Focus for Impact

Community profile
Catchment area for Stafford Clinic (Wards 14, 16, 19 and 31)

Newcastle Local Municipality
Amajuba District
KwaZulu-Natal

August 2017

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Abbreviations

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

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

Focus for Impact – understanding the background

At the heart of the NSP 2017-2022, is the strategy to "focus for impact" using the more detailed information and insights 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*** the vulnerable population is?

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

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, depend 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 Newcastle Local Municipality under the Amajuba 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 profile highlights factors that influence the risks of HIV 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 two types of data is considered and brought together: 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 Stafford Clinic, Newcastle local municipality is defined as Newcastle Wards 14, 16, 19, 31. For this specific profile, two stakeholder and community workshops held on 7 and 8 February 2017 in Siphesihle Primary School, Newcastle. The workshops were attended by 105 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 Newcastle Local Municipality will evolve. The same applies to more granular data that becomes available for this specific catchment area. This profile will be updated accordingly and should therefore be considered a living document.

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

Key and vulnerable populations:

- Young Women and Girls
- Youth
- Orphans and vulnerable children

Interventions that address:

- Sexual abuse and gender based violence – especially non-reporting of cases;
- Stigma and discrimination;
- Unprotected sex (sex without a condom) especially after circumcision;
- Continuous HIV education to the community especially men;
- Boundaries in one-roomed homes;
- Early education of children about HIV and AIDS; and
- High rate of substance abuse and drugs that triggers high risk behaviour.

1. Socio-demographic profile

1.1 Demarcated boundaries

Amajuba District is one of the 11 district municipalities of KwaZulu-Natal province. The Newcastle local municipality is one of the three local municipalities in Amajuba district. The rest are Dannhauser, and Emadiangeni local municipalities.

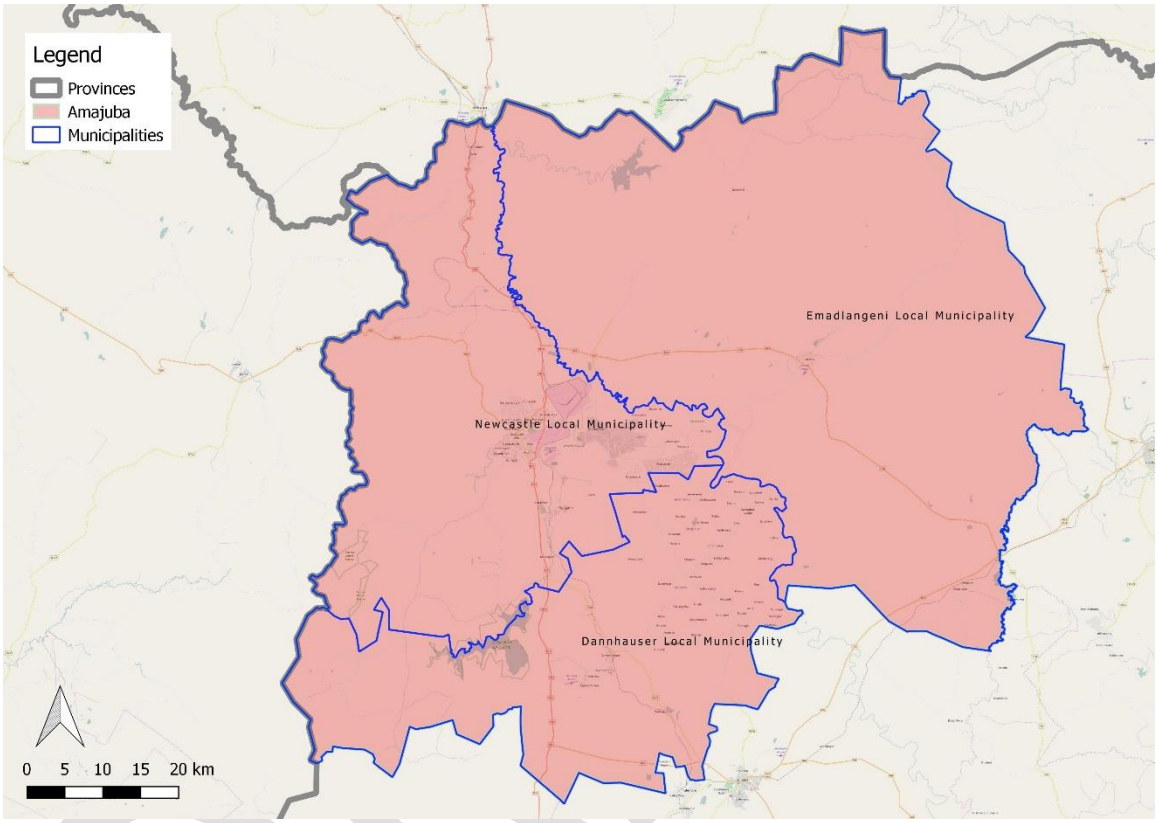

Figure 1: Local municipalities' Amajuba district

The Newcastle local municipality constitute of 31 administrative wards (see Figure 2).

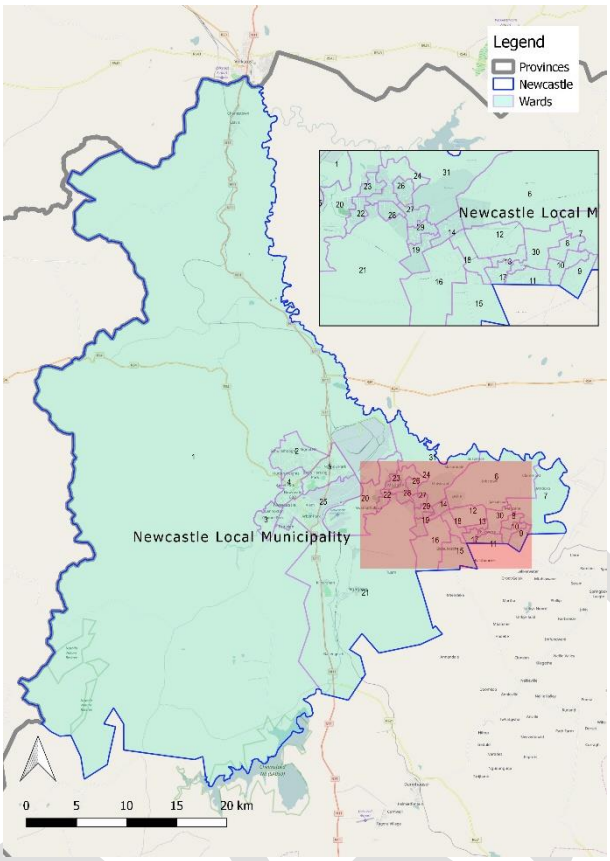

Figure 2: Distribution of Wards in the Newcastle local municipality

1.2 Population by sex and age

During the 2011 Census 363 099 in the 31 wards declared their age and most of these their sex. Table 1 summarises the age and sex per population in these wards. Females constitute 52% of population, compared to males 48%. The young people ≤ 25 years (54%) make up the majority of population in the local municipality. The detail for Ward 14, 16, 19 and 31 that forms the catchment area for Stafford Clinic, are highlighted in the table below.

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

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Ward 001	3417	1680	2016	1767	4731	2217	15828	7632	8196	*15828*
Ward 002	1452	831	813	678	3759	2802	10335	5364	4971	*10335*
Ward 003	1068	558	720	735	3234	1851	8166	4044	4122	*8166*
Ward 004	1194	627	660	750	3513	2451	9195	4731	4464	*9195*
Ward 005	1575	921	1107	1479	3588	1293	9963	5172	4791	*9963*
Ward 006	5988	2727	2838	2112	5730	2637	22032	11838	10194	*22032*
Ward 007	4428	2010	2106	1737	4347	2055	16683	8922	7761	*16683*
Ward 008	2046	981	996	990	2616	1479	9108	4737	4371	*9108*

Ward	Age							Sex		
	0-9	10-14	15-19	20-24	25-49	50+	Total	Female	Male	Total
Ward 009	3513	1638	1707	1518	4437	1695	14508	7803	6705	*14508*
Ward 010	2421	1122	1143	1149	3162	1644	10641	5682	4959	*10641*
Ward 011	2202	1107	1119	1116	3294	1608	10446	5529	4917	*10446*
Ward 012	2352	1062	1200	1005	2502	1296	9417	5064	4353	*9417*
Ward 013	1935	882	945	903	2553	1314	8532	4437	4095	*8532*
Ward 014	3345	1596	1581	1557	4752	1554	14385	7782	6603	*14385*
Ward 015	2877	1317	1440	1158	2931	1512	11235	5877	5358	*11235*
Ward 016	3894	1725	1740	1590	4011	1845	14805	7863	6942	*14805*
Ward 017	2502	1110	1284	1206	3357	1722	11181	5847	5334	*11181*
Ward 018	3177	1431	1578	1437	3588	1623	12834	6804	6030	*12834*
Ward 019	2166	1059	1131	1104	3174	1377	10011	5472	4539	*10011*
Ward 020	3411	1416	1434	1581	5157	1674	14673	7629	7044	*14673*
Ward 021	2658	1347	1563	1683	4554	2061	13866	7197	6669	*13866*
Ward 022	1689	861	1149	1125	2916	1029	8769	4659	4110	*8769*
Ward 023	2106	963	1020	1074	3126	1488	9777	5124	4653	*9777*
Ward 024	2670	1215	1350	1548	4182	1758	12723	6702	6021	*12723*
Ward 025	2106	924	1005	1479	5502	2451	13467	6693	6774	*13467*
Ward 026	1467	738	750	813	2313	1101	7182	3606	3576	*7182*
Ward 027	2355	1074	1296	1206	3336	1761	11028	5787	5241	*11028*
Ward 028	1374	675	837	1002	2367	1140	7395	3912	3483	*7395*
Ward 029	2337	1137	1236	1275	3492	1587	11064	5901	5163	*11064*
Ward 030	2922	1362	1473	1209	3690	1842	12498	6645	5853	*12498*
Ward 031	2886	1296	1290	1155	3471	1254	11352	5865	5487	*11352*
	79533	**37392**	**40527**	**39141**	**113385**	**53121**	**363099**	**190320**	**172779**	**363099**
%	**22%**	**10%**	**11%**	**11%**	**31%**	**15%**		**52%**	**48%**	

Table 2: Youth population per sex and five-year age groups per ward, Newcastle 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	783	813	717	585	585	897	1203	1050	696	501	**7830**
Ward 002	393	405	327	384	408	438	408	351	303	306	**3723**
Ward 003	252	300	357	372	321	306	420	378	414	324	**3444**
Ward 004	291	342	390	438	342	336	318	360	504	369	**3690**
Ward 005	471	588	714	438	363	450	519	765	504	282	**5094**
Ward 006	1329	1419	1128	951	756	1398	1419	984	720	555	**10659**
Ward 007	972	1041	909	702	612	1038	1065	828	588	408	**8163**
Ward 008	468	507	471	411	315	513	489	519	438	312	**4443**
Ward 009	819	849	744	669	546	819	858	774	582	426	**7086**
Ward 010	537	576	576	528	363	585	567	573	483	369	**5157**
Ward 011	570	555	531	513	363	537	564	585	522	348	**5088**
Ward 012	516	603	555	462	300	546	597	450	372	258	**4659**
Ward 013	411	477	414	375	288	471	468	489	420	258	**4071**
Ward 014	804	852	831	741	555	792	729	726	750	462	**7242**

Ward 015	624	708	564	495	351	693	732	594	396	324	**5481**
Ward 016	849	867	819	681	516	876	873	771	594	384	**7230**
Ward 017	531	630	597	483	378	579	654	609	474	417	**5352**
Ward 018	684	747	735	636	420	747	831	702	531	345	**6378**
Ward 019	549	579	564	540	435	510	552	540	432	336	**5037**
Ward 020	693	714	798	780	579	723	720	783	744	612	**7146**
Ward 021	654	816	849	693	477	693	747	834	672	483	**6918**
Ward 022	411	627	573	408	306	450	522	552	411	318	**4578**
Ward 023	471	507	546	429	354	492	513	528	507	333	**4680**
Ward 024	585	678	735	624	468	630	672	813	636	492	**6333**
Ward 025	477	528	672	684	558	447	477	807	861	675	**6186**
Ward 026	375	378	396	342	258	363	372	417	438	315	**3654**
Ward 027	546	633	600	546	420	528	663	606	591	393	**5526**
Ward 028	333	408	477	384	273	342	429	525	348	303	**3822**
Ward 029	546	627	621	612	435	591	609	654	531	360	**5586**
Ward 030	672	723	609	594	402	690	750	600	555	411	**6006**
Ward 031	621	600	579	549	378	675	690	576	483	354	**5505**
	18237	**20097**	**19398**	**17049**	**13125**	**19155**	**20430**	**19743**	**16500**	**12033**	**175767**

Figure 3 below reflects the population pyramid for Newcastle 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 I n the age group 0-4, followed closely by the age group 15-19-year-old.

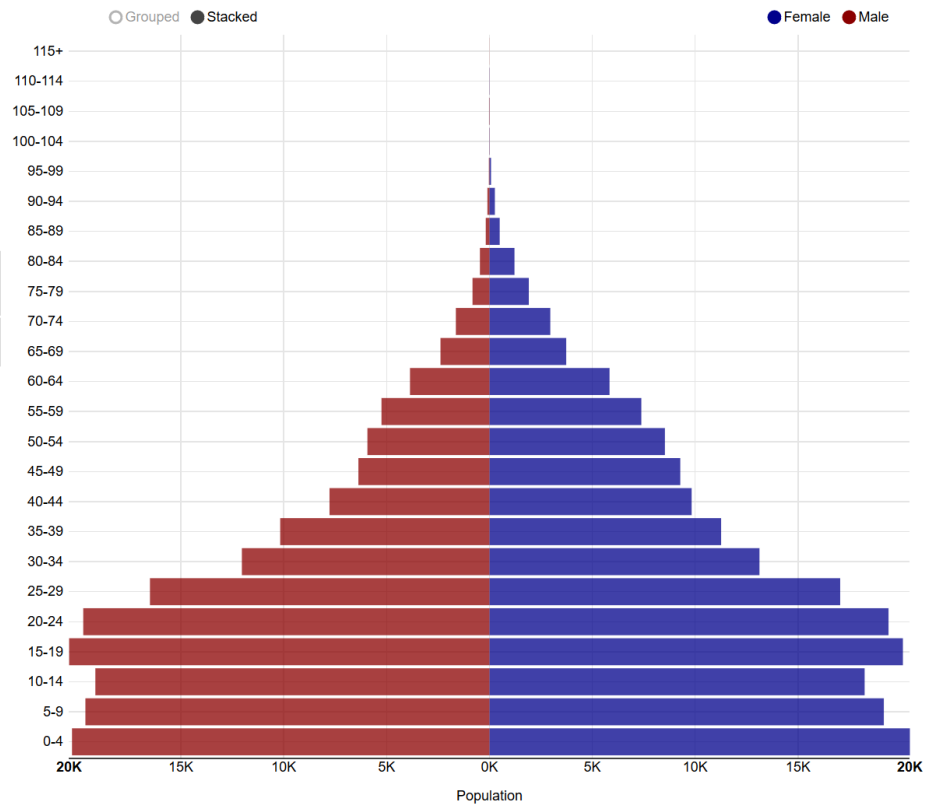

Figure 3: Population Pyramid Newcastle local municipality

From this population, 32.2% children and 4.5% elderly are dependent on the 63.3% economically productive ages in the population of the Newcastle local municipality (Figure 4).

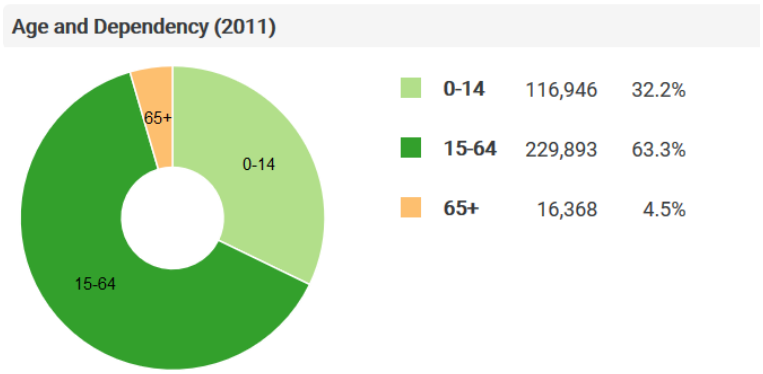

Figure 4: Dependency ratio Newcastle local municipality (Source Census 2011)

In the catchment area for the Stafford Clinic (Newcastle Wards 14, 16, 19 and 31) there is a change in the population profile (Figure 5) with a smaller 15-19 age group and different male to female distribution to that seen in the Newcastle Local municipality population pyramid in Figure 3.

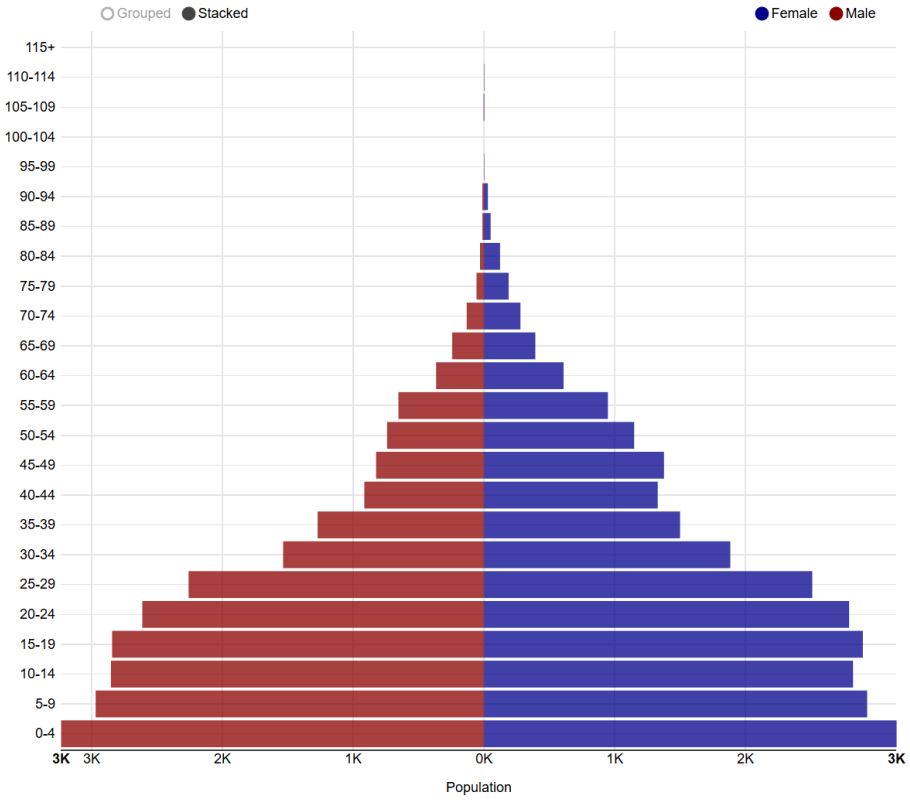

Figure 5: Population Pyramid Stafford clinic catchment area (Source Census 2011)

In the same catchment population, 35.5% children and 3.1% elderly are dependent on the 61.4% economically productive ages (Figure 6).

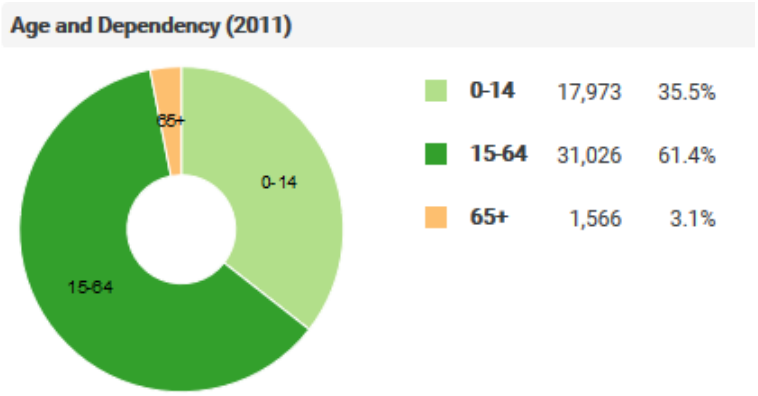

Figure 6: Dependency ratio Stafford clinic catchment area (Source Census 2011)

1.3 Population by race

The dominant population group in Newcastle local municipality is Black African at 91.9% followed by white with 3.9% (detail in Figure 7 and Table 2).

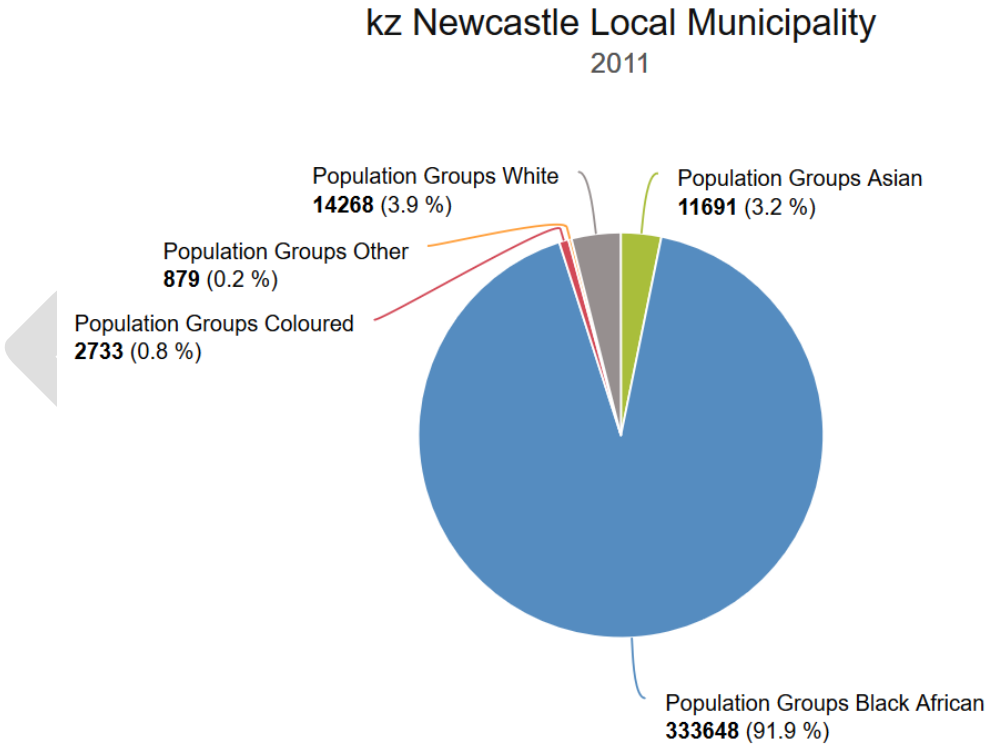

Figure 7: Population group distribution in Newcastle local municipality (Source Census 2011)

The detail for Ward 14, 16, 19 and 31 that forms the catchment area for Stafford Clinic, are highlighted in the table below.

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

Ward	Asian	Black African	Coloured	Other	White	Total
Ward 001	96	14892	138	18	699	**15843**
Ward 002	345	3723	123	105	6057	**10353**
Ward 003	6369	1419	270	66	57	**8181**
Ward 004	2655	3111	261	141	3027	**9195**
Ward 005	156	7716	87	27	1971	**9957**
Ward 006	15	22005	6	12		**22038**
Ward 007	18	16629	21	15	6	**16689**
Ward 008	21	9075	15		12	**9123**
Ward 009	21	14454	18	12	9	**14514**
Ward 010	30	10587	12	12		**10641**
Ward 011	12	10365	21	42	3	**10443**
Ward 012	12	9381	6	12	9	**9420**
Ward 013	12	8487	18	18	9	**8544**
Ward 014	21	14313	27	15	6	**14382**
Ward 015	21	11205	6			**11232**
Ward 016	12	14745	24	12	3	**14796**
Ward 017	30	11097	21	18	12	**11178**
Ward 018	18	12789	15	12	3	**12837**
Ward 019	93	9873	12	33	3	**10014**
Ward 020	9	14610	18	21	24	**14682**
Ward 021	45	13485	105	9	219	**13863**
Ward 022	21	8709	24	12	9	**8775**
Ward 023		9756	15	15	6	**9792**
Ward 024	21	12651	18	21	6	**12717**
Ward 025	1584	8235	1389	171	2094	**13473**
Ward 026	6	7155	9	9	3	**7182**
Ward 027	6	11010	6	9	3	**11034**
Ward 028	24	7350	3	12	6	**7395**
Ward 029	6	11022	12	18	3	**11061**
Ward 030	3	12453	21	6	3	**12486**
Ward 031	9	11346	12	6	6	**11379**
	11691	**333648**	**2733**	**879**	**14268**	**363219**

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 Amajuba district is TB (8.4%) followed by HIV (7.8%) (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 Amajuba District (Source STATSSA)

Cause	Number of deaths	Percent deaths
Tuberculosis	872	8.4
HIV Disease	816	7.8
Diabetes Mellitus	809	7.7
Cerebrovascular Disease	591	5.6
Hypertensive Disease	500	4.8
Intestinal Infectious Disease	330	3.1
Other forms of Heart Disease	322	3.1
Ischaemic Heart Disease	320	3.0
Influenza and Pneumonia	306	2.9
Malignant/neoplasm	253	2.4
Other Natural Causes	4330	41.2
Non Natural Causes	1043	9.9

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 Amajuba district. The definitions for these indicators can be found in

Appendix B: Terms, Definitions and calculations.

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

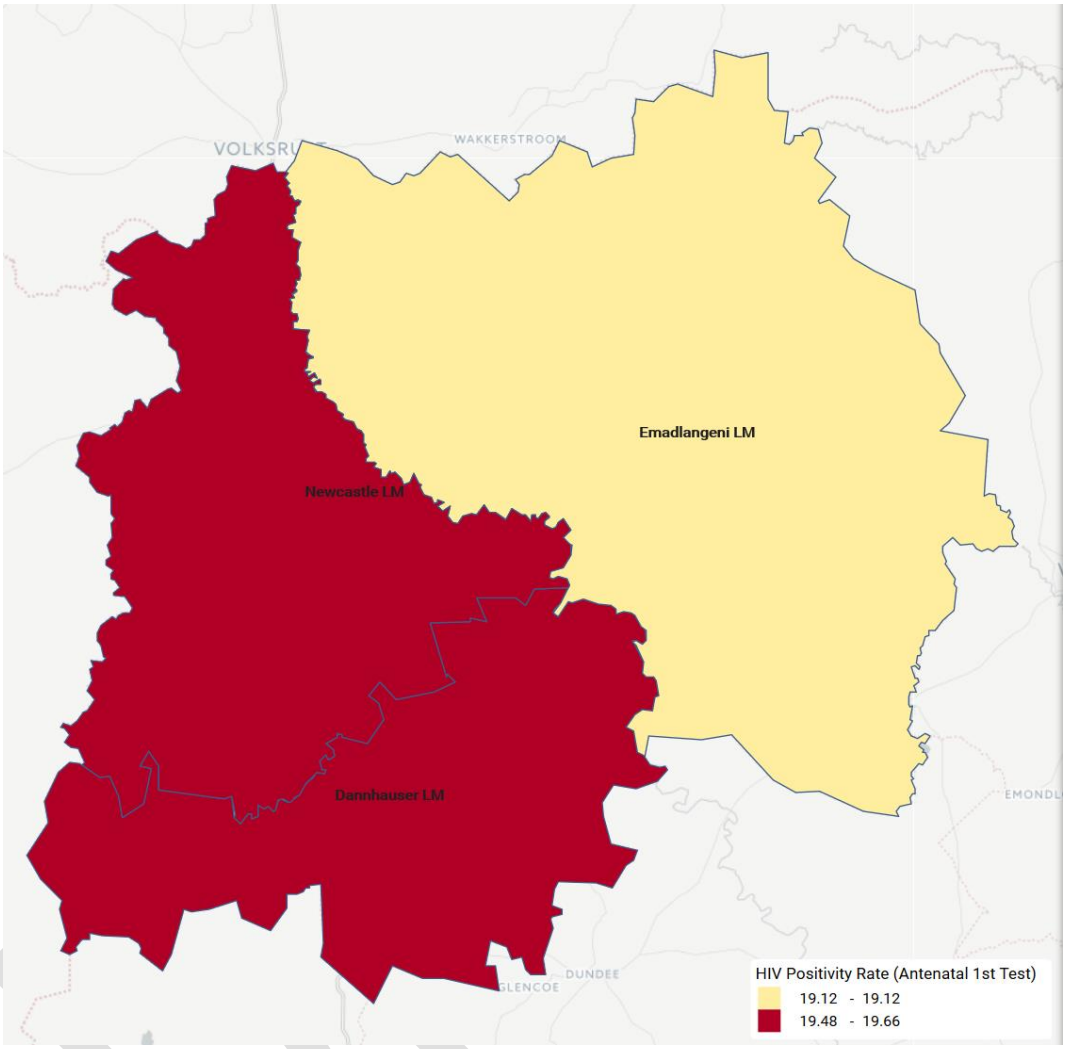

Figure 8: ANC client HIV 1st test positive rate Amajuba district (Source: KZN DHIS 2015)

Table 5: HIV Positivity Rate (Antenatal 1st Test) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **19.6 %**								
	Local Municipality	**2015 : HIV Positivity Rate (Antenatal 1st Test)**					**NUM %**	**DEN %**
1	kz Emadlangeni Local Municipality	19.12	%	(91	/	476)	6.28 %	6.43 %
2	kz Dannhauser Local Municipality	19.48	%	(271	/	1391)	18.69 %	18.80 %
3	kz Newcastle Local Municipality	19.66	%	(1088	/	5533)	75.03 %	74.77 %

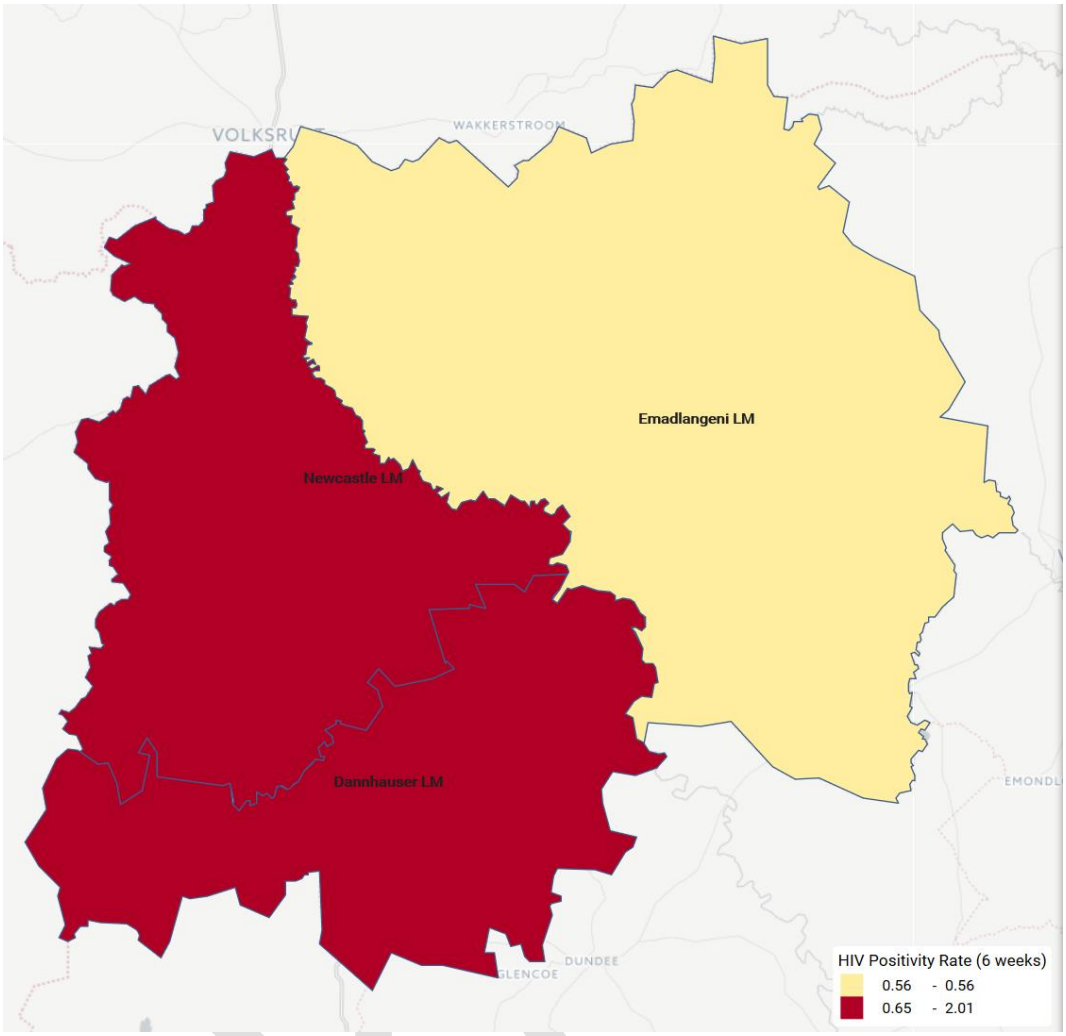

Figure 9: Infant 1st PCR test positive around 6 weeks rate Amajuba district (Source: KZN DHIS 2015)

Table 6: HIV Positivity Rate (6 weeks) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **1.6 %**								
	Local Municipality	**2015 : HIV Positivity Rate (6 weeks)**					**NUM %**	**DEN %**
1	kz Emadlangeni Local Municipality	0.56	%	(1	/	178)	2.56 %	7.49 %
2	kz Dannhauser Local Municipality	0.65	%	(3	/	459)	7.69 %	19.31 %
3	kz Newcastle Local Municipality	2.01	%	(35	/	1740)	89.74 %	73.20 %

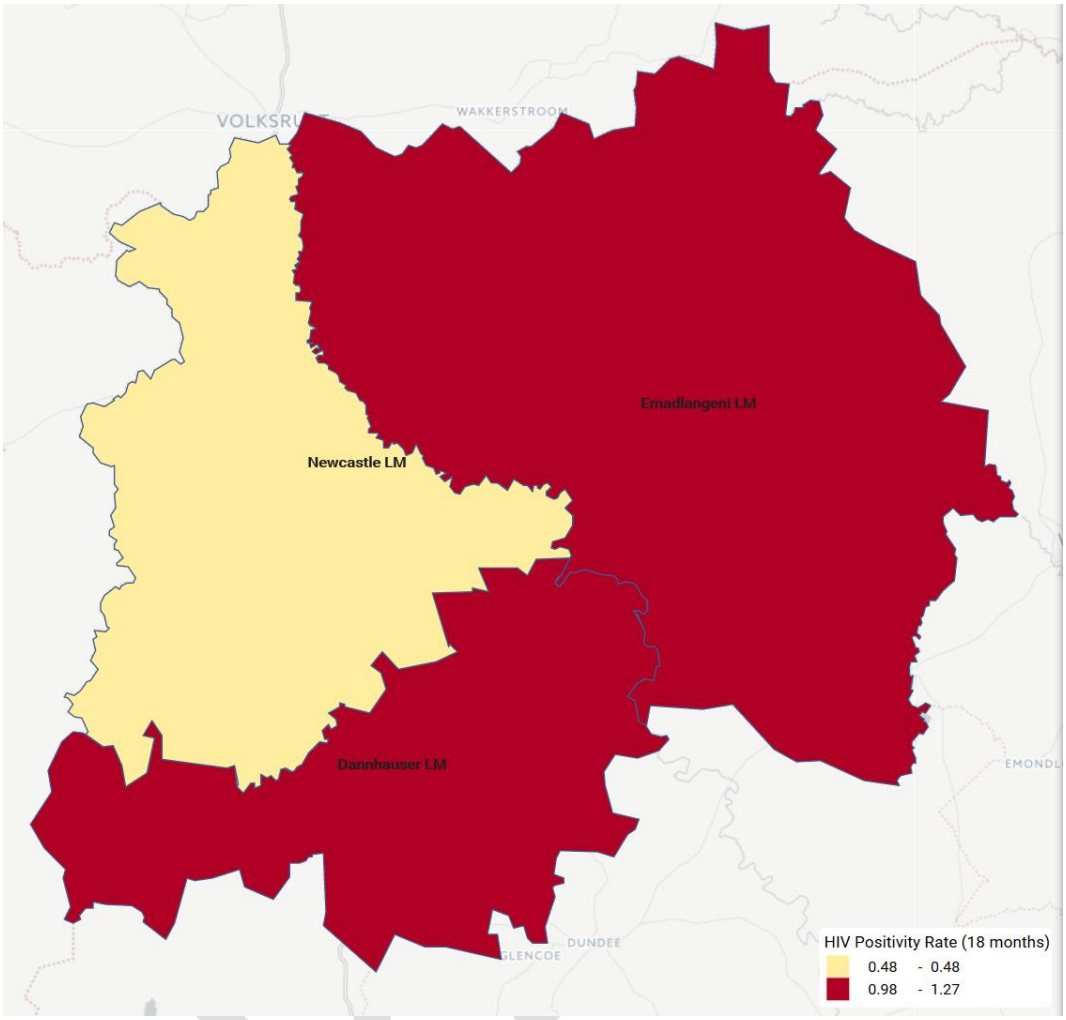

Figure 10: Infant rapid HIV test around 18 months positive rate Amajuba district (Source: KZN DHIS 2015)

Table 7: HIV Positivity Rate (18 months) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **0.7 %**								
	Local Municipality	**2015 : HIV Positivity Rate (18 months)**					**NUM %**	**DEN %**
1	kz Newcastle Local Municipality	0.48	%	(8	/	1656)	47.06 %	69.32 %
2	kz Emadlangeni Local Municipality	0.98	%	(1	/	102)	5.88 %	4.27 %
3	kz Dannhauser Local Municipality	1.27	%	(8	/	631)	47.06 %	26.41 %

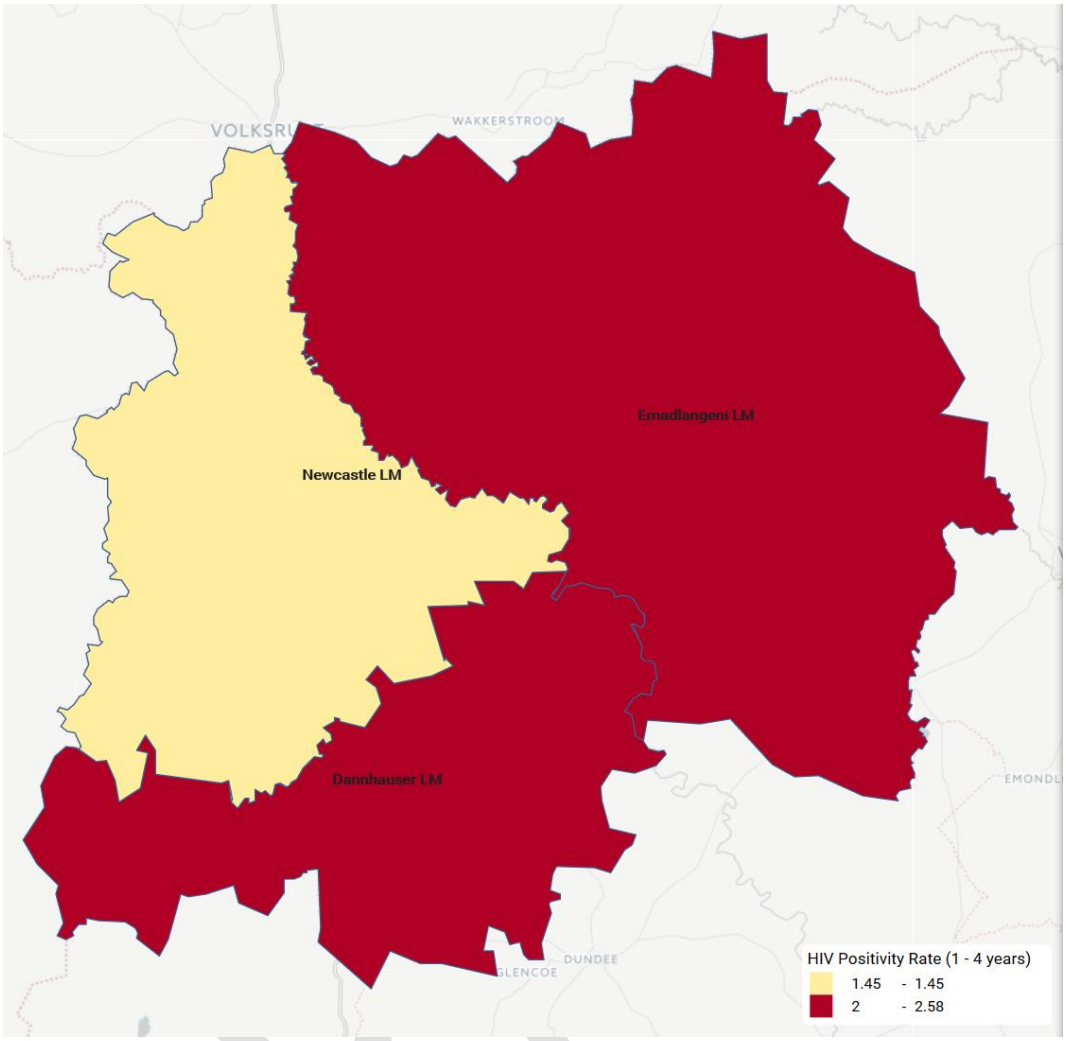

Figure 11: HIV test positive child 12-59 months rate Amajuba district (Source: KZN DHIS 2015)

Table 8: HIV Positivity Rate Amajuba district (12-59 months) (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **1.8 %**								
	Local Municipality	**2015 : HIV Positivity Rate (1 - 4 years)**					**NUM %**	**DEN %**
1	kz Newcastle Local Municipality	1.45	%	(46	/	3181)	53.49 %	65.52 %
2	kz Emadlangeni Local Municipality	2	%	(11	/	549)	12.79 %	11.31 %
3	kz Dannhauser Local Municipality	2.58	%	(29	/	1125)	33.72 %	23.17 %

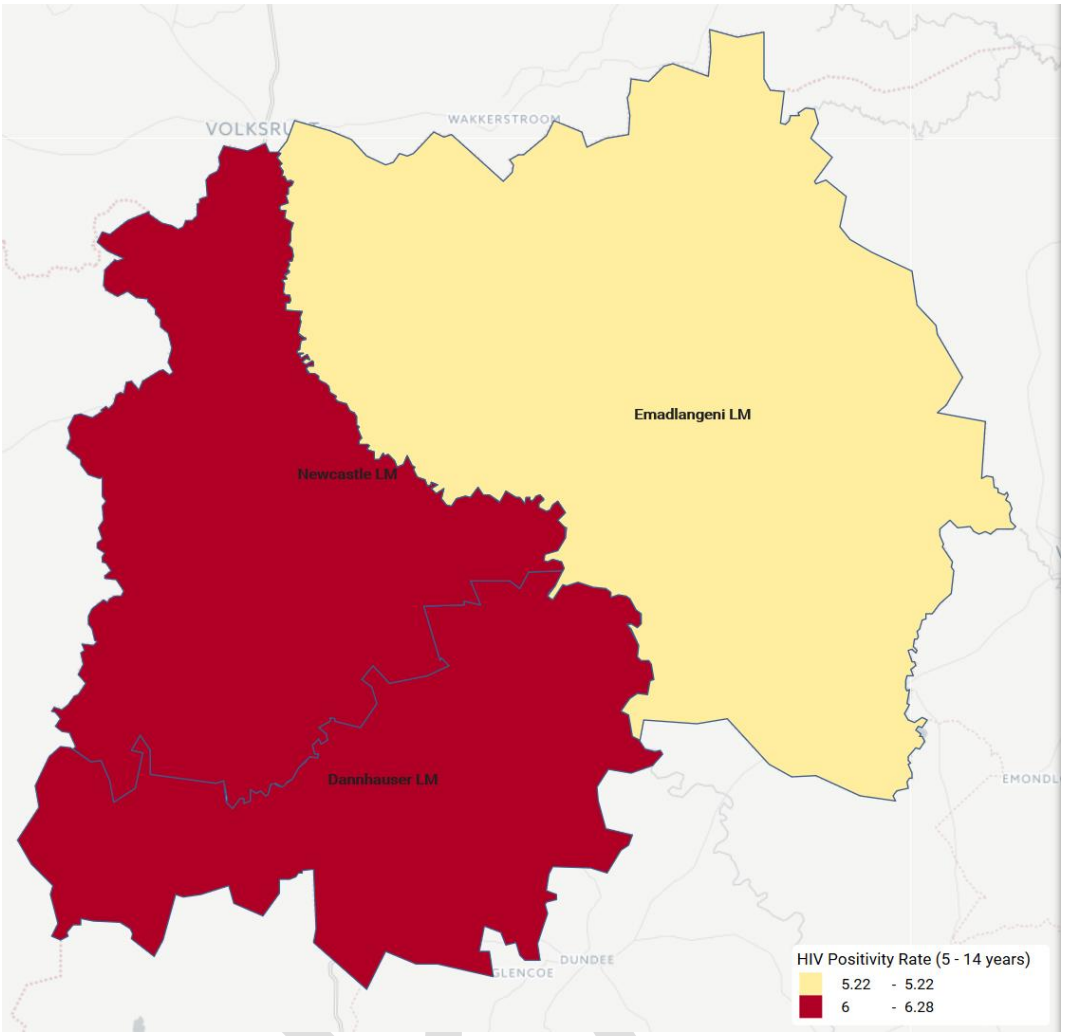

Figure 12: HIV test positive child 5-14 years rate Amajuba district (Source: KZN DHIS 2015)

Table 9: HIV Positivity Rate (5 - 14 years) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **6 %**								
	Local Municipality	**2015 : HIV Positivity Rate (5 - 14 years)**					**NUM %**	**DEN %**
1	kz Emadlangeni Local Municipality	5.22	%	(51	/	977)	19.77 %	22.74 %
2	kz Dannhauser Local Municipality	6	%	(31	/	517)	12.02 %	12.03 %
3	kz Newcastle Local Municipality	6.28	%	(176	/	2803)	68.22 %	65.23 %

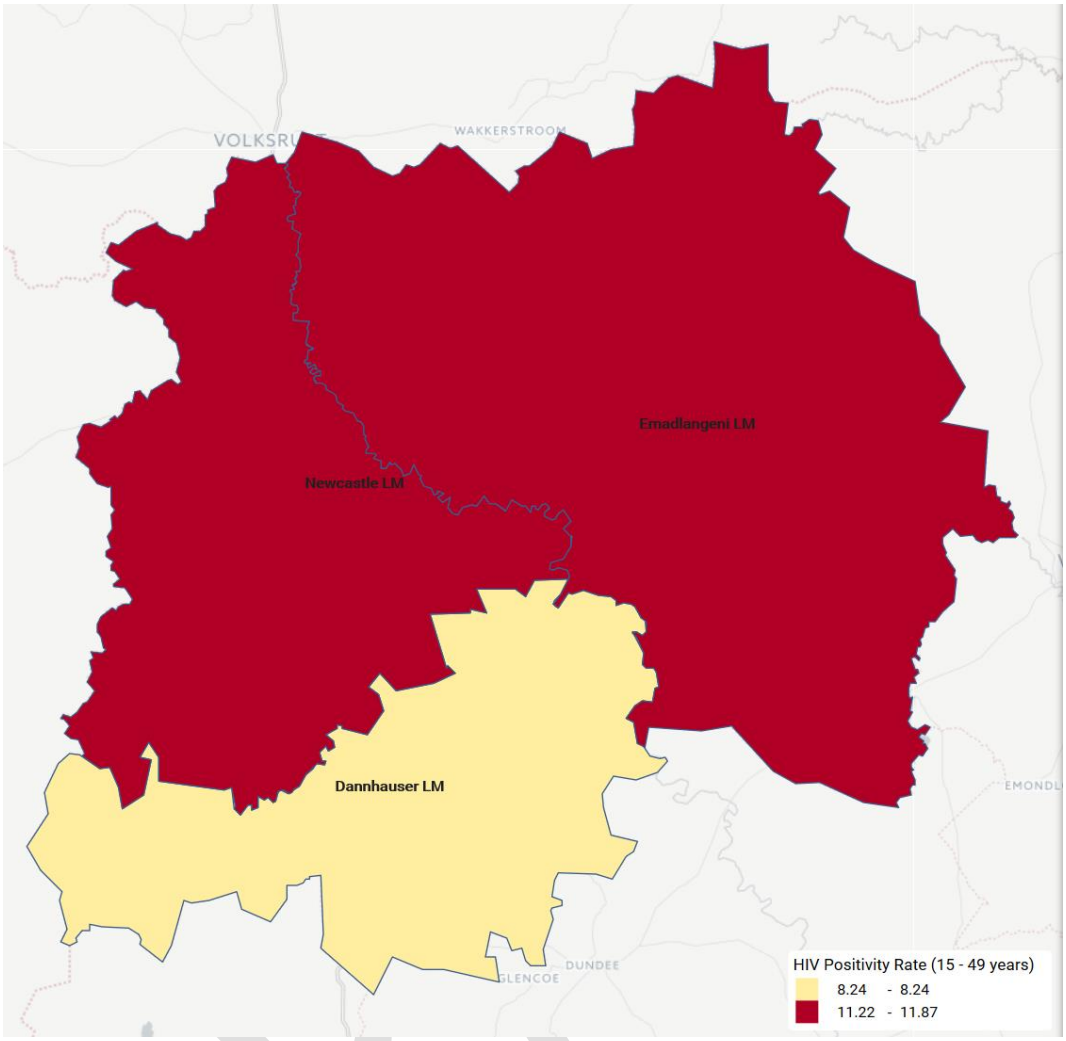

Figure 13: HIV prevalence amongst client tested 15-49 years rate Amajuba district (Source: KZN DHIS 2015)

Table 10: HIV Positivity Rate (15 - 49 years) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **11.2 %**								
	Local Municipality	**2015 : HIV Positivity Rate (15 - 49 years)**					**NUM %**	**DEN %**
1	kz Dannhauser Local Municipality	8.24	%	(1339	/	16253)	11.42 %	15.56 %
2	kz Emadlangeni Local Municipality	11.22	%	(1460	/	13015)	12.45 %	12.46 %
3	kz Newcastle Local Municipality	11.87	%	(8927	/	75177)	76.13 %	71.98 %

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 Amajuba district. The definitions for these indicators can be found in

Appendix B: Terms, Definitions and calculations.

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

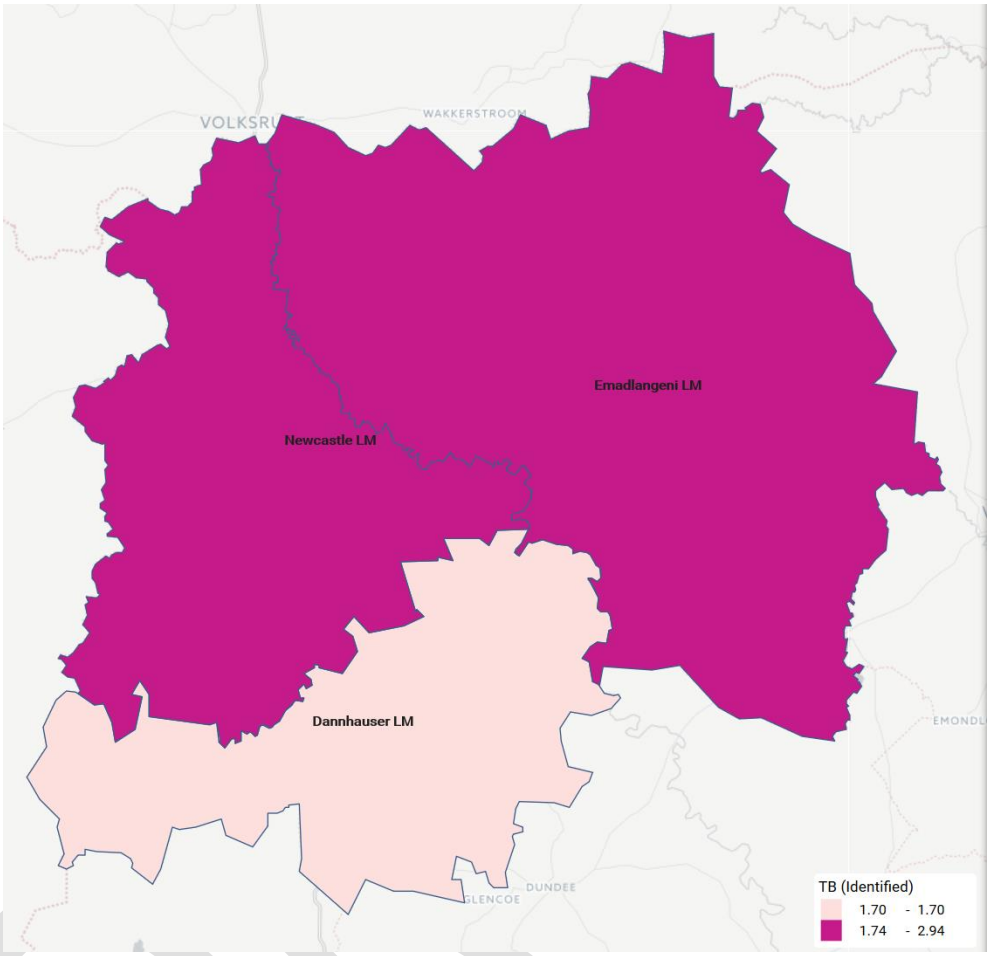

Figure 14: TB (pulmonary) case finding index Amajuba district (Source: KZN DHIS 2015)

Table 11: TB (pulmonary) case finding index Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **1.8 %**								
	Local Municipality	**2015 : TB (Identified)**					**NUM %**	**DEN %**
1	kz Dannhauser Local Municipality	1.70	%	(3530	/	207086)	20.08 %	21.14 %
2	kz Newcastle Local Municipality	1.74	%	(12470	/	718533)	70.93 %	73.36 %
3	kz Emadlangeni Local Municipality	2.94	%	(1580	/	53825)	8.99 %	5.50 %

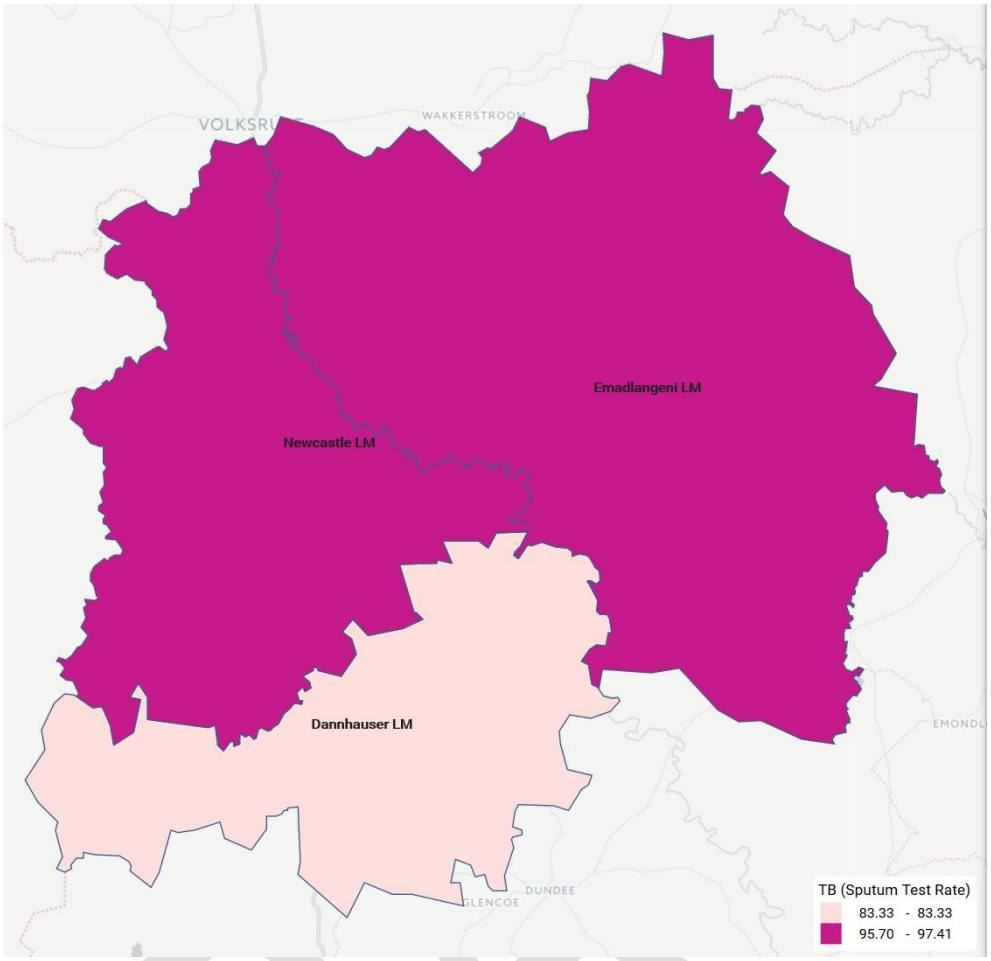

Figure 15: TB suspect sputum test rate Amajuba district (Source: KZN DHIS 2015)

Table 12: TB (Sputum Test Rate) Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **94.1 %**									
	Local Municipality	**2015 : TB (Sputum Test Rate)**					**NUM %**	**DEN %**
1	kz Dannhauser Local Municipality	83.33	%	(3530	/	4236)	20.08 %	22.67 %
2	kz Emadlangeni Local Municipality	95.70	%	(1580	/	1651)	8.99 %	8.83 %
3	kz Newcastle Local Municipality	97.41	%	(12470	/	12801)	70.93 %	68.50 %

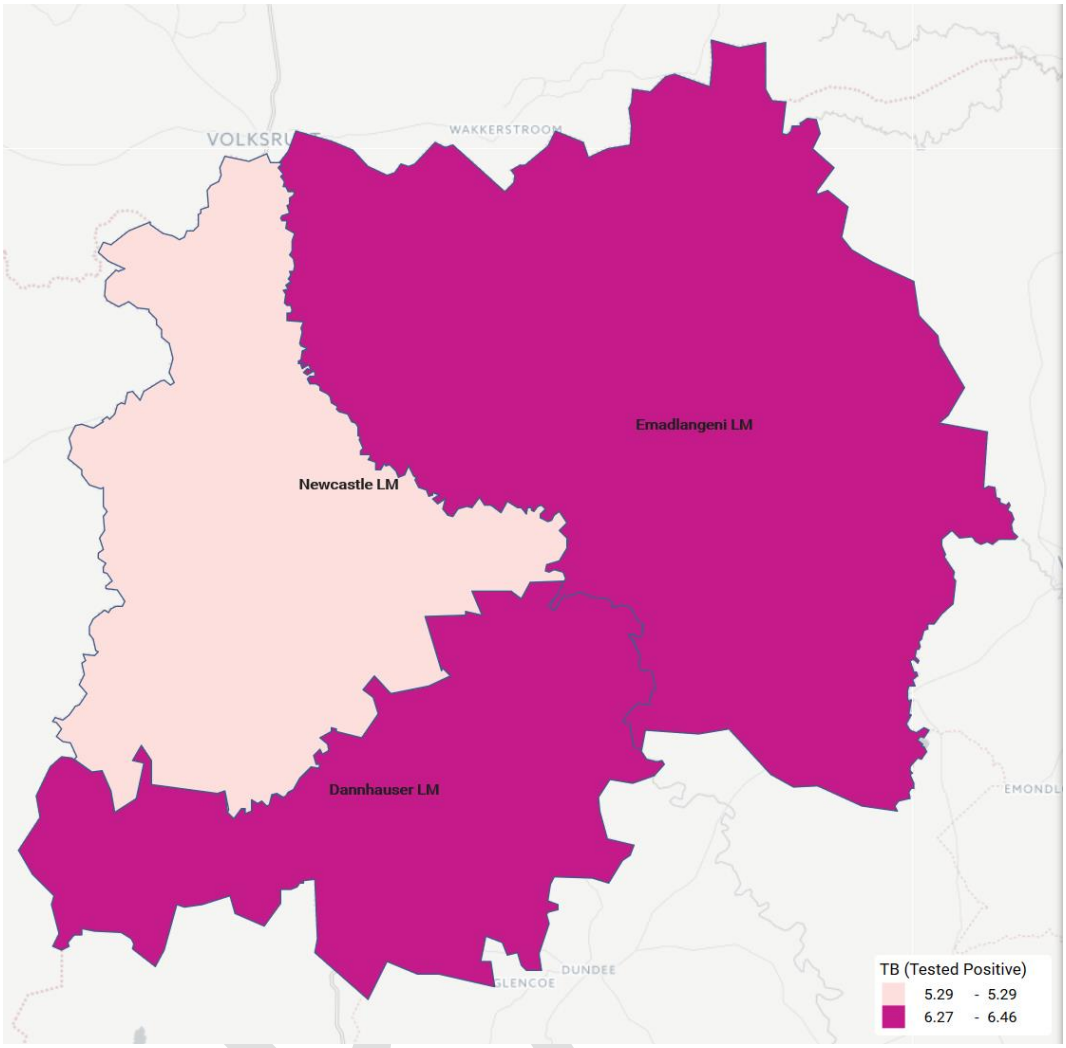

Figure 16: TB suspect smear positive rate Amajuba district (Source: KZN DHIS 2015)

Table 13: TB suspect smear positive rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **5.6 %**								
	Local Municipality	**2015 : TB (Tested Positive)**					**NUM %**	**DEN %**
1	kz Newcastle Local Municipality	5.29	%	(660	/	12470)	66.87 %	70.93 %
2	kz Emadlangeni Local Municipality	6.27	%	(99	/	1580)	10.03 %	8.99 %
3	kz Dannhauser Local Municipality	6.46	%	(228	/	3530)	23.10 %	20.08 %

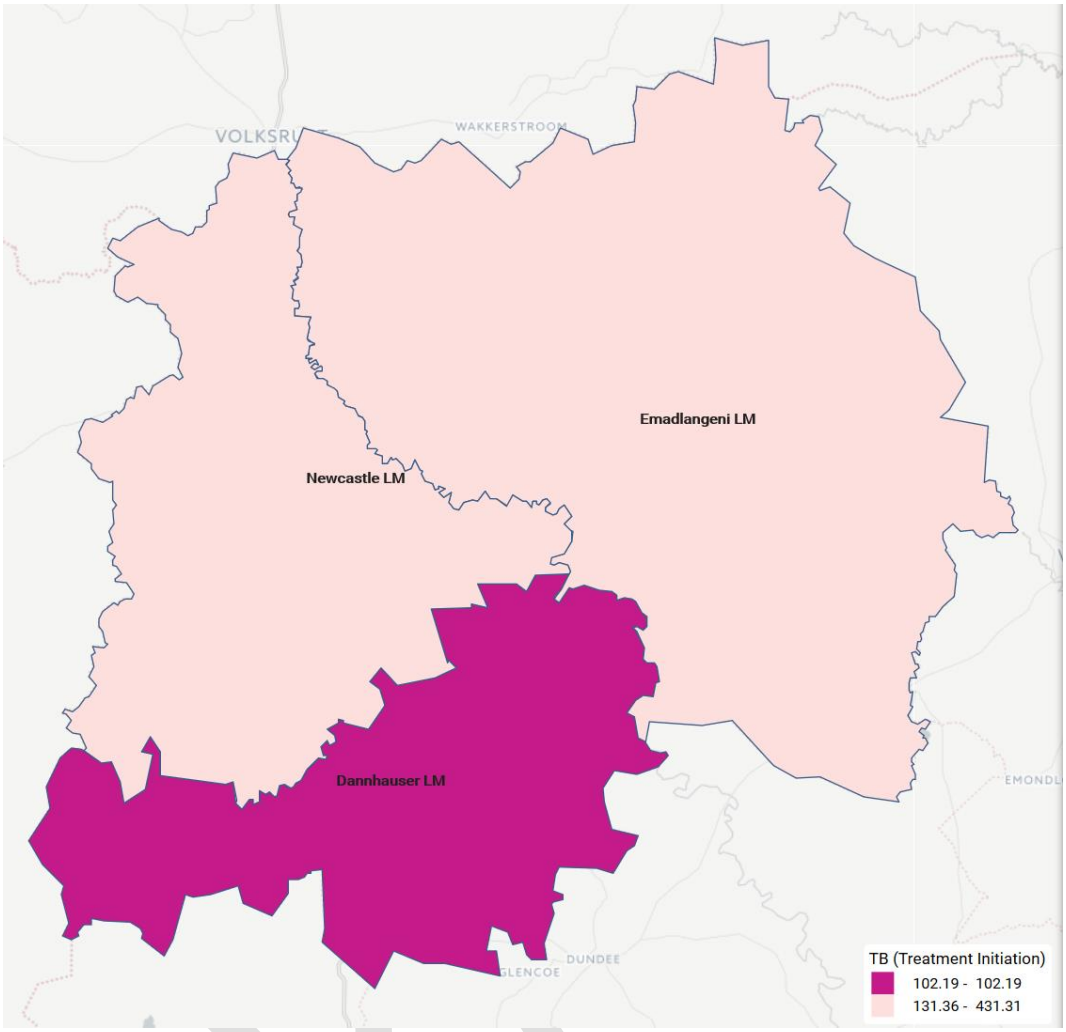

Figure 17: TB suspect treatment initiation rate Amajuba district (Source: KZN DHIS 2015)

Table 14: TB suspect treatment initiation rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **154.7 %**								
	Local Municipality	**2015 : TB (Treatment Initiation)**					**NUM %**	**DEN %**
1	kz Dannhauser Local Municipality	102.19	%	(233	/	228)	15.26 %	23.10 %
2	kz Newcastle Local Municipality	131.36	%	(867	/	660)	56.78 %	66.87 %
3	kz Emadlangeni Local Municipality	431.31	%	(427	/	99)	27.96 %	10.03 %

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 Amajuba 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

[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

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

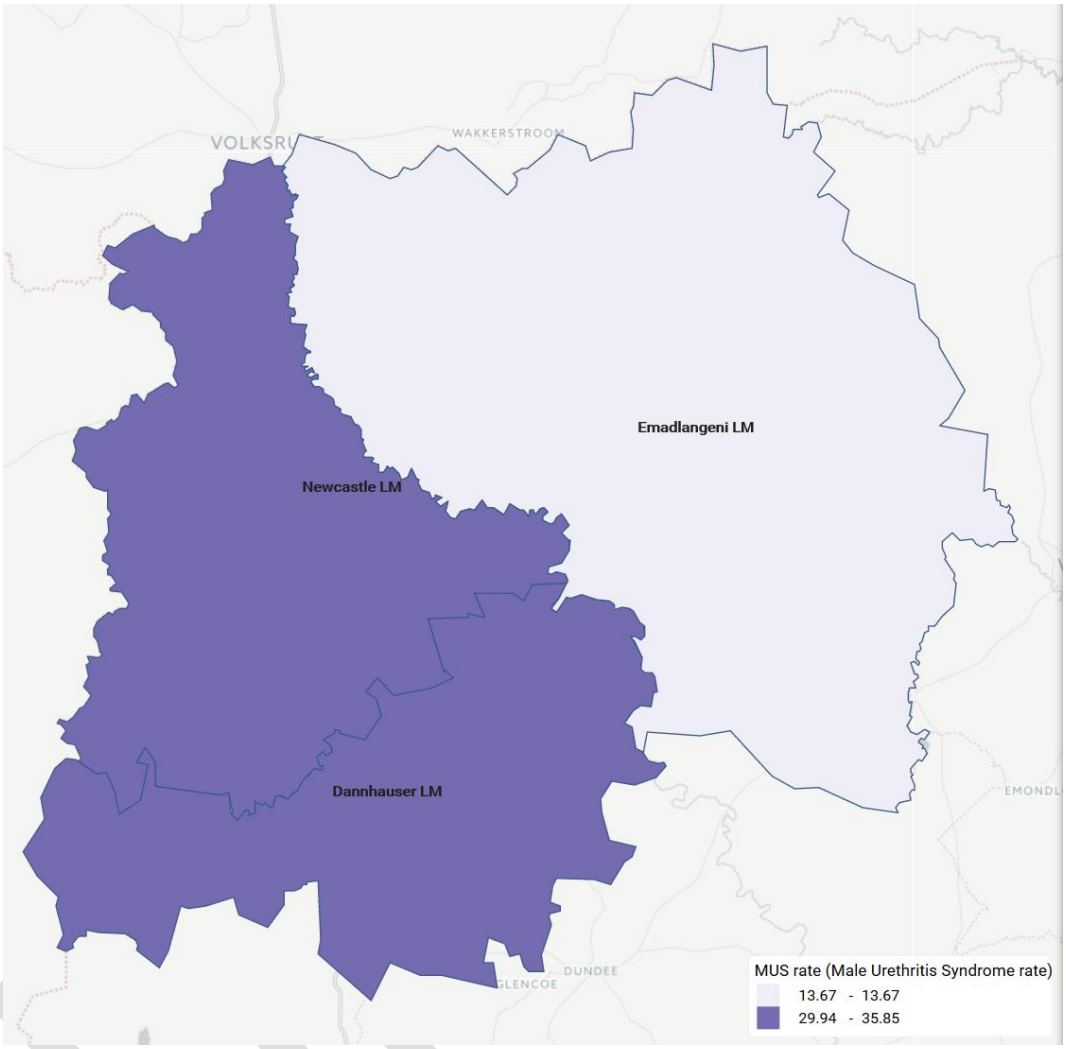

Figure 18: Male urethritis syndrome rate Amajuba district (Source: KZN DHIS 2015)

Table 15: Male urethritis syndrome rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **29.8 %**								
	Local Municipality	**2015 : MUS rate (Male Urethritis Syndrome rate)**					**NUM %**	**DEN %**
1	kz Emadlangeni Local Municipality	13.67	%	(150	/	1097)	3.08 %	6.70 %
2	kz Newcastle Local Municipality	29.94	%	(3794	/	12671)	77.83 %	77.43 %
3	kz Dannhauser Local Municipality	35.85	%	(931	/	2597)	19.10 %	15.87 %

3. Associated risk profile

3.1 Biomedical Profile

3.1.1 HIV Testing

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

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

- The fear syndrome in knowing one's HIV status paralysed the people because of the existing stigma;
- Men will not go to the clinic to test but will rely on the result from their partners and they usually say if my partner is negative it means I am also negative;
- The nurses at the local clinic are judgemental towards women, especially young women and girls;
- The nursed question why young women need to do testing at such a young age or they will not give them contraceptives;
- Judgement from the nurses prevents young women from going to test especially if family members work at the clinic;
- Men are reluctant to test and take their treatment, and
- There is poor health seeking behaviour amongst men.

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].

[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.

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

- Yes, male circumcision is done;
- 20% of the men get circumcised 80% don't;
- Medically circumcised men believe that if are circumcised you are not able to get HIV;
- Others do not like to circumcise since they only have one sexual partner;
- Others are afraid that they might not heal or their male organ might end up not functioning properly; and
- Others lack information.

3.1.3 ARV treatment

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

- ARVs are available at Stafford clinic, but their service is very poor, and they have short working hours;
- There is an issue around ART not being available at pick up points and so patients end up having to go to fetch medication regularly at the clinic;
- Clinics are closed, or far away;
- When patients miss pick up dates the health workers are rude and refuse medication;
- When patients must rush to work they leave the long queues at the facility without medication;
- There is no approach to accommodate those patients who are working;
- Medication is out of stock in facilities;
- Health workers do not full information to patients so they can't adhere;
- Patients are afraid to ask questions about their medication
- PLHIV do not disclose to their partner so they hide their treatment;
- Patients don't eat before medication so they default when there are side effects;
- Some PLHIV use traditional medicine;
- Some patients abuse alcohol and drugs and do not practice safe sex while on medication;
- Most patients have good knowledge but some of them are defaulting;
- PLHIV can be unavailable in time of treatment because they are at taverns or other places and have not disclosed to their partners so they are afraid to take treatment in front of them;
- People are not following up after they first test negative, they do not return to do a follow up test as advised;
- Follow up is done but only to those who have disclosed their status, or defaulted and are flagged for tracing by field workers;
- Now people can survive HIV and they believe that this medication can keep them alive for long with no side effects;
- Treatment has moved from 3 pills to only one pill a day which has changed from before;
- The one pill has got side effects such as mental disturbance; and
- Health has not yet found a combination that will not be harmful to anyone.

3.1.4 PEP and PrEP

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

- PrEP is not known by the community; and
- PEP is known to some members of the community, as well as it being provided to victims of rape.

3.1.5 Lubricant

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

3.2 Behaviour that can influence risk for HIV infection

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

3.2.1 HIV Knowledge

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

- The health caregivers felt they have educated the community members and they continue to educate them about HIV, AIDS and other related infections but feel that the community members do not want to disclose their status to their family members;
- Young girls sometimes default medication when they visit their boyfriends and they do not want their boyfriend to know that are taking ART;
- Sharing of instruments like razor blades between clients by the traditional healers contribute to a high rate of new HIV infections amongst their clients;

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

- Patients request a relative to do blood tests on their behalf and they take the results to their boyfriends for assurance that they are negative to get married;
- There is still unprotected sex happening;
- People are not aware of some of the known HIV related symptoms;
- The CCG's conduct door-to-door and assist in educating people and distribute pamphlets;
- Continuous education to the community but mainly to "men" is necessary;
- Early learning for children about HIV and AIDS is also seen as an important route for them to know about this virus; and
- Mixed feeding still happens because of poverty and poor knowledge on how HIV can be transmitted from the mother to the child.

3.2.2 Sexual risky behaviours

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

- Denial of and revenge for HIV infection still occurs;
- Promiscuity fuels infection.

3.2.3 Substance abuse

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

- Unemployment creates hopelessness resulting in alcohol abuse leading to bad decisions such as having unsafe sex with multiple partners; and
- There is a high rate of substance abuse and drug use that triggers high risk behaviour.

3.2.4 Condoms

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

- They are available (both male and female condoms) at health facilities, tuck shops, and schools; and
- Other sexual partners do not like condoms - they are not comfortable, they don't feel sensation, and they are thicker than those bought over the counter.

In Figure 19 and Figure 20 the condom distribution for females and males (annualised) are reflected at local municipality level in Amajuba district. The definitions for these indicators can be found in

Appendix B: Terms, Definitions and calculations.

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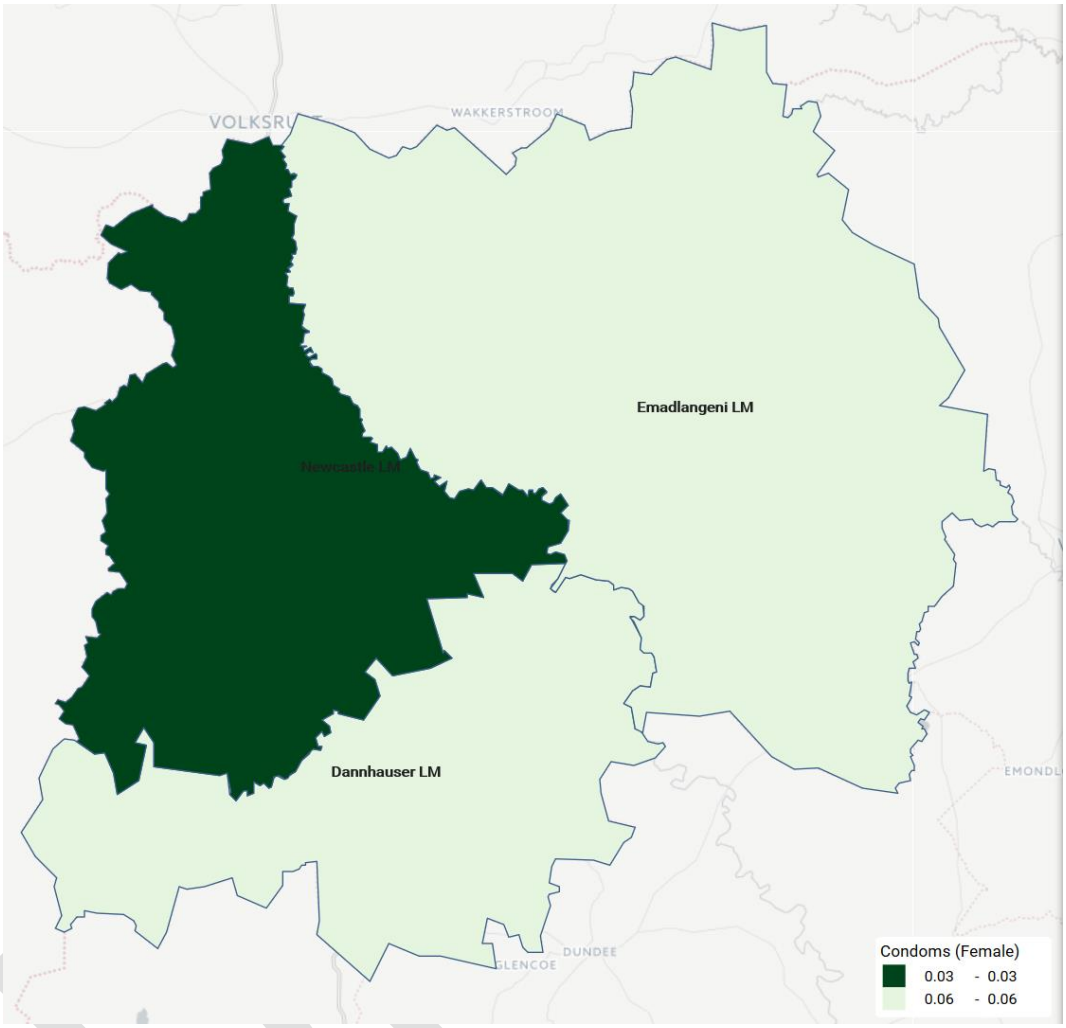

Figure 19: Female condom distribution rate Amajuba district (Source: KZN DHIS 2015)

Table 16: Female condom distribution rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **3.7 No**								
	Local Municipality	**2015 : Condoms (Female)**					**NUM %**	**DEN %**
1	kz Newcastle Local Municipality	0.03	No	(48663	/	1673112)	58.75 %	74.61 %
2	kz Emadlangeni Local Municipality	0.06	No	(7798	/	138528)	9.41 %	6.18 %
3	kz Dannhauser Local Municipality	0.06	No	(26374	/	430920)	31.84 %	19.22 %

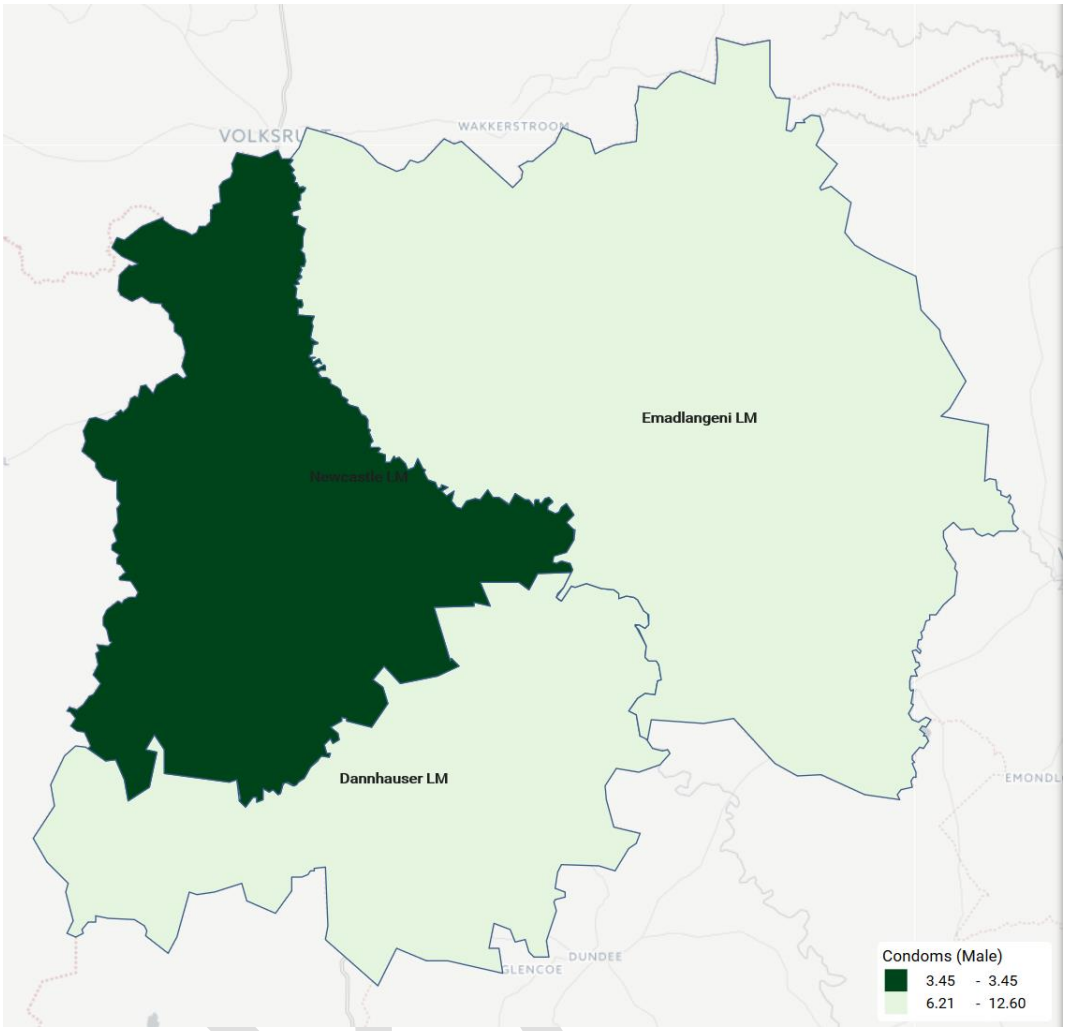

Figure 20: Male condom distribution rate Amajuba district (Source: KZN DHIS 2015)

Table 17: Male condom distribution rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **462.3 No**								
	Local Municipality	**2015 : Condoms (Male)**					**NUM %**	**DEN %**
1	kz Newcastle Local Municipality	3.45	No	(4953267	/	1435920)	55.39 %	74.24 %
2	kz Dannhauser Local Municipality	6.21	No	(2223905	/	358092)	24.87 %	18.51 %
3	kz Emadlangeni Local Municipality	12.60	No	(1764723	/	140088)	19.74 %	7.24 %

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

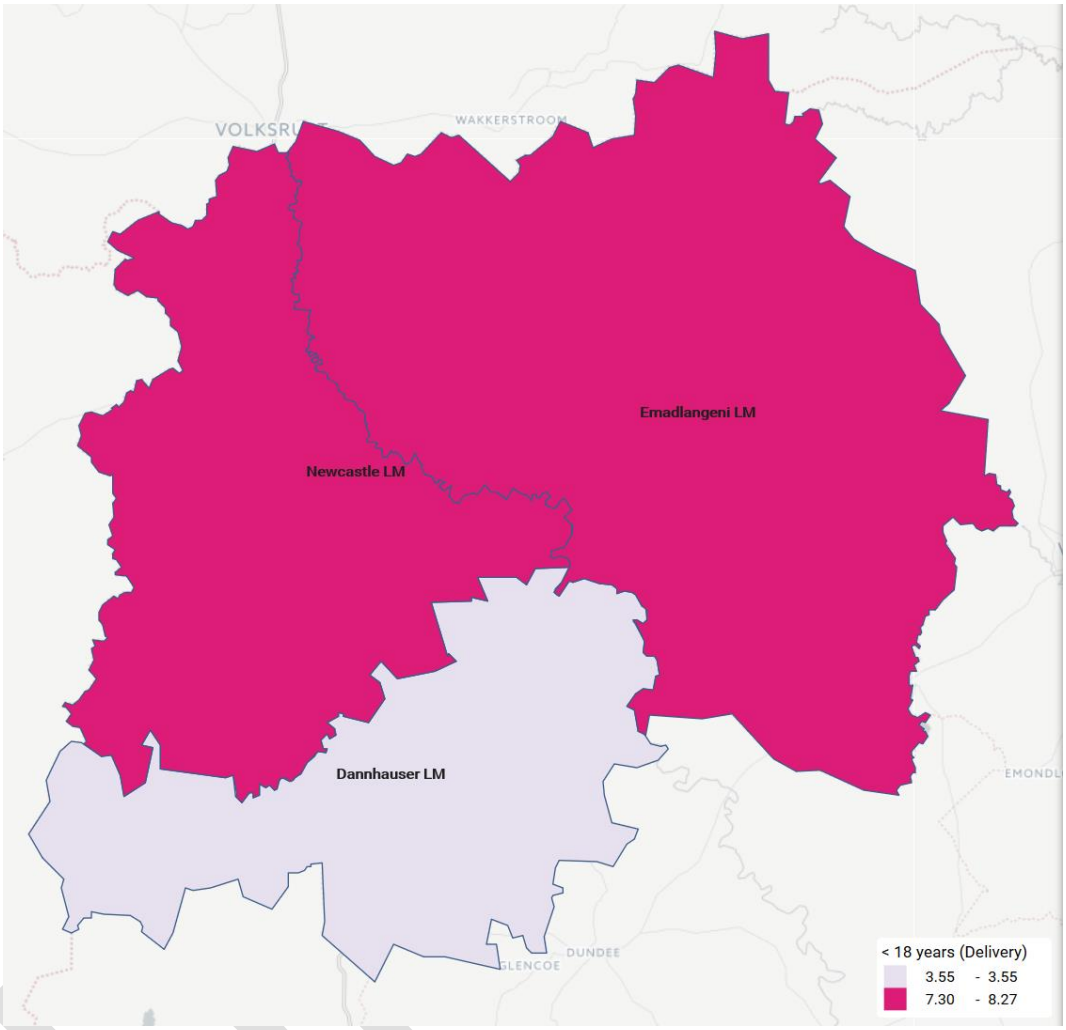

Figure 21: Teenage Pregnancy rate Amajuba district (Source: KZN DHIS 2015)

Table 18: Teenage Pregnancy rate Amajuba district (Source: KZN DHIS 2015 report 26 June 2017)

KZ AMAJUBA DISTRICT MUNICIPALITY: **8.1 %**								
	Local Municipality	**2015 : < 18 years (Delivery)**					**NUM %**	**DEN %**
1	kz Dannhauser Local Municipality	3.55	%	(5	/	141)	0.68 %	1.56 %
2	kz Emadlangeni Local Municipality	7.30	%	(43	/	589)	5.87 %	6.54 %
3	kz Newcastle Local Municipality	8.27	%	(685	/	8280)	93.45 %	91.90 %

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 woman and girls are usually involved in relationships with older men who provide for their needs They acquire the infection from blessers and they pass it on to their peer group. The nurses at the local clinic are judgemental towards women, questioning why they need to test or denying them contraception. This prevents YWG and taking up services at the facility especially if their relatives work at the facility. Young people "drop out" and start having sex at an early age. Lack of education and recreational facilities makes young people experiment with sex early. Young men that work provide young girls with alcohol and have unprotected sex with them.
Youth	Easily available pornography contributes to risky sexual behaviour amongst the youth.
Sex workers	Community sex work is common and sex workers are paid around R30,00 which is said to be very low
Orphans and vulnerable children	There is great exploitation of situation where the man who has money will provide help to orphans in exchange of sex e.g. buying of generator to have electricity.
Drug users	Practice of drawing blood and injecting to another person as a sign of brotherhood (Bluetooth) is the most dangerous practice. The use of drugs seems to be one of the propellers of HIV transmission
Disabled	
Truck drivers	
Migrant workers	

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 14, 16, 19 and 31 that forms the catchment area for Stafford Clinic, are highlighted in the table below.

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

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

Ward	Maternal orphans			Paternal orphans			Double orphans		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ward 1	184	144	328	408	398	806	166	158	324
Ward 2	23	23	46	78	71	149	29	29	57
Ward 3	11	9	20	58	47	105	5	6	10
Ward 4	13	19	32	62	65	127	15	14	29
Ward 5	48	48	96	155	162	317	45	39	84
Ward 6	284	260	543	800	792	1 591	246	247	493
Ward 7	188	156	344	530	556	1 086	189	199	388
Ward 8	108	79	187	331	321	652	146	139	285
Ward 9	123	132	255	477	488	966	133	131	264
Ward 10	119	109	228	267	296	563	120	116	236
Ward 11	86	93	179	337	348	685	131	139	270
Ward 12	97	91	188	344	329	674	119	122	241
Ward 13	96	109	205	268	221	489	117	99	217
Ward 14	133	144	277	414	438	852	147	151	298
Ward 15	152	147	299	391	396	787	164	151	315
Ward 16	149	155	304	517	498	1 015	225	208	433
Ward 17	121	140	262	314	367	681	162	135	297
Ward 18	157	171	328	452	405	857	180	158	338
Ward 19	75	81	155	315	269	583	95	108	203
Ward 20	155	162	317	478	435	913	147	169	316
Ward 21	121	124	245	345	345	689	108	156	263
Ward 22	74	77	151	241	245	487	84	118	202
Ward 23	112	89	201	249	236	485	151	128	279
Ward 24	129	129	258	357	335	692	149	161	310
Ward 25	40	38	78	163	170	333	37	40	76
Ward 26	67	62	129	185	185	370	80	91	172
Ward 27	95	101	196	251	293	544	120	130	250
Ward 28	77	82	159	196	210	406	92	78	170
Ward 29	124	112	236	348	348	696	142	170	312
Ward 30	135	133	268	496	459	956	245	217	462
Ward 31	101	92	193	390	377	767	153	118	271

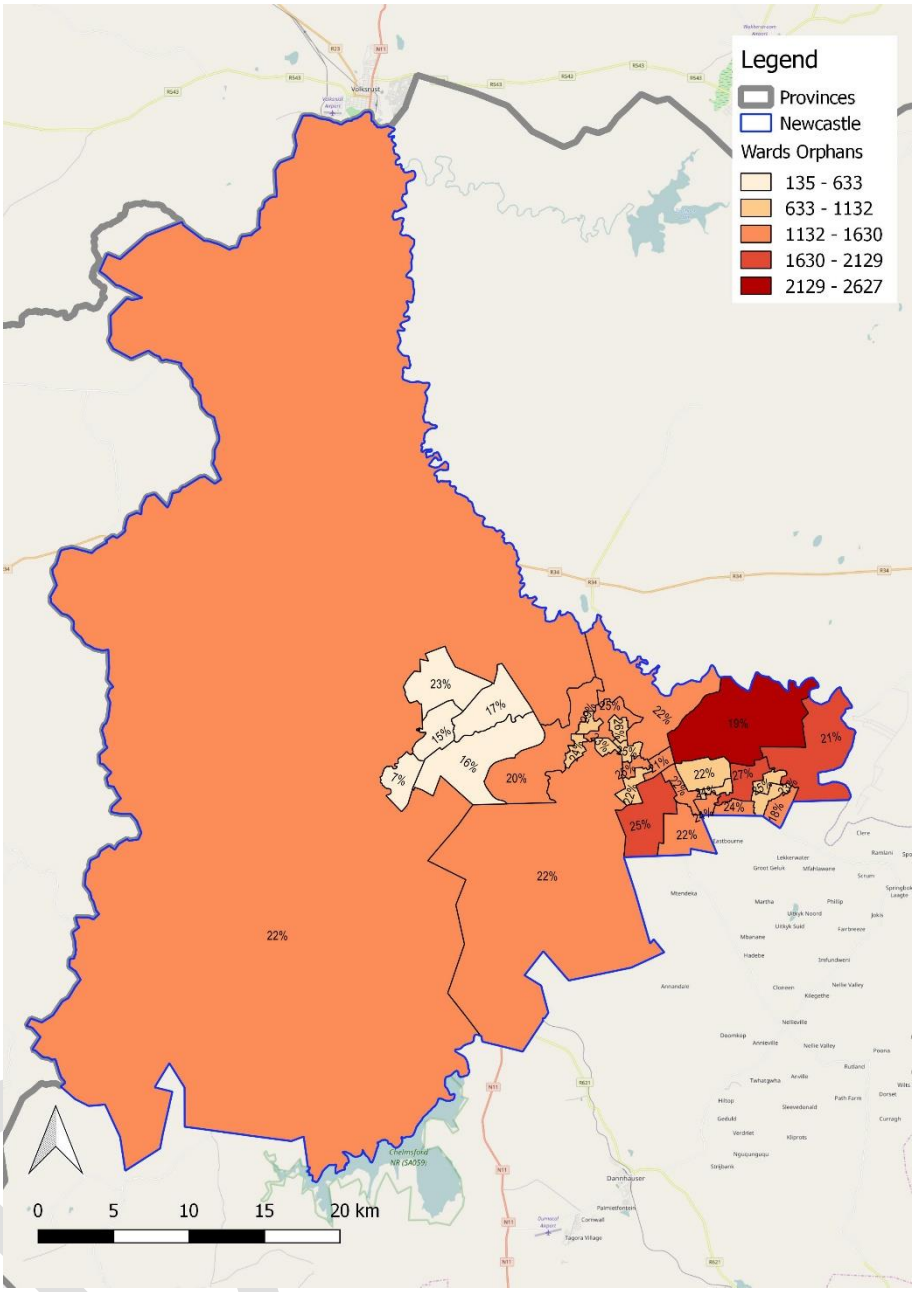

Figure 22: Total number of Orphans with percentage that are double orphans per ward (Source Census 2011)

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

- There is great exploitation of situation where the man who has money will provide help to orphans in exchange of sex e.g. buying of generator to have electricity.

3.3.2 Cultural and Religious Norms

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

- Cultural practice for initiation is not known by some people thus there is great spread of HIV;
- The sharing of one razor as a family for cultural practices also spreads the infection;

- The use of one shared instruments for the cultural medicinal enemas (spuit) leaves everyone women and children at high risk of infection;
- Women are vulnerable in respect of certain harmful cultural practices where infidelity is practiced by their partners as part of culture (polygamy);
- Culture encourages concurrent sexual networks within marriages, this latter significantly amplifying HIV transmission rate; and
- Cultural practices clearly display the male dominance in the family unit.

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:

- Most women in cultural settings are illiterate and their lack of education contributes to their unawareness of legal developments that can assist to improve their position and prevent them from getting HIV;
- Some members of the community suffer in silence as they do not report abuse and rape;
- Women cannot negotiate condoms in a relationship even when they disclose, instead men continue to sleep with other women outside the marriage;
- Men communicate their family stories on how they refuse condoms with their wives;
- Rape is the sign of power for men;
- Sexual abuse cases not reported within 72 hours; and
- Women have no control over the sexual behaviour of their partners.

3.3.4 Stigma

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

- People who are working in the local clinics also reside within the community so local people are reluctant to go to the clinic to collect medication or even get medical attention because they fear to be labelled as HIV+ and get mistreated;
- Disclosure is not favoured due to stigma;
- The prevailing stigma results in reluctance of me to go for HIV testing and share their status;
- The attitude of the staff in the clinic impacts on the stigma;
- People migrate because of stigma; and
- People are fearful to disclosure and continued to have a relationship with other people without informing them.

3.3.5 Poverty

Poverty is measured through the South Africa Multidimensional Poverty Index (SAMPI)[15]. The detail for Ward 14, 16, 19 and 31 that forms the catchment area for Stafford Clinic, are highlighted in the table below.

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

	Poverty Headcount (H)	Intensity of Poverty (A)	SAMPI (HxA)
kz Newcastle Ward 001	16.8	41.6	0.070
kz Newcastle Ward 002	0.09	37.8	0.000
kz Newcastle Ward 003	0.3	37.6	0.001
kz Newcastle Ward 004	0.33	44	0.001
kz Newcastle Ward 005	0.11	45.2	0.000
kz Newcastle Ward 006	14	43.1	0.060
kz Newcastle Ward 007	12.4	42.6	0.053
kz Newcastle Ward 008	3.3	42.8	0.014
kz Newcastle Ward 009	4.3	41.5	0.018
kz Newcastle Ward 010	1.5	41.3	0.006
kz Newcastle Ward 011	1.8	40.7	0.007
kz Newcastle Ward 012	9.2	42.5	0.039
kz Newcastle Ward 013	2.4	39.6	0.010
kz Newcastle Ward 014	3.4	42.3	0.014
kz Newcastle Ward 015	14.5	41.3	0.060
kz Newcastle Ward 016	12.7	42.8	0.054
kz Newcastle Ward 017	2.3	39.8	0.009
kz Newcastle Ward 018	7.7	42.4	0.033
kz Newcastle Ward 019	4.4	44.2	0.019
kz Newcastle Ward 020	3.5	40.3	0.014
kz Newcastle Ward 021	6.4	41.6	0.027
kz Newcastle Ward 022	0.62	38.3	0.002
kz Newcastle Ward 023	0.43	41.9	0.002
kz Newcastle Ward 024	1.3	40.3	0.005
kz Newcastle Ward 025	12.4	43.1	0.053
kz Newcastle Ward 026	0.77	37.8	0.003
kz Newcastle Ward 027	0.9	38.3	0.003
kz Newcastle Ward 028	0.38	38.8	0.001
kz Newcastle Ward 029	1.3	40.8	0.005
kz Newcastle Ward 030	4.2	40.2	0.017
kz Newcastle Ward 031	8.7	41.6	0.036
kz Newcastle	**4.9**	**41.2**	**0.020**

Ward 1 was the poorest Ward in Newcastle local municipality with three out of every ten households (25.2%) being poor (Table 3, Appendix B). Ward 2 has the lowest head count at 0.09%. The greatest contributors to high poverty measures in KZN are health (measured by child mortality) and education

[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.

(measured by years of schooling and school attendance). The Multidimensional Poverty Index for Newcastle local municipality changed between 2001 (Figure 23) and 2011 (Figure 24). In 2001 the highest Poverty Index was 17.61%. This reduced to 6.99% in 2011.

In the catchment area for Stafford clinic, the highest poverty index and poverty headcount is in ward 16 with a 12.7% headcount and an intensity of 42.8%, making it the second highest in Newcastle local municipality.

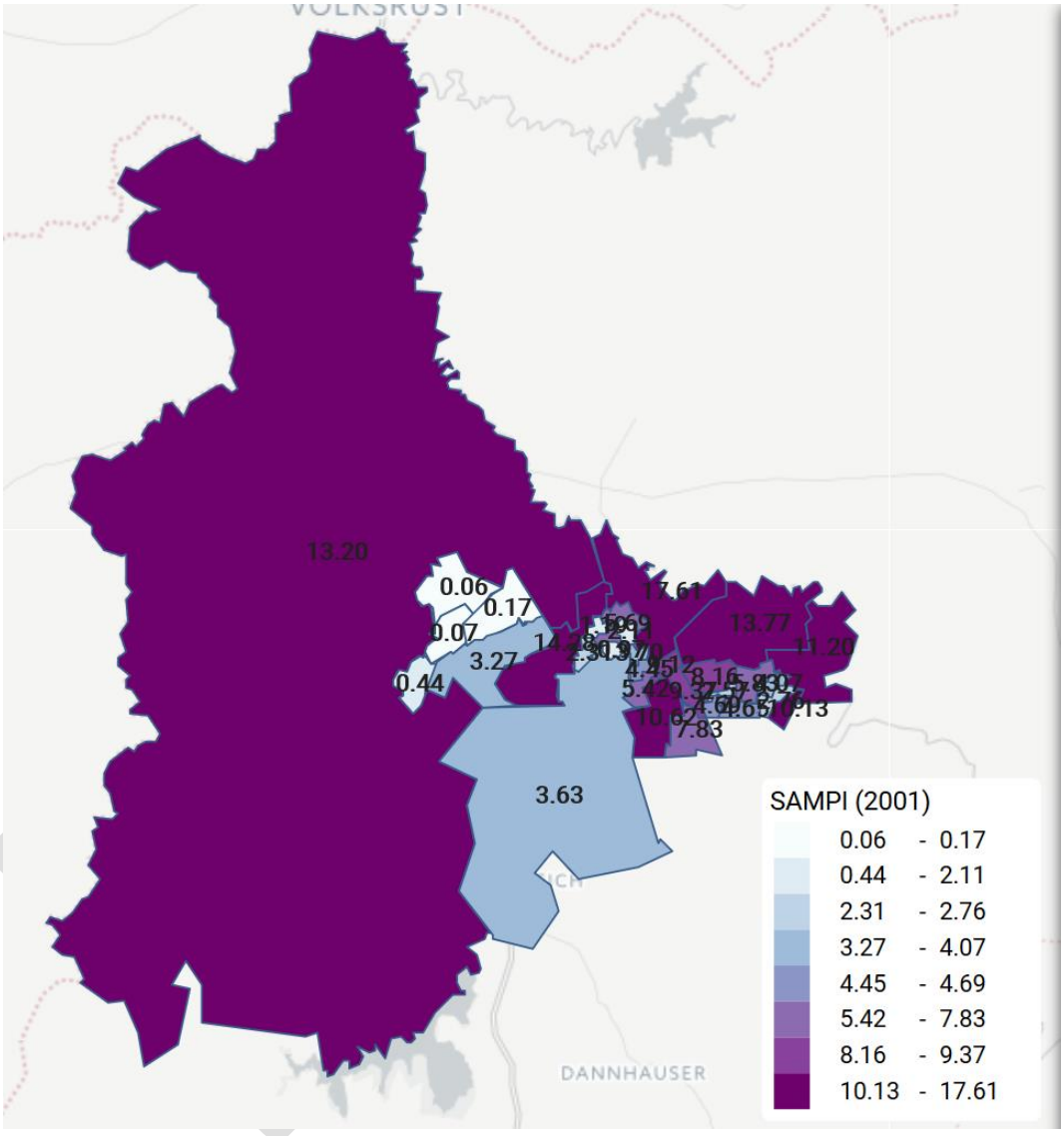

Figure 23: SAMPI (poverty Index) 2001 - ward level, Newcastle local municipality

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

KZ NEWCASTLE LOCAL MUNICIPALITY: **4.6 %**						
	Ward (2011)	**SAMPI (2001)**				
1	kz Newcastle Ward 002	0.06	%	(0.1	/	100)
2	kz Newcastle Ward 004	0.07	%	(0.1	/	100)
3	kz Newcastle Ward 005	0.17	%	(0.2	/	100)
4	kz Newcastle Ward 003	0.44	%	(0.4	/	100)

5	kz Newcastle Ward 028	0.97	%	(1	/	100)
6	kz Newcastle Ward 023	1.19	%	(1.2	/	100)
7	kz Newcastle Ward 026	2.11	%	(2.1	/	100)
8	kz Newcastle Ward 022	2.31	%	(2.3	/	100)
9	kz Newcastle Ward 013	2.57	%	(2.6	/	100)
10	kz Newcastle Ward 010	2.76	%	(2.8	/	100)
11	kz Newcastle Ward 025	3.27	%	(3.3	/	100)
12	kz Newcastle Ward 021	3.63	%	(3.6	/	100)
13	kz Newcastle Ward 027	3.70	%	(3.7	/	100)
14	kz Newcastle Ward 008	4.07	%	(4.1	/	100)
15	kz Newcastle Ward 029	4.45	%	(4.5	/	100)
16	kz Newcastle Ward 011	4.65	%	(4.6	/	100)
17	kz Newcastle Ward 017	4.69	%	(4.7	/	100)
18	kz Newcastle Ward 019	5.42	%	(5.4	/	100)
19	kz Newcastle Ward 024	5.69	%	(5.7	/	100)
20	kz Newcastle Ward 030	5.83	%	(5.8	/	100)
21	kz Newcastle Ward 015	7.83	%	(7.8	/	100)
22	kz Newcastle Ward 012	8.16	%	(8.2	/	100)
23	kz Newcastle Ward 014	9.12	%	(9.1	/	100)
24	kz Newcastle Ward 018	9.37	%	(9.4	/	100)
25	kz Newcastle Ward 009	10.13	%	(10.1	/	100)
26	kz Newcastle Ward 016	10.62	%	(10.6	/	100)
27	kz Newcastle Ward 007	11.20	%	(11.2	/	100)
28	kz Newcastle Ward 001	13.20	%	(13.2	/	100)
29	kz Newcastle Ward 006	13.77	%	(13.8	/	100)
30	kz Newcastle Ward 020	14.28	%	(14.3	/	100)
31	kz Newcastle Ward 031	17.61	%	(17.6	/	100)

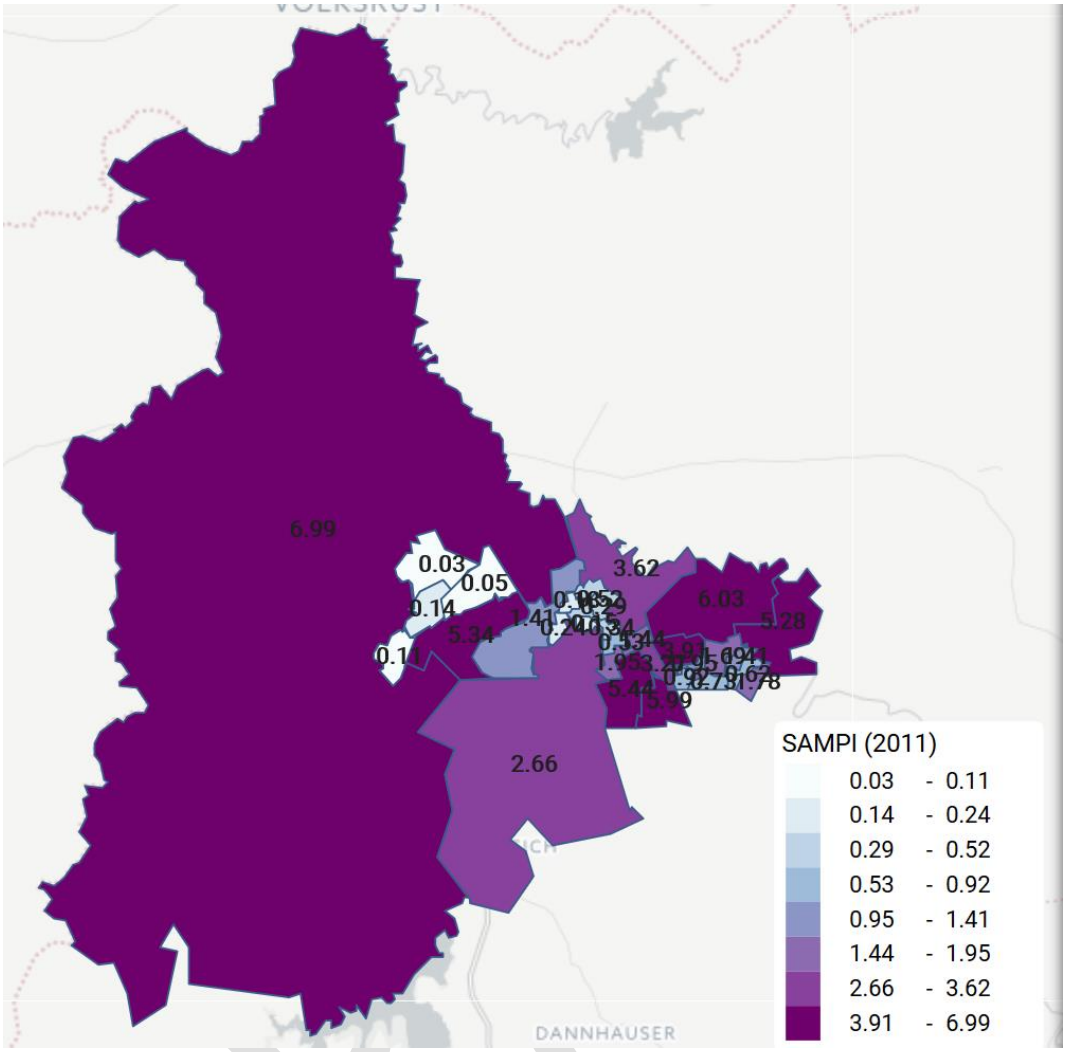

Figure 24: SAMPI (poverty Index) 2011 - ward level, Newcastle local municipality

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

KZ NEWCASTLE LOCAL MUNICIPALITY: **1.4 %**						
	Ward (2011)	**SAMPI (2011)**				
1	kz Newcastle Ward 002	0.03	%	(0	/	100)
2	kz Newcastle Ward 005	0.05	%	(0.1	/	100)
3	kz Newcastle Ward 003	0.11	%	(0.1	/	100)
4	kz Newcastle Ward 004	0.14	%	(0.1	/	100)
5	kz Newcastle Ward 028	0.15	%	(0.1	/	100)
6	kz Newcastle Ward 023	0.18	%	(0.2	/	100)
7	kz Newcastle Ward 022	0.24	%	(0.2	/	100)
8	kz Newcastle Ward 026	0.29	%	(0.3	/	100)
9	kz Newcastle Ward 027	0.34	%	(0.3	/	100)
10	kz Newcastle Ward 024	0.52	%	(0.5	/	100)
11	kz Newcastle Ward 029	0.53	%	(0.5	/	100)
12	kz Newcastle Ward 010	0.62	%	(0.6	/	100)
13	kz Newcastle Ward 011	0.73	%	(0.7	/	100)

14	kz Newcastle Ward 017	0.92	%	(0.9	/	100)
15	kz Newcastle Ward 013	0.95	%	(0.9	/	100)
16	kz Newcastle Ward 020	1.41	%	(1.4	/	100)
17	kz Newcastle Ward 008	1.41	%	(1.4	/	100)
18	kz Newcastle Ward 014	1.44	%	(1.4	/	100)
19	kz Newcastle Ward 030	1.69	%	(1.7	/	100)
20	kz Newcastle Ward 009	1.78	%	(1.8	/	100)
21	kz Newcastle Ward 019	1.95	%	(1.9	/	100)
22	kz Newcastle Ward 021	2.66	%	(2.7	/	100)
23	kz Newcastle Ward 018	3.27	%	(3.3	/	100)
24	kz Newcastle Ward 031	3.62	%	(3.6	/	100)
25	kz Newcastle Ward 012	3.91	%	(3.9	/	100)
26	kz Newcastle Ward 007	5.28	%	(5.3	/	100)
27	kz Newcastle Ward 025	5.34	%	(5.3	/	100)
28	kz Newcastle Ward 016	5.44	%	(5.4	/	100)
29	kz Newcastle Ward 015	5.99	%	(6	/	100)
30	kz Newcastle Ward 006	6.03	%	(6	/	100)
31	kz Newcastle Ward 001	6.99	%	(7	/	100)

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

- Poverty and a lack of self-esteem result in sleeping around with no protection;
- Due to lack of money and high level of unemployment young women and girls decides to be involved in transactional relationships;
- The older men called blessers provide money and money is misused by young people knowing that the blesser after another sex encounter will provide money;
- It was also mentioned that the is an informal settlement with the community that contribute on high level of poverty because the people that reside within the informal settlement most of them do not have proper documents such as ID as a result they cannot access services such as social grants and that increases the level of poverty so as the level of HIV and AIDS;
- People are unable to provide for themselves, they can't even afford the basic needs this also result on young woman and girls being involved in transactional sex and relationships such as blessers, sugar daddies and sugar snacks;
- Health care facility is too far and people can't afford to travel to the facilities and end up not getting proper health care;
- Due to poverty patients are selling ARVs and not taking it. ARVs are used in exchange of getting a drug called Wonga; and
- Caregivers are attempting to provide skills of starting food gardens to overcome hunger.

3.3.6 Employment

In Newcastle local municipality, 25% of the female population at economically active age is employed while 30% of the economically active males are employed. See Figure 25 below.

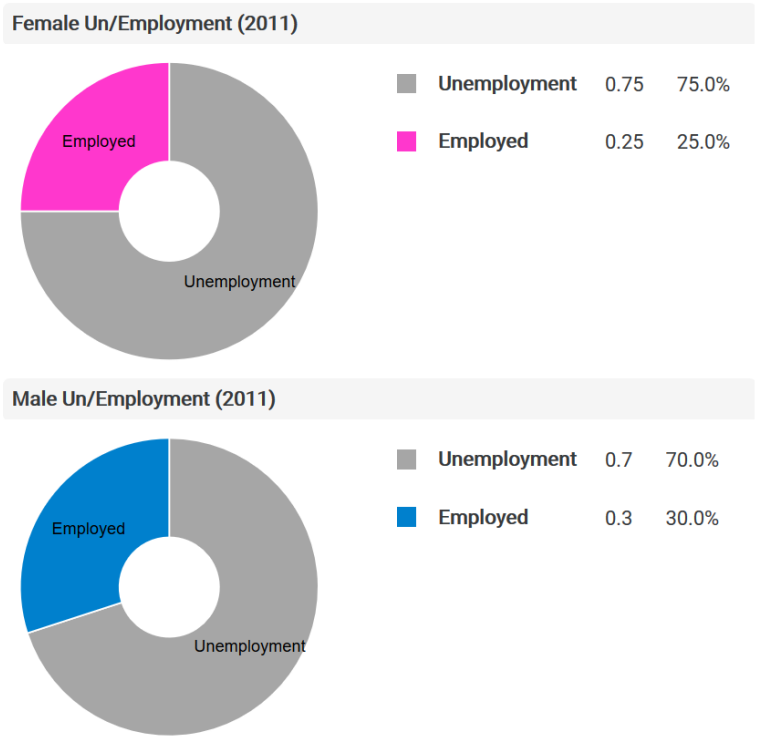

Figure 25: Female and Male employment Newcastle local municipality (Source Census 2011)

Unemployment of youth in Newcastle local municipality is at 80.1%. The majority of the youth in the area was therefore unemployed at the time of the Census.

Figure 26: Youth unemployment Newcastle local municipality (source Census 2011)

In comparison with the Newcastle local municipality a smaller percentage of females and males are employed from the total population in the Stafford clinic catchment area. In this area 22% of the female population and 26% of the male population is employed (see Figure 27)

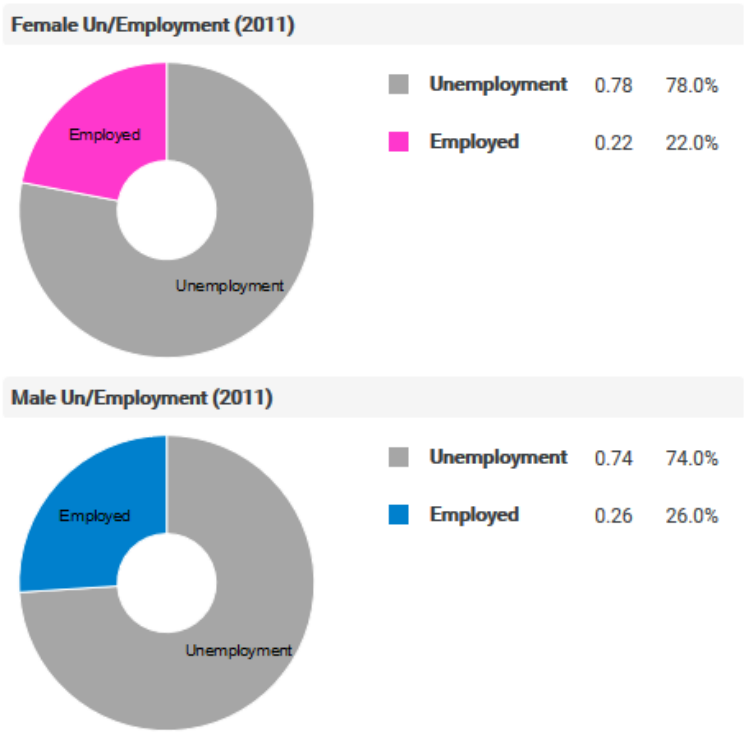

Figure 27: Female and Male employment Stafford clinic catchment area (Source Census 2011)

Less youth (18.6%) are unemployed in the Stafford clinic catchment area than the Newcastle local municipality (19.9%).

Figure 28: Youth unemployment Stafford 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:

- Unemployment contributes a lot on increase on HIVS within the community. One of the reasons is that the majority of young people end up being involved in relationship with older man who referred to as (blessers) for example 14-year olds being exposed to sex to get money for food;
- The high level of unemployment has resulted in some women indulging in unsafe sex with the aim to conceive so that they can access child support grants;
- Unemployment within the community is also due to the result of high level of drop outs. Some of the wards only have primary schools and there are no high schools. The scholars have to travel a long distance to access high school and some of them cannot afford to pay for local transportation system so they drop out of schools;
- Young people are engaged to prostitution through and are used by outside people who put them at risk in of having unprotected sex in exchange for money; and
- Due to unemployment women have unprotected sex to get money for survival.

3.3.7 Types of settlements

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

- Due to informal settlement, children end up witnessing their parents having sexual intercourse and they usually practice this with other children who are at their ages. This contributes to early sexual debut and possible infection;
- Informal settlements are seen as reciprocal of unhygienic areas. Objects such as used condoms are thrown where children can easily access them. Sharp object such as razors that have been used are also lying around. This increases the risk of HIV infection;
- Lack of resources make it difficult to educate people about HIV in informal settlements;
- In some informal settlements, the child in the RDP house will invite other girls and boys to have sex in the house; and

- Lack of knowledge on HIV prevention is lacking, some parents are exposed to infection without taking precautions.

3.3.8 Migration patterns in the area

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

- Migration pattern in the area is very high. The community have to accommodate people from different countries. This also contribute to high level of unemployment because it is said that these people accept low rate of income compared to the local people as a result the employers prefer them compared to the local people. Some of these migrants end up engaging in a sexual relation because of financial reasons;
- Fear of getting to the local clinics by the people from other countries for HIV testing spread the infection because they end up having sex with local people. Sexual relationships easily take place amongst the population in informal settlements;
- Truck drivers are seen also as vectors of HIV transmission, because of casual sexual relationships on their routes with other women and do not use protection;

3.3.9 Education and literacy

Because higher education is very expensive the majority of the community members only study up to matric senior certificate level. This also contributes on the high level of unemployment and increased HIV infection for reasons mentioned above.

3.3.10Hate crimes – xenophobic, homophobic, other

The community expressed that homosexuality is not part of traditional life.

3.3.11Disability

Stakeholder and community engagement workshops felt that the ***people with disability*** has an increased risk of HIV infection because:

- Disable people are sexually abused because of their disability and more so they cannot be able to express themselves; and
- People with disabilities are continuously raped especially the females. Men take advantage of disabled women especially to those that are mentally disabled. More education is needed to those that are guardians.

4. Services in the Local Municipality

4.1 Health facilities

There are five health facilities in Newcastle local municipality. See Figure 29 below for distribution of these facilities.

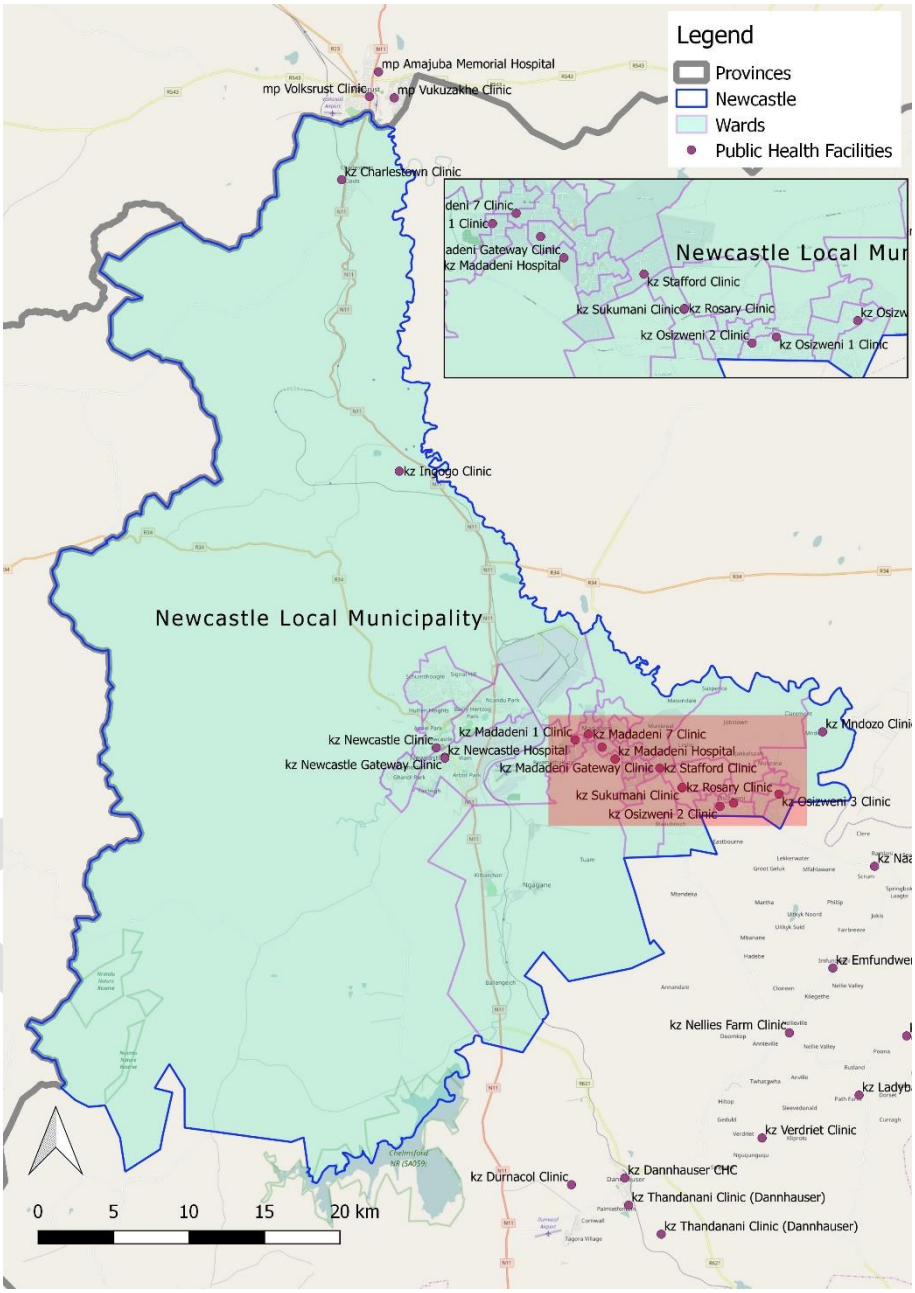

Figure 29: Distribution of health facilities in Newcastle local municipality

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.

Considering the priorities identified during the stakeholder and community workshops as well as the general profile presented here, the following recommendations are made in line with the National Strategic Plan for HIV, TB and STIs (2017 to 2022) and other relevant strategic documents:

Table 24: Key and vulnerable populations as well as priority interventions identified

Key and vulnerable populations for TB	Priority interventions
• People living with HIV • Household contacts of TB index patients • Health care workers • Pregnant women • Children < 5 years old • Diabetics • 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 for HIV	**Priority interventions**
• Young Women and Girls • Youth • Orphans and vulnerable children	• Sexual abuse and gender based violence – especially non-reporting of cases; • Stigma and discrimination; • Unprotected sex (sex without a condom) especially after circumcision; • Continuous HIV education to the community especially men; • Boundaries in one-roomed homes; • Early education of children about HIV and AIDS; and • High rate of substance abuse and drugs that triggers high risk behaviour

Table 25: Recommendations Stafford clinic catchment area

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 key populations	**Service**	**Multi-sectoral partner**
Sex workers	• Peer-led outreach • PrEP • Female and male condoms and lubricant • Intensified psychosocial support • Periodic presumptive treatment for STIs • Social mobilisation, use of formal/informal peer networks to create demand • PMTCT • Hepatitis B screening and immunisation	• 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
	• Annual Pap smears • CTOP (Choice of Termination of Pregnancy) • Screening for and protection from the sexual exploitation of children • Community empowerment	
People who use drugs, including people who inject drugs	• Peer-led outreach • Harm reduction counselling • Linkage to rehabilitation centres • Case management to ensure a continuum of care • Needle and syringe programmes • Opioid Substitution Therapy • Accelerated nutritional and social grant support, if indicated • Hepatitis B screening and immunisation • Hepatitis C screening and treatment when policy is developed	• DoH • NGOs • DSD
HIV and STI vulnerable populations		

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

TB key populations		
Children <5 yrs	• Household TB and HIV screening, immediate linkage to treatment • Improved diagnostic and treatment capacity for paediatric TB • Promote activism for child-friendly TB formulations and introduce as soon as they are available	• DoH • NGOs • Civil Society • DSD

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	• Improve sputum induction at PHC and hospital level • Screening for and protection from the sexual exploitation of children	
Healthcare workers	• Implement guidelines for TB in HCWs • Institute regular TB screening and offer HIV testing for all HCWs • Offer TB preventive therapy to all HCWs who are living with HIV • Develop a recording and reporting system for TB and DR-TB in HCWs • Appoint a DoH-led task force to monitor implementation and further elucidate the effort–effect ratio of screening all HCWs annually with symptom screening and CXR, and to investigate the role of preventive therapy for HCWs • Implement the FAST model in facilities (finding cases actively by cough surveillance and rapid molecular sputum testing, separating safely, and treating effectively, based on rapid drug susceptibility testing)	• DoH • DoH
Household contacts of TB index patients	• Implement simplified screening algorithms for TB-exposed children • Implement community education and mobilisation programmes to improve acceptance of contact investigations and to create awareness of the benefits of preventive therapy • Strengthen routine M&E for TB contact investigations, HIV testing, TB preventive therapy including outcomes, and pharmacovigilance	• DoH • NGOs
People living in informal settlements (also a vulnerable population for HIV and STIs)	• Facilitate access and demand creation to increase community HIV, TB and STI service provision • Intensify GBV programmes and screening • Accelerate social support • 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	• DoH

Inclusive package of services for all key and vulnerable populations that will be customised to age and population served		Multi-sectoral partner
	• Support groups specifically addressing internalised stigma	
Pregnant women and neonates	• Full access to PMTCT services • Household TB and HIV screening, immediate linkage to treatment • Improve mother–child pair tracing and service delivery • Improve TB screening and testing among pregnant women to reduce congenital and perinatal TB transmission • Improve diagnostic and treatment capacity for neonatal TB	• DoH • NGOs • DSD

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

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

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

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

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

Addressing social and structural drivers	Service	Multi-sectoral partner
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 • Civil society including NGOs
Training for adolescent girls and young women	• Empower young women, such as through SABCOHA's BizAIDS programme, to start and improve their own businesses • Encourage companies to support the programme through co-funding and job opportunities	• SABCOHA and other private sector • Organised labour • DOT

Appendix A: Selecting Data for the Profile

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

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

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

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

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

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

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

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

Data assumptions and limitations

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

Age breakdown of routine indicators are limited to predefined indicators, with no sex breakdown available at Provincial and National Dataset level. No key population specific data can be segregated from any of the available datasets. Given the importance of key populations in understanding of the local context, this is considered a serious limitation in available routine data. Data on HIV risk exposure or mode of transmission require disease specialists and willingness of patient to participate is also not available at national and/or local level. Mobile clinic data is reported under the point where mobile is working from and is not segregated by service delivery point. This skews the picture when data is projected geospatially. Sexual risk data not part of routine data collected, secondary data available from surveys are included for this yet this is only available at District level. Figure 30 below reflects on the source of various levels of data for the profile. Data is presented at the level that it is available.

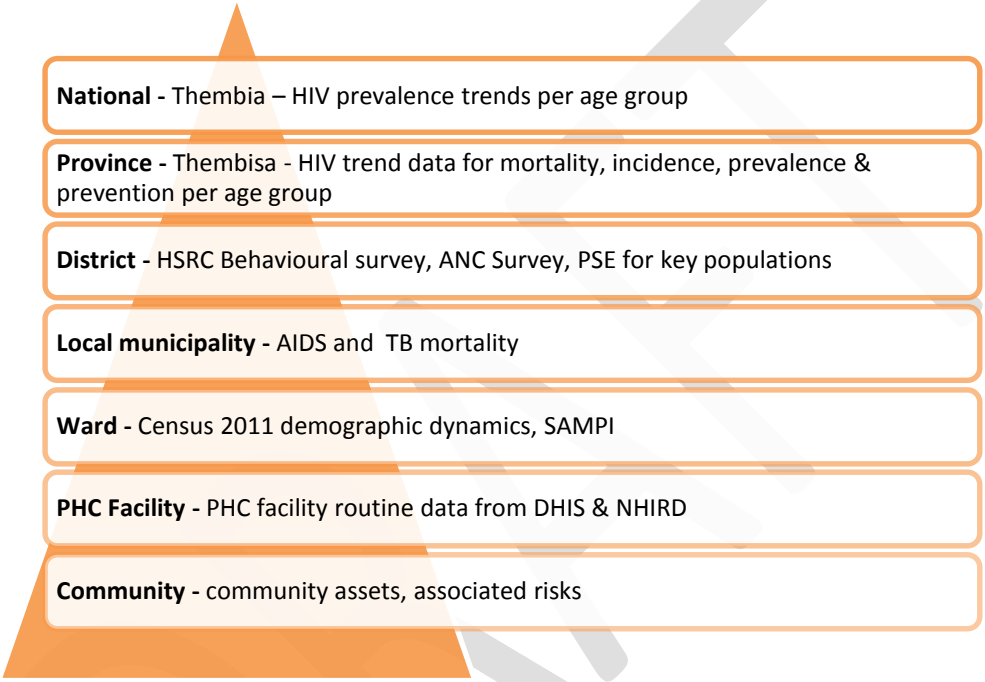

Figure 30: Data pyramid used for risk profiles

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).

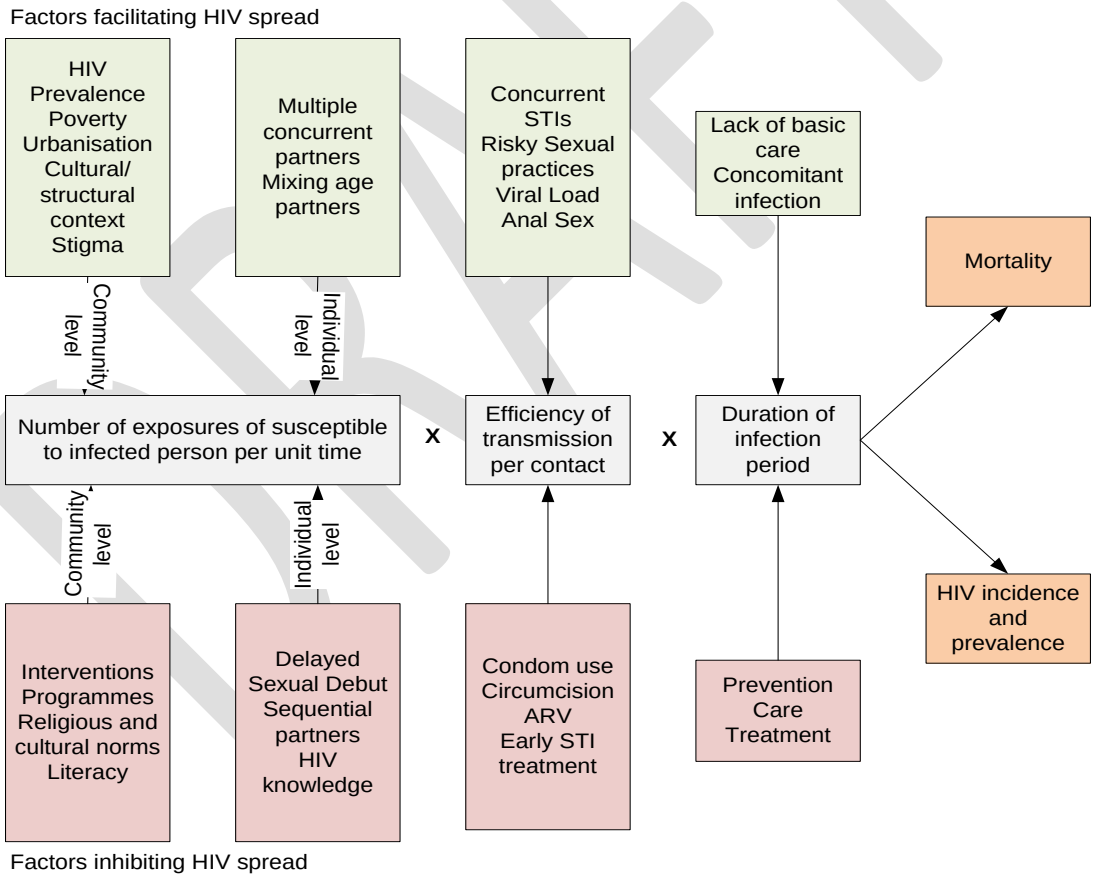

Figure 31: Factors influencing HIV associated risk and outcomes

Appendix B: Terms, Definitions and calculations

ANC client HIV 1st test positive rate (routine health indicator DHIS 2015)	Short Name - ANC HIV 1st test pos rate Numerator - Antenatal client HIV 1st test positive Denominator - Antenatal client HIV 1st test Indicator Type - % Definition - Antenatal clients tested HIV positive as proportion of antenatal clients HIV tested for the first time during current pregnancy
Antenatal client HIV re-test positive rate (routine health indicator DHIS 2015)	Short Name - ANC HIV re-test pos rate Numerator - Antenatal client HIV re-test positive Denominator - Antenatal client HIV re-test Indicator Type - % Definition - Antenatal clients re-tested positive for HIV as proportion of antenatal clients re-tested for HIV
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 also 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 of time (e.g., a year; known as period prevalence). Prevalence does not indicate how long a person has had a disease. It can provide an estimate of risk for a disease at a specific time.

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

School attendance</td><td>If no household member aged 15 or older has completed 5 years of schooling
If any school-aged child (aged 7 to 15) is out of school</td></tr>
<tr><td 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 32 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.

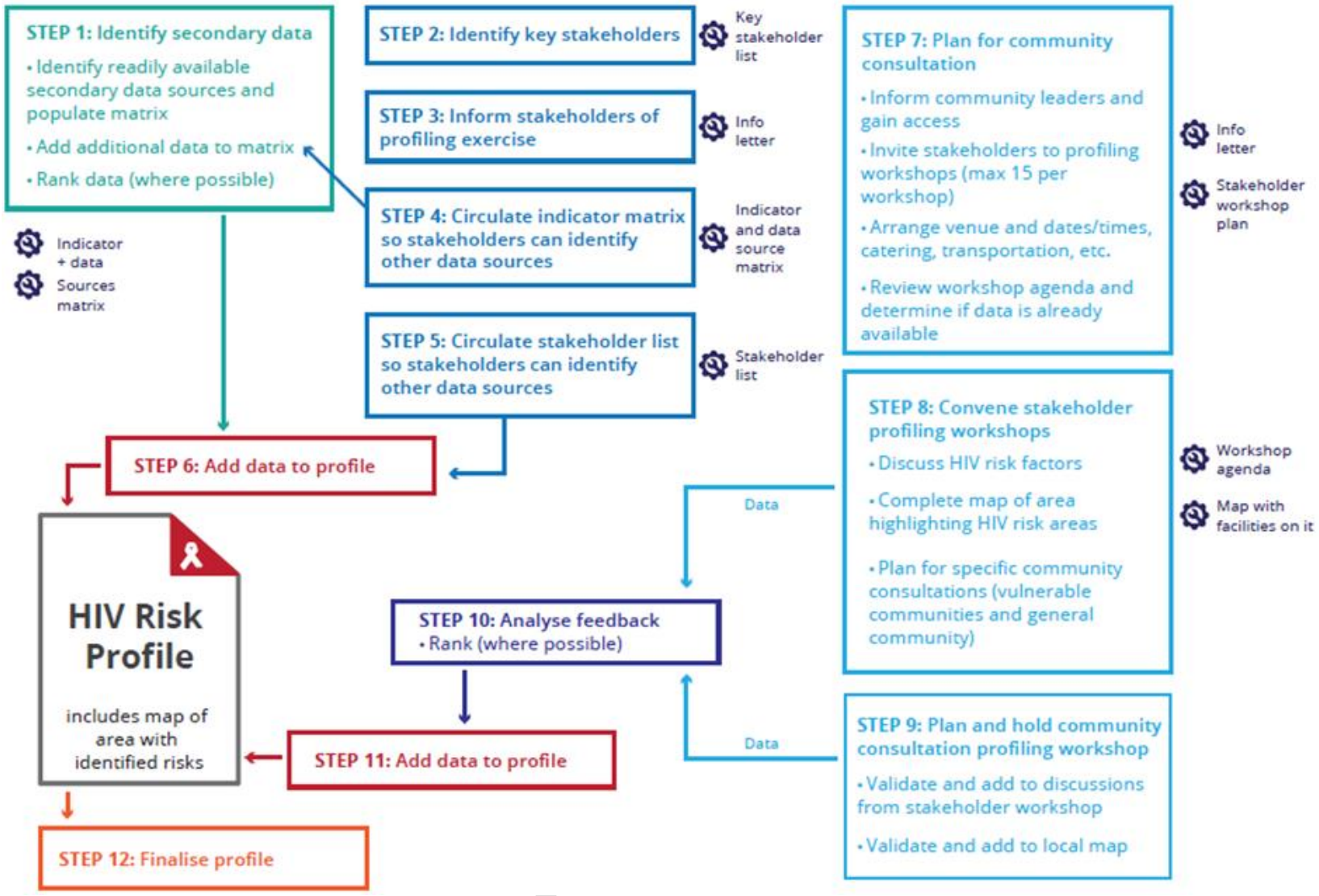

Figure 32: Steps for development of HIV associated risk profile