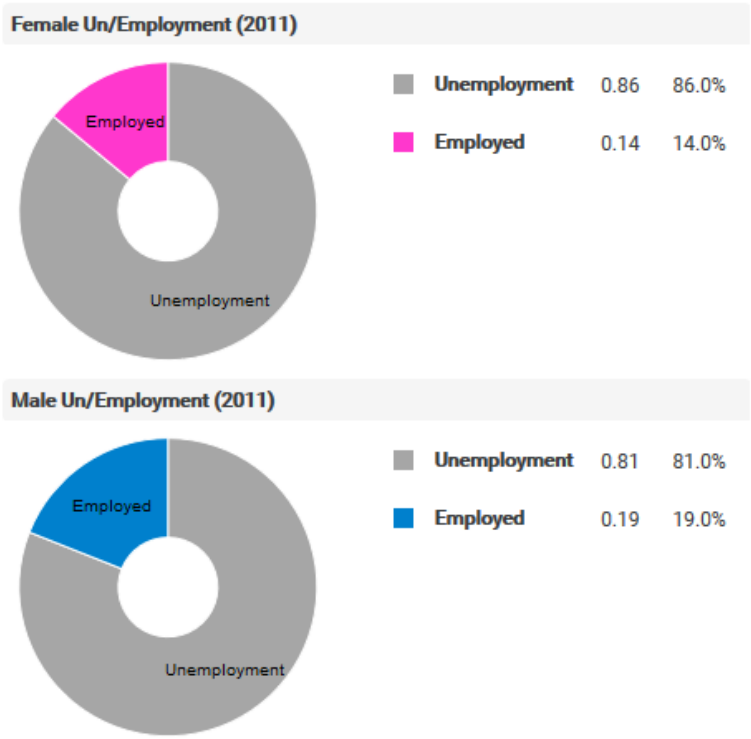

Figure 29: Female and Male employment Ntabamhlophe clinic catchment area (Source Census 2011)

Almost the same number of youth (87.5%) are unemployed in the Ntabamhlophe clinic catchment area as the iNkosi Langalibalele Local Municipality (87.8%).

Figure 30: Youth unemployment Ntabamhlophe clinic catchment area (source Census 2011)

During the stakeholder and community engagement workshops the following was said about ***employment*** and how this affects HIV in the area:

- There are no job opportunities available near the area;
- Lack of jobs causes young people to become enslaved to drugs;
- The influx of foreigners increases the circulation of drugs; and
- All this combined leads to an increase in HIV and STIs, as intoxication prevents people from engaging in safe sex.

3.3.7 Types of settlements

Stakeholder and community engagement workshops felt that the ***types of settlements*** have the following influences in the area:

- The existence of informal settlements and the living conditions found there can contribute to the spread of HIV;
- Informal settlements are seen as unhygienic. Ignorance about their HIV status and living in close proximity to many people increases the risk of HIV infection;
- Lack of resources make it difficult to educate people about HIV in informal settlements; and
- At times there can be multiple members in one household who abuse substances.

3.3.8 Migration patterns in the area

People who come to the area for construction work, who are not based there, can contribute to the spread of HIV. They come from other provinces or countries to work, and form relationships with people in the community. If the migrant workers have a partner in their own area, engaging in unsafe sexual practices can increase the spread of HIV both in the local community, and in their place of origin.

3.3.9 Education and literacy

The low standard of education in the area results in people not being able to access gainful employment. They end up bored and entertaining themselves through sexual activity.

3.3.10 Hate crimes – xenophobic, homophobic, other

Xenophobia in the area can be seen in the clinics where staff require a South African Identity document when people come in for assistance.

3.3.11 Disability

Participants in stakeholder and community engagement workshops felt that the ***people with disabilities*** have an increased risk of HIV infection because:

- Disabled people are abused sexually in some cases; and
- At other times, disabled people themselves seek out sex as they feel a physical need for it. If they do not have the proper understanding about how to protect themselves, they can contribute to the spread of HIV.

4. Services in the Local Municipality

4.1 Health facilities

There are 12 health facilities in iNkosi Langalibalele Local Municipality. See Figure 31 below for distribution of these facilities.

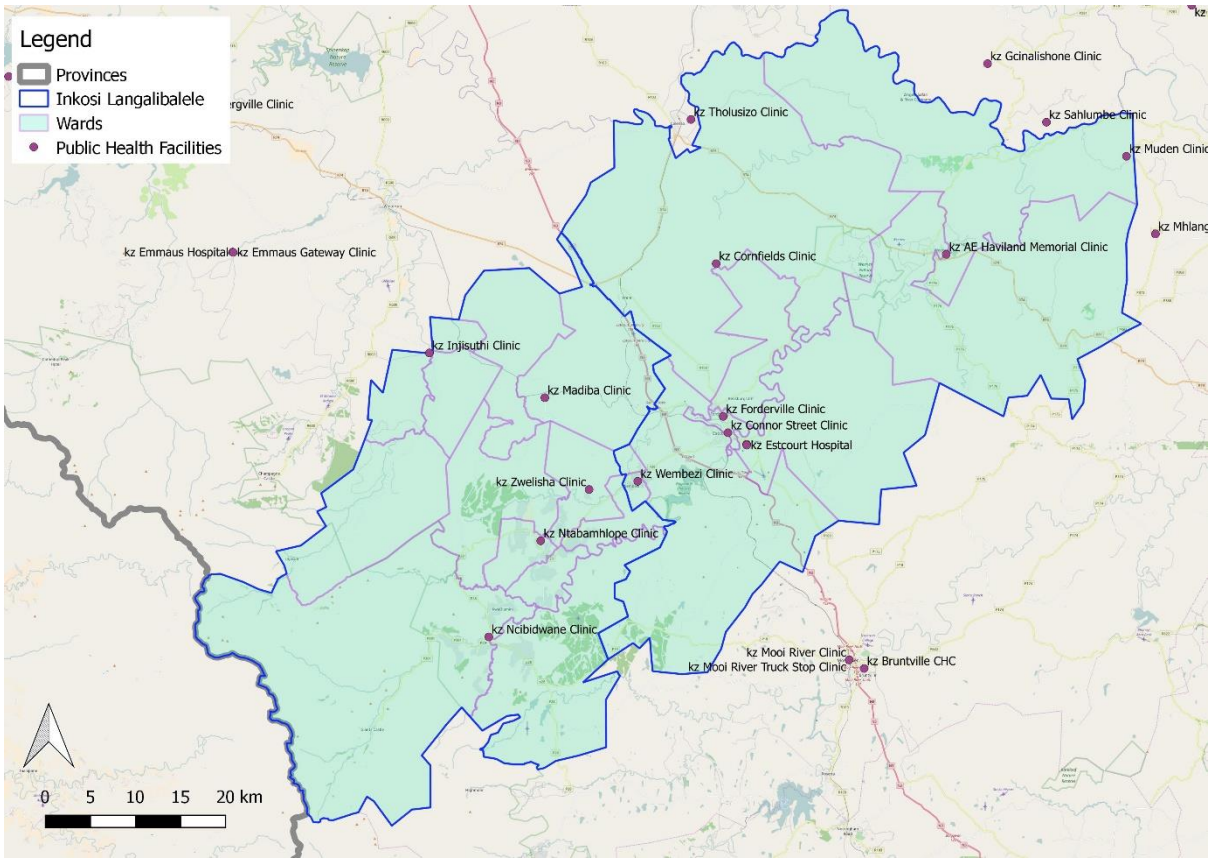

Figure 31: Distribution of health facilities in iNkosi Langalibalele Local Municipality

5. Recommendations for multi-sectoral interventions and focus on key and vulnerable populations

Based on the priorities identified in the profile for high burden areas, a mechanism needs to be put in place to coordinate the multi-sectoral response at the various levels. This is to ensure a comprehensive approach and to build sustainability of the response with local ownership. Coordination of the multi-sectoral interventions at the level of implementation would result in:

- increased access to available resources;
- more efficient use of resources;
- enhancement of accountability;
- development of innovative implementation strategies and modalities;
- broadened awareness about the priorities highlighted in the risk profile;
- development of new partnerships to render services;
- sustainable development of activities;
- broadened sharing of responsibility for different, yet related activities;
- stronger ownership by stakeholders;
- use of strengths of different partners; and
- sharing of new knowledge and lessons learnt.

Process for development and implementation of multi-sectoral HIV, TB and STI intervention packages through existing multi-sectoral coordination structures e.g. AIDS Councils, OSS war rooms:

1. Update community profiles with directory of existing services e.g. rendered by government, NGO, donor funded organisations. This will be used to determine resources and programmes already available to address the priorities in the community profile as well as resource and programme gaps that exist;
2. Communicate and validate the profiles through meetings with government, private and civil society organisations in the specific geographical area;
3. Present the profile findings and recommendations for multi-sectoral interventions to the multi-sectoral structure for validation of findings, prioritization of programmatic gaps and linkage with existing resources (final decision on resource allocation should be requested through appropriate channels, e.g. government processes, Global Fund etc.);
4. For gaps prioritised, identify possible service providers and interventions that can address the needs following the relevant government or donor processes and procedures (depending on source of funding); and
5. Provincial, district and local coordination structures to coordinate an implementation plan with clear activities, timelines and responsible stakeholders that aligns with the profile. This will form the foundation for tracking performance and progress against the implementation plan; and
6. Further and focused engagement to be done with the Young women and girls group identified as the priority population in this area to have a detailed understanding of their specific risks.

Table 26 summarises the key and vulnerable populations as well as priority interventions identified during the development of the community profiles in each of the seven local municipalities in the District. Due to the importance of TB as the main cause of death in the district, it is included in the priority interventions.

Table 26: Key and vulnerable populations as well as priority interventions identified in high burden areas

Key and vulnerable populations TB	**Priority interventions**
• People living with HIV • Household contacts of TB index patients • Health care workers • Pregnant women • Children < 5 years old • People living in informal settlements	• TB contact tracing, testing and post-exposure management • Enhanced health education about HIV/TB co-infection, reinfection • Service delivery and treatment delivery points in community, non-traditional settings
Key and vulnerable populations HIV	**Priority interventions**
• Young women and girls • Sex workers • Orphans and vulnerable children	• Sexual abuse and gender based violence – especially where men feel they have the right to coerce women into having unprotected sex • Stigma and discrimination (educating family and social networks on acceptance of an individual who is HIV positive) • Continue using condoms after circumcision • Continuous HIV education especially men and people who live in outlying rural areas who do not have access to services or educational programs • High rate of substance abuse and drugs that triggers high risk behaviour

Considering the priorities identified during the stakeholder and community workshops as well as the general profile, the following service delivery packages (Table 27) are recommended in line with the National Strategic Plan for HIV, TB and STIs (2017 to 2022) and other relevant strategic documents. These service delivery packages needs to be unpacked and included in the implementation plan referred to above based on the existing resource envelop in the area. Priority is given to the key and vulnerable populations identified, followed by other interventions identified in the NSP.

Table 27: Recommended multi-sectoral intervention packages

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		**Multi-sectoral partner**

• Service delivery in non-traditional settings, including after-hours and weekend hours
• Health information, customised to client needs
• Sexual and reproductive health services
• HIV screening, testing and treatment
• STI screening, treatment
• TB screening, treatment (including preventive therapy) and contact tracing for DS- and DR-TB
• Mental health screening and psychosocial support
• Access to PEP and post-sexual assault support
• Alcohol and drug use screening and referral to harm reduction services
• Violence screening and referral to psychosocial and other support services
• Condom and lubricant promotion and provision
• Targeted social and behaviour change communication
• Core rights-based programme components:
  ○ Human rights and constitutional protection
  ○ Health empowerment
  ○ Economic empowerment
  ○ Gender norms and equality
  ○ Justice
  ○ Principles of universal design and accommodation that enables reasonable access for persons with disabilities
		• NGOs
		• DoH
		• DSD
		• DBE
		• NPA
		• PCA, DAC, LAC
		• SAPS
		• DOT

HIV and STI vulnerable populations		

Adolescent girls and young women	• Peer-led outreach
	• Youth-friendly sexual and reproductive health services in schools and community settings which include:
	  ○ PrEP (for over 18 years olds)
	  ○ Complete two dose HPV vaccine (Grade 4 learners)
	  ○ PMTCT
		• DBE
		• DHET
		• DoH
		• DSD
		• NGOs
		• DoL

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	○ Choice of termination of pregnancy ○ Family planning services ○ Male and female condom provision in school ○ Sanitary towels • Programmes to keep girls in schools, including support for pregnant learners • Access to peer groups and clubs • Access to parenting programmes • Economic empowerment programmes • Increased access to further education opportunities • Increased access to mentorship and internships • Comprehensive sexuality and gender education • Provide reasonable accessibility for girls and young women with disabilities • Age-specific support to HIV-positive adolescents (support for disclosure, adherence)	• Private sector
Sex workers	• Peer-led outreach • PrEP • Female and male condoms and lubricant • Intensified psychosocial support • Periodic presumptive treatment for STIs • Social mobilisation, use of formal/informal peer networks to create demand • PMTCT • Hepatitis B screening and immunisation • Annual Pap smears • CTOP (Choice of Termination of Pregnancy) • Screening for and protection from the sexual exploitation of children • Community empowerment	• DoH • DSD • NGOs
Children and orphans and vulnerable children	• Health education, with a particular focus on sexual exploitation in the absence of primary caregivers • Accelerated nutritional and social grant support	• DSD • DBE • DoH

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner

	• Youth-friendly sexual and reproductive health services in schools and community settings which include:
	  ○ HPV vaccination
	  ○ Contraceptives including condoms
	  ○ Choice of termination of pregnancy
	• Comprehensive sexuality education in residential, school and non-school and youth-friendly settings
	• Intensive psychosocial support
	• Gender norms education, including risk reduction in relation to age-disparate relationships
	• School retention	

TB key populations		
Children <5 yrs	• Household TB and HIV screening, immediate linkage to treatment • Improved diagnostic and treatment capacity for paediatric TB • Promote activism for child-friendly TB formulations and introduce as soon as they are available • Improve sputum induction at PHC and hospital level • Screening for and protection from the sexual exploitation of children	• DoH • NGOs • Civil Society • DSD
Healthcare workers	• Implement guidelines for TB in HCWs • Institute regular TB screening and offer HIV testing for all HCWs • Offer TB preventive therapy to all HCWs who are living with HIV • Develop a recording and reporting system for TB and DR-TB in HCWs • Appoint a DoH-led task force to monitor implementation and further elucidate the effort–effect ratio of screening all HCWs annually with symptom screening and CXR, and to investigate the role of preventive therapy for HCWs • Implement the FAST model in facilities (finding cases actively by cough surveillance and rapid molecular sputum testing, separating safely, and treating effectively, based on rapid drug susceptibility testing)	• DoH • DoH

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
Household contacts of TB index patients	• Implement simplified screening algorithms for TB-exposed children • Implement community education and mobilisation programmes to improve acceptance of contact investigations and to create awareness of the benefits of preventive therapy • Strengthen routine M&E for TB contact investigations, HIV testing, TB preventive therapy including outcomes, and pharmacovigilance	• DoH • NGOs
People living in informal settlements (also a vulnerable population for HIV and STIs)	• Facilitate access and demand creation to increase community HIV, TB and STI service provision • Intensify GBV programmes and screening • Accelerate social support • Community education • Provide mobile services to improve accessibility • Infection control strategy for TB	• DoH • DSD • NGOs
People living with HIV	• Prompt ART initiation as a component of TB prevention • Adherence and psychosocial support • Peer education and support for TB prevention and treatment • Optimal uptake of preventive therapy for TB • Infection control in facilities, communities and households • TB symptom screening at each visit, linkages to treatment and care • HIV screening for household members, including partners and children • Cohort monitoring of HIV/TB co-infected patients • Support groups specifically addressing internalised stigma	• DoH
Pregnant women and neonates	• Full access to PMTCT services • Household TB and HIV screening, immediate linkage to treatment • Improve mother–child pair tracing and service delivery • Improve TB screening and testing among pregnant women to reduce congenital and perinatal TB transmission • Improve diagnostic and treatment capacity for neonatal TB	• DoH • NGOs • DSD

Comprehensive package of services for the general population, that will then be supplemented and customised to the age and population served			Multi-sectoral partner
• Accessible, friendly, comprehensive service delivery and health education, customised to client needs • HIV screening, testing, treatment • STI screening, testing, treatment • TB screening, testing, treatment and contact tracing for DS- and DR-TB • Medical male circumcision, referral • Comprehensive SRH services (including: cervical cancer screening, Pap smears, access to emergency contraception, choice of termination of pregnancy) • Prevention of mother-to-child transmission (PMTCT) of HIV • Mental health screening and psychosocial support • Access to PEP and post-sexual assault support • Alcohol and drug-use screening, referral • Violence screening, referral • Condom promotion and provision • Targeted social and behaviour change communication			• All implementing agencies • DoH • DSD • NPA • DBE • NGOS • PCA and DAC
Population	**Services/Interventions/Approaches**	**Setting**	**Multisectoral partner**
Children	• Child abuse screening • Age-appropriate HIV testing, treatment, adherence support • Support for disclosure of HIV status • HIV testing of household adult or adolescent index client • Contact tracing from adult, adolescent TB cases • Sputum induction for TB testing • Update hospital admission requirements for DR-TB treatment • Comprehensive sexuality education: Sexuality, puberty education, gender and empowerment, GBV, reproductive health, contraception, alcohol and drug use prevention, decision-making, self-esteem	• Health facility-based • School-based • Community-based • Mobile services	• DoH • DBE • DSD • CBOs • NGOs • Private employers • Private healthcare providers
PLHIV (adults,	• Hearing and vision screening, referral, treatment • Partner HIV testing, disclosure support, treatment, adherence support	• Health facility-based • School-based	• DoH • DBE

Population	Services/Interventions/Approaches	Setting	Multisectoral partner
adolescents)	• Hepatitis B and HPV vaccine where eligible • PMTCT and enhanced adherence support through pre- and post-natal period, including breastfeeding • Gender norms • Health and health rights literacy • Economic empowerment and health promotion • School retention • Accelerated nutritional and social grant support, if indicated • Targeted demand creation for services • Targeted, PLHIV-friendly IEC materials and SBCC, including social media and materials for those with vision and hearing impairment • Service delivery points in community, non-traditional settings	• Community-based • Mobile services	• DCS • DSD • CBOs • NGOs • Private employers • Private healthcare providers
Persons with TB (adults, adolescents)	• TB contact tracing, testing and post-exposure management • Partner HIV testing, disclosure support, treatment, adherence support • Enhanced health education about HIV/TB co-infection, reinfection • Hearing and vision screening, referral, treatment • Hepatitis B and HPV vaccine where eligible • PMTCT and enhanced adherence support through pre- and post-natal period, including breastfeeding, if indicated • Mental health screening • Gender norms education • Health and health rights literacy • Economic empowerment and health promotion • School retention • Accelerated nutritional and social grant support, if indicated • Targeted, TB-friendly IEC materials and SBCC, including social media and materials for those with vision and hearing impairment • Service delivery and treatment delivery points in community, non-traditional settings	• Clinic-based • School-based • Community-based • Mobile services	• DoH • DBE • DCS • DSD • CBOs • NGOs • Private employers • Private healthcare providers

Population	Services/Interventions/Approaches	Setting	Multisectoral partner
Discordant couples	• Partner HIV testing, disclosure support, treatment, adherence support • Hepatitis B and HPV vaccine where eligible • PMTCT and enhanced adherence support through pre- and post-natal period, including breastfeeding if pregnant and HIV-positive • Gender norms • Health and health rights literacy • Economic empowerment and health promotion • Accelerated nutritional and social grant support, if indicated • Targeted demand creation for services	• Clinic-based • Community-based • Mobile services	• DoH • DCS • DSD • CBOs • NGOs • Private employers • Private healthcare providers

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
Promote retention in care for all PLHIV on ART	This will be supported and strengthened by: • Increased efforts to implement the test and treat policy at facility level through the DIP process • Increased quality assurance to promote adherence to guidelines • Expansion of implementation strategies to include community based ART initiation demonstration projects for well patients, including the use of GPs • Prioritise rapid and same day ART initiation • Implement extended hours services for working people and adolescents • Use PLHIV in health facilities and communities to encourage linkage to care • Explore innovative ways to improve patients' linkage to services • Differentiated ART delivery for stable patients, including a minimum of 3 months drug supply and optimised prescription periods to meet the needs of key and vulnerable populations and improve adherence • Ensure a functional fast lane for collection of repeat drug prescriptions at all pharmacies • Use of approved patient representatives to collect ART refills	• DoH • DoT • Dept. of Agriculture • Private Sector • Civil society (PLHIV sector)

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
	• Expand of the Central Chronic Medicine Dispensing and Distribution programme • Implementation of a return friendly system in all facilities • Track and improve the management of chronic diseases and their complications, as the population on ART ages	
Improve adherence support	• Implementation of a comprehensive and age appropriate psychosocial package to enhance adherence • Promoting the establishment of peer-led differentiated support groups for new and stable patients • Ensuring their linkages to psychosocial support.	• DSD • DoH • Private Sector
Intensified facility-level TB case-finding	• Passive case-finding (test individuals presenting with symptoms of TB • Routine symptom screening for all adult clinic attendees • Undertaking Xpert MTB/RIF test for symptomatic individuals not tested for TB in the last 3 months and undertaking culture test for HIV+, Xpert-negative cases	• DoH • Private healthcare providers
Improve laboratory diagnostics to deliver optimal DS and DR-TB services	• Universal implementation of Xpert MTB/RIF as initial diagnostic tests • Monitoring and optimising implementation of all existing algorithms • Implementing robust reflex testing for samples found to be Xpert RIF resistant • Developing a platform for introduction of new diagnostics • Prepare and train on guidelines and algorithms in advance of Xpert Ultra introduction • Upgrade the laboratories to ensure sufficient second line LPA coverage to ensure optimal implementation of MDR-TB short regimen • Implement lessons learnt from Xpert rollout • All labs doing second line LPA should be either able to conduct phenotypic second line drug sensitivity testing or have easy referral to a lab that has this capability.	• DoH
Active case-finding for key and vulnerable populations	• Screening of household contacts under 5 years of age • Intensified TB screening and access to appropriate treatment in correctional facilities, mines, informal settlements and antenatal clinics and for diabetics, PLHIV, health care workers and all household contacts	• DoH • NGOs and CBOs working in this area • DBE • DSD

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
	• Contact tracing for all household members of TB index cases • Routine screening for health care workers • TB screening and testing among pregnant women to reduce congenital and perinatal TB transmission • Improved paediatric sputum induction at PHC and hospital level.	• Private healthcare providers
Reduce initial loss to follow-up rates for DS and DR TB cases	• Retrain staff and implement on-going clinical governance using QI approach • Establish initial loss to follow-up rate as a management priority as part of the DIP process • Reduce duration and number of visits from symptom onset to treatment initiation.	• DoH • Districts • Facilities • Development partners
Provide standard care for DS-TB cases	• Provision of adherence support and retention of patients in care for treatment duration including referral for psychosocial support as needed • Bacteriological monitoring of treatment outcomes and implementation of recommendations from reviews • National research priority studies to determine what health facility and programme management interventions impact on treatment outcomes, whether alternative drug dispensing strategies affect adherence and patient outcomes and what clinical management and adherence support strategies improve treatment outcomes? • The multi-sectoral TB Think Tank using the findings to timeously review and update policies.	• DoH • Civil society (PLHIV, PTB sectors) • NGOs
Scale up short-course MDR-TB treatment and provide decentralised MDR-TB care	• Training and mentoring of staff on these at PHC level and referral centres • Adaptation of the EDR to accommodate new regimens • Monitoring the initiation rate of patients on the new regimen as part of the DIP process to optimise uptake • Provision of psychosocial support to patients who need it.	• DoH
Implement a quality improvement (QI) initiative to close gaps in the TB care cascade and improve	• Development of DoH capacity to undertake QI (district and sub-district teams established; leadership and QI skills developed; tools and guidelines developed; learning networks established) with demonstration sites for QI established	• DoH • Support partners

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
programme outcomes.	• All implementing partners to implement TB QI projects • Then undertake district baseline assessments and set targets for national scale-up based on successful models including nurse initiated care.	
Implement the National STI National Framework guidance on the detection and treatment of asymptomatic STIs	• Developing, testing and validation of the sexual history tool for different populations and different ages as the basis for screening tests and / or presumptive treatment • Building capacity of health workers on the use of the tool and integrating it into all customised delivery sites. • Improved ACSM in high burden districts through targeted STIs messages. • Using the sexual history tool to screen and treat priority populations (pregnant women, AGYW and SW) for asymptomatic STIs.	• DoH, NICD ,NHLS • Dept. of Transport • Civil society (key population sectors) • District Management Teams • Private health sector
Appropriate syndromic management of STIs	• Ensuring appropriate management of cases non-responsive to the syndromic approach • The use of mobile outreach services for men with extended hours • Implementation of strategies to strengthen partner notification and contact tracing especially for key populations • Training and re-training of HCWs on syndromic management • Quality assurance programmes and advanced level STI management in secondary hospitals and CHCs with the necessary tools and training.	• DoH • DHET/HEAIDS • Private health sector
Screening of all pregnant women for syphilis at first ANC visit	• Screening for syphilis at birth for all infants born to Syphilis positive women or to women who were unbooked or untested • Linking all children diagnosed with congenital syphilis to care and ensuring they receive treatment; • Intensified notification process • Routine congenital syphilis monitoring and tracing and management of confirmed syphilis clients.	• DoH • Private health sector
Promote integration of STI prevention care and treatment into HIV, TB, ANC, sexual and	• Strengthened ART initiation at STIs services or linkage to ARV services	• DoH • Private health sector

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
reproductive health services		

Addressing social and structural drivers	**Service**	**Multi-sectoral partner**
Strengthened and scaled-up community based one-stop Khuseleka Centres	• Integrate community support programmes in one-stop centres	• DSD • SAPS • DoH • DOJ
Strengthened and scaled-up community-based 'white-door' shelters	• Provide short-term (72-hour) places of safety and shelter within communities and referral/integration with HIV/TB/STI services	• DSD • SAPS • DoH • DOJ
Identify and speedily allocate social grants to all who are eligible	• Link PLHIV, TB clients to social security programmes for access to social relief distress grants	• DSD • Civil society including NGOs
Scaled-up provision of food parcels, and nutritional supplementation to all eligible PLHIV and PTB	• Strengthen capacity of HIV/TB providers to screen for food insecurity • Ensure access to sufficient food in particular for PLHIV and PWTB • Expand drop-in centres especially in high-burden districts • Expand access through Isibindi model	• DSD • NGOs • SANAC sectors
Expand inpatient and outpatient rehabilitation facilities	• Develop adolescent-friendly practices • Sensitise and capacitate HCWs to screen for and refer and provide interim support for people with harmful use of alcohol and drugs • Expand availability of inpatient rehabilitation facilities	• DSD • DoH • DBE • NGOs
Implementation of harm reduction services to identify and support people who use substances and alcohol	• The Drug Master Plan harm reduction interventions including the provision of Opioid Substitution Therapy • Needle and syringe exchange programmes by NGOs • Identify for referral to in- and out-patient rehabilitation services	• DSD • DoH • NGOs • DBE • DHET

Addressing social and structural drivers	Service	Multi-sectoral partner
Community awareness and advocacy programmes	• Implement programmes to increase awareness of services	• DSD • Civil society including NGOs
Combination socio-economic programmes	• Strengthen economic capacities through support to access further education, training, job placements and entrepreneurial activities, including for PWDs	• DSD • Private sector • DHET • Civil society including NGOs
Training for adolescent girls and young women	• Empower young women, such as through SABCOHA's BizAIDS programme, to start and improve their own businesses • Encourage companies to support the programme through co-funding and job opportunities	• SABCOHA and other private sector • Organised labour • DOT

Appendix A: Selecting Data for the Profile

It is important to note that the quality of an HIV epidemic and risk profile depends on the quality of secondary data used. The following are considerations for reviewing data and data sources to be used in the epidemiologic profile:

- **Completeness of the data:** How well do the prevalence of HIV and the associated factors represent the true number of persons living with HIV in the selected service and/or administrative area?

- **Representativeness of the data:** How well do the characteristics from a data source correspond to the characteristics of the overall population? For example, data from a hospital-based sample may not represent all HIV-infected persons or all HIV-infected persons in care in the area covered by the survey.

- **Age of the data:** For example, a behavioural survey conducted in 2000 might not provide data that are sufficiently up-to-date for current prevention activities.

- **Timeliness of the data:** if dealing with administrative data, how long is the reporting delay between the diagnosis of HIV and associated socio demographic characteristics recorded and reported to relevant departments?

- **Surrogate, or proxy, markers:** A proxy variable can be used as a marker for other variables when what we really want to measure is too difficult to measure directly. For example, some areas may use STI data as a proxy when data on sexual behaviours are not available.

- **Reliability of the data:** How accurate and complete are the data? For example, how well was information e.g. age, recorded whether in a survey or in administrative records and transcribed to the case report from the medical record.

- **Small numbers:** Small numbers of cases need to be interpreted with caution because small absolute changes in the number of cases can produce large relative or proportionate changes in rates that may be misinterpreted by end users. Rates calculated from numerators smaller than 10 should be denoted in a footnote as unreliable.

Data assumptions and limitations

The National Department of Health collects routine HIV data. The data is captured in the National Health Information Repository and Data warehouse (NIRDS), through the provincial and district health information systems (DHIS). The data are mostly obtained through routine service delivery by providers e.g. health facilities, and PHC clinics and consist of reports of confirmatory HIV tests, viral loads and CD4 counts. Additionally, the system captures case reports and interview data that might include information on socio-demographics e.g. age, race, sex. Data on socio demographics rely heavily on patient and provider reporting. In most cases data of this nature may be obtained from independent cross-sectional and bio-behavioural surveys and only reported at much higher geographical levels than local levels or high burden areas. The bio-behavioural surveys also provide data on sexual risk behaviours.

Age breakdown of routine indicators are limited to predefined indicators, with no sex breakdown available at Provincial and National Dataset level. No key population specific data can be segregated from any of the available datasets. Given the importance of key populations in understanding of the local context, this is considered a serious limitation in available routine data. Data on HIV risk exposure or mode of transmission require disease specialists and willingness of patient to participate is also not available at national and/or local level. Mobile clinic data is reported under the point where mobile is working from and is not segregated by service delivery point. This skews the picture when data is projected geospatially. Sexual risk data not part of routine data collected, secondary data available from surveys are included for this yet this is only available at District level. Figure 32 below reflects on the source of various levels of data for the profile. Data is presented at the level that it is available.

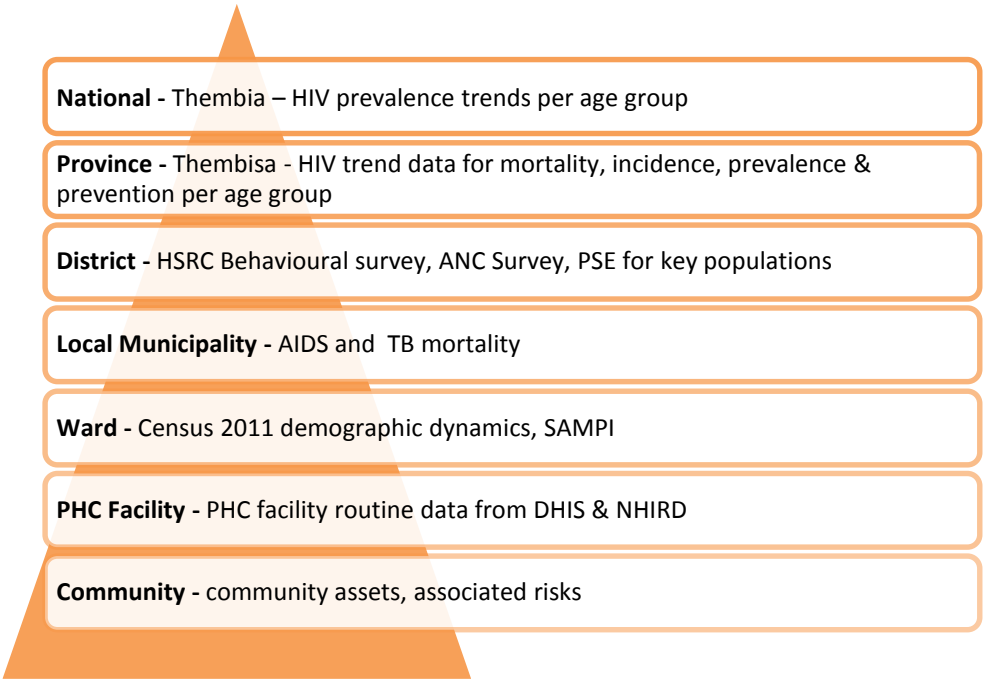

Figure 32: Data pyramid used for risk profiles

Care is also taken to avoid reporting on small number of cases without caution. Definitions and outlines of calculations are provided in

Catchment area and catchment populations

The catchment population is different from a catchment area, whereby the population is not simply just a count of the total number of people that are resident within that geographical boundary, but is rather an estimate of the estimated population that could access that specific facility.

Agreement on a health-care facility's catchment area is an important component in the Focus for Impact approach for defining the soft boundary for associated risk profiling within the catchment population linked to a specific HIV high burden area, estimate population-based rates of HIV, TB and STI as well as other important analyses.

For the purpose of the Focus for Impact approach demographic data for the population is derived from the Census 2011 data linked to a specific ward within the agreed catchment areas.

Working closely with the KZN DoH, the DoH used a geospatial approach to allocate each ward in KZN to the closest health facility. For the purposes of the Focus for Impact approach only the catchment area of fixed PHC facilities were used. Please keep in mind that multiple PHC facilities (fixed and mobile) refer to a specific Hospital and therefore relates to a larger catchment area that might overlap with several PHC facility catchment areas.

It is acknowledged that this approach does not take into consideration the topography of the area or preferences of the health facility users. It is therefore suggested that the catchment area be used as a starting point and that the approach be refined to determine the catchment population as better data becomes available e.g. through the scale up of the Health Patient Registration System (HPRS) where more granular patient level data will become available.

HIV associated risks

The HIV associated risk profile is a tool to assist decision-makers to design appropriate and sustainable interventions for HIV prevention. The diagram below illustrates factors affecting HIV associated risk. Data in this profile links with the different variables identified below (as far as it is available).

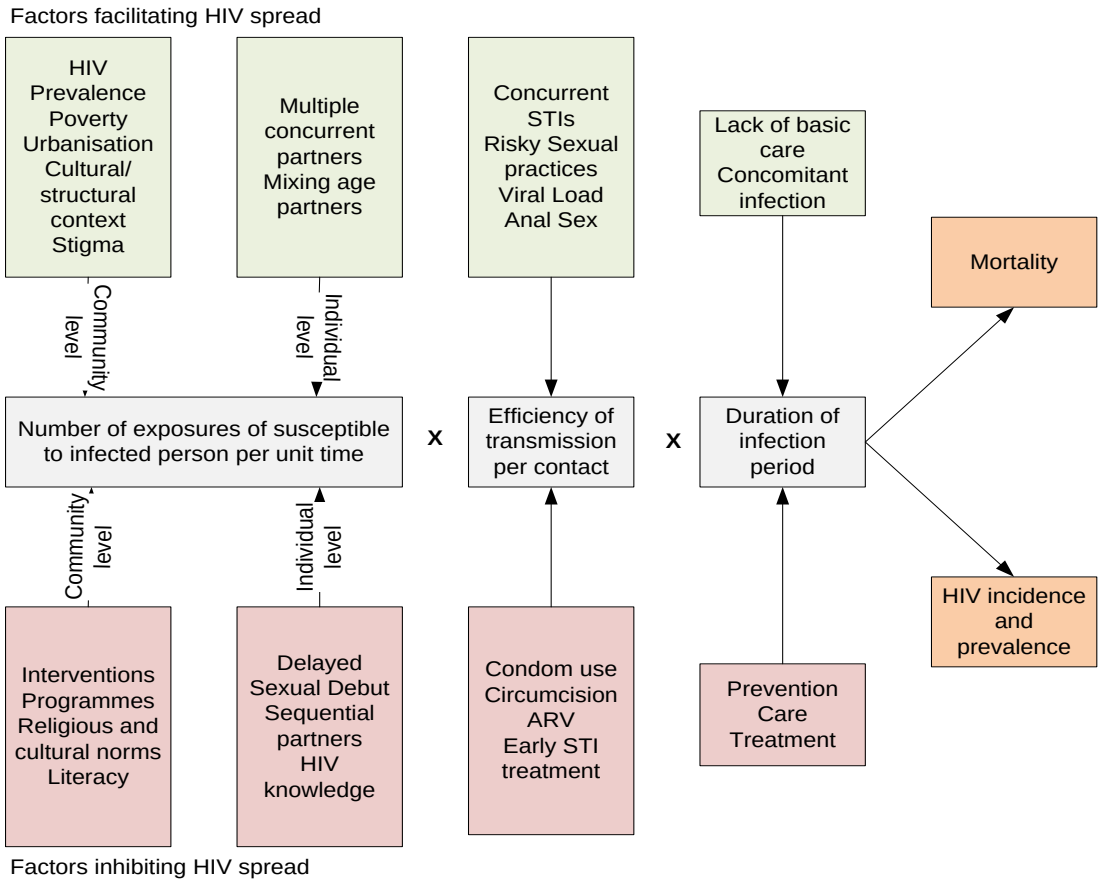

Figure 33: Factors influencing HIV associated risk and outcomes

Appendix B: Terms, Definitions and calculations

ANC client HIV 1st test positive rate (routine health indicator DHIS 2015)	Short Name - ANC HIV 1st test pos rate Numerator - Antenatal client HIV 1st test positive Denominator - Antenatal client HIV 1st test Indicator Type - % Definition - Antenatal clients tested HIV positive as proportion of antenatal clients HIV tested for the first time during current pregnancy
Antenatal client HIV re-test positive rate (routine health indicator DHIS 2015)	Short Name - ANC HIV re-test pos rate Numerator - Antenatal client HIV re-test positive Denominator - Antenatal client HIV re-test Indicator Type - % Definition - Antenatal clients re-tested positive for HIV as proportion of antenatal clients re-tested for HIV
Behavioural data	Data collected from studies of human behavior that is relevant to disease risk. Relevant behaviors for HIV risk may include sexual activity, substance use, needle sharing, condom use, or responses to primary and secondary prevention messages, knowledge of HIV transmission and prevention
Data	Raw, unprocessed numbers
Delivery in facility under 18 years rate (routine health indicator DHIS 2015)	Short Name - Delivery 18 rate Numerator - Delivery under 18 years in facility Denominator - Delivery in facility - total Indicator Type - % Definition - Deliveries to women under the age of 18 years as proportion of total deliveries in health facilities
Dependency ratio	The dependency ratio is an indicator of potential dependency burden of children and the elderly on those who are of economically productive ages in a population. Source Census 2011
Epidemiologic profile	A document that describes the distribution of HIV in various populations and identifies characteristics both of HIV-infected and HIV-negative persons in defined geographic areas. It is composed of information gathered to describe the effect of HIV on an area in terms of socio-demographic, geographic, behavioural, and clinical characteristics. Identifies characteristics of the general population and of populations who are living with, or at high risk for HIV infection in the pre-defined geographic areas in need of primary and secondary prevention or care services; and also identifies social, behavioural, cultural, factors driving local HIV infection. This providing information required to conduct needs assessments and gap analyses to complete the local HIV profile
Female condom distribution coverage (routine health	Short Name - Fem condom dist cov Numerator - Female condoms distributed Denominator - Female population 15 years and older Indicator Type - %

indicator DHIS 2015)	Definition - Female condoms distributed from a primary distribution site to health facilities or points in the community (e.g. campaigns, non-traditional outlets, etc.)
HIV prevalence amongst client tested 15-49 years rate (routine health indicator DHIS 2015)	Short name - HIV test 15-49y pos rate Numerator - HIV test positive 15-49 years, excl ANC Denominator - HIV test 15-49 years, excl ANC Indicator Type - % Description - Proportion of clients on whom an HIV test was done who tested positive for the first time
HIV test positive child 12-59 months rate (routine health indicator DHIS 2015)	Short Name - HIV+ 12-59 rate Numerator - HIV test positive 12-59 months Denominator - HIV test 12-59 months Indicator Type - % Definition - Children 12 to 59 months who tested HIV positive as a proportion of children who were tested for HIV in this age group
HIV test positive child 5-14 years rate (routine health indicator DHIS 2015)	Short Name - HIV+ 5-14 rate Numerator - HIV test positive 5-14 years Denominator - HIV test child 5-14 years Indicator Type - % Definition - Children 5 to 14 years who tested HIV positive as a proportion of children who were tested for HIV in this age group
Incidence	The number of new infections in a defined population during a specific period, often 1 year, which can be used to measure disease frequency. There is an important difference between HIV incidence and a new diagnosis of HIV infection: HIV incidence refers to persons newly infected with HIV, whereas persons newly diagnosed with HIV may have been infected years before the diagnosis. Population-based incidence estimates include new infections that have been diagnosed as well as new infections that have not been diagnosed. HIV incidence data may be used to monitor emerging trends and guide prevention activities
Indicators	A quantitative or qualitative variable that provides a simple and reliable measurement of one aspect of performance, achievement or change in a program or project
Infant 1st PCR test positive around 6 weeks' rate (routine health indicator DHIS 2015)	Short Name - PCR at 10w pos rate Numerator - Infant PCR test positive around 6 weeks Denominator - Infant PCR test around 6 weeks Indicator Type - % Definition - Infants tested PCR positive for follow up test as a proportion of Infants PCR tested around 6 weeks
Infant rapid HIV test around 18 months positive rate (routine health indicator DHIS	Short name - HIV test 18m pos rate Numerator - HIV test positive around 18 months Denominator - HIV test around 18 months Indicator Type - % Description - Infants tested positive for HIV antibodies around 18 months

2015)	after birth as the proportion of Infants tested for HIV antibodies around 18 months
Information	Processed or analyzed data that adds context through relationships between data to allow for interpretation and use
Intensity of poverty	The average proportion of indicators in which poor households are deprived. Example, an intensity of 44% in 2011 means the average intensity of poverty was 44% amongst the 20% poor households
Male condom distribution coverage (routine health indicator DHIS 2015)	Short Name - Male cond dist cov Numerator - Male condoms distributed Denominator - Male population 15 years and older Indicator Type - % Definition - Male condoms distributed from a primary distribution site to health facilities or points in the community (e.g. campaigns, non-traditional outlets, etc.)
Male urethritis syndrome rate (routine health indicator DHIS 2015)	Short Name - MUS rate Numerator - Male Urethritis Syndrome treated - new episode Denominator - STI male - new episode Indicator Type - % Definition - Male urethritis Syndrome new episodes treated as a proportion of total males with STI new episodes treated
Modes of HIV transmission or mode of HIV exposure	Heterosex (or heterosexual contact with a partner who is HIV positive or at increased risk for HIV. Often this level of knowledge about sexual partners (anonymous, casual, or exclusive) may be unknown; Men who have sex with men (MSM); People who Inject Drugs (PWID); Joint risk of MSM/PWID; and Other mode of exposure including (transplant, hemophilia, transfusion or mother with HIV or HIV risk (PMTCT)
Morbidity	The presence of illness in the population.
Mortality	The total number of persons who have died of the disease of interest. Usually expressed as a rate, mortality (total number of deaths over the total population) measures the effect of the disease on the population as a whole
Percentage	A proportion of the whole, in which the whole is 100. Example: Assume that 10 of the 40 cases of AIDS in a given year in a Ward occurred in men. (10 ÷ 40) x100= 25%
Poverty Headcount	The proportion of households defined as multi-dimensionally poor using the poverty cut-off. Example a headcount of 20% in 2011, based on 2011 census, means that 20% of households in South Africa were poor.
Prevalence	The proportion of cases of a disease in a population at risk, measured at a given point in time (often referred to as point prevalence). Prevalence can also be measured over a period of time (e.g., a year; known as period prevalence). Prevalence does not indicate how long a person has had a disease. It can provide an estimate of risk for a disease at a specific time.

	Prevalence data provide an indication of the extent of a condition and may have implications for services needed in a community. For HIV surveillance, prevalence refers to living persons with HIV disease, regardless of time of infection or date of diagnosis.
Qualitative data	Information from sources such as narrative behaviour studies, focus group interviews, open-ended interviews, direct observations, ethnographic studies, and documents. Findings from these sources are usually described in terms of common themes and patterns of response rather than by numeric or statistical analysis. Qualitative data often complement and help explain quantitative data
Quantitative data	Numeric information (e.g., numbers, rates, and percentages).
Rate	Measure of the frequency of an event compared with the number of persons at risk for the event. When rates are being calculated, it is usual for the denominator to be the general population rather than the population potentially exposed to HIV infection by various high-risk behaviours. The size of the general population is known from data from the U.S Census Bureau, whereas the size of a population at high risk is usually not known. $\frac{\text{number of HIV diagnoses}}{\text{Population}} X\ 100000 =\ \text{population rate of HIV diagnosis}$ Calculated for a given period. The multiplier (100,000) is used to convert the resulting fraction to number of cases per 100,000 populations. Although arbitrary, the choice of 100,000 is standard practice. Example: Assume that 200 cases of HIV disease were diagnosed during 2014 in a Ward X and that 400,000 persons lived in the Ward X in 2014 Rate: 200 ÷ 400,000 × 100,000 = 50 per 100,000
Routine health service based information	In terms of the National Health Act (Act 61 of 2003) the National Department of Health (NDoH) is required to facilitate and coordinate the establishment, implementation and maintenance of health information systems at all levels. The District Health Management Information System (DHMIS) Policy 2011 defines the requirements and expectations to provide comprehensive, timely, reliable and good quality routine evidence for tracking and improving health service delivery. The strategic objectives of the policy are to strengthen monitoring and evaluation (M&E) through standardization of data management activities and to clarify the main roles and responsibilities at each level for each category of staff to optimize completeness, quality, use, ownership, security and integrity of data. In 2000 the District Health Information System (DHIS) was adopted as the official South African routine health information system for managing aggregated routine health service based information. This information is defined as specific indicators and used in Focus for Impact to ensure

<table>
<tr><td></td><td>standardization of indicators across the different geographical areas.

Source: Department of Health. 2015. NDOH Data Directory. Available online from http://dd.dhmis.org/index.html</td></tr>
<tr><td>Service area</td><td>The jurisdictions of service areas or planning regions of respective planning groups. Example Health districts, sub- districts, wards or health facility catchment areas</td></tr>
<tr><td>Socio-demographic factors</td><td>Background information about the population of interest (e.g., age, sex, race, educational status, income, geographic location). These factors are often thought of as explanatory because they help us to make sense of the results of our analyses</td></tr>
<tr><td>Socio-economic status (SES)</td><td>A measure of social and economic factors that helps to describe a person's standing in society (e.g., income level, relationship to the national poverty line, educational achievement)</td></tr>
<tr><td>South Africa Multidimensional Poverty Index (SAMPI[16]) (StatSSA, 2014)</td><td>The SAMPI is based on the global Multidimensional Poverty Index (MPI) which is an international measure of acute poverty. The MPI "complements traditional income/ expenditure-based poverty measures by capturing the severe deprivations that each person or household faces with respect the following dimensions: - education (measured by years of schooling and school attendance indicators), health (measured by nutrition and child mortality indicators), and living standards (measured by indicators such as cooking fuel, Sanitation, water, electricity, floor, and assets).

The MPI creates a comprehensive picture of who and where people are that are living in poverty… [and it also] permits comparisons within countries by population group, settlement type, as well as other key household and community characteristics.

The SAMPI includes an additional dimension –the economic activity indicated by adult unemployment
<table>
<tr><th>Dimension</th><th>Indicator</th><th>Deprivation cut-off</th></tr>
<tr><td>Health</td><td>Child mortality</td><td>If any child under the age of 5 has died in the past 12 months</td></tr>
<tr><td>Education</td><td>Years of schooling

School attendance</td><td>If no household member aged 15 or older has completed 5 years of schooling
If any school-aged child (aged 7 to 15) is out of school</td></tr>
<tr><td>Standard of living</td><td>Fuel for lighting</td><td>If household is using paraffin/candles/nothing/other</td></tr>
</table>
</td></tr>
</table>

[16] StatSSA. (2014). *The South African MPI: Creating a multidimensional poverty index using census data*. Pretoria, South Africa.

		Fuel for heating	If household is using paraffin/wood/coal/dung/other/ none
		Fuel for cooking	If household is using paraffin/wood/coal/dung/other/ none
		Water access	If no piped water in dwelling or on stand
		Sanitation type	If not a flush toilet
		Dwelling type	If an informal shack/traditional dwelling/caravan/tent/other
		Asset ownership	If household does not own more than one of radio, television, telephone or refrigerator and does not own a car
	Economic activity	Unemployment (all adults)	If all adults (aged 15 to 64) in the household are unemployed

SAMPI is the product of the headcount (proportion of households defined as multi-dimensionally poor using the poverty cut-off) and intensity of poverty (average proportion of indicators in which poor households are deprived)

Example - If the headcount poverty was 20% in 2011 (i.e. 20% of all households were poor in 2011), and the average intensity of poverty amongst the poor households was 44%. Then the SAMPI equals 0.09(=20% X 44%)

In an extremely poor society where all households are poor and are deprived in all dimension indicators, the SAMPI score would be 1, 0. However, in an impoverished society where 50% of households are poor and experienced deprivation on 50% of all dimensions, the SAMPI score would be 0. 25.

TB (pulmonary) case finding index (routine health indicator DHIS 2015)	Short name - PTB case finding index Numerator - TB suspect 5 years and older sputum sent Denominator - PHC headcount 5 years and older Description - Proportion of clients 5 years and older, who were identified as TB suspects and for whom sputum was sent to the laboratory Growth-Sentiment - negative (high values are negative, low values are ideal: positive)
TB suspect smear positive rate (routine health indicator DHIS 2015)	Short name - TB suspect smear pos rate Numerator: TB suspect 5 years and older test positive Denominator: TB suspect 5 years and older sputum sent Indicator Type - % Description - Proportion of TB suspects with smear positive sputum results Growth-Sentiment: negative (high values are negative, low values are

	ideal: positive)
TB suspect sputum test rate (routine health indicator DHIS 2015)	Short name - TB susp sputum test rate Numerator - TB suspect 5 years and older sputum sent Denominator - TB suspect 5 years and older identified Indicator Type - % Description - Proportion of TB suspects with sputum sent to the laboratory for testing Growth-Sentiment: positive (low values are negative, high values are ideal: positive)
TB suspect treatment initiation rate (routine health indicator DHIS 2015)	Short name - TB suspect treatment rate Numerator - TB suspect 5 years and older initiated on treatment Denominator - TB suspect 5 years and older test positive Indicator Type - % Description - Proportion of smear positive TB suspects initiated on treatment Growth-Sentiment - positive (low values are negative, high values are ideal: positive)
Triangulation	Synthesis of data to compare and contrast the results of different kinds of research that address the same topic

Appendix C: Methodology for stakeholder engagement to explore local level data

The feedback from the community brings a local intelligence and ownership to the process that not only facilitates buy-in for HIV programming, but also brings about an opportunity for advocacy and accountability at this level. This gives new meaning to 'nothing about us, without us'. There is internal validation and triangulation of the data through this process, as stakeholders should be from various sectors/departments and types of organisations. Groups within the workshop validate the information before it is documented. In addition, the same information is tested with a community group (that should include members of key populations) and additions made with consensus.

Figure 34 below describes the various steps followed to develop this risk profile. A detailed guideline is available from SANAC that can be used be stakeholders and partners to ensure a standardised approach in the development and updating of the risk profile.

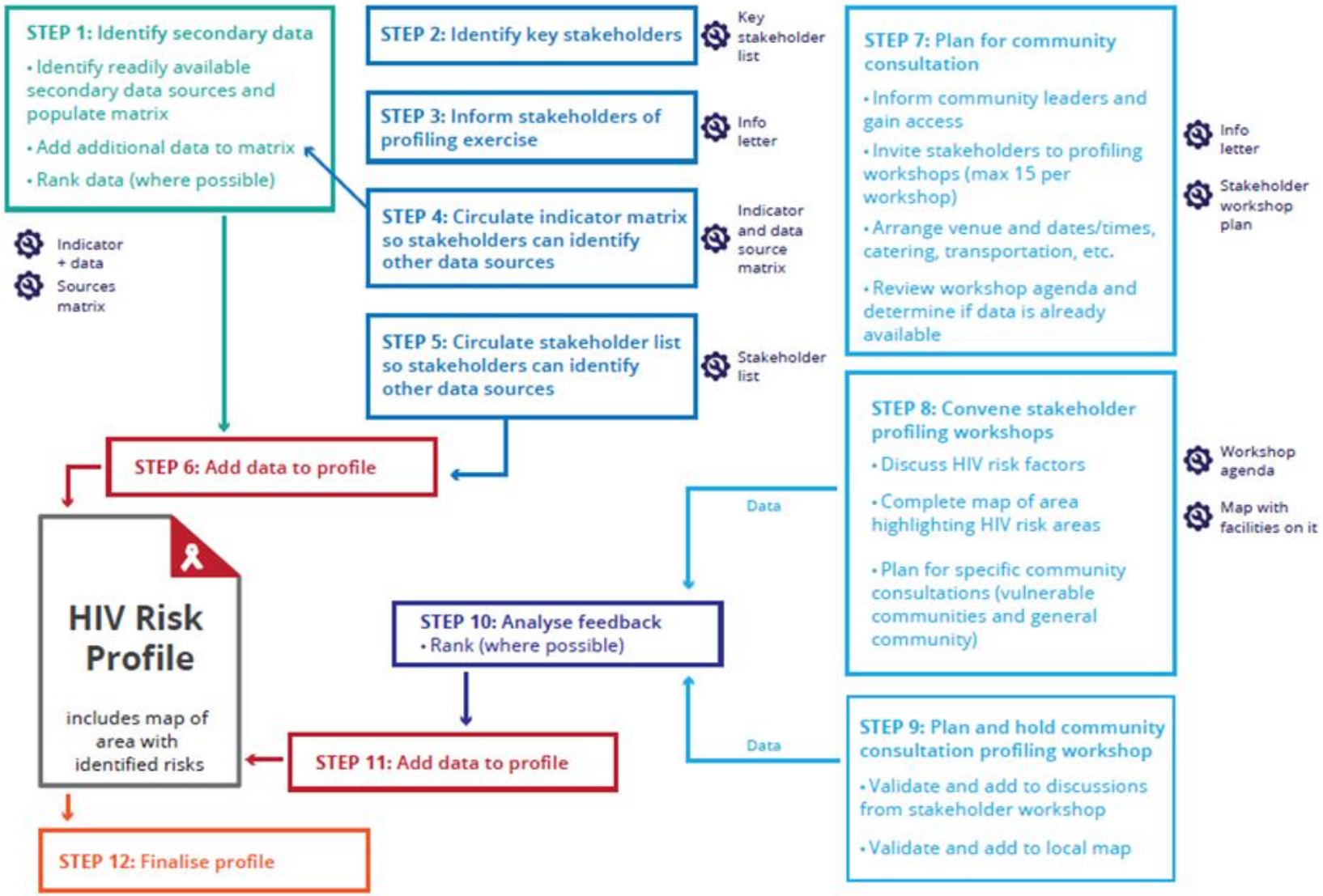

Figure 34: Steps for development of HIV associated risk profile