Focus for Impact

Community profile
Catchment area for Mzinto Clinic (Ward 6)

uMdoni local municipality
uGu District
KwaZulu-Natal

August 2017

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CCG	Community Care Givers
CCMDD	Centralised Chronic Medicine Distribution and Dispensing
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
LGBTIQ	Lesbian Gay Bisexual Transgender Intersex and Queer
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
SRD	Social relief of Distress (vouchers)
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis

Acknowledgement

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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 now 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. The purpose is 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 and on 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*** is the vulnerable population?

(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 enhanced use of proven community-centred service delivery. Priority is given to ensuring that treatment programmes are holistic, addressing each person's health needs, including co-morbidities. The need for innovative new sources of funding is identified. A higher priority is placed on the collection and timely use of high-quality data to guide and inform programmes and policies.

The ultimate success of the NSP 2017 – 2022, depends 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 done 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 this area in Maphumulo local municipality under the iLembe district, KwaZulu Natal.

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, both those who are infected and those at risk of infection. 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.

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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 Mzinto Clinic, uMdoni local municipality is defined as uMdoni wards 6, 12 and 13. For this specific profile, two stakeholder and community workshops were held on 14th and 15th August 2017 at the Vulamehlo municipal building and the Mzinto Town Hall. The workshops were attended by 53 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 Maphumulo 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 associated risk in the Mzinto Clinic catchment area:

- Key and vulnerable populations:
    - Young Women and Girls
    - Youth
    - Children
- Interventions that address:
    - Poverty, especially livelihoods support to mitigate transactional sex as a source of income
    - Substance abuse, especially alcohol and smoking drugs
    - HIV knowledge and education, especially for parents, older people and people with disabilities

1. Socio-demographic profile

1.1 Demarcated boundaries

uGu District is one of the 11 district municipalities of KwaZulu-Natal province. The uMdoni local municipality is one of the six local municipalities in Ugu district. The rest are Hibiscus Coast, Vulamehlo, uMzumbe, uMuziwabantu and eZinqoleni local municipalities.

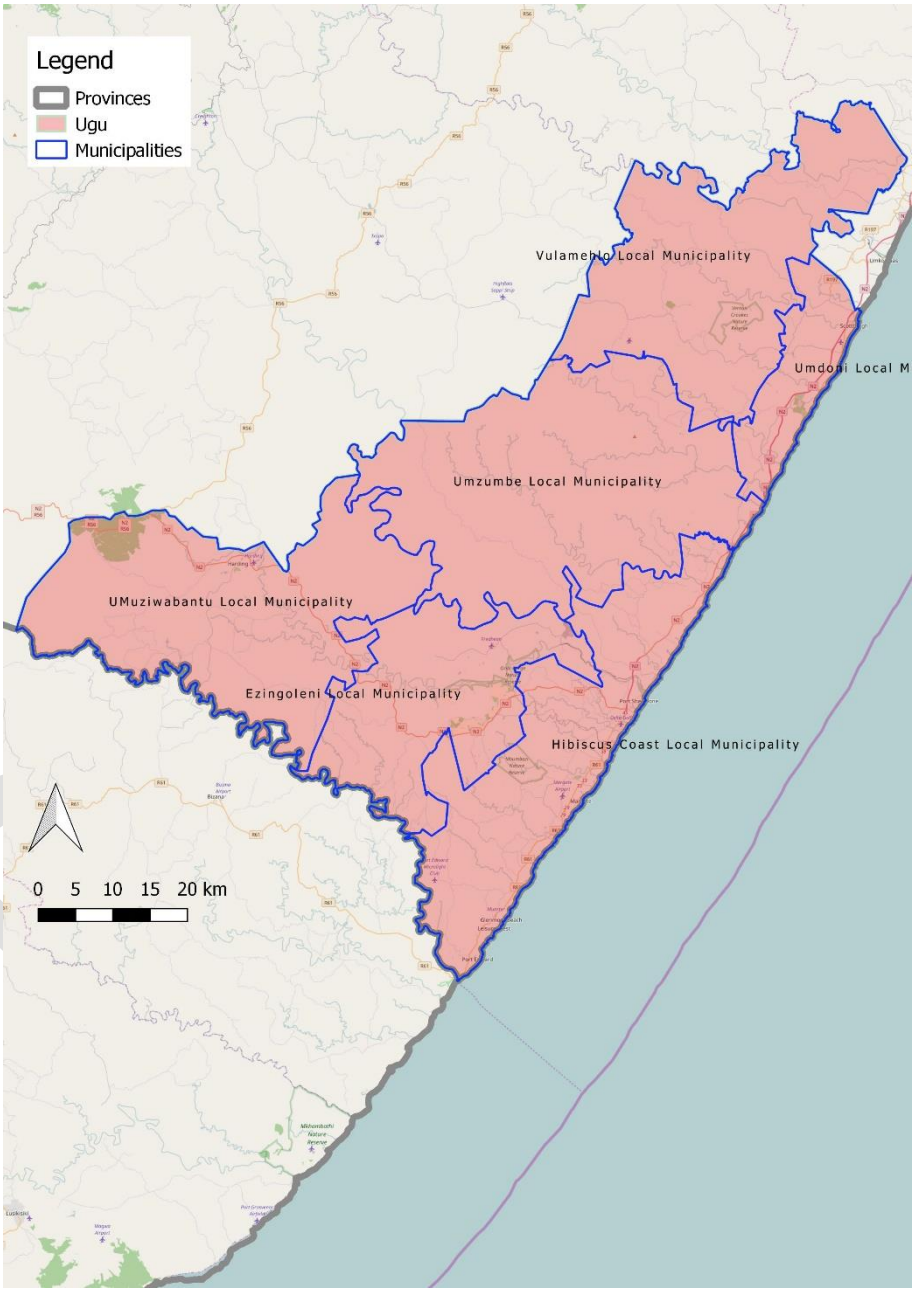

Figure 1: Local municipalities' uGu district

The uMdoni local municipality constitute of 10 administrative wards (see Figure 2).

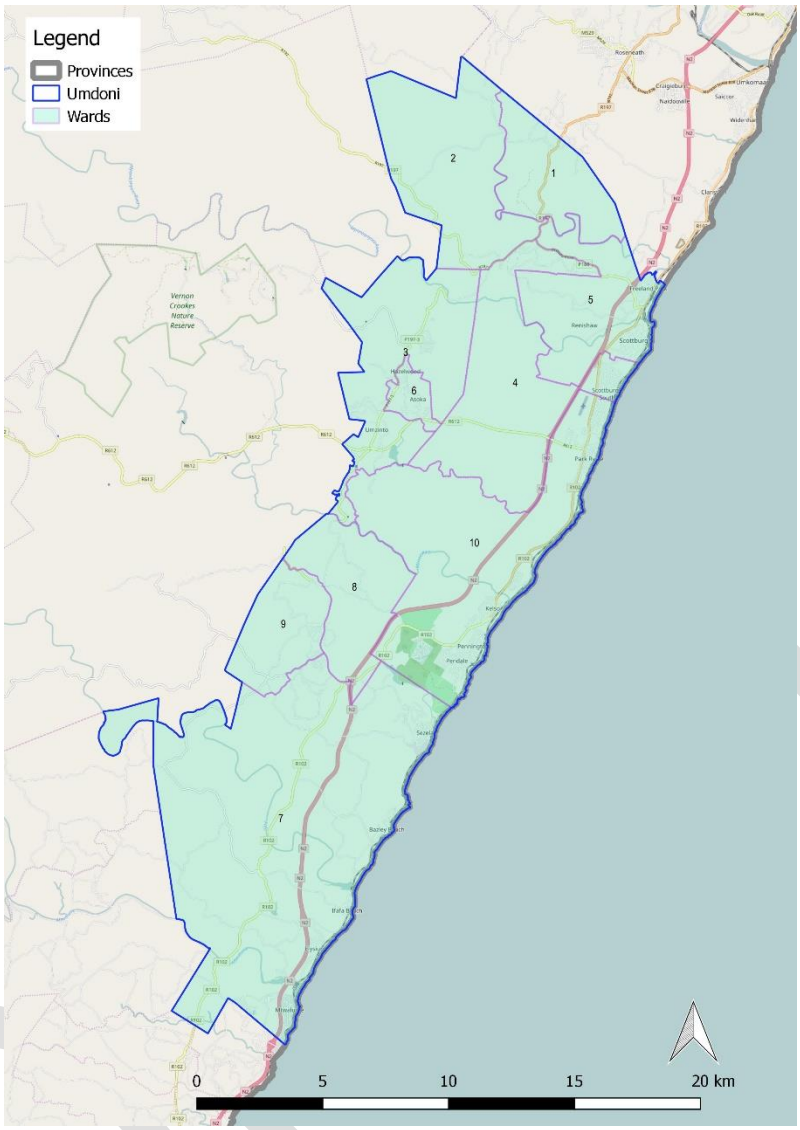

Figure 2: Distribution of Wards in the uMdoni local municipality

1.2 Population by sex and age

During the 2011 Census 78 852 were counted in the 10 wards. Table 1 summarises the age and sex per population in these wards. Females constitute 51% of population, compared to males 49%. The young people ≤ 25 years (47%) make up almost half of the population in the local municipality. The detail for Ward 6 that forms the catchment area for Mthandeni Clinic are highlighted in the table below.

Table 1: Population per age groups per ward, uMdoni local municipality

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Ward 001	1653	693	828	831	2373	1068	7446	3957	3489	7446
Ward 002	2319	1050	1248	1080	2946	1269	9912	5445	4467	9912
Ward 003	1410	702	810	1026	3699	1650	9297	4698	4599	9297
Ward 004	1230	594	681	660	2352	1356	6873	3579	3294	6873
Ward 005	942	432	483	555	2148	1992	6552	3345	3207	6552
Ward 006	771	351	480	774	2730	966	6072	2865	3207	6072
Ward 007	1575	690	732	831	2970	1956	8754	4296	4458	8754
Ward 008	2169	936	987	1011	2820	1290	9213	4725	4488	9213
Ward 009	1593	717	786	753	2205	669	6723	3504	3219	6723
Ward 010	816	489	537	705	2754	2709	8010	4173	3837	8010
Total	14478	6654	7572	8226	26997	14925	78852	40587	38265	78852
%	18%	8%	10%	10%	34%	19%		**51%**	**48%**	

Table 2 reflects the sex and age breakdown of the youth between 10 and 35 years for the same geographic area.

Table 2: Youth population per sex and five-year age groups per ward, uMdoni 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	366	420	429	378	291	327	408	402	420	237	3678
Ward 002	510	645	579	483	369	540	603	501	384	285	4899
Ward 003	381	414	483	477	402	321	396	543	522	375	4314
Ward 004	270	336	342	315	243	324	345	318	321	207	3021
Ward 005	204	210	273	291	291	228	273	282	252	318	2622
Ward 006	192	243	330	336	249	159	237	444	525	342	3057
Ward 007	351	360	378	360	303	339	372	453	453	357	3726
Ward 008	438	507	507	411	327	498	480	504	423	285	4380
Ward 009	366	420	390	345	225	351	366	363	354	243	3423
Ward 010	237	270	381	336	243	252	267	324	336	255	2901
	3315	3825	4092	3732	2943	3339	3747	4134	3990	2904	36021

Figure 3 below reflects the population pyramid for uMdoni local municipality. This figure visualises sex (male and female) and age in five-year age bands for this population. It is noted that the biggest group is in the 20-24 years age group, followed by the 0-4-year olds and then the 25-29-year olds.

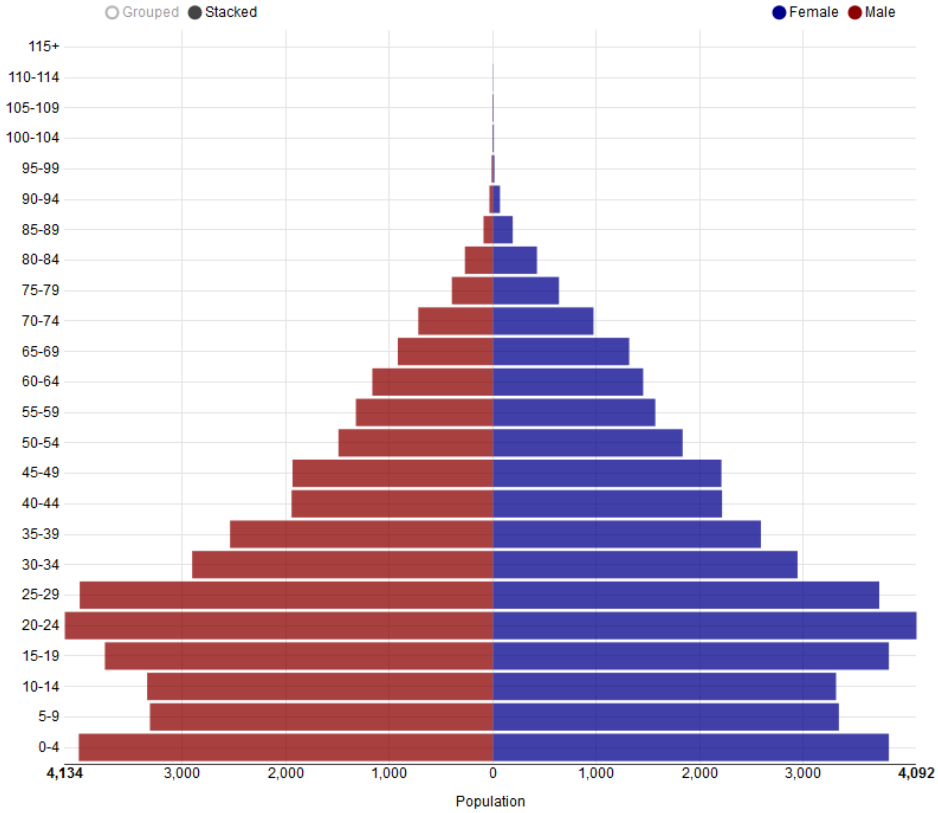

Figure 3: Population Pyramid uMdoni local municipality

From this population, 26.8 % children and 7,7% elderly are dependent on the 65,5% economically active population of the uMdoni local municipality (Figure 4).

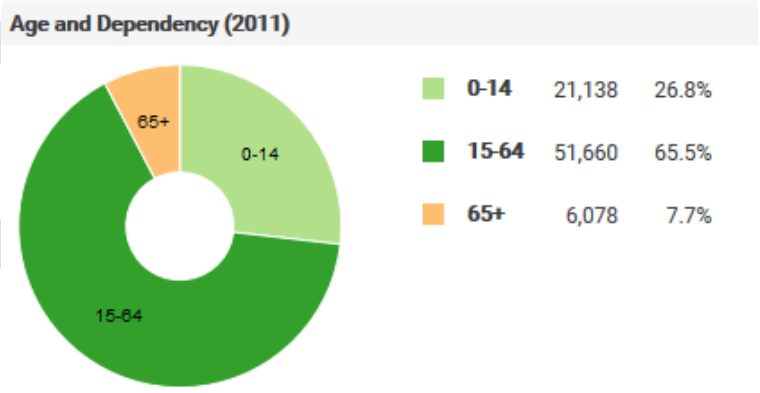

Figure 4: Dependency ratio uMdoni local municipality (Source Census 2011)

In the catchment area for the Mzinto Clinic (uMdoni Ward 6) there is a significant change in the population profile (Figure 5) with a different male to female distribution to that seen in the uMdoni Local municipality population pyramid in Figure 3.

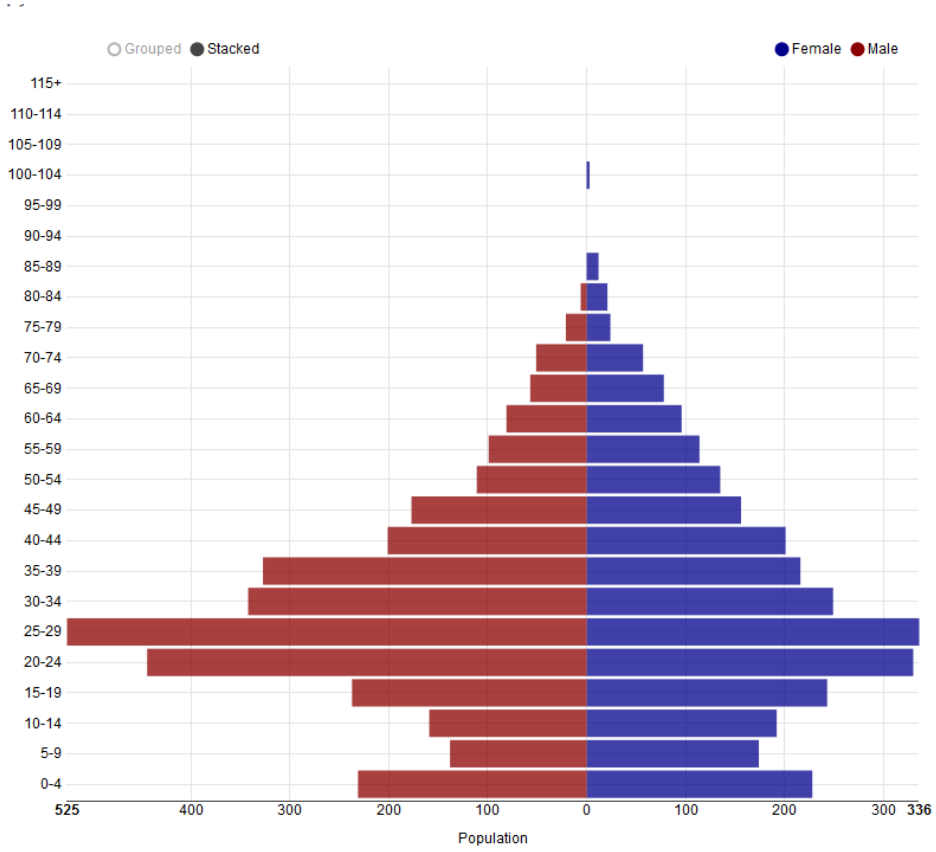

Figure 5: Population Pyramid Mzinto Clinic catchment area (Source Census 2011)

In the same catchment population, 18.6% children and 5.4% elderly are dependent on the 76% economically active population (Figure 6).

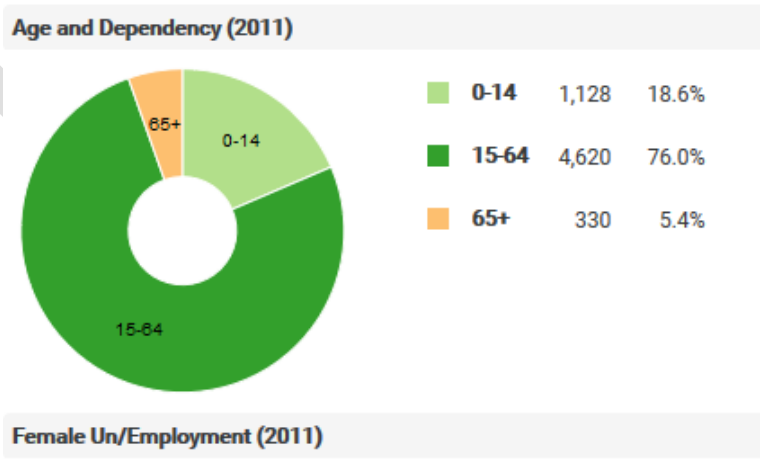

Figure 6: Dependency ratio Mzinto Clinic catchment area (Source Census 2011)

1.3 Population by race

The dominant population group in Maphumulo local municipality is Black African at 76.7% followed by white with 13.3% (detail in Figure 7 and Table 3).

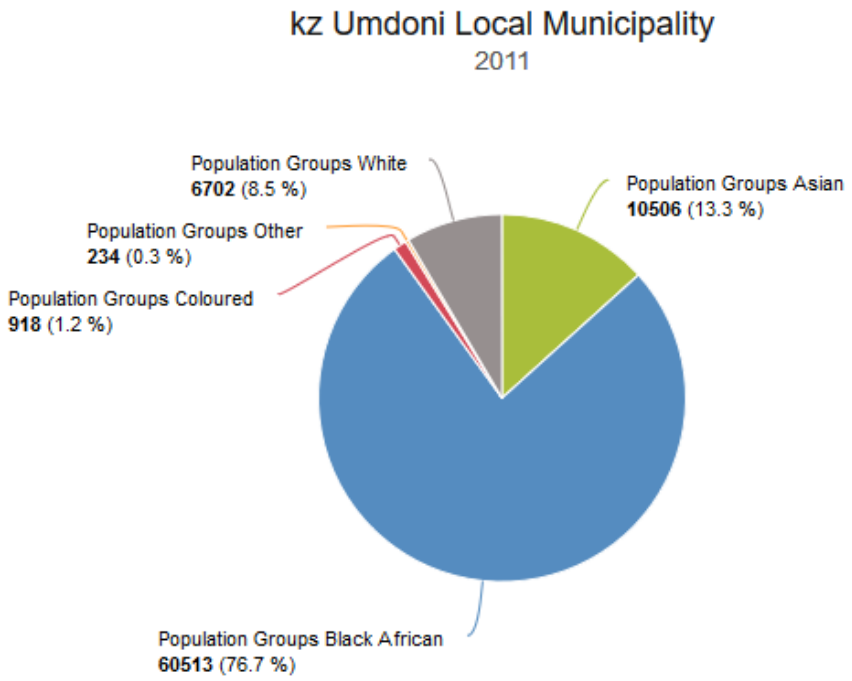

Figure 7: Population group distribution in uMdoni local municipality (Source Census 2011)

The detail for Ward 6 that forms the catchment area for Mzinto Clinic are highlighted in the table below.

Table 3: Ward level population distribution by Race in uMdoni local municipality

Ward	Asian	Black African	Coloured	Other	White	Total
Ward 001	9	7431	12	3		**7455**
Ward 002	9	9879	6	6	6	**9906**
Ward 003	4539	4458	174	93	36	**9300**
Ward 004	372	5295	63	12	1122	**6864**
Ward 005	324	4161	75	27	1971	**6558**
Ward 006	2331	3522	159	24	39	**6075**
Ward 007	873	6591	171	21	1107	**8763**
Ward 008	24	9174	9	3	3	**9213**
Ward 009	3	6711	3	9	3	**6729**
Ward 010	2022	3291	246	36	2415	**8010**
	10506	**60513**	**918**	**234**	**6702**	**78873**

2. Epidemiological profile

2.1 Causes of death

With the roll out of ART in South Africa, AIDS is now becoming a chronic disease since many people living with HIV are living longer. The main causes of death, the iLembe district is TB (XXX%) followed by HIV (XX%) (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 uGu 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 under iLembe 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.

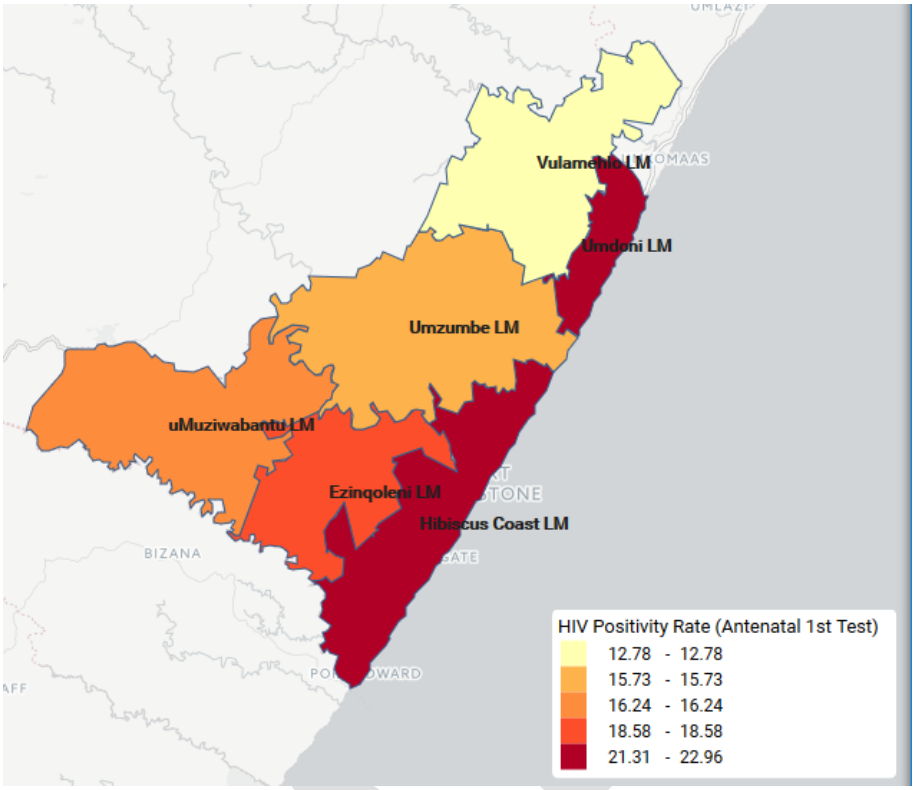

Figure 8: ANC client HIV 1st test positive rate uGu district (Source: KZN DHIS 2015)

Table 5: HIV Positivity Rate (Antenatal 1st Test) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **19 %**								
	Local Municipality	**2015 : HIV Positivity Rate (Antenatal 1st Test)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	12.78	%	(91	/	712)	4.45 %	6.60 %
2	kz Umzumbe Local Municipality	15.73	%	(265	/	1685)	12.95 %	15.63 %
3	kz uMuziwabantu Local Municipality	16.24	%	(300	/	1847)	14.66 %	17.13 %
4	kz Ezinqoleni Local Municipality	18.58	%	(147	/	791)	7.18 %	7.34 %
5	kz Hibiscus Coast Local Municipality	21.31	%	(968	/	4543)	47.29 %	42.14 %
6	kz UMdoni Local Municipality	22.96	%	(276	/	1202)	13.48 %	11.15 %

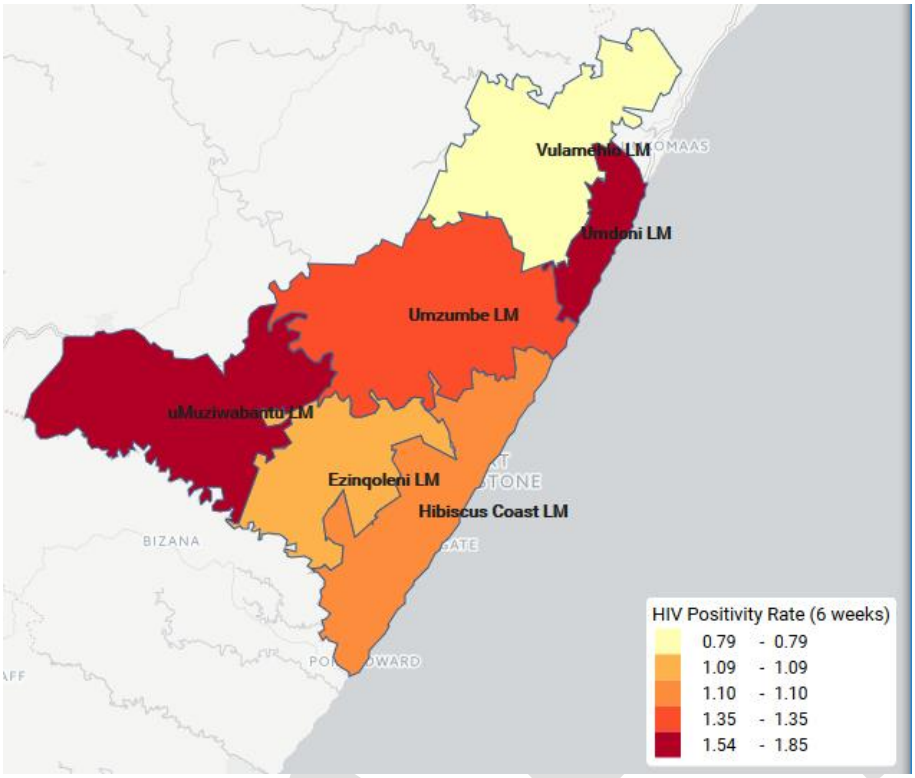

Figure 9: Infant 1st PCR test positive around 6 weeks rate uGu district (Source: KZN DHIS 2015)

Table 6: HIV Positivity Rate (6 weeks) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **1.3 %**								
	Local Municipality	**2015 : HIV Positivity Rate (6 weeks)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	0.79	%	(2	/	252)	3.64 %	5.89 %
2	kz Ezinqoleni Local Municipality	1.09	%	(4	/	368)	7.27 %	8.59 %
3	kz Hibiscus Coast Local Municipality	1.10	%	(18	/	1642)	32.73 %	38.35 %
4	kz Umzumbe Local Municipality	1.35	%	(11	/	817)	20 %	19.08 %
5	kz uMuziwabantu Local Municipality	1.54	%	(11	/	716)	20 %	16.72 %
6	kz uMdoni Local Municipality	1.85	%	(9	/	487)	16.36 %	11.37 %

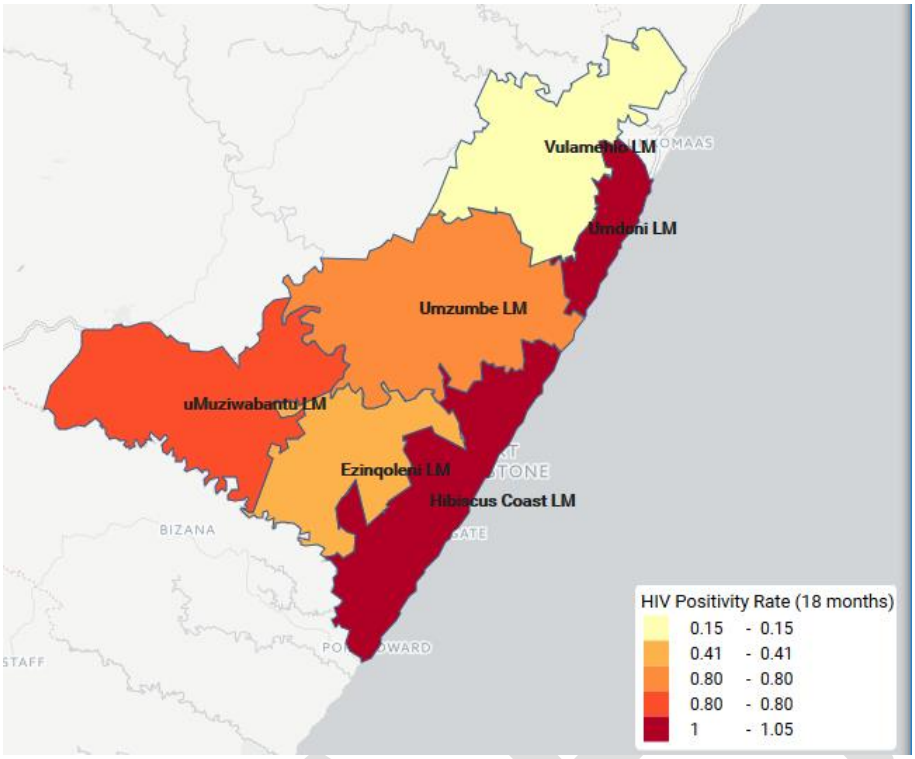

Figure 10: Infant rapid HIV test around 18 months positive rate uGu district (Source: KZN DHIS 2015)

Table 7: HIV Positivity Rate (18 months) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **0.8 %**								
	Local Municipality	**2015 : HIV Positivity Rate (18 months)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	0.15	%	(1	/	677)	1.47 %	8.03 %
2	kz Ezinqoleni Local Municipality	0.41	%	(4	/	977)	5.88 %	11.59 %
3	kz Umzumbe Local Municipality	0.80	%	(11	/	1377)	16.18 %	16.34 %
4	kz uMuziwabantu Local Municipality	0.80	%	(14	/	1741)	20.59 %	20.66 %
5	kz uMdoni Local Municipality	1	%	(8	/	798)	11.76 %	9.47 %
6	kz Hibiscus Coast Local Municipality	1.05	%	(30	/	2858)	44.12 %	33.91 %

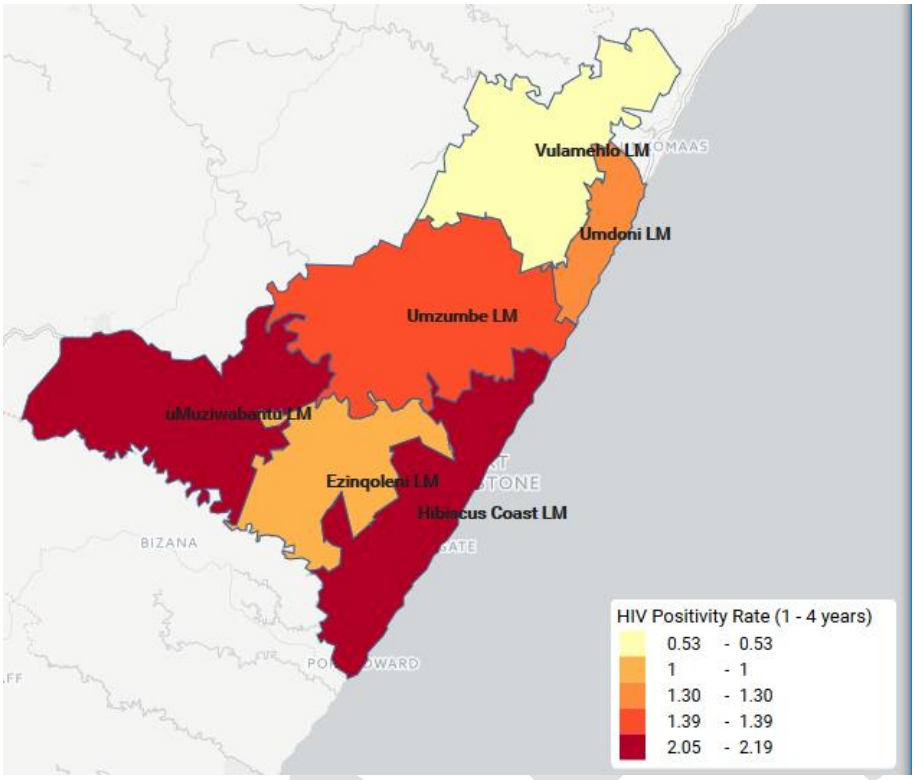

Figure 11: HIV test positive child 12-59 months rate uGu district (Source: KZN DHIS 2015)

Table 8: HIV Positivity Rate (12-59 months) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **1.7 %**								
	Local Municipality	**2015 : HIV Positivity Rate (1 - 4 years)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	0.53	%	(5	/	940)	1.98 %	6.32 %
2	kz Ezinqoleni Local Municipality	1	%	(17	/	1704)	6.75 %	11.46 %
3	kz UMdoni Local Municipality	1.30	%	(17	/	1308)	6.75 %	8.79 %
4	kz Umzumbe Local Municipality	1.39	%	(38	/	2734)	15.08 %	18.38 %
5	kz uMuziwabantu Local Municipality	2.05	%	(62	/	3025)	24.60 %	20.34 %
6	kz Hibiscus Coast Local Municipality	2.19	%	(113	/	5164)	44.84 %	34.72 %

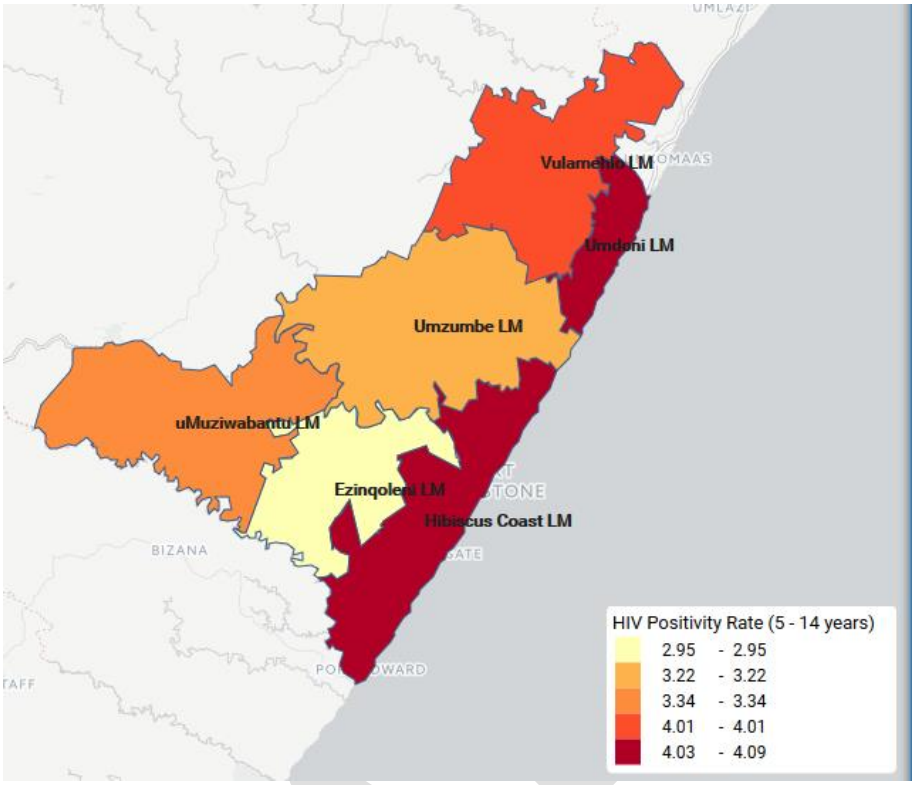

Figure 12: HIV test positive child 5-14 years rate uGu district (Source: KZN DHIS 2015)

Table 9: HIV Positivity Rate (5 - 14 years) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **3.6 %**									
	Local Municipality	**2015 : HIV Positivity Rate (5 - 14 years)**					**NUM %**	**DEN %**
1	kz Ezinqoleni Local Municipality	2.95	%	(30	/	1017)	9.06 %	11.06 %
2	kz Umzumbe Local Municipality	3.22	%	(69	/	2142)	20.85 %	23.29 %
3	kz uMuziwabantu Local Municipality	3.34	%	(63	/	1884)	19.03 %	20.48 %
4	kz Vulamehlo Local Municipality	4.01	%	(21	/	524)	6.34 %	5.70 %
5	kz uMdoni Local Municipality	4.03	%	(25	/	620)	7.55 %	6.74 %
6	kz Hibiscus Coast Local Municipality	4.09	%	(123	/	3011)	37.16 %	32.74 %

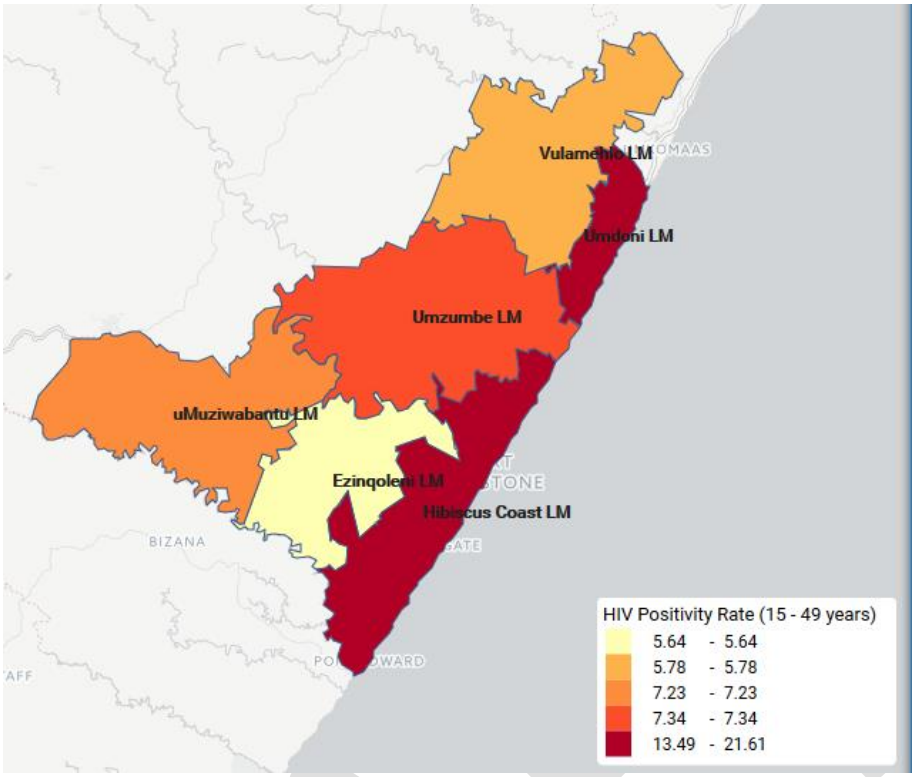

Figure 13: HIV prevalence amongst client tested 15-49 years rate uGu district (Source: KZN DHIS 2015)

Table 10: HIV Positivity Rate (15 - 49 years) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **10.7 %**									
	Local Municipality	**2015 : HIV Positivity Rate (15 - 49 years)**					**NUM %**	**DEN %**
1	kz Ezinqoleni Local Municipality	5.64	%	(764	/	13540)	4.52 %	8.56 %
2	kz Vulamehlo Local Municipality	5.78	%	(777	/	13450)	4.59 %	8.50 %
3	kz uMuziwabantu Local Municipality	7.23	%	(1802	/	24934)	10.65 %	15.76 %
4	kz Umzumbe Local Municipality	7.34	%	(2284	/	31112)	13.50 %	19.67 %
5	kz Hibiscus Coast Local Municipality	13.49	%	(8219	/	60912)	48.58 %	38.51 %
6	kz uMdoni Local Municipality	21.61	%	(3072	/	14215)	18.16 %	8.99 %

2.3 TB

The figures that follow reflects the TB burden based on the routine health data collected, collated and reported in health facilities under iLembe 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 Annexure A.

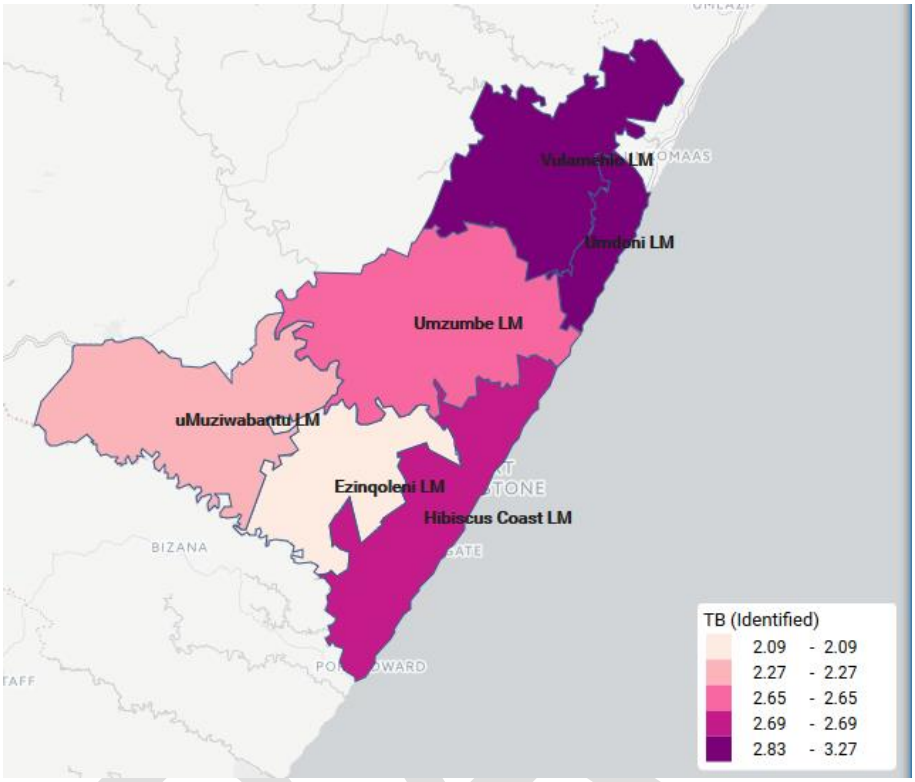

Figure 14: TB (pulmonary) case finding index uGu district (Source: KZN DHIS 2015)

Table 11: TB (pulmonary) case finding index uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **2.6 %**								
	Local Municipality	**2015 : TB (Identified)**					**NUM %**	**DEN %**
1	kz Ezinqoleni Local Municipality	2.09	%	(3851	/	184540)	6.86 %	8.71 %
2	kz uMuziwabantu Local Municipality	2.27	%	(6360	/	279897)	11.33 %	13.21 %
3	kz Umzumbe Local Municipality	2.65	%	(11392	/	429180)	20.30 %	20.26 %
4	kz Hibiscus Coast Local Municipality	2.69	%	(22348	/	830430)	39.82 %	39.21 %
5	kz Vulamehlo Local Municipality	2.83	%	(4598	/	162294)	8.19 %	7.66 %
6	kz uMdoni Local Municipality	3.27	%	(7579	/	231778)	13.50 %	10.94 %

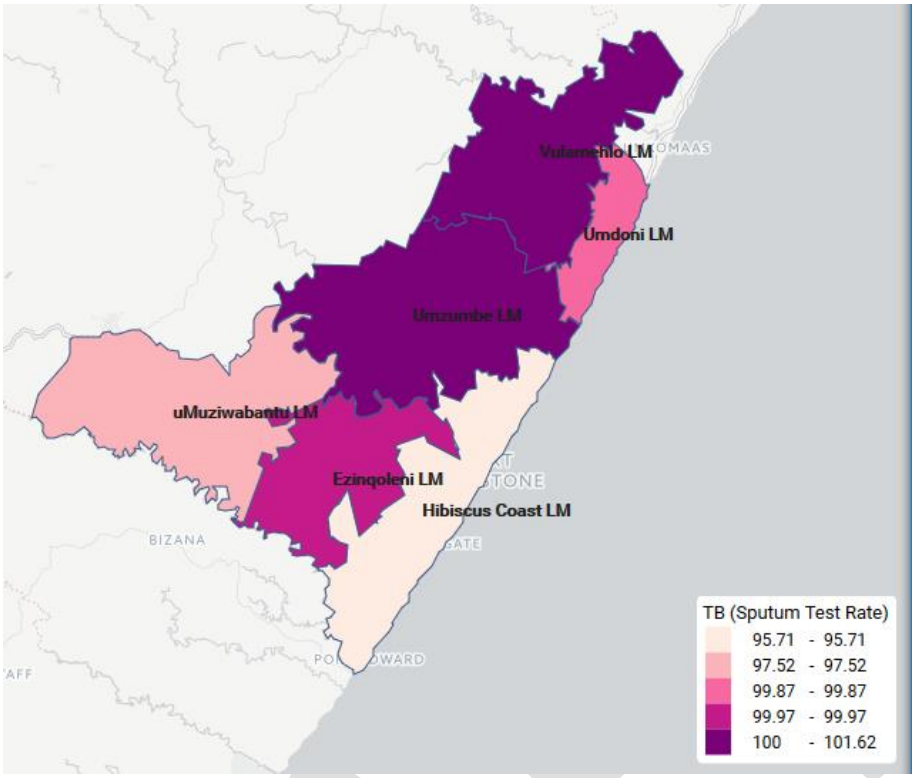

Figure 15: TB suspect sputum test rate uGu district (Source: KZN DHIS 2015)

Table 12: TB (Sputum Test Rate) uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **98.3 %**								
	Local Municipality	**2015 : TB (Sputum Test Rate)**					**NUM %**	**DEN %**
1	kz Hibiscus Coast Local Municipality	95.71	%	(22348	/	23350)	39.82 %	40.88 %
2	kz uMuziwabantu Local Municipality	97.52	%	(6360	/	6522)	11.33 %	11.42 %
3	kz uMdoni Local Municipality	99.87	%	(7579	/	7589)	13.50 %	13.29 %
4	kz Ezinqoleni Local Municipality	99.97	%	(3851	/	3852)	6.86 %	6.74 %
5	kz Vulamehlo Local Municipality	100	%	(4598	/	4598)	8.19 %	8.05 %
6	kz Umzumbe Local Municipality	101.62	%	(11392	/	11210)	20.30 %	19.63 %

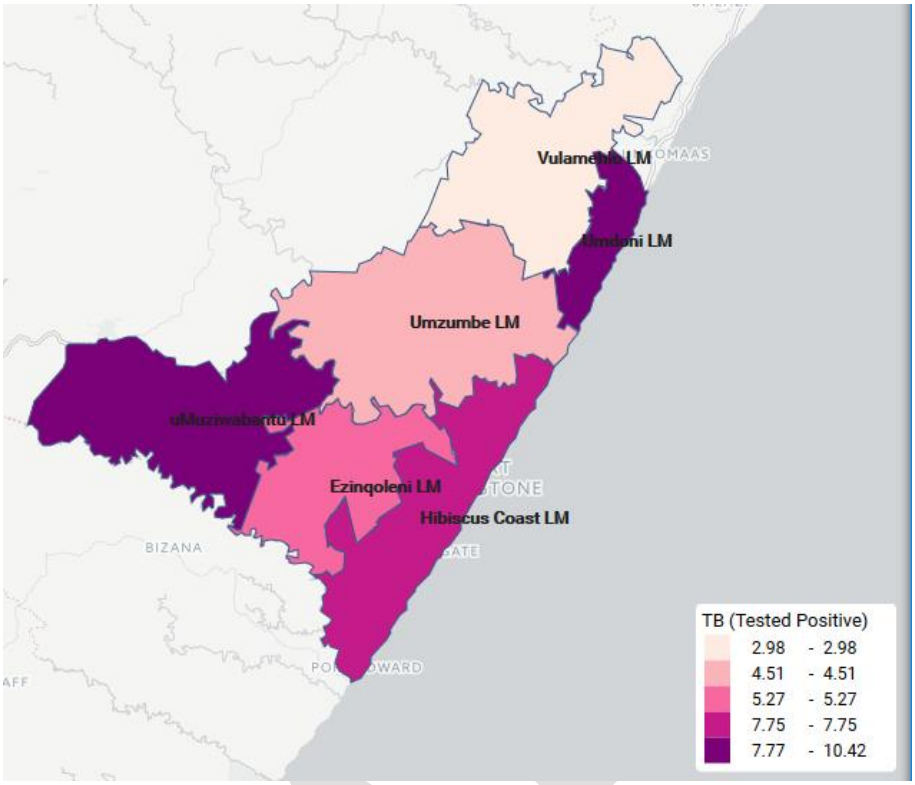

Figure 16: TB suspect smear positive rate uGu district (Source: KZN DHIS 2015)

Table 13: TB suspect smear positive rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **6.8 %**								
	Local Municipality	**2015 : TB (Tested Positive)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	2.98	%	(137	/	4598)	3.57 %	8.19 %
2	kz Umzumbe Local Municipality	4.51	%	(514	/	11392)	13.39 %	20.30 %
3	kz Ezinqoleni Local Municipality	5.27	%	(203	/	3851)	5.29 %	6.86 %
4	kz Hibiscus Coast Local Municipality	7.75	%	(1732	/	22348)	45.13 %	39.82 %
5	kz uMdoni Local Municipality	7.77	%	(589	/	7579)	15.35 %	13.50 %
6	kz uMuziwabantu Local Municipality	10.42	%	(663	/	6360)	17.27 %	11.33 %

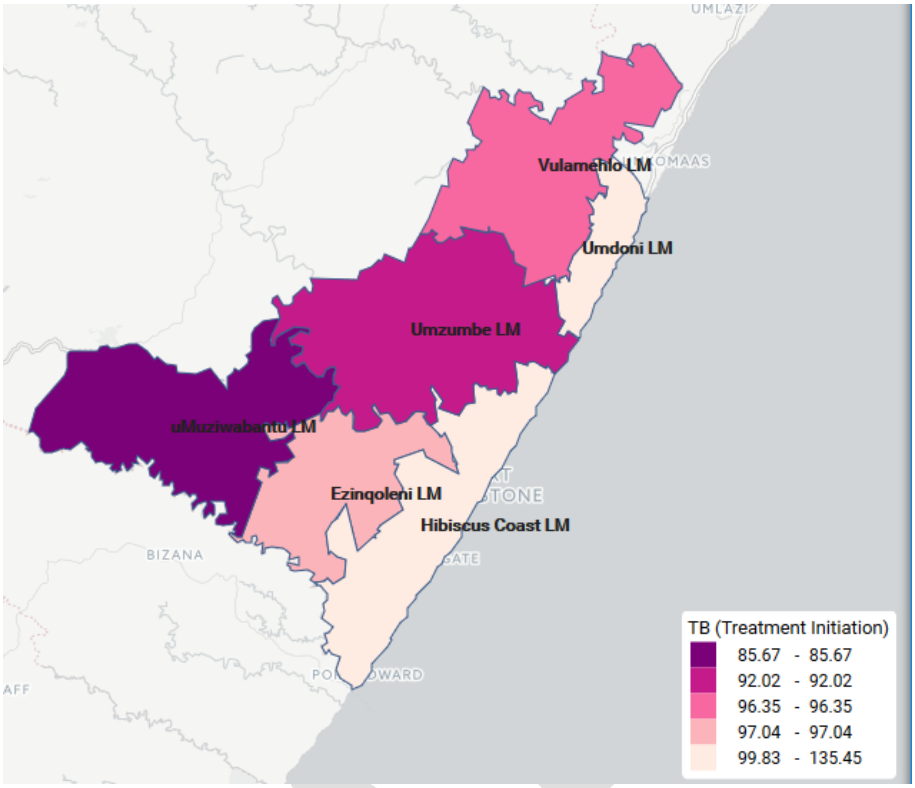

Figure 17: TB suspect treatment initiation rate uGu district (Source: KZN DHIS 2015)

Table 14: TB suspect treatment initiation rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **112.1 %**								
	Local Municipality	**2015 : TB (Treatment Initiation)**					**NUM %**	**DEN %**
1	kz uMuziwabantu Local Municipality	85.67	%	(568	/	663)	13.20 %	17.27 %
2	kz Umzumbe Local Municipality	92.02	%	(473	/	514)	10.99 %	13.39 %
3	kz Vulamehlo Local Municipality	96.35	%	(132	/	137)	3.07 %	3.57 %
4	kz Ezinqoleni Local Municipality	97.04	%	(197	/	203)	4.58 %	5.29 %
5	kz uMdoni Local Municipality	99.83	%	(588	/	589)	13.66 %	15.35 %
6	kz Hibiscus Coast Local Municipality	135.45	%	(2346	/	1732)	54.51 %	45.13 %

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 under iLembe 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.

[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

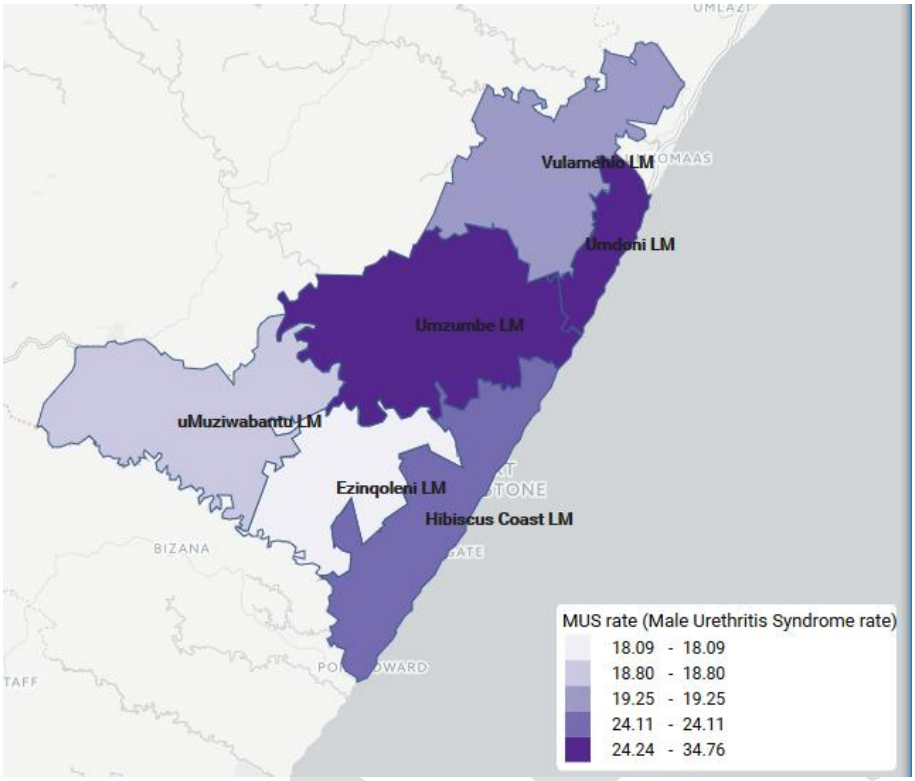

Figure 18: Male urethritis syndrome rate uGu district (Source: KZN DHIS 2015)

Table 15: Male urethritis syndrome rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **24.1 %**								
	Local Municipality	**2015 : MUS rate (Male Urethritis Syndrome rate)**					**NUM %**	**DEN %**
1	kz Ezinqoleni Local Municipality	18.09	%	(238	/	1316)	3.20 %	4.26 %
2	kz uMuziwabantu Local Municipality	18.80	%	(745	/	3963)	10.03 %	12.83 %
3	kz Vulamehlo Local Municipality	19.25	%	(216	/	1122)	2.91 %	3.63 %
4	kz Hibiscus Coast Local Municipality	24.11	%	(3990	/	16549)	53.71 %	53.59 %
5	kz Umzumbe Local Municipality	24.24	%	(1189	/	4906)	16 %	15.89 %
6	kz uMdoni Local Municipality	34.76	%	(1051	/	3024)	14.15 %	9.79 %

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].

- Testing is done in clinics hospitals and mobile clinics;
- People are encouraged to test so that they know their status;
- Pregnant women test when they go to the clinic;
- There are those who are scared of knowing and to be known;
- There is a fear of disclosure; and
- Men don't test they fear the clinic because it is a sign of weakness, they get their status from their partner.

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:

- There are no mobile services for circumcision only clinics and the hospital;
- There is an increase in MMC between the ages of 12-24;
- MMC is not appealing to those who are 30+, youth over 24 are averse to MMC; and
- Shembe does circumcision but there is no Shembe here.

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

3.1.2 ARV treatment

During the stakeholder and community engagement workshops the following was said about ***ARV treatment*** in the area:

- ARV's are accessible and available the clinics, pick up points, CCMDD points and the hospital but there are reports of shortages at Mzinto Clinic;
- CCG's also distribute them at home;
- People aren't aware that if you are living with HIV you will be given treatment;
- When patients lose their files, they are forced to start over again creating many lost-to-follow-ups;
- Young children default because when they are young they are not told about their status;
- Adherence is limited - Support groups and awareness can improve adherence;
- People are afraid of fetching medication because they are still stigmatised – when their return dates are missed, they are not rescheduled;
- The nurses shout at patients and make them go into the HIV room, even the cards tell you the person is living with HIV;
- People in wheelchairs can only get ARV's in hospital - the clinic is not wheelchair friendly and it costs R 140 to get to the hospital in Scottburgh; and
- Health care practitioners do follow them up.

3.1.3 PEP and PrEP

The community indicated that for ***post-exposure antiretroviral prophylaxis (PEP) and pre-exposure antiretroviral prophylaxis (PrEP)*** there is generally no information that its available or what its used for. Some participants know both PEP and PrEP but could not express its purpose or whether it is available. One person reported that you can't use PEP for condom bursts its refused at the clinic.

3.1.4 Lubricant

During the stakeholder and community engagement workshops it was noted that in general there is no knowledge of the benefit of extra lubricant or where it can be accessed.

3.2 Behaviour that influences 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:

- Old people are infected when caring for the sick;
- There is not enough HIV Knowledge in the community especially about the value of testing and knowing your status;
- People are shy to know their status they are afraid of death;
- But even if people are educated, they don't care about tomorrow only today;
- Girls who drink do not understand that alcohol stops them from making good decisions;
- Awareness campaigns need to accommodate the blind and deaf and physically disabled;
- The use of pictures and other methods of communication will also help illiterate people who are most vulnerable;
- Children need to be educated much younger about HIV;
- People are tired of hearing about HIV/AIDS, they think they know everything; and
- There are still myths like virgin sex cures HIV, holy water and prayer cures HIV as well as traditional medicine.

3.2.2 Sexual risky behaviours

The community engagement discussion on ***risky sexual behaviour*** identified multiple and concurrent partnerships entered into by both boys and girls in public as behaviour that fuels the transmission of HIV.

3.2.3 Substance abuse

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

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

- Substance abuse is high due to many school drop-outs;
- There are no recreation facilities for young people so they drink as recreation; and
- Parents traffic their children when they drink and have other partners.

3.2.4 Condoms

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

- They are being used from many places – shops, taverns, clinics etc.;
- There is a fear of female condoms and they are not promoted;
- Female condoms are uncomfortable and intimidating to use;
- Female condoms are not packaged well they don't look like condoms;
- Male condoms are being used because they are easily available and familiar;
- Women don't want to use condoms;
- Men don't like using condoms;
- Men think they are not trustworthy to their partners (if they use condoms);
- Mainly male condoms are promoted especially the flavoured ones but they are not used especially for one-night stands; and
- Girls are refusing condoms that are not flavoured.

In Figure 19 and Figure 20 the condom distribution for females and males (annualised) are reflected at local municipality level in iLembe 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.

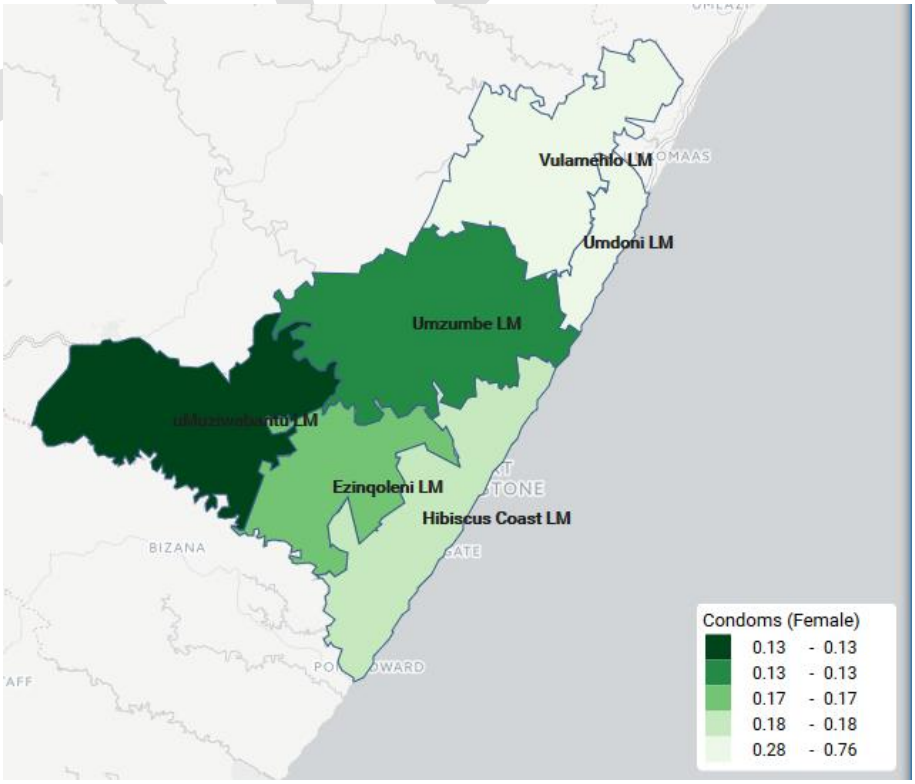

Figure 19: Female condom distribution rate uGu district (Source: KZN DHIS 2015)

Table 16: Female condom distribution rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **23.5 No**								
	Local Municipality	**2015 : Condoms (Female)**					**NUM %**	**DEN %**
1	kz uMuziwabantu Local Municipality	0.13	No	(50248	/	399420)	6.62 %	12.35 %
2	kz Umzumbe Local Municipality	0.13	No	(88805	/	684828)	11.70 %	21.17 %
3	kz Ezinqoleni Local Municipality	0.17	No	(38171	/	227400)	5.03 %	7.03 %
4	kz Hibiscus Coast Local Municipality	0.18	No	(224970	/	1221132)	29.64 %	37.75 %
5	kz uMdoni Local Municipality	0.28	No	(105360	/	370044)	13.88 %	11.44 %
6	kz Vulamehlo Local Municipality	0.76	No	(251448	/	331536)	33.13 %	10.25 %

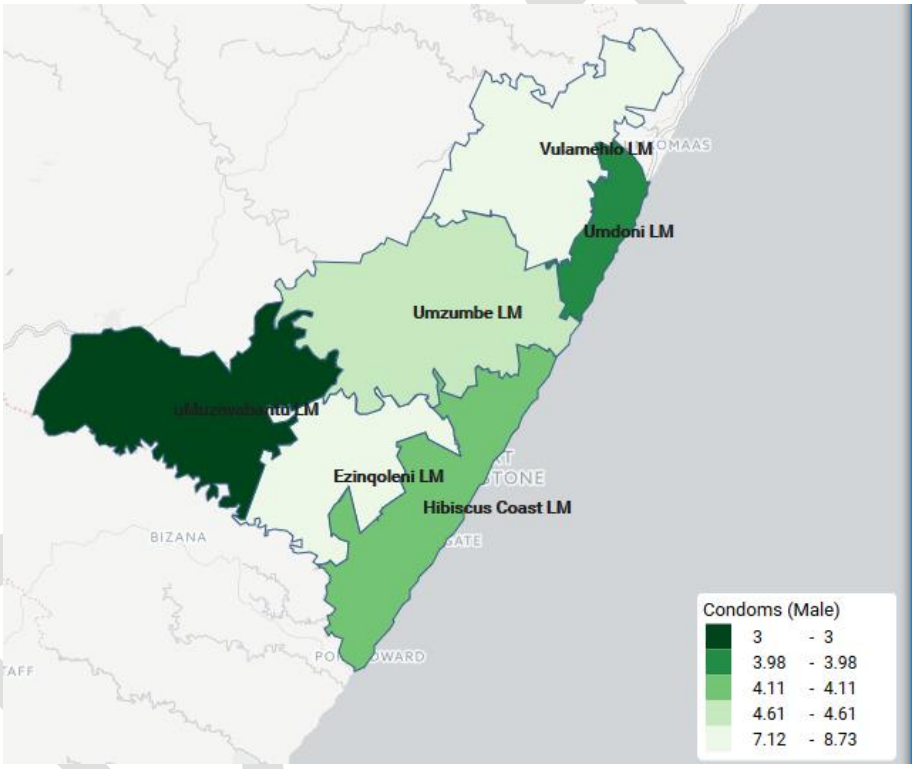

Figure 20: Male condom distribution rate uGu district (Source: KZN DHIS 2015)

Table 17: Male condom distribution rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **466.1 No**								
	Local Municipality	**2015 : Condoms (Male)**					**NUM %**	**DEN %**
1	kz uMuziwabantu Local Municipality	3	No	(895422	/	298392)	7.40 %	11.49 %
2	kz uMdoni Local Municipality	3.98	No	(1313239	/	330180)	10.85 %	12.71 %
3	kz Hibiscus Coast Local Municipality	4.11	No	(4180243	/	1018272)	34.52 %	39.20 %
4	kz Umzumbe Local Municipality	4.61	No	(2427484	/	526776)	20.05 %	20.28 %
5	kz Vulamehlo Local Municipality	7.12	No	(1808408	/	254076)	14.94 %	9.78 %
6	kz Ezinqoleni Local Municipality	8.73	No	(1483371	/	169896)	12.25 %	6.54 %

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.

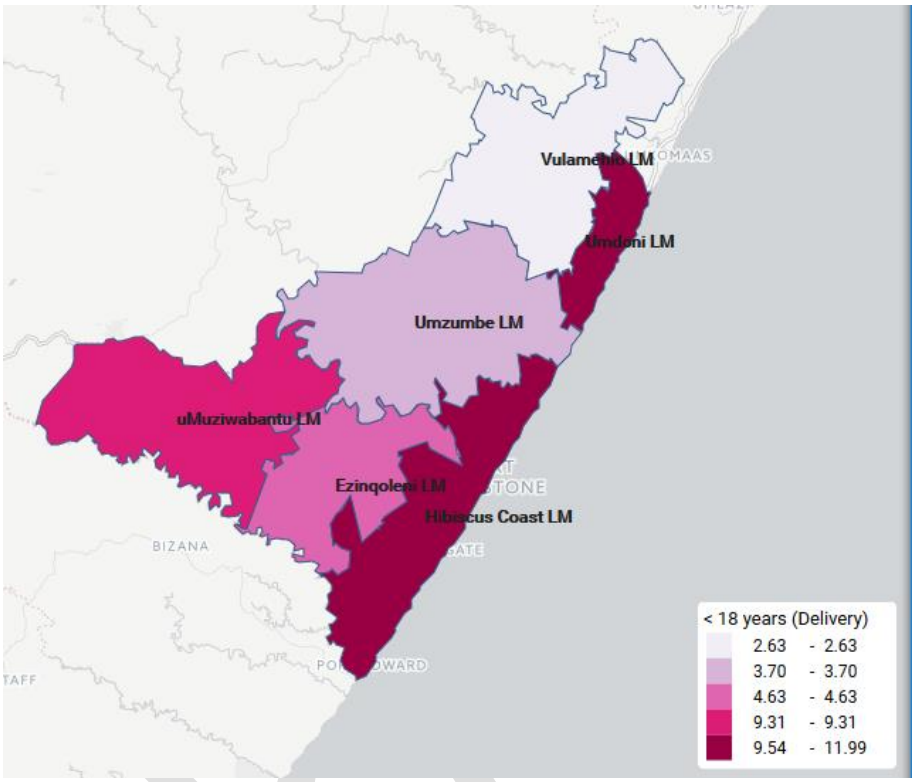

Figure 21: Teenage Pregnancy rate uGu district (Source: KZN DHIS 2015)

Table 18: Teenage Pregnancy rate uGu district (Source: KZN DHIS 2015 report 27 August 2017)

KZ UGU DISTRICT MUNICIPALITY: **9.8 %**									
	Local Municipality	**2015 : < 18 years (Delivery)**					**NUM %**	**DEN %**
1	kz Vulamehlo Local Municipality	2.63	%	(2	/	76)	0.15 %	0.56 %
2	kz Umzumbe Local Municipality	3.70	%	(16	/	433)	1.20 %	3.19 %
3	kz Ezinqoleni Local Municipality	4.63	%	(10	/	216)	0.75 %	1.59 %
4	kz uMuziwabantu Local Municipality	9.31	%	(220	/	2364)	16.50 %	17.40 %
5	kz Hibiscus Coast Local Municipality	9.54	%	(677	/	7099)	50.79 %	52.24 %
6	kz uMdoni Local Municipality	11.99	%	(408	/	3402)	30.61 %	25.03 %

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

Table 19: Key and vulnerable population groups

Key and vulnerable population group	Stakeholder and community feedback
Young women	Young women were identified as the most vulnerable group because they are dependent on men and have no means of controlling sexual risk because of financial dependency
Youth	Lack of employment and not being educated leads young people to abuse drugs and end up having unprotected sex. There is exchange of sex for money because they are lacking in skills.
Orphans and vulnerable children	There is no support for orphans, if they don't have papers they don't get grants. Children get exploited by neighbours
People with disabilities	People with disabilities are disadvantaged. They are not educated about HIV or supervised/monitored in their homes. But in Mzinto they are lucky with a good disability sector.
Older Persons	Older people do not know about HIV or how to care for PLHIV. Older women don't enjoy their husbands company because of alcohol abuse (so they have Ben 10's).
Contract workers	There are contract workers here building houses and they have money.
Migrant Workers	Foreign nationals are shopkeepers.

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 had been associated with high proportion of orphans[14] , albeit at provincial level. The detail for Ward 6 that forms the catchment area for Mzinto Clinic, are highlighted in the table below.

Table 20: Orphan hood for Census 2011 at Ward level in uMdoni local municipality

Ward	Maternal orphans			Paternal orphans			Double orphans		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ward 1	44	47	91	286	299	585	98	130	229
Ward 2	71	60	131	356	359	715	100	119	219
Ward 3	45	24	69	137	148	285	39	33	72
Ward 4	36	30	65	144	148	292	52	54	106
Ward 5	24	18	43	127	119	245	46	38	84
Ward 6	12	16	28	87	85	172	20	16	36
Ward 7	44	29	73	173	167	340	68	65	133
Ward 8	54	66	120	314	313	628	174	156	330
Ward 9	36	46	82	250	255	505	70	88	158
Ward 10	19	16	35	66	71	136	33	10	44

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

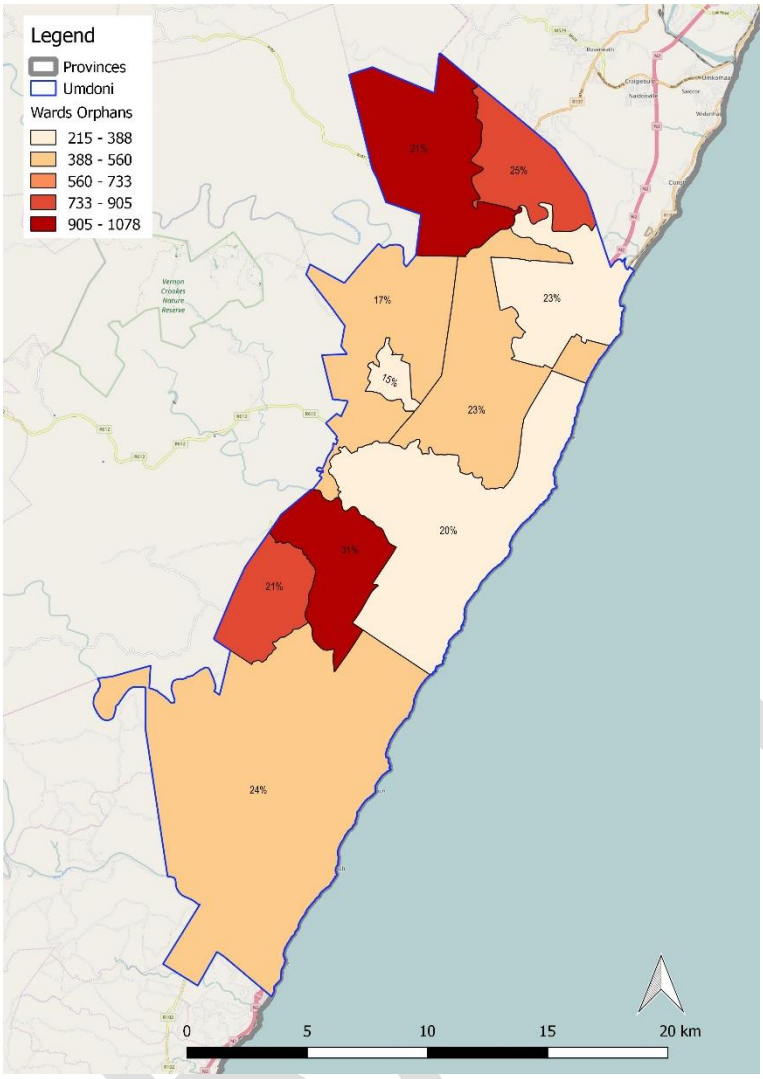

Figure 22: Total number of Orphans in uMdoni municipality with percentage that are double orphans per ward (Source Census 2011)

The following was identified as associated risks for ***Orphans and vulnerable children***:

- Orphans get little support, especially if their papers are not in order;
- Children are especially vulnerable to the community members, the get exploited; and
- Children are vulnerable on their way to school, there is not scholar transport and they can't afford public transport .

3.3.2 Cultural and Religious Norms

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

- Church leaders should be educated about HIV, they don't know and they spread myths;

3.3.3 Gender norms and gender-based violence

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

- Women get raped and get HIV;
- Women are very dependent on men for support so they are afraid of negotiating condoms; and
- Girls run away from abuse in the household and due to peer pressure, they abuse drugs.

3.3.4 Stigma

Stigma is mainly felt at the clinics because HIV patients are separated making it difficult for people to collect their medication. Notably the community expressed that *"people are treated differently by cards and rooms"*.

3.3.5 Poverty

Poverty is measured through the South Africa Multidimensional Poverty Index (SAMPI)[15]. The detail for Ward 6 that forms the catchment area for Mzinto Clinic are highlighted in the table below.

Table 21: Poverty measures for Census 2011 at Ward level in uMdoni local municipality

	Poverty Headcount (H)	Intensity of Poverty (A)	SAMPI (HxA)
Ward 001	9.3	41	0.038
Ward 002	19	41.3	0.078
Ward 003	19.6	46	0.090
Ward 004	3.6	42.3	0.015
Ward 005	4.6	44.2	0.020
Ward 006	22.5	46.7	0.105
Ward 007	11.4	40.8	0.047
Ward 008	17.7	41.6	0.074
Ward 009	29.5	44.7	0.132
Ward 010	0.97	41.9	0.004
Ward 011	13.8	43.1	0.059
kz uMdoni	9.3	41	0.038

Ward 9 had the highest head count at 29.5 followed by Ward 6 at 22.5. 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).

In the catchment area for Mzinto Clinic, the poverty index and poverty headcount is in ward 6 at 22.5%, making it the second highest in uMdoni local municipality. This is visible with the moderate shading in figure 26 for the SAMPI poverty headcount for the ward level.

[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 constitutes weighted education, health, assets, and economic activity (unemployment rates) indicators.

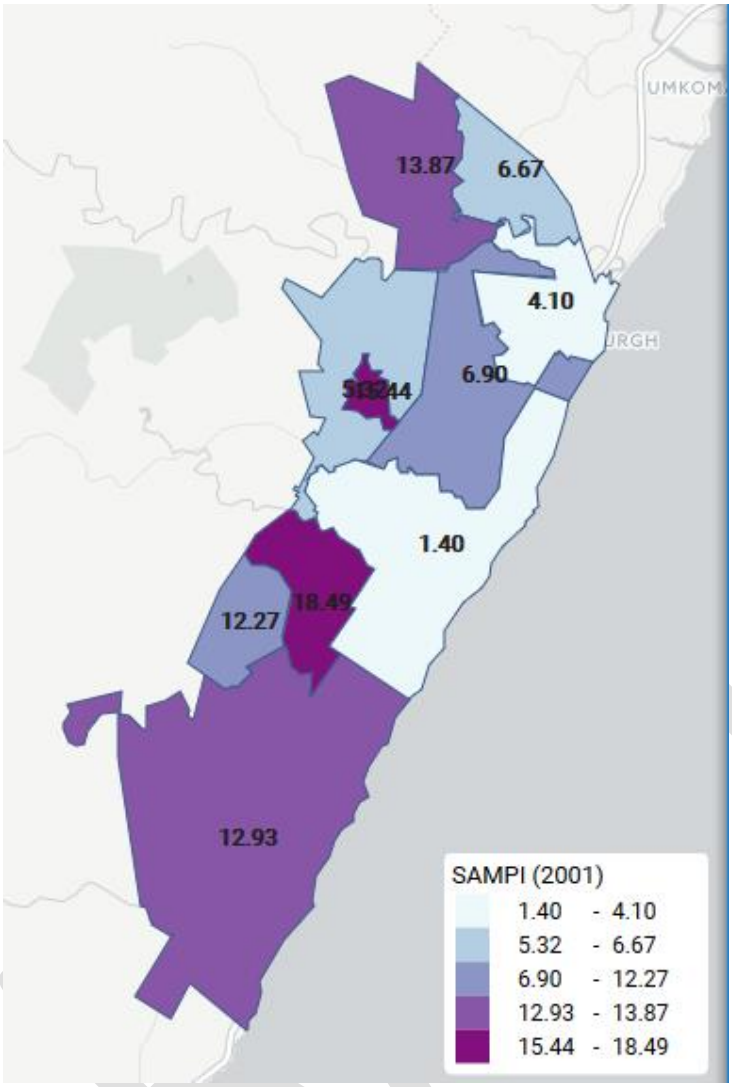

Figure 23: SAMPI (poverty Index) 2001 - ward level, uGu local municipality

Table 22: SAMPI (poverty Index) 2001 - ward level, uGu local municipality

KZ UMDONI LOCAL MUNICIPALITY: **9.6 %**						
	Ward (2011)	**SAMPI (2001)**				
1	kz uMdoni Ward 010	1.40	%	(1.4	/	100)
2	kz uMdoni Ward 005	4.10	%	(4.1	/	100)
3	kz uMdoni Ward 003	5.32	%	(5.3	/	100)
4	kz uMdoni Ward 001	6.67	%	(6.7	/	100)
5	kz uMdoni Ward 004	6.90	%	(6.9	/	100)
6	kz uMdoni Ward 009	12.27	%	(12.3	/	100)
7	kz uMdoni Ward 007	12.93	%	(12.9	/	100)
8	kz uMdoni Ward 002	13.87	%	(13.9	/	100)
9	kz uMdoni Ward 006	15.44	%	(15.4	/	100)
10	kz uMdoni Ward 008	18.49	%	(18.5	/	100)

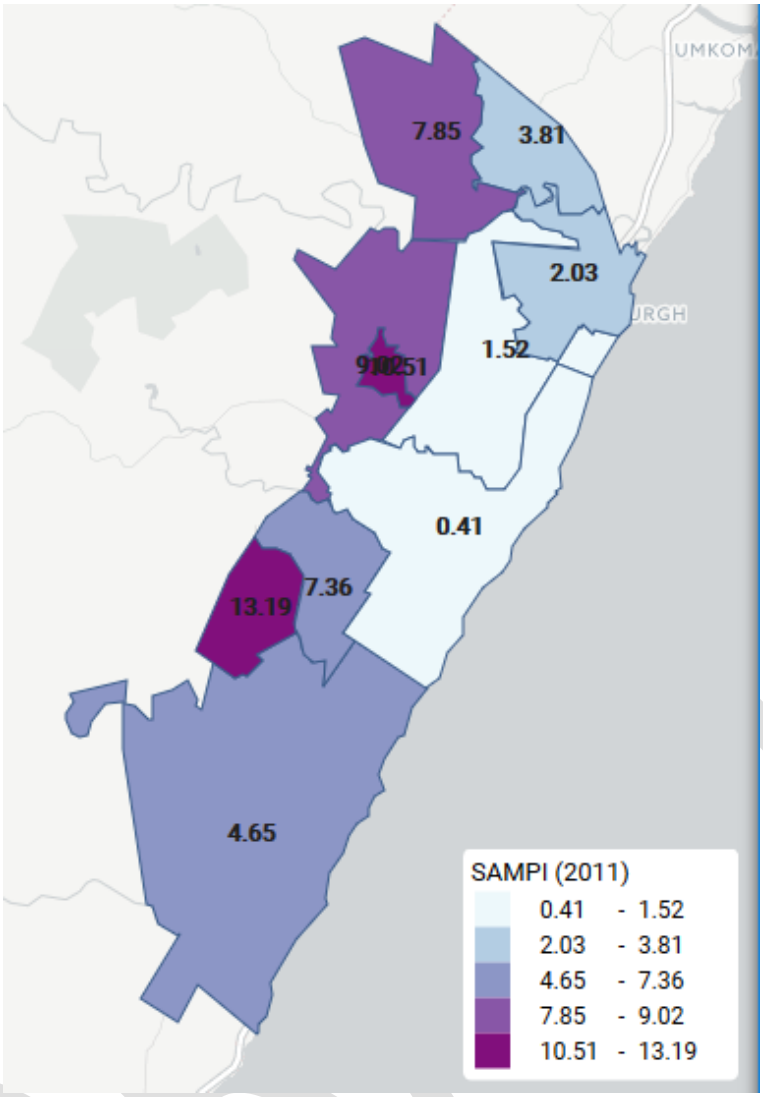

Figure 24: SAMPI (poverty Index) 2011 - ward level, uMdoni local municipality

Table 23: SAMPI (poverty Index) 2011 - ward level, uMdoni local municipality

KZ UMDONI LOCAL MUNICIPALITY: **6 %**						
	Ward (2011)	**SAMPI (2011)**				
1	kz uMdoni Ward 010	0.41	%	(0.4	/	100)
2	kz uMdoni Ward 004	1.52	%	(1.5	/	100)
3	kz uMdoni Ward 005	2.03	%	(2	/	100)
4	kz uMdoni Ward 001	3.81	%	(3.8	/	100)
5	kz uMdoni Ward 007	4.65	%	(4.7	/	100)
6	kz uMdoni Ward 008	7.36	%	(7.4	/	100)
7	kz uMdoni Ward 002	7.85	%	(7.8	/	100)
8	kz uMdoni Ward 003	9.02	%	(9	/	100)
9	kz uMdoni Ward 006	10.51	%	(10.5	/	100)
10	kz uMdoni Ward 009	13.19	%	(13.2	/	100)

The Multidimensional Poverty Index for Maphumulo local municipality changed between 2001 (Figure 23) and 2011 (Figure 24). In 2001 the highest Poverty Index was 18.49. This reduced to 13.19 in 2011.

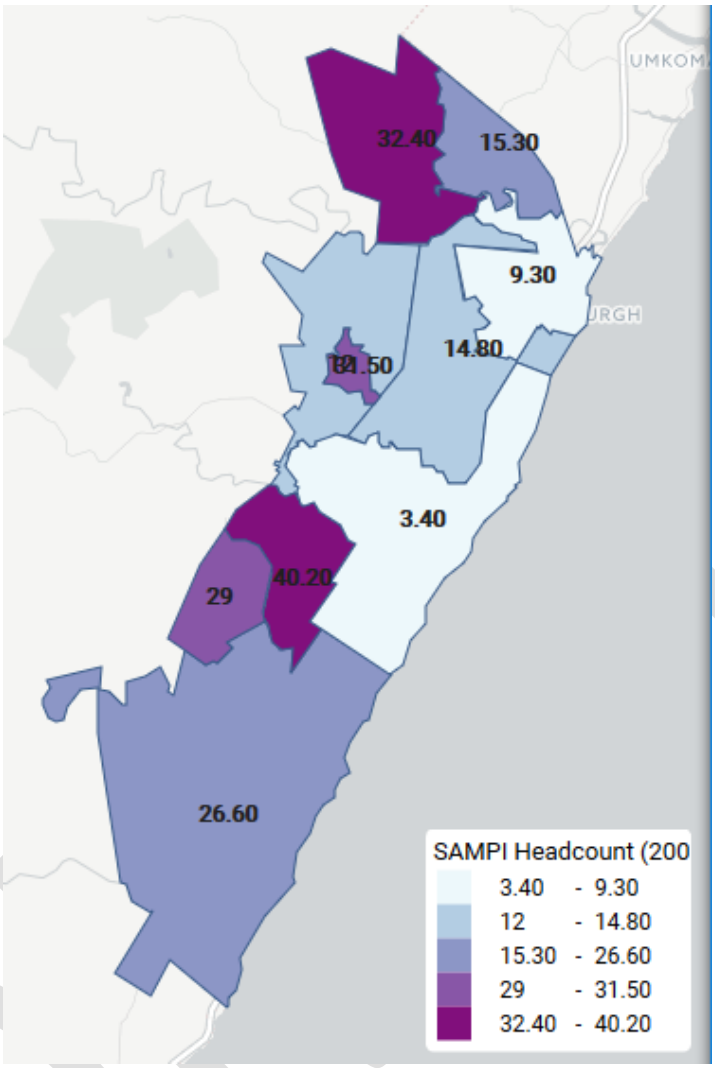

Figure 25: SAMPI 2001 poverty headcount - ward level, uMdoni local municipality

Table 24: SAMPI 2001 poverty headcount - ward level, uMdoni local municipality

KZ UMDONI LOCAL MUNICIPALITY: **21 %**						
	Ward (2011)	**SAMPI Headcount (2001)**				
1	kz uMdoni Ward 010	3.40	%	(3.4	/	100)
2	kz uMdoni Ward 005	9.30	%	(9.3	/	100)
3	kz uMdoni Ward 003	12	%	(12	/	100)
4	kz uMdoni Ward 004	14.80	%	(14.8	/	100)
5	kz uMdoni Ward 001	15.30	%	(15.3	/	100)
6	kz uMdoni Ward 007	26.60	%	(26.6	/	100)
7	kz uMdoni Ward 009	29	%	(29	/	100)
8	kz uMdoni Ward 006	31.50	%	(31.5	/	100)
9	kz uMdoni Ward 002	32.40	%	(32.4	/	100)
10	kz uMdoni Ward 008	40.20	%	(40.2	/	100)

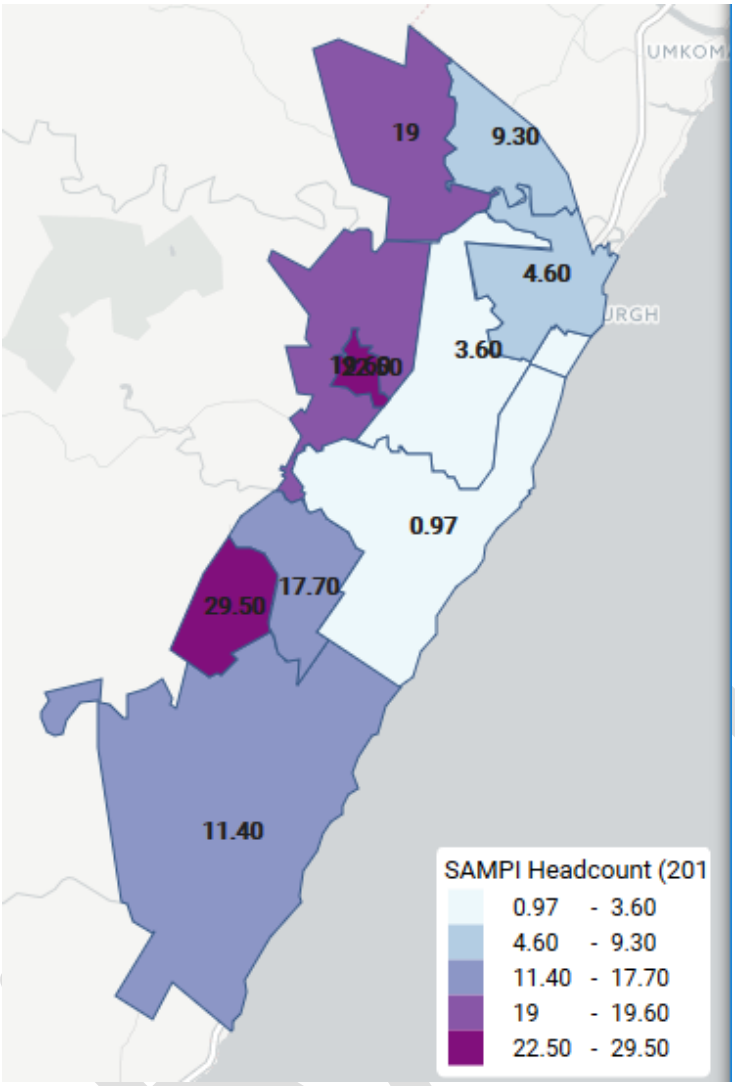

Figure 26: SAMPI 2011 poverty headcount - ward level, uMdoni local municipality

Table 25: SAMPI 2011 poverty headcount - ward level, uMdoni local municipality

KZ UMDONI LOCAL MUNICIPALITY: **14.6 %**						
	Ward (2011)	**2015 : SAMPI Headcount (2011)**				
1	kz uMdoni Ward 010	0.97	%	(1	/	100)
2	kz uMdoni Ward 004	3.60	%	(3.6	/	100)
3	kz uMdoni Ward 005	4.60	%	(4.6	/	100)
4	kz uMdoni Ward 001	9.30	%	(9.3	/	100)
5	kz uMdoni Ward 007	11.40	%	(11.4	/	100)
6	kz uMdoni Ward 008	17.70	%	(17.7	/	100)
7	kz uMdoni Ward 002	19	%	(19	/	100)
8	kz uMdoni Ward 003	19.60	%	(19.6	/	100)
9	kz uMdoni Ward 006	22.50	%	(22.5	/	100)
10	kz uMdoni Ward 009	29.50	%	(29.5	/	100)

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

- Poor families can't provide for their children;
- Poverty is the cause of desperation and survival;
- Hunger can make you do anything;
- The Blessers are taxi drivers and owners, truck drivers, foreign nationals and shopkeepers, the young girls are dating them because they need money; and
- The Ben 10's are also dating older women because they need money to survive and to provide for their same-age girlfriend – this protects their relationship.

3.3.6 Employment

In uMdoni local municipality, 28% of the female population at economically active age is employed while 36% of the economically active males are employed. See Figure 27 below.

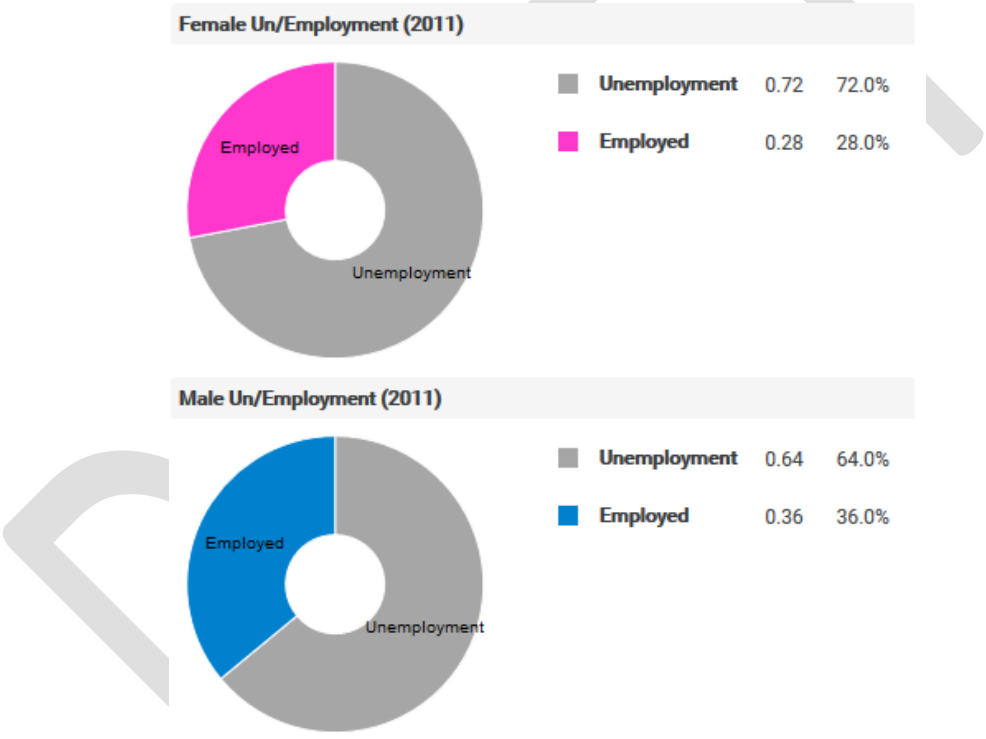

Figure 27: Female and Male employment uMdoni local municipality (Source Census 2011)

Unemployment of youth in uMdoni local municipality is at 74.3%. Almost three-quarters of the youth in the area was therefore unemployed at the time of the Census.

Figure 28: Youth unemployment uMdoni local municipality (source Census 2011)

In comparison with the uMdoni local municipality a marginally larger percentage of females and males are employed from the total population in the Mzinto Clinic catchment area. In this area 33% of the female population and 34% of the male population is employed (see Figure 29)

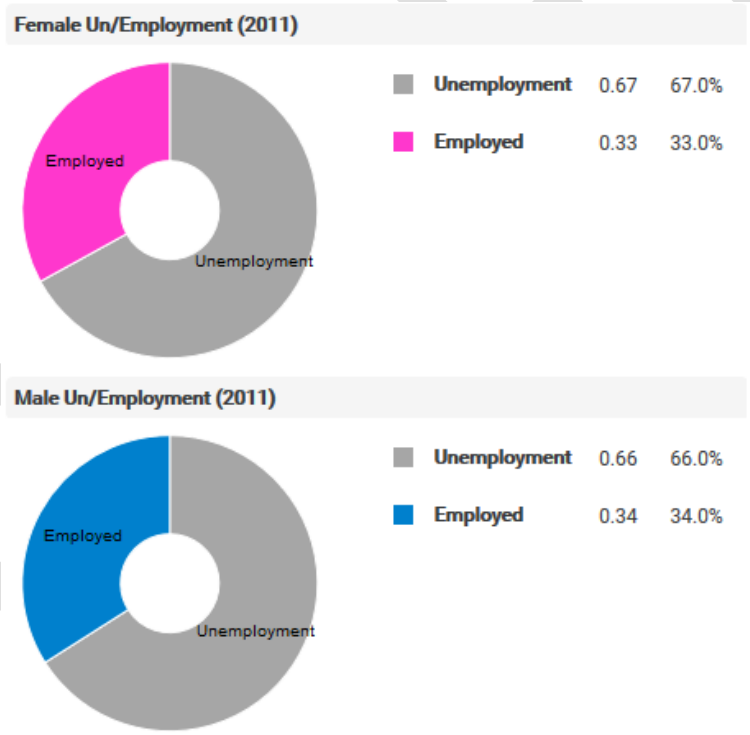

Figure 29: Female and Male employment Mzinto Clinic catchment area (Source Census 2011)

Less youth (70.9%) are unemployed in the Mzinto Clinic catchment area than the uMdoni local municipality (74.3%).

Figure 30: Youth unemployment Mzinto 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:

- Lack of employment leads to prostitution; and
- There is also swopping of sex for jobs, sex-bribing and there is no choice of using a condom.

3.3.7 Types of settlements

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

- In the shacks there is no privacy, children are getting exposed to sexual behaviours; and
- Children are also not living with their parents when they move around a lot they get exposed to a lot of things.

3.3.8 Migration patterns in the area

The main migrants in the community are local people who work elsewhere, they find another partner and do not share their HIV status. Construction companies also bring in foreigners who are not on ARV's.

3.3.9 Education and literacy

There is a deep concern in the uMdoni community that people with disabilities are not catered for in the formal education system.

3.3.10Hate crimes – xenophobic, homophobic, other

Xenophobia is a problem in the uMdoni community where people are displaced from other communities and then find new partners here.

3.3.11Disability

Stakeholder and community engagement workshops felt that the ***people with disability*** :

- It is assumed that people with disabilities don't have feelings so they are more vulnerable to violence and exploitation; and
- Disabled people are not educated about HIV so they become rape victims to their relatives.

4. Services in the local municipality

4.1 Health facilities

There are five health facilities in uMdoni local municipality. See Figure 31 below for distribution of these facilities.

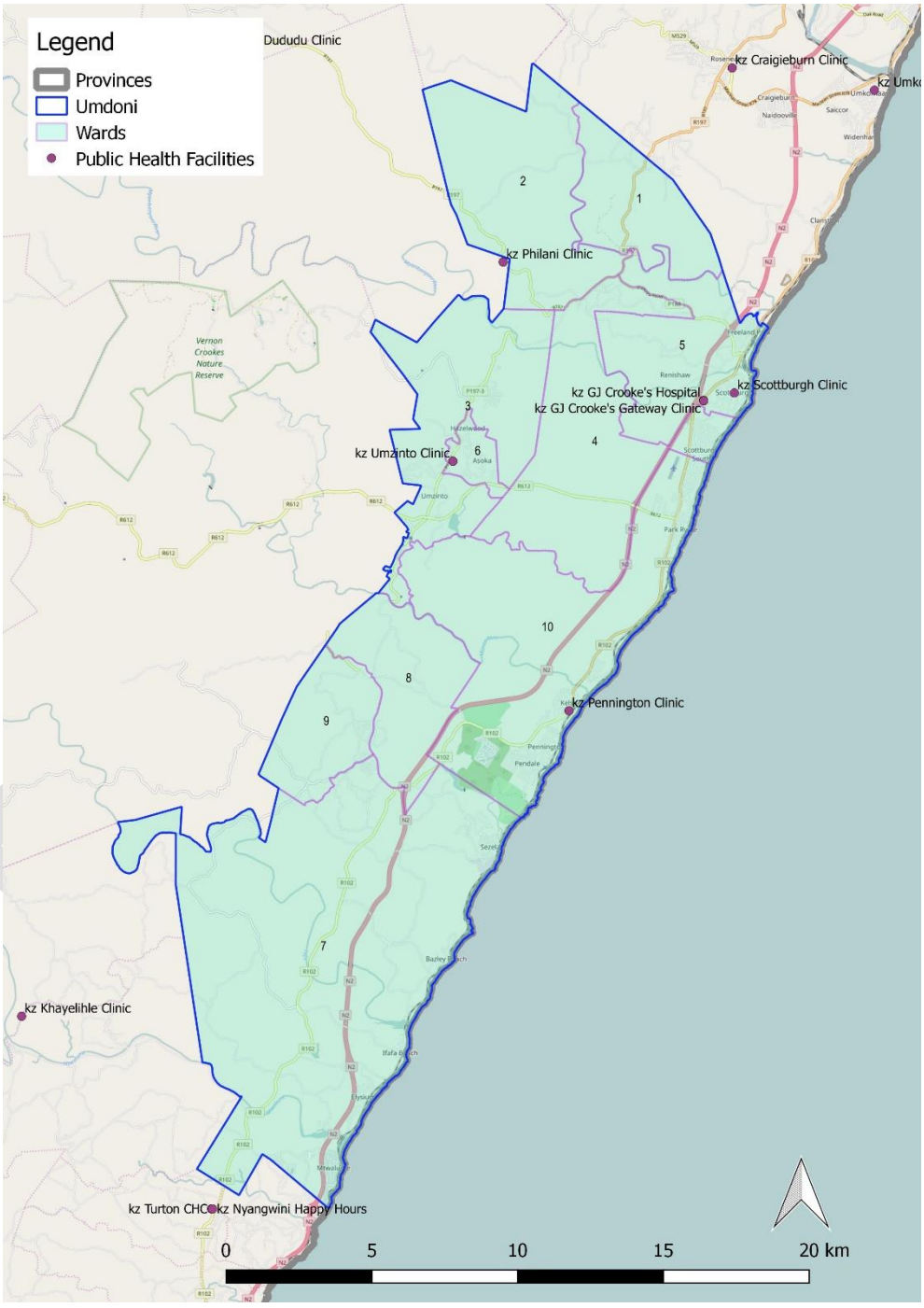

Figure 31: Distribution of health facilities in uMdoni local municipality

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 • Inmates • 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 • Youth • Children	• Poverty, especially livelihoods support to mitigate transactional sex as a source of income • Substance abuse, especially alcohol and smoking drugs • HIV knowledge and education, especially for parents, older people and people with disabilities

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 need to be unpacked and included in the implementation plan referred to above based on the existing resource envelop in the District. Priority is given to the key and vulnerable populations identified, followed by other interventions identified in the NSP.

Table 27: Recommended multi-sectoral intervention package

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

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

HIV and STI vulnerable populations		

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

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	○ Choice of termination of pregnancy ○ Family planning services ○ Male and female condom provision in school ○ Sanitary towels • Programmes to keep girls in schools, including support for pregnant learners • Access to peer groups and clubs • Access to parenting programmes • Economic empowerment programmes • Increased access to further education opportunities • Increased access to mentorship and internships • Comprehensive sexuality and gender education • Provide reasonable accessibility for girls and young women with disabilities • Age-specific support to HIV-positive adolescents (support for disclosure, adherence)	• DoL • Private sector
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 • 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	• DSD • DBE • DoH
People with disabilities	• Peer-led or peer-supported outreach • Specialised health education regarding risk and vulnerability to HIV, TB and STIs, particularly regarding sexual exploitation • Accelerated nutritional and social grant support • Comprehensive sexuality education accessible to learners with disabilities	• NGOs • DoH • DSD • DoH, DBE • DSD

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	• Intensive psychosocial support • Intensified TB screening, treatment and care due to increased exposure typically caused by confined living conditions • All people with disabilities have ready access to prevention services • Move to mainstreaming of the policy that 7% of all programmes target people with disabilities • PrEP available • Ensure universal accommodation of people with disabilities	• DoH
TB vulnerable 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

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

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

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

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

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
Promote retention in care for all PLHIV on ART	This will be supported and strengthened by: • Increased efforts to implement the test and treat policy at facility level through the DIP process • Increased quality assurance to promote adherence to guidelines • Expansion of implementation strategies to include community based ART initiation demonstration projects for well patients, including the use of GPs • Prioritise rapid and same day ART initiation • Implement extended hours services for working people and adolescents • Use PLHIV in health facilities and communities to encourage linkage to care • Explore innovative ways to improve patients' linkage to services • Differentiated ART delivery for stable patients, including a minimum of 3 months drug supply and optimised prescription periods to meet the needs of key and vulnerable populations and improve adherence • Ensure a functional fast lane for collection of repeat drug prescriptions at all pharmacies • Use of approved patient representatives to collect ART refills • 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	• 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**
Improve adherence support	• Implementation of a comprehensive and age appropriate psychosocial package to enhance adherence • Promoting the establishment of peer-led differentiated support groups for new and stable patients • Ensuring their linkages to psychosocial support.	• DSD • DoH • Private Sector
Intensified facility-level TB case-finding	• Passive case-finding (test individuals presenting with symptoms of TB • Routine symptom screening for all adult clinic attendees • Undertaking Xpert MTB/RIF test for symptomatic individuals not tested for TB in the last 3 months and undertaking culture test for HIV+, Xpert-negative cases	• DoH • Private healthcare providers
Improve laboratory diagnostics to deliver optimal DS and DR-TB services	• Universal implementation of Xpert MTB/RIF as initial diagnostic tests • Monitoring and optimising implementation of all existing algorithms • Implementing robust reflex testing for samples found to be Xpert RIF resistant • Developing a platform for introduction of new diagnostics • Prepare and train on guidelines and algorithms in advance of Xpert Ultra introduction • Upgrade the laboratories to ensure sufficient second line LPA coverage to ensure optimal implementation of MDR-TB short regimen • Implement lessons learnt from Xpert rollout • All labs doing second line LPA should be either able to conduct phenotypic second line drug sensitivity testing or have easy referral to a lab that has this capability.	• DoH
Active case-finding for key and vulnerable populations	• Screening of household contacts under 5 years of age • Intensified TB screening and access to appropriate treatment in correctional facilities, mines, informal settlements and antenatal clinics and for diabetics, PLHIV, health care workers and all household contacts • 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

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

Generic HIV, TB and STI prevention, management and care		
Focus	**Activities**	**Multi-sectoral partner**
	• 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.	
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

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.

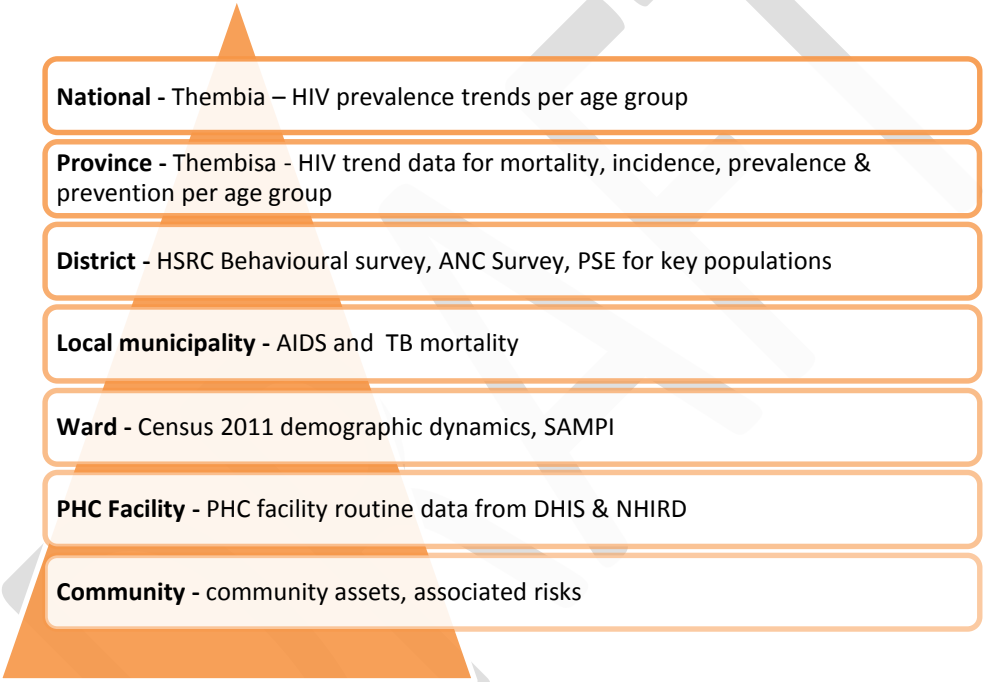

Figure 32: Data pyramid used for risk profiles

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).

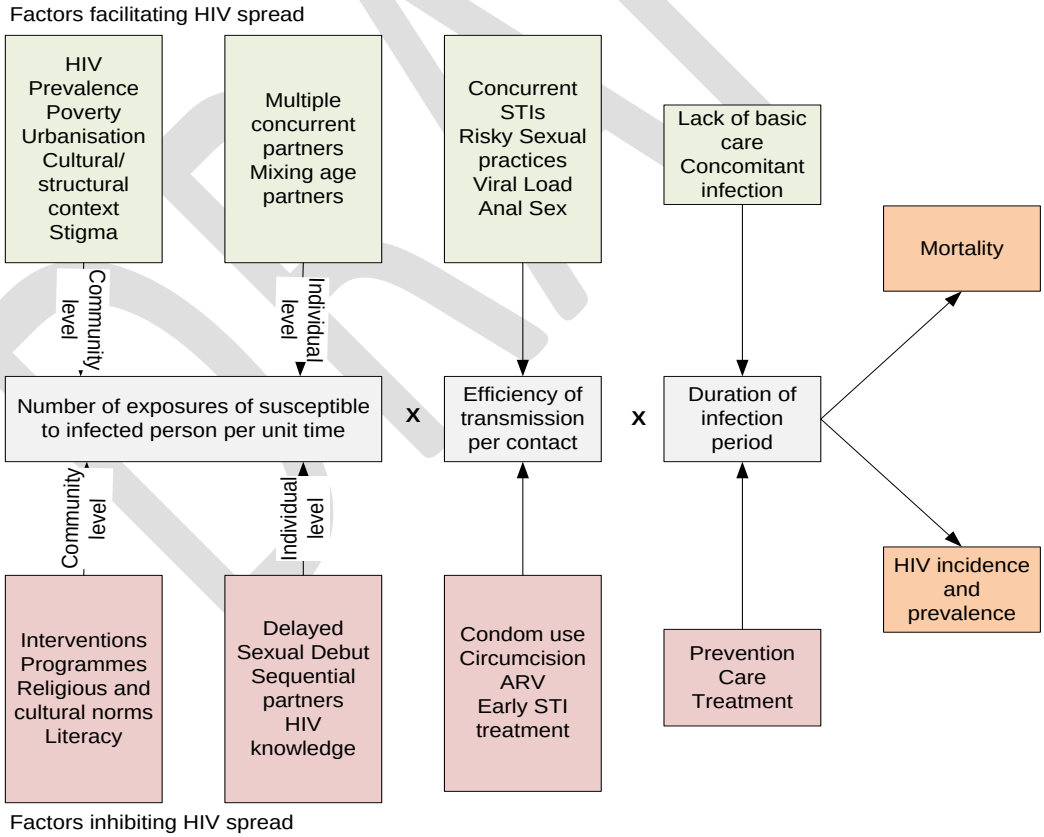

Figure 33: Factors influencing HIV associated risk and outcomes

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 client's 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
Behavioral data	Data collected from studies of human behavior that is relevant to disease risk. Relevant behaviors for HIV risk may include sexual activity, substance use, needle sharing, condom use, or responses to primary and secondary prevention messages, knowledge of HIV transmission and prevention
Data	Raw, unprocessed numbers
Delivery in facility under 18 years rate (routine health indicator DHIS 2015)	Short Name - Delivery 18 rate Numerator - Delivery under 18 years in facility Denominator - Delivery in facility - total Indicator Type - % Definition - Deliveries to women under the age of 18 years as proportion of total deliveries in health facilities
Dependency ratio	The dependency ratio is an indicator of potential dependency burden of children and the elderly on those who are of economically productive ages in a population. Source Census 2011
Epidemiologic profile	A document that describes the distribution of HIV in various populations and identifies characteristics both of HIV-infected and HIV-negative persons in defined geographic areas. It is composed of information gathered to describe the effect of HIV on an area in terms of socio-demographic, geographic, behavioral, 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 identifies social, behavioral, 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 (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 standardization of indicators across the different geographical areas.

<table>
<tr><td></td><td>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 rowspan="2">Education</td><td>Years of schooling</td><td>If no household member aged 15 or older has completed 5 years of schooling</td></tr>
<tr><td>School attendance</td><td>If any school-aged child (aged 7 to 15) is out of school</td></tr>
<tr><td rowspan="2">Standard of living</td><td>Fuel for lighting</td><td>If household is using paraffin/candles/nothing/other</td></tr>
<tr><td>Fuel for heating</td><td>If household is using paraffin/wood/coal/dung/other/ none</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 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	Short name - TB susp sputum test rate Numerator - TB suspect 5 years and older sputum sent Denominator - TB suspect 5 years and older identified

health indicator DHIS 2015)	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.

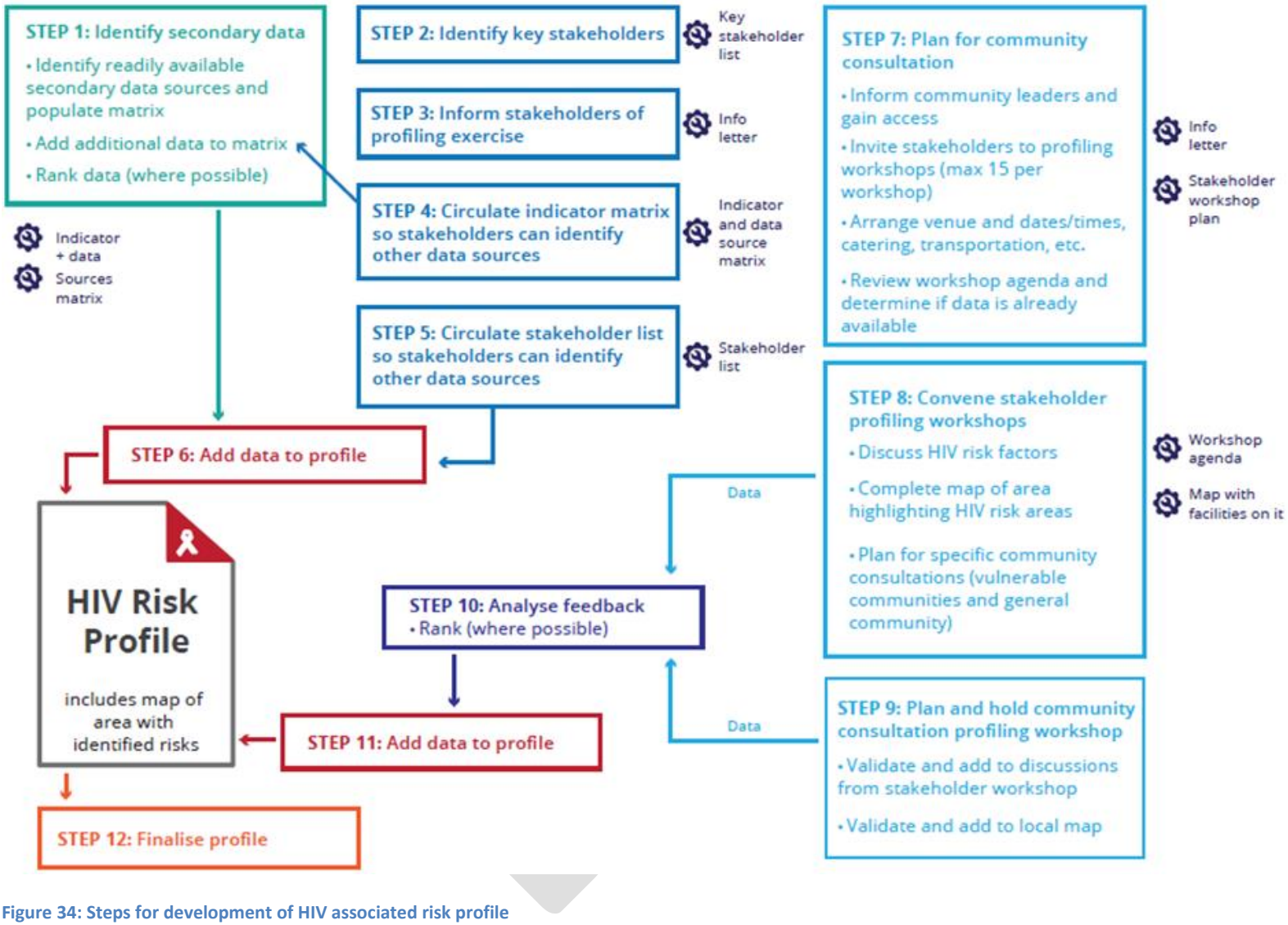

Figure 34: Steps for development of HIV associated risk profile