

20,000+: End of Project Report

Project number:

Organisation name: University of KwaZulu-Natal

Project Name: 20,000+ -

Project period covered by this report: October 2007 to December 2008

Project Summary:

“20,000+” is a partnership between the Provincial Department of Health and the University of KwaZulu Natal that aims to decrease vertical, mother-to-child transmission of HIV to 5% (the National Strategic Plan target) in Ethekewini, Umgungundlovu and Ugu Districts in the next 2 or 3 years. 20,000 is the number of HIV infections from mother to infant that could be prevented each year in KwaZulu Natal if every mother receives care according to the national PMTCT guidelines. At present, the mother-to-child HIV transmission rate in many places in KZN is about 20%. The 'plus' (+) in the title refers to the additional children that could be helped if infant feeding practices could be optimised in the same communities and so both avoid postnatal transmission of HIV (through breastfeeding) while still promoting child survival (i.e. avoiding deaths from diarrhoea and malnutrition that due to inappropriate and unsafe infants feeding practices).

PMTCT service delivery in South Africa demonstrates great variance between, and within the 9 provinces; best practices at academic research sites or within the private health sector commonly coexist with almost total absence of services in primary health care facilities and adjacent health districts. In 2008, the National Department of Health approved the provision of zidovudine (AZT) to all women with CD4 counts greater than 200 cells/mm³. From experience however, we anticipated that simply including AZT or even HAART in PMTCT protocols, and even supplying them to clinics, would be no guarantee that fewer children will become infected. A recent survey of PMTCT services in clinics across KwaZulu Natal revealed low morale, minimal sense of ownership and uncertainty of standard protocols by clinic staff, and only 24-60% HIV-infected women receiving sdNVP. Numerous obstacles have contributed to the gap in performance and failure of national and district health systems to operationalise PMTCT recommendations. While in some cases there are genuine deficiencies in human and physical resources, as well as incomplete training, experience in rural and urban South African PMTCT programmes points to a widespread failure to reliably deliver simple processes of care (e.g. determining a mother's HIV status, reliable dispensing of prophylactic drugs).

The main focus of the partnership is therefore improving the performance of the local health systems to deliver the interventions provided for in the SA National PMTCT protocol. Hence it is not so much a test of one drug over another but learning how best to deliver care in primary health care clinics and the hospitals that they work with. A partnership between University of KZN, the Institute of Healthcare Improvement (IHI) and the KZN Department of Health is using proven *continuous quality improvement* methods to rapidly scale-up locally tested interventions to strengthen PMTCT services. The partnership uses the District Health Information System (DHIS) data, routinely collected and submitted by clinics each month to District Information Offices, to guide and enable local staff to monitor their own performance with respect to PMTCT service delivery.

We have developed data collection and feedback systems that local staff will be able to use for looking at and evaluating their own 'performance'. Supervisor and teams have been trained in how

to interpret indicators and simple graphs and how to go about innovating and implementing simple changes in local practices that together should improve service delivery. Additional supervisors and teams will be trained in the next 6-12 months in additional sub-districts in the intervention districts.

Initial funding from DFID enabled the formation of the partnership and completion of the basic development work. Funds have been secured from CDC/PEPFAR to continue the work for the next 5 years until 2013.

Project Outcomes:

Objective	Outputs against objective
1. To implement systems improvement interventions that would increase the effectiveness of current PMTCT services across three districts of KZN;	These have been launched in the three selected districts.
2. To rapidly implement and integrate three additional PMTCT activities that improve the effectiveness of the PMTCT programme;	These have been implemented in a sample of facilities in each of the districts
3. To monitor and evaluate the effect of these protocol amendments and document the health system responses and obstacles to the quality improvement interventions	Bi monthly newsletters are distributed to facilities in the three districts. Executive reports of the performance of each facility in districts are submitted to the District managers each month. Meetings with the District and Provincial management teams serve to communicate obstacles to service delivery
4. To augment and develop health systems improvement capacity at provincial, district and service level to initially sustain effective PMTCT programmes, but that could be applied to any other health domain and service delivery	Supervisors have been trained in each district in quality improvement methods. District information officers are provided with regular reports about the completeness and accuracy of data submitted to their offices each month. Combined with training on how to use these reports, the completeness and accuracy of data is improving.
5. To disseminate findings rapidly in order to facilitate scaling up of similar approaches elsewhere	The National Department of Health has requested that the 20,000+ team assist to train other staff from 18 districts in quality improvement methods.

Provide below a written overview as to how this project has performed against its original targets, providing explanations as to any opportunities or constraints that have affected project performance:

20,000+ aims to improve prevention of mother-to-child-transmission (PMTCT) services across three districts through quality improvement methods and thereby reduce the number of children who become infected with HIV and ultimately improve child survival in these communities. The approach is premised on the following facts:

- At least 34% of under 5 mortality in South Africa can be directly attributed to HIV infection of children

- Over 60% of hospital deaths of children are directly due to HIV infection
- Although a PMTCT programme is in place in KZN, the quality of service has not resulted in reduce transmission rates. Infant mortality in the Province has trebled in the past 15 years
- Interventions are available that, if effectively implemented, could dramatically reduce transmission.

In discussions and planning with the KZN Department of Health, the work is described as a **partnership** rather than a 'project' or 'study'. This is intended to reflect the collaborative nature of the work in which the responsibility for implementation is correctly located with the DoH while technical assistance and support can be provided through an external team such as those in the 20,000+ (UKZN) team.

The concepts and development of the work emanated from an initiative in 2006 by Dr Zungu, the former deputy DG for health in KZN, in response to surveillance data presented at that time demonstrating high infant HIV transmission and mortality rates.

The present work (phase I) focuses on activities and delivery of antenatal interventions to reduce peripartum transmission of HIV (i.e. *in utero* and intrapartum); if successful, then the partnership aims to address the more complex challenges around postnatal transmission i.e. HIV infections through breastfeeding.

Overall Aim:

To significantly reduce perinatal HIV transmission within 2 years and improve overall child survival within 5 years in three districts of KwaZulu Natal through health system support interventions and introduction of new PMTCT protocols

Specific objectives:

- To implement systems improvement interventions that would increase the effectiveness of current PMTCT services across three districts of KZN;
- To rapidly implement and integrate three additional PMTCT activities that improve the effectiveness of the PMTCT programme;
- To monitor and evaluate the effect of these protocol amendments and document the health system responses and obstacles to the quality improvement interventions
- To augment and develop health systems improvement capacity at provincial, district and service level to initially sustain effective PMTCT programmes, but that could be applied to any other health domain and service delivery
- To determine the cost-effectiveness of these quality improvement interventions
- To disseminate findings rapidly in order to facilitate scaling up of similar approaches elsewhere

TARGET SITES

20,000+ operates across three districts that were chosen by the KZN DoH, namely Ethekewini (Durban and immediate surroundings), Ugu and Umgungundlovu. Ugu district is a Presidential nodal site, meaning that it has been designated as a district that is exceptionally poor and under-resourced. Umgungundlovu contains Pietermaritzburg, the second largest city in KZN. Durban and Pietermaritzburg both have large areas of informal housing and peri-urban areas with extremely poor communities. The 3 districts contain more than half (~5m) of the entire population of KZN (~9m) and suffer high antenatal HIV prevalence rates - Ethekewini 41.6%, Ugu 38.9% and Umgungundlovu 44.4%. Between the three districts there are over 260 PHC clinics and 16 state hospitals delivering 82,000 babies per year.

	Clinics	Hospitals	Total births (2006)
Ethekwini	130	10 (incl. one tertiary and two state-aided 'private' hospitals – McCords and St. Mary's)	51,352
Ugu	62	3	13,770
Umgungundlovu	72	3	17,486

20,000+ has introduced a health systems' improvement intervention designed to improve the quality of PMTCT services across 3 districts. The project team has trained and mentored 14 Primary Health Care (PHC) supervisors in quality improvement methodologies and management skills that are being supported through a data collection and monitoring system specifically designed and supported by the project. The engagement of the PHC supervisors has been a challenge, because of the many competing demands for their time.

Implementation of PMTCT services however, will remain the primary responsibility of health staff in clinics and hospitals. Routine PMTCT performance indicators are tracked as well as 3 outcome indicators (collected through other projects) namely a). Infant HIV prevalence rates at immunisation clinics, b). population-based infant mortality rates and c). in-patient child mortality.

All staff and facilities offering PMTCT services at any level are involved to a lesser or greater extent. The programme essentially aims to improve basic health care management by using routine data collected at clinics and submitted to the District Information Offices. No individual patient data or personally identifiable data will be collected.

We have built on the experience and lessons we have learned using Continuous Quality Improvement (CQI) methodology in South Africa over the past two years. Access to and intensive use of high quality data that tracks the processes of care is critical to the success of this methodology. Process indicators derived from data that continuously tracks the processes of PMTCT care at each health care site identify gaps in the healthcare system performance, and monitor effectiveness of the interventions. Through structured interventions, these data will then be used to target specific changes in care, using rapid cycle change methods.

Current status

Over the past 12 months the following activities have been completed.

1. Recruitment and training of a core mentoring and support team

Four quality mentors were initially recruited in November 2007 and trained over the subsequent 2-3 months. Training was both formal sessions and in-house workshops and also by supervision and mentoring while visiting clinics. Training was provided by Brandon Bennett, a health systems improvement consultant from the Institute of Healthcare Improvement (IHI).

Additional training was provided by Prof Pierre Barker, when visiting from the University of North Carolina. Prof Barker works 50% time for IHI as their coordinator for international programmes.

An additional 3 mentors were recruited in May and started work in June and July. These additional staff will permit more intensive engagement with the hospitals and clinics in the target areas.

An extended training workshop on quality improvement methods was done at the end of July, for both senior staff from the KZN DoH, and new quality mentors. This was requested by Janet Dalton, head of Primary Health Care Strategic Services at KZN DoH, Pietermaritzburg.

Subsequent to this, we have had 2 resignations from quality mentors (1 at the end of July, and the other at the end of September). We are now in the process of engaging 2 additional mentors, who

should commence work in January 2009.

The quality mentors have focussed on the creation on quality improvement teams at facility levels, which focussed on the usage of Improvement methodology, to improve outputs in the PMTCT programme. They have played an invaluable role in fostering team working, and facilitating identification and unblocking of bottlenecks, with PHC supervisors and Improvement team members.

A summary of training and mentoring core activities for the period April 08 to October 08 are as follows:

Total number of learning sessions conducted	7
Total number of participants	335
Mentoring visits	230
PHC supervisors enrolled	14
Hospitals engaged	13
District and facility information officers trained	24
Computers purchased to reduce turn around time for lab results	8
Sharing of best practices –hospitals and PHC facilities	104
Number of changes initiated	276

Large numbers of participants are included in training sessions, which are interactive. Quality mentors facilitate discussions in groups, and ensure that participants leave with Continuous Quality Improvement (CQI)methodology grasped, and the improvement teams at facility level, has led to significant successes in unlocking bottlenecks in the ability to be implemented at facility levels.

In addition to the mentoring and training activities, 2 additional workshops were held on the 9th and 23rd of October 2008. We had more than a 100 participants from targeted health facilities. These workshops generated much enthusiasm directed at improving measurable health outputs in the PMTCT programme at facility level.

These workshops provide a platform for participating health staff to share best practices, and learn from each other. It also provided an opportunity for us to identify blockages, and facilitate the provision of solutions e.g. the issues of training was identified as an impediment at some facilities, and this is now being addressed by trainers in the 3 districts, together with our support.

2. Developed database and web-based interface

Following discussion with the Health and EPI Monitoring Unit of the Provincial Department of Health, we agreed that the primary source of data for use in the improvement strategies should be the routing submissions from the District Health Information System (DHIS). This data is submitted by each clinic and hospital each month to the District Information Officer and thereafter consolidated and forwarded to the Provincial Department. While this is appropriate, it is also problematic as there are many inconsistencies with the DHIS that inherently introduce bias and difficulty in interpretation. These are discussed more below.

However, we have now developed a system that monthly extracts PMTCT specific data from the DHIS, captures it within a separate SQL database located on a dedicated server with high speed access at the University, and converts data elements into specific PMTCT indicators. Indicators can be easily seen according to individual clinic, sub-district clustering, hospital catchment area, Primary Health Care Supervisor grouping or by district. The system has been designed for maximum access and flexibility. The database is visible now to all hospitals, community health care centres via the intranet as well as hospital managers and district information officers.

The technical advisor for Area 1, Dr Victoria Mubaiwa, also asked for the routine PMTCT data for another district that she additionally supervises to be captured within the database on a regular basis for her to use. This has been accomplished. The Medical Research Council are also working in Amajuba conducting similar though less intense work on PMTCT. They also requested that Amajuba data be captured in the same way for them to use and again this has been achieved.

Access to the database is controlled by a manager and users are readily provided with password access. See www.20000plus.org.za.

Aggregated data is used for the creation of executive reports monthly (see accompanying example), and these are placed on the website. Increasing numbers of health facilities are accessing their facility specific data, to measure their performance on the PMTCT programme.

3. Created awareness around the work

Our team have spent considerable time and effort building awareness around the need for prioritising PMTCT and the potential gains for child survival. Awareness meetings have been held with senior and middle management staff as well as other managers within the health and related sectors.

Bimonthly newsletters are sent to both managers, and staff who are engaging in improvement work, to highlight success stories of 'early adopters'. The newsletter serves as a form of communication between the team, and the facility staff they engage with. It also provides information on frequently asked questions related to the PMTCT programme. See accompanying examples.

Monthly executive reports graphically depict aggregated data for the province and each district. One of the graphs demonstrates data completeness for key data elements. Key performance indicators are depicted in simple run graphs, with facility specific targets. This allows for timeous intervention should the need arise. Errors or omissions in data reporting are sometimes responsible for reductions in outputs.

The demonstration of trends in the graphs has been a useful tool for managers involved in monitoring and evaluating this programme, and has been a gap identified at senior management level. These reports are added to the website.

4. Formal training of local health care supervisor staff

Four large workshops (40-50 persons each) have been convened orientating and initiating training of Primary Health Care Supervisors and other training staff in each of the three districts. Each workshop provided a background to health systems improvement methods and specific orientation to PMTCT issues. Groups consisted of senior District staff with responsibility for PMTCT coordination, PHC supervision, data management and staff training.

Additional meetings have been convened with district and facility information officers to demonstrate weaknesses and difficulties with the DHIS that primarily relate to human aspects of data management rather than IT issues.

5. Hospital multidisciplinary PMTCT task teams

Multidisciplinary PMTCT improvement (task) teams have been established in each of the Ethekewini

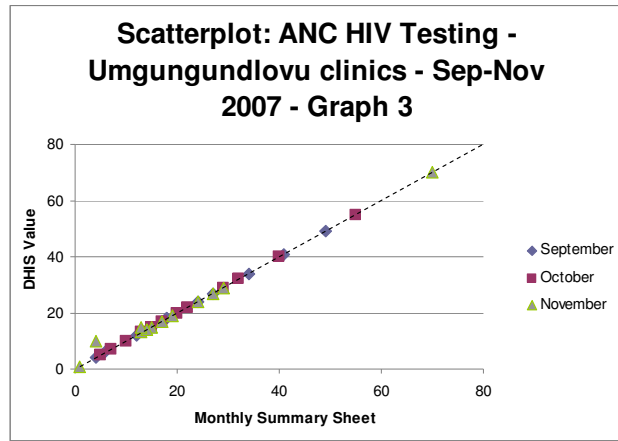
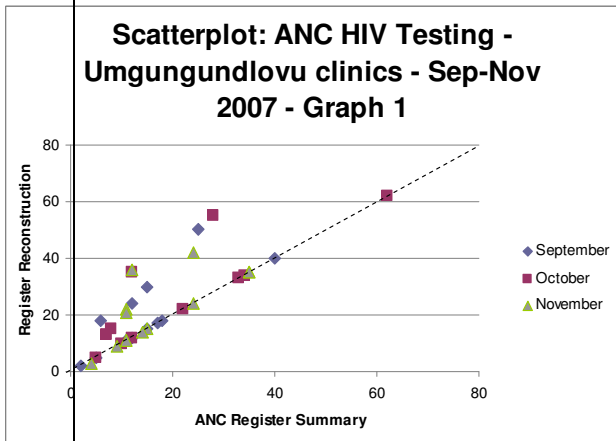
and Ugu hospitals, and Community Health centres. Collaborative learning sessions have been held with each of the hospital improvement teams and have been very well attended. Sessions last for one hour only and have focussed on collecting local data related to PMTCT activities and innovating small interventions to resolve known problems.

Work in this area has also commenced at Umgungundhlovu-both at Hospital and clinic level.

6. A preliminary assessment of the quality of PMTCT data routinely captured through the District Health Information System (DHIS)

We became aware through early visits and observations of the clinics and hospitals that the quality of data routinely submitted through the DHIS was inconsistent and therefore sub-optimal for using as baseline data from which to measure improvements. We decided to quantify these problems more systematically and therefore complete a data integrity exercise in which about half of all clinics and hospitals in the three districts were randomly selected and then visited (about 130 facilities in total). The original data relating to four PMTCT activities over the period September - November 2008 were collected from the original source documentation i.e. registers in the clinics. Ordinarily these data are collated from the various registers onto a monthly summary form which is then faxed to the district information office at the end of each month.

The scatter plots below illustrate how (left) the reconstructed summaries of ANC HIV testing differs from what was tallied and submitted to the District offices. There were significant variations between the two indicating that the daily registers were not accurately summarised at the end of each month. However, whatever was submitted was accurately reflected in the DHIS (right). This is not surprising, but for the first time these differences, and on the ground difficulties, are clearly evident.



In addition, and in a separate exercise, we found that about 40% data was missing from all sites across the three districts indicating that the data was simply not submitted. The district information officers were not aware of the magnitude of missing data and verified this independently. We have now developed a tool by which district information officers can simply check the completeness of PMTCT data elements by clinic, by sub-district or across the district.

Further to this original exercise, we have employed 4 additional Data Monitors, who reconstruct PMTCT data at a facility level, in order to allow us to compare data from both the District Health Information System, which is used by the health department for their decision making, with data collected at the point of clinical activities. We are hoping to see a closer alignment between clinical activities, and the DHIS.

All the facilities that we are working with will be visited once in 3 months, for the collection of data from the PMTCT programme.

Our aim is to promote awareness on the importance of data accuracy, and completeness, at all the facilities we engage with. We would like to improve the quality of the data on the DHIS.

Feeding back to Health managers, their PMTCT specific outputs, has been an 'eye-opener' for many health care workers.

It has created a renewed effort to improve service delivery, as measured by the data elements in the DHIS.

The creation of Improvement teams at facilities, has facilitated the integration of the PMTCT programme, and promoted interaction of important role –players, which include the Facility information officer, the laboratory technician, the matron responsible for ante and post natal care, and other health care workers

7. Programme achievements

Mentoring

A key component of this partnership is the development of skills in PHC supervisors, and facility improvement teams, to engage in quality improvement. This will entail the mapping of processes in health systems, the identification of bottlenecks, and the implementation of solutions, in rapid cycles, which show measurable improvement.

To date, hospital improvement teams have shown keen interest, and some facility improvement teams have now reached the stage where they are able to conduct their improvement meetings independently of quality mentors from our project.

This is ultimately, 1 of the aims of the partnership –to transfer skills, which health staff can continue implementing, to improve health care delivery.

Training:

7 Learning sessions have been conducted, with 335 participants trained in different aspects of CQI.

230 mentoring visits have been accomplished, at which staff engage with facility specific data, using data to plan, implement, and evaluate changes which would improve the outcomes in the PMTCT programme.

14 PHC supervisors and 13 hospitals are engaged in this programme. The creation of improvement teams has enabled health staff to engage with other relevant stakeholders, to work in an integrated fashion, in improving health outputs (i.e. incorporation of facility information offices, lab staff, and pharmacy with PMTCT services). Another significant accomplishment has been high level buy – in from facility managers, which has facilitated quality improvement activities targeting patient care. The training of District and Facility Information Officers in the understanding of the programme, and process management has led to improved data quality and completeness.

Changes implemented in 20000+partnership

More than 276 changes, directed at improving the PMTCT programme have been made since this partnership commenced.

Improved Turn around times for lab results:

This has been a key accomplishment of the partnership. Engaging the National Health Laboratory Service (NHLS), who have improved systems at their facilities in order to reduce turn around times, has resulted in faster access to results for clinicians providing comprehensive care and treatment for HIV.

Simple process changes, i.e. faxing of results from hospitals, or changing transport routes of drivers, have also contributed to reduction in turn around times. The direct result of improved turn around times is a rising number of PCR tests being done at clinics, that will lead to early identification and treatment of HIV infected infants ,and early access to ARVs for pregnant women, where indicated.

Hospital engagement

Hospitals have embraced this partnership, and are showing improvement in the processes linked to PMTCT. They have also acknowledged the integral role that their feeder clinics play. Some hospital teams have already commenced on the process of engaging their clinics on key processes in the PMTCT programme i.e. counseling and testing of all pregnant women, and the documentation of CD4 results.

Counseling uptake

This is a critical process in the successful delivery of the PMTCT programme. An encouraging trend, since inception of this project, has been the increased coverage of counseling of antenatal clients. Mapping of processes at facilities has identified gaps which have been addressed by improvement teams. Some hospital teams are now close to achieving 100% in all processes related to the PMTCT programme.

Data Completeness improvement

On a monthly basis, this information is shared with senior management at a provincial, and district level, and with facility managers we are working with. This data is also available to managers who have access to our website. There have been encouraging demonstrations of interest in data completeness and programme performance at facility levels.

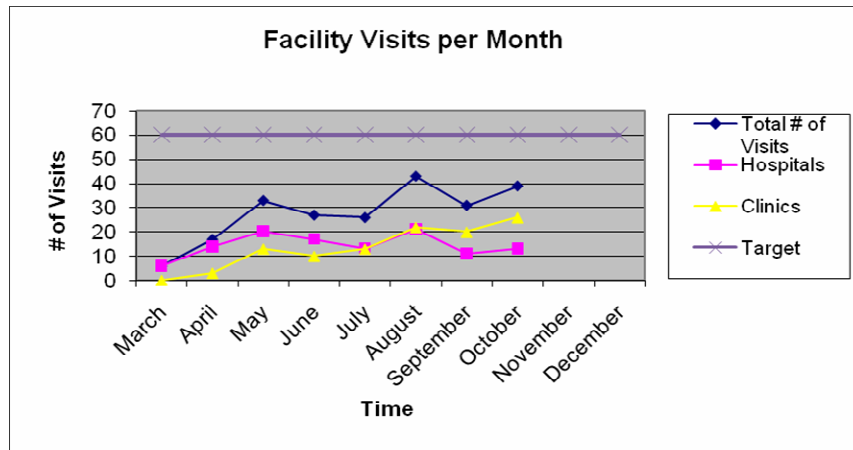
Identification and correct management of women in labour, whose HIV status was unknown:

Facilities that provide a delivery service rapidly recognized this as a gap, when data was fed back to them. This resulted in their looking at innovative ways of filling them e.g.

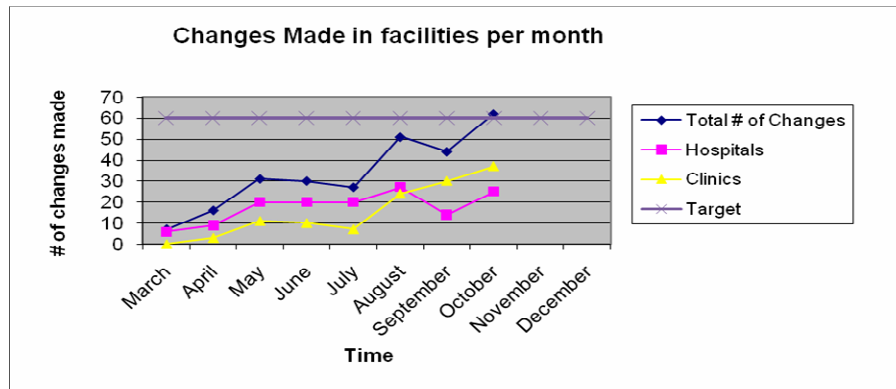
- employing lay counselors over weekends and after hours
- the provision of Provider Initiated Counselling and testing.
- The results on these interventions were gratifying to team members, as they has been a steady decline in the number of mothers in labour, who were unaware of their HIV status.

Project Progress November 10 2008

Site Visits – a measure of our ability to conduct visits in the field



Change Tracker – a measure of our ability to generate and test change ideas at visits – the target (or goal) is 2 changes per site per month – estimated at 60 for Wave 1



Note: The month of October represents the first month since we began that we generated more changes than we targeted. (This number is will increase as we await some last changes to be recorded from the QMs) Also note that our ability to affect change in the PHCs continues to increase, a very positive sign.

Change Distribution

Category of Change Ideas	Percentage of changes allocated by Category to date
VCT	16%
CD4	10%
DT	12%
HAART	4%
PCR	11%
Related*	21%
Data	26%

*The "Related" category most often refers to changes associated with introduction to improvement, team forming and building visits, changes agreed upon at district level or made to related care pathways but not specifically PMTCT.

Note: The distribution of change is relatively even at this point, with Quality Mentors working across the PMTCT care pathway in an effort to meet local need, generate enthusiasm and solve key challenges. The exception being changes helping to improve the roll out of HAART to pregnant women which we have as yet not spent a great deal of time with.

Funds

Initial funding has been provided by DFID following submission of a proposal in early 2007. This has now come to an end, as the DFID cycle of funding concludes. Core funding has since been secured from CDC SA for the next 5 years though additional funds will be sought for additional activities that are now planned.

Project management

The project is being directed by Dr Jennifer Reddy, who commenced work in August 2008.11.01 .I have been in South Africa on 3 occasions since July this year, and been in regular contact with the team in Durban, to provide them with technical guidance.

Our weekly teleconferences have ensured that I participate actively .

WHO is also interested in the progress of this partnership, which has the potential of being replicated in other areas of KZN ,and South Africa.

Meetings

In addition to our regular monthly meetings with the District PMTCT Task and management teams, we also have 6 monthly meetings with Dr Victoria Mubaiwa (Director of Maternal, Women and Child Health (KZN DoH), Nirvasha Moodley (Unit leader of health monitoring/DHIS), each of the 3 respective District Managers (Mrs Shezi, Mrs Zuma and Mr Chetty).

At the MSP meeting in Johannesburg on the 29th Of October 2008, great interest was shown in the work being accomplished by the partnership, by the Deputy –Director General of the National Department of Health, Dr Y. Pillay, Prof RG Thompson and Dr Phetsile Dlamini, personal advisers to the Minister of Health, have also shown great interest in the work being done in KZN.

Senior managers, at a provincial level, which include the Chief Directors responsible for Strategic planning, Maternal and Child health and Information management, are provided with updates and opportunities to engage with senior members of the team 6 monthly. At the last meeting on the 21st of August this year, much support for the partnership was obtained from the provincial managers present.

The next meeting is planned for January 2009.This would provide our team with an opportunity to show encouraging trends in programme improvement, as well as an opportunity to showcase the performance of Ugu District, which has system strengths that could be emulated by other Districts.

Part of the value of this programme, lies in the fact health workers are being trained in CQI methodology, which could be applied to other programmes in the PHC package of care, and success in its implementation, is not entirely dependent on resources. The renewed interest in data management will also contribute to improved monitoring of programmes.

Lessons Learned:

It is possible to introduce improvement interventions to the district health system that will systematically improve the quality of data. It is still too early to say whether the changes in process that have been introduced as a result of careful review of more accurate data will change service delivery. However, there have been districts, supervisors and hospitals who have more readily bought into the concept of QI and it appears that the types of change that would be needed to improve services are indeed being achieved.

There are many simple lessons that we have learned from the past year.

The leadership of the district manager is critical for creating the environment within which systems change can occur.

The quality of data in the DHIS is frequently unreliable and an inaccurate reflection of practices at sites.

Supervisors are often diverted into activities other than supervising the facilities that they are responsible for. As a result, clinics do not have any significant supervision or feedback mechanisms

There are multiple opportunities to improve the system if the will is there to do so. Human resource constraints are not the major cause of poor service delivery.

Good News Stories:

Already there have been significant changes in the quality of data management in the district information offices in the three target districts. The overall completeness of data has increased (previously only about 50% of data was routinely submitted from sites), and the accuracy of data also appears to be improving.

In Ugu district, supervisors are routinely applying quality improvement methods in their management of teams at clinics. In each of the 20 hospitals included in the work, multi-disciplinary teams have been established around the improvement work for PMTCT.

The mentoring teams are seeing significantly increased number of local innovations and changes to local practices around PMTCT services. These will hopefully be translated into improved service delivery – however this will only be measure

PMTCT is now regularly reviewed by the district managers in each of the districts. 20,000+ provides the district managers with executive summaries of the PMTCT performance for their respective districts.

The 20,000+ work will be presented at a lunch time seminar at WHO HQ in Geneva in February 2009.

In your opinion how has this project improved South Africa's response to HIV and AIDS:

In the past months, the SA National Department of Health has committed itself to improving the quality of PMTCT services in SA. In particular, 18 districts have been identified for special support and intervention. The team has had the opportunity to present the 20,000+ methodology to both the Minister and deputy Minister of Health.

The methods piloted and adapted by 20,000+ will be applied to these 18 districts. The 20,000+ team has contributed very significantly to the development of the National plan for accelerated and improved PMTCT care and will provide Quality Improvement training to the 18 districts. The database and reporting systems established for the partnership in KZN will be extended to the other 18 districts and the 20,000+ data management team will support the national plan by producing and distributing the routine performance data for all the facilities in each of the selected districts.

