

**Strategic Plan for Maternal,
Newborn, Child and Women's
Health (MNCWH) and Nutrition in
South Africa**

2012 - 2016

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ABBREVIATIONS

ANC	Antenatal Care
APP	Annual Performance Plan
ART	Antiretroviral therapy
ARV	Antiretrovirals
BANC	Basic Antenatal Care
CARMMA	Campaign for the Accelerated Reduction of Maternal Mortality in Africa
CCMT	Comprehensive Care, Management and Treatment
CBO	Community Based Organization
Child PIP	Child Healthcare Problem Identification Programme
CHW	Community Health Workers
CLO	Community Liaison Officer
CoMMiC	Committee on Mortality and Morbidity in Children
CTOP	Choice on Termination of Pregnancy
DBE	Department of Basic Education
DOH	Department of Health
DHIS	District Health Information System
ECD	Early Childhood Development
EDL	Essential Drugs List
EMOC	Emergency Management of Obstetric Care
EMS	Emergency Medical Services
EPI	Expanded Programme on Immunisation
HDACC	Health Data Advisory and Co-ordination Committee
HHCC	Household and Community Component (of IMCI)
HPV	Human Papilloma Virus
HSRC	Human Sciences Research Council
ISHP	Integrated School Health Programme
IDP	Integrated Development Plan
IMCI	Integrated Management of Childhood Illness
KMC	Kangaroo Mother Care
KPA	Key Performance Area
LBW	Low Birth Weight
MBFHI	Mother and Baby Friendly Hospital Initiative
MDG	Millennium Development Goal
MMR	Maternal Mortality Ratio
MNCWH	Maternal, Newborn, Child and Women's Health
MRC	Medical Research Council
MTS	Modernization of Tertiary Services
NaPeMMCo	National Perinatal Mortality and Morbidity Committee
NBTS	National Blood Transfusion Service
NCCEMD	National Committee on Confidential Enquiries into Maternal Deaths
NDOH	National Department of Health
NFCS	National Food Consumption Study
NSDA	Negotiated Service Delivery Agreement
NSP	National Strategic Plan (on HIV, STIs and TB)
PCR	Polymerase Chain Reaction
PHC	Primary Health Care
PPIP	Perinatal Problem Identification Programme

PMTCT	Prevention of Mother to Child Transmission (of HIV infection)
SADHS	South African Demographic and Health Survey
SAPS	South African Police Service
SASO	Specified Auxiliary Service Officer
STI	Sexually Transmitted Infection
RED (strategy)	Reach Every District (strategy)
SAQA	South African Qualifications Authority
Stats-SA	Statistics South Africa
TB	Tuberculosis
UNICEF	United Nations Children's Fund
WHO	World Health Organization
YFS	Youth Friendly Services

SECTION A: INTRODUCTION

South Africa is committed to reducing mortality and morbidity amongst mothers and children. This commitment is reflected in the Negotiated Service Delivery Agreement (NSDA) which was signed in 2010 and which identifies reductions in maternal and child mortality (as well as in the prevalence of TB and HIV) as key strategic outcomes for the South African health sector. South Africa also remains committed to working towards achievement of the Millennium Development Goals (MDGs). Although achievement of all the MDGs has important implications for the health and well-being of women, mothers and children, MDGs 1, 3, 4, 5 and 6 are of particular importance (see box below).

Delivery of comprehensive quality MCWH services is dependent on a well-functioning health system. Interventions outlined in the strategy are therefore closely linked to and aligned with efforts to strengthen the health system and especially to improve the functioning of PHC services and the district health system. Interventions contained in this plan reflect and support the process of PHC re-engineering. The three strands of PHC re-engineering, namely establishment of ward-based PHC outreach teams, expansion and strengthening of School Health services and establishment of district clinical specialist teams, will all contribute to improving maternal and child health. The ward-based PHC outreach teams will play a key role in delivering community-based MCWH services to communities and household level, and will facilitate access to services at PHC and hospital levels. Strengthening of school health services will contribute towards improved health and learning outcomes for children and youth, whilst the district clinical specialist teams, which will be made up of an obstetrician, a paediatrician, a family physician, an anaesthetist, an advanced midwife, an advanced paediatric nurse and a PHC nurse, will play a key role in ensuring provision of quality MCWH services at all levels within the district, with a particular focus on ensuring supervision and support of MCWH services at PHC and district hospital levels.

HEALTH-RELATED MILLENNIUM DEVELOPMENT GOALS

1. Eradicate extreme poverty and hunger

- Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.
- Achieve full and productive employment and decent work for all, including women and young people.
- Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

3. Promote gender equality and empower women

- Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.

- 4. Reduce child mortality**
 - Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.
- 5. Improve maternal health**
 - Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.
 - Achieve, by 2015, universal access to reproductive health.
- 6. Combat HIV/AIDS, malaria, and other diseases**
 - Have halted by 2015 and begun to reverse the spread of HIV/AIDS.
 - Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.
 - Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

The recently released report of the Health Data Advisory and Co-ordination Committee (HDACC) Report (2011)¹ recommends the following baselines (2009 data) and targets for 2014:

Indicator	Baseline (2009) ¹	Target (2014) ¹	Target (2016)
Maternal Mortality Ratio (per 100 000 live births)	310	270	
Under 5 mortality rate (per 1 000 live births)	56	50	40
Infant mortality rate (per 1 000 live births)	40	36	32
Neonatal mortality rate (per 1 000 live births)	14	12	11

Table 1: Mortality rates: baselines and targets

The HDACC considered that a 10% reduction in mortality for each of these rates was feasible by 2014 (these are shown in Table 1). The committee also recommended that the prevalence of stunting and underweight in children younger than five years be monitored, with an aim of reducing the prevalence by 1% per annum for the period 2009 – 2014 (no baseline is defined). Further targets to be achieved by 2016 are also shown in the table.

On an international level, recent efforts to improve maternal, newborn and child survival have focused on ensuring full coverage with packages of interventions with proven effectiveness. The key to making progress towards improving maternal, neonatal and child survival is to reach every mother, newborn and child in every district with a set of priority cost-effective interventions^{2,3,4}. This approach

¹ National Department of Health (2011) Health Data Advisory and Coordination Committee Report. Pretoria.

² Jones G *et al.* (2003) "How many child deaths can we prevent this year?" Lancet **362**: 65-71.

³ Adam T *et al.* (2005) Cost-effectiveness analysis of strategies for maternal and neonatal health in developing countries British Medical Journal **331**: 1107

⁴ The Partnership for Maternal, Newborn & Child Health (2011) A Global Review of the Key Interventions Related to Reproductive, Maternal, Newborn and Child Health (RMNCH). Geneva, Switzerland: PMNCH.

forms the basis of the African Union's Campaign for the Accelerated Reduction of Maternal Mortality in Africa (CARMMA) and the Strategic Framework for Reaching the MDGs on Child Survival in Africa, which calls on countries to increase efforts to strengthen health systems, and to implement at scale integrated packages of high-impact and low-cost health and nutrition interventions⁵.

This strategic plan therefore aims to identify priority interventions which can be expected to have the greatest impact on reducing maternal, newborn and child mortality and enhancing gender equity and reproductive health. It also aims to provide a road map of how these interventions can be effectively implemented with a focus on improving coverage, quality and equitable access to this package of core services.

MCWH SERVICE DELIVERY

Introduction of free health care services for mothers and children, together with the revitalization and building of more Primary Health Care (PHC) facilities, has improved access to health care services for many women and children, especially in rural areas. Utilization of PHC services has increased significantly with over 120 million visits to PHC facilities being recorded in 2010. Utilization rates amongst children have also increased with children below five years of age visiting PHC facilities an average of 4.5 times in 2010⁶. Despite these and other achievements, significant challenges remain.

The District Health System provides the vehicle for the delivery of comprehensive MCWH & Nutrition services in South Africa. PHC services are currently provided by 3 077 clinics and 313 Community Health Centres, whilst hospital services are provided at 269 district hospitals, 54 regional hospitals, 12 tertiary and nine central hospitals.⁷ Although access to health services is good, serious weaknesses and deficiencies have been documented in the South African health system⁸. MCWH & Nutrition services are at the heart of health service delivery, thus expanding and strengthening these services is dependent on addressing key bottlenecks to service delivery within the health system as a whole.

Most MCWH & Nutrition services are provided by the provincial Departments of Health, who are thus central role-players in efforts to improve coverage and quality of MNCWH & Nutrition services. Many other stakeholders also have key roles to play in promoting improved health and nutrition – these include other government departments (such as Social Development, Rural Development, Basic Education,

⁵ African Union (2007) A Strategic Framework for Reaching the Millennium Development Goal on Child Survival in Africa.

⁶ DHIS data. Extracted December 2011.

⁷ Day C and Gray A (2007) "Health and Related Indicators" in Harrison S, Bhana R and Ntuli A (eds) The South African Health Review 2007. Durban, Health Systems Trust.

⁸ Coovadia H, Jewkes R, Baron P, Sander D and McIntyre D (2009) "The health and health system of South Africa: historical roots of current public health challenges". Lancet.**374**: 817–34

Water Affairs and Forestry, Agriculture and Home Affairs), local government, academic and research institutions, professional councils and associations, civil society, private health providers and development partners, including United Nations and other international and aid agencies.

Within the National Department of Health, the Maternal and the Child Health Clusters are responsible for policy formulation, coordination, and monitoring and evaluation of MCWH & Nutrition services. Each province also has a unit which is responsible for fulfilling this role, and for facilitating implementation, at the provincial level.

At district level, services are provided by a range of health and community workers. These include nurses and doctors, as well as other professionals (e.g. dentists, dietitians, physiotherapists, occupational therapists) and other cadres such as community liaison officers (CLOs), specified auxiliary service officers (SASOs) and health promoters. A range of community health worker (CHW) programmes also play an important role in many districts. The ward-based PHC outreach teams, when deployed and fully functional, will strengthen provision of community-based services.

In the past decade efforts to improve MCWH services in South Africa have primarily focused on improving access to an expanded range of services especially at PHC level. This strategy aims to build on these services, and also to ensure that MCWH & Nutrition interventions at community and hospital levels are also strengthened.

PRIORITY HEALTH INTERVENTIONS FOR REDUCING MATERNAL AND CHILD MORTALITY: SERVICE PACKAGE

The following have been identified as priority interventions for reducing maternal and child deaths in South Africa. Efforts to reduce maternal and child mortality rates therefore need to focus on ensuring that every woman, mother and child receive these services as part of comprehensive service packages at community, PHC and hospital levels. District clinical specialist teams and ward-based PHC outreach teams will play a key role in ensuring that these services achieve full coverage.

Maternal Health

- Basic Antenatal Care (four visits for every pregnant women beginning during the first trimester)
- HIV testing during pregnancy with initiation of ART and provision of other PMTCT services where indicated
- Improved access to care during labour through introduction of dedicated obstetric ambulances and establishment of maternity waiting homes (where appropriate)
- Improved intrapartum care (with specific focus on the correct use of the partograms, and standard protocols for managing complications)
- Post-natal care within six days of delivery

Newborn Health

- Promotion of early and exclusive breastfeeding including ensuring that breastfeeding is made as safe as possible for HIV-exposed infants
- Provision of PMTCT
- Resuscitation of newborns
- Care for small/ill newborns according to standardized protocols.
- Kangaroo Mother Care for stable LBW infants
- Post-natal visit within six days which include newborn care, and supporting mothers to practice exclusive breastfeeding.

Child Health

- Promotion of breastfeeding and appropriate complementary feeding practices for infants and young children.
- Provision of preventative services. These include: immunisation, growth monitoring and promotion, vitamin A supplementation, regular deworming.
- Correct management of common childhood illnesses using the IMCI case management process (including early identification and management of children with HIV and TB).
- Early identification of HIV-infected children and appropriate management (including initiation of ART where indicated)

- Improved hospital care for ill children especially for those with common conditions (pneumonia, diarrhoea and severe malnutrition) using standardised protocols.
- Expansion and strengthening of school health services.
- Developing services for children with long-term health conditions.

Women's Health

- Access to contraceptive services, including pregnancy confirmation, emergency contraception, CTOP and a full range of contraceptive methods
- Post-rape care for adults and children.
- Improved reproductive health services for adolescents through provision of youth-friendly reproductive health services at health facilities and as part of school health services.
- Improved coverage of cervical screening and strengthening of follow-up mechanisms.

Community Interventions

- Provision of a package of community-based MCWH services by generalist CHWs working as part of ward-based PHC outreach teams
- Multi-sectoral action to reduce poverty and inequity, and improve access to basic services, especially improved water and sanitation
- Development of a MCNH communication strategy

In the following sections, more details regarding each of the five packages are outlined.

SECTION B: PRIORITY INTERVENTIONS FOR MATERNAL HEALTH

As noted above, the HDACC report estimated the MMR in 2009 to be 310 per 100 000 per live births in 2009 and set a target of reducing the ratio to 270 per 100 000 live births by 2014⁹.

AUDITING OF MATERNAL DEATHS IN SOUTH AFRICA

Maternal deaths have been notifiable since 1997. The National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) has published the regular reports, which have contained the following ten recommendations.

1. Protocols on the management of important conditions causing maternal deaths must be available and utilized appropriately in all institutions where women deliver. All midwives and doctors must be trained on the use of protocols.
2. All pregnant women should be offered information on, screening for and appropriate management of communicable and non-communicable diseases.
3. Criteria for referral routes must be established and utilized appropriately in all provinces.
4. Emergency transport facilities must be available for all pregnant women with complications (at any site).
5. Staffing and equipment norms must be established for each level and for every health institution concerned with the care of pregnant women.
6. Blood for transfusion must be available at every institution where caesarean sections are performed.
7. Contraceptive use must be promoted through education and service provision and the number of mortalities from unsafe abortion must be reduced.
8. Correct use of the partogram should become the norm in each institution conducting births. A quality assurance programme should be implemented, using an appropriate tool.
9. Skills in anaesthesia should be improved at all levels of care. Use of regional anaesthesia should be encouraged.
10. Women, families and communities at large must be empowered, involved and participate actively in activities, projects and programmes aiming at improving maternal and neonatal health as well as reproductive health in general.

The fourth Saving Mothers Report (2005 – 2007)¹⁰ confirmed that most maternal deaths are due to just four causes:

⁹ National Department of Health (2011) Health Data Advisory and Coordination Committee Report. Pretoria.

- Non-pregnancy related infections (including TB and HIV) accounted for 43.7% of deaths,
- Hypertension (15.7%),
- Postpartum haemorrhage (12.4%)
- Pregnancy-related sepsis (9.0%).

The most frequent health care provider avoidable factors were failure to follow standard protocols and poor problem recognition and initial assessment. Assessors thought that 38.4% of the deaths would have been avoided if the quality of care within the health care system had been better.

The 2010 National HIV and Syphilis Prevalence Survey found an HIV prevalence of 30.2% amongst pregnant women¹¹. This rate is indicative that the HIV prevalence has stabilised albeit at an extremely high level. The prevalence amongst women 15 – 19 years (14.0% in 2010) has also stabilised, whilst the prevalence of syphilis has decreased from 11.2% in 1997 to 1.5% in 2010.

Improving the quality of maternal care (especially intrapartum care) and addressing HIV infection are therefore the most important interventions for reducing maternal mortality.

PRIORITY INTERVENTIONS FOR ADDRESSING MATERNAL MORTALITY

- Basic Antenatal Care (four visits for every pregnant women beginning during the first trimester)
- HIV testing during pregnancy with initiation of ART and provision of other PMTCT where indicated
- Improved access to care during labour through introduction of dedicated obstetric ambulances and establishment of maternity waiting homes (where appropriate)
- Improved intrapartum care (with specific focus on the correct use of the partograms, and standard protocols for managing complications)
- Post-natal care within six days of delivery

¹⁰ National Department of Health. Saving Mothers: Fourth Report on Confidential Enquiries into Maternal Deaths in South Africa: 2005-2007. Pretoria.

¹¹ National Department of Health (2011) The National Antenatal Sentinel HIV and Syphilis Prevalence Survey: South Africa 2010. Pretoria.

1. Basic Antenatal Care

Between 90 and 100% of pregnant women attend a health facility at least once for antenatal care¹². However, fewer women attend on four occasions (only 73% in 2006)¹³, and approximately 38% attend before 20 weeks gestation¹⁴. Deficiencies in the quality of ANC have also been documented¹³.

The Basic Antenatal Care (BANC) approach, which aims to ensure that all women receive four focussed antenatal visits, has been shown to be as effective as more traditional models in terms of maternal and perinatal outcomes and to be acceptable to users¹⁵. The approach emphasises provision of routine care including promotion of healthy behaviours such as adequate nutrition and moderate exercise, promotion of safe sex and smoking and alcohol avoidance and cessation, as well as identification and referral of women with high-risk pregnancies.

All pregnant women should receive supplementation with iron and folate during pregnancy. All pregnant women should also be given calcium supplementation (at least 800 – 1000µg per day) to prevent pre-eclampsia¹⁶ – this is a new recommendation, and it is important to ensure that it is incorporated into routine practice without delay.

2. HIV testing and access to ART

One of the key goals of the HIV & AIDS and STI Strategic Plan for South Africa is to reduce mother-to-child transmission of HIV, with a target of less than 2% transmission at 6 weeks by 2016¹⁷. Achievement of this target is expected to result in a significant reduction in child mortality rates. The 2010 PMTCT transmission study found that the national MTCT transmission rate was 3.5%. This was half the transmission rate compared to the 8% that the report estimated for 2008¹⁸.

PMTCT services have historically focused on providing voluntary testing and counselling, antiretroviral therapy and infant feeding support. The expanded PMTCT package, with its four key pillars, includes additional services which target both HIV-positive and HIV-negative mothers. These include primary prevention of HIV among young women, prevention of unintended pregnancies amongst adolescents and HIV-positive women and involving men in decision-making.

¹² National Department of Health, Medical Research Council, OrcMacro (2007) South African Demographic and Health Survey 2003. Pretoria, Department of Health.

¹³ Pattinson RC *et al.* (2007) Report to UNICEF on the scaling-up of the BANC quality improvement programme in two sub-districts per province in South Africa.

¹⁴ DHIS 2010/11 Extracted January 2012.

¹⁵ World Health Organization (2002) WHO Antenatal Care Randomized Trial: Manual for Implementation of the New Model. Geneva, WHO.

¹⁶ World Health Organization (2011) WHO recommendations for Prevention and treatment of pre-eclampsia and eclampsia. Geneva, WHO.

¹⁷ Republic of South Africa (2011) National Strategic Plan on HIV, STIs and TB: 2012-2016. Pretoria, SANAC.

¹⁸ Statement issued by Medical Research Council, 9th June 2011.

However key components of the programme still need to be strengthened. Mechanisms for ensuring that pregnant mothers are fast-tracked for ART must be in place. New guidelines for the ART component of PMTCT have been introduced, and it is important that these are scaled-up as rapidly as possible.

3. *Improved access to care during labour*

Ensuring that pregnant women can access care once labour begins is also important. Some hospitals in rural areas make use of waiting areas, and this practice should be extended to other areas where women experience difficulties and delays in accessing care once labour has begun. In addition, obstetric ambulance services should also be expanded especially in hard to reach areas, and areas where emergency medical services response times are still long.

4. *Intrapartum Care*

Improvements in the quality of intrapartum care are critical if maternal deaths are to be reduced. Partograms should be used to monitor every labour, and quality assurance programmes, which monitor and improve the use of partograms as well as the identification and response to complications, should be in place in all institutions.

All health facilities should have (and use) protocols for identifying and managing complications. Access to Caesarean section is imperative, and blood for transfusion must be available at every health facility where these operations are performed. Skills in anaesthesia should be improved at all levels of care.

5. *Post-natal care within six days of delivery*

The early post-natal period is important for mothers and their infants - not only do many maternal and neonatal deaths occur in this period, but mothers require support in caring for and breastfeeding their babies.

Although post-natal visits should be part of routine service delivery the 2010/11 Annual Report¹⁹ reported that only 29.9% of babies and 27% of mothers were reviewed within 6 days of delivery.

Post-natal visits should ideally be home-based, although facility visits may be practical in some settings. Community Health Workers (CHWs) have a key role to play in improving coverage through conducting structured home visits during this period and the ward-based PHC outreach teams will play a significant role in ensuring that all mother-baby pairs are visited.

¹⁹ National Department of Health (2011). Annual Report 2010/11. Pretoria, NDOH.

SECTION C: PRIORITY INTERVENTIONS FOR NEWBORN HEALTH

In South Africa, as in other countries, deaths during the neonatal period (0 – 28 days) account for approximately a third of all deaths in children under five years of age. Thus significant reductions in under-five mortality rates will only be possible if deaths during the neonatal period are reduced. The HDACC report estimated the neonatal mortality rate at 14 per 1000 live births and set a target of reducing this to 12 per 1000 by 2014.

The stillbirth rate in South Africa is 19 per 1000 deliveries (with birth weight \geq 1000g). This is comparable with rates in other middle income countries, although the intrapartum stillbirth rate is higher than in these countries, suggesting that intrapartum care needs to be improved. A high proportion of both fresh stillbirths (18%) and macerated stillbirths (48%) were unexplained. Antepartum haemorrhage (15%), intrapartum asphyxia and birth trauma (14%), hypertension (13%) and infections (5%) were also important contributors to stillbirths²⁰.

The most important causes of death in the early neonatal period are immaturity (45%), intrapartum hypoxia (28%), infection (10%) and congenital abnormalities (8%). Hypoxia affects mostly larger babies, and improvements in intrapartum monitoring and care would prevent many of these deaths.

In 2010/11 one in eight (12.8%) babies was classified as having low-birth weight (< 2.5kg)²¹.

Priority interventions for reducing newborn mortality rates:

- Promotion of early and exclusive breastfeeding including ensuring that breastfeeding is made as safe as possible for HIV-exposed infants
- Provision of PMTCT
- Resuscitation of newborns
- Care for small/ill newborns according to standardized protocols.
- Kangaroo Mother Care for stable LBW infants
- Post-natal visit within six days which include newborn care, and supporting mothers to practice exclusive breastfeeding.

²⁰ MRC Unit for Maternal and Infant Health Care Strategies (2009) Saving Babies: Sixth Perinatal Care Survey for South Africa (2007 - 2008). Pretoria, University of Pretoria.

²¹ DHIS data 2010/11. Extracted January 2012.

PERINATAL MORTALITY AUDIT AND REVIEW

The Perinatal Problem Identification Programme (PIIP) is a facility-based approach to auditing perinatal deaths. It relies on regular institutional review meetings to discuss deaths, and identify and address possible shortcomings in care. This provides valuable information regarding perinatal health and health services in the country, and forms the basis of the Saving Babies Reports, which have been published on a regular basis for the past 10 years. The Seventh Saving Babies Report (2008 and 2009) included data on 962746 births, 23 547 stillbirths and 11 404 early neonatal deaths - this represents 52.4% of all births in institutions²². The reports identify low birth weight and asphyxia as the main causes of death in neonates; thus efforts to reduce neonatal mortality must prioritize the prevention and management of these conditions.

NaPeMMCo

A Ministerial Committee on Perinatal Mortality (NaPeMMCo) was appointed in 2008. In addition to improving the quality of data on perinatal deaths, the committee plays an important facilitatory role in institutionalising the use of perinatal mortality reviews as a mechanism for identifying and addressing deficiencies in the quality of care which mothers and their newborn babies receive.

The committee's report contains the following ten recommendations.

IMPROVING ACCESS TO APPROPRIATE HEALTHCARE

1. Regional Clinicians should be appointed to establish, run and monitor and evaluate outreach programmes for maternal and neonatal health
2. Improve transport system for patients and establish referral routes
3. The Government should ensure that constant health messages are conveyed to all and understood by all.

IMPROVING QUALITY OF CARE

4. Improve the training of health care professionals with regard to both undergraduate (pre-service training) and in-service training.
5. National maternal and neonatal guidelines should be followed in all healthcare facilities
6. Improve provision and delivery of postnatal care
7. Normalization of HIV infection as any chronic disease

²² Pattinson RC (ed) (2011) Saving Babies 2008-2009: Seventh report on perinatal care in South Africa. Tshepesa Press, Pretoria.

ENSURE THAT ADEQUATE RESOURCES ARE AVAILABLE

8. Provide adequate nursing and medical staff, adequate equipment for the health needs of both mothers and babies, especially the equipment required for emergency and critical care
9. Provide an adequate number of hospital beds for the health needs of mother and babies at all levels of health care, including critical care beds.

AUDITING AND MONITORING

10. Improve data collection and review

1. *Promotion of early and exclusive breastfeeding*

South Africa has experienced erosion of breastfeeding culture over the past years due to, among other reasons, aggressive marketing of breast milk substitutes by the infant feeding industry and lack of clarity regarding optimal infant feeding practices in the context of the HIV/AIDS epidemic. 2008 indicated that only 25.7% of children aged 0 to 6 months were exclusively breastfed, with 22.5% of children 0 to 6 months being exclusively formula fed and 51.3% of the children in this age group were mixed fed²³. The 2010 WHO guidelines on HIV and infant feeding brought renewed efforts to put breastfeeding back on the agenda as a key child survival strategy. The WHO guidelines recommend that all HIV-infected mothers breastfeed their infants provided that they (or their infant) receive antiretroviral drugs to prevent HIV transmission whilst breastfeeding continues²⁴.

A National Breastfeeding Consultative meeting was convened in August 2011. The meeting concluded with the Tshwane Declaration of Support for Breastfeeding in South Africa, which declared South Africa to be a country that actively promotes, protects and supports exclusive breastfeeding as the infant feeding option of choice, irrespective of the mother's HIV status.

The declaration contained the following actions were recommended:

- South Africa adopts the 2010 WHO guidelines on HIV and infant feeding, and recommends that all HIV-infected mothers should breastfeed their infants and receive antiretroviral drugs to prevent HIV transmission.
- National regulations on the International Code on Marketing of Breast Milk substitutes are finalised, adopted into legislation within 12 months, fully implemented and the outcomes monitored;

²³ Shisana O, *et al.* (2009) The South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: A turning tide among teenagers? Cape Town, HSRC Press.

²⁴ World Health Organization (2010) Guidelines on HIV and infant feeding 2010: Principles and recommendations for infant feeding in the context of HIV and a summary of evidence. Geneva, WHO.

- Legislation regarding maternity among working mothers is reviewed in order to protect and extend maternity leave, and for measures to be implemented to ensure that all workers, including domestic and farm workers, benefit from maternity protection, and to include an enabling workplace;
- Comprehensive services are provided to ensure that all mothers are supported to exclusively breastfeed their infants for six months, and thereafter to give appropriate complementary foods, and continue breastfeeding up to two years of age and beyond.
- Human milk banks are promoted and supported as an effective approach, especially in post-natal wards and neonatal intensive care units, to reduce early neonatal and post-natal morbidity and mortality for babies who cannot breastfeed
- Implementation of the Mother and Baby Friendly Health Initiative (MBFHI) and Kangaroo Mother Care (KMC) are mandated such that all public hospitals and health facilities are MBFHI-accredited by 2015, and all private hospitals and health facilities are partnered to be MBFHI accredited by 2015
- Communities are supported to be “Baby Friendly” and community-based interventions and support are implemented as part of the continuum of care, with facility-based services to promote, protect and support breastfeeding
- Continued research, monitoring and evaluation should inform policy development and strengthen implementation
- Formula feeds will no longer be provided at public health facilities, except on prescription by appropriate healthcare professionals for mothers, infants and children with approved medical conditions.

2. *Resuscitation of newborns and care for small/ill newborns according to standardized protocols*

All health care workers who deliver babies should be able to promptly recognize those neonates who require resuscitation, and start resuscitation immediately.

Complications related to prematurity and low birth weight are the leading cause of death in newborn babies. Mortality rates for small newborns are high in district hospitals, when compared with those in regional tertiary and central hospitals - notwithstanding the fact that most small infants are cared for in district hospitals. Provision of simple standardised care could prevent many of these deaths. Care should include: temperature control, blood sugar monitoring and control, appropriate fluid balance and breastfeeding, appropriate management of infants with respiratory distress (including provision of oxygen, non-invasive ventilation and surfactant), good infection control (especially handwashing) and early identification and treatment of infection.

3. Kangaroo Mother Care (KMC)

Studies have shown that provision of Kangaroo Mother Care to stable newborns where the baby is carried on the front of the mother's chest (with direct skin-to-skin contact) is an effective and safe way of caring for these babies. PPIP data have shown that public hospitals that implemented KMC reduced their mortality rates amongst small babies (weighing between 1 – 2 kg) by 30%²⁵.

KMC needs to be implemented in all facilities that provide newborn care. Incorporating KMC assessments into MBFHI assessments would ensure that more facilities implement both strategies.

4. Post-natal visit within six days

The importance of these visits is outlined in the section on maternal health. The newborn component of these visits should focus on supporting mother-infant bonding and exclusive breastfeeding, on identifying any problems and on ensuring that the mother is aware of and able to access preventive and curative child health services.

²⁵ Pattinson RC, Bergh A-M, *et al.* (2006) "Does Kangaroo Mother Care save lives?" Journal of Tropical Paediatrics **52** (6) 438-41.

SECTION D: PRIORITY INTERVENTIONS FOR CHILD HEALTH

As noted above the HDACC report estimated the infant mortality rate in 2009 to be 40 per 1000 live births and the under 5 mortality rate to be 56 per 1000. South Africa is considered to be just one of five countries in which the child mortality rate increased between 1990 and 2008²⁶.

The Saving Children Report 2005 - 2009²⁷ identified the leading causes of child deaths in hospitalized children as acute respiratory tract infections (including pneumocystis pneumonia), sepsis, diarrhoeal disease, tuberculosis and meningitis with these conditions accounting for 80% of deaths. Most deaths (63%) occurred in children less than one year of age and 34% occurred during the first 24 hours of admission. Sixty five percent of children who died were malnourished, with 35% having severe malnutrition.

Child poverty remains an important underlying or contributing factor to child deaths in South Africa. In 2009 61% of children lived in households that were income-poor. Three percent of children (approximately 622,000) were documented as being maternal orphans (with living fathers), and a further 5% (966,000) were recorded as being double orphans (both parents deceased or unknown). During the same year, 73% of eligible children were estimated to be receiving a child support grant. Only 61.9% of children lived in households with on-site access to adequate water, whilst 63.2% lived in households with basic sanitation²⁸.

COMMiC Recommendations

Determinants

Address the Social, Economic and Environmental Determinants of child mortality in South Africa.

Data

Improve systems for collecting data on child mortality. These include:

- Vital registration.
- District Health Information System.
- Demographic and Health Survey.
- Child Healthcare Problem Identification Programme (Child PIP).

Delivery

Define a Package of Essential Health Care Services for Children.

²⁶ WHO and UNICEF (2010) Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva and New York, WHO and UNICEF.

²⁷ Stephen CR, Bamford LJ, Patrick ME and Wittenberg DF (eds). (2011) Saving Children 2009: Five years of Data: A sixth survey of child healthcare in South Africa. Pretoria: Tshepesa Press, MRC, CDC.

²⁸ Jamieson L, Bray R, Viviers A, Lake L, Pendlebury S & Smith C (eds) (2011) South African Child Gauge 2010/2011. Cape Town: Children's Institute, University of Cape Town.

Diseases

Develop and implement specific recommendations for addressing the major causes of child mortality using the Package of Essential Health Care for Children approach targeting:

- Diarrhoeal Disease.
- Pneumonia.
- Malnutrition.
- HIV/AIDS

Undernutrition remains an important problem. The 2005 National Food Consumption survey found that 18% of children were stunted, 9.3% were underweight and 4.5% were wasted. Levels for all three indices were higher in young children (1 – 3 years) than in older children (7 – 9 years). Stunting was higher in children living in rural farming areas (24.5%), tribal areas (19.5%) and urban informal areas (18.5%). Micronutrient deficiencies were also documented. In contrast the study found 14% of children (1 – 9 years) to be obese²⁹.

1. *Promotion of breastfeeding and appropriate complementary feeding practices for infants and young children*

As outlined above, South Africa has adopted the 2010 World Health Organization (WHO) feeding guidelines which recommend that infants should be exclusively breastfed until six months of age. Expanded access to lifelong ART for pregnant women and provision of low-dose nevirapine for HIV-exposed infants have been introduced in order to make breastfeeding safe for HIV-infected mothers.

From six months of age, appropriate complementary feeds should be introduced whilst breastfeeding should continue until two years of age (one year of age for HIV-exposed, uninfected infants). Additional interventions are required to strengthen knowledge and practices of infant and young child feeding at community level.

2. *Preventative services*

Provision of preventive services is key to improving the health of children. These services include: Immunisation, growth monitoring and promotion with early identification and management of growth failure, vitamin A supplementation, regular deworming. Well child visits also provides an opportunity for assessment of the child's development. Children with poor eyesight, hearing loss, and other developmental and behavioural problems can be identified, and referred for the appropriate remedial support.

²⁹National Department of Health. National Food Consumption Survey-Fortification Baseline (NFCS-FB): South Africa, 2005. Unpublished.

Provision of these services will be facilitated by the new Road to Health booklet which represents a more comprehensive patient-held record. An important new feature is that the booklet now includes information on the HIV status of both the mother and the child – it is anticipated that this will promote early identification and management of children with HIV infection.

2.1 Expanded Programme on Immunisation

The Expanded Programme on Immunisation (EPI) has achieved high coverage with 89.4% of children being fully immunised (with the primary schedule) by one year of age in 2010/11³⁰. Neonatal tetanus has been eliminated, and South Africa was certified as polio-free in 2006. Vaccines against pneumococcal and rotavirus infections were introduced into the routine immunisation schedule in April 2009, and by March 2011 a coverage of 72.8% for pneumococcal 3rd dose and 72.2% for rotavirus was achieved. It is expected that high coverage with these new vaccines will result in decreased morbidity and mortality attributable to pneumonia and diarrhoea. The updated EPI schedule includes immunisation with tetanus toxoid at 6 and 12 years. In the long term it is anticipated that this will remove the need to immunise pregnant mothers with tetanus toxoid.

However, there are still health districts with significantly lower immunisation rates. The RED (Reach Every District) Strategy has been implemented in order to ensure that all districts reach and maintain high immunisation coverage rates.

Measles elimination and polio eradication strategies have also been strengthened. National immunisation campaigns have been conducted every three years, and surveillance activities have been strengthened. South Africa was declared free of wild polio virus in 2006, and neonatal tetanus has also been eliminated. Following a number of years during which few cases of measles were reported, more than 18 000 cases were reported between 2009 and January 2011³¹. The incidence dropped rapidly following the mass measles campaign undertaken in April and May 2010, but the outbreak underscored the importance of maintaining high coverage rates through both routine programmes and regular campaigns.

2.2 Growth monitoring and promotion with early identification and management of growth failure

Undernutrition contributes significantly to deaths in young children, and improving infant and young child feeding and nutrition, therefore have an important role to play in reducing infant and child mortality rates.

Early identification and appropriate classification of malnutrition is pivotal to appropriate and timely intervention, especially in children below five years of age.

³⁰ National Department of Health (2011) *Annual Report 2010/11*. Pretoria.

³¹ NICD and NHLS (2011) "Communicable Disease Communiqué". Vol. 10. No1. January 2011.

Regular weighing with correct plotting of the weight and interpretation of the growth curve on the Road to Health Chart form the core of the growth monitoring and promotion strategy.

Although growth monitoring is provided at all health facilities, a number of studies have documented inadequacies in the correct identification and management of children with growth and faltering and failure^{32,33}. Most training on growth monitoring and other preventative interventions has targeted professional nurses, whilst these services are provided by enrolled nurses and enrolled nursing assistants in many settings. These cadres of health workers need to be targeted if the coverage and quality of growth monitoring and promotion is to improve.

2.3 Supplementation with Vitamin A and other micronutrients

Regulations requiring fortification of maize and bread flour with zinc, iron and six vitamins (Vitamin A, thiamine, riboflavin, niacin, pyridoxine and folate) were implemented in order to reduce micronutrient deficiencies. In addition, iodization of salt has also become mandatory. Fortification with folate has resulted in a 30% decrease in the incidence of neural tube defects, whilst mandatory iodation of salt has dramatically reduced the prevalence of iodine deficiency in the country³⁴.

Vitamin A deficiency contributes to as many as one out of four childhood deaths with even moderate vitamin A deficiency significantly increasing a child's risk of dying from infectious diseases. A combination of interventions is usually used to prevent and eliminate vitamin A deficiency – these include breastfeeding protection and promotion, food fortification, vitamin A supplementation and dietary diversification.

Routine Vitamin A supplementation for children younger than five years was introduced in South Africa in 2003. Non-breastfed infants receive a once-off dose of 50 000 IU at 6 weeks, whilst children 6–11 months receive a single dose of 100 000IU and children aged 12– 60 months receive 200 000IU every 6 months. Data from the DHIS showed coverage of over 98% for children 6 – 11 months and 35% for children 12 – 59 months during 2010/11³⁵.

In an effort to improve the coverage in the 12–59 month age group, Vitamin A campaigns were conducted in 2008 and 2009. This will become an annual activity linked to other community-based campaigns such as EPI and mass deworming campaigns. Routine vitamin A supplementation will also be strengthened by ward-based PHC outreach teams.

³² Schoeman SE *et al.*(2006) "The targeting of nutritionally at-risk children attending a primary health care facility in the Western Cape Province of South Africa". *Public Health Nutrition* 9 (8), 1007-12.

³³ Hendricks MK, le Roux M, Fernandes M and Irlam J (2003) "Evaluation of a nutrition supplementation programme in the Northern Cape Province of South Africa". *Public Health Nutrition* 6(5), 431-7.

³⁴ National Department of Health. National Food Consumption Survey-Fortification Baseline (NFCS-FB): South Africa, 2005. Unpublished.

³⁵ DHIS data. Extracted January 2012.

2.4 Regular deworming

Children bear most of the burden associated with soil-transmitted helminth infections and bilharzia. These infections adversely affect their growth, ability to learn and intellectual development. Whilst alleviation of poverty and improving living conditions (especially sanitation and access to clean water) will provide long-term solutions to this problem, encouragement of health-promoting behaviours and synchronised, regular drug treatment of high-risk groups also have an important role to play.

Children between one and five years of age should receive regular deworming. This is currently provided at PHC facilities and through campaigns, although it is hoped that this can be incorporated into the work of ward-based PHC outreach teams (see section 7). Guidelines for regular deworming of primary school children have also been developed - and will be provided as part of the Integrated School Health programme (ISHP) package of services.

3. ***Correct management of common childhood illnesses using the IMCI case management process***

As in many developing countries, most deaths in children under five years of age are due to a limited number of preventable and treatable conditions. The Integrated Management of Childhood Illness (IMCI) aims to reduce mortality from these conditions through improved case management at health facilities, and by promoting improved child care and health-seeking behaviours at household and community levels. IMCI also has a strong preventative focus. The case management process for each child should include an assessment of the child's immunisation and nutritional status. Counselling on appropriate feeding during health and illness should be provided where necessary, and Vitamin A, deworming medication and immunisations should be provided routinely.

IMCI aims to ensure that 60% of health care providers in all PHC facilities are trained in IMCI. During 2010/11 provinces reported that this target has been met in 66% of PHC facilities³⁶.

The South African version of IMCI has been updated to include new developments in case management such as provision of zinc for the treatment of diarrhoea. Early recognition and management of TB and HIV infection as well as management of newborns in the first week of life have been incorporated into the guidelines. During 2010, a simple approach for initiation and follow-up of children on ART was incorporated. The IMCI "Six Steps for Initiating ART in Children" was included and subsequently adopted as the standard approach for nurse-initiated ART (NiMART) in children.

³⁶ IMCI programmatic data

Ensuring that IMCI is included in the pre-service curricula of all health professionals and that IMCI-trained health care workers implement IMCI adequately remain key challenges. Although most nursing and medical training institutions report that they have included teaching of IMCI in their curricula, concerns regarding the content and the quality of this teaching persist. Supportive supervision has been identified as key in maintaining the quality of IMCI implementation, but mechanisms to ensure regular quality supervision need to be strengthened in many districts.

4. Management of ill children in hospitals

Strategies for monitoring and improving the care that children receive in public hospitals have not been implemented on a large scale, resulting in wide variation in the quality of care provided in different hospitals. Establishment of district clinical specialist teams provides an important opportunity for improving the quality of care provided at regional and district hospital levels. The teams will be expected to ensure that appropriate guidelines and protocols are available, and that health care workers are appropriately trained and supported to provide high quality services.

WHO has developed and implemented a number of approaches to improving the quality of care for children in hospitals such as the Emergency Triage and Assessment (ETAT) course. These approaches focus on improving the emergency care of ill children, and on improving management of common conditions especially diarrhoeal disease, pneumonia and severe malnutrition.

Implementation of the WHO Ten Steps for the Management of Severe Malnutrition has been shown to reduce case fatality rates between 30% and 55%³⁷. This approach has already been adopted by the majority of provinces and is currently being implemented in 125 hospitals. In an effort to implement this approach on wide scale capacity building and advocacy workshops for senior managers has been conducted. Monitoring should be ongoing to ensure implementation of this approach is not neglected.

³⁷ Puoane T, Sanders D, Ashworth A, Chopra M, Strasser S (2004) "Improving the Hospital Management of Malnourished Children by Participatory Research." *International Journal of Quality of Care* **16**(1)

5. Early identification of HIV-infected children and appropriate management

It is estimated that there are approximately 300 000 children living with HIV in South Africa³⁸, and HIV infection is thought to be a contributing factor in between 30 and 60% of child deaths^{39,40}. Scaling-up of effective PMTCT interventions together with early identification and treatment of HIV-infected children can therefore be expected to result in substantial reductions in child mortality rates.

Early diagnosis and management of children with HIV is key to reducing mortality. Early diagnosis in children less than 18 months is facilitated by PCR testing, which is now available at all health facilities. Provision of cotrimoxazole to HIV-infected and HIV-exposed children has been shown to reduce mortality and morbidity, and should be provided to all eligible children. Ensuring that HIV exposed children are identified and tested during visits for routine services (e.g. visits for immunisation) is especially important.

Guidelines for the treatment of children with antiretroviral therapy (ART) have been developed and implemented. The 2010 guidelines include provision of ART for all HIV-infected infants, and stress the role of nurses in provision of ART, which should be available at all PHC facilities. In an effort to ensure full integration of HIV and child health services, the IMCI guidelines, which should be used for managing all sick children at PHC level, have been updated to include ART initiation and follow-up for children. The number of children receiving ART has increased with 40,000 children (under 15 years of age) being initiated on ART during 2011⁴¹. However significant challenges remain in ensuring that all eligible children are initiated on ART as early as possible, and that systems for tracking progress in initiating and maintaining children on ART are strengthened.

Guidelines and training materials that address the psychosocial care and support of children with HIV & AIDS, as well as provision of palliative care for children have also been developed.

³⁸ Meyers T and Moultrie H. (2006) "Management of HIV-infected children" in Ijumba P and Padarath A (eds) South African Health Review 2006. Durban, Health Systems Trust.

³⁹ Bradshaw D, Nannan N, *et al.* (2005) "Provincial mortality in South Africa, 2000 – priority-setting for now and a benchmark for the future". South African Medical Journal. **95** (7): 496-503.

⁴⁰ Stephen CR, Bamford LJ, Patrick ME and Wittenberg DF (eds). (2011) Saving Children 2009: Five years of Data: A sixth survey of child healthcare in South Africa. Pretoria: Tshepesa Press, MRC, CDC.

⁴¹ Giese S (ed) (2011) Children's HIV and AIDS Scorecard 2011: Monitoring South Africa's response to children and HIV and AIDS. Durban, Children's Rights Centre

6. Long term health conditions in children

International data indicate that 15 – 20 % of children are affected by a chronic or long term health condition⁴². These include a range of congenital and acquired conditions, including medical conditions (such as asthma and rheumatic heart disease) as well as developmental delay and disabilities. Many children with disabilities and other long term health conditions are not receiving the care they require⁴³.

Mechanisms need to be in place to ensure that children with these conditions receive appropriate care. Many different kinds of professional and other health care, educational, rehabilitation, social services and lay workers work with these children, and a range of health care and other organisations may be involved in their care. Emphasis should be placed on prevention and on ensuring that systems are in place to provide holistic, long-term care.

7. Improving provision of School Health Services

Twelve million learners were enrolled in public schools in South Africa in 2010⁴⁴. This number is likely to increase as the transformation and strengthening of the education system enables it to retain more learners for longer. Although school health services have been provided in South Africa for some time, implementation has been variable and sub-optimal, with low coverage in some areas of the country.

In 2010, in his State of the Nation address, the President committed the government to reinstating health programmes in public schools in South Africa⁴⁵. Likewise the road map document for the South African education sector (“Schooling 2025 and Action Plan to 2014”⁴⁶) includes provision of public health and poverty reduction interventions for learners through the Care and Support for Teaching and Learning (CSTL) programme. The goal of the programme is to realise the educational rights of all children, including those who are most vulnerable, through schools becoming inclusive centres of learning, care and support.

The new Integrated School Health Programme (ISHP) therefore aims to build on and strengthen existing school health services, albeit with some important changes. These include:

⁴³ Lachman PI and Zwarenstein MF (1990) “A community based survey in Mitchell’s Plein”. South African Medical Journal **77**:467-7

⁴⁴ Department of Basic Education (2010) Education Statistics in South Africa 2009. Pretoria.

⁴⁵ State of the Nation Address by His Excellency JG Zuma, President of the Republic of South Africa, at the Joint Sitting of Parliament, Cape Town. <http://www.info.gov.za/speeches/2010/10021119051001.htm>. Accessed 7th October 2011.

⁴⁶ Department of Education (2009) Schooling 2025 and Action plan to 2014: Call to Action: Mobilizing Citizens to Build a South African Education and Training System for the 21st Century. Pretoria

- A commitment to close collaboration between all role-players, with the Departments of Health and Basic Education taking joint responsibility for ensuring that the ISHP reaches all learners in all schools.
- Provision of services to learners in all four educational phases (These are foundation, intermediate, senior and further education and training (FET) phases).
- Provision of a more comprehensive service, which addresses not only barriers to learning, but also other conditions which contribute to morbidity and mortality amongst learners during both child and adulthood.
- More emphasis being placed on provision of health services in schools with a commitment to expanding the range of services provided over time.
- A more systematic approach to implementation. The phased approach (as outlined in the 2003 school health policy⁴⁷) which focused on district level implementation, did not translate into adequate coverage at sub-district, school and learner levels. Although the ISHP will initially target the most disadvantaged schools, sequenced plans for progressive coverage aim to ensure that all learners are reached.

A package of school health services for each of the four educational phases has been defined. The ISHP aims to ensure that this package of services is provided to all learners by 2016.

⁴⁷ National Department of Health (2003) School Health Policy and Implementation Guidelines. Pretoria.

SECTION E: PRIORITY INTERVENTIONS FOR WOMEN'S HEALTH

Women's Health

- Access to contraceptive services, including pregnancy confirmation, emergency contraception, CTOP and a full range of contraceptive methods
- Post-rape care for adults and children.
- Improved reproductive health services for adolescents through provision of youth-friendly reproductive health services at health facilities and as part of school health services.
- Improved coverage of cervical screening and strengthening of follow-up mechanisms.

1. Access to contraceptive services

All PHC facilities and hospitals are required to provide a full range of contraceptive services and methods, and promote the use of dual methods (contraceptive and condom use). It is especially important to ensure that adolescents have access to reproductive health services, including contraceptive and pregnancy testing. All PHC facilities should provide these services in a youth-friendly manner and ensure that all users (and their sexual partners) are empowered with information on sexual and reproductive health and contraceptive use.

Although termination of pregnancy is legal and should be readily available, many women experience barriers to accessing the service, especially in the second trimester. Approximately 60 000 terminations are conducted each year. Extending access to emergency contraception and promoting early confirmation of pregnancy (through improving knowledge of sexual and reproductive health and promoting pregnancy testing) are important for reducing second trimester terminations and unintended pregnancies. However, it is also important to ensure that services are accessible in all districts for both first and second trimester terminations.

2. Improved reproductive health services for adolescents

Improving access and utilization of reproductive health services for adolescents is important for both reducing teenage pregnancy and HIV prevalence.

Using a definition of the rates of teenage pregnancy as the percentage of women aged 15-19 years who have ever been pregnant, current statistics point to a decrease in the rate of pregnancy amongst teenagers⁴⁸.

Provision of health services for youth is guided by the Policy Guidelines for Youth and Adolescent Health, which outline five intervention strategies, namely promoting a safe and supportive environment, providing information, building skills,

⁴⁸ National Department of Health (2009) Report on the Review of South African Current Research and Interventions on Teenage Pregnancy. Pretoria.

counselling and access to health services. PHC facilities have been supported to become youth-friendly - in 2011 47% of facilities were accredited as being youth-friendly. As outlined above, provision of reproductive health services is also a key aim of the ISHP.

3. *Cervical cancer screening*

Cancer of the cervix and breast cancer are the most common cancers in women with an incidence rate in 2004 of approximately 30 per 100 000 women for each condition. Together these cancers account for around 55% of all cancer-related deaths in women.

Although the current National Guidelines for Cervical Cancer aim to ensure that screening is offered to all women above thirty years of age at 10-year intervals, a more ambitious target of ensuring that all women be screened every five years by 2020 was endorsed at the Non-Communicable Disease summit held in September 2011. Coverage for 2010/11, based on ten-yearly screening intervals, was estimated to be 52%⁴⁹.

Efforts to improve cervical cancer screening need to focus on increasing coverage and ensuring that women who are identified as having abnormal smears receive appropriate follow-up and care. Almost all cervical cancers are associated with Human Papilloma Virus (HPV). Effective vaccines against HPV are now available, and discussions are underway regarding the possibility of including immunisation against HPV as part of the routine EPI schedule.

4. *Gender-based violence and post-rape services*

Prevention of all forms of violence against women is a critical component of efforts to empower women, and high rates of violence against women and girls are of concern. Statistics from the South African Police Service (SAPS) show that 56,272 rapes of women and children were reported during 2010/11⁵⁰. There are no reliable national data on rates of domestic violence, but the most recent community-based surveys have shown that 33% of women disclosed ever being victims of physical intimate partner violence and 13% had been so in the previous 12 months⁵¹. Domestic and other violence against women have been shown to be associated with an increased risk of HIV-infection⁵² and mental health problems.

⁴⁹ DHIS. Extracted 10th January 2012.

⁵⁰ South African Police Service 2010

⁵¹ Machisa M, Jewkes R, Lowe-Morna C, Rama K (2011) *The war at home*. Genderlinks, Johannesburg

⁵² Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA, Harlow SD (2004) "Gender-Based Violence, Relationship Power and Risk of Prevalent HIV Infection among Women Attending Antenatal Clinics in Soweto, South Africa". *Lancet* **363**: 1415-1421.

The Sexual Assault Care Policy (2005), and the accompanying Clinical Management Guidelines have been developed and implemented nationally. The guidelines (which are currently being updated) emphasize both the medical and psychological management of rape survivors as well as the medico-legal responsibilities of health professionals.

Although post-rape health services have been substantially improved over the last decade, many health professionals providing care are still untrained and services for children are particularly limited. Continued efforts are needed to ensure that services meet the physical and mental health needs of adult and child survivors. Standardizing training using the recently developed national curriculum for training sexual assault care providers is important in improving service quality, and this needs to be extended to all post-rape service providers. Continued efforts are needed to strengthen service infrastructure, and to ensure 24-hour access to all post-rape services.

SECTION F: PRIORITY INTERVENTIONS: COMMUNITY-BASED MCH SERVICES

1. Provision of a package of MCH services by ward-based PHC outreach teams

In recent years, provision of maternal and child health services at community level has been neglected with more attention being paid to provision of HIV services. A draft “Framework for Accelerating Community-based Maternal, Neonatal, Child and Women’s Health and Nutrition Interventions” has been developed which identifies six modes whereby community services should be delivered to pregnant women, mothers and young children. These are:

1. Structured home visits by CHWs trained in specific maternal, neonatal and child health tasks.
2. Recruitment of mothers into organized support groups
3. Regular outreach maternal and child health services organized by PHC facilities
4. Child Health days or weeks to improve coverage of child health preventive and promotive services.
5. Support to Early Childhood Development (ECD) centres.
6. Communication and social mobilization.

These activities should be provided by generalist CHWs who are part of ward-based PHC teams which are being established as part of the PHC re-engineering process.

2. *Multi-sectoral action to reduce poverty and inequity*

Efforts to improving health status and reduce deaths require that the social determinants of health are addressed. Access to basic services, especially improved water and sanitation, must be improved.

3. *Development of a MCWH communication strategy*

Although behaviour change and promotion of healthy behaviours have been identified as a cornerstone of efforts aimed at improving maternal and child health, a comprehensive MCWH communication strategy with a set of standardised key messages has not been in place. A national MCWH communication strategy should aim to improve awareness in the community at large and especially amongst mothers and caregivers, to increase demand for services and to enhance community involvement and participation in maternal and child survival activities through delivery of a set of consistent key messages. The strategy should also focus on improving knowledge and communication skills of community leaders, health workers and other service providers.

SECTION G: MNCWH & NUTRITION STRATEGIC PLAN

1. *Vision*

Accessible, caring, high quality health and nutrition services for women, mothers, newborns and children

2. *Mission*

To reduce mortality and to improve the health and nutritional status of women, mothers, newborns and children through promotion of healthy lifestyles and provision of integrated, high quality health and nutrition services.

3. *Guiding Principles*

- Sustained political commitment and supportive leadership
- Commitment to realizing the human rights of women, mothers, newborns and children.
- Working with all sectors to improve the lives of women, mothers, newborns and children
- Provision of an integrated service using a lifecycle approach
- Optimizing performance of all concerned with MNCWH care
- Effective communication
- Empowerment of communities and families, including men
- Protecting and respecting children
- Ensuring linkages between the levels of care – community, primary health care and hospital levels

4. *Overall Goal*

- To reduce the maternal mortality ratio and neonatal, infant and child mortality rates by at least 10% by 2016
- To empower women, and to ensure universal access to reproductive health services
- To improve the nutritional status of all mothers and children.

SECTION H: KEY STRATEGIES FOR IMPLEMENTATION OF PRIORITY INTERVENTIONS

The following eight key strategies aim to ensure full coverage of adequate quality of the priority interventions outlined in the previous section.

1. Address inequity and social determinants of health

In general those districts with the poorest socio-economic indicators also have the poorest health status indicators and the highest maternal, newborn and child mortality rates. These districts often also have poor health coverage indicators. Improving socio-economic conditions and improving coverage with priority MNCWH & Nutrition interventions can therefore be expected to reduce maternal, neonatal and child mortality. Empowering women to achieve greater gender equity is essential for promoting the health of women and children.

Strategies to address this:

- Ensure that under-served districts and sub-districts are prioritized in efforts to scale-up and improve the quality of priority MCWH & Nutrition interventions.
- Work with other sectors to address the social determinants of health, especially improved access to basic services such as clean water and adequate sanitation.
- Work with the education sector to promote comprehensive health education and promotion in schools which address a range of issues including psychosocial well-being, mental health and violence prevention.
- Mobilize and empower community members to participate in efforts to improve their health at individual, household and community levels.

2. Develop a comprehensive and coordinated framework for MNCWH & Nutrition service delivery

MNCWH & Nutrition services are provided as part of comprehensive PHC, district and hospital health services which are organized and managed in geographic areas (provinces and districts). At the same time many interventions are delivered as vertical programmes. There is need to ensure that the continuum of MNCWH & Nutrition services is maintained across programmes, and between the various levels of care. Ensuring full integration between MCWH and HIV programmes is particularly important due to the high contribution of HIV to maternal and child mortality and morbidity.

Strategies to address this:

- Develop a clearly defined overarching and comprehensive framework for delivery of MNCWH & Nutrition services. The framework needs to define what MNCWH & Nutrition services should be delivered at community, PHC, district and regional hospital levels and to outline norms and standards for delivery of these services.
- Once norms and standards are in place, the gap between expected and current levels of service delivery can be incrementally reduced.
- Provinces should be supported to develop and implement comprehensive plans to address the gap between current and expected levels of service delivery.
- Ensure that these plans are costed, and that the information is used to advocate for additional resources (if required) and more rational resource allocation.

3. Strengthen community-based MNCWH & Nutrition interventions

Community-based MCWH services can play an important role in reducing maternal and child mortality. In recent years most community care workers have focused on provision of HIV and TB services.

Strategies to address this:

- Provision of a package of evidenced-based community MCWH services by generalist CHWs who are part of the ward-based PHC outreach teams.
- Provision of services through community-based campaigns such as HCT, EPI Vitamin A and mass deworming campaigns.
- Strengthening specific intersectoral actions – in particular programmes and interventions that improve access to clean water and sanitation.
- Foster partnerships with community structures.

4. Scale-up provision of key MNCWH & Nutrition interventions at PHC and district levels

Although most key MNCWH & Nutrition interventions are provided in South Africa, the coverage of some interventions remains low. In some instances coverage is high, but problems are experienced with regard to the quality of care provided.

Strategies to address this:

- Ensure high coverage of all vaccines, including pneumococcal and rotavirus vaccines, as part of the routine EPI schedule
 - Ensure that HIV services, including provision of ART, are provided at all PHC facilities, and are integrated with maternal and child health services.
 - Strengthen school health services through provision of a comprehensive and integrated school health programme.
 - Scale-up new or existing interventions with low coverage. This includes: ANC (using BANC approach), post-natal care and infant feeding support, IMCI (including EPI and growth monitoring and promotion) and youth-friendly services.
 - Strengthen supportive supervision of MNCWH & Nutrition services and ensure that all PHC facilities receive regular supervisory visits.
- 5. Scale-up provision of key MNCWH & Nutrition interventions at district hospital level**

Strategies to address this:

- Ensure high coverage with a high quality package of interventions. This includes: high risk ANC care, PMTCT, intrapartum care, post-natal care including infant feeding counselling and support, neonatal resuscitation and care (including KMC), management of common childhood illnesses (including emergency care and care for children with long term health conditions), TOP and post-rape care.
 - Ensure that health care workers are competent to provide key MNCWH & Nutrition interventions.
 - Improve the quality of hospital care through provision of protocols, training of health care workers and strengthening of supportive supervision.
 - Strengthen and institutionalize the use of mortality reviews to identify and address deficiencies in the quality of care provided.
- 6. Strengthen the capacity of the health system to support the provision of MNCWH & Nutrition services**

MNCWH & Nutrition services are provided as part of a comprehensive health service, and the quality of the services reflects the overall quality of the health system.

Strategies to address this:

- Ensure that there is coordinated planning (especially at provincial level) involving all relevant sections of the health service e.g. district hospitals, pharmaceutical services.

- Ensure that adequate equipment for delivery of MNCWH & Nutrition services is available.
 - Ensure that essential supplies and drugs are available at PHC and district hospital levels
 - Work with EMS to ensure that adequate transport is available
 - Strengthen referral systems
 - Strengthen routine health information systems
- 7. Strengthen the human resource capacity for the delivery of MNCWH & Nutrition services**

Human resource development is key to the success of this strategy.

Strategies to address this:

- Appoint district clinical specialist teams who will play a key role in ensuring provision of high quality comprehensive MCWH services to mothers and children in the catchment population.
 - Ensure that ward-based PHC outreach teams are adequately trained to provide MCWH services.
 - Define the roles of the different cadres of health workers, including health service managers, professionals, and mid-level workers
 - Develop norms which define the staff which are required for delivery of MNCWH & Nutrition services
 - Develop estimates of the number of health workers with MNCWH & Nutrition skills who are required
 - Update curricula of health professionals to ensure adequate pre-service training in MNCWH & Nutrition
 - Work with Regional Training Centres to co-ordinate and strengthen in-service training in MNCWH & Nutrition
- 8. Strengthen systems for monitoring and evaluation of MNCWH & Nutrition interventions and outcomes**

Systems for monitoring and evaluation and use of information for decision making at all levels of the health system need to be strengthened.

Strategies to address this:

- Monitor implementation of the MNCWH strategy
- Monitor trends in key MNCWH & Nutrition indicators at national, provincial, district, sub-district and facility level.
- Improve quality and use of data on MMR and child mortality rates
- Institutionalise monthly reviews of maternal, perinatal, neonatal and child deaths at all health facilities (as for Strategy 5).

- Strengthen routine health information systems for monitoring of MNCWH services (as for Strategy 6), and ensure that MNCWH & Nutrition health workers and managers are able to use the data

More detailed plans, including objectives, targets and role-players, for each of the eight strategies are outlined on the following pages.

Strategy 1: Address inequity and social determinants of health

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Ensure that under-served districts and sub-districts are prioritized in efforts to scale-up and improve the quality of priority MNCWH & Nutrition interventions.	Ensure that interventions for improving MNCWH services are implemented in underserved districts	Not available	Interventions in most underserved districts	Interventions in all districts, but focused on most underserved districts	National DOH Provincial DOHs Districts and municipalities CBOs and NGOs Development partners
Work with other sectors to address the social determinants of health, especially improved access to basic services such as clean water and adequate sanitation.	Concrete actions to address key social determinants of health included in district health plans and APPs as well as IDPs		Annually		National DOH and other government departments Provincial DOHs and other departments Health Districts and municipalities
Work with the education sector to promote comprehensive health education in schools that addresses gender issues including violence prevention	Strengthen health promoting schools				DOH (all levels) DBE (all levels)
Mobilize and empower women, children and men to participate in efforts to improve their health at individual, household and community levels	Implement community-based interventions as outlined under Strategy 3		As per strategy 3		National DOH Provincial DOHs Districts CBOs and NGOs

Strategy 2: Develop a comprehensive and coordinated framework for MNCWH & Nutrition service delivery

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Ensure that the MNCWH & Nutrition services which should be delivered at each level (PHC, district, district and regional hospital) are clearly defined	Develop norms and standards for MNCWH & Nutrition service delivery at PHC level, and incorporate these into the PHC package	Completed by 2012			National DOH Provincial DOHs
	Review district and regional hospital packages, together with documents related to the MTS and Service Transformation Plan	Completed by 2012			National DOH Provincial DOHs
	Develop norms and standards for delivery of MNCWH & Nutrition services at district and regional hospital levels	Completed by 2012			National DOH Provincial DOHs
Quantify the gap between the present and expected levels of service delivery	Increase the % of PHC facilities which provide the full range of services outlined in the PHC package	No baseline	Baseline available	100%	National DOH Provincial DOHs Districts
Develop comprehensive strategic and operational plans which outline how MNCWH & Nutrition services should be configured and provided at provincial and district levels	Ensure that all provinces have plans for implementation of the MNCWH & Nutrition strategic plan	Completed by 2012			National DOH Provincial DOHs
	Ensure that all districts include provision of MNCWH & Nutrition services in their annual plans	Completed by 2012/13 financial year			National DOH Provincial DOHs
Ensure that these plans are costed, and that the information is used to advocate for additional resources (if required) and more rational resource allocation	Cost provision of all MNCWH & Nutrition Services	Completed by 2012			National DOH Academic institutions
Foster partnerships with other role-players	Establish a stake-holder forum for co-ordination of MNCWH & Nutrition interventions	Forum established in 2012			All role-players
	Ensure alignment of developmental partner plans with MNCWH & Nutrition Strategic Plan	From 2012			National DOH Development partners

Strategy 3: Strengthen community-based MNCWH & Nutrition interventions

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Communicate messages to households and communities for improving practices promoting MNCWH & Nutrition.	Develop harmonized messages around MNCWH & Nutrition	Completed by 2012			National DOH NGOs and CBOs
	Develop an MNCWH & Nutrition communication strategy	Completed by 2013			
	Monitor increase in the population who are reached by key MNCWH & Nutrition messages	> 5%	50%	75%	
Ensure that ward-based PHC outreach teams provide the full package of community-based MNCWH services	Include key MNCWH & Nutrition messages and intervention in CHW curricula and training programmes	Completed 2012			National DOH
	Increase the % of wards with active PHC outreach teams	No baseline	Baseline available	100% of sub-districts	NGOs and CBOs Provincial DOHs Development partners
Provide services through community-based campaigns –EPI, Vitamin A, mass deworming.	Annual campaigns	No baseline	Campaigns in all districts		Provincial DOHs. Districts
Foster partnerships with community structures.	Ensure that all district plans include plans for community partnerships	No baseline	Baseline available	100% of districts	National DOH Provincial DOHs Districts

Strategy 4: Strengthen provision of MNCWH & Nutrition services at PHC and district levels

Objective	Key Activities	Sub-objective	Baseline	Target 2013	Target 2016	Key partners
Expand the range of services provided at PHC level	<ul style="list-style-type: none"> Ensure that zinc is available at all PHC facilities 	Increase the % of children with diarrhoea who receive zinc	< 5%	80%	95%	National DOH Provincial DOHs
	<ul style="list-style-type: none"> Introduce pneumococcal and rotavirus vaccines 	Ensure high coverage with pneumococcal and rotavirus vaccines	75%	90%	95%	Provincial DOHs
Scale-up programmes to ensure increased coverage of key interventions	<ul style="list-style-type: none"> Develop provincial plans for scaling-up of BANC Include messages around early attendance of ANC in the communication strategy 	Increase the % of PHC facilities implementing Basic Antenatal Care (BANC)	42%	75%	100%	Provincial DOHs District Clinical Specialist teams Medical Schools and Nurse Training Institutions
		Increase the % of pregnant women who book before 20 weeks gestation	34%	55%	75%	
	<ul style="list-style-type: none"> Train and provide support to counsellors in districts with low HIV testing coverage Ensure mechanisms are in place to fast-track pregnant women to receive ART Ensure that HIV-infected mothers and their infants receive ART for PMTCT as outlined in guidelines. 	Increase the % of eligible antenatal clients initiated on ART	92%	96%	100%	
		Increase the % of antenatal clients initiated on AZT during antenatal care	76%	90%	100%	
	<ul style="list-style-type: none"> Develop national guidelines on provision of post-natal care, and ensure that provincial policies/guidelines are aligned with these. 	Increase the % of mothers and babies who receive post-natal care within 6 days of delivery	20%	70%	80%	
	<ul style="list-style-type: none"> Improve the capacity of CHWs, health professionals and other nutrition workers to provide support to mothers regarding exclusive feeding. 	Increase the % of infants that are exclusively breastfed	26%	50%	75%	

	<ul style="list-style-type: none"> Ongoing training of PHC nurses in IMCI, including Growth Monitoring and Promotion Ensure that all training institutions have incorporated IMCI into their curricula 	Increase the % of PHC facilities in which 60% of nurses are IMCI trained	74%	85%	95%	Provincial DOHs Medical Schools and Nurse Training Institutions
		Increase the number of districts in which 90% of children are fully immunised by one year of age	17	35	52	
		Increase the % of children age 1 to 5 years who receive at least one dose of Vitamin A per year	35%	70%	80%	
		% of Nurse Training institutions who teach IMCI in pre-service curriculum	70%	100%	100%	
	<ul style="list-style-type: none"> Develop guidelines for integrating PCR testing into immunisation services Monitor and reduce turn-around time for PCR Ensure that all IMCI-trained nurses are trained in using the IMCI approach to HIV infection Support Nurse-based provision of ART for children 	Increase the % of HIV exposed infants who are tested for HIV (using PCR) at six weeks	70%	90%	95%	
		Ensure that targets for initiation of children on ART are met	53% (Q1 10/11)	90%	100%	
		Increase the % of HIV exposed and infected children who receive Cotrimoxazole prophylaxis	60%	80%	95%	
	<ul style="list-style-type: none"> Launch the Integrated School Health Policy and Programme Ensure that all districts have sufficient School Health Nurses (who have been trained on the ISHP) 	Increase the number of schools in which all targeted learners receive school health services	No baseline	All Quintile 1 & 2 schools	All schools	
	<ul style="list-style-type: none"> Ensure that mechanism for YFS accreditation are in place 	Increase the % of PHC facilities which are accredited as being youth-friendly	41%	60%	75%	
	Improve the quality of care	<ul style="list-style-type: none"> Ensure that supervisors have skills to supervise MNCWH & Nutrition services 	Increase the % of PHC facilities which receive a supervisory visit, with written standardised report, at least once a month	61%	85%	

Strategy 5: Strengthen delivery of MNCWH & Nutrition services at district hospital level

Objective	Activities	Sub-objectives	Baseline	Target 2013	Target 2016	Key partners
Scale-up implementation of key MNCWH & Nutrition services	<ul style="list-style-type: none"> Ensure that provinces have plans in place to scale-up provision of these services. 	Increase the % of sub-districts which provide TOP services	40%	60%	80%	Provincial DOHs District Clinical Specialist teams
		Increase the % of hospitals with High Risk Antenatal Care Clinics	No baseline	Baseline available	95%	
		Where appropriate, provide lodging facilities for pregnant women awaiting the onset of labour	No baseline	50% where required	90% where required	
		Increase the % of hospitals which provide KMC	No baseline	Baseline available	80%	
		Increase the % of hospitals which provide appropriate infant feeding support and are MBFHI-accredited	44%	65%	90%	
Improve the quality of care	<ul style="list-style-type: none"> Ensure that appropriate guidelines and other materials are available at all hospitals Train health workers to ensure that they have adequate skills Develop systems for monitoring and evaluating including accreditation (where appropriate) Ensure that key aspects of MNCWH & Nutrition service delivery are included in the KPAs of hospital CEOs, and clinical and other managers 	Increase the % of hospitals which have programmes in place to monitor and improve the quality of intrapartum care (based on use of the partogram)	50%	70%	100%	Provincial DOHs Hospitals District Clinical Specialist teams
		Increase the % of hospitals where all staff who supervise deliveries are trained in neonatal resuscitation and newborn care	No baseline	Baseline available	100%	
		Ensure that all staff are trained to provide emergency care to children	No baseline	30%	90%	
		Reduce the in-hospital case fatality rate for children (U5) with diarrhoea	7.4%	5%	<3%	
		Reduce the in-hospital case fatality rate for children (U5) with pneumonia	6.5%	5%	<3%	
		Increase the % of babies born to HIV +ve women who receive ARVs until 6 weeks of age	47%	90%	95%	
		Increase the % of hospitals where standard guidelines for the assessment and management of ill children are available	No baseline	Baseline available	95%	
		Increase the % of hospitals which are implementing the WHO Ten Steps for the Management of Children with Severe Malnutrition	25%	60%	95%	
		Increase the % of hospitals where dedicated, trained staff provide comprehensive post-rape care	No baseline	Baseline available	95%	

Institutionalize reviews of maternal, perinatal, neonatal and child deaths	<ul style="list-style-type: none"> • Include mortality reviews in the KPAs of hospital CEOs, and clinical and other managers • Encourage hospitals to use existing audit systems such as PIPP and Child PIP 	Increase the % of hospitals which review maternal and perinatal deaths and address identified deficiencies	45%	80%	100%	Provincial DOHs District Clinical Specialist teams PIPP and Child PIP NCCEMD, NaPeMMCo and CoMMiC
		Increase the % of hospitals which review child deaths and address identified deficiencies	25%	60%	100%	

Strategy 6: Strengthen the capacity of the health system to support the provision of MNCWH & Nutrition services

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Increase the number of districts which have mechanisms for coordinated planning of MNCWH & Nutrition service provision	Support development of district MNCHW & Nutrition plans (must involve relevant sections of DOH as well as other role-players)	No baseline	Baseline available	95% of districts	National DOH Provincial DOHs Districts
Ensure that appropriate equipment is available at PHC and hospital levels	Review/develop norms and standards regarding availability of appropriate equipment at PHC and hospital levels	Completed by 2012			National DOH
	Undertake an audit of current MNCWH & Nutrition equipment	Completed by 2013			National DOH
	Develop norms and standards for availability of equipment	No baseline	Baseline available	95% of facilities	National DOH
	Develop provincial plans for addressing gaps in the availability of equipment	Completed by 2013			
Ensure that essential supplies and drugs (as outlined in the EDL) are available at PHC and hospital levels	Work with pharmaceutical services to decrease the % of PHC facilities which experience stock-outs of essential drugs	No baseline	Baseline available	< 5% of facilities	National DOH
	Work with the National Blood Transfusion Service (NBTS) to increase the % of hospitals where caesarean sections are performed that have blood available	No baseline	100%	100%	Provincial DOHs NBTS
Work with EMS to ensure that adequate transport is available	Increase % of districts where pregnant women and newborns receive priority attention for emergency transport	No baseline	Baseline available	90%	National DOH
Strengthen routine health information systems for monitoring of MNCWH services	Ensure that all provincial and national MNCWH & Nutrition programme managers receive monthly reports	No baseline	60%	100%	National DOH Provincial DOHs
	Improve capacity of MNCWH managers and district and provincial level counterparts to analyze and use data	No baseline	All provincial MNCWH & Nutrition managers trained		National DOH Provincial DOHs

Strategy 7: Strengthen human resource capacity for delivery of MNCWH & Nutrition services

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Appoint district clinical specialist teams	Develop guidelines which outline the role and responsibilities of the teams	Completed by 2012			National DOH Provincial DOHs NCCEMD, NaPeMMCo and CoMMiC
	Develop a set of resources for teams to use	Completed by 2012			
	District Clinical Specialist teams appointed	None	50%	100%	
Define the roles of the different cadres of health workers, including professionals, mid-level workers and CHWs	Identify cadres of health workers and define their roles in MNCWH & Nutrition service delivery	Completed by 2012			
Develop norms which define the staff which are required for delivery of MNCWH & Nutrition services	Develop staffing norms for each level of the health system	Completed by 2012			
	Measure the gap between staffing norms and the current staffing situation	Completed by 2013			
Develop estimates of the number of health workers with MNCWH & Nutrition skills who are required	Development of estimates	Completed by 2013			
Update curricula of health professionals to ensure adequate pre-service training in MNCWH & Nutrition	Review curricula of health professional training institutions	Completed by 2013			National DOH Training institutions Professional councils and bodies
	Ensure that all health training institutions cover all key MNCWH & Nutrition interventions in their pre-service curricula	No baseline	Baseline available	90%	
Work with Regional Training Centres to co-ordinate and strengthen in-service training in MNCWH & Nutrition	All provinces have MNCWH & Nutrition training plans in place	No baseline	Baseline available	All provinces	Provincial DOHs Regional Training Centres Training institutions

Strategy 8: Strengthen systems for monitoring and evaluation of MNCWH & Nutrition interventions and outcomes

Objective	Activities	Baseline	Target 2013	Target 2016	Key partners
Monitor implementation of the MNCWH strategy	Ensure that data used to monitor implementation of the strategic plan are available and of good quality	Data on some key indicators not available	All baseline data available Targets reviewed	Data available	National DOH
Monitor trends in key indicators of MNCWH & Nutrition	Develop consensus on key outcomes which should be measured (see section 4 for draft list)	Completed 2012			National DOH Academic/Research institutions NCCEMD, NaPeMMCo and CoMMiC
	Review key indicators on an annual basis	Ongoing			
Improve quality and use of data on MMR and child mortality rates	Improved consensus regarding MMR and child mortality rates	Ongoing			NCCEMD, NaPeMMCo and CoMMiC Academic institutions Provincial DOHs Dept of Home Affairs
	Increase the proportion of deaths reported through routine information systems	50%	75%	90%	
Institutionalize reviews of maternal, perinatal, neonatal and child deaths (from Strategy 5)	Increase the % of hospitals which review maternal and perinatal deaths and address identified deficiencies	45%	80%	100%	Provincial DOHs PIIP and Child PIP NCCEMD, NaPeMMCo and CoMMiC
	Increase the % of hospitals which review child deaths and address identified deficiencies	25%	60%	100%	
	Ensure that all provincial and national MNCWH & Nutrition programme managers receive monthly reports	No baseline	90%	100%	National DOH Provincial DOHs
Strengthen routine health information systems for monitoring of MNCWH services (from Strategy 6)	Ensure that all provincial and national MNCWH & Nutrition programme managers receive quarterly reports	No baseline	90%	100%	National DOH Provincial DOHs
	Improve capacity of MNCWH managers and district and provincial level counterparts to analyze and use data	All provincial MNCWH & Nutrition managers trained	National DOH Provincial DOHs	All provincial MNCWH & Nutrition managers trained	National DOH Provincial DOHs

SECTION I: MONITORING AND EVALUATION FRAMEWORK

Key indicators that will be used to monitor trends in the health and nutrition of mothers, newborns and children are shown in the table below. Many of these indicators can only be collected through large-scale surveys which are conducted intermittently (often every three to five years). However available data on all indicators should be reviewed annually.

INDICATOR	CURRENT STATUS	TARGET	YEAR	DATA SOURCE
High level indicators				
Maternal Mortality Ratio	310 per 100,000 live births (2008)	270 per 100,000 live births	2014	MRC/NDACC
Neonatal mortality rate	14 per 1000 per live births	12 per 1000 live births	2014	MRC/NDACC
Infant mortality rate	40 per 1000 live births	36 per 1000 live births	2014	MRC/NDACC
Under-5 mortality rate	56 per 1000 live births	50 per 1000 live births	2014	MRC/NDACC
Prevalence of underweight amongst children < 60 months	No baseline	5% reduction	2014	HSRC
Prevalence of stunting amongst children < 60 months	No baseline	5% reduction	2014	HSRC
Other indicators				
% pregnant women who attend ANC	94%	98%	2016	DHIS, SADHS
% of women who attend ANC before 20 weeks	38%	80%	2016	DHIS
% of births supervised by skilled attendants	83%	90%	2016	DHIS, SADHS
Mother-to-child transmission of HIV	3.6% at 6 weeks	< 2% (6 weeks) < 5% (18 months)	2016	NSP
Stillbirth rate	19 per 1000 births	10 per 1000 births	2016	DHIS, PPIP data, other surveys
Low-birth weight rate	15.5%	10%	2016	DHIS, PPIP data
% of infants (0-6 months) who are exclusively breastfed	26%	75%	2016	Population-based surveys
% district with 90% children fully immunised under 1 year	24 out of 51 districts	All districts	2016	DHIS
Reduce the in-hospital case fatality rate for children (U5) with diarrhoea	7.4%	< 3%	2016	DHIS
Reduce the in-hospital case fatality rate for children (U5) with pneumonia	6.5%	< 3%	2016	DHIS
Contraceptive prevalence rate	65%	75%	2016	SADHS
% of rape victims seen by trained care providers	No baseline	95%	2016	DHIS
Prevalence of HIV infection in women 15 - 24 years	8.7% (2008)	4.4%	2016	NSP

SECTION J: CRITICAL SUCCESS FACTORS

Social determinants of health are addressed

Although interventions within the health sector have a key role to play in achieving MDGs 3, 4 and 5, interventions from other sectors which reduce poverty, improve access to basic services and build gender equity are also vital.

Within the health sector, efforts to improve MNCWH & Nutrition services need to address inequities, and to specifically target the most under-resourced and needy districts.

Health System Strengthening

MNCWH & Nutrition services are at the heart of service provision at community, PHC and district hospital levels, and quality services can only be delivered at scale through a well-functioning district health system. Overall efforts to strengthen the health system and especially PHC services are critical to successfully reducing mortality and morbidity amongst women, newborns and children.

Support from key stake-holders

Successful implementation of the strategic plan is critically dependent on a range of role-players. Whilst the National Department of Health will provide leadership and support, implementation at provincial, district, facility and community levels will be dependent on the Provincial Departments of Health.

Other key role-players include other government departments, developmental partners and civil society, including a wide-range of non-governmental and community-based organizations.

Resource mobilization

Provision of a full package of MNCWH & Nutrition interventions will require additional resources, both financial and human. Once implementation of the plan has been fully costed and the resource gap identified, steps to bridge the gap will need to be identified.

Training institutions will also need to be involved in ensuring that sufficient numbers of health care workers, with appropriate skills, are trained.

Strengthening of MNCWH & Nutrition capacity

Implementation of the strategic plan will require strengthening of MNCWH & Nutrition capacity at national, provincial, district and sub-district levels.