



## **Implementing a rural programme of Prevention of Mother-to-Child Transmission of HIV in Nkangala, South Africa: a baseline evaluation**

Draft Baseline report 1: Nkangala PMTCT programme implementation – facility assessment

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## **Acronyms and Abbreviations Used**

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
AZT	Azidothymidine
CBOs	Community-based organizations
CDC	United States Centers for Disease Control and Prevention
CHC	Community Health Centre
CD4	Cell Differentiation
CCT	Confidential counselling and testing
CHWs	Community health workers
CR	Case Registers
CT	Counselling and testing
DHIS	District Health Information System
EPI	Expanded Programme on Immunisation
ELISA	Enzyme-Linked ImmunoSorbent Assay
FBO	Faith Based Organisation
FHI	Family Health International
FP	Family planning
HIV	Human immunodeficiency virus
HSRC	Human Sciences Research Council of South Africa
IEC	Information, education and communication
IMCI	Integrated Management of Childhood Illnesses
LC	Lay counsellor
LSA	Local Service Area
MCH	Maternal and child health
MTCT	Mother-to-child transmission of HIV
NPO	Non-Profit organisation
NSI	National site indicator
NVP	Nevirapine
PCR	Polymerase chain reaction

PEP	Post-exposure prophylaxis
PEPFAR	(United States) President's Emergency Plan for AIDS Relief
PLWHA	Person living with HIV and AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
PN	Professional Nurse
PNC	Postnatal care
SAHA	Social Aspects of HIV/AIDS and Health Research Programme
SC	Site Coordinators
sdNVP	Single-dose Nevirapine
SGFs	Support Group Facilitators
SPSS	Statistical Package for Social Services
SS	Summary Sheets
StatsSA	Statistics South Africa
STI	Sexually transmitted infection
TBA	Traditional birth attendants
THP	Traditional Health Practitioner
VCT	Voluntary counselling and testing
UNAIDS	Joint United Nations Programme on AIDS
WHO	World Health Organisation



## **EXECUTIVE SUMMARY**

### **Introduction**

HIV related health problems have robbed about 2 million lives. About 1.9 million of the 2.7 million new infections that have documented occurred in Sub Saharan Africa (UNAIDS, 2008). Women and children bear a disproportionate share of the burden, and in many settings continue to experience high rates of new HIV infections and of HIV-related illness and death. In 2008 alone, an estimated 430 000 children were newly infected with HIV, with about 91% of these infections occurring in sub-Saharan Africa (UNAIDS, 2009). In high income countries, PMTCT interventions have led to new HIV infections in children becoming increasingly rare. Globally, renewed efforts are required urgently to increase access to comprehensive, integrated programmes to prevent HIV infection in infants and young children. These programmes also serve as a unique entry point for women to access the services they need to improve their own health and to prevent transmission of HIV to their infants (WHO, 2003). Several recent initiatives have presented an opportunity for countries to increase the coverage and effectiveness of PMTCT programmes.

### **Methodology**

All 80 PMTCT sites in Nkangala district in Mpumalanga were selected for assessment in the baseline assessment of the formal health sector. The district comprises six sub districts. Facility assessments included two components:

- a. Key informants (PMTCT site/clinic manager/maternity staff), one per PMTCT site, at each site were interviewed by an HSRC researcher after informed consent has been obtained with a semi-structured questionnaire and clinic registers on PMTCT indicators were checked. Names of patients in the clinic registers were blinded for the assessment by the researcher.
- b. Lay counselors (all lay counselors at PMTCT sites): Lay counselors were interviewed using structured questionnaires. The questionnaire comprised sections on demographic characteristics, HIV knowledge, training experience, service delivery, male circumcision, job attitudes and satisfaction, support and supervision, HIV testing experience, and general experiences as lay counselor.

Informed consent was obtained from participants before each interview was conducted.

### **Key findings**

Seventy six out of the 80 facilities were available for assessment. Findings reported are based on the 76 facilities that were assessed.

## **Facility assessments**

Staff shortage was reported in all six sub districts, available staff to render PMTCT service ranged from 67-98.7%. The overall majority of staff have had some training on some aspects of PMTCT. However, only two sub-districts indicated that they are always updated when there are any new developments on PMTCT programme. There were a number of training aspects identified and they varied within the district. Needs ranged from ARV adherence, all PMTCT aspects, infant nutrition. The need for refresher courses was clearly articulated by nurses.

Less than half of facilities had the national guideline on feeding infants of HIV positive mothers. Not a single facility had all the national guidelines/protocols/policies. The same was observed for provincial guidelines/protocols/policies. Eighty-eight percent of facilities had HIV-related posters on display boards. However, IEC materials were not available in local languages.

Facilities (92%) promoted family planning through talks and IEC materials and women encouraged to take VCT during family planning visits (92%). There are no support groups for HIV positive mothers. Ninety-two percent of facilities offered rapid HIV testing on site. Ninety-three percent of facilities had NVP, and 96% had AZT in stock. Most women bring their infants for PCR testing, but there is lack of follow up system for children born to HIV positive mothers. Shortage of infant formula and drugs was reported. Stigma is a main challenge and it affects collection of infant formula as women do not their status to be disclosed. Lack of trust in LCs knowing the HIV status of clients poses a challenge in service delivery. Some facilities did not have counselling rooms for LCs. LCs were trained on VCT (85%), PMTCT (68%) and couple counselling (54%).

Facilities had several registers for recording client data. Both under-, over-reporting and no recording of some data elements was observed in data recording.

## **Conclusion and recommendations**

Findings of the facility assessment reveal a need to strengthen PMTCT service delivery at Nkangala. Staff shortage compromises service delivery and the quality of service as the PNs are overwhelmed by heavy workload. The number of PNs needs to be increased as some facilities served a large population. Development of a follow up system for infants born to HIV mothers in crucial in tracking infants born to positive mothers. Male involvement should be prioritised and a strategy developed to encourage male involvement in PMTCT. Family planning should be promoted during ANC visits. Shortages of infant formula might lead to mixed feeding. Counselling on infant feeding should be strengthened. Poor data might contribute to under stocking of infant formula and drugs, human resource and planning of infrastructure. Training on accurate data recording needs to be initiated.

## **1. INTRODUCTION**

### **1.1 Context, background and literature review**

HIV is the leading cause of death and disease among women of child-bearing age in the world (15-49 years) (WHO, 2009). Sub Saharan Africa hosts two-thirds of all of the 33 million people living with HIV in the world (UNAIDS & WHO, 2007). In Sub Saharan Africa, women account for 60% of people living with HIV (UNAIDS, 2009). In this region, the prevalence of HIV among young women (15-24 years) is on average about three times higher than among men of the same age (UNAIDS, 2009). In South Africa, 15% of the persons aged 15-49 years were reportedly living with HIV (2008). HIV related health problems have robbed 2 million lives. About 1.9 million of the 2.7 million new infections occurred in Sub Saharan Africa (UNAIDS, 2008). Women and children bear a disproportionate share of the burden, and in many settings continue to experience high rates of new HIV infections and of HIV-related illness and death. In 2008 alone, an estimated 430 000 children were newly infected with HIV, with about 91% of these infections occurring in sub-Saharan Africa (UNAIDS, 2009).

Mother-to-child transmission (MTCT) can occur during pregnancy, labour and delivery or during breastfeeding (WHO, 2006) and in the absence of any intervention the risk of such transmission is 15–30% in non-breastfeeding populations, with breastfeeding by an infected mother increasing the risk to a total of 20–45% (de Cock et al., 2000). The risk of MTCT can be reduced to under 2% by a range of interventions that include antiretroviral (ARV) prophylaxis given to women during pregnancy and labour and to the infant in the first weeks of life, obstetrical interventions including elective caesarean delivery (prior to the onset of labour and rupture of membranes), and complete avoidance of breastfeeding (UNAIDS, 2006).

In high income countries, these interventions have led to new HIV infections in children becoming increasingly rare. In many resource-constrained settings, however, elective caesarean delivery is seldom feasible and it is often neither acceptable nor safe for mothers to refrain from breastfeeding. In these settings, the efforts to prevent HIV infection in infants initially focused on reducing MTCT around the time of labour and delivery, which accounts for one to two thirds of overall transmission, depending on whether the mother breastfeeds. Infant feeding patterns are a very important determinant of MTCT. For mothers using replacement feeding there is obviously no transmission through breastfeeding. De Cock et al. (2000) suggest breastfeeding through 6 months leads to about 10% extra transmission (from 20% to 30%), while breastfeeding through 18-24 months leads to about 17.5% extra transmission (from 20% to 37.5%), compared to no breastfeeding (de Cock et al). Current international guidelines in PMTCT programmes suggest that breastfeeding be as short as possible for around 6 months (UNAIDS, 2005). However, a recent study by Coovadia et al. (2007) to assess the HIV-1 transmission risks and survival associated with exclusive breastfeeding and other types of infant feeding, found that exclusive breastfeeding carries a significantly lower risk of HIV transmission than do all types of mixed breastfeeding (Coovadia et al., 2007). The estimated risk of postnatal transmission of HIV by 20–26 weeks of age in exclusively breastfed infants

who were negative at 6 weeks of age was 4.0% (Coovadia et al., 2007). This risk is lower than that in babies who receive other food or liquids in addition to breast milk before 6 months of age. Mixed feeding before or after 14 weeks nearly doubled transmission risk and the addition of solids increased the risk 11-fold (Coovadia et al., 2007).

The last few years have seen considerable efforts to introduce and expand PMTCT programmes. However, these interventions rely heavily on functioning maternal and child health services (FHI, 2004). Despite feasibility and cost-effectiveness of PMTCT, implementation and expansion in resource-constrained settings remains sub-optimal. By 2005, only 9% of HIV pregnant women were receiving ARV prophylaxis for HIV, with a striking variation in coverage between countries (UNAIDS, 2006).

In South Africa in 2006, an estimated 38 000 children acquired HIV infection from their mother around the time of birth, and an additional 26 000 children were infected with HIV through breastfeeding (DOH, 2007). Current national government policy for prevention of mother-to-child transmission (PMTCT) includes HIV testing during pregnancy, and the provision of Nevirapine to pregnant women during labour and to their infants within 48 hours of delivery (DOH, 2004). A 2002 evaluation of 18 PMTCT pilot sites in all provinces found an HIV prevalence of 30% among women tested, 85% of tested women received their results, but only 55% of HIV-positive women attending the pilot facilities received Nevirapine prophylaxis (Doherty et al. 2005).

By March 2005, the South African government PMTCT program had been implemented in 87% of public health facilities but a large portion of pregnant women still do not receive an HIV test during pregnancy, and less than 50% of pregnant women known to be HIV-positive receive Nevirapine at the time of delivery (DOH, 2006). Implementation of the PMTCT program remains a challenge, especially in poor, rural areas. The national Department of Health indicated that human resource issues remain a key challenge, together with sustainable drug procurement; transport and inter-departmental collaboration (DOH, 2004). In many areas, record-keeping systems are inadequate to enable the follow-up of HIV-infected pregnant women, serving as an additional barrier to PMTCT program implementation (Mate et al., 2009).

In the rural Eastern Cape Province, several studies by the Human Sciences Research Council, have investigated barriers to utilization of PMTCT and mechanisms for improving access (Peltzer et al., 2005, Peltzer et al., 2007, Skinner et al., 2005). These studies have shown that the socio-economic context presents a formidable barrier to the provision of PMTCT services, and that poor roads, an under-developed transport system and poor telecommunications present significant obstacles to access, even if free health care services are made available. This is exacerbated by understaffed and under-developed health care facilities. Several supportive interventions have been introduced, which include ready made Nevirapine packs (this enables the pregnant women to administer the adult and infant Nevirapine dosages themselves), staff training, traditional birth attendant evaluation, training and supportive activities and some infrastructural interventions.

Globally, renewed efforts are required urgently to increase access to comprehensive, integrated programmes to prevent HIV infection in infants and young children. These programmes also serve as a unique entry point for women to access the services they need to improve their own health and to prevent transmission of HIV to their infants (WHO, 2003). Several recent initiatives have presented an opportunity for countries to increase the coverage and effectiveness of PMTCT programmes. These include: the Group of Eight Nations' July 2005 declaration of commitment on HIV/AIDS; re-affirmation by WHO Member States in September 2005 to implement all goals in the 2001 UNGASS Declaration of Commitment; and the Abuja declaration, where a Call to Action Towards an HIV-free and AIDS-free Generation was issued by representatives of governments, multilateral agencies, development partners, research institutions, civil society and people living with HIV (UNGASS, 2001).

## 1.2 The study setting

Nkangala district has a population of 1.121 839 people (2008/9). The district has a HIV prevalence rate of 31.9%. It was estimated that 90% of the population was dependent on the state for the provision of all their health services (Department of Health, 2008). The primary health care utilisation rate of 2.2 visits per person per year has been constant from 2008 to 2009. The nurse clinic workload is currently 19.6 patients per day. Caesarean section rate in district hospitals is 77.6% at Nkangala. HIV prevalence among ANC clients is 25.4. Stillbirth rate is 27. The delivery rate in health facilities fluctuated around 77.6%. The caesarean section rate is 9% which is below the national average of 15.6% (Health Systems Trust, 2008/9).

**Figure 1: South African map showing location of the Mpumalanga Province (in blue study district: Nkangala, and in gray, Nkangala,)**



### **1.2.1 HIV prevalence in Mpumalanga**

Mpumalanga is ranked the second highest in the prevalence of AIDS in South Africa (HSRC Report 2008). The antenatal HIV prevalence in Mpumalanga province was estimated to be 34.6% in 2007/8 and 35.5% HIV prevalence observed in 2008/9. Nkangala district has an antenatal HIV prevalence (25.4%) in 2008/9 (Health Systems Trust, 2009).

### **1.3 Rationale for the intervention**

The HSRC proposed to work with the Mpumalanga Department of Health to provide technical support and strengthen PMTCT service implementation at 80 PMTCT sites in six sub districts of Nkangala at Mpumalanga. All the 6 sub districts at Nkangala have been covered in the study.

The HSRC, together with its CDC partners, proposed to assist the Government of Mpumalanga province to maximize the knowledge gained so far in implementation of previous interventions programmes to increase the participation of women in the PMTCT programme and to increase its effectiveness. The study will complement the existing national programme on the prevention of mother-to-child transmission of HIV, and heed the international call to make women and children a priority in the fight against the epidemic.

In partnership with the Mpumalanga Department of Health, the purpose of the intervention is to provide technical support and strengthen PMTCT service implementation at all sites in Emalahleni, Emakhazeni, Dr JS Moroka, Delmas, Steve Tshwete and Thembisile sub districts. All PMTCT sites were selected for assessment.

## **2. PMTCT GOALS AND OBJECTIVES**

The goal of the PMTCT component is to strengthen programmes to prevent HIV transmission from mother to child in Nkangala District in Mpumalanga.

The objectives were to:

- i) Expand the PMTCT programme support to a total of 80 existing PMTCT sites at Nkangala.
- ii) Train community workers (including peer support) in PMTCT, in accordance with South African national standards and guidelines;
- iii) Increase the number of pregnant women who receive confidential HIV counselling and testing (CT) and who receive their results;
- iv) Increase the number of pregnant women provided with a complete course of antiretroviral therapy in a PMTCT setting;
- v) Monitor the number of children in Nkangala district in Mpumalanga who become infected with HIV during the first year of life;

- vi) Increase the number of eligible women of childbearing age enrolled in wellness and/or treatment programmes;
- vii) Increase the number of babies born to HIV-positive women who are tested for HIV by PCR at 6 weeks to 6 months;
- viii) Increase the number of babies born to HIV-positive women who are tested for HIV antibodies at 12 to 24 months;
- ix) Increase the number of infants born to HIV-positive women receiving infant formula;
- x) Increase the number of infants born to HIV-positive women exclusively breast fed.

### **3. PMTCT PROGRAMME OUTPUTS**

- i) Number of health workers trained in the provision of PMTCT services according to South African guidelines and standards.
- ii) Number of pregnant women who receive CT for PMTCT and who receive their HIV test result;
- iii) Number of pregnant women who receive ARV prophylaxis in a PMTCT setting;
- iv) Number of infants tested for HIV by PCR at 6 weeks to 6 months;
- v) Number of pregnant women referred to a wellness and/or an ART programme;

### **4. METHODS**

This approach to PMTCT programme strengthening had the following components:

- i) A baseline rapid assessment in the formal health sector;
- ii) Interventions to strengthen PMTCT programme implementation
- iii) Monitoring and evaluation support.

Each of these is briefly described below.

#### **4.1 A baseline programme assessment in the formal health sector**

The assessment was conducted in February to April 2010. Strengthening PMTCT programme implementation requires understanding of the quality and scope of existing services, as well as the behavioural and socio-cultural context of implementation. The purpose of the rapid baseline assessment is to gather in-depth information on the current situation and dynamics regarding PMTCT implementation in the formal health sector, and to inform the planned/proposed interventions.

##### **A) Interviews with PMTCT clinic managers and record review**

*Sampling and procedures*

All 80 PMTCT sites in Nkangala district in Mpumalanga were selected for assessment in the baseline assessment of the formal health sector. Assessments included two components:

Key informants (PMTCT site/clinic manager/maternity staff), one per PMTCT site, and all lay counsellors at each site were interviewed by an HSRC researcher after informed consent has been obtained with a semi-structured questionnaire and clinic registers on PMTCT indicators were checked. Names of patients in the clinic registers were blinded for the assessment by the researcher.

### *Measures*

a) A semi-structured questionnaire for key informants (PMTCT site/clinic manager/maternity staff) focussed on:

- Human resources
- Trainings done
- Protocols/Policies/Guidelines
- Information, Education and Communication (IEC) Activities
- HIV support groups
- Counselling and Testing
- Lay counsellors, their living conditions, working conditions, training and emotional experiences
- Infant follow-up of PMTCT programme
- PMTCT site indicators
- Views about running PMTCT
- Benefits of implementing PMTCT
- Challenges of implementing PMTCT with clients
- Challenges of implementing PMTCT with staff, infrastructure and current practice
- What could improve the running of the PMTCT programme

b) A PMTCT indicator list was used to check clinic registers for all PMTCT indicators for a period of six months prior to the assessment by an HSRC researcher. Prior to the clinic visits, appointments were made with the district coordinators, whom in turn liaised with the HAST coordinators for the respective sub-districts about the HSRC visit to the facilities. The HAST coordinators informed the sisters in charge of the various clinics about the PMTCT baseline assessment. About five HSRC researchers conducted the interviews with the sisters in charge in the above 76 facilities<sup>1</sup>. Confidentiality issues were explained and the sister in charge was requested to give informed consent before the interview proceeded.

### **B) Survey of lay counsellors**

Data were collected through structured questionnaires on lay counselors working at PMTCT designated sites in Nkangala District. The lay counselor assessment tool consisted of sections on demographic characteristics, HIV knowledge, training experience, service delivery, male circumcision, job attitudes and satisfaction, support

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<sup>1</sup> Four facilities were not available



and supervision, HIV testing experience, and general experiences as lay counselor. Lay counselors were interviewed by experienced researchers from HSRC on related questions. Prior to the interview, the study was explained where informed consent was sought and an information sheet was given to the interviewee.

**C) Survey of pregnant women (to be reported in second report)**

**D) Survey of HIV positive mothers (to be reported in second report)**

**5. ETHICAL CONSIDERATIONS**

Informed consent was obtained from all participants. The study was approved by the HSRC ethics committee and the Mpumalanga Department of Health.

**SECTION 1**

**PART 1: FACILITY ASSESSMENTS**

One of the aims of this study was to determine how the PMTCT programmes in Nkangala district can be strengthened. As a means to achieve this aim the quality and the scope of the services currently existing was examined.\

**FACILITIES ASSESSED**

Table 1 provides a list of clinics that were assessed at each sub district. Nkangala district comprises six sub-districts. Facilities where the PN in charge was not available/not interested could not be assessed.

**Table 1: List of assessed facilities in Nkangala District – per sub district**

<b>Dr JS Moroka sub-district</b>	<b>Emalahleni sub-district</b>	<b>Steve Tshwete sub-district</b>	<b>Thembisile sub-district</b>	<b>Emakhazeni sub-district</b>	<b>Delmas sub-district</b>
Troya Clinic	Klipfontein clinic	Middelburg Hospital	Mathesenkop clinic	Belfast clinic	Bernice Samuel Hospital
Leeufontein Clinic	Ogies clinic	Simunye clinic	Tweefontein D	HA Groove	Botleng Clinic
Allemansdrift Clinic	Hlalanikahle clinic	Middleburg Civic clinic	Tweefontein M	Siyathuthuka clinic	
Loding Clinic	Thubelihle clinic	Hendrina	Goedereede clinic	Machadodorp	
Moripe Clinic	Beatty clinic	Eastdene clinic	Verena CHC	Emthonjeni clinic	
Wolwerkraal Clinic	Lynnville clinic	Pullenshope clinic	Vriesgewaagte clinic	Waterval Boven clinic	
Pankop Clinic	Siphosensim	Sakhelelwe	Tweefontein H	Waterval Boven	

	bi CHC	clinic		Hospital	
Witlaagte Clinic	Phola clinic	Nasaret clinic	Gembokspruit		
Phake Clinic	Witbank Hospital	Kwa-Zamokuhle	Kwagga A clinic		
Allemansdrift B Clinic	Impungwe hospital	Parkhome clinic	Vlaklaagte II		
Rhenosterkop Clinic	Ackerville	Wonderfontein clinic	Kameelpoortnek clinic		
Vaalbank Clinic			Empilweni clinic		
Nokaneng Clinic			Tweffontein A		
Peiterskraal Clinic			Kwagga CHC		
Senotlelo Clinic			Tweffontein C		
Waterval CHC			Moloto clinic		
Klipplaatdrift Clinic					
Vaalschofontein Clinic					
Lefiso Clinic					
Ga-Maria Clinic					
Seabe Clinic					
Lefiswane Clinic					
Mmamethake CHC,					
Marapyane CHC,					
Siyabuswa CHC,					
Mmamethake hospital					

## 1. STAFFING

### 1.1 STAFF COMPOSITION AT FACILITIES

Nkangala health district consists of 80 PMTCT sites, of which 76 were assessed. Four facilities could not be assessed due to unavailability of personnel at the time of assessment. The number of PNs at a facility depends on the size of the catchment area. There are no specific PNs assigned to PMTCT. Professional nurses were the majority category of personnel offering PMTCT, and the health promoters being the minority. Regarding the sessions offered by medical officers, the majority (62%) of the facilities were able to hold at least one medical officer session per week, while others (18.4%)

were unable to hold these sessions. The overall number of staff available in Nkangala district is presented on Table 2.

**Table 2: Overall number of personnel available at Nkangala district PMTCT sites (n=76)**

Category	Personnel		Total	
	N	N	N	%
Medical officers sessions/ week	62	76	76	81.6
Prof nurses	75	76	76	98.7
Enrolled nurses	59	76	76	77.6
Registered general assistants	72	76	76	94.7
Pharmacy assistants	51	76	76	67.1
Lay counsellors	73	76	76	96.1
Mentor mothers	55	76	76	72.4
Home based carers	66	76	76	86.8
DOT supporters	59	76	76	77.6
Health promoters	51	76	76	67.1

Findings of facility assessments revealed that all the sub-districts assessed had a total number of 75 PNs, 59 ENs and 72 RGAs. Although other sub-districts had more facilities than the others, there was a general staff shortage in all the sub-districts. The number of available personnel per sub-district is shown in Table 3 below. The number of lay counsellors and health promoters was less than the number of facilities.

**Table 3: number of available personnel at Nkangala PMTCT sites per sub district**

	Thembisile N=15	Dr J. S Moroka N = 29	Emalahlen N = 11	Delmas N= 2	Steve Tshwete N =12	Emakhazeni N= 7	Total N=76
Number of medical officers	11	20	10	2	12	7	62
Number of professional nurses	15	28	11	2	12	7	75
Number of enrolled nurse	13	16	11	1	11	7	59
Number of enrolled general assistance	15	27	11	1	11	7	72
Number of pharmacy assistants	10	12	10	1	11	7	51
Number of lay consellers	15	28	11	1	11	7	73
Number of mentor mothers	14	13	10	1	11	6	55

Number of home based carers	14	25	11	1	10	5	66
Number of DOT supporters	13	24	7	1	9	5	59
Number of health promoters	9	12	10	1	12	7	51

## 1.2. STAFF TRAINING OF PNs

The overall majority of PNs has had some training on PMTCT aspects. However, only two sub-districts indicated that they are always updated when there are new developments on PMTC programme. There were a number of training aspects identified as listed in the Table 4 below and the training aspects varied from sub-district to sub-district with Dr JS Moroka identifying more training needs than any other sub-districts. However there was ambivalence pertaining to training needs amongst participants of the same district. Thus, causing difficulty in determining specific training needs or needs that needed to be prioritized in each sub-district or individual facilities. Some felt that they needed training while some indicating that training was adequate. Data is presented in the Table 4 below.

**Table 4: PMTCT training needs identified by PNs (no. of facilities per sub district)**

PMTCT training aspects required	No. of facilities per subdistrict						Total
	Thembisile	Dr JS Moroka	Emalahleni	Delmas	Steve Tshwete	Emakhazeni	
Side effects of drugs and refresher on using testing kit.	0	0	3	0	1	0	4
Adherence and refresher course	4	4	5	1	1	0	15
Medication and management as a whole	0	1	0	0	0	0	1
AZT training and side effects of HAART.	0	0	0	0	0	1	1
PCR testing ( “we just reading manuals, we need proper training”)	0	3	0	0	0	1	4
Referring a person to ART centre and Medical centre.	0	0	0	0	1	0	1
Dual therapy	0	3	0	0	0	2	5
All aspects of PMTCT	4	12	4	1	1	2	24
BBA	0	1	0	0	0	0	1
Guidelines and policies because they change now and again.	0	1	2	0	0	1	4
Infant nutrition	3	0	2	0	0	0	5
VCT for nurses (“because it’s a problem when we counsel without them”).	0	3	0	0	1	0	4
Couple counselling	1	0	0	0	0	0	1

## 2. AVAILABILITY OF HIV/PMTCT GUIDELINES/PROTOCOLS/POLICIES

### 2.1 Available national guidelines

Researchers verified the national as well as provincial PMTCT and related guidelines that were available at the facilities. The lists of national provincial guidelines found are presented on the Table 5 below, and the lists available guidelines per facility are available per request. A number of facilities did not have most of the guidelines and the trend was common in all sub-districts. Thirty-nine facilities had the national guidelines on prevention of mother to child transmission and management of HIV+ pregnant women. While Dr JS Moroka is the biggest sub- district in the Nkangala region, the majority of its institutions do not have the national or provincial PMTCT guidelines. The summary of the available national and provincial guidelines available per sub district is summarized in the Table 5 below.

**Table 5: Availability of national protocols/policies/guidelines at facilities**

<b>National Guidelines, records available</b>	<b>Thembisile N=15</b>	<b>Dr J. S Moroka N = 29</b>	<b>Emalahleni N = 11</b>	<b>Delmas N= 2</b>	<b>Steve Tshwete N =12</b>	<b>Emakhaze ni N=7</b>	<b>Total N=76</b>
Feeding of Infants of HIV+ mothers	12	5	3	1	8	2	31
Management of occupational exposure to HIV	9	5	4	1	8	5	32
Managing HIV in children	12	4	6	1	9	4	36
Prevention of Rx of opportunistic and HIV related diseases in adults	9	3	3	1	10	3	29
Prevention of mother to child transmission and management of HIV+ pregnant women	13	7	5	1	11	2	39
Rapid HIV testing	10	2	3	1	7	3	26
Testing for HIV	11	4	4	1	8	3	31
TB and HIV	13	3	2	1	9	2	30
Home based care and community based care	6	0	2	0	4	3	15
Contraception guidelines	11	3	6	0	8	3	31
Do professional nurses discuss these guidelines together as a team	11	8	2	1	7	4	33
Dual therapy	8	5	3	1	7	2	26

## 2.2 Provincial Guidelines/protocols/policies

About half of facilities did not have updated protocols/guidelines for PMTCT. Very few facilities had the PCR testing protocol (n=15). Generally, the availability of provincial guidelines at facilities was poor (Table 6).

**Table 6: Availability of Provincial Guidelines/protocols/policies according to sub-districts**

<b>Provincial Guidelines, records available</b>	<b>Thembisile N=15</b>	<b>Dr J. S Moroka N = 29</b>	<b>Emalaheni N = 11</b>	<b>Delmas N= 2</b>	<b>Steve Tshwete N =12</b>	<b>Emakhazeni N= 7</b>	<b>Total N=76</b>
Updated protocol/guidelines for PMTCT	13	6	5	0	11	2	37
Protocol for needle stick injury	8	3	1	0	9	1	22
PEP protocol for rape victims	10	2	3	0	9	1	25
Guidelines for management of STIs	14	2	4	0	10	1	31
Updated protocol/guidelines for VCT	11	2	1	0	8	2	24
PCR testing protocol	6	1	1	0	6	1	15
Scope of practice for lay counsellors	6	2	2	0	7	4	21
Quality control guidelines	9	2	1	0	5	1	18
Are the documents accessible to all staff members at the facility	13	6	6	1	9	7	42
Are there flow diagrams of protocols/guidelines/policies in consulting rooms	12	5	7	1	7	6	38
PMTCT registers exist within maternity (hospital)	1	3	4	1	1	2	12

## 2.3 IEC MATERIALS

A high percentage (88%) of the clinics had HIV related posters on their display boards (Table 7). With regard to pamphlets and leaflets, some clinics had them. The main challenge was that most of the information leaflets and pamphlets were not available in local languages but only in English.

**Table 7: Available IEC material at facilities**

Available IEC material	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalahleni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
HIV related posters on display boards	13	24	1	11	11	7	67
Pamphlets and leaflets available	11	22	1	10	10	7	61
Lay counsellors give health education in the waiting room	13	25	1	11	9	6	65
Facility hosts HIV-related health days	11	19	1	9	7	2	49

## 3. SERVICES OFFERED

### 3.1 FAMILY PLANNING

Table 8 reflects the family planning practices that clinics have in general in terms of integrating family planning and VCT. What Table 8 shows is that 90% of the clinics in all the sub-districts promote family planning by talks and IEC and also women are encouraged to undertake VCT when coming for family planning.

**Table 8: Family Planning practices**

Family Planning practices	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalahleni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
Promotion of contraceptive: talks, posters, videos	14	26	1	11	11	7	70
Promotion of VCT in family planning clinic	14	27	2	9	11	7	70

Promotion of family planning during ANC and PNC	14	25	2	9	9	7	66
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### 3.2 SUPPORT GROUPS

Support groups specific to HIV positive pregnant women are not available in almost all the clinics in all the districts. In others they had started the groups but they are not active. What is mainly happening is that they have mixed groups where everybody who is HIV positive belongs and even those are few. Table 9 shows that only 17% of the clinics in all the sub-districts had support groups.

**Table 9: Availability of support groups**

Availability of support groups	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalahleni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
Support groups for HIV+ mothers in your clinic area	3	3	1	5	0	1	13

### 3.3 COUNSELLING AND TESTING

Table 10 reflects HIV counselling and testing services at PMTCT sites. Seventy facilities offer rapid HIV testing and 68 are able to store test kits in safe places. The consent forms are also filled well. Fifty-six facilities reported having patients who refuse testing, with reasons ranging from, not ready, afraid to know their status etc. The number of PNs that are available to do HIV testing range from 1-4. Even in those instances lay counsellors do pre- test counselling, Professional nurses comes to prick the patient and then the lay counsellor do post-test counselling.

**Table 10: Counselling & Testing**

Counselling and Testing	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalahleni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
Is rapid HIV testing available on site	14	26	2	11	12	5	70



Are HIV test kits stored in a safe place	13	24	2	11	11	7	68
Are consent forms filed and available	14	24	2	11	11	7	69
Do patients refuse testing, what are reasons for refusal	8	24	2	5	11	6	56
PN available to do HIV testing							
One	5	10		1	0	2	16
Two	5	6		3	5	3	22
Three	0	1		2	3	0	6
Four	1	0		0	0	0	1

### 3.4 ANTENATAL CARE

Generally all clinics use two rapid tests to confirm HIV results and if they have a discordant result they take blood for ELISA test to confirm the results (Table 11). If the results are positive they take blood for CD4 count the same day and HIV negative women are retested at 32 weeks of pregnancy. Staff training to do rapid HIV test is lacking in some clinics. Nothing much is being done with regards to involving male partners in PMTCT, what nurses do is just to advice pregnant women to invite their partners when they come for their next ANC visit and this strategy has proved unsuccessful. With regards to invitation letters, most clinics were reluctant to write, only 11% of the clinics write invitation letters to male partners. Reasons cited include compromising the confidentiality of the women if they have not disclosed their status to their partners.

**Table 11: Antenatal care**

Antenatal care	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalaheni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
How is confirmatory test done to positive women							
Are condoms give to pregnant women	14	19	2	10	10	7	62
What is done if results are discordant							
Are HIV testing codes recorded on ANC cards	13	26	1	11	11	7	69
Are HIV positive women	14	22	2	11	11	7	

screened for TB							67
Is repeat HIV test for HIV negative women done at around 34 weeks to detect seroconversion	14	25	1	10	12	5	67
Is CD4 count done same day HIV positive status is confirmed	13	25	1	11	11	7	68
Are all staff trained to do rapid HIV test	5	14	1	8	9	3	40
What do you do to involve male partners to participate in PMTCT							
Are women provided with letter of invitation encouraging partners to get HIV tested	0	3	1	1	2	2	9

#### 4.0 SERVICES RENDERED BY THE CLINICS

##### 4.1 NATIONAL SITE INDICATORS

Table 12 below presents the services rendered by the clinics in the Nkangala district, and these are presented by district. Among all the sub-districts assessed, three clinics (one in Thembisile and two at Dr JS Moroka), does not offer the services presented in this table. Further more, on the variable, ‘at least two trained PMTCT professional nurses per facility,’ one clinic within the Thembisile municipality and three within Dr JS Moroka does not have trained PMTCT professional nurses. Of the 76 clinics which were assessed, Thembisile municipality has 14 clinics which have professional nurses trained on PMTCT while Dr. JS Moroka has 26. Similar gap is also identified on the number of trained professional nurses for both of these municipalities (Dr JS Moroka and Thembisile). Overall as indicated in the table, there has been a good coverage of the services rendered at the clinics.

**Table 12: National site indicators**

	Thembisile N=15	Dr J. S Moroka	Emalaheni N = 11	Delmas N= 2	Steve Tshwete N =12	Emakhazeni N= 7	Total N=76
On-site counseling for HIV testing	14	27	11	2	12	7	73
On -site HIV testing	14	27	11	2	12	7	73
Private room in which VCT can be conducted	14	27	11	2	12	7	73
Daily availability of VCT	14	27	11	2	12	7	73

Referral to ARV site	14	27	11	2	12	7	73
CD4 count testing	14	27	11	2	12	7	73
ARV prophylaxis ( AZT) given to mother at 28 weeks	14	27	11	2	12	7	73
ARV prophylaxis ( Nevirapine) given to mother at 28 weeks	14	27	11	2	12	7	73
ARV prophylaxis given to the baby within 72 hours of birth	14	27	11	2	12	7	73
Antenatal counseling on infant feeding offered	14	27	11	2	12	7	73
Postnatal counseling and support for infant feeding	14	27	11	2	12	7	73
Adequate supply of free infant formula	14	27	11	2	12	7	73
PCR testing for infants for HIV infection	14	27	11	2	12	7	73
At least two trained PMTCT PN's per facility	14	26	11	2	12	7	72
At least two trained PN's per facility	14	26	11	2	12	7	72
A support group specific to HIV-positive mothers and pregnant women	14	27	11	2	12	7	73

#### 4.2 FOLLOW-UP OF INFANTS BORN TO HIV-POSITIVE MOTHERS

Of the 76 clinics assessed, only 31 clinics responded to the question, 'what was done to ensure the follow-up of infants born to HIV-positive women? (Table13). Of the 31 clinics, Thembisile municipality, Steve Tshwete and Dr JS Moroka remained the district with the least response to this question. However, large number of clinics (73) responded positively to other questions which includes; HIV-Positive mothers and counselling about infant feeding options.

**Table 13: Infant follow-up**

	<b>Thembisile N=15</b>	<b>Dr J. S Moroka N = 29</b>	<b>Emalahlen N = 11</b>	<b>Delmas N= 2</b>	<b>Steve Tshwete N =12</b>	<b>Emakhazeni N= 7</b>	<b>Total N=76</b>
Is there a method in place to ensure the follow-up of infants born to HIV-positive women?	14	26	9	2	11	7	69
How is it done?	2	7	11	1	3	7	31
Is PCR available on site?	14	27	11	2	12	6	72
Are PCR test kits in stock?	14	22	11	2	12	6	67

Are HIV-Positive mothers given counselling about infant feeding options?	14	27	11	2	12	7	73
Is infant formula provided to HIV positive mothers?	14	27	11	2	12	7	73
Is infant formula in stock?	14	27	11	2	12	7	73
Have there been any shortages of infant formula in the past 3 months?	14	27	11	2	11	7	72
How long do you provide infant formula to a child?	6	22	9	2	3	4	46
Do exposed infants follow registers exist	14	27	11	2	12	7	73
What infant feeding recommendations are provided to HIV positive women?							
(A) Exclusive breast feeding	11	22	10	2	12	7	64
(B) Rapid weaning with counselling	10	14	10	2	12	7	55
(c) Formula Feeding with AFASS	14	24	10	2	12	7	69
(d) Other, Specify	12	13	8	2	12	7	54

### 4.3 ARV DRUGS FOR PMTCT

Table 14 below, suggest that almost all the clinics had Nevirapine (71) and AZT ( 73) in stock during the data collection process of this study with the least ( 63) clinics which offered service testing and counselling ( and ARV prophylaxis if positive) to women of unknown status who gave birth at the facility. This high response of the clinics towards this indicator is an indication of good conduct and compliance with the national PMTCT guidelines.

**Table 14: ARV drug availability**

	<b>Thembisile N=15</b>	<b>Dr J. S Moroka N = 29</b>	<b>Emalahlen N = 11</b>	<b>Delmas N= 2</b>	<b>Steve Tshwete N =12</b>	<b>Emakhazeni N= 7</b>	<b>Total N=76</b>
Are there Nevirapine tablets in stock?	13	27	11	2	11	7	71
Are there AZT tablets in stock?	14	27	11	2	12	7	73
Are Cotrimoxazole tablets or syrup in stock?	14	27	11	2	12	7	73
Is the drug register in use and in	14	27	11	2	12	7	73

order (Monthly check)?							
Have there been any shortages of ARV drugs in the past 3 months?	14	27	11	2	12	7	73
Is point of service testing and counselling (and ARV prophylaxis if positive) offered to women of unknown status giving birth at the facility?	11	25	11	2	7	7	63

#### 4.4 LAY COUNSELLORS

##### COUNSELLING PRACTICES

In general, clinics had at least 2 lay counsellors with only a few exceptions (Table 15). Some clinics had a counselling room that is conducive for HIV testing. Some however, did not have rooms assigned for VCT as they sometimes used doctor's room, treatment room, and consulting rooms that becomes vacant. This compromised privacy and confidentiality of VCT services. For almost half of the clinics, there was no work schedule for lay counsellors in spite of the fact that they worked everyday. It was found that some clinics did not have the required number of lay counsellors – two per facility and had had no counselling rooms.

**Table 15: Lay counselling practices**

Lay counselling practices	Thembisile N=15	Dr. JS Moroka N=29	Delmas N=2	Emalahleni N=11	Steve Tshewete N=12	Emakhazeni N=7	Total N=76
Clinics with 2 or more lay counsellors	11	7	0	5	8	3	34
Clinics have a counselling room	9	22	2	11	9	4	57
Rooms private and with conducive layout to HIV testing	11	19	2	11	9	5	57
Work schedule for lay counsellors	6	9	2	8	7	5	37

#### 5. PMTCT MANAGERS' VIEWS ON PMTCT

An in-depth interview was conducted with 75 clinic managers' concerning challenges they encounter with clients and staff, challenges with the health facility, benefits of implementing the prevention of the mother to child transmission programme, noteworthy successes as well as steps that could be taken to improve the services of PMTCT.

Table 16 below summarises the challenges that are experienced by PMTCT managers. These challenges have been classified into three categories, viz. the health policy, health services and clients.

**Table 16: Summary of the challenges experienced in the implementation of PMTC**

<b>a) Health policy</b>	<b>b) Health services</b>	<b>c) Clients</b>
Problems with Monitoring and evaluation	Shortage of staff	Unwillingness to test
Lack of follow-up	Shortage of HIV test kits	Late ANC bookings
Problems with guidelines	Untrained staff	Late PCR tests booking
Stigma	Infrastructure problems	Denial
	Shortage of milk	Lack of disclosure

## **5.1 HEALTH POLICY**

### **Problems with Monitoring and Evaluation**

Nurses reported that women forget to take their AZT and also fail to collect medication when they are supposed to. The percentage of women who forget to take or collect the AZT once it is finished is low. There is also a challenge with women who opt to deliver babies at home and such infants could not be followed up.

### **Lack of follow up**

While many women bring their infants for PCR testing at 6 weeks, follow up test at 18 months to determine whether the infants are still HIV negative is still a problem. Most women fail to bring their infants when anti-body testing is due, and reason cited was that there is no system in place to follow it up.

### **Problems with guidelines**

Almost all the clinics do not have completed PMTCT guidelines and protocols. They all need to have completed guidelines.

### **Stigma**

Most clinic managers have expressed that one of the major challenge with clients is stigma. Stigma has an adverse effect on the collection of milk for infants by positive mothers. Women refuse to test at antenatal visits for fear of stigma. Babies are brought for late PCR testing and most women are mix feeding because of fear of what people are thinking. The clients also have a problem with the lay counsellors as they are from the same community. This is one of the reasons why they are not willing to test. They are afraid that if they test positive, the lay counsellor may spread the word in the community.

They are also afraid to disclose their status to their partners, families or friends because of fear of being stigmatised. Many people know about HIV/AIDS but are ignorant about what HIV/AIDS really is about, and how one can be infected. Some mothers are in denial of their HIV status. After receiving their HIV test results they still insist that they are not HIV positive.

## **5.2 HEALTH SERVICES**

### **Shortage of staff**

Most clinics indicated that they do not have enough staff while some clinics only had one Professional Nurse.

### **Shortage of HIV test kits**

Few clinics sometimes run short of HIV test kits. Some of the challenge with the test kits is lack of training before they are distributed. When new test kits are delivered, training should also be done on the usage of the test kit.

### **Untrained staff**

Many clinics have reported that most of their staff members have not been trained on some of the PMTCT aspects and they would like to be trained. There are clinics that have only one staff member trained on PMTCT and these are clinics that have one Professional Nurse. This makes it difficult to implement the services fully. Some clinics reported a need for refresher courses on PMTCT because they are unable to implement PMTCT.

### **Infrastructure problems**

Most clinics do not have enough space especially counselling rooms, and lay counsellors have to share the available space. This creates problems with privacy as lay counsellors have to give each other a chance to counsel clients. The infrastructure is also not adequate to accommodate all the patients.

### **Shortage of milk (infant formula)**

There was a shortage of milk in some clinics over the past months, but the time the interviews were conducted clinics did not have any shortages.

## **5.3 CLIENTS**

Most of the challenges faced with clients are all due to stigma. Challenges experienced with clients are:

- Stigma

- Refusal to test at ANC
- Late HIV test during pregnancy
- Late PCR testing
- No follow up tests at 18 months for infants
- Denial of HIV status
- Mix feeding
- Shortage of milk

#### **5.4 BENEFITS OF IMPLEMENTING PMTCT**

Below is a list of all the benefits that came with the implementation of the PMTCT programme.

- Dual therapy is effective
- More women are willing to test and are testing for HIV
- Almost all babies born to HIV positive women test negative
- Most of the babies who test at 18 months are also HIV negative
- Free infant formula supply
- Women are using one method to exclusively feed
- Reduced mortality and mobility
- Free access to ARVs
- Have knowledge on the use of contraceptives and sterilization
- Access to ARV referral sites

#### **5.5 NOTEWORTHY SUCCESSES**

Almost all the clinics did not seem to have had any noteworthy successes with implementation of PMTCT. However, most of the facilities stated that they have succeeded in tracking infants, and have won awards for being the best baby clinics (Pankop, Mmamethlake CHC, Debeersput, Hendrina, Kwazamukuhle, Extension 8, Machadodorp, Wonderfontein, and Marapyana). Other clinics mentioned that they advise women to bring bigger bags when they come to collect pelargon so that other people will not notice what is in the bag (Senotlela).

#### **5.6 STEPS THAT COULD BE TAKEN TO IMPROVE THE SERVICES**

When asked what they think could be done to improve the PMTCT services at the clinics, managers cited the following:

- More staff needed (Professional Nurses & Lay Counselors and health promoters)
- More training is needed on PMTCT
- Extend infrastructure to accommodate everyone
- Need a method to be put in place to trace babies
- More awareness campaigns in the form (community mobilisation)
- Establish support groups
- Provision of guidelines



- Provision and Sustainability of Pelargon (milk)
- There must be enough HIV test kits in stock
- Refresher training on PMTCT after some few months
- Support from HAST coordinators
- There must be a method to help clients with HIV disclosure to families

## **PART 2: LAY COUNSELORS' EXPERIENCES**

### **6. EXPERIENCES OF LAY COUNSELORS DELIVERING PMTCT SERVICES**

#### **6.1 Demographics**

A total number of 117 lay counselors are based at health facilities designated as sites for the prevention of mother-to-child transmission (PMTCT) of HIV. About 90% of the lay counsellors were women and the majority aged (71.8%) 40 years and younger (Table 17). Most of them (41.9%) spoke either Setswana or Sepedi and had either matric or higher education (74.4%). Many (75.9%) have been working at their respective PMTCT sites for two years or more at the time of the interview.

**Table 17: demographic characteristics of lay counsellors**

<b>Category</b>	<b>N</b>	<b>%</b>
<b><i>Sex</i></b>		
Male	11	9.6
Female	104	90.4
<b><i>Age (years)</i></b>		
20-29	31	27.2
30-39	46	40.4
40-49	32	28.1
50 or more	05	4.4
<b><i>Home language</i></b>		
Sepedi	29	24.8
Setswana	20	17.1
Isindebele	26	22.2
Isizulu	25	21.4
Others	17	14.5
<b><i>Education</i></b>		
Std 6 – Std 7/Gr8-Gr9/ABET 4	4	3.4
Std 8/Gr 10/NTC 1	4	3.4
Std 9/Gr 11/NTC 2	33	28.2
Std 10/Gr 12/Matric/NTC 3	46	39.3
Certificate or Diploma with Gr 12	30	25.6

<b>Years of service</b>		
<2years	28	24.1
2 years or more	88	75.9

## 6.2 Training

Prior to starting work as lay counselors, they received mandatory training and most reported receiving training in VCT for PMTCT (85.3%), PMTCT (67.8%), HIV couple counselling (53.8%) while only a minority received training in record keeping practices for PMTCT services (32.2%). About 77.2% of the lay counsellors reported that the training made them feel prepared to provide patients information about MTCT and PMTCT intervention. 78.4% felt that they needed more training in the areas in which they have been trained. They reported that they needed more training in PMTCT, ARV adherence counselling, rape counselling, and HIV management.

Of those who received training in the various components, the majority rated the training as very good. PMTCT services provided personally as reported by lay counsellors were pre-test (99%), post-test (100%) and ongoing counseling (97%), HIV testing (56%) infant feeding counseling (81%), infant feeding support (69%), infant follow-up (60%), care for HIV positive children (59 %).

## 6.3 Challenges

The most difficult problems encountered in PMTCT as cited by the lay counsellors were inadequate salary, inadequate facilities, lack of training and having too many patients (Table 18). Lack of time to do the job, low staff morale, and security were the least cited problems.

**Table 18: Most difficult problems encountered in PMTCT**

<b>Problem encountered</b>	<b>% of lay counsellors</b>
Inadequate salary	91.2
Lack of training	68.2
Inadequate facilities	67.3
Too many patients	55.1
Staff shortages	47.7
Poor working environment	38.3
Lack of feedback on job performance	36.5
Lack of supervision	31.7
Security	23.1
Demoralized staff	18.1
Lack of time to do job	13.5

## **6.4 Personal experiences cited by lay counselors**

### *Provision of HIV education*

The most cited experiences in terms of provision of education were that they inform people about HIV/AIDS by doing health talks at the clinic; giving advice to clients, their families and the entire community on HIV related matters; encourage people to test for HIV; encourage people to follow HIV prevention methods; and encourage clients to lead positive lives. One lay counsellor is quoted below:

*‘Some people who are scared of coming to the clinic for VCT come to where I stay and we talk about HIV and I advice them to come to the clinic for testing. We provide HIV education in the clinic and even in the schools so this has made an impact because we have teenagers and adults coming forward to test. I am a traditional healer as well so I make a point of talking to other healers about HIV and advice them not to attempt to treat someone with AIDS but to refer them to the clinic and hospital.’*

## **6.5 Roles and responsibilities in the community**

Lay counsellors have reported the following as their responsibilities:

- helping people accept their HIV status
- informing the community about HIV
- educating families on how to treat HIV positive people
- giving support to friends, family, and community members
- encouraging people in the community to test for HIV

Some have reported that they are involved in community development activities related to HIV and AIDS such as having campaigns with the youth in churches and in schools. The most recurring roles are that of being advisors and supporters for HIV positive clients, their families, and generally everyone who comes for counselling and testing.

*‘A lot of people are very sick and we are trying by all means to give them counselling so that they can cope.’*

*‘I play a big role in the community by informing them about HIV. I do have campaigns with youth in churches’*

## **6.6 Work stress and psychological experiences of lay counsellors when counselling HIV positive and AIDS clients**

About 14 lay counsellors have mentioned that giving HIV test results that are positive to their clients, some of whom are children, has been stressful to them. Also, more than 12 lay counsellors have complained about the stress they have that arises from clients who are in denial about their positive HIV status. They said that some of their clients blame them for their HIV positive test results. Having to deal with known clients also adds to their stress as some mentioned that these clients go to their homes either to ask for advice or to confront them when they experience problems instead of going to the health facility.

Some lay counsellors have reported that they worry a lot when their clients who are HIV positive never show up for their follow-up appointments. They said that these clients come to the clinic after a long time when they are too sick and dying. This happens because they do not adhere to their appointments they do not get a chance to start early on their treatment.

About 20 lay counsellors have mentioned the challenge of counselling couples as conflicts arise between the two partners when the HIV test results are discordant. This had made the counselling sessions messy as some couples even fight in front of the counsellors. Lay counsellors who have mentioned these issues have complained that this stresses them a lot and they also feel guilty and responsible about the conflicts between their clients. They say a lot of relationships end because of discordant HIV tests results leaving them feeling responsible for such outcomes.

### **6.6.1 Areas of difficulties in the HIV/AIDS counselling process**

More than 12 lay counsellors have mentioned that they have difficulty dealing with clients who are in denial about their HIV positive status. According to them, some clients even go to re-test at other clinics hoping that they will have different test results. Some even visit *sangomas*<sup>2</sup> hoping to be healed from their HIV positive status. They say other clients become suicidal or they do not follow-up on their appointments so that they can get early treatment.

Some lay counsellors have reported that it is difficult to counsell couples especially when conflicts arise between two partners during the counselling session. They said that these conflicts occur because there is a lot of blame and accusations about who brought the HIV virus into the relationship.

One lay counsellor is quoted below: ‘having to counsel clients who are in need of ARVs, as I have not attended training in ARV adherence counselling’ is difficult.

### **6.6.2 Role conflicts and multi-tasking**

A number of lay counsellors have found themselves in situations where they have assisted nurses with the clinic work due to staff shortages. Thirteen (13) lay counsellors have reported that they have assisted the clinic staff with duties such as, taking and recording vital signs of patients, labeling of blood specimen, notification of TB patients, and administrative work. Some have said that they have volunteered to perform these tasks while others said they were forced.

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<sup>2</sup> Traditional healer

## **PART 3: DATA MONITORING AND EVALUATION**

### **7. PMTCT INDICATORS**

The report provides results on the following PMTCT data elements and indicators: antenatal and postnatal care (ANC & PNC), maternity and infant indicators. The results reflect data that was recorded from August 2009 to January 2010. PMTCT registers that were used to record the monthly figures for the indicators: PMTCT register, tick register, drug register, PCR register, and CD4 count register.

#### **Data reliability and validity**

In order to check data reliability and validity, the information obtained from the case registers was compared with the information recorded on the monthly summary sheet for a period of six months (August 2009 to January 2010). DHIS office did not provide the data that we requested. If two different figures were found recorded for the same month, we interpreted that as data discrepancy (Table 19-34).

### **PMTCT INDICATOR RESULTS BY SUB-DISTRICT**

#### **7.1 Dr JS Moroka sub district (Table 19-21)**

##### **ANC and PNC indicators Dr JS Moroka sub district**

Data recorded on ANC and PNC for 6 months was reviewed. Below is the interpretation for the combined data for all the facilities falling under Dr JS Moroka sub district. Table 19 presents summary of data recorded in Dr JS Moroka sub-district:

##### **i) ANC 1<sup>st</sup> visit before 20 weeks**

Throughout the 6 months of data recording by all the clinics data recorded on CR does not tally with data recorded on the monthly SS. For all the months, data has been over recorded on CRs and under recorded on the monthly SS. Surprisingly, half of the facilities (Leeufontein, Allemandsrift, Loding, Moripe, Wolwerkraal, Witlaagte, Allemandrift, Rhenosterkop, Vaalbank, Seabe did not record data on CRs but have recorded on monthly SS, yet data on monthly SS seems to be lower.

##### **ii) ANC 1<sup>st</sup> visit at 20 weeks or later**

In terms of the 1<sup>st</sup> ANC visit at 20 weeks or later, for all the 6 months assessed, data recorded on CRs does not tally with data recorded on the monthly SS. The high discrepancy that is seen is due to the fact that data has been over recorded on monthly SS and under recorded on the CRs. All the months reflect this discrepancy but August 2009 (143/268) and December 2009 (183/314) seems to be the worst.

**iii) ANC clients pre-tested counselled for HIV at 1<sup>st</sup> visit**

This indicator shows high figures that are recorded on a monthly basis when all the facilities are combined. However, there is no tallying data and this is due to the fact that data was either over recorded or under recorded on the CRs and monthly SS.

**iv) ANC clients pre-tested counselled for HIV at subsequent visit**

For this indicator, only two facilities had data, the rest of the facilities had no data on both CR and monthly SS. Troya clinic had only recorded data on the monthly SS and therefore could not be verified for accuracy. Loding clinic recorded data on both Cr and monthly SS but only data for 3 months tallied, the rest of the months it did not tally.

**v) ANC clients tested for HIV (new)**

For this indicator, high numbers have been recorded on both CR and monthly for the new clients tested for HIV, however, it does not tally. Data had been mostly over recorded on the monthly SS.

**vi) ANC clients re-tested for HIV at 32 weeks or later**

Table 1 shows that for this indicator, data has not been recorded on CR but most of the facilities for all most all the months except for December month (2/68) whereby non tallying data has been recorded. For the other 5 months, data could not be checked for accuracy since it was only recorded on the monthly SS.

**vi) ANC clients tested positive for HIV at 1<sup>st</sup> test (new)**

Data has been recorded on both CRs and monthly SS however, it does not tally. In some instance, data has been over recorded on the CR and in another data has been over recorded on the monthly SS.

**viii) ANC clients tested positive for HIV at 32 weeks or later (re-test)**

For this indicator, there is no data recorded at facility level. The question is do facilities record this data somewhere or there is no data available at all?

**ix) HIV positive ANC clients tested for CD4 count**

For this indicator, fewer numbers have been recorded by facilities for all the 6 months on both CR and monthly SS. The recorded data shows high discrepancies which are due to over recording data on the monthly SS. For instance, September month (24/84); October month (43/99) etc.

**x) ANC clients initiated AZT at 28 weeks or later**

In terms of the ANC clients initiated AZT at 28 weeks or later, fewer numbers have been recorded by facilities for all the 6 months on both CR and monthly SS. The recorded data shows high discrepancies which are due to over recording data on the monthly SS.

**xi) HIV positive ANC clients (new) medically eligible (cd4<200)**

For this indicator, less than ten facilities (Ga-Maria, Vaalsschfontein, Klipplaatdrift, Waterval CHC, Vaalbank, Moripe, Lefiso, Allemansdrift B and Rhenosterkop) have recorded data on the monthly SS and not on the CR, therefore data accuracy could not be verified. When compared for the whole district, there are high data recording

discrepancies due to the above mentioned reason. There are only a few facilities (Marapyane CHC, Nokaneng and Seabe) that have recorded data on both CR and monthly SS, however, even for those facilities, data for few facilities and few months tallies, the rest does not tally. From this indicator, the reflection is that data has been over recorded on the monthly SS and this is due to the fact that some clinics did not record data at all on the CRs.

**xii) HIV positive ANC clients (new) medically eligible (clinical stage)**

For this indicator, most of the facilities did not record data on both CR and monthly SS. However, in August 2009, Seabe clinic, recorded 2 HIV+ clients in the monthly SS who are medically eligible.

**xiii) NVP to positive women at ANC**

In terms of NVP given to positive women at ANC, only few facilities had data for this indicator. The recorded data for all the months does not tally probably due to the fact that on some months there is no data.

**Table 19: Data for ANC & PNC Indicators**

INDICATORS	Dr JS MOROKA DSISTRIC											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
MONTHS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
<b>1. ANC &amp; PNC INDICATORS</b>												
1. ANC 1 <sup>st</sup> visit before 20 weeks	290	119	312	197	309	139	298	130	268	161	323	202
2. ANC 1 <sup>st</sup> visit at 20 weeks or later	143	268	169	242	224	261	148	172	183	314	180	254
3. ANC clients pre-tested counseled for HIV at 1 <sup>st</sup> visit	421	507	449	440	488	409	335	370	407	431	453	465
4. ANC clients pre-tested counseled for HIV at subsequent visit	7	16	6	15	6	10	5	5	4	5	14	14
5. ANC clients tested for HIV (new)	405	411	448	466	474	400	323	360	340	414	429	446
6. ANC clients re-tested for HIV at 32 weeks or later (re-test)	-	59	-	60	-	86	-	72	2	68	-	59
7. ANC clients tested positive for HIV at 1 <sup>st</sup> test (new)	65	54	79	83	96	92	47	86	64	58	71	81
8. ANC clients tested positive for HIV at 32 weeks or later (re-test)	-	-	-	-	-	-	-	-	-	-	-	-
9. HIV positive ANC clients tested for CD4 count	39	56	24	84	43	99	23	56	33	57	33	75
10. ANC clients initiated AZT at 28 weeks or later	23	40	29	62	14	54	23	52	32	71	18	35
11. HIV positive ANC clients (new) medically eligible (cd4<200)	6	11	2	7	1	18	2	6	4	9	8	1
12. HIV positive ANC clients (new) medically eligible (clinical stage)	-	2	-	-	-	-	-	-	-	-	-	-
13. NVP to +ve women at ANC	12	5	24	6	13	8	10	9	8	15	3	11



## MATERNITY INDICATORS

Table 20 below shows the data elements that are recorded in maternity indicators for the period of August 2009 to January 2010

- i) **Live births to HIV positive women**  
In terms of live births to HIV positive women, data for 5 months does not tally, only data for December 2009 (25/25) tallies. Only a few facilities have recorded data on this, this would be mainly hospitals and CHCs. Non tallying data is due to over recording or under recording on CRs and monthly SS.
- ii) **ANC booked with known HIV status**  
There is absolutely no data recorded on this indicator.
- iii) **Women receiving Nevirapine in labour**  
Data has been recorded on both CRs and monthly SS however, it does not tally. The discrepancy is due to the fact that data has been over recorded on the monthly.
- iv) **HIV positive delivering women on AZT>4 weeks**  
Most of the facilities did not record data on this indicator. The available data has only been recorded either on CRs or on monthly SS, therefore data accuracy could not be checked.
- v) **HIV positive delivering women on AZT < 4 weeks**  
Most of the facilities did not record data on this indicator. The available data has only been recorded either on CRs or on monthly SS, therefore data accuracy could not be checked.

**Table 20: Data Elements in recording maternity indicators**

INDICATORS MONTHS	JS MOROKA DSISTRIC											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
<b>2. MATERNITY INDICATORS</b>												
1. Live births to HIV positive women	23	31	24	28	28	17	27	31	25	25	30	27
2. ANC booked with known HIV status	-	-	-	-	-	-	-	-	-	-	-	-
3. Women receiving Nevirapine in labour	9	28	13	11	11	28	3	20	7	14	6	15
4. HIV positive delivering women on AZt>4 weeks	1	-	3	-	1	-	-	-	1	-	1	-
5. HIV positive delivering women on AZT < 4 weeks	-	-	1	-	1	-	-	-	-	-	1	-

## **INFANT INDICATORS**

Table 21 below shows the data elements that are recorded on infant indicators for the JS Moroka sub-district.

### **i) Babies given NVP +ve mother**

For this indicator, it is reflected even though data has been recorded on both CRs and monthly SS, it does not tally. This high discrepancy is due to the fact that data has been mostly over recorded on the monthly SS and under recorded on the CRs. However, for November 2009, all the facilities did not record data on CRs, but there is data (-/24) recorded on the monthly SS.

### **ii) Babies given AZT**

Regarding babies given AZT, the six months data shows that when all the facilities data is combined, there are lower records on CRs and high over recording on the monthly SS.

### **iii) HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks**

Most of the facilities did not record data on this indicator, only a few did, however data recorded on monthly SS seems to be high for all the months. Therefore, there is high discrepancy in data recording.

### **iv) PCR test done on babies born to +ve mothers on 6 weeks or later**

For this indicator, data has mostly been under recorded on CRs and over recorded on the monthly SS.

### **v) PCR test results given**

In terms of PCR test results given, the only tallying data is for November 2009 month (13/13). Data for other months has mostly been over recorded on the monthly SS.

### **vi) HIV tests done to HIV exposed babies at 18 months**

There is absolutely no data on the CR for this indicator for all the 6 months, however, there is data recorded on the monthly SS. Due to this discrepancy, no comparisons could be made to check data accuracy.

### **vi) HIV exposed babies test positive for HIV at 18 months**

There is absolutely no data on the CR for this indicator for all the 6 months. The data recorded on the monthly SS is only from August-November, therefore there is missing data for December and January 2010. Due to this discrepancy, no comparisons could be made to check data accuracy.

### **viii) HIV positive women receiving counselling on infant feeding options**

There is absolutely no data recorded on the CR and monthly SS for this indicator for all the 6 months.

### **ix) HIV positive mothers choosing to exclusively breast-feed**

Only one clinic had data recorded on CRs for August month. The rest of the months, there is no data recorded on CRs for 5 months. Therefore, data recorded on monthly SS could not be verified for accuracy.

**x) HIV positive mothers choosing to exclusively formula feed**

There is high data recording discrepancy shown on this indicator. From August-September 2009, data has been recorded on both CRs and monthly SS, however, it does not tally. For instance, September 2009 (1/121) reflect huge discrepancy of data recording. For the month of November-January 2010, there is no data recorded on CRs, therefore, data accuracy could not be checked.

**Table 21: Data elements on recording infant indicators for Dr JS Moroka sub district**

INDICATORS MONTHS	JS MOROKA DSISTRIC											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
3. INFANT INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Babies given NVP +ve mother	3	24	9	20	3	17	-	24	1	21	3	26
2. Babies given AZT	9	19	14	24	9	18	5	27	4	20	2	15
3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks	1	30	1	21	-	39	1	46	-	42	4	40
4. PCR test done on babies born to +ve mothers on 6 weeks or later	5	47	6	38	14	45	12	52	14	62	19	49
5. PCR test results given	4	10	5	-	11	20	13	13	5	10	6	18
6. HIV tests done to HIV exposed babies at 18 months	-	1	-	1	-	5	-	7	-	2	-	2
7. HIV exposed babies test positive for HIV at 18 months	-	1	-	1	-	1	-	1	-	-	-	-
8. HIV positive women receiving counselling on infant feeding options	-	-	-	-	-	-	-	-	-	-	-	-
9. HIV positive mothers choosing to exclusively breast-feed	1	25	1	31	-	25	-	17	-	18	-	31
10. HIV positive mothers choosing to exclusively formula feed	1	27	1	121	-	35	-	41	-	35	-	19

## **7.2 DELMAS SUB-DISTRICT INDICATOR RESULTS**

Data compiled on the table below is for the two (2) facilities in Delmas sub-district.

Table 22 reflects data recorded by the two (2) clinics in Delmas sub-district. The results are interpreted by each of the 13 ANC and PNC indicators.

### **i) ANC 1<sup>st</sup> visit before 20 weeks**

Throughout the 6 months of data recording by all the clinics data recorded on CR does not tally with data recorded on the monthly SS except for December month (13/13) whereby tallying data was recorded.

### **ii) ANC 1<sup>st</sup> visit at 20 weeks or later**

In terms of the 1<sup>st</sup> ANC visit at 20 weeks or later, for August month, there is no data recorded on both CR and monthly SS. For the remaining months (September-January 2010) there was absolutely no data recorded on CRs. Therefore, data accuracy could not be checked.

### **iii) ANC clients pre-tested counseled for HIV at 1<sup>st</sup> visit**

For this indicator, even though data was recorded on both CRs and monthly SS, there is high discrepancy on data recording. Data has either been over recorded or under recorded on the CRs or monthly SS.

### **vi) ANC clients pre-tested counseled for HIV at subsequent visit**

There is absolutely no data recorded on this indicator for all the 6 months.

### **vii) ANC clients tested for HIV (new)**

For this indicator, even though data was recorded on both CRs and monthly SS, there is high discrepancy on data recording. Data has either been over recorded or under recorded on the CRs or monthly SS.

### **vii) ANC clients re-tested for HIV at 32 weeks or later**

For this indicator, zero has only been recorded on the monthly SS.

### **vii) ANC clients tested positive for HIV at 1<sup>st</sup> test (new)**

The only tallying data recorded for this indicator is for December month. The rest of the months, data has either being over recorded on CRs or the monthly SS.

### **viii) ANC clients tested positive for HIV at 32 weeks or later (re-test)**

There is absolutely no data recorded on this indicator for 6 months by both the facilities.

### **ix) HIV positive ANC clients tested for CD4 count**

Data recorded on this indicator has been for 1 facility (Botleng clinic). Data for all the months does not tally except for January 2010 (10/10).

**x) ANC clients initiated AZT at 28 weeks or later**

In terms of the ANC clients initiated AZT at 28 weeks or later, data has only been recorded on the monthly SS and not on CR, therefore verification of data accuracy could not be performed.

**xi) HIV positive ANC clients (new) medically eligible (cd4<200)**

For this indicator, zero has only been recorded on the monthly SS.

**xii) HIV positive ANC clients (new) medically eligible (clinical stage)**

There is absolutely no data recorded on this indicator throughout the 6 months on both CRs and monthly SS.

**xiii) NVP to +ve women at ANC**

For this indicator, zero has only been recorded on the monthly SS.

## ANC & PNC Indicators for Delmas sub district

**Table 22: Data for ANC & PNC Indicators**

MONTHS	DELMAS SUB-DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
1. ANC & PNC INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. ANC 1 <sup>st</sup> visit before 20 weeks	18	-	29	15	42	13	21	10	13	13	39	8
2. ANC 1 <sup>st</sup> visit at 20 weeks or later	-	-	-	12	-	23	-	24	-	18	-	29
3. ANC clients pre-tested counseled for HIV at 1 <sup>st</sup> visit	18	26	28	27	41	36	18	34	13	37	39	37
4. ANC clients pre-tested counseled for HIV at subsequent visit	-	-	-	-	-	-	-	-	-	-	-	-
5. ANC clients tested for HIV (new)	16	21	21	17	37	35	17	22	12	23	37	36
6. ANC clients re-tested for HIV at 32 weeks or later (re-test)		0		0		0		0		0		0
7. ANC clients tested positive for HIV at 1 <sup>st</sup> test (new)	5	7	7	8	13	10	3	8	1	1	11	10
8. ANC clients tested positive for HIV at 32 weeks or later (re-test)	-	-	-	-	-	-	-	-	-	-	-	-
9. HIV positive ANC clients tested for CD4 count	4	7	7	17	12	10	2	0	1	3	10	10
10. ANC clients initiated AZT at 28 weeks or later		15		0		9		7		0		0
11. HIV positive ANC clients (new) medically eligible (cd4<200)		0		0		0		0		0		0
12. HIV positive ANC clients (new) medically eligible (clinical stage)	-	-	-	-	-	-	-	-	-	-	-	-
13. NVP to +ve women at ANC		0		0		0		0		0		0

## **MATERNITY INDICATORS**

There is absolutely no data recorded by both facilities for all the 6 months that were assessed. Most surprisingly is that even the hospital that provides maternity services seems to have no information recorded for the 6 months period. This might not be a true reflection of the situation.

## **INFANT INDICATORS**

**Table 23** below shows the data elements that are recorded on infant indicators for the in JS Moroka sub-district

### **Infant Indicators**

Botleng clinic is the only one that has recorded data on the 10 infant indicators; however data was only recorded on the monthly SS for all the 6 months and not on CRs (Table 23). Therefore data could not be compared for accuracy for all the 10 infant indicators.

**Table 23 : Data elements for Delmas sub district**

MONTHS	Delmas sub district											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
3. INFANT INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Babies given NVP +ve mother		0		0		0		0		0		0
2. Babies given AZT		0		0		0		0		0		0
3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks		0		0		4		6		3		3
4. PCR test done on babies born to +ve mothers on 6 weeks or later		0		0		4		6		3		3
5. PCR test results given		0		0		0		0		1		0
6. HIV tests done to HIV exposed babies at 18 months		0		0		0		0		0		2
7. HIV exposed babies test positive for HIV at 18 months		4		0		0		0		0		0
8. HIV positive women receiving counselling on infant feeding options	-	-	-	-	-	-	-	-	-	-	-	-
9. HIV positive mothers choosing to exclusively breast-feed		0		0		0		6		4		30
10. HIV positive mothers choosing to exclusively formula feed		0		0		1		2		3		7



### 7.3 THEMBISILE SUB-DISTRICT INDICATOR RESULTS

**Table 24: Data for ANC & PNC Indicators**

MONTHS	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. No. of 1 <sup>st</sup> ANC visit before 20 weeks	226	179	151	114	165	171	113	212	113	115	133	155
2. No. of 1 <sup>st</sup> ANC visit 20 weeks or later	143	298	179	280	156	255	153	192	103	233	141	232
3. ANC clients pre-test counselled for HIV at subsequent visits	-	-	-	-	-	-	-	-	-	-	-	-
4. No. women counselled for VCT (pre-test counselled)	401	486	362	365	334	459	267	357	205	257	320	425
5. No. ANC tested for HIV	363	408	301	341	332	382	236	365	194	256	265	352
6. No. of women testing positive	86	95	77	80	87	105	61	94	47	55	67	85
7. No. women retested at 32 weeks	87	130	52	72	53	95	73	88	43	49	42	58
8. No. women testing positive on retest	5	24	10	13	3	20	3	14	0	10	9	13
9. No. of HIV positive women with CD4 result	120	110	71	58	91	86	47	62	37	40	72	78
10. No. HIV positive women with	20	40	-	4	-	7	8	12	10	7	2	8

CD4 cell count under $\leq 200$												
11. No. of HIV positive ANC clients medically eligible	2	22	-	3	-	2	5	9	1	2	5	2
11. No. of ANC clients initiated on 28 weeks or later	36	45	20	32	32	81	21	52	24	51	22	62
12. ANC booked with known HIV status	-	-	-	-	-	-	-	-	-	-	-	-
13. NVP to HIV+ women at ANC	26	19	10	33	18	62	13	32	18	21	14	35

Table 24 above reflects data recorded by all 16 clinics in Thembisile sub-district.

**i. ANC 1<sup>st</sup> visit before 20 weeks**

Data recorded on case register by all clinics throughout the six months does not tally with the data recorded on monthly summary sheet. For some months the differences are big, November 2009(113/212) whereas for others the differences are slight, October 2009, (165/171).

**i) ANC 1<sup>st</sup> visit at 20 weeks or later**

No tallying data was recorded for this indicator for all the six months assessed. Monthly summary sheet has recorded very high numbers and case registers lower numbers which is reflecting on either over reporting on the side of monthly summary sheet or under reporting on case registers. The discrepancy between the two data sets is huge, August 2009 (143/298), December 2009 (103/233).

**ii) ANC clients pre-tested counselled for HIV at 1<sup>st</sup> visit**

For all the six months there is no tallying data and this might be because data was either over recorded or under recorded on both CR and SS. The discrepancies are not very wide between case register and monthly summary sheet for this indicator, September 2009, (262/265).

**iii) ANC clients pre-test counselled for HIV at subsequent visits**

No data was recorded for this indicator throughout the six months in both the CR and the months SS.

**iv) No. ANC tested for HIV**

With regards to number of ANC clients who tested for HIV, still there is no tallying data throughout the six months and again SS data is higher than the CR and this could be because of under or over recording in either the CR or SS.

**v) No. of women testing positive**

In terms of women testing positive at ANC there is no tallying data between case register and monthly summary sheet throughout the six months period. The discrepancies between case register and monthly summary sheet are not too wide throughout the reporting period with monthly summary sheet figures slightly higher than the case registers figures, for example, September 2009 (77/80), December 2009 (47/55).

**vi) No. women retested at 32 weeks**

For this indicator we do not have any tallying figures between case register and monthly summary sheet, and again the margins are not too wide between the two data sets with the exception of August 2009 (87/130). Monthly summary sheet recorded higher figures throughout the six months than the case registers.

**vii) No. women testing positive on retest**

In terms of number of women testing positive at 32 weeks, there is no tallying data throughout the six months between case register and monthly summary sheet. The figures on the case registers are very low than those reported on the monthly summary sheet. This could be due to lack of consistency in the recording of this indicator on the case register or just over reporting on summary sheet.

**viii) No. of HIV positive women with CD4 result**

There is no tallying data between case registers and monthly summary sheets for this indicator throughout the six months that were assessed. The discrepancy between the two data sets is not huge, August 2009 (120/110), January 2010 (72/78). In addition, for this indicator we are seeing case register data being higher than monthly summary sheet, August 2009 (120/110), November 2009 (47/62).

**ix) No. HIV positive women with CD4 cell count under  $\leq 200$**

Only the monthly summary sheets captured data for this indicator in September and October 2009. For the other four months data was recorded on both the monthly summary sheet and on the case register but still the data recorded did not tally even though the discrepancy is not wide (8/12) in December 2009.

**x) No. of HIV positive ANC clients medically eligible**

Very little figures are reported for this indicator and again September and October did not have data on the case registers for this indicator. The data recorded for the other months did not tally at all.

**xi) No. of ANC clients initiated on AZT 28 weeks or later**

In terms of ANC clients initiated on AZT 28 weeks or later, for all the six months assessed, there is no tallying data. The discrepancies between monthly summary sheets and case registers are not wide. Only October 2009 has the biggest discrepancy (32/81).

**xii) NVP to HIV+ women at ANC**

In terms of the number of women receiving NVP at ANC, there is no tallying data for this indicator. August 2009 recorded higher number in the case register than the monthly summary sheet. The discrepancies between the case register and monthly summary sheet is bigger on other months and lower on some months.

**Table 25: Maternity Indicators**

MONTHS	THEMBISILE SUB-DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
1. MATERNITY INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Women receiving NVP in labour	6	27	5	16	14	35	5	24	9	29	8	25
2. Live births to HIV positive women	10	26	12	16	21	36	15	30	26	32	18	32
3. HIV positive delivering women on AZT > 4weeks	3	4	3	4	-	6	-	12	-	15	-	10
4. HIV positive delivering women on AZT < 4weeks	26	19	10	33	18	62	13	32	18	21	14	35

Table 25 above reflects data recorded for 6 months (August 2009-January 2010) by all clinics in Thembisile sub-district. The results are interpreted by each of the 4 maternity indicators.

**i) Women receiving NVP in labour**

With regard to women receiving NVP in labour, data in monthly summary sheet and case register is not tallying and the discrepancies between both data sets are huge. Monthly summary sheets have high numbers whereas case registers have lower numbers, December 2009 (9/29), January 2010 (8/25).

ii) **Live births to HIV positive women**

For this indicator the data between monthly summary sheet and case register does not tally and case registers recorded lower figures as compared to monthly summary sheet.

iii) **HIV positive delivering women on AZT > 4weeks**

August and September 2009 are the only months where data has been recorded in both case register and monthly summary sheet for this indicator and the discrepancies are very slight between the two data sets (3/4) for both months. For the other months data is only recorded in the monthly summary sheet.

iv) **HIV positive delivering women on AZT < 4weeks**

In terms of HIV positive delivering women on AZT less than 4 weeks data does not tally throughout the assessed six months. There are discrepancies between case register and summary sheet with summary sheet recording higher figures than case registers. This could be attributed to over or under reporting on both sides.

**Table 26: Data for Infant Indicators for the Thembisile sub district**

MONTHS	THEMBISILE SUB-DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
INFANT INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. No. of babies given NVP	11	27	12	25	21	36	15	30	26	32	18	32
2. No. of babies given AZT	11	19	5	23	13	36	5	30	13	32	10	32
3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks	5	41	4	36	11	62	7	66	7	46	4	29
4. PCR test done on babies born to HIV+ mothers	5	45	4	24	11	47	13	48	2	39	5	50
5. PCR test result given	2	7	-	8	-	-	5	11	-	11	1	12

6. HIV tests done to HIV exposed babies at 18 months	1	3	-	4	-	9	4	12	1	7	-	3
7. HIV exposed babies test positive for HIV at 18 months	-	1	-	-	-	3	-	-	1	1	-	1
8. HIV positive women receiving counselling on infant feeding options	-	26	-	15	-	13	13	14	5	8	3	4
9. HIV positive mothers choosing to exclusively breastfeed	9	17	43	69	7	51	52	91	59	134	12	155
10. HIV positive mothers choosing to exclusively formula feed	9	20	18	38	19	44	21	37	25	79	11	61

Table 26 above reflects data recorded in Thembisile sub-district.

i) **No. of babies given NVP**

In terms of this indicator, there is no tallying data recorded throughout the 6 months assessed. There are discrepancies between case register and monthly summary sheet but the wider one is reported in November 2009 (15/30).

ii) **No. of babies given AZT**

For this indicator, data does not tally throughout the six months assessed. Monthly summary sheet still reports higher figures than the case registers and this could be because of either over reporting or under reporting. The worst discrepancy is seen in September 2009 (5/23), and November 2009 (5/30).

iii) **HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks**

There is no tallying data between monthly summary sheet and case register for this indicator for all the six months assessed. Case register records very low figures as

compared to monthly summary sheets, for example, August 2009 (5/41), September 2009 (4/36).

iv) **PCR test done on babies born to HIV+ mothers**

The discrepancies between case registers and monthly summary sheets are very high for this indicator and the data is not tallying. Throughout the six months that were assessed, case registers recorded very low figures as compared to monthly summary sheets, December 2009 (2/39), January 2010 (5/50).

v) **PCR test result given**

With regards to PCR test results given, the numbers are very low and three months cannot be compared because only August, November 2009 and January 2010 out of the six months assessed has data in monthly summary sheet and case register and the data is not tallying.

vi) **HIV tests done to HIV exposed babies at 18 months**

Data is only recorded in the monthly summary sheet for this indicator for three months, only August, November and December 2009 has data in both monthly summary sheet and case register and the data is not tallying.

vii) **HIV exposed babies test positive for HIV at 18 months**

Only December 2009 has data in both monthly summary sheet and case registers and the data is tallying (1/1). For other months there is no data in both summary sheet and case register, September and November 2009 and the remaining months only have data in the summary sheets.

viii) **HIV positive women receiving counselling on infant feeding options**

Data is only recorded in the monthly summary sheet for this indicator.

ix) **HIV positive mothers choosing to exclusively breastfeed**

For this indicator there is no tallying data throughout the six months assessed. The discrepancy between the two data sets, that is the monthly summary sheet and the case register is huge, (7/51) for October 2009 and (12/155) for January 2010. This could be due to either over or under reporting from both data sources.

x) **HIV positive mothers choosing to exclusively formula feed**

With regards to HIV positive mothers choosing to exclusively formula feed, data does not tally throughout the six months assessed. There are huge discrepancies between the two data sets with monthly summary sheet recording higher figures than the case registers throughout the six months.

## 7.4 EMALAHLENI SUB-DISTRICT INDICATOR RESULTS

**Table 27: ANC & PNC Indicators**

MONTHS	EMALAHLENI SUB-DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2009	
ANC & PNC Indicators	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. No. of 1 <sup>st</sup> ANC visit before 20 weeks	160	84	80	120	94	130	97	134	86	90	136	92
2. No. of 1 <sup>st</sup> ANC visit 20 weeks or later	202	368	98	220	58	246	173	246	135	184	171	271
3. No. ANC clients pre-test counselled for HIV at first visit	271	394	198	347	169	440	236	412	190	348	249	460
4. ANC clients pre-test counselled for HIV at subsequent visits	-	-	-	-	-	-	-	-	-	-	-	-
5. No. ANC tested for HIV	271	386	112	352	189	431	241	408	190	349	249	372
6. No. of women testing positive	69	102	49	97	33	98	71	123	60	111	58	128
7. No. women retested at 32	-	26	-	21	-	39	-	41	-	20	-	26



weeks												
8. No. women testing positive on 32 week retest	-	-	-	-	-	-	-	-	-	-	-	-
9. No. of HIV positive women with CD4 result	47	106	32	94	19	114	49	123	37	103	34	125
10. No. HIV positive women with CD4 cell count under $\leq 200$	-	12	-	13	6	15	-	32	-	42	-	18
11. No. of HIV positive ANC clients medically eligible	-	-	-	2	-	4	-	4	-	5	-	2
12. No. of ANC clients initiated on 28 weeks or later	16	112	18	216	12	129	11	88	15	105	4	107
13. NVP to HIV+ women at ANC	-	-	-	31	19	-	44	-	21	20	11	-

Table 27 above reflects data recorded for 6 months at all clinics in Emalahleni sub-district.

**i) ANC 1<sup>st</sup> visit before 20 weeks**

Throughout the 6 months of data recording by all the clinics data recorded on CR does not tally with data recorded on the monthly SS. For August – December the CR data is always lower than the SS data, It is only in January 2010 where the CR data is

higher than the SS data.

**ii) ANC 1<sup>st</sup> visit at 20 weeks or later**

In terms of the 1<sup>st</sup> ANC visit at 20 weeks or later, for all the 6 months assessed, data recorded on CR does not tally with data recorded on the monthly SS. The high discrepancy that is seen is due to the fact that data has been over recorded on monthly SS and under recorded on the CR. All the months reflect this discrepancy but October 2009 (58/248) seems to be the worst.

**viii) ANC clients pre-tested counselled for HIV at 1<sup>st</sup> visit**

For all the six months there is no tallying data and this might be because data was either over recorded or under recorded on both CR and SS. The monthly SS seems to be reporting the highest figures as compared to the CR.

**ix) ANC clients pre-test counselled for HIV at subsequent visits**

No data was recorded for this indicator throughout the six months in both the CR and the months SS.

**x) No. ANC tested for HIV**

With regards to number of ANC clients who tested for HIV, still there is no tallying data throughout the six months and again SS data is higher than the CR and this could be because of under or over recording in either the CR or SS. The worst discrepancy is found in October 2009 (189/431).

**xi) No. of women testing positive**

In terms of women testing positive at ANC there is no tallying data between case register and monthly summary sheet throughout the six months period. The discrepancies between case register and monthly summary sheet are too wide throughout the reporting period with monthly summary sheet figures higher than the case registers figures.

**xii) No. women retested at 32 weeks**

For this indicator we only have data recorded on monthly summary sheet, the case registers did not capture this information.

**xiii) No. women testing positive on retest**

Both monthly summary sheet and case registers did not capture this data for this indicator

**xiv) No. of HIV positive women with CD4 result**

There is no tallying data between case registers and monthly summary sheets for this indicator. In addition there is a huge discrepancy between both sets of data throughout the six months that were assessed.

**xv) No. HIV positive women with CD4 cell count under  $\leq 200$**

Only the monthly summary sheets captured data for this indicator. It was only in October where case registers captured this indicator and even then the data sets do not tally.

**xvi) No. of HIV positive ANC clients medically eligible**

For this indicator we also have data recorded of monthly summary sheets and nothing on case registers. August did not have any data for the monthly summary sheet.

**xvii) No. of ANC clients initiated on AZT 28 weeks or later**

In terms of ANC clients initiated on AZT 28 weeks or later, for all the six months assessed, there is no tallying data. The discrepancies between monthly summary sheets are so huge. January 2010 (4/107), (October 12/129)

**xviii) NVP to HIV+ women at ANC**

In terms of the number of women receiving NVP at ANC, not all the months have any records for this indicator. August did not have any records in both monthly summary sheets and case registers, September had a record in monthly summary sheet, October, November 2009 and January 2010 had records in the case registers. It is only in December where we have both monthly summary sheet and case register recording data for this indicator and the differences between the two is very slight, (21/20).

**Table 28: Maternity Indicators**

MONTHS	EMALAHLENI SUB-DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2009	
	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Women receiving NVP in labour	13	127	12	286	6	127	12	121	9	27	10	99
2. Live births to HIV positive women	-	134	-	177	-	147	-	153	-	113	-	138
3. HIV positive delivering women on AZT > 4weeks	-	30	-	30	-	36	-	30	-	44	-	50
4. HIV positive delivering women on AZT < 4weeks	-	67	-	100	-	64	-	64	-	36	-	40

Table 28 above reflects data recorded by all the 10 clinics in Emalahleni sub-district. The results are interpreted by each of the 4 maternity indicators.

**i) Women receiving NVP in labour**

With regard to women receiving NVP in labour, data in monthly summary sheet and case register is not tallying and the discrepancies between both data sets are huge. Monthly summary sheets have high numbers whereas case registers have lower numbers

**ii) Live births to HIV positive women**

Data is only recorded in the monthly summary sheet for this indicator

**iii) HIV positive delivering women on AZT > 4weeks**

Data is only recorded in the monthly summary sheet for this indicator

**iv) HIV positive delivering women on AZT < 4weeks**

Data is only recorded in the monthly summary sheet for this indicator

Table 29 below reflects data recorded for 6 months (August 2009-January 2010) by all the 10 clinics in Emalahleni sub-district. The results are interpreted by each of the 10 infant indicators.

**i. No. of babies given NVP**

In terms of this indicator data is recorded in monthly summary sheets, there is no data in case registers for this indicator.

**Table 29: Infant Indicators**

	EMALAHLENI SUB-DISTRICT											
MONTHS	August 2009		September 2009		October 2009		November 2009		December 2009		January 2009	
INFANT INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. No. of babies given NVP	-	20	-	30	-	17	-	30	-	31	-	19
2. No. of babies given AZT	17	134	17	168	6	132	-	142	-	101	-	128
3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks	-	151	-	132	-	129	-	88	-	95	-	93
4. PCR test done on babies born to HIV+ mothers	-	108	-	93	-	63	1	77	1	74	1	84
5. PCR test result given	-	1	-	3	-	-	1	-	-	3	1	5
6. HIV tests done to HIV exposed babies at 18 months	-	18	-	20	-	31	-	115	-	6	-	14
7. HIV exposed babies test positive for HIV at 18 months	-	2	-	2	-	14	-	11	-	4	-	4
8. HIV positive women receiving counselling on infant feeding options	-	-	-	-	-	-	-	-	-	-	-	-
9. HIV positive mothers	-	77	-	54	-	79	-	60	-	50	-	67

choosing to exclusively breastfeed												
10. HIV positive mothers choosing to exclusively formula feed	-	65	-	51	-	44	-	54	-	43	-	33

**ii) No. of babies given AZT**

For this indicator, we have data in both case register and summary sheet for August (17/134), September (17/168), and October (6/132). The data is not tally and the discrepancy in data between case register and summary sheet is quite high. This could be because of over or under reporting in either case register or summary sheet. In November 2009, December 2009 and January 2010 data is only recorded in the monthly summary sheet.

**iii) HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks**

In terms of HIV exposed infants receiving cotrimoxazole prophylaxis, data is only recorded in the monthly summary sheet for this indicator.

**iv) PCR test done on babies born to HIV+ mothers**

November, December 2009 and January 2010 are the only months where both monthly summary sheet and case register has recorded data for this indicator even though the discrepancies are enormous between these two data sources. Monthly summary sheet reports high numbers and case register reports very low numbers (1/77), (1/74), (1/84). The other three months that were assessed, August, September and October only reports monthly summary sheet data

**v) PCR test result given**

With regards to PCR test results given, the numbers are very low and most cannot be compared because only January 2010 out of the six months assessed has data in monthly summary sheet and case register and the data is not tallying.

**vi) HIV tests done to HIV exposed babies at 18 months**

Data is only recorded in the monthly summary sheet for this indicator

**vii) HIV exposed babies test positive for HIV at 18 months**

Data is only recorded in the monthly summary sheet for this indicator

**viii) HIV positive women receiving counselling on infant feeding options**

No data is recorded for this indicator

**ix) HIV positive mothers choosing to exclusively breastfeed**

Data is only recorded in the monthly summary sheet for this indicator

**x) HIV positive mothers choosing to exclusively formula feed**

Data is only recorded in the monthly summary sheet for this indicator

**7.5 STEVE TSHWETE SUB-DISTRICT INDICATOR RESULTS**

**Table 30: ANC, PNC and maternity indicators**

STEVE TSHWETE SUB-DISTRICT												
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2009	
	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
ANC 1st visit before 20 weeks	33	66	21	49	26	78	18	49	21	75	28	77
ANC 1st visit at 20 weeks or later	152	152	185	138	163	102	141	78	127	83	199	103
ANC clients pre-tested counseled for HIV at 1st visit	185	214	206	207	179	190	159	147	148	148	231	182
ANC clients pre-tested counseled for HIV at subsequent visit												
ANC clients tested for HIV (new)	183	210	201	200	186	191	136	155	141	145	203	228
ANC clients re-tested for HIV at 32 weeks or later (re-test)	34	27	51	38	40	26	36	12	40	24	46	9
ANC clients tested positive for HIV at 1st test (new)	56	132	46	89	51	131	50	114	41	114	65	48
Live births to HIV positive women		58		40		79		66		76	0	
Babies given NVP		58		40							0	
ANC clients tested positive for HIV at 1st test (new)					0	0	0	0	0	0	1	1
ANC clients			3	3	1	1	0	1	1	1	0	1



tested positive for HIV at 32 weeks or later (re-test)												
ANC booked with known HIV status												
HIV positive ANC clients tested for CD4 count	59	68	56	56	51	52	44	42	43	40	65	46
ANC clients initiated AZT at 28 weeks or later	21	29	25	47	13	64	24	28	33	16	20	20
HIV positive ANC clients (new) medically eligible (cd4<200)	13	15	7	5	10	9	6	5	12	13	5	5
HIV positive ANC clients (new) medically eligible (clinical stage)	10	12	5		6	6	4	3	7	7	1	1
NVP to +ve women at ANC		41				48		45		60		
Women receiving NVP in labour				34							69	
Live births to HIV positive women											0	

**i) ANC 1<sup>st</sup> visit –**

Huge discrepancies exist in August data, with over reporting in monthly reports (SS). The huge figures reported could not be verified in CR. Underreporting was observed in November. Not a single sub district reported reliable 1<sup>st</sup> ANC visit data.

**ii) ANC clients pretest counselled at 1<sup>st</sup> visit**

Reliable data (same figure reported in SS appearing in CR) was recorded in December. Underreporting of pretest counselled clients at first visit was observed in two, and overreporting in four sub districts.

iii) **No. ANC tested for HIV new**

Data recorded in CR varied from that in SS. Overreporting was observed in five sub districts. Underreporting was not common.

iv) **No. women retested at 32 weeks**

Under reporting was observed throughout the district. More clients were recorded in CR than reported in SS. The 46 cases reported in January were not recorded in SS.

v) **No. of women testing positive at 1<sup>st</sup> test (new)**

Both under and over reporting were found, with over reporting up to 2.5 times the number of clients consulted.

vi) **No. of HIV positive women tested for CD4 count**

September data was reliable. Underreporting was observed in five sub districts.

vii) **No. of ANC clients initiated on AZT 28 weeks or later**

January CR data tallied with SS. Overreporting was more common.

viii) **No. HIV positive women (new) medically eligibly (with CD4 cell count under  $\leq 200$ )**

Reliable data was reported in January. Both over and under reporting was common.

ix) **No. of HIV positive ANC clients medically eligible (clinical stage)**

October, December and January data was reliable.

x) **Live births to HIV positive women**

There were no records for all the months.

**Infant data (Table 30)**

i) **Babies given NVP**

Very few cases were reported in monthly reports and they could not be verified in CR.

ii) **PCR test on babies born to positive mothers at 6 weeks or later**

Missing records, over and under reporting observed.

iii) **PCR test results given**

Under reporting was more common. Missing data in September.

iv) **HIV test done to exposed babies at 18 months**

Both under and over reporting were observed.

iv) **infant feeding options**

Data provided were unreliable, with missing data in formula fed infants.

v) **HIV positive women delivering on AZT before after 4 weeks**  
 Data poorly recorded with a lot of missing data.

**Table 31: Infant indicators**

	STEVE TSHWETE											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
	CR	SS	CR	SS	CR	SS	SS	CR	CR	SS	CR	SS
2.INFANT												
Babies given NVP +ve mother		51				56		60		76		
Babies given AZT				39								
HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks		45				26		12	0	16		30
PCR test done on babies born to +ve mothers on 6 weeks or later		63	26	30	47	43	18	19	17	20	30	32
PCR test results given	43	20	7		17	18	13	7	21	11	9	2
HIV tests done to HIV exposed babies at 18 months	28	5	4		8	16	7	2	11	2	3	3
HIV exposed babies test positive for HIV at 18 months	4				2	4	0	1	0	0	46	5
HIV positive women receiving counselling on infant feeding options			91	0	46	0	24	0	28	0	64	16
HIV positive mothers choosing to exclusively breast-feed	95	23	5	25	13	5	11	2	17	9	11	10
HIV positive mothers choosing to exclusively formula feed	10				4	52	3	67	4	63	9	25
HIV positive delivering women on AZT >4 weeks	9	49	1	25	7		694	0				0

HIV positive delivering women on AZT <4 weeks	9			0								

## 7.6 EMAKHAZENI SUB-DISTRICT INDICATOR RESULTS

**Table 32: ANC, PNC data elements and indicators**

INDICATORS	EMAKHAZENI SUB DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
1. ANC & PNC INDICATORS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. ANC 1 <sup>st</sup> visit before 20 weeks	31	26	26	35	52	42	48	26	37	43	51	55
2. ANC 1 <sup>st</sup> visit at 20 weeks or later	15	34	21	36	13	29	6	35	10	29	9	59
3. ANC clients pre-tested counseled for HIV at 1 <sup>st</sup> visit	49	59	69	78	68	67	63	58	51	54	79	88
4. ANC clients pre-tested counseled for HIV at subsequent visit	7	0	5	0	10	10	17	0	0	0	10	5
5. ANC clients tested for HIV (new)	56	43	69	77	78	69	74	47	62	55	89	88
6. ANC clients re-tested for HIV at 32 weeks or later (re-test)	2	10	1	10	2	28	1	14	2	4	0	22
7. ANC clients tested positive for HIV at 1 <sup>st</sup> test (new)	15	13	18	17	20	28	13	10	16	19	20	27
8. ANC clients tested positive for HIV at 32 weeks or later (re-test)	0	0	0	0	0	0	0	0	0	0	0	0
9. HIV positive ANC clients	5	11	8	15	10	33	8	10	7	14	0	21

tested for CD4 count												
10. ANC clients initiated AZT at 28 weeks or later	25	9	25	40	18	15	17	12	27	19	22	15
11. HIV positive ANC clients (new) medically eligible (cd4<200)	02	01	0	0	0	0	0	01	0	0	0	02
12. HIV positive ANC clients (new) medically eligible (clinical stage)	01	0	0	0	0	0	0	0	0	0	0	0
13. NVP to +ve women at ANC	0	0	0	0	0	0	0	0	0	0	0	0

Table 32 above presents data for Emakhazeni subdistrict.

**i) ANC 1<sup>st</sup> visit before 20 weeks**

There is a clear indication that data recorded on the case register by all clinics does not correspond with the monthly summary sheet. It is either under reported or over reported. We do however acknowledge that this may be due to case registers not capturing the all the clients's first visits before or after 20 weeks

**ii) ANC 1<sup>st</sup> visit at 20 weeks or later**

Same thing that is seen with the previous indicator is also observed on this indicator. Numbers do not tally on the CR and SS

**iii) ANC clients pre-tested counselled for HIV at 1<sup>st</sup> visit**

This indicator summarises the first two indicators and still the numbers do not correspond. What is reported on the CR is different from SS. The gaps between CR and SS are not that wide but there is no single month where numbers tallied.

**iv) ANC clients pre-test counselled for HIV at subsequent visits**

For this indicator, data was available on CR for the six months and SS was captured for two months only. We can therefore report on the 2 months where there were records. The indicator was tally in October 2009 (10/10) and did not tally in January 2010 (10/5).

**v) No. ANC tested for HIV**

Data does not tally on this indicator, sometimes CR is over reported than SS or vice versa.

**vi) No. of women testing positive**

Throughout the six months period, the numbers on this indicator are also not tallying due under reporting on CR and over reporting on SS or over reporting on CR and under reporting on SS.

**vii) No. women retested at 32 weeks**

There seem to be a wide gap with this indicator as CR record is low and an SS record is higher. Forinstance, in October 2009 CR is 2 and SS is 28.

**viii) No. women testing positive on retest**

There is no data recorded from all the clinics on this indicator.

**ix) No. of HIV positive women with CD4 result**

Over reporting on SS and under reporting on CR is also indicated in this indicator as in October (10/33) and January (0/21).

**x) No. HIV positive women with CD4 cell count under  $\leq 200$**

This indicator was recorded in on CR only in August and there was no record for the other months

**xi) No. of HIV positive ANC clients medically eligible**

Very little figures are reported for this indicator and again September and October did not have data on the case registers for this indicator. The data recorded for the other months did not tally at all.

**xii) No. of ANC clients initiated on AZT 28 weeks or later**

With this indicator, we see higher numbers recorded on CR than in SS, in August (25/9) and in December (27/19)

**xiii) NVP to HIV+ women at ANC**

There is no record of this indicator on CR or SS

**Table 33: Maternity data**

INDICATORS	EMAKHAZENI SUB DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Live births to HIV positive women	13	0	14	0	12	0	11	0	10	0	14	0
2. ANC booked with known HIV status	0	0	0	0	0	0	0	0	0	0	0	0
3. Women receiving Nevirapine in labour	9	0	7	0	7	0	8	0	10	0	8	0
4. HIV positive delivering women on AZT >4 weeks	1	0	0	0	4	0	2	0	0	0	0	0
5. HIV positive women delivering women, on AZT	3	0	3	0	1	0	1	0	0	0	0	0

**v) Women receiving NVP in labour**

We only have records on CR because there were no records available on SS

vi) **ANC booked with known HIV status**

No records available on this indicator

vii) **Live births to HIV positive women**

For the 6 months we only have records available on CR than SS. There were no records available at the time of the assessment.

viii) **HIV positive delivering women on AZT > 4weeks**

We only have records available for three of the six months that we were assessing.

ix) **HIV positive delivering women on AZT < 4weeks**

Of the six months that we were assessing, data was only available for four months and it was on CR and there were no records of SS.

**Table 34: infant data**

INDICATORS	EMAKHAZENI SUB DISTRICT											
	August 2009		September 2009		October 2009		November 2009		December 2009		January 2010	
3. INFANT	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS	CR	SS
1. Babies given NVP +ve mother	13	0	14	0	12	0	11	0	10	0	11	0
2. Babies given AZT	13	0	14	15	12	0	11	0	10	0	11	0
3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks	0	11	0	12	0	19	0	11	0	13	0	13
4. PCR test done on babies born to +ve mothers on 6 weeks or later	6	19	2	10	0	37	0	11	0	12	0	14
5. PCR test results given	0	0	2	2	0	0	1	0	0	0	1	0
6. HIV tests done to HIV exposed babies at 18 months	0	2	0	1	0	6	0	2	0	2	1	4
7. HIV exposed babies test positive for HIV at 18 months	0	2	0	1	0	2	0	5	0	0	0	0
8. HIV positive women receiving counselling on infant feeding	0	0	0	0	0	0	0	0	0	0	0	0

options												
9. HIV positive mothers choosing to exclusively breast-feed	0	7	0	7	0	10	0	7	0	6	0	2
10. HIV positive mothers choosing to exclusively formula feed	0	2	0	5	0	14	0	4	0	16	0	9

xi) **No of babies given NVP (Table 34)**

Data for this indicator is only available on on CR and there was nothing recorded on SS

xii) **No. of babies given AZT**

Data does not tally throughout the months as some of the months there were no SS records, only September 2009 (14/15) had data captured and the numbers did not tally.

xiii) **3. HIV exposed infants receiving cotrimoxazole prophylaxis from 6 weeks**

With this indicator, the data does not tally at all as CR has no data and only SS has data.

xiv) **4. PCR test done on babies born to HIV+ mothers**

For this indicator there is huge discrepancies as the data does not tally at all, there is a wide gap for all the months as most of the CR has no data at all while SS has, August 2010 (6/19), October 2010 (0/37).

xv) **PCR test result given**

For the six months that was assessed, data only tallied in September 2010 (2/2) and for the other months on CR data was not available while on SS it was captured.

xvi) **HIV tests done to HIV exposed babies at 18 months**

Data recorded for the six months do not tally. There were no records available on CR for five months and it was only available in January (1/4).

xvii) **HIV exposed babies test positive for HIV at 18 months**

Data is available for the first four months of the six that were assessed and it was captured on CR as there were no records for SS to measure whether they tally.

xviii) **HIV positive women receiving counselling on infant feeding options**

There is no data recorded for this indicator on both CR and SS

xix) **HIV positive mothers choosing to exclusively breastfeed**

For the first three months, data is only recorded on CR and the remaining three months data was recorded on SS. We can not really determine if the data tally because there were



no records to compare with on SS and CR for the first and the last three months respectively.

xx) **HIV positive mothers choosing to exclusively formula feed**

For four months data is recorded on SS and recorded on SS for two months. We can not really determine if the data tally because there were no records to compare with on SS and CR for the captured months.

## 8. DISCUSSION

Staff shortage appeared to be common throughout the district. Areas of PMTCT that need strengthening are staff appointments at all levels. This includes medical officers and lay counselors as well. Lack of counseling rooms for lay counsellors worsens the current problem of stigma. The main hindrance to PMTCT, that is stigma, needs to be addressed as it prohibits disclosure of one's HIV status. If health care facilities cannot provide counseling rooms with privacy, the objective of promoting disclosure will not be realized. Information, education and education materials are not available in local languages. Collection of milk (infant formula) was affected by lack of privacy. Accurate data collection is crucial in PMTCT service delivery and other aspects of health care. Poor data recording was attributed to:

- Data is only recorded on CRs.
- Data is only recorded on monthly SS.
- Data that is recorded on both CR and monthly SS but does not tally.
- Data is either under recorded on the monthly SS and over recorded on the CRs or vice versa.
- There is lot of missing data for both CR and monthly SS.

From the data reported in Tables 18-34, it is very clear that data recording continues to be a problem for most of the facilities in Nkangala District. Out of the 76 clinics visited in the six sub-districts, only less than a handful can somewhat record accurate data that tallies in both the CR and the monthly summary sheets. Unfortunately, data from DHIS was not available for comparison.

In terms of the ANC and PNC indicators, there are lot of discrepancies especially on the number of ANC tested for HIV, number of women testing positive, and number of women retested. There seems to be a trend in all the facilities that there is no data on the retesting of women. Moreover, there is a lot happening in the health facilities but not everything is recorded. The nurses attribute the lack of consistency in recording data to a high workload. There also seems to be lack of data verification in most of the facilities which is why there is lot of discrepancies. In terms of the maternity indicators, most of the information is captured by the hospitals, still there is not a single hospital from the assessed ones that have recorded data that is accurate. The hospital staff also blames the lack of data inaccuracy to a high workload. Based on the above results, one can clearly see why there is a need for an intervention such as this that aims to improve the PMTCT services in Nkangala. Therefore, there is definitely a need to conduct training on client data recording with the nurses, PMTCT/VCT and infant feeding. Training is also required for lay counsellors and information officers. Provision of protocols, guidelines and policies on HIV should be done as soon as possible in order to facilitate service delivery. These documents should be accessible to all health care workers at the facilities.

Lack of support groups, infant feeding, infant follow up, male involvement, intimate partner violence was revealed during facility assessments.

## **9. CONCLUSIONS**

PMTCT implementation still experiences challenges that need immediate attention IN Nkangala district. However, challenges such as staff shortage might require more time to rectify due to budget constraints. Training of staff, shortage of test kits, early PCR testing, milk shortage and community interventions can be addressed as a matter of urgency. Aspects to be intensified are awareness campaigns to encourage testing and early treatment, stigma issues needs to be addressed by encouraging disclosure and emphasizing the benefits of early treatment.

Some positive aspects were reported and they are positive mothers giving birth to HIV negative infants, free access to ARVs, dual therapy implementation and women willing to test.

## **10. RECOMMENDATIONS**

Based on the findings of the facility assessments, the following recommendations are suggested for improving PMTCT service delivery:

### **i) Data monitoring and management**

Clinic supervisors to sign the data off as correct to avoid discrepancies. Data should be discussed in staff meetings to allow the nurses changes to be made. Regular feedback from the district is crucial. This will assist the clinic staff to know program progress and gaps and ways to improve implementation of PMTCT services. Filing system should be seriously reviewed. PMTCT staff in health facilities should review each monthly summary form them to keep track of the trends. Supervisors should conduct monthly or periodic meetings to disseminate findings, review Procedures for data editing and cleaning should be in place and enforced at each level of data collection. Protocol for data verification procedures would decrease the amount of erroneous data. Protocols should include actions for correcting different types of errors, and the responsible person for carrying out those actions. Corrections should be written in the data logbook and signed off by the appropriate responsible person.

### **ii) Protocols, guidelines and HIV policies and IEC materials**

Distribution of these documents to all facilities needs immediate attention. IEC materials in local languages should be available and accessible at health care facilities. Training staff on these protocols will increase overall efficiency and value of the system.

### **iii) Appointment and Training of staff**

Staff shortage poses a threat to service delivery and more nurses need to be appointed. Training of nurses, lay counsellors and all stakeholders involved in PMTCT is crucial in PMTCT service delivery.

### **iv) Community PMTCT interventions**

A number of activities to support PMTCT interventions are recommended: peer support intervention, infant feeding, infant follow up, male involvement and screening and management of intimate partner violence to strengthen PMTCT service delivery.

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