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Acronyms

ANC  Antenatal Care
AIDS  Acquired Immune Deficiency Syndrome
ART  Antiretroviral Therapy
BEmOC  Basic Emergency Obstetric Care
CEmOC  Comprehensive Emergency Obstetric Care
CPR  Contraceptive Prevalence Rate
CSSC  Child Survival Steering Committee
CSTWG  Child Survival Technical Working Group
DDF  District Development Fund
DOT  Directly Observed Treatment
EOC  Emergency Obstetric Care
EPI  Expanded Programme of Immunization
ETAT  Emergency Triaging and Treatment
FST  Family Support Trust
GAVI  Global Alliance for Vaccine and Immunization
GMO  Government Medical Officer
Hib  Haemophilus Influenza B
HIV  Human Immunodeficiency Virus
HMIS  Health Management Information System
IGME  Inter-agency Group for Child Mortality Estimation
IMCI  Integrated Management of Childhood Illnesses
IMNCI  Integrated Management of Neonatal and Childhood Illnesses
ITN  Insecticide Treated Nets
IPT  Intermittent Presumptive Treatment
IYCF  Infant and Young Child Feeding
MCH  Maternal and Child Health
MNCH  Maternal Neonatal and Child Health
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MER</td>
<td>More Efficacious Regimen</td>
</tr>
<tr>
<td>MIMS</td>
<td>Multiple Indicator Monitoring Survey</td>
</tr>
<tr>
<td>MNCH</td>
<td>Maternal Neonatal and Child Health</td>
</tr>
<tr>
<td>MOHCW</td>
<td>Ministry of Health and Child Welfare</td>
</tr>
<tr>
<td>NIDs</td>
<td>National Immunization Days</td>
</tr>
<tr>
<td>MNCHSC</td>
<td>National Maternal, Newborn and Child Health Steering Committee</td>
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<tr>
<td>ORS</td>
<td>Oral Rehydration Solution</td>
</tr>
<tr>
<td>OVC</td>
<td>Orphans and Vulnerable Children</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission</td>
</tr>
<tr>
<td>PNC</td>
<td>Primary Care Nurse</td>
</tr>
<tr>
<td>SdNVP</td>
<td>single dose Nevirapine</td>
</tr>
<tr>
<td>SP</td>
<td>Sulfadoxine/ Pyrimethamine</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Emergency Fund</td>
</tr>
<tr>
<td>WASH</td>
<td>Water Sanitation and Hygiene</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>ZDHS</td>
<td>Zimbabwe Demographic and Health Survey</td>
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Foreword

Zimbabwe, like most Sub-Saharan African countries, bears a heavy burden of high neonatal and child mortality when compared to countries in other regions of the world. The under-five mortality rate according to the Zimbabwe Demographic and Health Survey of 2005-5 is 82 deaths per 1,000 live births. The infant mortality rate is 60 deaths per 1,000 live births compared to 82 in 1999. Related to this is the neonatal mortality rate which was 36 per 1,000 live births in 2004 (State of the World’s Children 2009, UNICEF) compared to 29 per 1000 live births in 1999. The Multiple Indicator Monitoring Survey (MIMS) of 2009 estimates under five mortality rate and infant mortality rates at 94 and 67 deaths per 1,000 live births respectively. These indicators are unacceptably high. This demonstrates the need for us to scale up high impact interventions urgently, in order to reverse this trend and achieve Millennium Development Goal (MDG) number four.

Neonatal conditions are the leading causes of mortality in children under five years in Zimbabwe. The HIV epidemic continues to be a major challenge to child health. Approximately 105,740 children are living with HIV. Ninety percent of these infections are result of mother-to-child transmission. It is therefore imperative that efforts to prevent vertical transmission and rapid scale up of infant diagnosis are redoubled, so that infants are protected from acquiring HIV infection, and those infants who are infected are detected early and offered life saving Anti-Retroviral Therapy (ART)

The country has made efforts to address child health issues in the context of several international agreements aimed at improving child health. The first international declaration underlining the importance of primary health care (PHC) was the 1978 Alma-Ata Declaration. The declaration expressed the need for urgent action by all governments, health and development partners, and the world community, to protect and promote the health of all people of the world. Zimbabwe has re-affirmed its commitment to the Ouagadougou Declaration on Primary Health Care Approach, to facilitate the delivery of high impact, low cost interventions at high population coverage rates in order to reduce under 5 mortality by two thirds by 2015.

This Child Survival Strategy provides a framework for addressing child health challenges currently facing Zimbabwe. It is an over-arching strategy for scale up of the national response to reduce the current levels of child mortality and morbidity in line with the MDG health related targets. The life cycle approach and continuum of care concept, starting with care from the home environment to health facility, guided the development of this strategy.

The strategy will help bring together all national stakeholders to support one national Child Survival programme, one national Child Survival coordination mechanism, and one national Child Survival Planning, Monitoring and Evaluation Framework.

The Ministry of Health and Child Welfare would like to acknowledge the generous technical and financial contributions from all organizations and institutions that participated in the development of the Child Survival Strategy. The Ministry of Health would also like to extend its gratitude to all past and current donor partners who have offered specific support for child health activities, as well as financial and technical assistance for other aspects of health service delivery.
Most importantly the Ministry of Health and Child Welfare would like to acknowledge the dedicated service and hard work of all health personnel at all levels of service delivery, who are at the forefront of efforts to improve child survival in the country.

I therefore urge you all to implement this strategy and secure the health of our children over the next five years.

Brigadier General (Dr) Gerald Gwinji
Permanent Secretary
Ministry of Health and Child Welfare
Acknowledgements

The production of this five year Child Survival Strategy for Zimbabwe was made possible through collaboration of Zimbabwe’s Ministry of Health and Child Welfare (MOHCW), the United Nations Children’s Fund (UNICEF) and the World Health Organization (WHO). The Ministry of Health and Child Welfare supported the writing team with access to programme managers, health workers and documents pertaining to child health and welfare. The WHO and UNICEF provided critical funding and technical support and we would like to thank the following people from these two organizations: Dr D Teshome (ESA ICT focal person, Child and Adolescent Health, WHO), Dr T Kanyowa (National Professional Officer, Child and Adolescent Health, WHO), Dr A Kampo (Section Chief Young Child Survival and Development, UNICEF), Dr K Assaye (Health Specialist Maternal Newborn and Child Health, UNICEF), and Mrs. Shelly Chitsungo (Health Specialist, UNICEF). Valued technical input was also provided by Professor K Nathoo (Professor, Department of Paediatrics College of Health Sciences) and Dr H Mujuru (Senior Lecturer College of Health Sciences) from the University of Zimbabwe Paediatric Department.

This work was overseen by a collaborative task-force chaired by Dr N Gonah (Paediatrician Chitungwiza Central Hospital and Chairman of the IMNCI taskforce), Ms R Gerede (Deputy Director Community Nursing Services, MOHCW) Ms C Machena (IMNCI manager, MOHCW), and Mrs R Madzima (Consultant Nutritionist). Departments within the Ministry of Health and Child Welfare provided most of the data and information on which the situation analysis was based. We are indebted to communities who participated in group discussions for being frank and giving us a well balanced community perspective on issues impacting on child survival, and to all the organizations that have participated in the development of this strategy.

We would like to thank the Secretary for health, Brigadier General Dr G Gwinji, Provincial Medical Directors (PMDs) and the Provincial Health Executives (PHEs) of Mashonaland Central, Manicaland, Matabeleland and Midlands Provinces for allowing access giving us to information in their areas. The consultancy services for coordination, writing and final production of the document were provided by a three member team comprising Dr G Chimhini (Paediatrician), Dr G Shambira (Public Health Specialist), and Dr T Simbini (Health Informatics Specialist).
Executive Summary

Zimbabwe has a high estimated HIV prevalence of 13.7%, a weakened health system in the midst of poor economic performance, and recurrent droughts. These factors predispose the Zimbabwean child to poor health outcomes. One in every eleven Zimbabwean children dies before their fifth birthday each year (approximately 35,500 children per year). In order to develop a comprehensive child survival strategy for the country, a situation analysis on maternal, newborn and child health was carried out to guide the process and content of strategy development.

The Zimbabwean infant mortality rate is estimated at 60 per 1,000 live births. The under-5 mortality is estimated at 86 per 1,000 live births, and the neonatal mortality rate is 36 per 1,000 live births (State of the World’s Children 2009, UNICEF). The perinatal mortality rate is 29 per 1,000 live births (Zimbabwe Maternal and Perinatal Mortality Study, 2007). Of these perinatal deaths 50 percent occur within the first 24 hours. These indicators are unacceptably high. About 80 percent of deaths among under-5 children are caused by four mostly preventable causes: Neonatal causes (29 percent); AIDS (21 percent); pneumonia (13 percent) and diarrhoea (9 percent). Measles has resurfaced having an 8 percent contribution to mortality. Malnutrition is an underlying cause for most of these conditions. Most of these deaths can be prevented by providing universal coverage with proven high impact low cost interventions.

The Ministry of Health and Child Welfare of the Government of Zimbabwe has developed this strategy in order to deliver these proven interventions, reaffirming its commitment to significantly reduce early child mortality as promoted in the Millennium Development Goals (MDGs). The Child Survival Strategy was developed in the context of the existing National Health Strategy, and will complement other documents, including the Maternal and Neonatal Roadmap launched in 2009. Although the policy and legal environment is well developed, child survival integration at operational level lacks the capacity to deliver these interventions.

The goal of the strategy is to achieve MDG 4, to reduce under-5 mortality by two thirds: for Zimbabwe this translates to a reduction from 79 per 1,000 live births in 1990 to 27 per 1,000 live births by 2015. The mission of the strategy is to provide comprehensive and integrated maternal, newborn and child health services by scaling up proven cost effective interventions at high population coverage through family/community, outreach and facility level care. The mission will be realized through the successful, integrated implementation of nine strategic objectives focused on 1) increasing coverage of key interventions for universal access; 2) strengthening the capacity of the health system; 3) strengthening the capacity of individuals, families and communities; 4) mobilising and diversifying the resource base; 5) strengthening supervision, monitoring and evaluation; 6) establishing and sustaining partnerships for implementation; 7) strengthen logistics and supply chain systems; 8) establishing a coordination mechanism; and 9) strengthening multisectoral collaboration in health.

Continuum of care, equity, partnerships and the multi-sectoral approach will be the major guiding principles of this strategy. The strategy will be anchored on the Primary Healthcare Approach, health systems strengthening and empowering families and communities especially the poor and marginalized. A phased implementation plan
with timelines and benchmarks will allow for realistic attainment of the targets. Advocacy, through operational partnerships at all levels, will be paramount in promoting increased resource mobilization and allocation towards those interventions that will lead to the intended reduction in maternal, newborn and child mortality. The organizational structure of the MOHCW will be realigned in order to integrate the main child health programmes and give child health clear visibility within the ministry. There is need for rapid recruitment, training/orientation and deployment of village health workers who will be a catalyst for enhanced community mobilization and participation in MNCH activities including community case management of selected childhood conditions.

A National Maternal, Newborn and Child Health Steering Committee (MNCHSC), chaired by the Honorable Minister of Health and Child Welfare, will promote the implementation of the Child Survival Strategy and create national awareness of the need for universal access to high impact maternal, newborn and child health interventions. From a child health perspective, the MNCHSC will be technically supported by national Child Survival Technical Working Group (CSTWG). Government ministries, development partners; civic society, FBOs, research and training institutions have well defined roles in the strategy.

A set of relevant indicators will be collected systematically from all levels of the health system in Zimbabwe. The National Maternal, Newborn and Child Health Steering Committee will task the CSTWG to develop standard operational definitions for indicators, as well as the numerators and denominators to be used while measuring each indicator. The MNCHSC will also monitor progress in implementation of the child survival strategy as part of its efforts to ensure attainment of the strategic goals and objectives. The partnerships shall also assist government in the developing the appropriate tools and mechanisms for tracking progress of implementation of the strategy. The Child Survival Technical Working Group will develop a research agenda in collaboration with training and research institutions on coverage, quality, utilization and compliance with interventions and impact of these interventions.
Chapter 1: Context For Strategy

1.1 Background

One out of every eleven Zimbabwean children dies each year before their fifth birthday (approximately 35,500 children per year). With an under-5 mortality rate estimated at 86 per 1,000 live births (MIMS 2009), Zimbabwe ranks within the top 50 countries in the world for high early childhood mortality. Over 65% of these deaths occur within the first year of life, as estimated by an infant mortality of 60 per 1,000 live births (MIMS, 2009). Within the first month, 24 neonates out of 1,000 live births die each year. This represents about 40% of the infant mortality and 28% of the under-5 mortality. In order to effectively reduce the childhood mortality trends in the country, a child survival strategy outlining the major target killers, key intervention strategies and actions, coupled with a well defined monitoring and evaluation framework, required development. This child survival strategy should be used in conjunction with the maternal and neonatal roadmap, infant and young child feeding policy, comprehensive multiyear strategic plan, HIV and AIDS strategic documents and other policy documents pertaining to child survival.

1.2 Geography, and demographic situation

Zimbabwe is a landlocked country in central Southern Africa, with a total land area of 390,757 square kilometers and a population density of 30 people per square kilometers. It shares borders with Zambia, Mozambique, South Africa, Botswana, and Namibia. The country’s population was estimated to be 13,300,000 in mid-2007, of which 41 percent are children under 15 years of age. 1,706,000 people (13 percent of the total population) are children under-5 years.

According to the World Health Report of 2009, the life expectancy at birth in Zimbabwe for both sexes was estimated at 45 years. The healthy life expectancy i.e. an estimate of how many years a person might live in good health, was estimated at 39 years. Females have a lower healthy life expectancy of 38 years compared to 40 years for males.

The total fertility rate i.e. the number of children a woman would have by the end of her childbearing years in the ages 15-49 years was estimated at 3.2 in 2007. The total fertility rate has declined from 5.2 in 1990 to 3.2 in 2007. Approximately 21 percent of women aged 20-24 have their first child at 18 years. The median birth interval in Zimbabwe is 41.6 months. About one in ten children are born after too short an interval (less than 24 months) (ZDHS 2005/6).

1.3 Socio-Economic Context

Delivery of quality Maternal, Neonatal and Child Health (MNCH) services and improvement in the health status of women and children not only rest with immediate environmental and health systems, but also with socioeconomic factors including the performance of macroeconomic factors which have a bearing on health access, improvement in education levels, women’s empowerment and optimization of public financing mechanisms. Since the late 1990s the country’s economy, which is mostly agriculture based, began to decline. In subsequent years the country’s real economic growth rates declined to negative values estimated at -12.1 percent in 2003 to the lowest rate of -14.1 percent in early 2009, ranking 215th in the world. The negative
economic growth resulted in the highest inflation record in the country’s history, massive devaluation of the currency, low productive capacity, and loss of jobs, food shortages, poverty, massive de-industrialization and general despondency. The hyperinflation officially ended in February 2009 when the country changed the Zimbabwean dollar for a multi-currency economy based mainly on the United States dollar and the South African rand. The economic decline has had a profound effect on child survival through a strained health delivery system due to shortage of both human and material resources, failing health delivery infrastructure, community inability to pay for health services and general household level food insecurity.

The recent economic situation has also seen a decline in the country’s expenditure on health in real terms. The general government expenditure on health as a percentage of general government expenditure did not change significantly from 7.3% in 2000 to 8.9% in 2006 (World Health Report 2009). This is not reflective of meaningful funding in health as all sectors were being affected by a hyperinflationary economic environment.

### 1.4 Organization of the Health System

Zimbabwe’s public health delivery system is organized into a hierarchical system of four tiers namely (from the least specialized to the most specialized).

- **Level 1: Primary Health Care (Clinics / Rural Health Centers and Village Health Workers):** There are approximately 1,000 primary health care facilities comprising rural clinics and urban municipal clinics. The level comprises of a network of clinics, rural health centers assisted by village health workers, providing comprehensive promotion, preventive, curative and rehabilitative services and community based health services. The rural health centers have an establishment of 2 primary care nurses one of whom must be trained in midwifery. These centres must be able to deliver the essential package of MNCH services which include:
  - Focused antenatal care including PMTCT
  - Postnatal care including early detection and timely referral of women/neonates with complications
  - Normal delivery using the partogram
  - Ensuring appropriate breastfeeding practices
  - Full immunization growth monitoring and promotion
  - IMNCI Services Community based health services

- **Level 2: District /Mission Hospitals.** There are approximately 164 district hospitals. Of these approximately half are mission run hospitals. They are
staffed by Government Medical Officers (GMOs). Services offered at this level include:

- Surgical procedures including caesarian section
- Safe blood transfusion
- Comprehensive emergency obstetric and newborn care
- Comprehensive management of childhood illness including paediatric emergency care

A major concern is that urban centres such as Harare do not have district or provincial level hospitals. This means patients are often referred directly to tertiary institutions which may be become overburdened with conditions that can be dealt with at a lower level.

- **Level 3: Provincial Hospitals.** There are 7 provincial hospitals. They are the highest levels of referral at Province level with posts for specialized health services. However, these posts are largely vacant meaning these centres currently provide similar services to district level hospitals. Services offered include:
  - Caesarian section
  - Blood transfusion
  - Comprehensive emergency obstetric and newborn care
  - Comprehensive management of childhood illness including paediatric emergency care
  - Management of complicated paediatric, adult medical and surgical cases referred from the district level

- **Level 4: Central Hospitals.** There are five Central Hospitals in the country, two in Harare, two in Bulawayo and one in Chitungwiza. These are the highest and most specialized levels of care with specialty services for both maternal and child health. These specialties include: obstetricians and gynaecologists, neonatologists, paediatricians, and paediatric surgeons. Services offered include
  - Comprehensive emergency obstetric and newborn care especially management of complicated maternal and newborn cases
  - Specialist medical and surgical management of complicated paediatric cases such as paediatric cancer

In addition to government provided services (both central and local government), there is also an active for-profit private sector.

The Access to Health Care Services Study (2008) found that 60% of communities live within a 5km radius from the nearest health facilities, 23% live between 5 to 10 km
and 17% are over 10km. The study noted that access to health services was extremely
difficult owing to lack of transport in the rural areas, and most roads were in a poor
state.

1.5 Initiatives to improve maternal, newborn and child health in Zimbabwe

1.5.1 Promotion of Primary Health Care

At independence in 1980, Zimbabwe adopted the Primary Health Care (PHC) approach as the main strategy for delivering healthcare to the majority of the population, with a focus in increasing community access to health services.

The initiatives to improve MNCH within the PHC approach included: a comprehensive antenatal and postnatal care program, a well supported Expanded Program in Immunization (EPI), and community level child monitoring and surveillance through Village Health Workers (VHWs). Health care services were provided through a “supermarket approach”, where preventive and curative maternal, newborn and child health services were accessed at a single visit. Together, these initiatives resulted in a decline of early childhood mortality rates. The period of 1983 to 1988 recorded an under-5 mortality rate of 75 per 1,000 live births compared to the preceding period (1978-1982) with a rate of 104 per 1,000 live births (ZDHS/1983). The infant mortality rate declined in the same time periods, from 64 to 53 per 1,000 live births. These were early indicators of the success of the various MCH interventions being carried out.

Major gains were documented from 1980 up to the mid 1990’s. Access to health facilities increased remarkably, so that 85 percent of the population was living within 8-10 kilometres of a facility. The infant mortality rate decreased by 50 percent between 1980 and 1990, from 100 per 1,000 live births to 50 per 1,000 live births. During the same period childhood full immunization coverage increased from 25 percent to 80 percent. In 1983 Zimbabwe established a Child Survival Foundation which was instrumental in advocating for a focus by government, partners and the public at large on valuing the welfare of the child. In these years child survival was supported by a health delivery system that performed well after independence but has started to show signs of decreased performance in recent years.

Zimbabwe remains committed to the PHC approach as reaffirmed in the Ouagadougou declaration on PHC and Health Systems strengthening of 2009. Zimbabwe is also party to the 2015 Millennium Development Goals (MDGs) which includes a specific target for reduction of child mortality. The Zimbabwe Maternal and Neonatal Roadmap was launched in December 2009 and is expected to help harness resources targeted towards maternal and neonatal health. Concerted efforts to prevent vertical transmission of HIV have been initiated. The PMTCT programme was launched in 1999 under the framework of the national HIV and AIDS policy of 1999, based on single dose Nevirapine. Owing to the limited effectiveness of this regimen the More Efficacious Regimen (MER) was piloted and is in the process of being rolled out, along with prioritization of pregnant women with CD4<350 to receive ART. The Nutritional Sentinel Site Surveillance System was established in November 2004 by the Government of Zimbabwe to monitor the nutritional status of
children and women. The child survival strategy is part of the ongoing efforts to improve on the health and welfare of children in Zimbabwe.

1.5.2 Creating a favourable policy and legal environment

Since 1980, health sector activities have been guided by two policy documents: “Planning for Equity in Health” of the early 1980s, and the National Health Strategy, “Working for Quality and Equity in Health” (1997-2007). More recently the guiding policy will be The National Health Strategy for Zimbabwe (2009-2013) - Equity and Quality in health: A People’s Right. The key principles enshrined in these documents include protection of the poor and vulnerable through exemption of user fees for all health services in the public sector, the Primary Health Care approach, and integration of preventive and curative services through the supermarket approach and use of village health workers for community mobilization. In addition the Public Health Act provides for the support and well-being of maternal and child welfare.

The Government of Zimbabwe is a signatory to a number of important international legal instruments that bind governments to create an enabling environment for delivery of maternal, neonatal and child health services. These include:

- The UN Convention for the Rights of the Child (1989)
- The Millennium Declaration (2000)
- The Abuja Declaration (2000)
- Ouagadougou Declaration (2008) on Primary Health Care and Health Systems in Africa

There are a number of national policies and strategies that promote child health and welfare. These include:

- The National Health Strategy for Zimbabwe 2009-2013
- Maternal and Neonatal Health Road Map 2007-2015
- Plan for the Nationwide Provision of antiretroviral therapy 2008-2012
- Zimbabwe National Programme of Action for children
- National Orphan Care Policy
- Reproductive Health Policy
- National HIV and AIDS Policy
- Zimbabwe National HIV and AIDS Strategic Plan (ZNASP) 2006-2010
- National Gender Policy
- National Adolescent Health Strategy
- National Infant and Young Child Feeding Policy
- Breast-milk Substitutes and Infant Nutrition Regulations, Nutrition and HIV strategy
- Integrated Management of Neonatal and Childhood Illnesses
Comprehensive Multi-year plans for EPI (2009-2013)
Health Sector Investment case (2010-2012)
Application for GAVI Alliance Health Systems Strengthening Support
Zimbabwe Expanded Programme on Immunization Policy Document

The Reproductive Health policy provides the framework for the provision of integrated maternal health, family planning, HIV and AIDS and STI services. The HIV and AIDS policy and strategic framework were updated in 2005 to address some weaknesses such as inadequate attention to child-related issues.

Legislation which protects the survival and development of children include
- Children’s Act (Chapter 5:06)
- Education Act
- Medical Dental and Allied Professionals Act
- Public Health Act
- Maintenance Act
- Termination of Pregnancy Act
- Disabled Persons Act

The wide variety of different policies related to child health in Zimbabwe therefore reaffirms the importance of this single child survival strategy, as a focused effort to bring together all policies and frameworks to enable coordinated action going forwards.

1.5.3 Focus on Child Rights
Zimbabwe has demonstrated a strong commitment to the survival of the Zimbabwean child as exemplified by its ratification of international treaties such as the Convention on the Rights of the Child (CRC), the most comprehensive international document pertaining to the rights of children, and various statutory instruments.

The Committee on the Rights of the Child has identified the following articles as general principles that are basic to implementation of all rights contained in the CRC:
- Non-discrimination (article 2)
- Best interests of the child (article 3)
- Right to life, survival and development (article 6)
- Respect for the views of the child (article 12)

Article 24 pertains to health and health services where children have a right to the highest level of health possible, which includes a right to health and medical services, with special emphasis on primary and preventive health care, public health education and diminution of infant mortality.

Regionally, Zimbabwe is a signatory to the African Charter on the Rights and Welfare of the Child, the first regional child rights treaty, which came into force in 1999. Legislation pertinent to children includes the Children’s Protection and Adoption Act and its Amendment, the Guardianship of Minors Act, the Maintenance Act, and the Child Abduction Act. The Public Health Act also recognizes the welfare of children.
1.6 Current Challenges in delivering Health Services

1.6.1 Health Services Structures

At a national level, maternal and child health services are coordinated by officers who have different reporting hierarchies, resulting in a fragmented response to MCH needs. According to the “Organization and Functions” document of the MOHCW of 2001, which contains the current operative structure, Child Health and Reproductive Health form separate departments each with its own units/divisions. The post for Child Welfare Coordinator has been vacant since 2007 and this has negatively impacted on the coordination of IMNCI, Reproductive Health, Nutrition, EPI and malaria programmes within the MOHCW.

1.6.2 Human Resources

From the late 1990s there has been a marked increase in the vacancy rates of health professionals in Zimbabwe. This peaked in 2009 when the economic situation in the country deteriorated significantly. According to the Human Resources Department report in December 2008, the vacancy levels in the public health sector were 69 percent for doctors, 80 percent for nursing midwives, 61 percent for environmental health technicians and 63 percent for medical school lecturers. Massive health professional migration has resulted in the decimation of the experienced cadre, leaving those with skills strained to train new cadres well enough to meet the national demands. This has resulted in the loss of quality cadres capable of working with minimum supervision, and inadequately trained cadres at the point of care. The Primary Care Nurses who staff the rural health centers have limited midwifery skills.

1.6.3 Village Health Workers (VHWs)

The VHW program is a community based initiative to provide basic maternal and child health skills through locally trained cadres. As reported in the Child Situation Analysis of 2006, the VHW program has not significantly improved. No province has reached the target of one VHW per 100 households. The bulk of the VHW, who are mainly former Village Community Workers, are in the rural communal areas, others in farming areas. In the provinces visited, Farm Health Workers are the least supported due to their remote location and poorly developed road networks. Currently UNICEF supports the VHW program in 11 districts. In some districts VHWs are supported by some NGOs, but this is not harmonized throughout the country and may affect the sustainability of this program.

1.6.4 Drugs, Health Services, Equipment and Essential supplies

The situation around drugs, equipment and essential supplies remains dire. The common challenges include:

- Low capacity of surgical and laboratory services
- Problems with maintenance of available equipment and obsolescence of some
- Severe shortages of blood and blood products at district hospital level.
- Autoclave machines and oxygen cylinders either absent or non-functional resulting in increased numbers of referrals requiring Caesarean sections.
- Neonatal units in central and provincial hospitals without functional resuscitation equipment and incubators.

Comment [AM1]: I would suggest either a) deleting this “in the provinces visited” or b) including a brief section at the beginning explaining the rationale / methodology for field work conducted for the situational analysis.
A Vital Medicines Availability and Health Services Survey carried out in May and June 2009 visited 96% (1257 out of 1313) of all health facilities in the country. Key findings were:

- 56% of the facilities had no selected essential drugs at all at the time of the visit. Primary health care facilities were the most affected by essential drug shortages.
- 20% of the surveyed sites were without antibiotics
- Trained pharmaceutical staff members were available in only 5% of the surveyed sites.

Key findings on maternal and child health services were:

- 85% had a functional maternity clinic
- Charges for ANC services were being levied in 51% of the health facilities.
- In those facilities that offered maternity services, ANC and delivery services ranged from USD$5 to USD$250 with higher fees being charged in private health facilities.
- 34% charged for child health services. Of these 99% were charging below USD$5.
- Over 75% of health facilities surveyed had child health cards on the day of the visit.

1.6.5 Referral and communication Systems

Referral systems and community outreach programmes are being severely compromised by lack of transport. Ambulance services are severely compromised from district to central hospital.

Fixed communication equipment such as telephones and radio services are significantly limited. The lack of fixed telephones has affected electronic mail access through the Healthnet system which had been established earlier.

1.6.6 Health Financing and Budgeting

The MOHCW was initially allocated US$ 157,673,800 for the 2009 budget which was revised down to US$ 121,000,000. However, only US$ 23,000,000, (18%) was actually disbursed. This translates to approximately US$7 per capita of which only US$2 per capita was disbursed. The trend has been for budget disbursements to be below 15% of allocation over the years. In the 2010 budget allocation, Ministry of Health and Child Welfare has been allocated USD285 million, which represents approximately 12.7 percent of the national budget.

While in the past the Government of Zimbabwe funded the majority of health related activities with partners filling in the gaps, in recent years funding from donors – including bilateral agencies and the United Nations Family - has been critical in the provision of Health Services in Zimbabwe. The country also submitted successful Round 5 and Round 8 funding applications to the Global Fund for AIDS, TB and Malaria (GFATM) for a total of 301 million USD over the next 5 years. According to the World Health Report of 2009, Zimbabwe’s total health expenditure of 2006 was 9.3% of the gross domestic product. General government expenditure on health was 48.3% of the total expenditure on health, with the remainder 51.3% being private expenditure. The external resources accounted for 17.3% of the total expenditure, a significant increase from 1.6% in 2000.
It is important to note that ever since the inception of Child Welfare within the Ministry of Health in 1992, there was no line item specific for child welfare as a specific entity.

1.6.7 Monitoring, Evaluation and Health Management Information Systems
Zimbabwe’s public health information system is based on the T (Tally) form system. Health information is increasingly less complete at District, Province and National levels, because of failure to update with late returns received at lower levels. At central hospitals there is very limited capturing of morbidity and mortality data. Timeliness and stability of the system have been compromised by poor telecommunication especially from the rural health facilities to the district. Usefulness of surveillance systems in general is limited was and there is little evidence of the use of data for planning and decision making. The National Health Information strategy incorporates most of the child health indicators. However indicators on postnatal care including neonatal indicators are not included. Paediatric ART is not captured separately from adults (National Health Information Strategy, 2009-2014).

1.6.8 Community Challenges in Accessing Health Services
There are challenges faced by the community in accessing health services including:

- Distance to the clinic; some mothers are walking 30 km to the nearest clinic.
- Financial barriers such as user fees and transport costs
- Shortages of health commodities such as vaccines and drugs
- Acute shortage of human resources.
Chapter 2: Situation Analysis

Trends in maternal and child mortality have not shown any significant improvement since the early 1990’s. From the mid-1990s, the country has undergone significant economic decline, affecting the entire socio-economic fabric of the country. These economic challenges compounded the already existing scourge of HIV and AIDS. Recurrent droughts from 1992 to date have continued to threaten the survival of the Zimbabwean child. These challenges have largely contributed to an increase in demand of health delivery services, shortages of resources across the entire spectrum of human and economic development, a general collapse of the health delivery system, and food insecurity at household and national levels threatening the nutritional well-being of children.

The following situational analysis was carried out to assess the current state of Zimbabwe’s children and support development of a comprehensive Child Survival Strategy.

2.1 Trends in Neonatal and Child Morbidity and Mortality

2.1.1 Mortality Trends in Children

Figure 1 shows the adjusted trends in infant and under-5 mortality from 1990 to 2008 as point estimates from the ZDHS surveys and other data sources. These are estimates by the Inter-agency Group for Child Mortality Estimation (which includes technical experts from WHO, UNICEF, the United Nations Population Division, the World Bank, and independent experts), using a method adjusting for HIV and AIDS related mortality for each data observation. The graphs show fairly constant mortality rates from the year 2000 onwards. The dotted lines show the expected drop in mortality rates in order to meet the MDGs of 2015. This illustrates the need for urgent and concerted effort to realize the required impact and reach the MDGs.

![Infant and Under 5 Mortality Rates (1990 -2008) and MDG Targets](image)

**Figure 1: Early childhood mortality indicators over the years in relation to the MDG targets**

Source: Inter-agency Group for Child Mortality Estimation (IGME), 2009.
2.1.2 Mortality Patterns in Children

The Zimbabwean infant mortality rate is estimated at 60 per 1,000 live births. The under-5 mortality rate is estimated at 86 per 1,000 live births (MIMS 2009). These figures demonstrate little change since the ZDHS of 2005/6 which reported an infant mortality rate of 60 per 1,000 live births and under-5 mortality rate of 82 per 1,000 live births respectively. The neonatal mortality rate was 19 per 1000 live births in 1988 and increased to 29 in 1999, followed by a decrease to 24 per 1000 live births in 2005-6.

There are significant differences in mortality by province and place of residence. Mashonaland East province had the highest under-5 mortality rate of 103 per 1,000 live births while Matabeleland South Province had the lowest under-5 mortality rate of 56 per 1,000 live births (MIMS 2009). There are also differences in the under-5 mortality rate between urban and rural areas; in rural areas the under-5 mortality rate was estimated at 90 per 1,000 live births compared to urban rate of 76 per 1,000 live births (MIMS 2009). This is an indication of disparities in access and quality of care between the urban and rural areas of Zimbabwe which needs to be addressed.

2.1.3 Causes of Mortality in Under-5s

Figure 2 shows the causes of mortality for children under-5 years in Zimbabwe. Neonatal causes (comprising preterm birth complications, birth asphyxia and neonatal sepsis) contribute 29% of under-5 deaths. The single leading cause of child mortality in Zimbabwe is HIV and AIDS which contributes 22 percent of deaths. The other major contributions to under-5 mortality are pneumonia, diarrhoea and measles, although HIV and AIDS may also underlie deaths recorded under pneumonia and diarrhoea. Malaria contributes 3% of under-5 mortality. Malnutrition is an underlying factor in most of these deaths. Most of these deaths can be prevented through simple, cost-effective interventions.

![Figure 2: Causes of Under-5 Mortality in Zimbabwe](image)

Source: Adapted from the Child Health Epidemiologic Reference Group Lancet Publication May 12, 2010

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2.1.4 Causes of morbidity in children under-5 years

Figure 3 shows that respiratory conditions, diarrhoea, malaria and skin conditions rank among the top five causes of morbidity in children under-5 years in Zimbabwe. Acute respiratory infections account for most outpatient attendances. A significant proportion of children present with pneumonia, often of the severe form. The T5 is the standard health information system tally form that captures outpatient disease conditions at a health facility; the Other category includes about 13 000 cases of AIDS among under-5s reported on the T5 outpatient reporting system in 2008. This is probably a huge underestimate considering the population of children with HIV and AIDS which is estimated at about 100 000.

![Outpatient attendance of Under 5s](image)

**Figure 3: Outpatient attendance cases by under-5s**

Source: National Health Profile of MOHCW 2006

2.2 Status of key neonatal and childhood illnesses and conditions

2.2.1 Causes of Neonatal Mortality

The neonatal mortality rate is 36 per 1,000 live births (State of the World’s Children 2009, UNICEF) Most deaths of under-5s occur in the neonatal period. Thirty nine percent of neonatal deaths are caused by preterm birth complications (figure 4) followed by birth asphyxia (27 percent), and neonatal sepsis (14 percent). Seventy five percent of the neonatal deaths occur within the first week of life. Of these, 50 percent occur within the first 24 hours of life.

The causes of these neonatal deaths are mostly preventable. Risk factors of neonatal mortality include: unsafe and unhygienic delivery environments, delays in seeking skilled medical care, home deliveries, poor antenatal surveillance and poor postnatal care.
2.2.2 HIV and AIDS
Currently, HIV and AIDS is the single biggest determinant of child survival in Zimbabwe and is probably responsible for the documented rise in child mortality since the early 1990s. Of the 1.1 million Zimbabwans estimated to be living with HIV and AIDS in 2009, 105,740 (10 percent) are children under the age of 14. It is estimated that 62 883 (53 638 – 73 299) adults and 15 791 (8 054 – 22 431) children were newly infected with HIV in 2008. It is expected that with increasing coverage of more efficacious regimens to prevent vertical transmission, new infections in children will continue to decline.

2.2.3 Pneumonia
Pneumonia is the third leading killer disease of children under-5 years in Zimbabwe after HIV and AIDS and neonatal causes, contributing 14% of deaths. In the MIMS survey of 2009, only 16 percent of children under-5 who were suspected of having pneumonia in the two weeks preceding the survey had received an antibiotic. Urban areas had a higher percentage of children (25 percent) with suspected pneumonia, who received antibiotics than their rural counterparts (14 percent). Zimbabwe has not yet adopted community case management where antibiotics for pneumonia will be prescribed at community level.

2.2.4 Diarrhoea
Diarrhoea is the fourth leading cause of mortality among under-5s in Zimbabwe, contributing 9% of childhood deaths. The Zimbabwe Micronutrient and Nutrition Surveillance survey of 2008 reports that 20 percent of children under-5 had suffered from diarrhoea in the 2 weeks preceding the survey. In the MIMS 2009, 11 percent of children at national level in this age group had suffered from diarrhea in the last two
weeks preceding the survey, with no sex or urban and rural differentials. The national under-5 diarrhoea prevalence was comparable to the ZDHS 2005/6 prevalence of 12 percent. Children aged 12-13 months had the highest diarrhea prevalence of 19 percent compared to the lowest (7 percent each) in the age groups 36-47 months and 48-59 months. In the predominantly rural provinces, Manicaland and Mashonaland West had the highest under-5 diarrhoea prevalence of 14 percent each while Matabeleland North and Matabeleland South provinces had the lowest of 7 percent each. About 80% of diarrhoeal deaths are attributable to poor hygiene, inadequate sanitation and lack of adequate and safe drinking water.

The MIMS of 2009 reported that 58 percent of under-5s who had diarrhoea in the two weeks preceding the survey were given homemade salt and sugar solution. This is a decline from 61 percent use as reported by the ZDHS of 2005/6. At the time of carrying out MIMS, sugar and salt were not widely accessible to members of the community due to economic hardships in the country. The WHO / MOHCW cholera review meeting of April 2009 noted that use of ORS was regulated with ORS being promoted at facility level and salt sugar solution at household level. Noting the challenges faced by the community, policy has changed to providing ORS sachets at household level.

Introduction of Zinc (Zn) and low osmolarity ORS is being rolled out by the IMNCI program. Low osmolarity ORS was introduced to replace the previous WHO/UNICEF ORS. This roll out was launched around 2007 but the implementation has been slow to reach all the health facilities.

2.2.5 Measles
Measles is now the fifth highest cause of death in children under-5 years of age. Measles previously contributed less than 1% of childhood mortality. In 2009 and spilling into 2010, measles cases were identified among children who had not been vaccinated indicating the significance of these pockets of unvaccinated children in causing disease outbreaks. By November 2009 about 200 cases of measles had been reported in all provinces. A significant proportion of these children are from families belonging to the Johanne Marange and Masowe religious organizations who generally forbid members to seek any curative or preventive medical attention. In an evaluation of National Immunisation Days (NIDs) coverage for 2009, in 31 percent of children not immunized the major reason was religious objection. The problem of religious objectors, especially amongst particular religious sects persists, creating pockets of unvaccinated children in their communities. This poses risks for elimination and eradication goals of measles and poliomyelitis. There have been calls for legislation to deal with the problem as well as more persuasive dialogue with religious leaders.

2.2.6 Malnutrition
Malnutrition is a major underlying factor in child mortality. A child who is severely underweight is 8.4 times more likely to die from infectious disease than a well nourished child. Moderately underweight and mildly underweight children are 4.6 and 2.5 times respectively more likely to die than well nourished children. Using the WHO standard to estimate child nutrition, nationally 35 percent of the children under-5 years are stunted in Zimbabwe (MIMS, 2009). Stunting is a reflection of chronic malnutrition, the result of chronic dietary deficiencies or repeated or chronic bouts of illness. Children whose weight for height is below two standard deviations of the
reference population are classified as wasted. Nationally 2.4 percent of children in Zimbabwe are wasted (MIMS, 2009). Wasting is a reflection of acute malnutrition, typically the result of recent nutritional deficiency or disease. Children whose weight-for-age is below two standard deviations from the median are considered underweight. Nationally, 11.6 percent of children under-5 years are underweight (MIMS, 2009). Children aged 12-23 months are at higher risk for malnutrition with an underweight prevalence of 24% (Zimbabwe Micronutrient and Nutrition Surveillance Survey, 2008).

2.2.7 Malaria

Malaria is a major public health problem in Zimbabwe, with over five million people at risk of contracting the disease annually and contributing 3% of mortality in under-5s. It is estimated that 50% of the country’s population resides in malarial areas. This disease has a crippling effect on economic growth and perpetuates a vicious cycle of poverty. In Zimbabwe, malaria is the cause of 0.8%-1.9% in lost GDP productivity. In highly endemic districts it is responsible for between 30%-50% of fever cases, 30% of all outpatient consultations and 10%-15% of hospital admissions. Malaria is responsible for over 2,000 deaths each year, and every year 1 million to 1.85 million people suffer from clinical malaria in Zimbabwe. Malaria increases the risk of anaemia in pregnancy, preterm deliveries and low birth weight babies. 45 out of the 89 rural and urban districts in Zimbabwe are malaria prone. Of these, 30 are malaria endemic while 15 experience malaria seasonally. Inpatient case fatality rates have been noted to be on the decline from 0.2 to 0.06 in 2008 but this data was not disaggregated according to age.

In the MIMS of 2009 a total of 8 percent of under-5 year olds had experienced episodes of fever in the two weeks preceding the survey, with no gender or urban/rural differences. This study was carried out in April 2009, towards the end of the malaria season. Of these children only 14 percent had received any appropriate anti-malarial drug in the last two weeks preceding the survey. However this is an improvement from 4.7 percent documented in the ZDHS of 2005/2006. In the last Malaria indicator survey of 2007 about 1.7 percent of children presenting with fever received Quinine, suggesting these may have presented as complicated cases. Zimbabwe has adopted the use of Artemesinin based therapy, Coartem as the first line treatment of malaria. An audit of malaria case management showed a wide variation by province with respect to diagnosis with rapid diagnostic tests and Coartem prescribing.

There has been a significant rise in the proportion of children using insecticide treated nets (ITNs). In rural areas 17 percent of children aged 0-59 months slept under an ITN in 2009 (MIMS 2009) compared to 2 percent in 2005/6 (ZDHS2005/6).

2.2.8 TB in children

The HIV epidemic has led to increased prevalence of TB in adults which consequently increases the risk of TB in children. Generally TB in children represents 10-20% of all cases in the community. In 2008, 3561 (9%) of the 39 426 notified cases were children under the age of 15 years (National TB Programme Report, 2008). In Manicaland province only 101(2%) of 4912 notified cases were children
under the age of 15 years (NTP Report, 2008). This may reflect difficulties in
diagnosis of TB in children because of the similar presentation of TB and HIV
associated pulmonary disease, and less reliability of the tuberculin skin test in the
immune-compromised. Data on contact tracing is not readily available. TB reporting
data in 0-4 year olds is not readily available.

2.3 Child Health Interventions

2.3.1 Summary Coverage of Key Maternal, Newborn and Child Health
Interventions

Figure 5 below summarizes the coverage of maternal, newborn and child health
interventions for 2009. Although key child survival interventions are in place,
coverage levels for some of the key interventions are so low the interventions cannot
achieve their intended impact. Poor coverage is clearly a result of weaknesses in both
the provision of and demand for services, and a consequence of a malfunctioning
health system. Receiving antenatal care at least once during pregnancy is the
intervention with the highest coverage (93 percent). This actually offers an
opportunity as an entry point for scaling up other interventions.

Figure 5: Summary coverage of key maternal, newborn and child health interventions in Zimbabwe

SOURCE: Adapted from MIMS, 2009
2.3.2 HIV and AIDS Interventions

The MOHCW started providing paediatric ART in 2004, initially reaching a total of 90 children. There was rapid scale up to 1,985 children by the end of 2006. Approximately 25% (8,627) of the children who were estimated to need this life saving intervention were on ART in 2007. By end of 2008, 104 health facilities in the country were offering paediatric ART (ART Report, 2008). However progress was limited in 2009 with only 39% (17,366) of children in need being on ART by September 2009 against the targeted 25,000 children being on ART by December 2009 (ART national strategic framework). In the last 3 years an estimated 33,345 children have died of AIDS. The figure below illustrates trends in Number of HIV positive children, need for ART and deaths from 2007-2009 (figure 6).

![Children in need of ART 2007-2009](chart)

**Figure 6: Estimated coverage of ART in children, 2007-2009**

Source: AIDS and TB Unit, MOHCW.

2.3.3 Neonatal Interventions

There is limited information on coverage of neonatal interventions in Zimbabwe. The MOHCW is promoting Kangaroo Mother Care for preterm babies, expansion of comprehensive PMTCT and promoting the Baby Friendly Hospital initiative. Neonatal care has now been incorporated in the Integrated Management of Childhood Illness (IMCI) guidelines, hence the change to IMNCI; however the implementation of this program has been a challenge. While the majority of essential interventions are home care practices which families can provide, there is lack of systematic implementation at community level. Some training of healthcare workers on Emergency Neonatal Care has been carried out but increasing coverage has been slow and inadequate. Attainment of key indicators that ensure the survival of neonates still need to be improved. According to the World Health Report of 2009, 69% of births
are attended to by skilled personnel. The low exclusive breastfeeding rate of 26% negatively impacts on child survival.

2.3.4 Pneumonia

There are several challenges in the management of pneumonia at the district health centre and central hospital level, including the non-availability of oxygen for those who require it. The use of oxygen concentrators at district health facilities has been suggested. The EPI programme started giving Hib vaccine as part of the pentavalent vaccine in 2007. This is expected to lower the incidence and mortality from pneumonia, with introduction of pneumococcal vaccines expected to further reduce the impact of pneumonia on child morbidity and mortality.

2.3.5 Infant and Young Child Feeding

While breastfeeding is nearly universal in Zimbabwe, exclusive breastfeeding rates are relatively low, reflecting early mixed feeding. Frequently changing guidelines on infant and young child nutrition may have led health workers to give mixed messages. For example, the 2006 WHO infant feeding guidelines for women with HIV recommended exclusive breastfeeding and abrupt weaning at 6 months. New guidelines however recommend continued breastfeeding up to 24 months. The MIMS study (2009) recorded an exclusive breastfeeding prevalence at 6 months of 26 percent. Comparing regionally, Malawi has been experiencing a rapid decline in infant mortality rate and reported an exclusive breastfeeding prevalence of 56%. Complementary feeding should be introduced from the age of 6 months according to the Ministry of Health and Child Welfare guidelines. It is of concern that significant proportions of children under 6 months had been introduced to solids. 63 percent of children aged 4 – 5 months, 41 percent aged 2 - 3 months and 12 percent aged 0 - 1 month had been introduced to solids (MIMS 2009). A major positive finding is that a significant proportion of mothers continued to breastfeed their children up to 2 years.

2.3.6 Nutritional Interventions

In Zimbabwe UNICEF is the lead United Nations (UN) agency for nutrition and coordinates the Nutrition cluster with Helen Keller International. This cluster works with government departments on the underlying causes of malnutrition: food security, care, and health. In addition the Food and Nutrition Council (FNC) is a multi-stakeholder organization whose mandate is to facilitate a cohesive multi-sectoral response to the food and nutrition problems in Zimbabwe.

Care interventions include infant and young child feeding, HIV/ART nutrition education, general nutrition education and community-based growth monitoring. In 2007/2008 eleven districts in Zimbabwe were reported as having no beneficiaries of nutritional interventions. Care interventions were accessed by 5,000 to 15,000 persons per district during that period. Only one organization (PSI) had more than 10,000 beneficiaries of infant and young child feeding (Intervention mapping for Nutrition in Zimbabwe, UNICEF 2008). There are significant gaps in the care interventions for young children who are at risk for malnutrition, and the strategy should prioritize this in order to reduce under-5 mortality in Zimbabwe.
2.3.7 Immunization and Vitamin A Supplementation

Zimbabwe has been implementing a relatively successful expanded programme on Immunization since independence. According to the MIMS 2009, 49% of children 12 to 23 months old were fully immunized (BCG, Pentavalent and Measles). However there has been a decline in EPI coverage since 2000 as shown in Figure 7 below. The percentage of children with no vaccination at all was 7 percent, a reduction from 22 percent in 2005/2006. Harare and Matabeleland South provinces recorded the highest full child immunization coverage (88 percent) while Midlands’s province recorded the lowest (68 percent) (MIMS, 2009).

![EPI Coverage trend by antigen 1996-2008](Image)

Figure 7: EPI coverage trends by antigen 1996-2008

Source: Ministry of Health and Child Welfare

An assessment of the National Immunization Days of June 2009 demonstrated that Zimbabwe had managed to attain high coverage against poliomyelitis and measles (90 percent and 93 percent respectively) and vitamin A supplementation (92 percent). Remarkable consistency was observed between administrative and survey coverage rates, with evidence of strong compliance of performing staff with the national protocol developed by the MOHCW to conduct NIDs. A high Child Health Card retention rate of 82 percent was observed.

In 2005 Zimbabwe reported two-dose vitamin A coverage of 47 percent (ZDHS 2005/2006). However this had dropped to 23 percent for one dose coverage in the six months prior to the MIMS of 2009. Urban areas reported a higher Vitamin A supplementation coverage of 25 percent compared to rural areas of 22 percent. Among the provinces, Matabeleland South province had the highest Vitamin A supplementation of 30 percent while Midlands had the lowest rate of 16 percent.
2.3.8 Integrated Management of Childhood Illnesses (IMCI)

Integrated Management of Childhood Illnesses (IMCI) was a strategy for delivering essential child survival interventions at health facilities and in communities\(^1\). The IMCI strategy includes three components:

- Improving the case management skills of health workers
- Improving the health system support needed for effective management of childhood illness
- Promoting key family and community practices through education of caretakers and other members of the community.

Implementation started in 2000, followed by a National Review in 2001. By 2006 more than 800 health workers had been trained in IMCI case management. Supervisors have also been trained in IMCI follow up, and IMCI training has been introduced into the pre-service training curriculum for the Registered General Nurse and the Primary Care Nurse.

While training of health workers in IMCI case management can lead to important improvements in the quality of care of sick children, the main challenge is providing coverage of the interventions at sufficient levels to have a meaningful impact on the population level.

The assessment of quality of care for children in referral hospitals report of 2004 identified lack of triaging as an important issue for compromised quality of care at referral centres. Emergency Triage Assessment Training (ETAT) was recommended. The same report highlighted less than adequate drug stocks of less than 80%, while most of the hospitals had 60% availability of essential stocks. Emergency Triage Assessment and Treatment was recommended as a way of strengthening the quality of care, resulting in adaptation of ETAT training modules adapted and a national training on ETAT being carried out.

In 2007 a health facility survey was carried out in 171 first level health facilities in four districts of Zimbabwe: 80 percent of the children were checked for general danger signs and 95 percent of cases were classified according to IMCI guidelines. This was a high level of achievement. However only 38 percent of those needing urgent referral were identified and prescribed urgent referral. This needs to be addressed urgently because deaths commonly occur amongst this group of very ill children. About 81 percent of the children were checked for immunization status. Although most of the vaccines were available and the cold chain was well maintained, only about 48 percent of children needing vaccinations left the facilities with all needed vaccination. These were missed opportunities for vaccination. However approximately 78 percent of children had their weight checked against growth charts. This practice should be scaled up as it enables the early detection of malnutrition, an underlying factor in more than half of all childhood deaths.

\(^1\) IMCI has now been termed the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) reflecting the introduction of a neonatal component. However the term IMCI is used in this situational analysis as this was what was originally implemented.
The 2007 Health Facility Survey reports that 88 percent of children were managed by health workers trained in IMCI. As a result, 95 percent of cases were classified according to IMCI guidelines. This was a high level of achievement. The fact that 43 percent of sick children were managed by health workers with pre-service training in IMCI demonstrates Zimbabwe’s efforts to make IMCI more sustainable: these efforts need to be supported by the government and partners. However, the Multiple Indicators Monitoring Survey of 2009 showed that only 16 percent of children with suspected pneumonia had received appropriate antibiotic treatment; of the children under 5 years only 14 percent of them had been on an appropriate anti-malarial drug within 24 hours of onset of symptoms. This may also be an indicator of poor health seeking behavior of communities in taking prompt action towards ill children, inaccessibility of health facilities and/or shortage of drugs. This situation also has policy implications regarding the home use of antibiotics and anti-malarial drugs.

IMCI has also made efforts to improve the health delivery system through advocating for policy change to de-list essential drugs in the EDLIZ and advocating for the use of Zinc and low osmolarity ORS in the management of diarrhoea in children. Tools for integrated supervision and monitoring have been adapted and pilot tested in eight districts.

Community IMCI (c-IMCI) is the third component of IMCI and is being implemented in eight districts. A baseline study on knowledge, attitudes and practices was carried out in 2000, with a follow up survey being done in 2004. The report showed an increase in the proportion of under-5s sleeping under nets, knowledge of management of sick children at home was higher, and improvements in general sanitation were apparent. The same report showed that 50.5% of children needing care outside the home received it in these districts. However, the report showed lack of standardization of c-IMCI implementation. IEC materials, a Communication strategy, a Community based workers manual and a Resource manual have since been produced to address this. To date 160 resource persons and more than 12,000 Community Based Workers (CBWs) have been trained in community IMCI.

Shortage of funds has limited scale up of IMCI training, especially for case management and training of IMCI facilitators, leading to loss of gains made in the early 2000s. The IMCI department is grossly understaffed at national level, with only one officer in charge and no dedicated secretarial and administrative support. IMCI chart booklets have not been adequately printed. High staff turnover and weak integration at national level were thus some of the challenges encountered in IMCI. The Community IMCI working group does not appear to be active with no meetings held during 2007 or 2008.

As described above, IMCI has now been revised to include the neonatal component and is being called Integrated Management of Neonatal and Childhood Illnesses (IMNC). IMNC guidelines have also been reviewed and adapted to include HIV/AIDS.

### 2.3.9 Water, Sanitation and Hygiene (WASH)

There has been a slight decline in the proportion of the population using improved water sources (73 percent in 2009 MIMS compared to 76 percent in 2005/2006) (ZDHS). The proportion of people who use an improved water source in urban areas is 98 percent, compared to 61 percent in rural areas. Recently there has been a decline
in the provision of safe water in most urban centres which are suffering water cuts that may last for weeks or months. The decline in provision of safe water was manifest in the cholera outbreak from August 2008 to July 2009. This outbreak was unprecedented with more than 94,000 cases and approximately 5,000 deaths. This was closely followed by another outbreak starting in September 2009.

Sanitation coverage varies widely in the country with urban centres such as Harare reporting usage of improved sanitation facilities as high as 97 percent, while rural areas use of such facilities was as low as 30 percent (Matabeleland North). Sixty percent of the population in Zimbabwe use improved toilet facilities. However there is a wide difference by place of residence. Urban areas have a high proportion of the population (97 percent) using improved toilet facilities compared to rural areas (43 percent). For the predominantly rural provinces, Mashonaland East and Manicaland provinces had the highest proportion of the population using improved sanitation facilities (59 percent), while Matebeleland North had the lowest (31 percent). In urban areas the most commonly used improved sanitation facility is the flush to piped water system (85 percent) while in rural areas it is the ventilated improved pit latrine (24 percent) and the pit latrine with slab (17 percent) (MIMS 2009).

A National Policy on Domestic Water Supply and Sanitation has been drafted but there have been major limitations on implementation owing to lack of financial resources. Key informant interviews revealed that government structures in provision of water and sanitation are currently weak. Most of the water/sanitation interventions are being spearheaded by NGO’s.

2.4 Child Welfare

2.4.1 Child Abuse

Child Abuse, particularly sexual abuse, has been on the increase in Zimbabwe. The Family Support Trust (FST) currently attends to an average of five new victims a day. Of all victims seen, ninety-seven percent of them were female. Twenty five percent of the children seen at the Family support unit were between 0 and 5 years of age.

Several factors have been found to influence the occurrence of child sexual abuse. In an unpublished study conducted in Harare, risk factors for sexual abuse were identified as single parent caregiver, large household size and being out of school. These factors are closely linked to orphan hood. The growing number of children orphaned to HIV and AIDS, and a declining economy, predisposes more children to sexual abuse. Information on other forms of abuse such as physical and emotional is not well documented.

2.4.2 Orphaned and Vulnerable Children (OVC)

According to MIMS (2009) the prevalence of orphans and vulnerable children amongst children between the ages of 0-17 years was 37 percent. Of the OVCs 79 percent had not received any form of formal external support in the past 3 or 12 months preceding the survey. In urban areas more than 80% of OVC did not receive any support. This is an indicator that resources targeted at this group are reaching only a few OVCs.
There are numerous programmes targeting orphans and vulnerable children. These include:

- The National Plan of Action for OVCs
- The National Strategy on Children in Difficult Circumstances
- OVC programmes implemented in partnership with community based organisations (CBOs), faith-based organisations (FBOs) and NGOs.

### 2.5 Maternal Morbidity and Mortality Trends

Maternal wellbeing is inextricably linked to child survival. A mother enjoying a healthy life cares for and provides adequately for the child. Child mortality trends have been shown to be worse for children born to women who do not have basic education, and are in the low socio-economic grouping (MIMS, 2009; ZDHS, 2005/6). Hence promoting and securing maternal well being must be taken as a critical and integrated component of addressing child survival.

#### 2.5.1 Maternal Mortality Trends

According to the Zimbabwe Maternal and Perinatal Mortality study of 2007, the maternal mortality ratio was 725 per 100 000 live births. This translates into a maternal death for every 138 live births in 2007. In the UNICEF State of the World’s Children report of 2009, the adjusted maternal mortality ratio for 2005 was estimated at 880 per 100 000 live births, representing a 1 in 43 lifetime risk of a maternal death. Figure 8 below summarizes the major causes of maternal deaths according to the Maternal and Perinatal Mortality Study, 2007.

![Figure 8: Major causes of maternal mortality](image)

**Source:** Zimbabwe Maternal and Perinatal Mortality Study, 2007

The figure above shows that the five major causes of maternal mortality account for 70 percent of the maternal deaths. HIV and AIDS is the leading cause of maternal death. This finding is consistent with the high HIV prevalence among women of reproductive age in Zimbabwe.
The majority of maternal deaths (63 percent) occurred in the postpartum period, 24 percent in the antenatal period and 6.6 percent in the intrapartum period. Delays in seeking care contributed to 72.8 percent of the deaths. The risk of a maternal death was significantly increased by non-institutional delivery, operative delivery, delivery by non-skilled attendant and belonging to the apostolic faith sect (Maternal and Perinatal Mortality Study, 2007).

2.5.2 Perinatal Mortality
Perinatal mortality is an important health indicator for the evaluation of the pregnancy and puerperium process.

According to the Maternal and Perinatal Mortality study of 2007, the perinatal mortality rate was 29 per 1,000 live births. In the 2007 study, the risk of perinatal death was higher if the mother belonged to the Apostolic Faith sect. The 3 main causes of perinatal death (accounting for 75 percent of perinatal deaths), were:

1. Preterm birth (33.6 percent)
2. Intrapartum asphyxia and birth trauma (26 percent)
3. Unexplained intrauterine death (17.4 percent).

2.6 Maternal Health Interventions

2.6.1 Antenatal Care (ANC)
The antenatal care period clearly presents opportunities in the continuum of care process for reaching pregnant women with interventions that are vital to their health and well being and that of their infants. Antenatal care coverage has remained generally high in Zimbabwe. Nationally this was reported in MIMS as 93 percent for the first ANC visit in 2009 which is a slight decline from 95 percent (ZDHS 2005/6). According to the maternal and neonatal roadmap, 32% of women opt to deliver at home. In the rural provinces the decline in antenatal coverage is more significant from 94 percent (ZDHS 2005/6) to 90 percent in 2009. Of the women attending antenatal care, 62 percent had blood taken for investigations, 74 percent had blood pressure checked while only 36 percent had a urine sample taken. This is of concern since eclampsia is a major cause of maternal deaths. The maternal and neonatal roadmap recommends focused antenatal care including birth preparedness and provider initiated HIV testing and counseling to be part of routine ANC services.

2.6.2 Place of delivery
In 1999, 83 percent of deliveries in Zimbabwe occurred in health institutions. According to ZDHS in 2005/6, 68 percent were institutional deliveries, and in 2009, only 61 percent of deliveries occurred in health institutions (MIMS, 2009). This trend shows a consistent decline in institutional deliveries over the years, compromising safety of both mother and baby during childbirth.

2.6.3 Basic and Comprehensive Emergency Obstetric and Neonatal Care
Most maternal deaths are caused by haemorrhage, obstructed labour, infection (sepsis), unsafe abortion and eclampsia (pregnancy induced hypertension). Essential Obstetric Care (EOC) provides not only the means to manage emergency complications when they happen, but also the procedures for early detection and
treatment to prevent the progression of problem pregnancies to the level of an emergency. Basic Emergency Obstetric Care (BEmOC) responds to unexpected complications such as hemorrhage and obstructed labor. The first line health cadre in Zimbabwe at rural health center level i.e. the primary care nurse (PCN), is not trained in BEmOC and the essential skills required in averting the third delay to care i.e. delays in accessing treatment. The recommended national caesarean section rates in Comprehensive Emergency Obstetric Care (CEmOC) are not less than 5% and not more than 15%. However for Zimbabwe, the national caesarean section rate is currently 4%. It is lowest in communities with the lowest wealth quartile where it is about 2%, indicating disparities in access to care.

2.6.4 Postnatal Care
Information on postnatal care attendance in Zimbabwe is scanty. There appears to be no clear guidelines being followed on when to discharge mother and baby from the place of delivery, which ranges from a few hours after birth to five days post delivery. Currently mothers are advised to return at 10 days postnatal with 73.7% attending (Maternal and Perinatal study, 2007). This is late considering that most maternal and neonate’s deaths occur within 7 days following delivery. Neonatal conditions like jaundice, poor breast feeding techniques, and neonatal sepsis would be best detected on days 3 to 5 after birth.

2.6.5 Prevention of Mother to Child Transmission (PMTCT)
The PMTCT programme was launched in 1999 under the framework of the national HIV and AIDS policy of 1999. These services were integrated into the antenatal care services. According to the PMTCT report of 2008, comprehensive PMTCT services in Zimbabwe include routine HIV testing of pregnant women and provision of ARV prophylaxis (initially based on single dose Nevirapine to reduce mother-to-child transmission of HIV). PMTCT services are currently offered in over 910 health facilities with a further 650 sites providing routine antenatal and postnatal care but unable to provide on-site HIV testing. Throughout 2008, 224,637 pregnant women booked for a first ANC visit. Of these, 226,713 pregnant women were counseled for HIV and 78% were tested. The overall ANC HIV prevalence was 15.6% in 2008.

Uptake of single dose Nevirapine (sdNVP) by HIV-positive pregnant women at ANC sites is currently 91%, with over 24,896 HIV-positive pregnant women receiving prophylaxis. Owing to the limited effectiveness of this regimen, the More Efficacious Regimen (MER) was piloted and is in the process of being rolled out along with an urgent emphasis on treating those pregnant women with HIV who require it for their own health. Based on the national HIV estimates from 2008/2009, it was estimated that at a population level, 50,702 pregnant women were expected to be HIV-positive. The national PMTCT programme was therefore able to achieve an estimated 49% coverage of PMTCT interventions in 2008. This is far below the expected universal coverage of PMTCT services given that about 95% of HIV in children is through vertical transmission.

A number of challenges face the PMTCT programme including low human resource capacity, low male partner participation, low rate of HIV status disclosure and ongoing integration into other health systems and services.
2.6.7 Contraception

Strengthening access to contraception in the continuum of care enhances child survival through prevention of unwanted pregnancies and promotion of child spacing. The contraceptive prevalence rate (CPR) among women aged 15-49 years was 65 percent in 2009 which is an increase from 60 percent (ZDHS 2005/6). Urban areas had a higher CPR of 69 percent compared to rural areas (63 percent), and there was a general positive correlation with education and wealth status. However significant differences have been noted with some provinces such as Matebeland North and South provinces reporting a low CPR of 43 percent.

While family planning knowledge is almost universal in Zimbabwe, the unmet need is estimated at 13 percent (8 percent for spacing and 5 percent for limiting births, ZDHS 2005/6). If this unmet need is fulfilled it means that the contraceptive prevalence rate could be increased from 60 percent to 73 percent. The median birth interval in Zimbabwe is 41.6 months. About one in ten children are born after too short an interval (less than 24 months, ZDHS 2005/6).

2.6.8 Intermittent Presumptive Treatment (IPT)

The Ministry of Health and Child Welfare, through the Department of Disease Prevention and Control adopted a goal aimed at preventing morbidity and mortality, social and economic losses due to malaria. For pregnant women the policy recommends intermittent presumptive treatment (IPT) with 2-3 courses of Sulfadoxine / Pyrimethamine (SP), the first course being given in the second trimester (16th–27th week) and a repeat dose in the third trimester (28th–34th week gestation) at intervals of not less than four weeks using a Directly Observed Treatment (DOT) approach. According to the ZDHS of 2005/6 only 12 percent of pregnant women from malaria prone regions took at least one dose of SP. In a malaria case management audit of 2009, 45.5 percent of the women attending antenatal care received at least one dose of SP. Twenty eight percent received at least 2 doses of IPT. A large proportion of women are therefore not obtaining the benefits which accrue from IPT such as increased birth weight of the baby, reduction in preterm birth, anaemia and reduced malaria morbidity and mortality.

2.6.9 Iron/Folate Supplementation in pregnancy

The prevalence of anaemia in pregnant women in Zimbabwe is high (47% ZDHS 2005/6). The ZDHS reported that 43 percent of women had taken iron tablets or syrup during pregnancy in 5 year preceding the survey. This is an indicator of the extent of iron deficiency in this population and highlights the need to prioritize iron supplementation as part of focused antenatal care.
Chapter 3: Target Conditions and Delivery of Key High Impact Interventions

3.1 Target Conditions

From the situational analysis in Chapter 2, 96 percent of childhood mortality in Zimbabwe can be attributed to:

- Neonatal causes (preterm birth, asphyxia, infection, diarrhoea, congenital abnormalities)
- HIV and AIDS
- Pneumonia
- Diarrhoea

Malnutrition is an underlying condition that increases the risks of each of the above conditions. Malaria also contributes significantly to childhood morbidity and mortality. Neonatal causes, HIV and AIDS remain the biggest determinants of childhood illnesses. With universal coverage of at least 90% of high impact interventions, neonatal mortality can be reduced by 72%.

The childhood mortality profile of Zimbabwe is similar to the findings in other developing countries as reported in the Lancet series of 2003. HIV and AIDS, malnutrition and micronutrient deficiencies increase childhood susceptibility to the other conditions. The consequent decreases in immune and none immune host deficiencies from these conditions predisposes children to pneumonia, diarrhoea, malaria and other conditions.

According to the Lancet series, 23 high impact cost effective preventive and curative interventions can reduce all cases of childhood mortality globally by over 63%. Annex 1 summarizes these interventions by disease and intervention.

These interventions are not reaching the children who need them, and yet they can reduce 63% of all childhood deaths. Defining universal coverage at 99% of all children who need these interventions, it is noted that effective nutrition interventions i.e. exclusive breastfeeding, timely, adequate and safe complementary feeding, vitamin A and zinc supplementation, could save about 25% of all deaths; effective and integrated management of childhood infections (diarrhoea, dysentery pneumonia, malaria and neonatal sepsis) could save about 33% of all deaths; and interventions in the neonatal period could prevent 55% of neonatal deaths, translating to about 18% of all early childhood deaths.

3.2 Modes of Delivery

Three delivery modes will be considered for the interventions.

1. **Family-oriented, community based services** that do not require a skilled health worker but can be delivered on a daily basis by community health workers with periodic supervision by skilled health staff. Examples of these are
Family Preventive/WASH Services including:
- Universal use of ITNs in malaria endemic areas
- Use of safe water and sanitation facilities
- Hand washing with soap
- Condom use
- Family Planning
- Prioritizing nutrition and health interventions for all children and OVCs

2. Population-oriented outreach and planned services that require health staff to provide outreach services closer to communities or in health facilities in a scheduled programme. Examples of these interventions will include

**Preventive Health Care during pregnancy which comprises**
- Focused Antenatal Care
- Tetanus immunization
- Detection of asymptomatic bacteriuria
- Prevention and Treatment of Iron deficiency anaemia
- IPT for malaria in malaria prone areas
- ITN for pregnant women

**Preventive care for Infants and Children including:**
- Immunization
- Vit A Supplementation
- ITN for under-5

3. Individually-oriented clinical services that require skilled health workers (preferably registered nurses, midwives or doctors) available on a 24hr basis, seven days a week. Examples of these interventions are:

**Clinical Primary Level Skilled Maternal and Neonatal Care**
- Skilled delivery care
- At least 3 antenatal visits including urine test
- Resuscitation of newborn
- Administer Antenatal steroids for preterm labour
- Antibiotics for preterm labour/premature rupture of membranes
- Detection and management of pre-eclampsia with Magnesium Sulphate
- Pre-referral treatment of neonatal infections

**Management of Maternal and Childhood Illness at Primary Clinical Level**
- Antibiotics for pneumonia
- Antibiotics for diarrhoea and fever
- Zinc and ORT for diarrhoea management
- Artemisinin-based combination therapy for malaria for children and pregnant women
- Combination therapy for PMTCT
- ART for mothers and children
- Basic Emergency Obstetric Care (BEmOC)
• Nutrition counseling

These delivery modes will help address the 3 delays which are associated with poor maternal, neonatal and child health outcomes. These delays are:

1. delays in making decisions to seek care
2. delays in reaching care
3. delays in receiving care

The delivery modes within the continuum of care must particularly reduce the gap in care around the time of birth, when the risks are highest for the mother and baby as well as reduce the gap in care in places where it is needed most i.e. the rural areas with poor referral and communication links. The interaction in these delivery modes is shown in the figure below:

Figure 9: Linkages in delivery modes


Combining quality health services at the health facility, supported by strong outreach, follow-up and referral services, whilst promoting healthy behaviours at home and making early decisions to seek care, will have the greatest impact.

3.3 Delivery of Interventions within the continuum of care

Achieving universal coverage of these low cost interventions is dependent on the delivery strategies of these interventions. Poor coverage is a result of weaknesses in both the provision of and demand for services, and a consequence of a malfunctioning
health system. Even new delivery strategies have been noted to face major obstacles when being scaled up.

The **continuum of care** has been identified as a core principle and framework to underpin strategies to save the lives of mothers and babies. The continuum of care has two dimensions: firstly the *time* of care giving and secondly the *place* and approach of care giving.

- **In time**, an effective continuum of care connects essential maternal, newborn and child health packages throughout adolescence, pregnancy, childbirth, postnatal and newborn periods and into childhood building upon their natural interactions throughout life.

- **In place**, an effective continuum of care strengthens the links between the home and the first level facility and hospital assuring the appropriate care is available in each place. Strategies involve improving the skills of health workers, strengthening health system supports, and improving household and community practices and community actions for health. This approach brings care closer to the home through outreach series and promotes referral by strengthening access to and improving the quality of services at peripheral and district level facilities.

Table 1 below demonstrates effective interventions throughout the continuum of care in time and place.
<table>
<thead>
<tr>
<th>PLACE</th>
<th>TIME</th>
<th>Pre-pregnancy</th>
<th>Birth</th>
<th>Newborn / Postnatal</th>
<th>Childhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family &amp; Community</td>
<td>Family Planning</td>
<td>Adolescent and pre-pregnancy nutrition Education Prevention and treatment of HIV and STIs</td>
<td>Counseling and preparation for newborn care and breastfeeding, emergency preparedness.</td>
<td>Where skilled care is not available, clean delivery and simple early newborn care including warmth and early initiation of breastfeeding.</td>
<td>Healthy home care including: promotion of exclusive breastfeeding, hygienic cord /skin care, keeping the baby warm, promoting demand for quality care. Extra care for Low Birth Weight babies. Case management for pneumonia where referral is not available. Childhood Vaccinations Malaria insecticide treated bed nets Nutrition including Vitamin A/Zinc Care of children with HIV IMNCI</td>
</tr>
<tr>
<td>Outreach / outpatient</td>
<td>Prevention and Management of STI and HIV Folic Acid</td>
<td>Focused 4-visit ANC including: • Hypertension / preeclampsia management • Syphilis and STI management • IPTp and ITN for malaria • PMTCT for HIV and AIDS • Detection of bacteriuria.</td>
<td></td>
<td></td>
<td>Routine postnatal care to support healthy practices including PMTCT, early detection and referral of complications.</td>
</tr>
<tr>
<td>Primary</td>
<td>Family Planning</td>
<td>Basic obstetric care to manage complications Antibiotics for preterm rupture of membranes Corticosteroid for preterm labour Emergency newborn care for illness, especially sepsis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral</td>
<td>Family Planning</td>
<td>Comprehensive obstetric care to manage complications Antibiotics for preterm rupture of membranes Corticosteroid for preterm labour Emergency newborn care for illness, especially sepsis</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Chapter 4: Child Survival Strategic Framework

**Strategic Vision**
A Zimbabwe where pregnancy and childbirth do not pose a threat to the lives of mothers and newborns; where children are healthy and free of the common childhood illnesses and are able to survive, grow and develop to their full potential thereby fulfilling their role in the socioeconomic development of Zimbabwe.

**Strategic Mission**
To provide comprehensive and integrated maternal, newborn and child health services by scaling up proven cost effective interventions at high population coverage through family/community, outreach and facility level care.

**Goal of Strategy**
To achieve MDG 4 by reducing under-5 mortality by two thirds from 1990 level by 2015. (From 79 per 1,000 live births to 27 per 1,000 live births)

**Strategic Objectives**
1. Increase coverage for universal access to selected high-impact maternal, newborn and child health interventions by 2015.
2. Strengthen capacity of the health system for leading, managing and providing high-impact and low cost priority interventions for women and children by 2015
3. Strengthen individual, family and community capacity to promote key family and community practices to improve maternal, newborn and child health by 2015.
4. Mobilize additional resources and diversify the resource base to support programmes for neonatal, child survival and development by 2015.
5. Strengthen supervision, monitoring, evaluation and the Health Management Information system (HMIS) to report on progress towards the relevant MDGs
6. Establish and sustain partnerships at all levels to support implementation of the child survival strategy
7. Strengthen logistics and supply systems for maternal, neonatal and child health services
8. Establish a coordination mechanism for implementation of the child survival strategy at all levels
9. Strengthen multisectoral collaboration in health, improved living environment, education and alleviation of the plight of the child living in difficult circumstances.

Note: priority actions for each of these strategic objectives are described in Chapter 7 (Implementation Framework).

**Strategic Approaches**
The strategic approaches are based on the current child situation analysis:

- **Implementing the Primary Health Care (PHC) approach**, a strategy that seeks to respond equitably, appropriately and effectively to basic health needs and to address the underlying social, economic and political causes of poor health, to provide accessible essential health services and to involve the participation of the communities.
• **Strengthening of the health systems** by building capacities at all levels of the health sector and increasing access to quality coverage with high impact cost effective interventions in an integrated manner. Building human resource capacity is critical.

• **Empowering families and communities** especially the poor and marginalized; this is essential to avoid disparities in access to services. Communities should meaningfully participate in planning, implementation, monitoring and evaluation of interventions at family, community and population level.

• **Advocacy at all levels**, which is paramount in promoting scale up of resource mobilization and allocation of these resources towards those interventions that will lead to the intended reduction in maternal, newborn and child mortality.

• **Phased planning, and implementation.** Promoting implementation in clear phases with timelines and benchmarks that enable re-planning for better results. Building and strengthening existing health infrastructures will be a priority.

• **Mobilization of resources** from a variety of sources at local, district, provincial, national and international level. Data from monitoring and evaluation will provide strong evidence to influence donors especially. While the strategy recognizes the importance of resources it will also spell out the need for efficiency with which those resources will be spent.

• **Forming operational partnerships** to implement high impact interventions with government in the lead and donors, NGOs, the private sector and other stakeholders engaged in joint programming and co-funding of activities and technical reviews.

**Guiding Principles**

The child survival strategy will be guided by the Health Sector Investment case of 2010-2012. The major thrust of the investment case is “to revitalize the health sector, identify high impact priority interventions and mobilize additional resources to scale up progress towards attainment of the MDGs, which are currently lagging behind. It is anticipated that the benefits of scaling up MDG related interventions should positively impact on the wider health system”.

**Continuum of Care**

Survival of the mother and child are intricately linked. Interventions which improve maternal health and survival will have a corresponding positive impact on child survival. The continuum of care which is defined using the life cycle approach and three modes of delivery seeks to have interventions throughout the cycle of adolescence, pregnancy, childbirth, postnatal, newborn period and into childhood. These interventions will have a synergistic effect which will enable the country to harness resources for significant short-term and long term impact on maternal and child survival.

**Equity and Accessibility**

Provision of quality and equitable services will be emphasized. Targets will be included to reduce gaps in coverage of maternal, newborn and child health, nutrition and related interventions, as well as mortality rates between the rich and poor. Mechanisms will be put in place to ensure that services reach the poor, marginalized and hard to reach areas. Monitoring
and evaluation frameworks will include measurement of wealth quintiles in order to ascertain access to services and the impact of interventions across the socioeconomic groups in the country.

Integration
The strategy will seek to ensure that interventions are delivered in an integrated manner to avoid duplication, improve efficiency and increase coverage levels in order to achieve the intended results. All services for target childhood conditions and high-impact, low cost interventions for accelerating child survival and development will be integrated in each service delivery mode at all levels: household, community, primary health care unit and hospitals.

Multi-sectoral approach
Child survival depends on a number of sectors such as education, social welfare, agriculture, justice, civil society, faith based organizations, NGOs and economic development. The strategy seeks to ensure sustained multisectoral collaboration for the benefit of the child. The multisectoral approach will develop new partnerships and strengthen existing ones to ensure that maternal, newborn and child health interventions are fully integrated in the national, provincial, district, health facility and community level in a sustainable way.

Leadership and political will
The State should be at the forefront of promoting a sense of stewardship, accountability and transparency on the part of the Government as well as stakeholders for enhanced sustainability in child survival efforts. Demonstration of political will from the highest level will help garner support and ensure successful efforts in advocating for maternal, newborn and child survival as a priority in government’s agenda.

Partnership
Promoting partnership, coordination and joint programming among stakeholders including international and regional organisations committed to supporting the survival of the Zimbabwean child, central and local government structures, private and faith-based sectors, academia, professional organizations, civil society institutions, as well as communities, in order to improve collaboration and maximize on limited resources by avoiding duplication of effort.

Human rights and gender in health
The right to life is a basic human right. Mainstreaming gender throughout the programmes and adopting a human rights approach as the basis of planning and implementation is important. It is also critical to understand that children’s rights are important human rights and therefore need to be respected at all times in order to uphold the dignity that enables child development and participation.
Chapter 5: Priority Areas for Target Conditions

The following conditions will be prioritized in the implementation framework: neonatal conditions, HIV and AIDS, pneumonia, diarrhea, malaria and malnutrition. Service integration will ensure the delivery of interventions effectively and efficiently.

5.1 Neonatal Conditions

Within the framework of the Zimbabwe Maternal and Neonatal Roadmap (2007-2015) the following areas are the priorities to address the neonatal causes of under-5 mortality:

1. Increase availability and utilization of quality focused ANC services including PMTCT:
   - Develop capacity of health facilities to enable them provide comprehensive care during pregnancy including PMTCT
   - Update, develop and disseminate Training and service guidelines on Focused ANC including PMTCT
   - Strengthen the capacity of health workers on community mobilization to increase demand for ANC and also on identifications of High Risk mothers and prompt referral
   - Expansion of mother/baby friendly supply of essential equipments and for ANC at all levels.

2. Improve access to skilled attendance at delivery, including Emergency Obstetric and Neonatal care:
   - Conduct community mobilization to increase the skilled birth attendance
   - Develop the capacity of all health facilities to provide both comprehensive and Basic Emergency Obstetrics Care
   - Develop, update and distribute training and service guideline on Essential Newborn Care and Neonatal Resuscitation
   - Train all health workers in delivery room on Essential Newborn Care and Neonatal Resuscitation using standard training guideline
   - Ensure availability of Newborn Corner in every delivery room that is fully functional to provide Essential Newborn Care including Neonatal Resuscitation immediately after birth
   - Ensure availability of fully functional Newborn Care Unit, or Newborn Care Wing in all hospitals to provide optimum inpatient care for critically sick newborns
   - Strengthen the transport and communications system for prompt effective referral
   - Ensure the continuous and regular supply of essential equipment and supplies for Essential Newborn Care and Neonatal Resuscitation.

3. Improve access to quality PNC (post natal care) including PMTCT:
   - Establish a system to ensure every delivering mother has the opportunity to stay in the facility for at least 24 hours after delivery
   - Develop a mechanism to have newborns brought back for PNC around day 3 or within the first week of life
• Develop a mechanism to conduct regular home visits (for those not able to attend the clinic) for PNC using the village health workers, to ensure at least 3 visits have been conducted to the mother in the first one week of postnatal period
• Provide information on PNC to all health workers and to village health workers using standard training guidelines
• Develop, update and distribute training and service guideline on PNC
• Ensure the continuous and regular supply of essential equipments and supplies for PNC
• Strengthen and expand waiting mothers’ shelters
• Conduct community mobilization to increase demand for quality PNC and PMTCT services

4. Strengthen the capacity of the health system for the planning, implementation and management of the comprehensive Maternal, Neonatal, Child Health programme through the following strategies:
  • Reproductive Health commodity security
  • Availability of skilled human resource
  • Functional health management and information system
  • Improving financing and management capacity at all levels
  • Advocacy for integration of sexual and reproductive services with HIV/AIDS action plans

5.2 PMTCT and Paediatric AIDS

Within the framework of the National Plan for Paediatric HIV Prevention, Treatment and Care, the following strategies will be pursued:
1. Advocating for increased awareness and commitment towards comprehensive paediatric HIV prevention (ART for eligible pregnant women and mothers, more efficacious ARV regimens for non-eligible pregnant women, early infant diagnosis), treatment, care and support services among policy makers, stakeholders and partners at all levels
2. Strengthening provision of comprehensive paediatric HIV prevention, care, treatment and support services in all sectors of the health delivery system
3. Strengthening the human resource capacity for comprehensive paediatric HIV prevention, treatment care and support in the context of overall health system strengthening
4. Ensuring the continuous availability of good nutrition, good quality medicines, diagnostics and other supplies for comprehensive paediatric HIV prevention, care, treatment and support services
5. Develop and strengthen the health infrastructure to enable delivery of comprehensive PMTCT including widening the availability of the MER and other prevention, care, treatment and support services.
6. Improve community mobilization, referral and follow-up systems for women with HIV, their infants and families
7. Improve the generation, use and dissemination of strategic information to guide programming, including monitoring and evaluation, surveillance, operations research and documentation of best practices
8. Improve programme management, coordination and supervision for comprehensive PMTCT and paediatric HIV prevention, treatment care and support services at all levels.
9. Improve the identification of pregnant women with HIV who require ART for their own health.
10. Ensure cotrimoxazole supply to all HIV exposed infants and to make sure Early Infant Diagnosis is performed by 6 weeks in all HIV exposed infants.
11. Expeditiously commence infants who require ART on treatment.

5.3 Pneumonia, Diarrhoea, Malaria

Scaling up of IMNCI should be seen within the overall child survival agenda of rapidly reducing under-5 mortality in Zimbabwe for the attainment of MDG 4. Revitalization in training and retention, community mobilization, commodity availability and optimal nutrition should be prioritized.

1. Training approaches should be reviewed to address the issue of unavailability of trained staff and improve the existing training coverage, in order to provide equal opportunities for quality care to all children under-5 years old seen at the same facility (use of IMNCI abridged course and acceleration of pre-service training in medical and especially nursing training institutions can go a long way towards implementing this recommendation).

2. Accelerate the introduction and establishment of IMNCI in training institutions so that newly graduated health workers are familiar with national policies and guidelines on appropriate care of sick children at primary level health facilities.

3. All first level health facilities should have at least two IMNCI trained health workers.

4. During IMNCI training, re-enforcement and emphasis should be given to the following areas; identifying severely ill children and providing appropriate pre-referral treatment before urgent referral, general counseling and nutrition assessment and management.

5. Scale up emergency triaging system (ETAT) to improve identification and management of severely ill children at all levels.

6. Widely disseminate IMNCI job aids including laminated recording forms, chart booklets, caretakers’ cards and promote their uses. These supplies should be part of the first level health facility inventories.

7. Partners and stakeholders should ensure availability of ORS.

8. Strengthened and sustained education of mothers/caregivers focusing on hand washing with soap or ash and safe disposal of child’s stools.

9. Essential equipment, drugs, and supplies including zinc, low osmolarity ORS, RDTs should always be made available. There is need to strengthen supply chain management systems at all levels.

10. Linkages between facility based and community IMNCI should be strengthened and implementation of the third component should be accelerated.

11. Use the IMNCI approach to counsel on mother’s health so as to bridge the gap between maternal and child health.

12. Ensure supportive supervision to all IMNCI trained health workers.

13. Malaria case management at first level health facilities depends to a large extent on IMNCI. Joint efforts from the child health and malaria units of the MOHCW should help to address this issue. Sick children should receive their first treatment in the health facility to avoid unnecessary delay in the initiation of treatment.
14. Conduct in–service training on IMNCI to private family practitioners as part of continuing medical education
15. Initiate community based case management of pneumonia, diarrhoea and malaria in areas where access to health facilities is limited. Results from this experience will be utilized to scale up community case management for these conditions.
16. Improved household water, sanitation and promotion of key hygiene behaviour changes will be critical to complement and strengthen the essential health package.

5.4 Malnutrition

1. Infant and young child feeding:
   - Sensitization of families, communities and all health workers on optimal breastfeeding for the first 6 months through appropriate methods of communication. Promotion of continued breastfeeding according to recommended guidelines.
   - Scaling up bi-annual Vitamin A supplementation for children aged 6-59 months
   - Integration of infant and young child feeding at primary and community level with Baby-Friendly Hospital Initiative, IMNCI, PMTCT, growth monitoring and referral
   - Finalisation and implementation of the infant and young child feeding policy
   - Enforcement of the code of marketing of breast-milk substitutes regulations
   - Timely initiation of appropriate complementary infant feeding.

2. Prevention and Management of childhood malnutrition:
   - Prevention of malnutrition in early childhood through the promotion of improved child feeding, care giving and care seeking, growth monitoring and promotion practices at family, community, and facility level
   - Facility based care of children with severe acute malnutrition with complications targeting children under 2 years of age
   - Children with severe acute malnutrition but without medical complications and having good appetite should be referred to outpatient therapeutic feeding programme. Children with moderate malnutrition should be referred to a supplementary feeding programme
   - Continued monitoring of child nutritional status as well as the underlying causes of malnutrition
### 5.5. Maternal, Neonatal and Childhood Intervention Coverage Targets and Costing

Table 2 below gives the target coverage for key interventions over the five years of the strategy to 2015.

Cost estimates for each are also provided and have been calculated using …… (TBA)

#### Table 2: Coverage of Maternal, Newborn and Child Health Interventions for the Target Conditions

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Intervention</th>
<th>Baseline</th>
<th>Target</th>
<th>U5 mortality reduction</th>
<th>Per Capita Cost USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV and AIDS</td>
<td>Preventive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIV positive pregnant women receiving ARV for prophylaxis</td>
<td>49%</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pregnant women tested for HIV during ANC</td>
<td>49%</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIV positive pregnant women initiating cotrimoxazole prophylaxis</td>
<td>0%</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIV positive infants initiating cotrimoxazole prophylaxis</td>
<td>N/A</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV and AIDS</td>
<td>Curative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ART for treatment eligible women</td>
<td>Not available</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early infant diagnosis and treatment</td>
<td>Not available</td>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neonatal Causes</td>
<td>Preventive</td>
<td>Curative</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>----------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>ART for eligible infants and children</strong></td>
<td>40%</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Neonatal Causes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmet need for contraception</td>
<td>13%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant women who receive at least three antenatal visits</td>
<td>%</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT2</td>
<td>58%</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers who receive at least 3 post-natal care visits within one week after delivery</td>
<td>Not available</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron and Folate supplementation during pregnancy</td>
<td>43%</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KMC for preterm babies</td>
<td>Not available</td>
<td>90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics for premature rupture of membranes</td>
<td>Not available</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antenatal steroids for preterm labour</td>
<td>Not available</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive Breastfeeding for 6 months</td>
<td>26%</td>
<td>90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Curative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled birth attendant at delivery</td>
<td>60%</td>
<td>90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resuscitation of newborn</td>
<td>Not available</td>
<td>90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics for neonatal sepsis</td>
<td>Not available</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Management of low temperature or hypothermia</td>
<td>Not available</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preventive</td>
<td>Curative</td>
<td></td>
<td></td>
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<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pneumonia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal Vaccine</td>
<td>0% 90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hib Immunization</td>
<td>63% 95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Immunization</td>
<td>63% 85%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles Immunization</td>
<td>66% 95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Curative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics for pneumonia</td>
<td>16% 95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diarrhoea</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to safe and adequate water</td>
<td>73% 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of sanitation</td>
<td>60% 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrine utilization</td>
<td>67% 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe disposal of child stools</td>
<td>54% 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand washing with soap</td>
<td>Not available 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Rehydration Therapy</td>
<td>35% 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc for diarrhoea management</td>
<td>Not available 99%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics for dysentery</td>
<td>6% 90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malnutrition</td>
<td>Preventive</td>
<td></td>
<td></td>
<td></td>
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<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exclusive breastfeeding for infants 0-6 months</td>
<td>26%</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Timely introduction of appropriate complementary feeding</td>
<td>87%</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biannual Vit A Supplementation 6-59 months</td>
<td>23%</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continued Breastfeeding to 24 months</td>
<td>42%</td>
<td>99%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Curative</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of acute moderate malnutrition</td>
<td>Not available</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>Therapeutic feeding for severe acute malnutrition</td>
<td>Not available</td>
<td>99%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Malaria</th>
<th>Preventive</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children sleeping under ITN</td>
<td>17%</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>Pregnant women sleeping under an ITN</td>
<td>7%</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>IPT2 in pregnant women in malaria endemic areas</td>
<td>28%</td>
<td>99%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Curative</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Artemesinin-based combination therapy for malaria in children under 5 years</td>
<td>14%</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>Management of complicated malaria</td>
<td>72%</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>Measles case management</td>
<td>66%</td>
<td>99%</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 6: Implementation Framework

The goals of this strategy will be realised by successfully implementing a total of nine strategic objectives in a coordinated, integrated management approach, as outlined in the strategic framework (Chapter 4). Priority actions are identified under each strategic objective, to be implemented and reviewed under the coordination and oversight of the national Maternal, Newborn and Child Health Steering Committee (NMNCHSC) - see Chapter 7.

Strategic Objective 1

To achieve universal access to selected high-impact maternal, new born and child health interventions by 2015 (MDG4)

Priority Actions
1. Implementing monitoring mechanisms on user fees in all public health institutions so as to remove financial barriers to mothers and children
2. Ensure adequate provision of essential medical supplies, drugs, vaccines, reproductive health commodities, ITNs and other basic equipment from primary level to tertiary level
3. Expand Primary Health Care Facilities in underserved areas such as resettlement farms
4. Provide and sustain outreach services from first level facilities to communities

Strategic Objective 2

To strengthen capacity of health systems for leading, managing and providing high-impact and low cost priority interventions for women and children by 2015

Priority Actions
1. Assess training needs and strengthen the skills and capacity of health workers, programme managers and health management teams.
2. Strengthen pre-service curriculum training in medical and nursing schools in safe motherhood, EPI, IMNCI, IYCF, PMTCT, paediatric HIV and AIDS
3. Strengthen pre-service education through the necessary financial and human resources to provide graduates with required knowledge and competencies to deliver on child survival
4. Provide the necessary support to conduct operational research in the context of strengthening health systems
5. Recruit and retain the required cadres and introduce motivational packages particularly for those working in rural areas
6. Update available guidelines to incorporate currently recommended evidence based practice on maternal, newborn and child health
7. Establish a minimum package of maternal, newborn and child health for primary, secondary and tertiary levels
8. Ensure the distribution of national policies and guidelines on maternal, newborn and child health to all health care providers for use
9. Strengthen and sustain a functional emergency referral system
10. Strengthen and sustain communication services in all health facilities.
**Strategic Objective 3**

To strengthen individual, family and community capacity to promote key family and community practices to improve maternal, newborn and child health by 2015

**Priority Actions**

1. Scale up community IMNCI to promote key family and community practices
2. Strengthen village and ward health committees in order to enable them to contribute meaningfully to health issues and respond appropriately to emergencies
3. Revitalise and strengthen the Village Health Worker programme with prioritization of maternal and child health issues
4. Develop the capacity of village health workers to conduct community case management of pneumonia, diarrhea and malaria
5. Advocate for increased community participation in resource mobilization and allocation towards maternal and child survival
6. Develop the capacity of community groups especially faith based organizations to appreciate and assume their roles in improving the health of mothers and children
7. Make available to all Zimbabweans information on the health status of the nation including determinants and risk factors for health, with particular emphasis on maternal and child health
8. Make individuals aware of their rights and responsibilities through empowerment and involvement in governance of health services
9. Develop and implement a framework for community participation

**Strategic Objective 4**

To mobilize additional resources and diversify the resource base to support programmes for neonatal, child survival and development

**Priority Actions**

1. Develop an advocacy strategy to ensure allocation of a significant proportion of the total health budget to maternal and child health services at local, district, provincial and national level. Budget Line items for maternal and child health should be clearly delineated at these levels
2. Improve networking and partnership in order to mobilize additional resources from key stakeholders
3. Establish mechanisms to leverage funding from existing global funding organizations such as Global Fund, GAVI, PEPFAR, Clinton, EGPAF, Bill and Melinda
4. Improve coordination and efficient use of resources mobilized for child survival.
5. Use the National Health System Investment case to mobilize additional resources for child survival
6. Use community financial potential to mobilize resources for maternal, neonatal and child health
7. Strengthen the capacity of the health system for timely absorption and utilisation of funds
8. Conduct mapping of strategic partners and resources
9. Build capacity for financial management and ensure accountability at all levels
10. Put in place mechanisms that cushion the poor and marginalized from user fees and other barriers to accessing vital services
11. Improve coordination between public/private sectors and increase efficiency and economies of scale in the provision of maternal and child health services
12. Advocate for the establishment of a National Health Insurance scheme to increase access to health care services

**Strategic Objective 5**

To strengthen supervision, monitoring, evaluation and the Health Management Information system (HMIS) to report on progress towards the relevant MDGs

**Priority Actions**

1. Establish a minimum number of uniform process, outcome and impact indicators that will be used in monitoring and evaluation of the child survival strategy
2. Strengthen health management and information systems to include community-based maternal, neonatal and child health information and support evidenced based decision making
3. Strengthen the existing integrated monitoring, support and supervision tools to track progress
4. Conduct operational research in maternal, newborn and child health focusing on the leading and underlying causes of under-5 mortality
5. Ensure inclusion of sufficient child health indicators in the HMIS
6. Use information collected through monitoring, evaluation and the HMIS system for action at all levels

**Strategic Objective 6**

To establish and sustain partnerships at all levels to support implementation of the child survival strategy

**Priority Actions**

1. Use the Investment Case to strengthen partnerships and mobilize resources for child survival in Zimbabwe
2. Advocate and establish partnerships for maternal, neonatal and child health at all levels
3. Capacitate local organizations (NGOs, FBOs etc) to contribute to achieving the goals of the child survival strategy in specific areas such as PMTCT, nutrition and paediatric HIV and AIDS
4. Intensify public/private partnerships in areas such as operational research, teaching and mentoring of staff
5. Ensure all relevant partners involved in the implementation, monitoring and evaluation of the National Child Survival Strategy
6. Establish a National Child Survival Technical Working Group
7. Harmonize and align partner contributions towards achievement of the goals of the national child survival strategy, to avoid duplication and reduce transaction costs.
Strategic Objective 7

To strengthen logistics and supply systems for maternal, neonatal and child health services

Priority Actions
1. Strengthen the logistics and supply master plan
2. Mobilize budgetary allocation to support implementation of the Strategy from sector ministries, government departments and district and local authorities
3. Strengthen logistics management and information systems
4. Strengthen stock management of equipment and supplies
5. Mobilize adequate resources (skilled manpower, computers, finance, other materials)
6. Strengthen the logistics network at a national and sub-national level.

Strategic Objective 8

To establish a coordination mechanism for implementation of the child survival strategy at all levels

Priority Actions
1. Develop a data base of all key partners at national and sub-national levels, their roles in child survival and development
2. Hold inter-programme meetings to harmonize operations and arrive at common understanding on selected issues, including: (a) targets year by year, (b) timing of key activities; and (c) allocation of resources with reference to funding gaps and intervention coverage levels
3. Form Technical Working Groups and Task Forces amongst partners as and when necessary to achieve a given task

Strategic Objective 9

To strengthen multisectoral collaboration in health, improved living environment, education and alleviation of the plight of the child living in difficult circumstances.

Priority Actions
1. Revive and strengthen the National Programme of Action for Children
2. Hold inter-ministerial meetings to garner support, strengthen commitment and mobilization of resources for children as an integral part of Zimbabwe’s national plans and policies
3. The NPA coordinator should maximize platforms to outline the mandate and planned activities within the National Program of Action
4. Identify strategies for health systems strengthening and capacity development to address child abuse
CHAPTER 7: Management and Coordination

7.1 National Maternal, Newborn and Child Health Steering Committee

A national Maternal, Newborn and Child Health (MNCH) Steering Committee (NMNCHSC) will be constituted and chaired by the Honorable Deputy Minister of Health and Child Welfare. Membership will comprise senior officials from the Government Ministries, UN agencies (UNICEF & WHO), and key bilateral partners. This committee will be responsible for:

- Promoting the implementation of the Child Survival Strategy and Maternal Health Roadmap, and creating national awareness of the need for universal access to high impact maternal, newborn and child health interventions
- Overseeing the implementation of the strategies (child survival and maternal health) in line with the stated strategic objectives and priority actions
- Coordinating input of all the major internal and external partners in the country in the Child Survival, maternal health and development effort
- Establishing and maintaining contacts with the Global Child Survival Partnership and maternal health networks
- Mobilizing resources for the strategies
- Overall integration of maternal, newborn and child health programmes

7.2 Child Survival Technical Working Group

Under the NMNCHSC, and from the child survival perspective, will be the Child Survival Technical Working Group (CSTWG) which will be responsible for advising the NMNCHSC on programmatic and technical issues related to child survival and development. The members of this group shall comprise of directors and other senior technical officials from MOHCW, other government ministries and partnering organizations with a mandate in child survival and development.

The Terms of Reference of the CSTWG will be to:

- Coordinate planning, implementation, coordination, monitoring and evaluation of programmes that relate to child survival & development at all levels
- Develop & disseminate technical & managerial guidelines on Child Survival
- Support national, provincial and district planning for child survival and development
- Function as a think tank for problem solving on child survival issues
- Monitor and evaluate the national implementation of the Strategy
- The chairperson of the CSTWG shall be the Director Family Health Services and the IMNCI manager being the secretary.

There is need to appoint a Director of Family Health who will coordinate all maternal, newborn, child survival programmes within the Ministry of Health and Child Welfare. He/she will report to the Principal Director, Preventive services. The Coordination of these programs will enhance efficiency in the utilization of resources in the delivery of high impact interventions in order to have the intended impact (MDGs 4 & 5).
7.2 Managing partnerships

There is need for focused and coordinated effort among international community and national partners for more successful programming to reach the MDGs. These partnerships should be functional at all levels for successful roll out and sustained implementation of the child survival strategy. The following principles will guide the operations of these partnerships:

- Declaration of interest and commitment to the goals and objectives of the Child Survival Strategy
- Shared responsibility to support and advocate for other partners to discharge their responsibilities on child survival and development
- Acceptance of roles within mandates set by the NMNCHSC as well as willingness to discharge responsibilities in accordance with the Child Survival Strategy.

7.3 Organization of the Management and Coordination of the Child Survival Strategy within Overall and Integrated MNCH

Figure 10 below is a proposed organogram on the management and coordination of this Child Survival Strategy within the overall and integrated maternal, neonatal and child health programmes in the MOHCW.
Figure 10: Proposed Organisation of the Management and Coordination of the Child Survival Strategy in the MOHCW
7.4 Specific Roles and Responsibilities

7.4.1 Ministry of Health and Child Welfare: National Level

The MOHCW will mobilise resources and advocate for reduction of maternal, newborn and child deaths. It will also be responsible for the overall technical leadership, guidance and advice on the implementation and monitoring of the strategic plan. The following will be the specific roles and responsibilities of the various departments within the Ministry.

i) Policy Planning, Monitoring and Evaluation will ensure adequate budget allocation for child welfare and mainstreaming of child survival indicators into policy frameworks, and facilitate overall coordination of health systems strengthening. The HMIS Unit will facilitate the monitoring of all indicators from routine data collection systems.

ii) Director Curative Services in collaboration with other partners will ensure availability of essential drugs, supplies, equipment and diagnostics by facilitating efficient procurement and distribution to all levels of service delivery.

iii) Directorate of Human Resource and Development. The training department will be responsible for review and update of pre- and in-service curricula to ensure relevant issues for child welfare are adequately addressed. The department will also promote accelerated training of mid-level cadres in order to increase the available number of skilled health workers, and will facilitate effective development, recruitment and deployment of skilled health workers at health units to address the human resource crisis. This will be done in collaboration with the Health Services Board, Ministry of Finance and Economic Affairs and the Offices of the President and Prime Minister.

iv) Directorate of Preventive Services will supervise and coordinate all activities with respect to all sections under its charge for the realisation of the child survival strategy objectives. It will particularly undertake the following activities:

- Advocate for the implementation of the Child Survival Strategy by:
  - Coordinating the implementation and monitoring of child survival activities
  - Involving and collaborating with various stakeholders at all levels for planning and implementation of the Child Survival Strategic Plan
- Facilitate capacity development at national, provincial and district levels by developing protocols and training packages for MNCH
- Design and develop IEC/BCC materials with stakeholders and disseminate them to the intended users
- Facilitate procurement of communication equipment and its installation at hospital, and health centres in collaboration with the procurement unit
- Identify and propose disaggregated indicators and update monitoring data collection tools to include process indicators for EmOC, newborn care, nutrition, postnatal care, and child care
- Facilitate integration of nutrition actions in maternal, newborn and child care programmes
- Promote outcomes research on MNCH including FP and nutrition
- Capacity development for the implementation of maternal, newborn, child and adolescent health
- Facilitate integration of maternal, newborn and child health programmes.

7.4.2 Ministry of Health and Child Welfare: Provincial Level
- Provide technical support for effective planning and implementation of integrated MNCH activities
- Coordinate, monitor and supervise MNCH activities in the province
- Provide technical support for training and ensuring quality in service provision
- Support districts in analysis and utilization of MNCH data and disseminate/report to the national level.

7.4.3 Ministry of Health and Child Welfare: District Level
- Disseminate Child Survival Strategic Plan to all stakeholders in the District Council including NGOs, and other private sector partners.
- Fully integrate MNCH services
- Coordinate and supervise all MNCH activities planned and implemented by all stakeholders in the district
- Provide technical support for quality MNCH services
- Capacity development for facility and community MNCH interventions
- Follow up maternal, perinatal, neonatal and child death reviews at health facility (health centres, mission and district hospitals) and in the community.
- Council Management Teams and District Health Boards to ensure adequate resource allocation for implementation and monitoring of the MNCH interventions.

7.4.4 Ministry of Health and Child Welfare: Health Facility (Health Centre and Hospital)
- Integrate MNCH activities into facility health plans
- Provide quality MNCH services
- Implement quality improvement approaches and baby friendly services
- Ensure timely availability of essential equipment, supplies and drugs
- Conduct maternal, perinatal, neonatal and child death reviews, involving the community
- Health facility committees to monitor and ensure quality MNCH service provision
- Provide technical and supportive supervision to community interventions
- Provision of quality, regular outreach services.

7.4.5 Community
The Village and Ward Committee through the Primary Health Care (PHC) committee and health facility governing committee will be responsible for supervision and implementation of MNCH activities in their areas. Other responsibilities include:
- Facilitate development and monitoring of community MNCH action plans
• Mobilize the community to participate in community interventions
• Leverage community resources for the implementation of MNCH interventions

7.4.6 Roles and Responsibilities of other Ministries
Key Ministries should be involved to ensure that the reduction of maternal, newborn and child mortality is high on their agenda. These include Ministry of Finance, Ministry of Labour and Social Welfare, Ministry of Youths, Gender and Women’s Affairs, Ministry of Transport, Ministry of Education Sports and Culture, Ministry of Agriculture, and Ministry of Information Communication Technologies, Ministry of Justice and Parliamentary Affairs, and Ministry of Home Affairs

i) Ministry of Finance and Economic Affairs
- Give priority to health, especially MNCH, in budget guidelines for allocation of resources
- Increase financial resources for health and especially implementation of MNCH activities as guided by the Child Survival Strategy

ii) Offices of the President and Prime Minister
- Mobilize funds to support implementation of MNCH
- Support infrastructural development, rehabilitation and maintenance to improve access for MNCH services
- Coordinate the activities of ministries in order to avoid duplication of effort and increase efficiency in the utilization of resources

iii) Ministry of Education
- Promote universal access to education, especially education for girls and women
- Review and update components of MNCH in schools and pre-service curricula in collaboration with MOHCW, particularly on provision of adolescent friendly services
- Mobilize children in schools to adopt positive health behaviours

iv) Ministry of Agriculture,
- Promote food and nutrition security at household, community, district and national levels
- Promote the production of nutritious food products from household subsistence to commercial level

v) Ministry of Youth, Gender and Women’s Affairs
- Facilitate the establishment of community mechanisms to support emergency transportation for MNCH services
- Advocate for attention to gender issues to improve MNCH decision-making at all levels
- Increase the participation of women in decision making in all sectors and at all levels
- Support and promote a rights-based approach to programming for MNCH
- Promote parental support for adolescents to access information and health services
- Advocate for adoption of maternity protection conventions (ILO, Convention 183)
- Advocate for affirmative action towards equal opportunities for girls in education and employment
- In collaboration with the MOHCW develop a Youth Communication Strategy
- Develop capacity for life skills and livelihood for young people.

vi) Ministry of Transport
- Improve road networks to facilitate access to services at primary and referral levels, especially in rural areas and the newly resettled farming communities
- Ensure that road safety for children is prioritized within the transport system regulatory framework.

vii) Ministry of Information and Communication Technologies
- Promote the development, availability of and access to appropriate technology such as low cost telemedicine and communication technologies to support MOCHW service provision.

viii) Ministry of Information
- In conjunction with the MoHCW disseminate information aimed at promoting early care seeking behaviour for MNCH and use of preventive care services

ix) Ministry of Justice Legal and Parliamentary Affairs
- Ensure compliance with statutes such as the UN Convention on the Rights of the Child (1990)
- Be at the forefront for formulating policy on child rights in the broader context of sexual, physical and emotional abuse
  Advocate for resources for victim friendly legal services, counselling services, rehabilitation and social integration of child victims of abuse.

x) Ministry of Home Affairs
- Facilitate the prosecution of offenders who sexually and/or physically abuse children
- Implement policies which enhance child protection

xi) Ministry of Water Resources
- Ensure universal access to safe water and sanitation at household level, schools and health institutions.

xii) Ministry of Energy
- Prioritize the electrification of rural health centres
Put in place mechanisms to minimize disruption of power supplies to health institutions

xiii) Ministry of Labour and Social Welfare
- Develop social protection nets through, for example, village child protection units
- Facilitate access to nutrition, education and health services for orphaned and vulnerable children
- Ensure compliance with legislation concerning child labour particularly in commercial farming areas.

xiv) Ministry of Local Government
- Put in place mechanisms that protect women, children and child-headed households access accommodation, water and sanitation services
- Prioritize the construction of health facilities in areas where distance is a hindrance to accessing health care
  Provide maintenance and repair services at health institutions through the District Development Fund (DDF)

xv) Ministry of Lands
- Ensure fair access by women to productive land and support economic activities by vulnerable households on land
- Make provisions for land for the construction of health facilities.

7.4.7 Roles and Responsibilities of Development Partners
- Provide technical and financial support for the coordination, planning, implementation, capacity development and monitoring and evaluation of MNCH services
- Advocate for increased global and national commitment to the reduction of maternal, newborn and child morbidity and mortality
- Mobilise and allocate resources for the implementation of MNCH interventions
- Support surveys such as the MIMS and operational research.

7.4.8 Roles and Responsibilities of Civil Society Organisations (NGOs, FBOs, CBOs, Professional Associations)
- Advocate for the rights of women and children
- Forge partnership with different stakeholders including political leaders to promote MNCH
- Implement community based strategies to promote healthy behaviours during pregnancy, child birth, post partum period, childhood and adolescence
- Complement government efforts in the provision of quality MNCH services
- Disseminate the MNCH Strategic Plan to accelerate the reduction of maternal, newborn and child morbidity and mortality
- Mobilize and allocate resources for implementation of the Child Survival Strategic Plan.
7.4.9 Roles and Responsibilities of Private Sector

- Complement Government efforts in the provision of quality MNCH services
- Invest in commodities and supplies for MNCH interventions

7.4.10 Role of Training and Research Institutions

- Undertake research on relevant MNCH outcomes to provide evidence for policy directions and guide implementation
- Review and update curricula to ensure relevant MNCH issues are adequately addressed
- Provide technical advice and updates on current developments on MNCH to policy makers
- Train competent graduates who will participate effectively in the implementation of the Child Survival Strategy.
Chapter 8: Monitoring and Evaluation

Monitoring refers to the routine, daily assessment of on-going activities and progress, focusing on what has been done. Evaluation is the episodic or periodic assessment of overall achievements in terms of the impact that has been made. Monitoring and evaluation will play critical management functions in assessing the implementation of the child survival strategy. There is currently little information on quality of maternal and newborn care, such as intrapartum care, stillbirth rate, babies receiving resuscitation and outcome, and percentage of newborns receiving essential newborn care.

Maternal, newborn and child care programmes will be evaluated based on an agreed set of indicators; qualitative and quantitative (Annex 2). Routine health information systems currently track outputs such as number of admissions, management of childhood illnesses, immunization, antenatal care, births, and caesarean sections. Collected data will be grouped by gender, age, income/wealth quintiles, and geographical location (rural and urban).

Mechanisms of monitoring will include:

- Programme activity reports by NGOs, CBOs, private sector organizations, sector ministries and departments working on child survival. The information will be collected using existing data capture tools and reporting mechanisms at each level.
- Financial Management Reports (FMR) will be provided by implementers of the various programmes to assist in compiling reports on financial monitoring as well as linking to programme activity reports.
- Regular support and supervision

Monitoring and evaluation will be done at three levels:

1. Local monitoring to improve services management
2. Monitoring coverage to strengthen health systems

Rolling out monitoring and evaluation of the Child Survival Strategy and the need for accelerated implementation requires a strong need to monitor coverage of interventions and uptake of the services (mainly population oriented services). There is need to monitor at operational level:

- Availability of services
- Access to services for key population groups: vulnerable, marginalized or under-served
- Initial and continued utilization of services
- Quality of service being provided.

Mechanisms of evaluation will include:

- Routine data from Health Management Information System (HMIS)
• Surveys e.g. ZDHS, MIMS, cluster surveys, household surveys, health facility surveys, etc
• Joint Review Missions by the technical working groups
• Operational research on priority conditions impacting on maternal, neonatal and child health
• Biennial implementation report tracking progress on indicators
• Annual review meetings

The set of proposed indicators (Annex 2) will be used for systematic data collection from all levels of the health system in Zimbabwe. The NMNCHSC will task the CSTWG to develop defined standard operational definitions for indicators, as well as the numerators and denominators to be used while measuring each indicator. The NMNCHSC will monitor the progress of the implementation of the child survival strategy as part of its efforts to ensure the attainment of the strategic goals and objectives. The partnerships shall also assist government in developing the appropriate tools and mechanisms for tracking progress in strategy implementation. The Child Survival Technical Working Group will develop a research agenda in collaboration training and research institutions, especially as they relate to coverage, quality, utilization and compliance with interventions and impact of these interventions.

A number of community indicators will be developed to measure initiatives and involvement of families/communities in Maternal, Newborn and Child Health. Increased political will and commitment will be assessed by the proportion of Government budget allocated to health particularly to Maternal, Neonatal and Child Health, and availability of policies addressing increased coverage for skilled care.

Progress in implementing the Child Survival Strategy will be measured by evidence of existence of partnership for Maternal Newborn and Child Health, total resources mobilized for Child Survival Strategy and reports tracking progress on indicators (see table of indicators).
### Annex 1: MNCH interventions by Delivery Mode

#### Family and Community Interventions

<table>
<thead>
<tr>
<th>Family Preventive/WASH Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Universal use of ITNs in malaria endemic areas</td>
</tr>
<tr>
<td>• Use of safe water and sanitation facilities</td>
</tr>
<tr>
<td>• Hand washing with soap</td>
</tr>
<tr>
<td>• Condom use</td>
</tr>
<tr>
<td>• Family Planning</td>
</tr>
<tr>
<td>• Prioritizing nutrition and health interventions for all children and OVCs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family Neonatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clean delivery and cord care</td>
</tr>
<tr>
<td>• Putting baby to breast within 1 hour 30 minutes of delivery</td>
</tr>
<tr>
<td>• Referral for low birth weight infants</td>
</tr>
<tr>
<td>• Temperature management using the Kangaroo Method</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Infant and Young Child feeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exclusive breastfeeding for infants 0-6 months</td>
</tr>
<tr>
<td>• Continued breastfeeding for children 6-23 months</td>
</tr>
<tr>
<td>• Nutritious, timely, adequate and safe complementary feeding from 6 months</td>
</tr>
<tr>
<td>• Supplementary feeding for malnourished children</td>
</tr>
<tr>
<td>• Therapeutic feeding for severely malnourished children</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Management of Illnesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Oral Rehydration Therapy</td>
</tr>
<tr>
<td>• Zinc for diarrhoea management</td>
</tr>
<tr>
<td>• Anti-malaria treatment</td>
</tr>
<tr>
<td>• Child protection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preventive Health Care for Adolescents and Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Family planning</td>
</tr>
<tr>
<td>• Condom distribution and promotion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preventive Health Care during pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focused Antenatal Care</td>
</tr>
<tr>
<td>• Tetanus immunization</td>
</tr>
<tr>
<td>• Detection of asymptomatic bacteriuria</td>
</tr>
<tr>
<td>• Prevention and treatment of iron deficiency anaemia</td>
</tr>
<tr>
<td>• IPT for malaria in malaria prone areas</td>
</tr>
<tr>
<td>• ITN for pregnant women</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIV/AIDS Prevention and Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PMTCT</td>
</tr>
<tr>
<td>• VCT/PITC</td>
</tr>
<tr>
<td>• Infant feeding counseling</td>
</tr>
<tr>
<td>• Condom use</td>
</tr>
<tr>
<td>• Cotrimoxazole prophylaxis for HIV positive women and HIV positive infants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preventive care for Infants and Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Immunization</td>
</tr>
</tbody>
</table>
- Vitamin A Supplementation
- ITN for under-5
### Population-oriented/Outreach/Scheduled Services Key Interventions

#### Key Interventions at Health Center/Clinic Facility level

<table>
<thead>
<tr>
<th>Clinical Primary Level Skilled Maternal and Neonatal Care</th>
<th>Management of Maternal and Childhood Illness at Primary Clinical Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Skilled delivery care</td>
<td>• Antibiotics for pneumonia</td>
</tr>
<tr>
<td>• At least 3 antenatal visits including urine test</td>
<td>• Antibiotics for diarrhoea and fever</td>
</tr>
<tr>
<td>• Resuscitation of newborn</td>
<td>• Zinc and ORT for diarrhoea management</td>
</tr>
<tr>
<td>• Administer Antenatal steroids for preterm labour</td>
<td>• Artemisinin-based combination therapy for malaria for children and</td>
</tr>
<tr>
<td>• Antibiotics for preterm labour/premature rupture of membranes</td>
<td>pregnant women</td>
</tr>
<tr>
<td>• Detection and management of pre-eclampsia with Magnesium Sulphate</td>
<td>• Combination therapy for PMTCT</td>
</tr>
<tr>
<td>• Pre-referral treatment of neonatal infections</td>
<td>• ART for mothers and children</td>
</tr>
<tr>
<td></td>
<td>• Basic Emergency Obstetric Care (BEmOC)</td>
</tr>
<tr>
<td></td>
<td>• Nutrition counseling</td>
</tr>
</tbody>
</table>
### Annex 2: Maternal, Newborn and Child Health Indicators

<table>
<thead>
<tr>
<th>Priority area</th>
<th>Indicator</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neonatal mortality rate</td>
<td>No of infant deaths under 28 days of age</td>
<td>Total live births</td>
<td>Census/DHS/MIMS</td>
</tr>
<tr>
<td></td>
<td>Infant mortality rate</td>
<td>No of deaths to children under 1 yr</td>
<td>Total live births</td>
<td>Census/DHS/MIMS</td>
</tr>
<tr>
<td></td>
<td>Under-5 mortality rate</td>
<td>No of deaths to children under 5</td>
<td>Total live births</td>
<td>Census/DHS/MIMS</td>
</tr>
<tr>
<td>Maternal Health</td>
<td>Contraceptive Prevalence Rate</td>
<td>Number of women of reproductive age who are using /partner using a contraceptive method</td>
<td>Total number of women age 15-49 years who are currently married or in union</td>
<td>ZDHS/MICS</td>
</tr>
<tr>
<td></td>
<td>Percentage of pregnant women receiving at least 4 antenatal care visits</td>
<td>No of pregnant women receiving at least 4 antenatal care visits</td>
<td>Expected number of pregnant women</td>
<td>ZDHS/MICS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Census estimate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of deliveries assisted by skilled birth attendant</td>
<td>No of births assisted by skilled attendant</td>
<td>Total number of Expected deliveries</td>
<td>Census estimate</td>
</tr>
<tr>
<td></td>
<td>Proportion of primary health centres offering B-EMONC services</td>
<td>No of facilities offering B-EMONC services</td>
<td>No of Health Facilities</td>
<td>HF/Census</td>
</tr>
<tr>
<td></td>
<td>Proportion of district hospitals offering C-EMONC services</td>
<td>Cumulative number of district hospitals offering C-EMONC services</td>
<td>Total No of district hospitals</td>
<td>HF/Census/ZDHS</td>
</tr>
<tr>
<td>Measure</td>
<td>Description</td>
<td>Denominator</td>
<td>Source/Abbreviation</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>Obstetric Case Fatality Rate</td>
<td>No of deaths due to obstetric complications</td>
<td>Total no of emergency obstetric complications managed in the facility</td>
<td>RR</td>
<td></td>
</tr>
<tr>
<td>Proportion of babies with a birth weight below 2500g</td>
<td>No of babies born less than 2500g</td>
<td>Total no of live births</td>
<td>RR</td>
<td></td>
</tr>
<tr>
<td>Proportion of newborns put to breast within 1 hour of birth</td>
<td>No of newborns put to breast within 1 hour of birth</td>
<td>Total no of live births</td>
<td>ZDHS, HF</td>
<td></td>
</tr>
<tr>
<td>Proportion of infants protected from neonatal tetanus at birth</td>
<td>No of infants whose mothers had protective dose of TT</td>
<td>Total no of live births</td>
<td>ZDHS, HF</td>
<td></td>
</tr>
<tr>
<td>Proportion of asphyxiated infants who have been resuscitated</td>
<td>No of asphyxiated infants who have been resuscitated</td>
<td>Total no of asphyxiated infants</td>
<td>HF</td>
<td></td>
</tr>
<tr>
<td>Proportion of newborns with sepsis who received proper antibiotics</td>
<td>Total no of newborns with sepsis who received proper antibiotics</td>
<td>Total no of newborns with sepsis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perinatal Mortality Rate</td>
<td>Number of perinatal deaths (still births, deaths within the first seven days of life)</td>
<td>Total no of live births, still births, deaths within the first seven days of life</td>
<td>HF/HMIS</td>
<td></td>
</tr>
<tr>
<td>Proportion of mothers who received at least three visits in the first one week after delivery</td>
<td>No of mothers who received at least three visits in the first week after delivery</td>
<td>Total no of number of deliveries</td>
<td>Survey/RR/H MIS</td>
<td></td>
</tr>
<tr>
<td>Proportion of HIV exposed infants for whom DNA-PCR was done</td>
<td>No of HIV exposed infants for whom DNA-PCR was done</td>
<td>Total No of HIV exposed infants</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Proportion of preterm babies who was put on KMC</td>
<td>No of preterm babies who was put on KMC</td>
<td>Total no of preterm babies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Indicator</td>
<td>No of</td>
<td>Total no of</td>
<td>Source</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
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<td>-----------------</td>
</tr>
<tr>
<td>Proportion of district hospitals that are accredited baby friendly</td>
<td>No of district hospitals that are accredited baby friendly</td>
<td></td>
<td></td>
<td>HF</td>
</tr>
<tr>
<td>Proportion of mother who received Vitamin A in the first 4 weeks after delivery</td>
<td>No of mother who received Vitamin A in the first 4 weeks after delivery</td>
<td></td>
<td></td>
<td>ZDHS/HMIS</td>
</tr>
<tr>
<td>Proportion of pregnant women counseled and tested for HIV/PMTCT</td>
<td>No of pregnant women counseled and tested for PMTCT/HIV</td>
<td></td>
<td></td>
<td>HF/ZDHS</td>
</tr>
<tr>
<td>Proportion of HIV positive pregnant women provided with complete course of ARVs(MER) to reduce risk of MTCT</td>
<td>No of HIV positive pregnant women provided with complete course of ARVs(MER) to reduce risk of MTCT</td>
<td></td>
<td></td>
<td>RR</td>
</tr>
<tr>
<td>Proportion of pregnant women attending ANC receiving two doses of SP in malaria endemic districts</td>
<td>No of pregnant women attending ANC receiving two doses of SP in malaria endemic districts</td>
<td></td>
<td></td>
<td>RR</td>
</tr>
<tr>
<td>Child Health</td>
<td>Proportion of children exclusively breast-fed (0-6 months)</td>
<td></td>
<td></td>
<td>Survey</td>
</tr>
<tr>
<td>Proportion of children who continue to breastfeed from 6-23 months</td>
<td>No of children who continue to breastfeed from 6-23 months</td>
<td></td>
<td></td>
<td>Survey</td>
</tr>
<tr>
<td>Proportion of children who receive timely complementary feeding aged 6-7 months</td>
<td>No of children who receive timely complementary feeding aged 6-7 months</td>
<td>Total no of children aged 6-7 months</td>
<td>Survey</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>Proportion of children under 5 who are under weight</td>
<td>No of children under 5 who are under weight</td>
<td>Total no of children under 5</td>
<td>RR</td>
<td></td>
</tr>
<tr>
<td>Proportion of children 6-59 months with severe acute malnutrition</td>
<td>No of children 6-59 months with severe acute malnutrition</td>
<td>Total no of children aged 6-59 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of children under 5 with stunting</td>
<td>No of children under 5 with height for age &lt; -2 Z score</td>
<td>Total no of children under 5</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Proportion of severely malnourished children 6-59 months receiving therapeutic feeding</td>
<td>No of severely malnourished children 6-59 months receiving therapeutic feeding</td>
<td>Total no of severely malnourished children aged 6-59 months</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Proportion of children under 5 who slept under an ITN the previous night in malaria prone districts</td>
<td>No of children under 5 who slept under an ITN the previous night in malaria prone districts</td>
<td>Total No of children under 5 in malaria prone districts</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Proportion of children under 5 who were diagnosed and treated with appropriate anti-malarial within 24 hrs of onset of fever</td>
<td>No of children under 5 who were diagnosed and treated with appropriate anti-malarial within 24 hrs of onset of fever</td>
<td>Total No of children under 5 who with fever</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Proportion of children under 5 with pneumonia who receive appropriate antibiotic</td>
<td>No of children under 5 with pneumonia who received antibiotics</td>
<td>Total number of episodes of pneumonia treated among under 5 children</td>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>No. of children under 5 with diarrhea receiving ORT</td>
<td>Total number of episodes diarrhea treated among children under 5</td>
<td>Source</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------</td>
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</tr>
<tr>
<td>Proportion of children under 5 with diarrhoea receiving ORT</td>
<td></td>
<td></td>
<td></td>
<td>Survey</td>
</tr>
<tr>
<td>Proportion of under5 children with diarrhea who received zinc treatment</td>
<td></td>
<td></td>
<td></td>
<td>Survey</td>
</tr>
<tr>
<td>Proportion of primary health care facilities implementing IMNCI</td>
<td>No of primary health care facilities implementing IMNCI</td>
<td></td>
<td></td>
<td>HFS</td>
</tr>
<tr>
<td>Village health worker to rural population ratio</td>
<td>No of village health workers</td>
<td></td>
<td></td>
<td>HF/Census</td>
</tr>
<tr>
<td>Proportion of children 6-59 months supplemented with biannual vitamin A</td>
<td>No of children 6-59 months who were supplemented with biannual vitamin A</td>
<td></td>
<td></td>
<td>HMIS (T5)</td>
</tr>
<tr>
<td>Proportion of surviving infants vaccinated</td>
<td>No of surviving infants vaccinated for measles before one year of age</td>
<td></td>
<td></td>
<td>ZHDS/MIMS</td>
</tr>
<tr>
<td>Proportion of children immunized HIB pneumonia</td>
<td>No of infants receiving Hib vaccine aged 12-23 months</td>
<td></td>
<td></td>
<td>MIMS/HMIS</td>
</tr>
<tr>
<td>Proportion of infants fully immunized 12-23 months</td>
<td>No of infants fully immunized aged 12-23 months</td>
<td></td>
<td></td>
<td>HMIS/MIMS</td>
</tr>
<tr>
<td>Proportion of HIV positive children under5 who received ART</td>
<td>No of HIV positive children under 5 accessing ART</td>
<td></td>
<td></td>
<td>HF/HMIS</td>
</tr>
<tr>
<td>Proportion of children under 5 with diarrhoea receiving ORT</td>
<td></td>
<td></td>
<td></td>
<td>Survey</td>
</tr>
<tr>
<td>Proportion of under5 children with diarrhea who received zinc treatment</td>
<td></td>
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<td></td>
<td>Survey</td>
</tr>
<tr>
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<td>Proportion of surviving infants vaccinated</td>
<td>No of surviving infants vaccinated for measles before one year of age</td>
<td></td>
<td></td>
<td>ZHDS/MIMS</td>
</tr>
<tr>
<td>Proportion of children immunized HIB pneumonia</td>
<td>No of infants receiving Hib vaccine aged 12-23 months</td>
<td></td>
<td></td>
<td>MIMS/HMIS</td>
</tr>
<tr>
<td>Proportion of infants fully immunized 12-23 months</td>
<td>No of infants fully immunized aged 12-23 months</td>
<td></td>
<td></td>
<td>HMIS/MIMS</td>
</tr>
<tr>
<td>Proportion of HIV positive children under5 who received ART</td>
<td>No of HIV positive children under 5 accessing ART</td>
<td></td>
<td></td>
<td>HF/HMIS</td>
</tr>
<tr>
<td>Category</td>
<td>Indicator</td>
<td>No of households</td>
<td>Total no of households</td>
<td>Source</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Proportion of HIV exposed infants accessing ARV prophylaxis</strong></td>
<td>Number HIV exposed infants accessing ARV prophylaxis</td>
<td>Total number of HIV exposed infants</td>
<td>HF/HMIS</td>
<td></td>
</tr>
<tr>
<td><strong>WASH</strong></td>
<td>Proportion of households using improved sanitation facilities</td>
<td>No of households using improved sanitation facilities</td>
<td>Total no of households</td>
<td>DHS/Census</td>
</tr>
<tr>
<td></td>
<td>Proportion of households with access to adequate amounts of clean and safe water</td>
<td>No households with access to adequate amounts of clean and safe water</td>
<td>Total no of households</td>
<td>DHS/Census</td>
</tr>
<tr>
<td><strong>Child Protection</strong></td>
<td>Proportion of children under 5 with birth certificate</td>
<td>No of children under 5 with birth certificates</td>
<td>Total no of under 5 children</td>
<td>DHS/Census</td>
</tr>
<tr>
<td></td>
<td>Proportion of women who went into marriage or union under 18 years of age</td>
<td>No of women aged 20-49 years who were in union or marriage before 18 years of age</td>
<td>Total number of women aged 20-49 years</td>
<td>DHS/Census</td>
</tr>
<tr>
<td></td>
<td>Proportion of OVC who did not receive any formal external support</td>
<td>No of OVC aged 0-17 who did not receive any formal external support</td>
<td>Total no of OVC aged 0-17</td>
<td>DHS/MICS</td>
</tr>
</tbody>
</table>
References

4. Zimbabwe Demographic and Health Survey, 2005-2006
18. WHO infant feeding guidelines in HIV infected women, 2006
28. Factors associated with Child Sexual Abuse in Harare City, Mashumba et al 2009(unpublished)