Focus for Impact

Community profile
Catchment area for KwaNdaba Clinic (Ward 16)

uMhlabuyalingana Local Municipality
uMkhanyakude District
KwaZulu-Natal

August 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

Acknowledgement

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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 uMhlabuyalingana Local Municipality in the uMkhanyakude 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 are in need of 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 KwaNdaba Clinic, uMhlabuyalingana Local Municipality is defined as uMhlabuyalingana Ward 16. For this specific profile, two stakeholder and community workshops held on 1 and 2 August 2017 in Bhekabantu Hall, Bhekabantu. The workshops were attended by 90 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 uMhlabuyalingana 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 KwaNdaba clinic catchment area:

- Key and vulnerable populations:
  - Young women and girls
  - Migrant workers
  - Orphans and vulnerable children
- Interventions that address:
  - Young women's vulnerability in relation to men-in terms of gender relations, as well as lack of financial independence
  - Stigma and discrimination, including Xenophobia
  - HIV prevention after circumcision
  - HIV education especially for men, children and the elderly
  - Substance abuse and drugs that contributes to high risk behaviour
  - Access to Health Education

1. Socio-demographic profile

1.1 Demarcated boundaries

uMkhanyakude District is one of the 11 district municipalities of KwaZulu-Natal province. The uMhlabuyalingana Local Municipality is one of the five Local Municipalities in uMkhanyakude district. The rest are Jozini, Hlabisa, Mtubatuba and the Big 5 False Bay Local Municipalities.

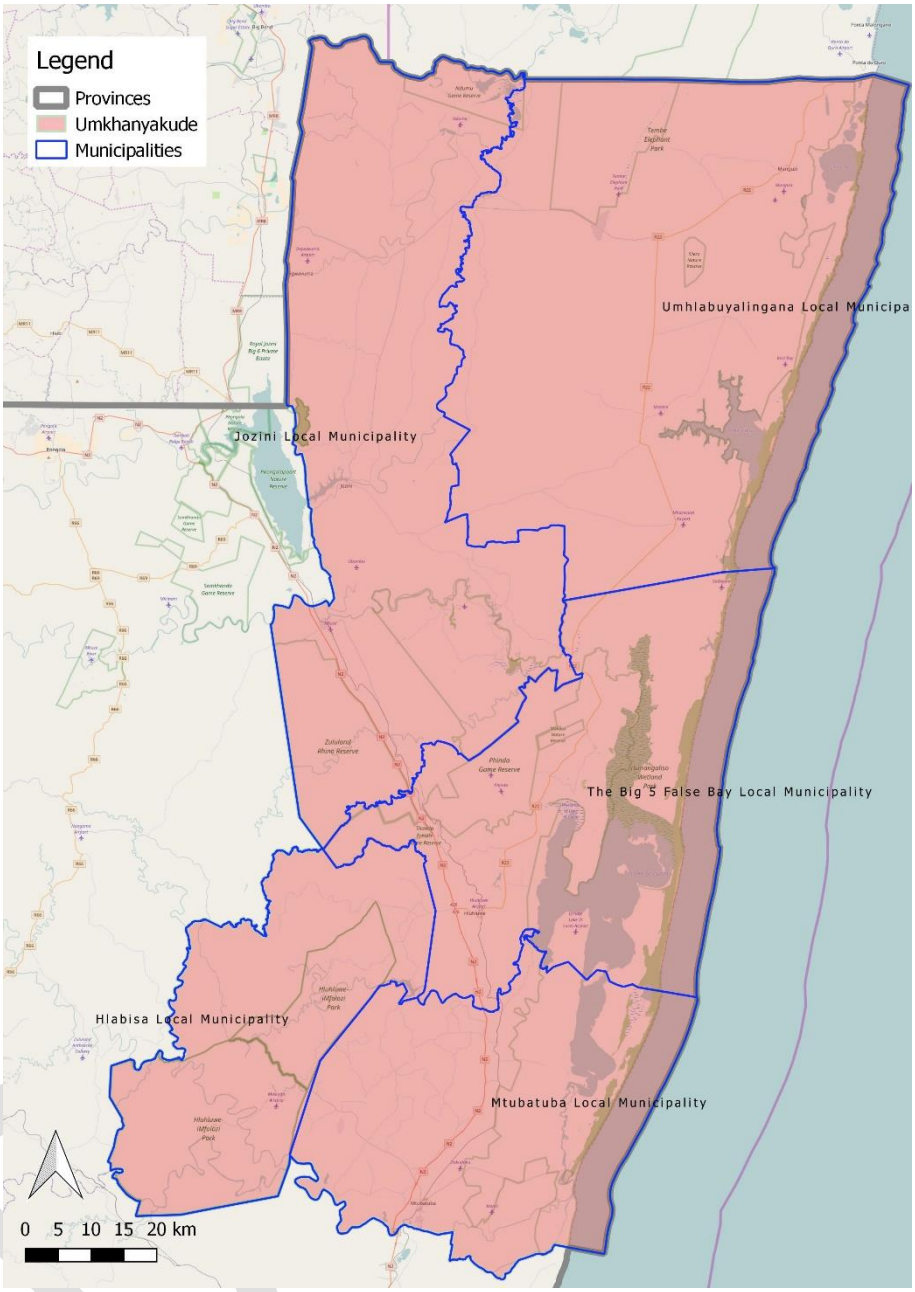

Figure 1: Local Municipalities' uMkhanyakude district

The Umhlabuyalingana Local Municipality constitute of 17 administrative wards (see Figure 2).

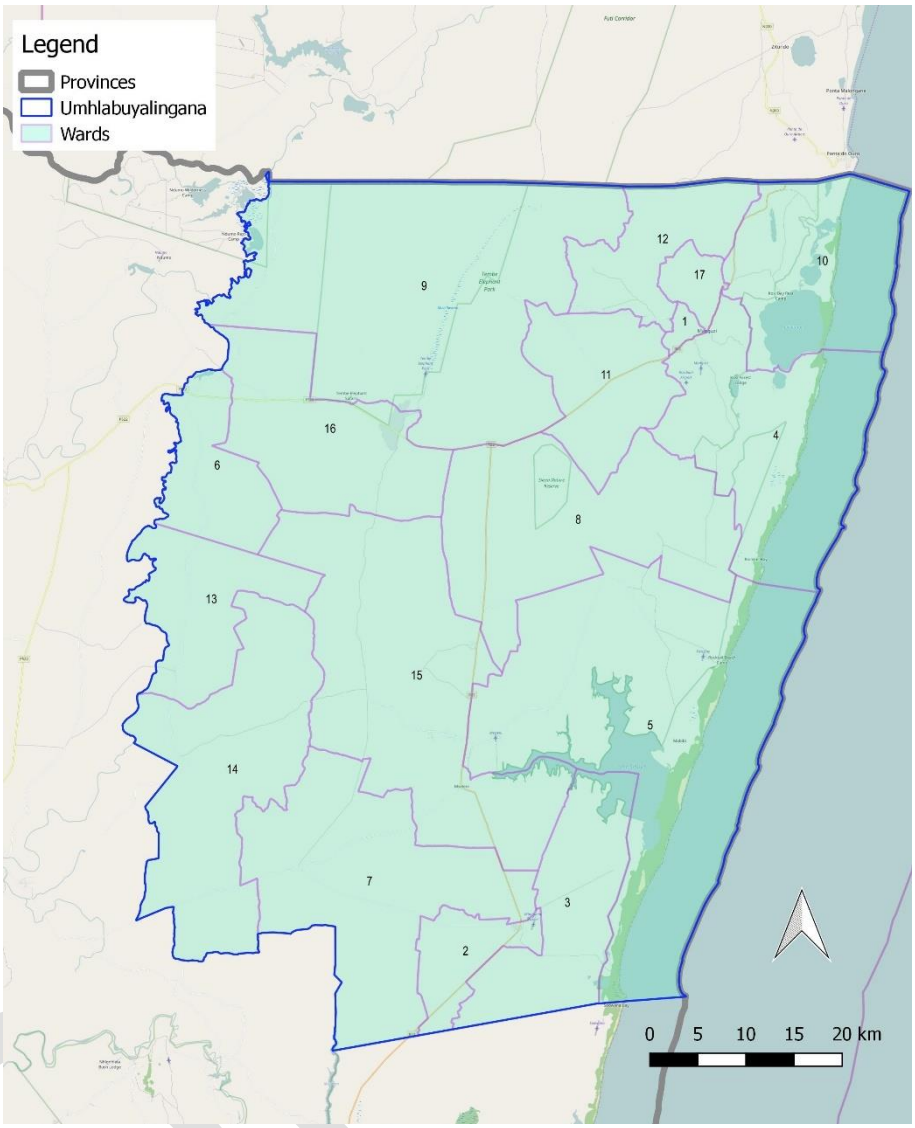

Figure 2: Distribution of Wards in the uMhlabuyalingana Local Municipality

1.2 Population by sex and age

During the 2011 Census 156 744 people participated in the 17 wards. Table 1 summarises the age and sex per population in these wards. Females constitute 54% of population, compared to males at 46%. Young people ≤ 25 years (62%) make up the majority of population in the Local Municipality.

The detail for Ward 16 that forms the catchment area for KwaNdaba Clinic, is highlighted in the table below.

Table 1: Population per age groups per ward, uMhlabuyalingana Local Municipality

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Ward 001	1155	558	552	438	1449	558	**4710**	2559	2151	**4710**
Ward 002	2043	906	906	795	2295	813	**7758**	4104	3654	**7758**
Ward 003	3000	1506	1359	1122	3126	1287	**11400**	6072	5328	**11400**
Ward 004	2976	1455	1497	1242	3414	1509	**12093**	6489	5604	**12093**
Ward 005	2256	1077	1041	801	2469	1260	**8904**	4800	4104	**8904**
Ward 006	3780	1797	1851	1230	3219	1200	**13077**	7077	6000	**13077**
Ward 007	2730	1323	1215	1005	2352	1176	**9801**	5238	4563	**9801**
Ward 008	2172	1131	1167	777	1983	1269	**8499**	4656	3843	**8499**
Ward 009	3462	1674	1491	1041	2829	1347	**11844**	6504	5340	**11844**
Ward 010	1725	933	1014	687	1824	1014	**7197**	3909	3288	**7197**
Ward 011	2424	1227	1326	912	2568	1119	**9576**	5313	4263	**9576**
Ward 012	1980	966	966	654	1791	966	**7323**	4005	3318	**7323**
Ward 013	2736	1290	1128	762	2058	936	**8910**	4758	4152	**8910**
Ward 014	2415	1203	1017	738	1761	963	**8097**	4401	3696	**8097**
Ward 015	2790	1389	1365	966	2529	1353	**10392**	5625	4767	**10392**
Ward 016	2190	1065	1023	756	1821	813	**7668**	4230	3438	**7668**
Ward 017	2406	1170	1119	990	2748	1062	**9495**	5253	4242	**9495**
	42240	**20670**	**20037**	**14916**	**40236**	**18645**	**156744**	**84993**	**71751**	**156744**
%	**27%**	**13%**	**13%**	**10%**	**26%**	**12%**		**54%**	**46%**	

Table 2: Youth population per sex and five-year age groups per ward, uMhlabuyalingana 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	
Ward 001	261	267	243	219	183	297	285	195	153	135	**2238**
Ward 002	435	441	417	393	309	471	465	378	336	228	**3873**
Ward 003	732	690	576	501	429	774	669	546	417	279	**5613**
Ward 004	690	759	660	519	441	765	738	582	432	285	**5871**
Ward 005	504	528	423	411	303	573	513	378	339	213	**4185**
Ward 006	885	870	660	570	429	912	981	570	372	243	**6492**
Ward 007	618	591	528	393	288	705	624	477	279	216	**4719**
Ward 008	522	591	453	276	258	609	576	324	213	129	**3951**
Ward 009	786	756	561	477	390	888	735	480	285	207	**5565**
Ward 010	462	510	354	285	240	471	504	333	192	171	**3522**
Ward 011	618	693	468	420	336	609	633	444	252	189	**4662**
Ward 012	462	492	363	258	252	504	474	291	180	138	**3414**
Ward 013	633	579	417	360	267	657	549	345	219	171	**4197**
Ward 014	576	519	420	318	228	627	498	318	219	135	**3858**
Ward 015	672	669	507	417	297	717	696	459	294	219	**4947**
Ward 016	528	522	441	312	237	537	501	315	207	132	**3732**
Ward 017	588	555	570	480	375	582	564	420	309	258	**4701**

Ward	Female					Male					
	10-14	15-19	20-24	25-29	30-34	10-14	15-19	20-24	25-29	30-34	
	9972	10032	8061	6609	5262	10698	10005	6855	4698	3348	75540

Figure 3 below reflects the population pyramid for uMhlabuyalingana Local Municipality. This figure visualises sex (male and female) and age in five-year age bands for this population. After 0-4-year olds the next largest age group is 0-4. Followed by 10-14-year olds and then 15-19-year olds.

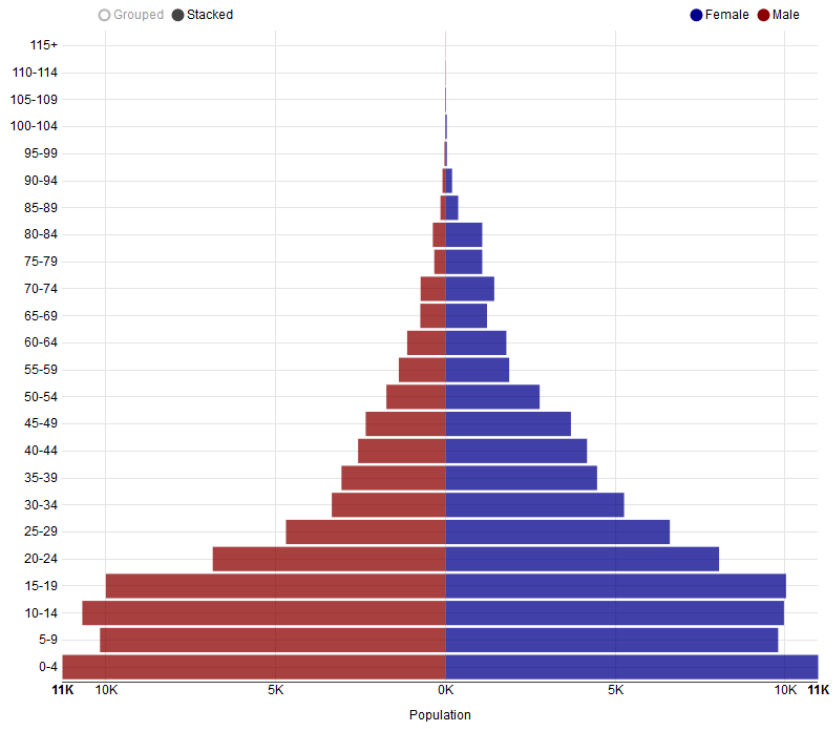

Figure 3: Population Pyramid uMhlabuyalingana Local Municipality

From this population, 40.2% children and 5.1% elderly are dependent on the 54.8% economically active population of the uMhlabuyalingana Local Municipality (Figure 4).

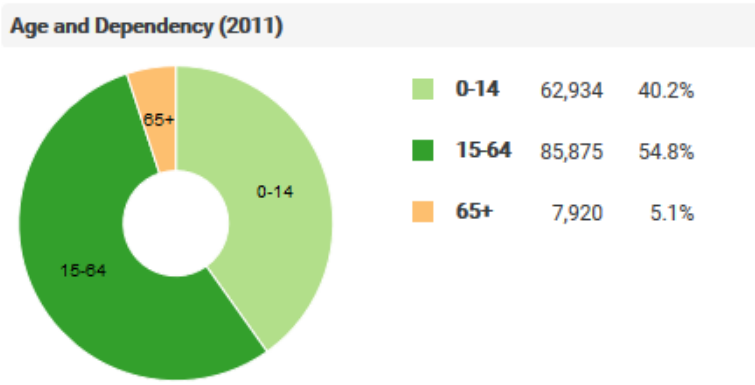

Figure 4: Dependency ratio uMhlabuyalingana Local Municipality (Source Census 2011)

In the catchment area for the KwaNdaba Clinic (uMhlabuyalingana Ward 16) there is a different male to female distribution to that seen in the uMhlabuyalingana Local Municipality population pyramid in Figure 3.

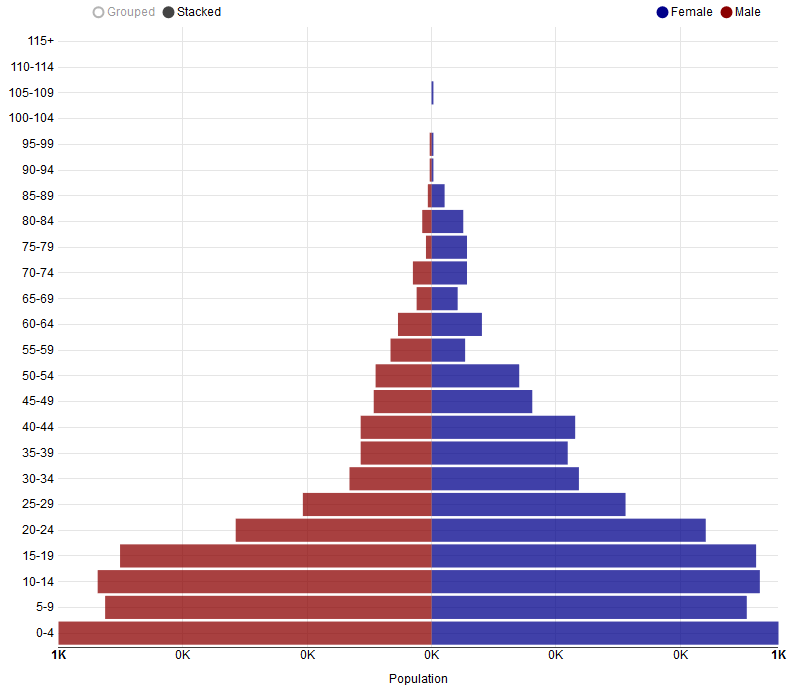

Figure 5: Population Pyramid KwaNdaba clinic catchment area (Source Census 2011)

In the same catchment population, 42.4% children and 4.3% elderly are dependent on the 53.3% economically active population (Figure 6).

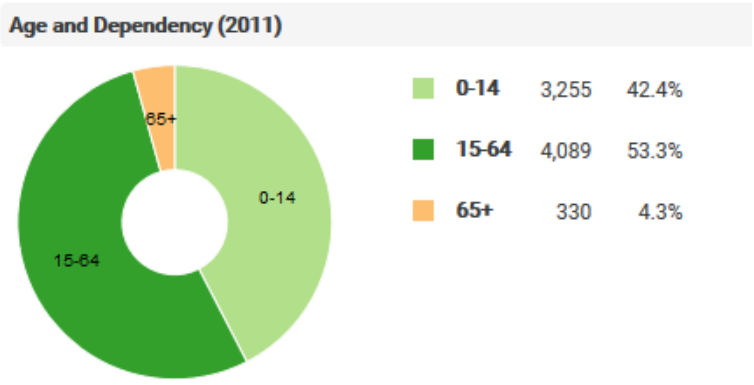

Figure 6: Dependency ratio KwaNdaba clinic catchment area (Source Census 2011)

1.3 Population by race

The dominant population group in uMhlabuyalingana Local Municipality is Black African at 99.3% followed by white at 0.3% (detail in Figure 7 and Table 2).

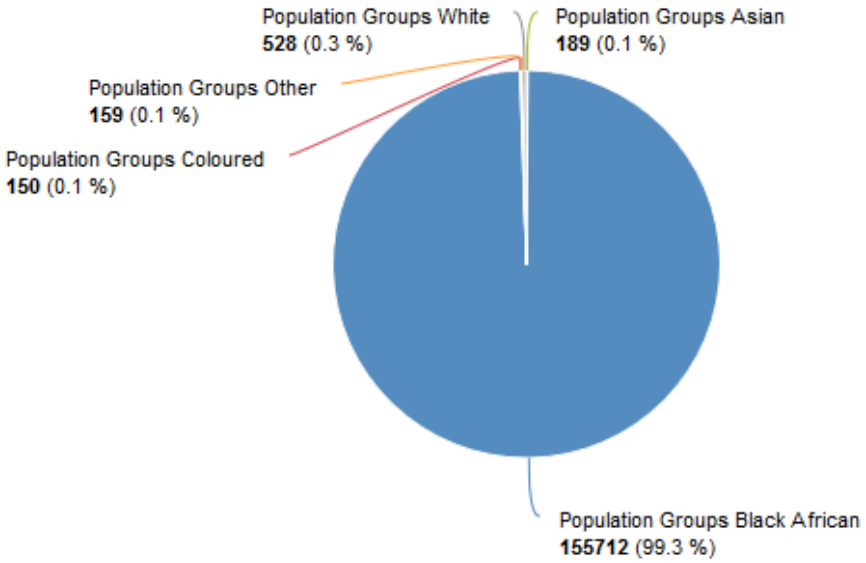

Figure 7: Population group distribution in uMhlabuyalingana Local Municipality (Source Census 2011)

The detail for Ward 16 that forms the catchment area for KwaNdaba Clinic, are highlighted in the table below.

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

Ward	Asian	Black African	Coloured	Other	White	Total
Ward 001	12	4650	12	9	24	**4707**
Ward 002	15	7689	27		15	**7746**
Ward 003	24	11214	15	3	147	**11403**
Ward 004	9	12009	24	24	21	**12087**
Ward 005	12	8772	18	15	75	**8892**
Ward 006	18	13035	6		3	**13062**
Ward 007	3	9759	3	6	24	**9795**
Ward 008		8484		9		**8493**
Ward 009	18	11781	6	6	33	**11844**
Ward 010	12	7077		9	90	**7188**
Ward 011	15	9537	3	18	15	**9588**
Ward 012	3	7299	3	12	15	**7332**
Ward 013	6	8886	6	12	9	**8919**
Ward 014	3	8097	6		3	**8109**
Ward 015	21	10344	9	24	3	**10401**
Ward 016	3	7659	3		12	**7677**
Ward 017	15	9420	9	12	39	**9495**
Total	**189**	**155712**	**150**	**159**	**528**	**156738**

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 uMkhanyakude district is TB (xxx%) followed by HIV (xxx%) (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 uMkhanyakude 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 uMkhanyakude 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.

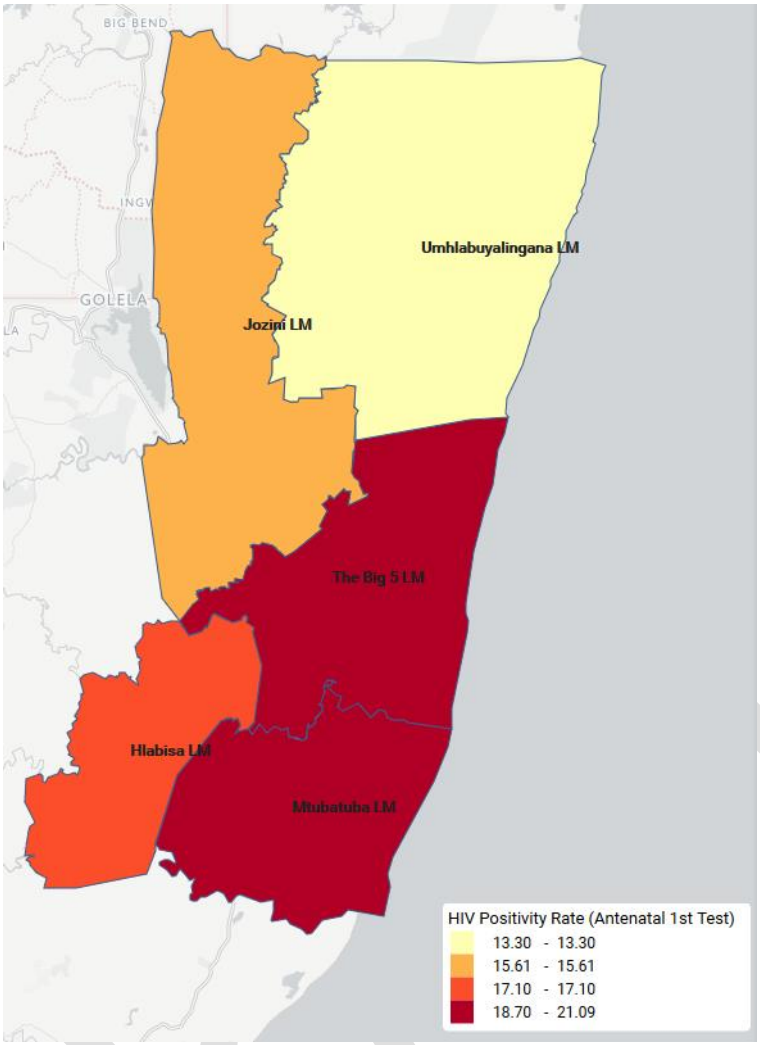

Figure 8: ANC client HIV 1st test positive rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 5: HIV Positivity Rate (Antenatal 1st Test) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **16.7 %**								
	Local Municipality	**2015 : HIV Positivity Rate (Antenatal 1st Test)**					**NUM %**	**DEN %**
1	kz Umhlabuyalingana Local Municipality	13.30	%	(463	/	3481)	21.83 %	27.40 %
2	kz Jozini Local Municipality	15.61	%	(615	/	3941)	29 %	31.02 %
3	kz Hlabisa Local Municipality	17.10	%	(210	/	1228)	9.90 %	9.67 %
4	kz The Big 5 False Bay Local Municipality	18.70	%	(172	/	920)	8.11 %	7.24 %
5	kz Mtubatuba Local Municipality	21.09	%	(661	/	3134)	31.16 %	24.67 %

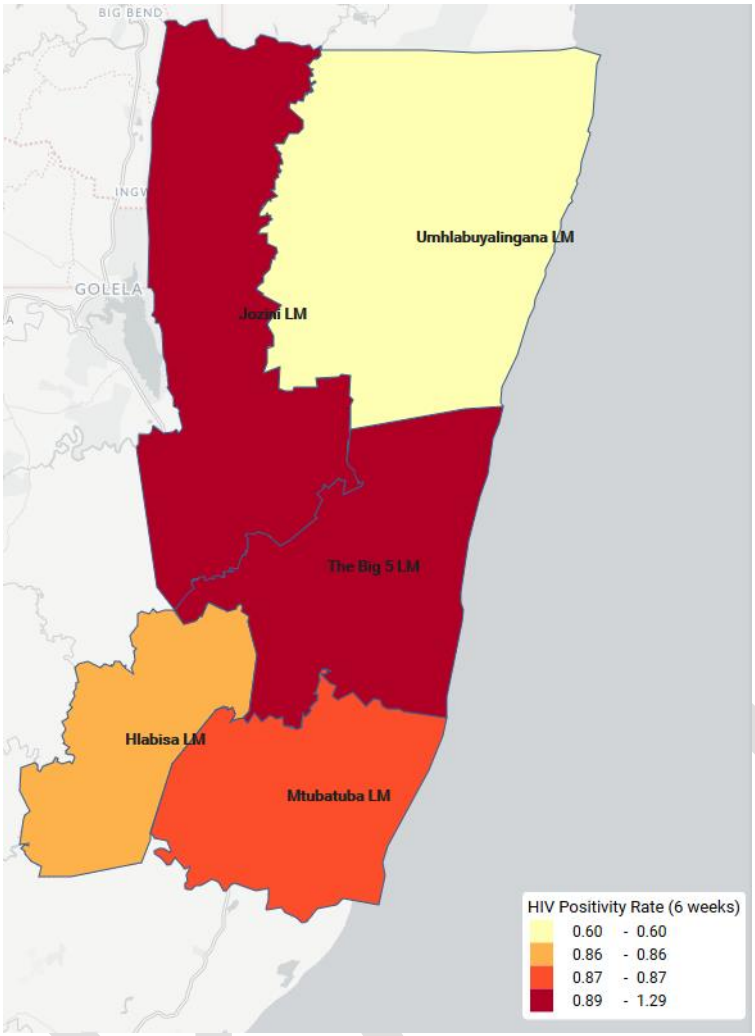

Figure 9: Infant 1st PCR test positive around 6 weeks rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 6: HIV Positivity Rate (6 weeks) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **0.9 %**								
	Local Municipality	**2015 : HIV Positivity Rate (6 weeks)**					**NUM %**	**DEN %**
1	kz Umhlabuyalingana Local Municipality	0.60	%	(6	/	1008)	16.67 %	25.97 %
2	kz Hlabisa Local Municipality	0.86	%	(3	/	348)	8.33 %	8.96 %
3	kz Mtubatuba Local Municipality	0.87	%	(10	/	1143)	27.78 %	29.44 %
4	kz The Big 5 False Bay Local Municipality	0.89	%	(2	/	224)	5.56 %	5.77 %
5	kz Jozini Local Municipality	1.29	%	(15	/	1159)	41.67 %	29.86 %

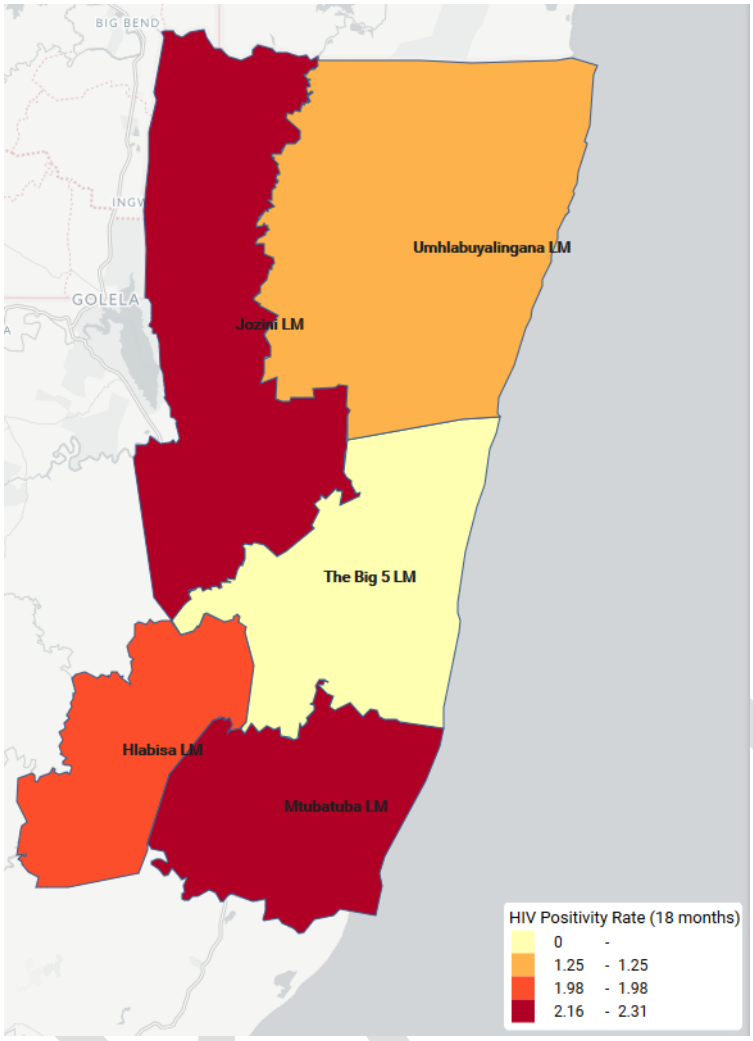

Figure 10: Infant rapid HIV test around 18 months positive rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 7: HIV Positivity Rate (18 months) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **1.8 %**								
	Local Municipality	**2015 : HIV Positivity Rate (18 months)**					**NUM %**	**DEN %**
1	kz The Big 5 False Bay Local Municipality	0	%	(-	/	177)	0 %	5.11 %
2	kz Umhlabuyalingana Local Municipality	1.25	%	(13	/	1044)	20.63 %	30.11 %
3	kz Hlabisa Local Municipality	1.98	%	(5	/	253)	7.94 %	7.30 %
4	kz Jozini Local Municipality	2.16	%	(15	/	696)	23.81 %	20.07 %
5	kz Mtubatuba Local Municipality	2.31	%	(30	/	1297)	47.62 %	37.41 %

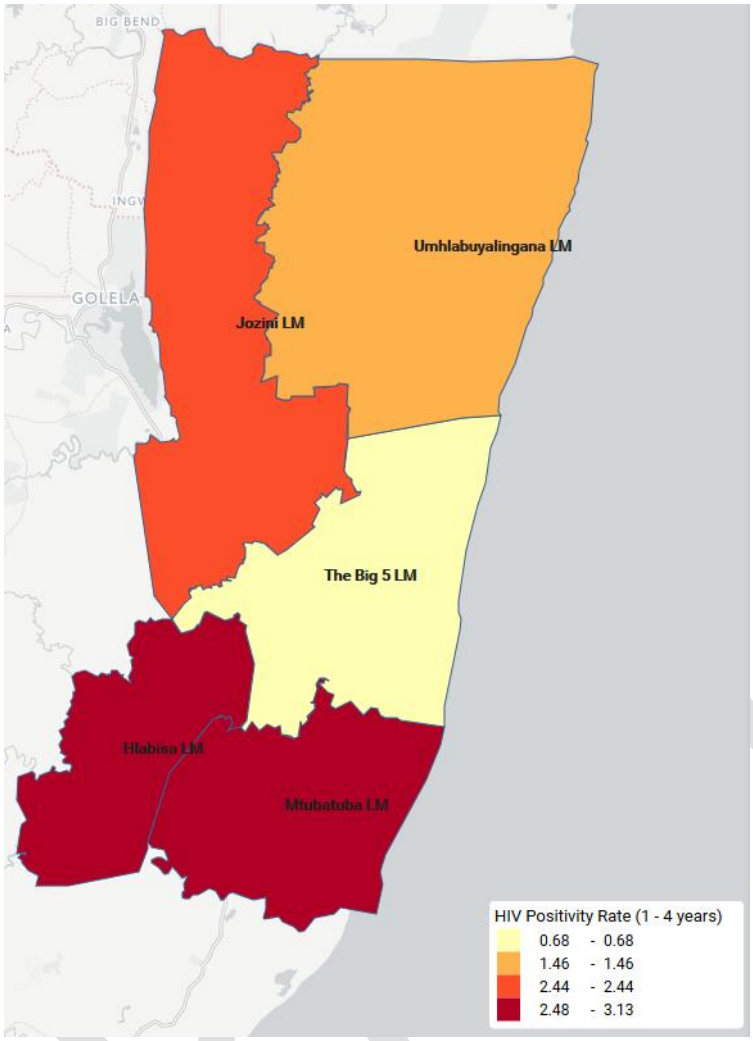

Figure 11: HIV test positive child 12-59 months rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 8: HIV Positivity Rate (12-59 months) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **2.2 %**									
	Local Municipality	**2015 : HIV Positivity Rate (1 - 4 years)**					**NUM %**	**DEN %**
1	kz The Big 5 False Bay Local Municipality	0.68	%	(3	/	444)	1.92 %	6.37 %
2	kz Umhlabuyalingana Local Municipality	1.46	%	(32	/	2195)	20.51 %	31.48 %
3	kz Jozini Local Municipality	2.44	%	(37	/	1516)	23.72 %	21.74 %
4	kz Hlabisa Local Municipality	2.48	%	(16	/	646)	10.26 %	9.26 %
5	kz Mtubatuba Local Municipality	3.13	%	(68	/	2172)	43.59 %	31.15 %

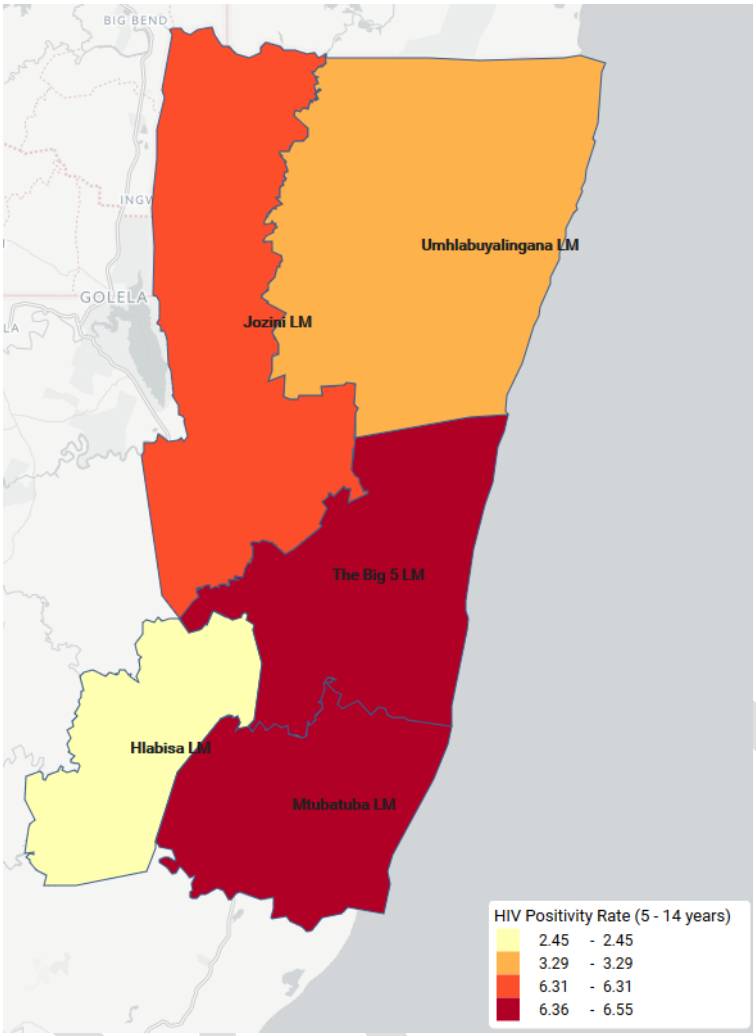

Figure 12: HIV test positive child 5-14 years rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 9: HIV Positivity Rate (5 - 14 years) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **4.8 %**									
	Local Municipality	**2015 : HIV Positivity Rate (5 - 14 years)**						**NUM %**	**DEN %**
1	kz Hlabisa Local Municipality	2.45	%	(18	/	736)		9.38 %	18.58 %
2	kz Umhlabuyalingana Local Municipality	3.29	%	(34	/	1035)		17.71 %	26.13 %
3	kz Jozini Local Municipality	6.31	%	(78	/	1236)		40.63 %	31.20 %
4	kz The Big 5 False Bay Local Municipality	6.36	%	(15	/	236)		7.81 %	5.96 %
5	kz Mtubatuba Local Municipality	6.55	%	(47	/	718)		24.48 %	18.13 %

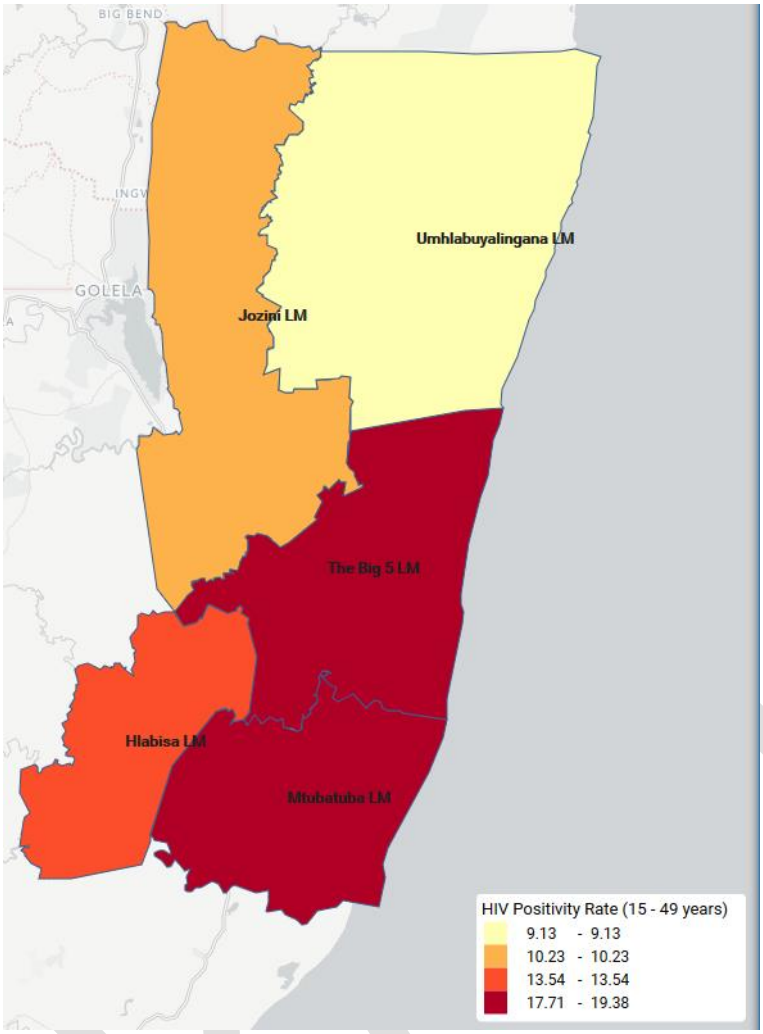

Figure 13: HIV prevalence amongst client tested 15-49 years rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 10: HIV Positivity Rate (15 - 49 years) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **12.1 %**								
	Local Municipality	**2015 : HIV Positivity Rate (15 - 49 years)**					**NUM %**	**DEN %**
1	kz Umhlabuyalingana Local Municipality	9.13	%	(2490	/	27266)	26.55 %	35.22 %
2	kz Jozini Local Municipality	10.23	%	(2603	/	25448)	27.76 %	32.87 %
3	kz Hlabisa Local Municipality	13.54	%	(918	/	6782)	9.79 %	8.76 %
4	kz The Big 5 False Bay Local Municipality	17.71	%	(1143	/	6453)	12.19 %	8.33 %
5	kz Mtubatuba Local Municipality	19.38	%	(2223	/	11472)	23.71 %	14.82 %

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 uMkhanyakude 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.

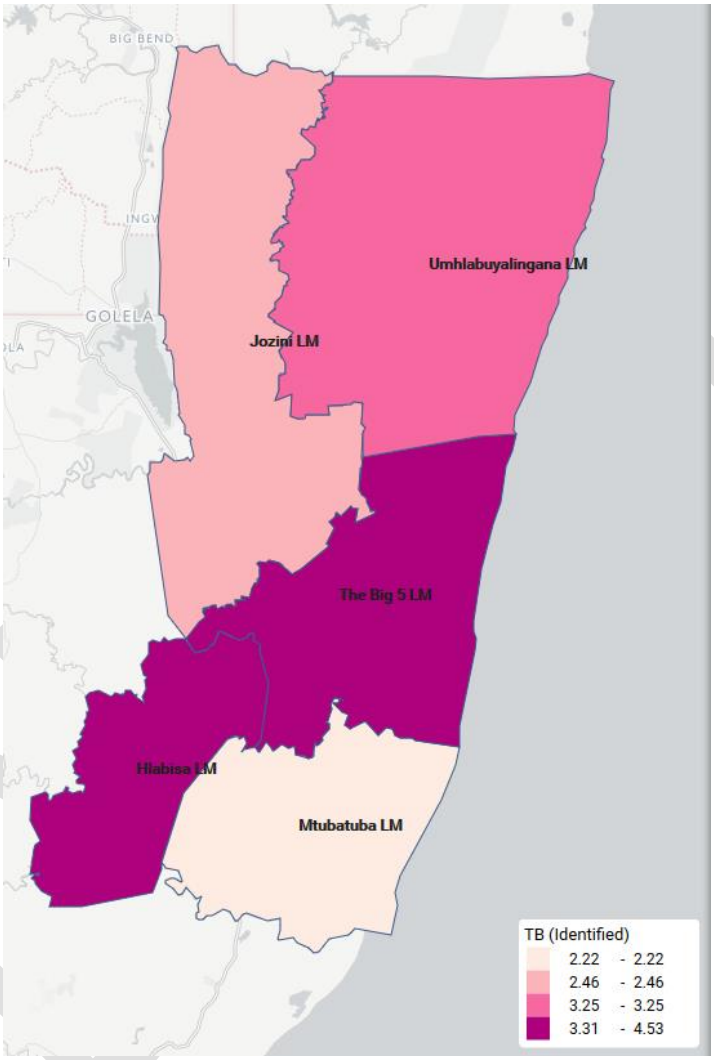

Figure 14: TB (pulmonary) case finding index uMkhanyakude district (Source: KZN DHIS 2015)

Table 11: TB (pulmonary) case finding index uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **2.9 %**								
	Local Municipality	**2015 : TB (Identified)**					**NUM %**	**DEN %**
1	kz Mtubatuba Local Municipality	2.22	%	(10220	/	459340)	19.39 %	25 %
2	kz Jozini Local Municipality	2.46	%	(14101	/	574313)	26.75 %	31.26 %
3	kz Umhlabuyalingana Local Municipality	3.25	%	(15946	/	490172)	30.25 %	26.68 %
4	kz The Big 5 False Bay Local Municipality	3.31	%	(4712	/	142552)	8.94 %	7.76 %
5	kz Hlabisa Local Municipality	4.53	%	(7728	/	170678)	14.66 %	9.29 %

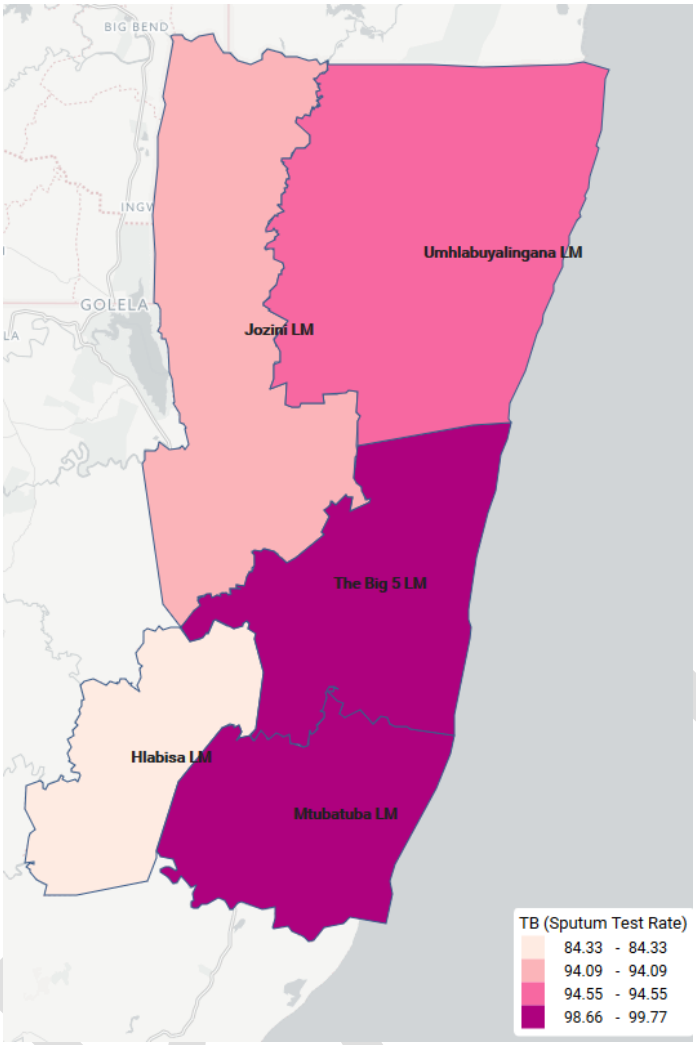

Figure 15: TB suspect sputum test rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 12: TB (Sputum Test Rate) uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **94 %**								
	Local Municipality	**2015 : TB (Sputum Test Rate)**					**NUM %**	**DEN %**
1	kz Hlabisa Local Municipality	84.33	%	(7728	/	9164)	14.66 %	16.34 %
2	kz Jozini Local Municipality	94.09	%	(14101	/	14986)	26.75 %	26.71 %
3	kz Umhlabuyalingana Local Municipality	94.55	%	(15946	/	16865)	30.25 %	30.06 %
4	kz Mtubatuba Local Municipality	98.66	%	(10220	/	10359)	19.39 %	18.47 %
5	kz The Big 5 False Bay Local Municipality	99.77	%	(4712	/	4723)	8.94 %	8.42 %

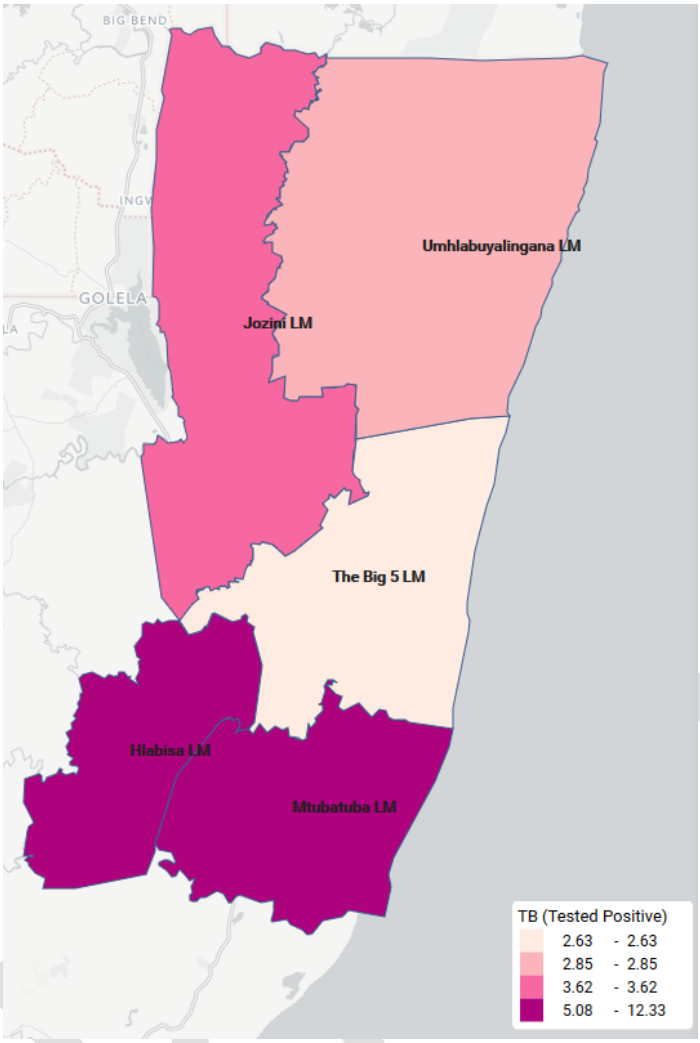

Figure 16: TB suspect smear positive rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 13: TB suspect smear positive rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **4.9 %**								
	Local Municipality	**2015 : TB (Tested Positive)**					**NUM %**	**DEN %**
1	kz The Big 5 False Bay Local Municipality	2.63	%	(124	/	4712)	4.84 %	8.94 %
2	kz Umhlabuyalingana Local Municipality	2.85	%	(454	/	15946)	17.73 %	30.25 %
3	kz Jozini Local Municipality	3.62	%	(511	/	14101)	19.95 %	26.75 %
4	kz Mtubatuba Local Municipality	5.08	%	(519	/	10220)	20.27 %	19.39 %
5	kz Hlabisa Local Municipality	12.33	%	(953	/	7728)	37.21 %	14.66 %

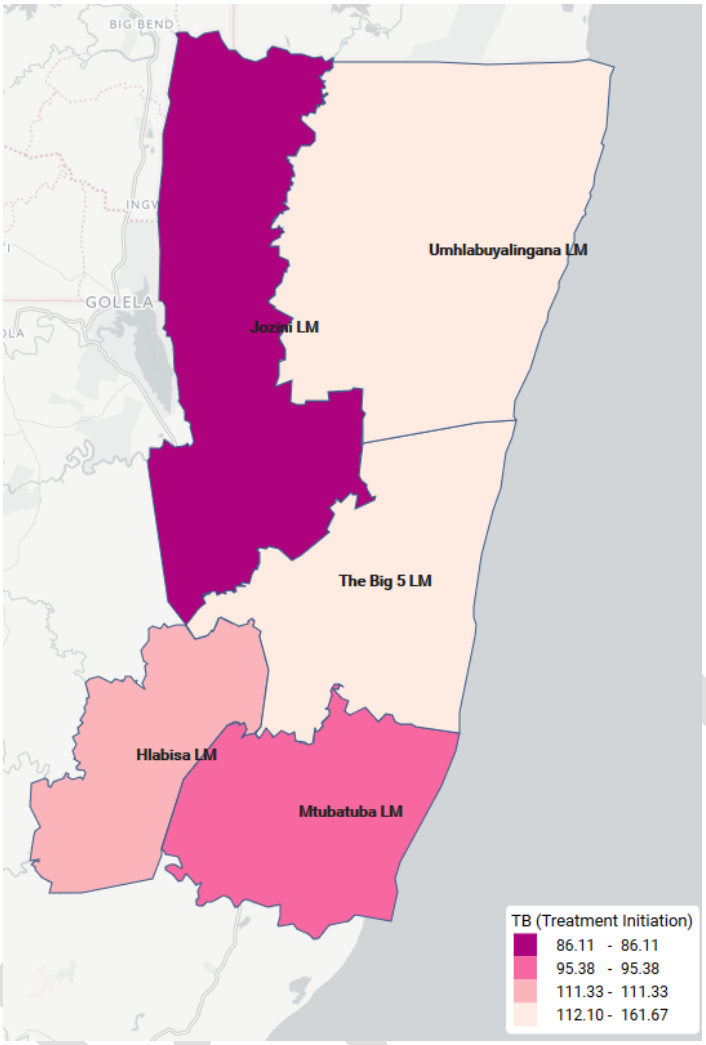

Figure 17: TB suspect treatment initiation rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 14: TB suspect treatment initiation rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **112 %**									
	Local Municipality	**2015 : TB (Treatment Initiation)**					**NUM %**	**DEN %**
1	kz Jozini Local Municipality	86.11	%	(440	/	511)	15.34 %	19.95 %
2	kz Mtubatuba Local Municipality	95.38	%	(495	/	519)	17.25 %	20.27 %
3	kz Hlabisa Local Municipality	111.33	%	(1061	/	953)	36.98 %	37.21 %
4	kz The Big 5 False Bay Local Municipality	112.10	%	(139	/	124)	4.84 %	4.84 %
5	kz Umhlabuyalingana Local Municipality	161.67	%	(734	/	454)	25.58 %	17.73 %

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 in order 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 uMkhanyakude 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

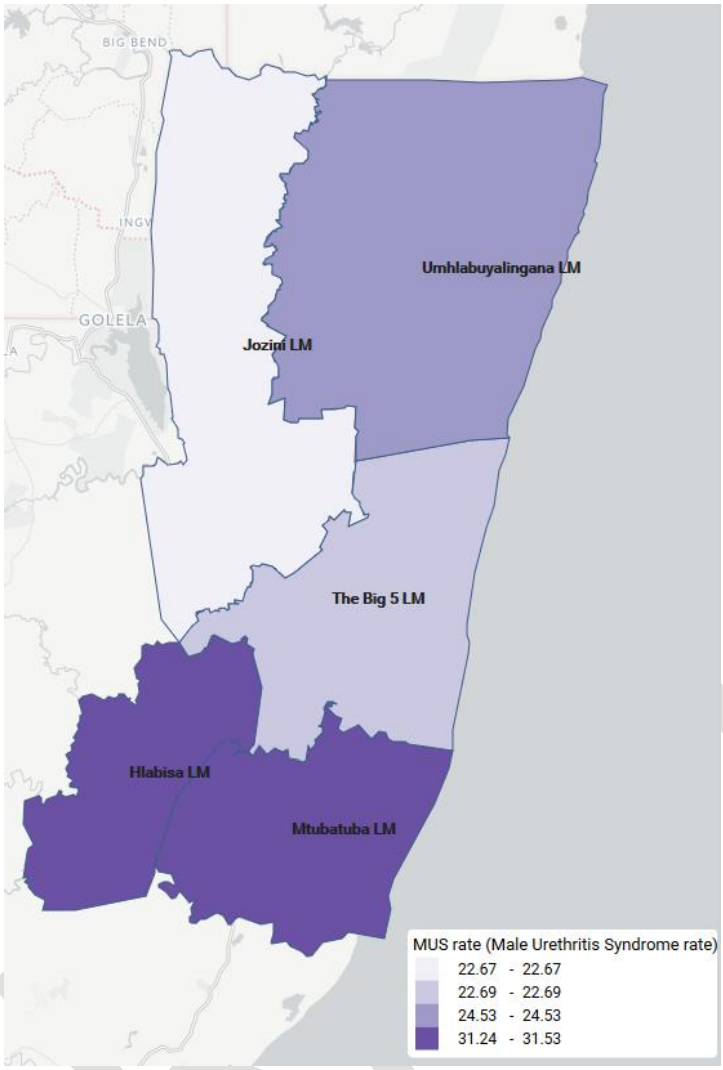

Figure 18: Male urethritis syndrome rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 15: Male urethritis syndrome rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **25.9 %**									
	Local Municipality	**2015 : MUS rate (Male Urethritis Syndrome rate)**						**NUM %**	**DEN %**
1	kz Jozini Local Municipality	22.67	%	(2282	/	10068)		27.39 %	31.25 %
2	kz The Big 5 False Bay Local Municipality	22.69	%	(802	/	3535)		9.62 %	10.97 %
3	kz Umhlabuyalingana Local Municipality	24.53	%	(2155	/	8786)		25.86 %	27.27 %
4	kz Hlabisa Local Municipality	31.24	%	(657	/	2103)		7.88 %	6.53 %
5	kz Mtubatuba Local Municipality	31.53	%	(2437	/	7728)		29.25 %	23.99 %

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].

Stakeholder and community engagement workshops revealed the following about ***HIV Testing Services*** in the area:

- Long queues and waiting times in clinics discourage the community from going to test;
- The long distances between people's homes and health facilities causes people to avoid going to health facilities;
- Men seem to be averse to going to the clinic. They could also be prevented by lack of transport as a result of unemployment;
- Men tend to find it more difficult to accept the outcome of results, to the point of denial;
- Women tend to get tested more regularly, especially when they are pregnant;
- In some cases, when a woman is pregnant and tests positive for HIV, she fears telling her partner as she might get kicked out of the home; and
- Once some people have tested, there is a tendency to hide the results from others.

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:

- Only medical circumcisions is carried out in this area;

[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.

- Young men do not behave responsibly because they think that once they are circumcised, they are immune from disease;
- Although people are educated, they tend to ignore those teachings in their daily lives; and
- The messages around how circumcision can reduce the possibility for HIV infection can be misinterpreted and then the men don't continue using condoms.

3.1.3 ARV treatment

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

- ARV Treatment is available at KwaNdaba Clinic;
- There are also people assigned to do home visits if a patient has not collected medicine. This can contribute to poor adherence because the follow ups occur after one or two months of non-collection have passed;
- Some people do not receive enough education about the importance of adherence;
- People are reluctant to have their medical information broadcast to other patients in the clinic, by having separate queues, or different coloured files;
- Lack of transport and long distances can be a hindrance to people adhering to their treatment;
- Hunger is a barrier to adherence, as people are not able to take their treatment without a meal beforehand;
- Discrimination because of HIV status is not as prevalent in the community as it was in the past;
- People felt that health workers were not forthcoming about the reasons for blood tests and this made them apprehensive; and
- ARV treatment no longer has the negative side effects it had in the past.

3.1.4 PEP and PrEP

PrEP and PEP is not known by the community. The assumption was that neither of these were available in the area.

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:

- The community does knowledge, but they felt there is a need for trained health professionals who will continue to add on to the knowledge and help where it is needed;
- The community does not have the right information about how to protect themselves from HIV infection, citing the lack of trained health professionals who could educate them in this area;
- Using the same razors or needles can lead to the spread of HIV;
- Pregnant women should urgently get tested in order to take the necessary measures to protect their unborn child;
- In schools, teachers are unable to teach about HIV and AIDS;
- In health facilities, nurses don't have any time to teach about HIV and AIDS;
- Older people do not have knowledge which they can pass on to their children/grandchildren where they are the caregivers;
- Myths around being able to cure oneself of HIV, by sleeping with a young person or a virgin still exist;
- Some people believe that HIV comes from abroad; and
- Some people believe that HIV can be found in food (myths needs to be addressed in the community).

[12] Shisana, O., T. Rehle, et al. (2014). South African National HIV Prevalence, Incidence and Behaviour Survey,2012. Cape Town, HSRC Press.
[13] Ibid+6

3.2.2 Sexual risky behaviours

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

- If a man or woman has multiple sexual partners, they end up not knowing how they contracted the virus;
- Due to unemployment, and lack of activities to keep young people occupied, they end up entering into relationships with much older partners in order to get money for pads, or to go to the salon;
- Young people sit in taverns, and take drugs. Thereafter, they engage in unprotected sex, and put themselves at risk of becoming infected; and
- Young girls become pregnant at an early age and find themselves unable to receive a full education.

3.2.3 Substance abuse

The following was discussed about ***substance abuse*** during the stakeholder and community engagement workshops in the area:

- Due to unemployment people are hopeless and end up indulging in alcohol and when they are intoxicated they make bad decisions such as having sex without condoms and with different partners;
- Drug use increases because of unemployment, but there are no services such as rehabilitation centres.
- Youth are very involved in alcohol abuse and cannabis abuse; and
- Alcohol abuse results in taking poor decisions for HIV Prevention.

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 uMkhanyakude 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.

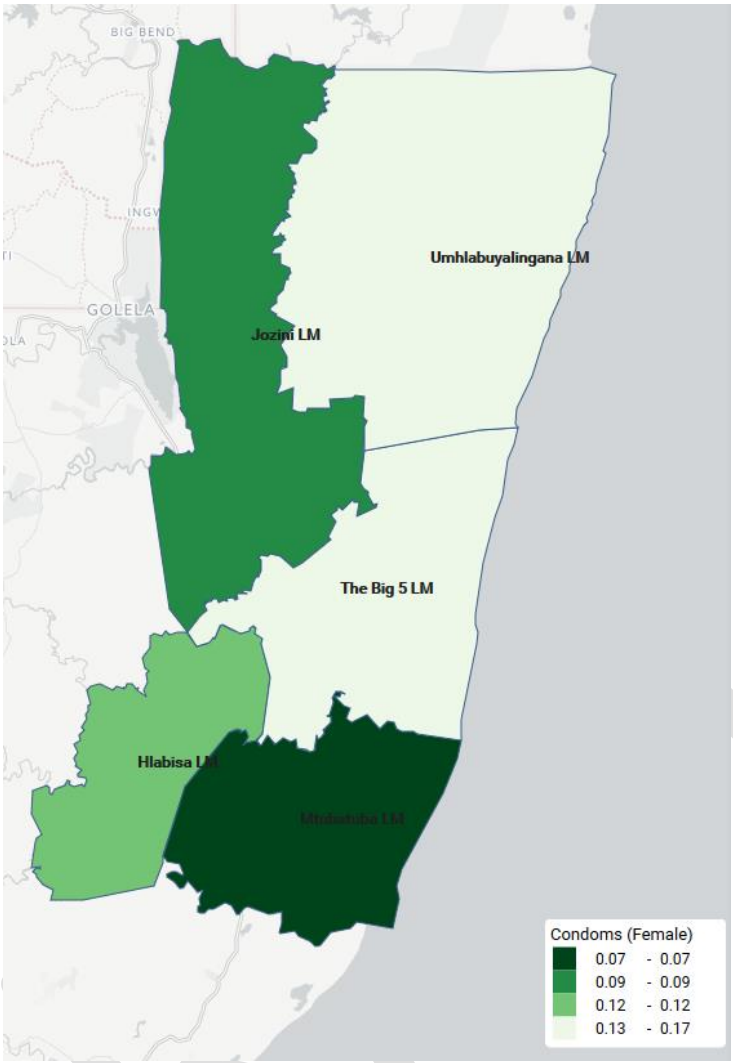

Figure 19: Female condom distribution rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 16: Female condom distribution rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **11 No**								
	Local Municipality	**2015 : Condoms (Female)**					**NUM %**	**DEN %**
1	kz Mtubatuba Local Municipality	0.07	No	(53908	/	761688)	18.24 %	28.25 %
2	kz Jozini Local Municipality	0.09	No	(67343	/	788772)	22.79 %	29.25 %
3	kz Hlabisa Local Municipality	0.12	No	(37196	/	304992)	12.59 %	11.31 %
4	kz The Big 5 False Bay Local Municipality	0.13	No	(20573	/	155688)	6.96 %	5.77 %
5	kz Umhlabuyalingana Local Municipality	0.17	No	(116451	/	685092)	39.41 %	25.41 %

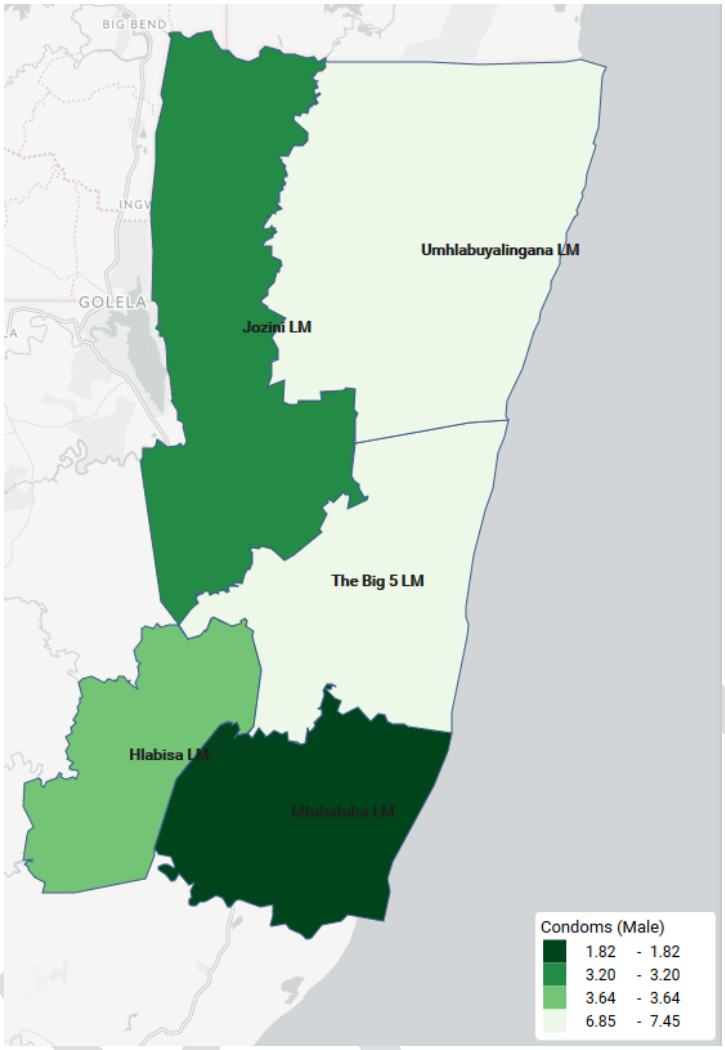

Figure 20: Male condom distribution rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 17: Male condom distribution rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **400.4 No**								
	Local Municipality	**2015 : Condoms (Male)**					**NUM %**	**DEN %**
1	kz Mtubatuba Local Municipality	1.82	No	(1146378	/	629748)	13.18 %	28.99 %
2	kz Jozini Local Municipality	3.20	No	(2034379	/	635940)	23.39 %	29.28 %
3	kz Hlabisa Local Municipality	3.64	No	(875300	/	240588)	10.06 %	11.08 %
4	kz Umhlabuyalingana Local Municipality	6.85	No	(3644493	/	532056)	41.90 %	24.49 %
5	kz The Big 5 False Bay Local Municipality	7.45	No	(997931	/	133884)	11.47 %	6.16 %

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

- Male condoms are widely known, and widely available;
- Poor judgement as a result of drug or alcohol use can lead to one engaging in unsafe sex;
- Women tend to not use female condoms because they are not user friendly;
- Not everybody in the community can be said to be using them;

- Although people are aware of the existence of female condoms, they are not easily available; and
- Women are so reluctant to take female condoms when they are offered, and so reluctant to use them, that many times the supplies reach their expiry date. The main issues are the difficulty of use that comes with female condoms (waiting period), and the prevailing patriarchal mindset that labels women as forward or dirty minded if they are proactive about condom use.

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.

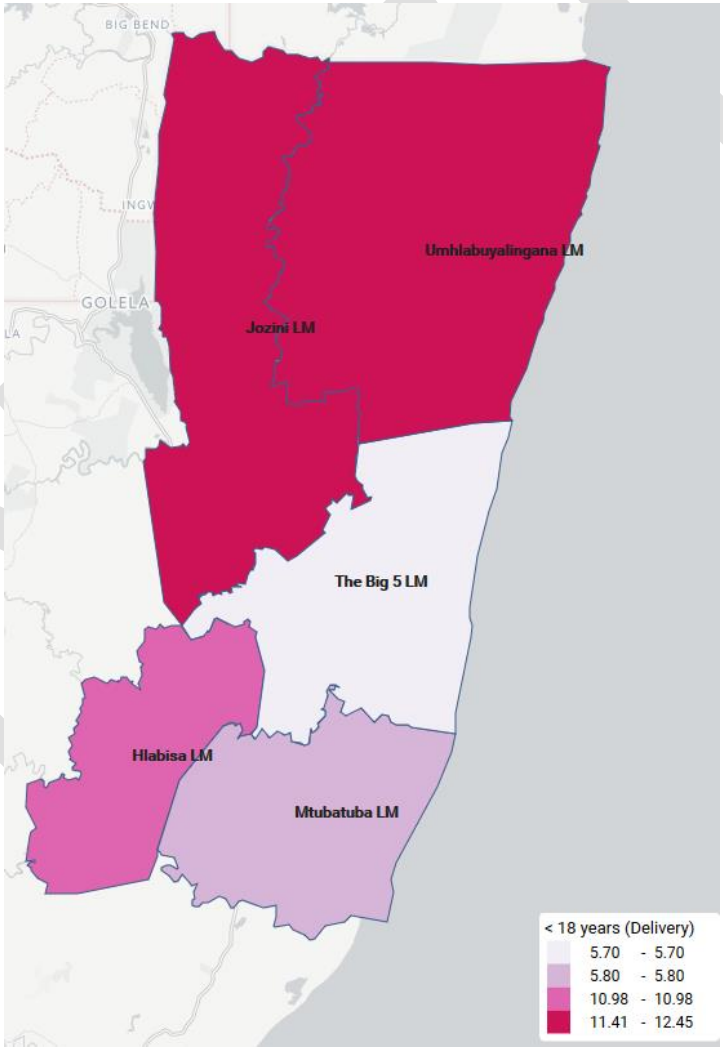

Figure 21: Teenage Pregnancy rate uMkhanyakude district (Source: KZN DHIS 2015)

Table 18: Teenage Pregnancy rate uMkhanyakude district (Source: KZN DHIS 2015 report 4 August 2017)

KZ UMKHANYAKUDE DISTRICT MUNICIPALITY: **11.1 %**									
	Local Municipality	**2015 : < 18 years (Delivery)**						**NUM %**	**DEN %**
1	kz The Big 5 False Bay Local Municipality	5.70	%	(9	/	158)		0.55 %	1.07 %
2	kz Mtubatuba Local Municipality	5.80	%	(65	/	1121)		3.97 %	7.62 %
3	kz Hlabisa Local Municipality	10.98	%	(452	/	4116)		27.63 %	27.97 %
4	kz Umhlabuyalingana Local Municipality	11.41	%	(552	/	4837)		33.74 %	32.87 %
5	kz Jozini Local Municipality	12.45	%	(558	/	4483)		34.11 %	30.47 %

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**
Women	Women are most at risk because they tend to be the ones who take care of the sick. Being in a polygamous marriage places women at a high risk of becoming infected
Youth	There are few opportunities for work or further study in the community. As a result, youth engage in sexual activity to occupy their time. They also enter into relationships that will provide them with financial stability, sometimes at the risk of having unsafe sex.
Sex workers	There are sex workers, although they are undisclosed. With the prevalence of migrant construction workers, as well as soldiers who encamp in the vicinity, women from the area enter into relationship with these groups for financial gain
Orphans and vulnerable children	Orphans in the area are seen to be at risk of sexual exploitation. In addition, orphans who are HIV positive often do not have knowledge about how to live healthily, or any support from the government
Drug users	The main drug that mainly young men use in this area is cannabis, and that can lead to poor decision making in relation to sexual practice
Truck drivers	With the area being near two border posts, truck drivers are seen as contributors to the spread of HIV, as they can have multiple anonymous sexual partners during their travel
Migrant workers	People of other countries are suspected to have illnesses and because they do not have Medical aid they are suspected as

Key and vulnerable population group	Stakeholder and community feedback
	spreading diseases. They are also accused of coming in to the country solely for the purpose of collecting child grants

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 16 that forms the catchment area for KwaNdaba Clinic is highlighted in the table below.

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

Ward	Maternal orphans			Paternal orphans			Double orphans		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ward 1	44	37	81	161	105	266	32	44	77
Ward 2	49	45	93	268	222	491	66	48	113
Ward 3	67	58	125	378	372	750	96	88	184
Ward 4	98	80	179	438	412	850	101	106	208
Ward 5	70	65	135	269	264	533	94	89	183
Ward 6	90	89	179	504	523	1 027	116	154	270
Ward 7	67	60	126	296	270	567	125	86	211
Ward 8	63	68	131	278	256	534	63	79	142
Ward 9	70	58	128	433	442	875	119	108	227
Ward 10	67	48	115	244	238	482	58	64	121
Ward 11	52	65	117	312	290	602	66	85	151
Ward 12	38	34	73	234	228	461	57	60	118
Ward 13	59	74	133	298	251	549	81	63	143
Ward 14	79	49	128	297	305	601	108	89	197
Ward 15	85	65	150	352	337	690	81	104	185
Ward 16	64	61	125	254	257	511	68	73	141
Ward 17	62	56	118	268	265	532	59	64	123

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

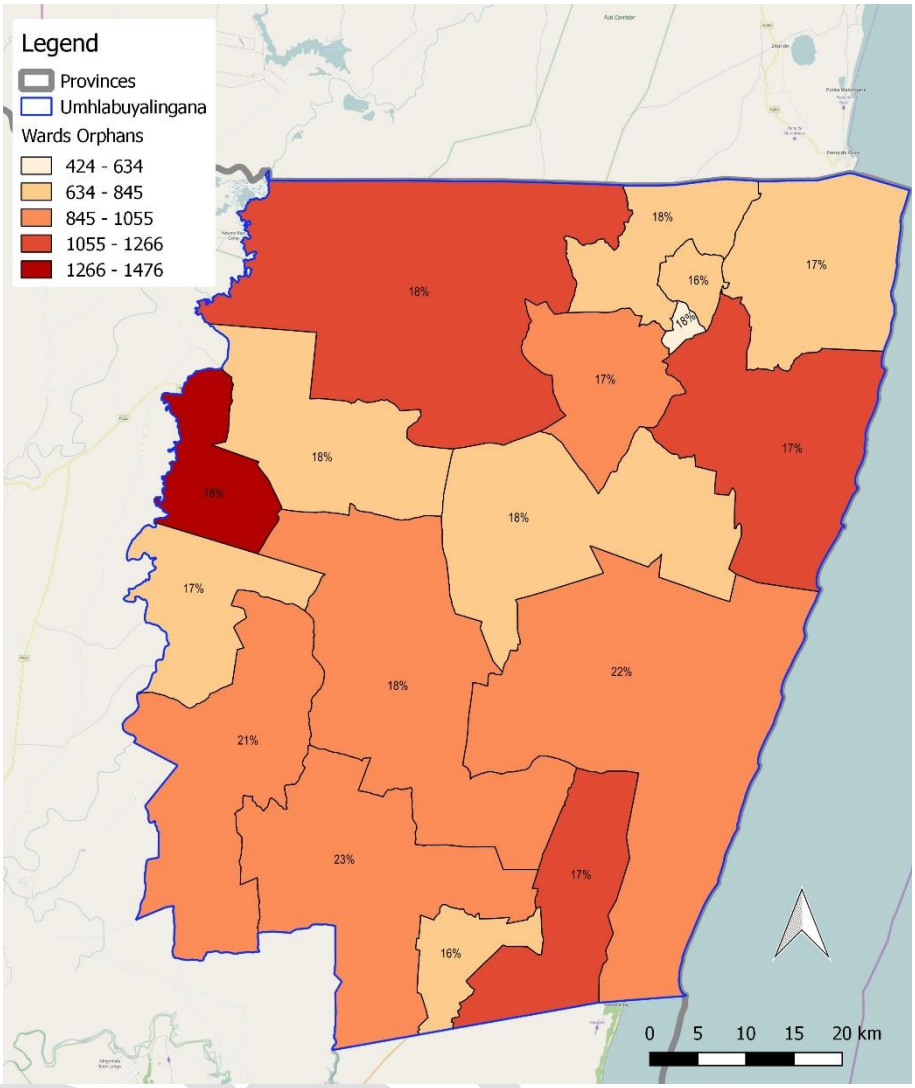

Figure 22: Total number of Orphans with percentage that are double orphans per ward (Source Census 2011)

Children who were born with HIV, and have since lost their parents are in a vulnerable position as there are no systems in place to help them with their illness, and life in general.

3.3.2 Cultural and Religious Norms

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

- The cultural practice of "Ukuthwala" (kidnapping a woman and forcing her into marriage) has been abolished, but in some families (due to poverty), young girls are sent away to live with, or marry much older men, in exchange for money or goods; and
- There are some religious leaders who claim to be able to cure HIV through prayer.

3.3.3 Gender norms and gender-based violence

Women are seen as the main breadwinners within this community and the community felt that this helps to minimise gender based violence in the area.

3.3.4 Stigma

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

- Many young people are dying due to fear of going for treatment; and
- People are very secretive about their status and this makes them a danger to the rest of the community as it can contribute to the spread of HIV.
- There are those who do discriminate and those who are accepting of others that are HIV positive; and
- People still need more education in the area around the ability of those who are not infected with HIV to live in the same spaces as those who are living with HIV in a safe comfortable manner.

3.3.5 Poverty

Poverty is measured through the South Africa Multidimensional Poverty Index (SAMPI)[15]. The detail for Ward 16 that forms the catchment area for KwaNdaba Clinic is highlighted in the table below.

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

	Poverty Headcount (H)	Intensity of Poverty (A)	SAMPI (HxA)
Ward 1	19	41.8	0.079
Ward 2	24.9	43.6	0.109
Ward 3	18.6	40.7	0.076
Ward 4	24.4	42.8	0.104
Ward 5	17.9	42.8	0.077
Ward 6	40.9	45	0.184
Ward 7	27.7	41.9	0.116
Ward 8	30.4	42.6	0.130
Ward 9	42.6	42.7	0.182
Ward 10	28.2	41.3	0.116
Ward 11	25.7	42.5	0.109
Ward 12	34.6	41.7	0.144
Ward 13	41.9	44.6	0.187
Ward 14	39.5	42.9	0.169
Ward 15	27.4	41.4	0.113
Ward 16	34.3	41.7	0.143
Ward 17	20.3	42.3	0.086

[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.

Ward 9 was the poorest Ward in uMhlabuyalingana Local Municipality with the poverty headcount at (42.6) %) being poor (Table 21, Appendix B). Ward 5 had the lowest head count at 17.9%. 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 Umhlabuyalingana Local Municipality changed between 2001 (Figure 23) and 2011 (Figure 24). In 2001 the highest Poverty Index was 30. This reduced to 18.69 in 2011.

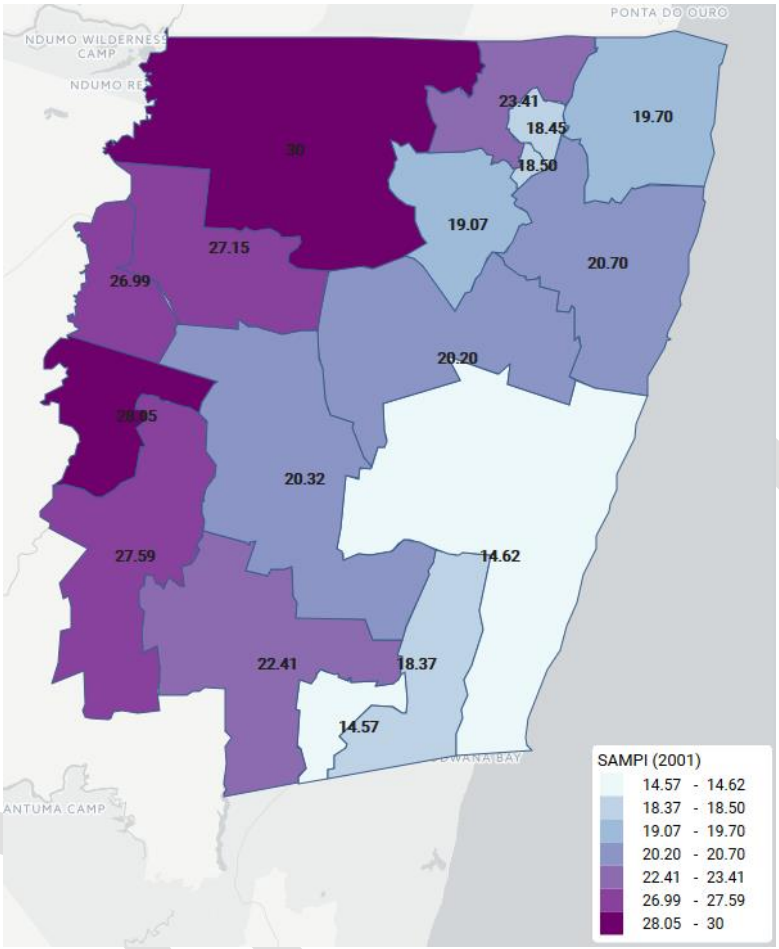

Figure 23: SAMPI (poverty Index) 2001 - ward level, uMhlabuyalingana Local Municipality

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

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: 20.3 %						
	Ward (2011)	**SAMPI (2001)**				
1	kz Umhlabuyalingana Ward 002	14.57	%	(14.6	/	100)
2	kz Umhlabuyalingana Ward 005	14.62	%	(14.6	/	100)
3	kz Umhlabuyalingana Ward 003	18.37	%	(18.4	/	100)
4	kz Umhlabuyalingana Ward 017	18.45	%	(18.4	/	100)
5	kz Umhlabuyalingana Ward 001	18.50	%	(18.5	/	100)
6	kz Umhlabuyalingana Ward 011	19.07	%	(19.1	/	100)
7	kz Umhlabuyalingana Ward 010	19.70	%	(19.7	/	100)
8	kz Umhlabuyalingana Ward 008	20.20	%	(20.2	/	100)
9	kz Umhlabuyalingana Ward 015	20.32	%	(20.3	/	100)
10	kz Umhlabuyalingana Ward 004	20.70	%	(20.7	/	100)

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: 20.3 %						
	Ward (2011)	SAMPI (2001)				
11	kz Umhlabuyalingana Ward 007	22.41	%	(22.4	/	100)
12	kz Umhlabuyalingana Ward 012	23.41	%	(23.4	/	100)
13	kz Umhlabuyalingana Ward 006	26.99	%	(27	/	100)
14	kz Umhlabuyalingana Ward 016	27.15	%	(27.1	/	100)
15	kz Umhlabuyalingana Ward 014	27.59	%	(27.6	/	100)
16	kz Umhlabuyalingana Ward 013	28.05	%	(28.1	/	100)
17	kz Umhlabuyalingana Ward 009	30	%	(30	/	100)

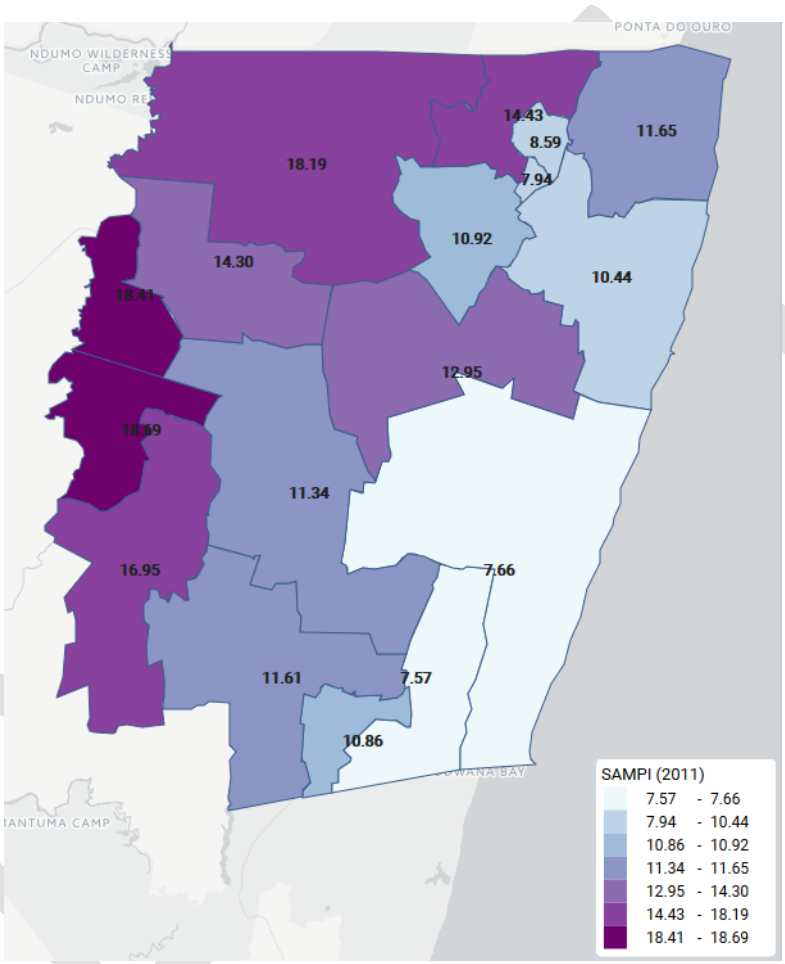

Figure 24: SAMPI (poverty Index) 2011 - ward level, uMhlabuyalingana Local Municipality

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

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: 11.6 %						
	Ward (2011)	SAMPI (2011)				
1	kz Umhlabuyalingana Ward 003	7.57	%	(7.6	/	100)
2	kz Umhlabuyalingana Ward 005	7.66	%	(7.7	/	100)
3	kz Umhlabuyalingana Ward 001	7.94	%	(7.9	/	100)
4	kz Umhlabuyalingana Ward 017	8.59	%	(8.6	/	100)
5	kz Umhlabuyalingana Ward 004	10.44	%	(10.4	/	100)
6	kz Umhlabuyalingana Ward 002	10.86	%	(10.9	/	100)

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: 11.6 %						
	Ward (2011)	**SAMPI (2011)**				
7	kz Umhlabuyalingana Ward 011	10.92	%	(10.9	/	100)
8	kz Umhlabuyalingana Ward 015	11.34	%	(11.3	/	100)
9	kz Umhlabuyalingana Ward 007	11.61	%	(11.6	/	100)
10	kz Umhlabuyalingana Ward 010	11.65	%	(11.6	/	100)
11	kz Umhlabuyalingana Ward 008	12.95	%	(12.9	/	100)
12	kz Umhlabuyalingana Ward 016	14.30	%	(14.3	/	100)
13	kz Umhlabuyalingana Ward 012	14.43	%	(14.4	/	100)
14	kz Umhlabuyalingana Ward 014	16.95	%	(16.9	/	100)
15	kz Umhlabuyalingana Ward 009	18.19	%	(18.2	/	100)
16	kz Umhlabuyalingana Ward 006	18.41	%	(18.4	/	100)
17	kz Umhlabuyalingana Ward 013	18.69	%	(18.7	/	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 uMhlabuyalingana was 65.50. This reduced to 46.20 in 2011.

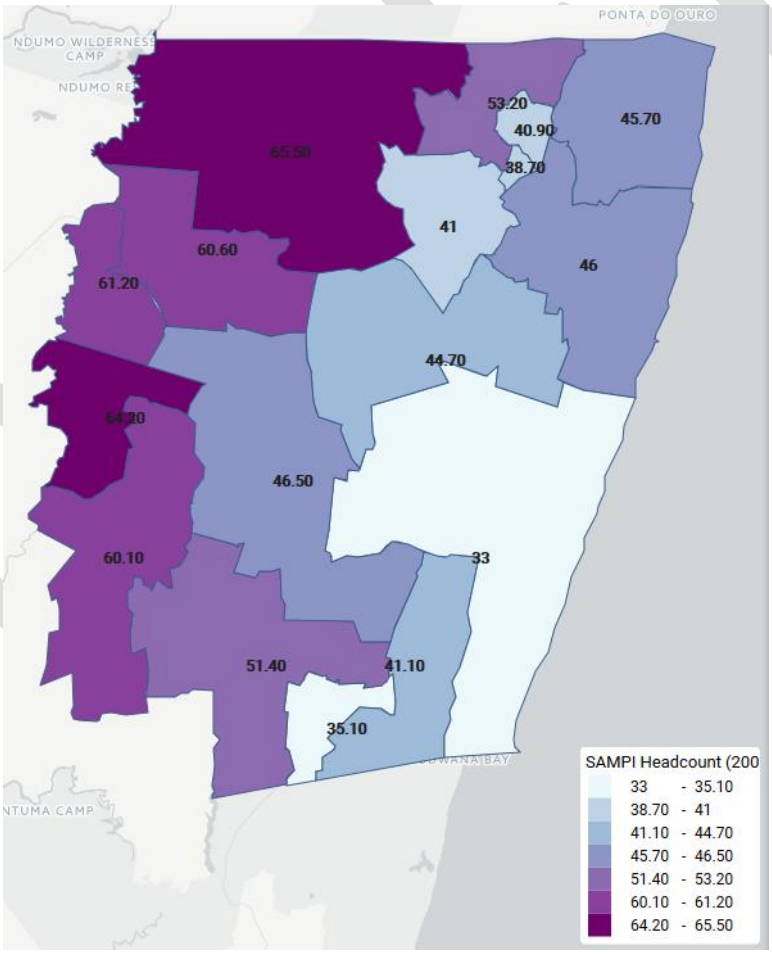

Figure 25: SAMPI 2001 poverty headcount - ward level, uMhlabuyalingana Local Municipality

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

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: **46 %**						
	Ward (2011)	**SAMPI Headcount (2001)**				
1	kz Umhlabuyalingana Ward 005	33	%	(33	/	100)
2	kz Umhlabuyalingana Ward 002	35.10	%	(35.1	/	100)
3	kz Umhlabuyalingana Ward 001	38.70	%	(38.7	/	100)
4	kz Umhlabuyalingana Ward 017	40.90	%	(40.9	/	100)
5	kz Umhlabuyalingana Ward 011	41	%	(41	/	100)
6	kz Umhlabuyalingana Ward 003	41.10	%	(41.1	/	100)
7	kz Umhlabuyalingana Ward 008	44.70	%	(44.7	/	100)
8	kz Umhlabuyalingana Ward 010	45.70	%	(45.7	/	100)
9	kz Umhlabuyalingana Ward 004	46	%	(46	/	100)
10	kz Umhlabuyalingana Ward 015	46.50	%	(46.5	/	100)
11	kz Umhlabuyalingana Ward 007	51.40	%	(51.4	/	100)
12	kz Umhlabuyalingana Ward 012	53.20	%	(53.2	/	100)
13	kz Umhlabuyalingana Ward 014	60.10	%	(60.1	/	100)
14	kz Umhlabuyalingana Ward 016	60.60	%	(60.6	/	100)
15	kz Umhlabuyalingana Ward 006	61.20	%	(61.2	/	100)
16	kz Umhlabuyalingana Ward 013	64.20	%	(64.2	/	100)
17	kz Umhlabuyalingana Ward 009	65.50	%	(65.5	/	100)

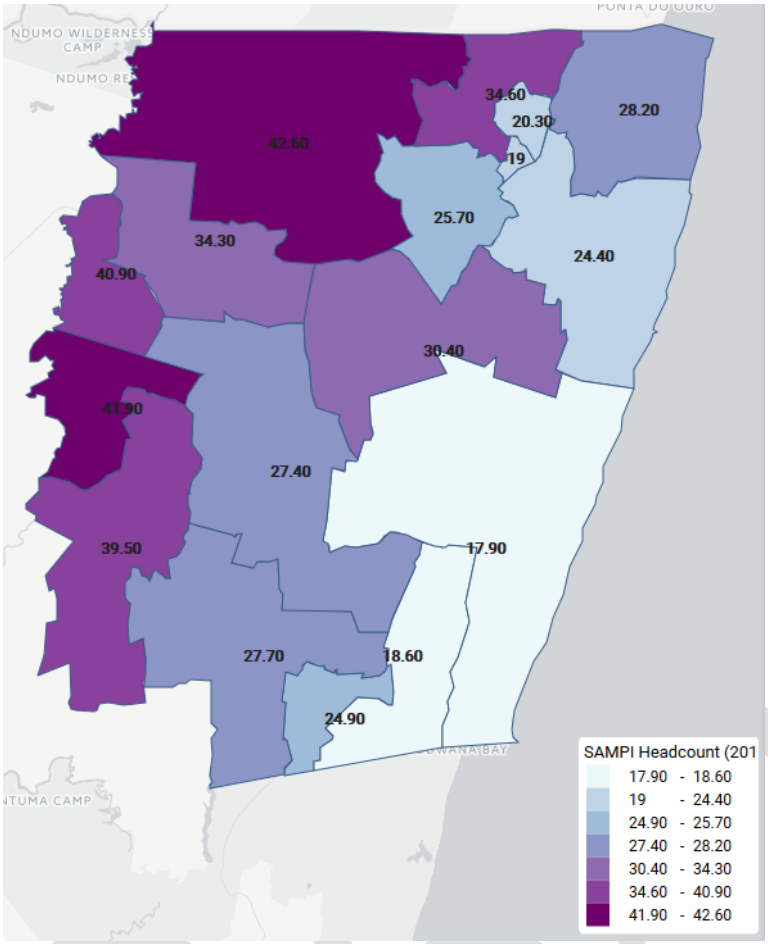

Figure 26: SAMPI 2011 poverty headcount - ward level, uMhlabuyalingana Local Municipality

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

KZ UMHLABUYALINGANA LOCAL MUNICIPALITY: 27.7 %						
	Ward (2011)	**SAMPI Headcount (2011)**				
1	kz Umhlabuyalingana Ward 005	17.90	%	(17.9	/	100)
2	kz Umhlabuyalingana Ward 003	18.60	%	(18.6	/	100)
3	kz Umhlabuyalingana Ward 001	19	%	(19	/	100)
4	kz Umhlabuyalingana Ward 017	20.30	%	(20.3	/	100)
5	kz Umhlabuyalingana Ward 004	24.40	%	(24.4	/	100)
6	kz Umhlabuyalingana Ward 002	24.90	%	(24.9	/	100)
7	kz Umhlabuyalingana Ward 011	25.70	%	(25.7	/	100)
8	kz Umhlabuyalingana Ward 015	27.40	%	(27.4	/	100)
9	kz Umhlabuyalingana Ward 007	27.70	%	(27.7	/	100)
10	kz Umhlabuyalingana Ward 010	28.20	%	(28.2	/	100)
11	kz Umhlabuyalingana Ward 008	30.40	%	(30.4	/	100)
12	kz Umhlabuyalingana Ward 016	34.30	%	(34.3	/	100)
13	kz Umhlabuyalingana Ward 012	34.60	%	(34.6	/	100)
14	kz Umhlabuyalingana Ward 014	39.50	%	(39.5	/	100)
15	kz Umhlabuyalingana Ward 006	40.90	%	(40.9	/	100)
16	kz Umhlabuyalingana Ward 013	41.90	%	(41.9	/	100)
17	kz Umhlabuyalingana Ward 009	42.60	%	(42.6	/	100)

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

- Levels of poverty in the area are high as a result of the high level of unemployment;
- People live on the elderly's old age pension, or on child grants; and
- There are no services to aid in community development, such as training centres, water, electricity, or government services.

3.3.6 Employment

In uMhlabuyalingana Local Municipality, 13% of the female population at economically active age are employed while 15% of the economically active males are employed. See Figure 27 below.

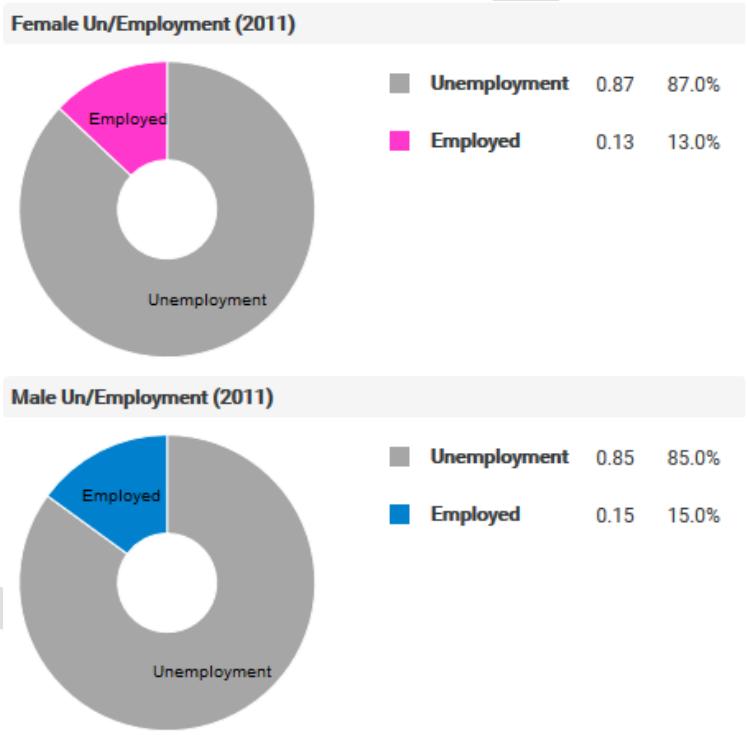

Figure 27: Female and Male employment uMhlabuyalingana Local Municipality (Source Census 2011)

Unemployment of youth in uMhlabuyalingana Local Municipality is at 89.9%.

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

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

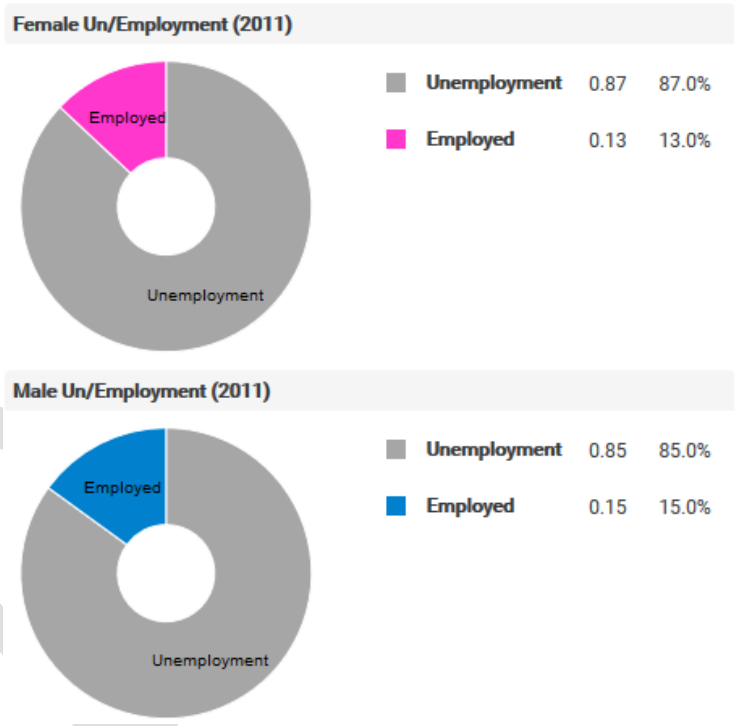

Figure 29: Female and Male employment KwaNdaba clinic catchment area (Source Census 2011)

Almost the same number of youth (89.7%) are unemployed in the KwaNdaba clinic catchment area as the Umhlabuyalingana Local Municipality (89.9%).

Figure 30: Youth unemployment KwaNdaba 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:

- The high levels of unemployment, and the lack of activities results in people passing their time by engaging in sexual activity. When this occurs in an unsafe manner, it can contribute to the spread of HIV;
- People try to grow vegetables in their gardens, and sell them at markets;
- When people find employment it's usually in to positions of domestic work;
- Some of the men in the community leave the area to seek employment far away and they may be contributing to the spread of HIV, as they may have partners near their place of work, and at home; and
- Women end up entering relationships for the purpose of acquiring money. This usually happens with soldiers and construction workers who are found in the area.

3.3.7 Types of settlements

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

- Most of the houses in the area are one room, or rondavels;
- People have to use their own resources and build to the best of their ability;
- Many houses are not in a good condition; and
- Children share a room with their parents and end up witnessing parents engaging in sex. This can fuel their curiosity and they may end up engaging in unsafe sex.

3.3.8 Migration patterns in the area

The following were identified as implications of ***migration patterns*** in the area on the associated risk of HIV:

- The majority of in the area come from Mozambique, with some coming from Swaziland

- The community members could not be drawn on their thoughts around how migration patterns may influence the spread of HIV, as there were some foreign nationals amongst the participants; and
- In another session, it was stated that foreign nationals and business owner come in to the community, where thy form relationships with the local women, and then abandon them and sometimes the children born out of those relationships.

3.3.9 Education and literacy

Young girls become pregnant at an early age, and if they do not have anybody to look after their babies, they are forced to drop out of school. Girls fall pregnant as early as 12 years old. There are not institutions of higher education nearby, and if one wants to study further, they are forced to move to far away urban areas.

3.3.10Hate crimes – xenophobic, homophobic, other

The community members claimed that there is no xenophobia or homophobia occurring in the area.

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 do receive social grants;
- If an individual was born “normal”, and they acquire a disability, it takes a long time for them to access a grant; and
- Disabled people were abused or neglected by their families because of grant money; and
- There are those who sexually abuse disabled people.

4. Services in the Local Municipality

4.1 Health facilities

There are 18 health facilities in uMhlabuyalingana Local Municipality. See Figure 31 below for distribution of these facilities.

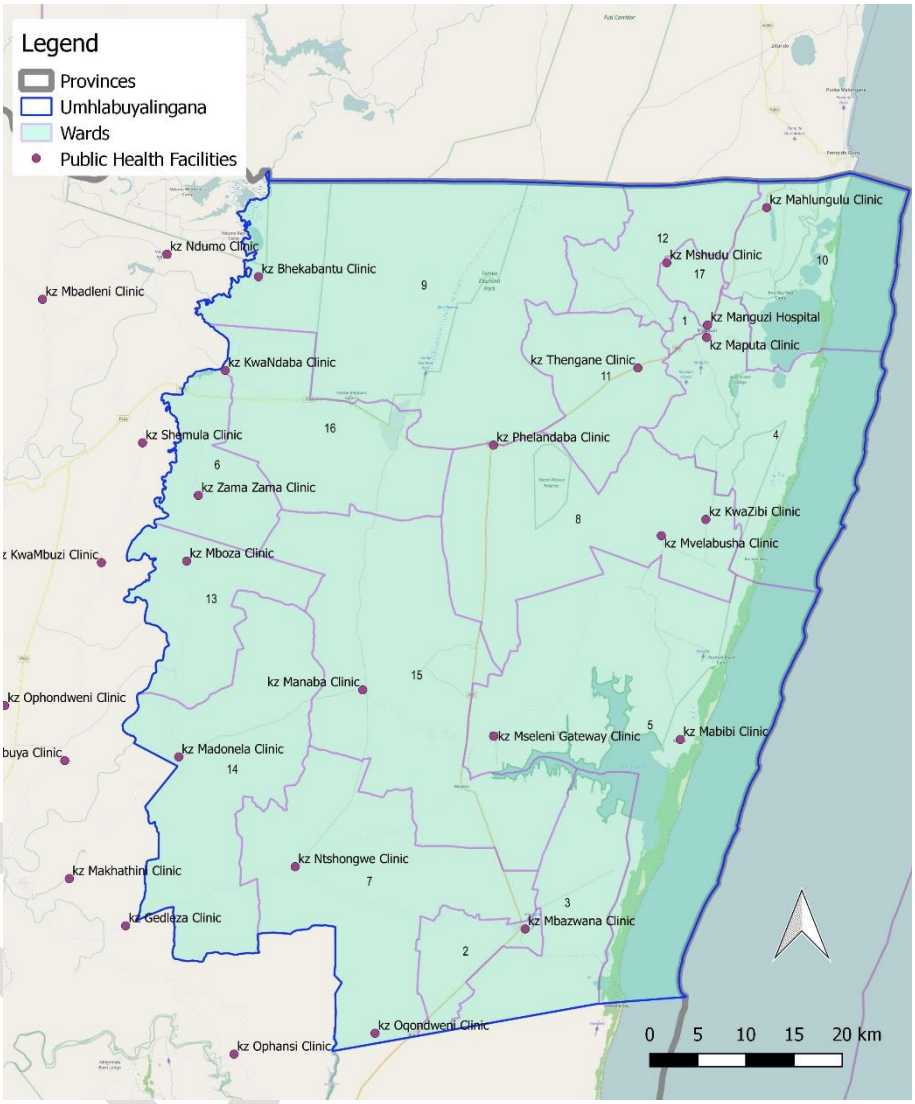

Figure 31: Distribution of health facilities in uMhlabuyalingana Local Municipality

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 • Migrant workers • Orphans and vulnerable children	• Young women's vulnerability in relation to men-in terms of gender relations, as well as lack of financial independence • Stigma and discrimination, including Xenophobia • HIV prevention after circumcision • HIV education for men, children and the elderly • High rate of substance abuse and drugs that contributes to high risk behaviour • Access to Health Education

Considering the priorities identified during the stakeholder and community workshops as well as the general profile, the following service delivery packages 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
	  ○ 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
		• DBE
		• DHET
		• DoH
		• DSD
		• NGOs
		• DoL
		• Private sector

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	• 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)	
Mobile populations, migrants and other undocumented foreigners	• Mobile populations include those involved in big infrastructure and construction projects, agriculture all four modes of transport, road, rail, civil aviation and maritime e.g. truck drivers, sea farers, long distance taxi drivers, pilots and cabin attendants • Provision of health services along the transport corridors • Flexible service delivery options including provision of condoms, HTS, provision of ART refills and TB treatment • Focused prevention messages and SBCC that addresses their specific challenges e.g. GBV, drug and alcohol use • Intensified psychosocial support • Cross border collaboration on HIV, TB and STI policy and programming • Utilise informal networks to raise awareness about services • Accelerated access to official papers to access services • Places of safety • Implementation of social impact plans that mitigate the impact of HIV, TB and STIs, for organisations involved in big infrastructure and construction projects e.g. building power stations, major roads	• SADC • DIRCO • Multilaterals • NGOs • DSD • SAPS • DHA • DOA • DOT • DoH

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
	• Youth-friendly sexual and reproductive health services in schools and community settings which include:
	  ○ HPV vaccination
	  ○ Contraceptives including condoms
	  ○ Choice of termination of pregnancy
		• 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
	• 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
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	• DoH • DSD • NGOs

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	• Community education • Provide mobile services to improve accessibility • Infection control strategy for TB	
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	• All implementing agencies • DoH • DSD • NPA • DBE • NGOS • PCA and DAC

Comprehensive package of services for the general population, that will then be supplemented and customised to the age and population served			Multi-sectoral partner
• Violence screening, referral • Condom promotion and provision • Targeted social and behaviour change communication			
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, adolescents)	• Hearing and vision screening, referral, treatment • 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 • 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	• Health facility-based • School-based • Community-based • Mobile services	• DoH • DBE • 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	• Clinic-based • School-based • Community-based • Mobile services	• DoH • DBE • DCS • DSD • CBOs

Population	Services/Interventions/Approaches	Setting	Multisectoral partner
	• 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		• NGOs • Private employers • Private healthcare providers
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	• 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**
	• 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 • 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	• DoH

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
	capability.	
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 • 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.	• DoH • NGOs and CBOs working in this area • DBE • DSD • 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	• Development of DoH capacity to undertake QI (district and sub-district teams established; leadership and QI skills developed; tools and guidelines developed;	• DoH • Support partners

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
TB care cascade and improve programme outcomes.	learning networks established) with demonstration sites for QI established • 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 reproductive health services	• Strengthened ART initiation at STIs services or linkage to ARV services	• DoH • Private health sector

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
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

Addressing social and structural drivers	Service	Multi-sectoral partner
		• 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.

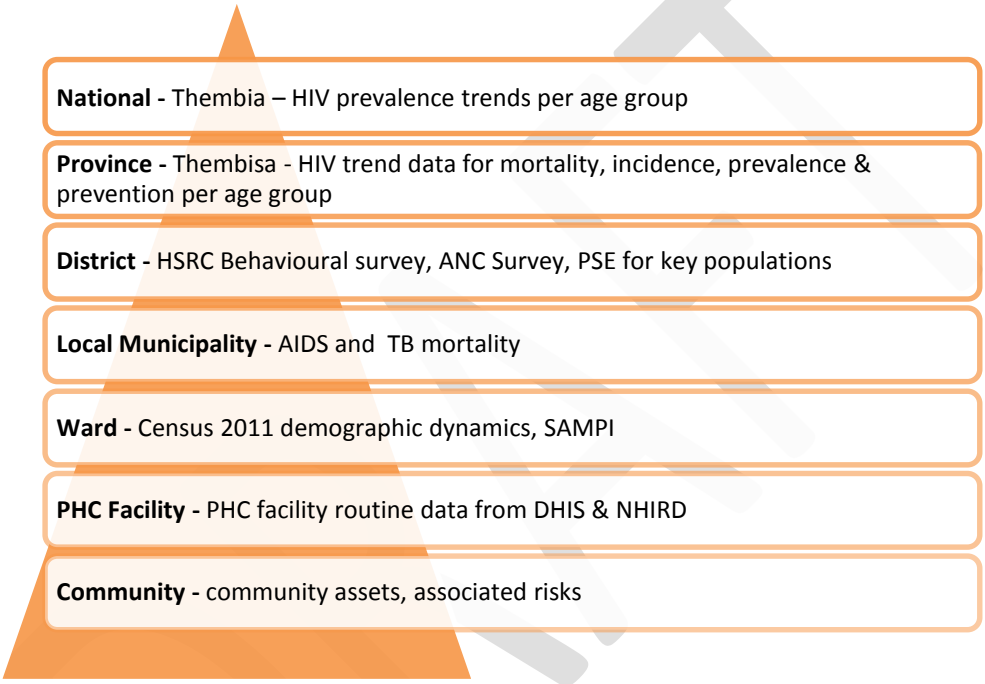

Figure 32: Data pyramid used for risk profiles

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).

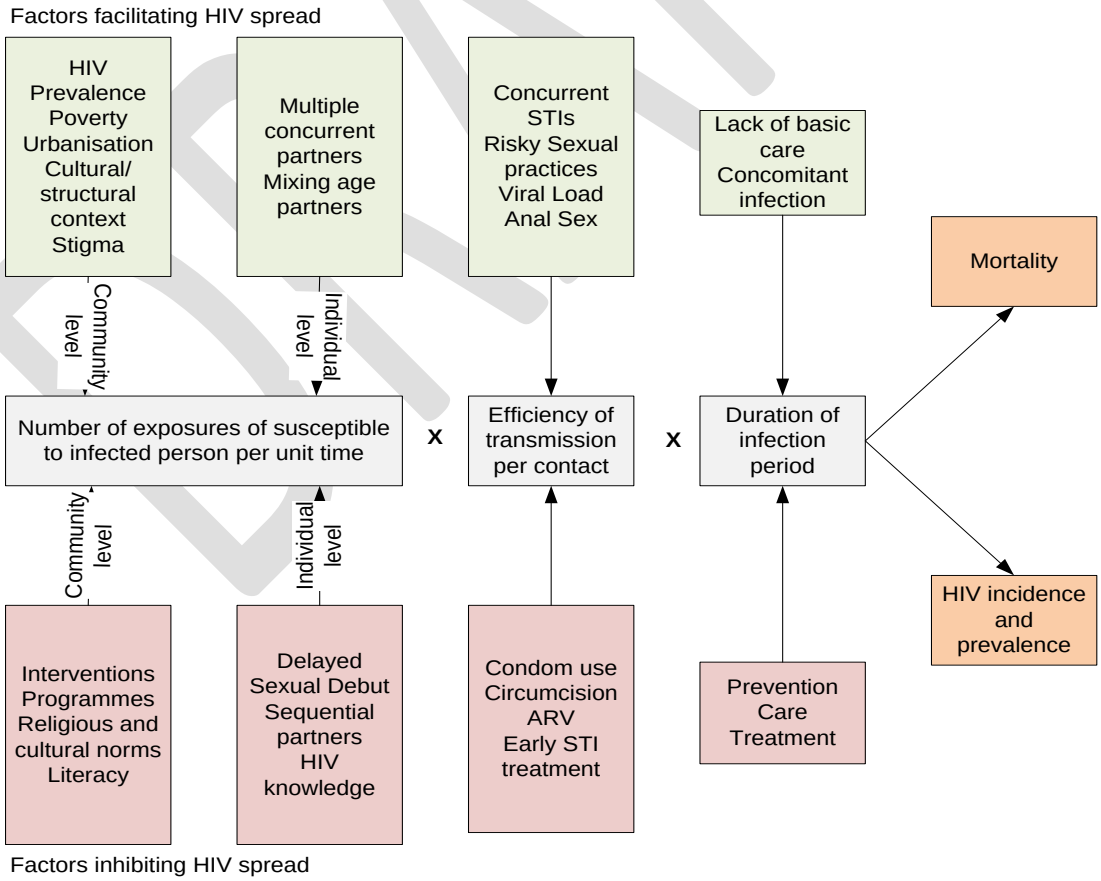

Figure 33: Factors influencing HIV associated risk and outcomes

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 behaviour 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 indicator DHIS 2015)	Short Name - Fem condom dist cov Numerator - Female condoms distributed Denominator - Female population 15 years and older Indicator Type - %

	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 2015)	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

	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.

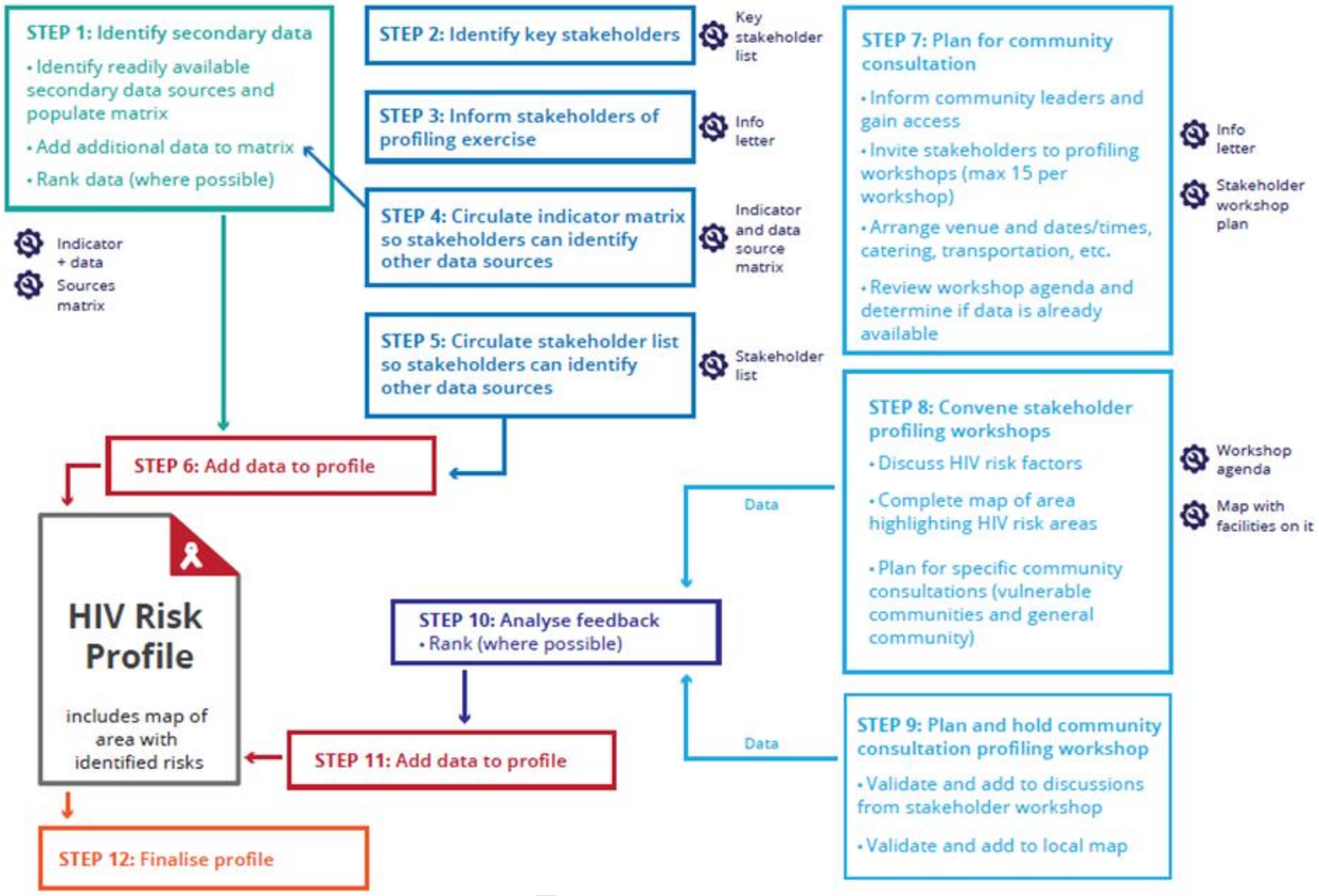

Figure 34: Steps for development of HIV associated risk profile