5

IMPLEMENTING THE PMTCT PROGRAMME - LESSONS LEARNT

This section focuses on different aspects of the PMTCT programme in order to draw out the key findings, lessons and experiences that may assist in strengthening the current programme, and informing a possible expansion of PMTCT services to other sites.

5.1 Uptake of HIV testing amongst pregnant women

There are three broad sets of factors determining the HIV testing rate. These are:

- ➢ The availability and accessibility of counselling and testing facilities
- ➢ The quality of encouragement and counselling
- ➢ Community factors.

The availability and accessibility of counselling and testing facilities

Human resources

HIV counselling and testing is a difficult and time-consuming procedure. Suggested *minimum* standards for counselling as part of a PMTCT service include the need to provide an average of 60 minutes of initial pre- and post-test counselling, together with two further antenatal counselling sessions of an average of 30 minutes each. There is no way in which existing staff, with other clinical and public health duties, can cope with such an increase in workload.

For example, some of the clinics surrounding Shongwe Hospital in Mpumalanga have to provide a comprehensive PHC service with only 2 – 4 nurses. In another rural clinic, the unavailability of lay counsellors and the shortage of staff, meant that there was only one nurse available to do all the education, counselling and testing, resulting in long waiting times, and consequently, a poor uptake rate.

As a consequence the employment of 'lay counsellors' to support health workers is a cornerstone of the PMTCT programme. However, some provinces (Northern Province

and Mpumalanga) have not yet established a system for the recruitment, management and remuneration of lay counsellors, and in other sites, there are still not enough lay counsellors to provide a quality PMTCT service.

Table D in Appendix 2 describes how provinces have recruited, deployed and remunerated 'lay counsellors' using different approaches. Some difference in the way provinces organise the availability of a cadre of 'lay counsellors' is appropriate. However, the remuneration rates of lay counsellors range from zero to R2 800 per month, and this magnitude of difference between provinces may be inappropriate.

In many provinces the recruitment of lay PMTCT counsellors occurs in an unclear and unco-ordinated policy environment for lay health volunteers/workers in general. As a consequence, lay PMTCT counsellors, home based carers, VCT counsellors, DOTS supervisors and "traditional" community health workers are being paid differently. This inconsistency has led to charges of unfairness and a general unhappiness of those lay health workers who are on the lower end of the remuneration scale. On the other hand, those provinces that have stated a desire to adopt a uniform and co-ordinated system, have effectively delayed the recruitment and deployment of paid lay PMTCT counsellors.

Some provinces have also cited bureaucratic, administrative and labour relations difficulties with the recruitment and remuneration of lay workers, and are therefore employing a strategy of funding NGOs to recruit, manage and remunerate lay workers.

While insufficient lay counselling capacity has been a significant rate-limiting step to the uptake of HIV testing and the improved quality of counselling, the provision of HIV counselling services cannot be left as the sole responsibility of 'lay counsellors'. At one of the national PMTCT Steering Committee meetings, the need to discourage professional health workers from thinking that they can abdicate their counselling and education responsibilities to lay counsellors was discussed. In any case, in some sites, clients have simply refused to be counselled (or even informed about HIV and MTCT) by a lay worker, and have demanded to be informed and counselled by a trained health worker. As one site co-ordinator said, "in our area we have the educated intellectuals – they will not see a lay counsellor – they refuse".

Lay counsellors are currently barred from performing the rapid on-site HIV diagnostic test, which is estimated to take an average time of 30 minutes per client, placing this burden squarely on the shoulders of nurses.[1] One province is planning to adopt the use of a rapid saliva test which can be conducted by lay counsellors, and which could therefore free up nursing staff from the activity.

Therefore, in spite of the recruitment of 'lay counsellors', the HIV testing component of the PMTCT programme constitutes a considerable increase in workload for antenatal professional health workers. Those facilities that were already under-staffed, are struggling to provide a good service without compromising other services. While it is possible that time may be created through efficiency gains, there are concerns that the increase in workload (without additional staff) may result in a deterioration of the quality of care elsewhere, and to stress and burn-out amongst some staff.

1 In some facilities, lay counsellors are performing the on-site site testing despite the regulation barring them.

Another human resource problem has been 'staff rotation' policies that have led to a high turn-over of staff. As a consequence many provincial HIV units have had to constantly reorganise and reschedule new training interventions for health workers operating in the PMTCT facilities, a problem that seems to cut across and affect other health services.

Even without the rotation of staff, in most sites, organising and providing appropriate training to all nurses is an unfinished challenge. For example in one of the larger urban sites with more than twenty PHC facilities, despite the involvement of local universities and NGOs, and despite a heavy emphasis on training, only 75% of all professional nurses had received formal training in PMTCT and HIV counselling by the end of 2001, and no staff nurses or enrolled nurses had been trained yet.

Part of the reason why the training of staff is such a big challenge is because the base knowledge and counselling skills of staff is poor, resulting in the need for intensive training interventions spread over several days, rather than shorter training interventions that can reach a larger number of staff in a given time. This knowledge and skills base is known to vary across different parts of the country, and is a reflection of the varied quality of training institutions and their students. An important strategy that must therefore be implemented straight away is to ensure that HIV counselling and PMTCT are taught thoroughly and effectively in all undergraduate health sciences training institutions.

Medical input and support

Sites have had varied experiences with the role and involvement of doctors. The benefit of doctors being a visible and pro-active part of the PMTCT programme has been described in a number of sites. On the other side of the coin, sites with a lack of interest and support from doctors have experienced problems.

In some sites such as Durban, Pietermaritzburg, Rietvlei and East London, senior doctors play a leading and catalytic role. In other sites, doctors do not appear to be significant, especially in the antenatal period. This is partly because doctors generally play a limited role in antenatal care (except for high-risk pregnancies), and because traditionally, counselling and patient education has not been considered part of the medical role in the public sector. However, there has been a feeling in several sites that doctors have not played a clinical leadership role, are uninterested or, 'have been left out of the training on PMTCT'.

It appears that while doctors are not always central to the provision of direct patient care, they are central to a well-functioning obstetric service and have an important clinical leadership, quality control and training role, which supports and sustains the programme.

Physical space

Another significant challenge of all 18 sites has been overcoming the lack of physical space and furniture to provide counselling in a comfortable and private manner. In the larger facilities (e.g. academic, regional and even district hospitals), it has usually been possible to identify spare rooms that can be used for the dedicated purpose of pre- and post-test counselling.

However, many clinics have had to resort to counselling in inappropriate places (e.g. outside in a car, in the clinic kitchen or in a room with no privacy), whilst waiting for longer-term solutions. Purchasing pre-fabricated huts or containers as makeshift consulting rooms and building partitions to create more rooms, are some of the solutions pursued by provinces. One site has gone to the lengths of renovating, painting and refurbishing an existing building to create dedicated HIV counselling rooms which are private, comfortable, spacious and of a first-world standard.

The difference in the comfort and privacy of counselling facilities in the different sites is a stark reminder of the vast inequities that exist within the public health sector. In some facilities, the lack of space means that two nurses may have to share the same room and consult patients from opposite ends of the same table.

Testing kits

The availability of testing kits does not appear to have been a problem in any of the sites. Although a formal, external evaluation of the use of rapid testing kits has not been conducted, there have been no indications of any problems with the reliability of the rapid HIV test results.

The arrangement of space, patient flow and waiting times

The need to provide room and time for PMTCT services is a challenge to the organisation of space, patient flow and time management in many facilities. Space and time needs to be found for individual counselling, group information and education sessions, obstetric examinations, the handling of blood specimens, child follow-up consultations and the secure storage of formula milk powder.

In terms of antenatal care, the organisation of dedicated days or times in the week for antenatal care (especially for the first antenatal booking service) has been found to be a time-saving strategy that also allows pregnant women to meet each other as a group. However, this has resulted in an uneven spread of HIV testing and counselling needs across the week. On these 'antenatal booking days', the volume of required counselling and testing may simply out-strip the number of counsellors and space available. Many clients refuse to wait in a queue and decline to be tested or counselled as a result.

In order to make testing and counselling more accessible, it may be necessary to spread out the antenatal care workload across the week, and abandon the practice of concentrating antenatal patients in one or two days of the week. Doing this, however, will result in losing certain advantages such as the efficiency of collecting blood specimens in one go, and providing group health education to pregnant women. In some clinics blood specimens for antenatal booking are only collected once a week (due to a lack of transport), and in such situations, changing this arrangement would not be feasible or desirable.

In some of the larger facilities which have been able to provide dedicated space and rooms for HIV counselling and testing, a problem that has cropped up is the lack of anonymity of the rooms which easily become associated with HIV testing. In some sites, there are even signs pointing to HIV testing rooms, which is likely to act as a deterrent to patients.

The quality of encouragement and counselling

Unlike with 'standard' VCT services that wait passively for clients to request HIV counselling and testing, a PMTCT programme requires a more pro-active approach whereby *all* pregnant women are actively counselled about the benefits of HIV testing.

This includes providing all pregnant women and community members with information about the benefits of testing in pregnancy. A general approach has been to offer information and education to groups of clients, after which individuals are invited to go for individual counselling and HIV testing if they agree. However, there seems to be room for improving other sources of information on PMTCT such as leaflets and posters in the local language. One notable exception is a series of patient leaflets designed by the Free State DoH.

Facilities where morale and motivation is low, or where there is a denial towards HIV amongst staff, may not provide adequate encouragement for pregnant women to choose to test. The morale, motivation and attitudes of staff toward HIV are therefore important factors that need to be optimised to improve uptake rates and the quality of counselling.

Provinces have embarked upon different strategies for the provision of training, relying significantly on NGOs such as PPASA, Lifeline and university departments. Many ATICCs have also been brought in to help provide training.

To date there has been little formal evaluation of the quality and effectiveness of the training. Preliminary research conducted in the national VCT sites and in some PMTCT sites indicates that some of the training that has been provided is not culturally appropriate; provides theoretical information at the expense of improving skills and practice; and does not adequately deal with the attitudes, prejudices and denial of the trainees themselves. A further weakness is the lack of ongoing in-service training and support for staff and lay counsellors working in the programme.

A pointer to the current inadequacy of counselling and testing are reports that few pregnant women disclose their status to their partner or families. This reflects inadequate attention paid to empowering the client to disclose their HIV positive status, a lack of effort or capacity to provide 'couple counselling and testing' as well as the degree of stigma, ignorance and prejudice in the community.

Many sites have also noted the importance and benefit of local PWA support groups for clients who have tested positive. Where they exist, they provide an invaluable source of support to HIV positive pregnant women. Where they do not exist, efforts must be made to establish them.

The burn-out of staff providing HIV testing services on a regular basis has been recognised in all sites. Providing supportive supervision to counsellors, arranging peer support groups, and in a few places, formal de-briefing sessions with trained psychologists or social workers are some of the efforts being made to help staff cope with the emotional and psychological stress of conducting HIV tests. These efforts are important for the quality and sustainability of HIV testing services and require strengthening.

Language is another factor that influences the quality and accessibility of counselling. For sites that cater for clients from a mix of language groups, there have been reports

of occasions when a counsellor with the appropriate language was not available. Other characteristics of counsellors such as their age and gender have also been noted as potential factors that influence the uptake and accessibility of counselling services.

Community factors

The extent of denial and stigma in the community impacts on the uptake of HIV testing, the disclosure of HIV test results to sexual partners and families, and on desired changes in behaviour after testing. Many of the sites have commented that community education and mobilisation is an important, but relatively neglected aspect of the PMTCT programme to maximise coverage of women, promote couple testing and disclosure as well as setting up PWA support groups. Some provinces and sites have organised community meetings and IEC campaigns that have used local radio, print media and local advertisements which seems to have helped overcome stigma, denial, prejudice and ignorance.

5.2 The administration of NVP to mothers

The national PMTCT protocol stipulates that pregnant women who are 28 weeks or more in their gestation be given a tablet of NVP for self-administration in the event of going into labour. Women are asked to self-administer NVP because the earlier it is taken during active labour, the more effective it will be. Should the mother's dose of NVP be taken within two hours of delivery, the baby should be given an extra dose of NVP immediately after delivery (with a 'normal' dose between 24 and 72 hours after delivery). Should a mother take NVP without going into 'active labour', she should be provided with a second NVP tablet. All midwives, nurses and doctors working in labour wards are expected to enquire and ensure that all HIV positive women in labour have correctly self-administered their NVP tablet, and if not, to administer NVP in the labour ward.

Although this evaluation was not designed to review the clinical efficacy of NVP, its side-effects or the potential for creating resistance, Appendix 5 provides a summary of the latest international scientific consensus on the latter two issues. There are, however, a number of operational issues related to the administration of NVP that are important to evaluate.

The self-administration of NVP

At the present moment research has not been conducted to formally assess the treatment literacy of patients or the correctness of NVP self-administration. Many sites however report a high number of women who require NVP to be dispensed in the labour ward, which suggests that tablets are not correctly self-administered or are lost; or that women forget to take the tablet when they go into labour.

A possible concern about the self-administration of NVP is that NVP tablets may be marketed and sold as a cure for HIV/AIDS. However, this has not been reported in any of the sites and is unlikely if women have been appropriately counselled. In any case, women are only dispensed one tablet at a time.

Multiple dispensing

Some women require multiple doses of NVP because they may take the tablet when not in active labour. It is not known how many women take multiple doses of NVP during a single pregnancy. Neither is the effect of this in terms of creating NVP resistance known.

Active enquiry about the correct self-administration of NVP in the labour ward

The failure to make proper enquiries during labour about the correct self-administration of NVP could effectively amount to a 'missed opportunity' to prevent vertical transmission.

It is possible that in the busy environment of a labour ward, especially one that is under-staffed, staff may not ask pregnant HIV women if they have taken their NVP. The attitude and knowledge of staff about the PMTCT programme are also important factors. Staff who have no interest in the PMTCT programme or who are reluctant to deal with HIV/AIDS, may not want to identify women who are HIV positive.

On the other hand, pregnant women may not be in a psychological or emotional state to correctly recall if they took their NVP tablet correctly. Of greater concern is the fact that HIV positive women in labour may not be readily identifiable because of their reluctance to reveal their HIV status in delivery rooms that lack privacy, or to staff who have not been involved in their antenatal counselling and care. The poor state of some labour wards where patient privacy may only amount to a flimsy curtain between beds is a barrier to adequate care during labour in general, but especially for women who are HIV positive.

A formal evaluation of these aspects of the PMTCT programme has not yet been made. However, anecdotal reports suggest that 'missed opportunities' are not a big problem. In a number of sites, the considerable amount of NVP dispensed within health facilities suggests that staff are pro-actively asking women whether they have taken NVP. On the other hand, the discrepancy between the numbers of HIV positive women diagnosed in the antenatal period and the number of HIV positive deliveries might suggest that some HIV positive women are not being identified in labour, or that because of the busy nature of labour wards, NVP is being dispensed without being recorded.

5.3 Obstetric practices

In addition to the administration of NVP, there are a number of obstetric interventions that must be practiced for the correct and safe care of HIV positive women in labour. To start with, there should be strict adherence to all the precautions and safety procedures for the protection of staff from occupational exposure. These precautions and safety procedures should furthermore be applied universally to all women regardless of their known HIV status.

Secondly, there are certain obstetric practices that can minimise the risk of vertical transmission of HIV. These include avoiding the artificial rupture of membranes, minimising the duration of ruptured membranes, minimising the duration of active labour (especially in the second stage) and avoiding instrumental or assisted vaginal

deliveries. Although performing elective caesarian sections reduces the rate of transmission, this is not part of the current PMTCT protocol due to the unfeasibility of this option.

The correct implementation of the practices described above will depend on the general staffing levels, expertise, experience and capacity of doctors and midwives within the sites. Although there has not yet been an in-depth review of clinical obstetric practice in the PMTCT sites, the sub-optimal staffing levels and certain indicators of the quality of care in some facilities suggests that the general standard of obstetric care is inadequate.

Finally, in one site, obstetric staff indicated that there was no difference in clinical practice or clinical protocols for known HIV positive women, because of the practice of taking universal precautions. In other words, all pregnant women in labour were managed as though they were potentially HIV positive. In other sites, however, there was an understanding that obstetric practice was different for women known to be HIV positive. This reveals a lack of clarity around the clinical guidelines for the care of HIV positive women in labour.

5.4 The paediatric administration of NVP

The national PMTCT protocol stipulates that the babies of all HIV positive mothers receive a dose of NVP suspension between 24 and 72 hours after delivery. If the mother only received her dose of NVP within 2 hours of delivery, the baby should actually receive two doses of NVP.

Several facilities have cited some difficulties with the administration of NVP due to the fact that many women are discharged home before 24 hours have elapsed after delivery. As a consequence some sites are dispensing the dose of NVP suspension 12 hours after delivery. Pharmacokinetic studies conducted at the University of Natal have suggested that this should be as efficacious as waiting 24 hours after delivery.

Immediately after birth, there are three places that a baby is likely to be taken to: the postnatal ward with the mother; the nursery (without the mother), or the special/ intensive care unit. In order to make sure that all eligible babies receive the right dose of NVP at the right time, it is important that some continuity of care is established between the labour ward and the postnatal ward, nursery and special care unit. The extent to which drug charts and patient case notes clearly indicate to postnatal nursing staff which newborns must receive NVP before discharge or within 72 hours of delivery needs to be evaluated.

5.5 Post-delivery follow-up and continuity of care

The national PMTCT protocol makes it clear that care must extend beyond the point of delivery for both mother and child. All women are recommended to go for a postnatal check-up 3-14 days after discharge, and further visits are recommended every two weeks in the first month and once a month thereafter. These visits should provide medical care as required, permit access to free formula, as well as provide ongoing clinical care and support for infant feeding.

Infants of HIV positive women are recommended to be followed-up weekly during the 1st month of life, and monthly thereafter, until the age of 12 months. After that they should be monitored 3 monthly until they are two years of age, unless the child is ill. In addition, co-trimoxazole prophylaxis is to be provided from 6 weeks of age. At 12 months, an HIV test will be conducted. If this is negative, co-trimoxazole prophylaxis will be stopped. For children who are HIV-positive, co-trimoxazole will be stopped if they are well and growing. If the infant has had pneumocystis infection, more than two episodes of pneumonia, an AIDS-defining illness or is not growing well, co-trimoxazole will be continued for life.

There is currently little information on the uptake, frequency and regularity of follow-up visits. Many sites however have recognised that providing ongoing care to mothers and children is a formidable challenge. The challenges to providing follow-up care are numerous, and include:

- ➢ Poor access to health facilities due to long distances and a lack of affordable transport
- ➢ Poor patient records which make it difficult to maintain a continuity of care
- ➢ Long waiting times and queues
- ➢ Patient mobility in and out of the sites.

In some sites, free formula is only made available at the delivery facility. For women who live far from the hospital or MOU, the lack of availability of free formula at a nearby clinic can make it expensive and difficult for her to get her formula.

Difficulties with follow-up and continuity of care tend to be more acute in sites where there is poor communication between antenatal services, hospitals and clinics, where patient mobility is high and where there has been a relative over-emphasis on the obstetric aspect of the PMTCT programme in relation to out-patient child health and medical services.

Although there are massive infrastructural barriers to the full implementation of the follow-up guidelines of the national PMTCT protocol, the Paarl site in the Western Cape (a well resourced and low prevalence site) offers an example of excellent care. During the antenatal period, mothers are counselled and advised to choose a clinic for their follow-up. Sometimes mothers will choose a clinic distant from their homes in order to protect their confidentiality. The PMTCT site manager will then take the mother to the clinic to introduce her to the clinic staff. A special register allows for these patients to be followed up over time. This arrangement would be impossible in many of the rural sites.

Anecdotal reports of the patient-held cards of HIV positive women being lost or defaced to protect their confidentiality indicates that some women do not want to disclose their HIV status after delivery. In order to get around this problem, health workers have been devising all manner of coded terms and markers of HIV positivity that will be recognised by health workers, but not by members of the general public. There have been concerns that such actions to protect patient confidentiality may re-inforce stigma and silence, as well as undermine the continuity of patient care across different service providers.

5.6 Organisation and management

Experience from all the sites has pointed to the fundamental importance of leadership and effective management as key ingredients of successful PMTCT sites. This is unsurprising given the fact that the programme requires the recruitment of new staff (PMTCT co-ordinators and lay counsellors), the creation of physical space for counselling, the training of staff in HIV, MTCT and infant feeding, the establishment of linkages and referral systems between different parts of the health care system, community mobilisation and the regular supply of medicines, testing kits and formula.

Provincial leadership and management

Sites with the involvement of the highest levels of provincial government have been most successful in implementing the PMTCT programme. The role of senior managers is important in integrating the programme horizontally, sharing the workload across a number of departmental units and avoiding the trap of locating the programme within a narrow and vertical management system. The establishment of functional multi-unit steering committees appears to have worked well in getting the provincial department as a whole to pull together. Senior managers are also required to play more of a strategic role in balancing the requirements of the PMTCT programme with the requirements of other HIV and PHC services.

The presence of a dedicated 'driver' at the provincial level is critical. However the skills and qualities of such a person are important. The driver needs to have not only the technical proficiency to understand the clinical and public health aspects of the programme, but also the seniority and authority to make and implement the required decisions. Alternatively s/he needs to work with other people at the provincial level with the required skills and competencies.

In some provinces however, conflict around turf and a lack of clarity about roles and responsibilities has weakened provincial capacity to implement the programme.

An important ingredient has been the availability of a local pool of PMTCT 'experts' and clinicians who can be drawn upon to provide training and support. The Western Cape for example has had the benefit of academics and consultants from the University of Cape Town, in addition to local NGOs to support their sites. In Gauteng and Durban, expertise located in Baragwanath and King Edward Hospital VIII have been able to provide support. In other provinces however, there is still a need to increase the training capacity required to continuously improve the quality of services, and this will be essential should there be an expansion of services to other sites.

Provincial PMTCT co-ordinators also need to have the authority and technical legitimacy to work with and through the different role-players at the site level.

The creation of a CCLO post has been useful for most provinces, although some provinces have taken a long time to appoint people to the posts. Concerns about the short-term contractual nature of the post and its relative lack of seniority have been expressed. In some provinces too much responsibility has been placed on the shoulders of the CCLO. Provinces whose Directors of PHC and Directors of HIV and MCWH have taken active leadership roles, with the CCLO operating under their supervision, have shown quicker and more effective implementation.

Site preparation and management

The careful preparation of sites prior to implementation appears to be an ingredient of success. Ideal site preparation starts with careful planning, staff training and orientation, the recruitment of lay counsellors (preferably done with and through a credible NGO), the training of lay counsellors, community mobilisation and the establishment of adequate physical space and privacy.

A PMTCT service requires leadership and good co-ordination within the site. Actions at the community level, counselling and testing in antenatal clinics, delivery care and NVP administration in labour wards, and postnatal care in clinics must ideally form part of a seamless continuum.

Those PMTCT 'sites' that were identified as a network consisting of a hospital and its feeder CHCs/clinics were better suited to deliver a comprehensive PMTCT service than those sites that essentially consisted of single, isolated facilities. Provinces that establish viable health sub-districts (in line with the WHO District Health System model) with sub-district health management teams will have the best chance of expanding PMTCT services.

A good functional relationship between clinics, PHC programmes and hospitals is important. The Thlabane site in the North West struggled to implement the PMTCT programme for a long time because of the non-participation of Rustenberg Hospital. In Gauteng, the focus on hospitals and relative neglect of their links to clinics has caused weaknesses and problems.

Training and Human Resource Development

The effective organisation and provision of training is possibly the most important function of national and provincial management. Unless the available human resources at site and facility level have the correct and appropriate knowledge, skills and attitudes, the PMTCT programme is only partially effective.

Although there has been a tremendous amount of training in the PMTCT sites, human resource development remains a key challenge (Appendix 2, Section B describes some of these activities province by province). Some of the findings include:

- Provinces with ready and easy access to academic and technical experts are at a distinct advantage over those that don't.
- The tendency for provinces to manage and organise their own training interventions is an appropriate delegation of responsibility from the national office. However, some provinces require the national office to facilitate support from non-government agencies and academic/tertiary institutions (e.g. from some of the better resourced provinces).
- In spite of training, some nurses and counsellors have difficulties with aspects of HIV counselling, and correctly advising women about infant feeding, which suggests the need to evaluate and strengthen existing training interventions.
- In terms of the content of training, the focus to date has been on HIV counselling and testing and on vertical transmission. There is a need to balance this with more training on infant feeding and child health.

- Off-site, formal classroom-based training (usually for the development of knowledge and understanding) needs to be complimented with more on-site in-service training with a focus on skills development and problem solving.
- Doctors are inadequately targeted for training in some sites, and they are not being fully used as trainers of other staff.
- The balance between providing in-depth quality training versus rapid training to achieve a faster coverage of staff needs to be weighed up carefully on a site by site basis. The baseline capacities for staff to develop new knowledge and skills varies across the country, and ideally training would be tailored accordingly.
- Some provinces have taken the initiative to engage with nurse training institutions so as to develop undergraduate curricula that cover PMTCT.

Supply and distribution of consumables and equipment

In general, there have been few problems with the supply and distribution of NVP, testing kits and formula. Although there were delays with the transfer of the conditional grant, provinces made other arrangements to purchase the supplies and equipment required so that they could start-up their sites quickly. For example, in the Northern Province, the provincial pharmacy budget was used. In Mpumalanga, due to the delay in transferring national funds, initial supplies were provided from Gauteng. Many provinces also drew on their provincial VCT programmes, especially for making available rapid testing kits and for providing training.

Budgets and Funding

The conditional grant allocated from the national government to the provinces was held up for a considerable length of time due to administrative blockages. Funding did not actually reach the provinces until September/October 2001. In order to move ahead with the implementation of PMTCT services, provincial funds were used during the initial phases of development. However, the implementation of PMTCT services was delayed in provinces without ready access to other sources of funding.

The provincial PMTCT budgets from the national grant were calculated on the basis of HIV prevalence and the number of deliveries expected. Management capacity, rurality, the level of health care infrastructure and staffing levels were not adequately factored into the apportioning of budgets to the provinces. Money was not available in the national grant to upgrade facilities, and provincial budgets had to be used for this.

Routine monitoring and health information systems

All 18 national sites are currently providing some data on a routine basis. Frontline providers are responsible for collecting data which is sent to PMTCT site co-ordinators and/or provincial PMTCT co-ordinators on a weekly basis. However, much of the quality and reliability of this data is poor. Not all provinces used the same data definitions or calculated indicators using the same numerator and denominator (see notes in Appendix 1).

A nationally defined data set with clearly defined indicators was only finalised in December 2001. Consultants have now been funded by the national DoH to provide support and training to each of the provinces and the 18 sites to ensure good quality and standardised routine data collection.