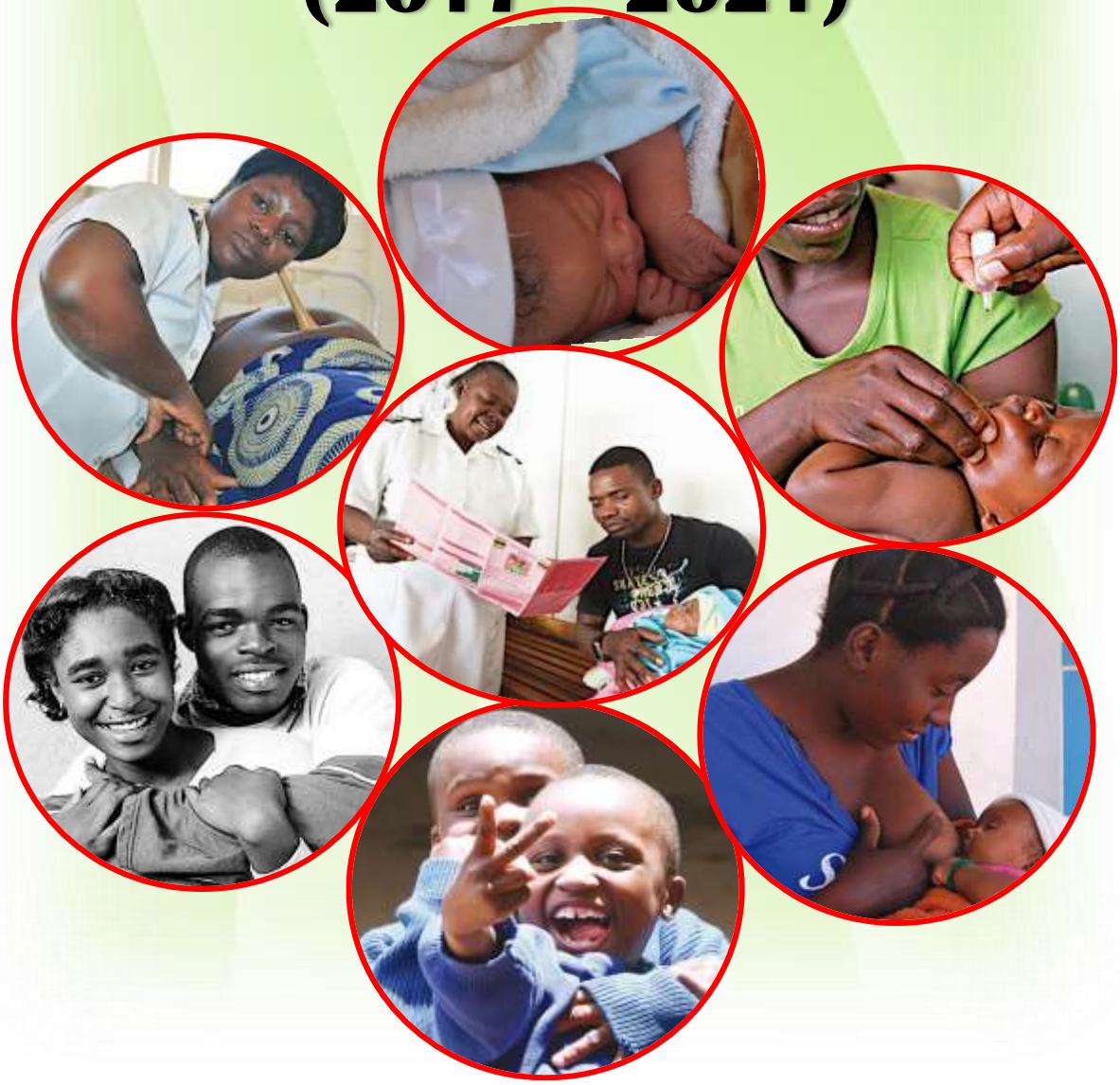
Zimbabwe Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy (2017 – 2021)



March 2017

Zimbabwe Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition [RMNCAH&N] Strategy (2017 – 2021)

Table of Contents

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARHR	Adolescent Reproductive Health and Rights
ARK	Absolute Return for Kids
ART	Antiretroviral Therapy
ARVs	Antiretroviral Drugs
ASRH	Adolescent Sexual and Reproductive Health
BEmONC	Basic Emergency Obstetric and Neonatal Care
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CH	Child Health
CHERG	Child Health Epidemiology Reference Group
DBS	Dried Blood Spot
DHIS2	District Health Information System version 2
ECEB	Essential Care for Every Baby
EGPAF	Elizabeth Glaser Paediatric AIDS Foundation
EID	Early Infant Diagnosis of HIV
EmONC	Emergency Obstetric and Neonatal Care
eMTCT	Elimination of Mother-to-Child Transmission of HIV
EPI	Expanded Programme on Immunisation
ETAT	Emergency Triage, Assessment and Treatment
GAVI	Global Alliance for Vaccines and Immunisation
GPM	Growth Promotion and Monitoring
HC	Health Centre
HDF	Health Development Fund
HF	Health Facility
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System

HTF	Health Transition Fund
ICCM	Integrated Community Case Management
ICT	Information Communication Technology
IMNCI	Integrated Management of Neonatal and Childhood Illness
IMR	Infant Mortality Rate
IPTp	Intermittent Preventive Therapy in pregnancy
ITN	Insecticide Treated Nets
IUCD	Intra Uterine Contraceptive Device
IYCF	Infant and Young Child Feeding
LAPM	Long Acting Permanent Methods
LEEP	Loop Electrosurgical Excision Procedure
LLIN	Long Lasting Insecticide-treated Nets
MCHIP	Maternal Child Health Integrated Program
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MNCH	Maternal, Newborn and Child Health
MNH	Maternal and Neonatal Health
MOHCC	Ministry of Health and Child Care
MUAC	Mid-Upper Arm Circumference
NGO	Non Governmental Organisation
NMR	Neonatal Mortality Rate
OOP	Out-of-Pocket
PCN	Primary Care Nurses
PCR	Polymerase Chain Reaction
PNC	Postnatal Care
PEPFAR	President's Emergency Fund for AIDS Relief
PHC	Primary Health Care
PLHIV	Persons Living with HIV

PMTCT	Prevention of Mother to Child Transmission of HIV
QA	Quality Assurance
QI	Quality Improvement
RMNCAH&N	Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition
SDG	Sustainable Development Goals
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
TB	Tuberculosis
THE	Total Health Expenditure
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VHW	Village Health Workers
VIAC	Visual Inspection with Acetic Acid and Cervicography
VMAHS	Vital Medicines Availability and Health Services
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organisation
ZDHS	Zimbabwe Demographic and Health Survey
ZIMASSET	Zimbabwe Agenda for Sustainable Social and Economic Transformation
ZNFPC	Zimbabwe National Family Planning Council

Foreword

The Government of Zimbabwe is committed towards prioritising global initiatives focusing on improving Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition (RMNCAH&N) interventions as evidenced by the international and regional treaties the government is signatory to. National policies, guidelines and strategies have been put in place to provide the appropriate environment for maternal, neonatal, child and adolescent health.

Current interventions include Family Planning, Prevention of Cervical Cancer, Maternal and Neonatal Health with special focus on Antenatal Care, emphasising on quality service delivery, clean and safe delivery, emergency obstetric care, postnatal care and Prevention of Mother to Child Transmission of HIV. Interventions for improved neonatal care include essential care for every baby (ECEB), care for premature babies, small newborn babies and sick newborn babies. The Child Health interventions include EPI, IMNCI, ETAT, Early Infant diagnosis, Paediatric HIV Care and antiretroviral treatment.

The country has made remarkable progress in improving RMNCAH&N outcomes. Use of modern family planning methods among currently married women increased from 50% in 1999 to 66% in 2015, while the use of traditional contraceptive methods declined from 3% to <1% during the same period. Thirty nine percent of the sexually active unmarried girls 15 – 19 years reported use of modern family planning methods. However, 21% of maternal deaths occurred in girls aged 15-19 years, which further underscores the need for their prioritization with family planning services (ZDHS 2015).

Although 79% of women had heard of cervical cancer, only 13% ever had a cervical examination. Out of 693,854 women screened for cervical cancer, the VIAC positivity rate was 7% and 58% of them were treated with either cryotherapy or Loop Electrosurgical Excision Procedure (LEEP).

The Maternal Mortality Ratio (MMR) increased from 612 per 100,000 live births in the 2005-06 to a peak of 960/100 000 in 2010-11 followed by a decline to 651/100 000 in 2015 (ZDHS). Despite the decline, MMR remains much higher than the set MDG target of 174 deaths per 100,000 live births.

The Neonatal Mortality Rate (NMR) increased from 24 in 2005-06 to a peak of 31 deaths per 1,000 live births in 2010-11 then declined slightly to 29 in 2015. The trend in Infant Mortality Rate (IMR) revealed a consistent pattern of decline from 60 deaths per 1,000 live births in 2005-06 to 57 in 2010-11 and 50 per 1,000 live births in 2015.

The country RMNCAH&N programme is guided by the Sustainable development Goals, Africa Union Commitments (CARMMA), ZIMASSET (2013-2018) and the National Health Strategy (2016-2020). The country strives to meet the targets of preventable deaths from pregnancy and among children below five years of age.

RMNCAH&N programmes work as part of an integrated Health delivery system in close collaboration with other related departments such as Human Resources, Essential Medicines and Commodities, Health promotion/communication and Monitoring and Evaluation hence the need for an integrated strategy to enhance collaboration, improved efficiency and continuum of care across the life spectrum. The Strategy will also enhance inter-governmental coordination mechanisms that ensure collective response from both levels of Government and development partners.

DR P.D. PARIRENYATWA (SENATOR)
MINISTER OF HEALTH AND CHILD CARE

Acknowledgements

This RMNCAH&N (2016 – 2021) strategy was developed through an extensive consultative process involving all relevant key stakeholders to ensure collaboration in implementing interventions that could be scaled up during the next five years to rapidly improve the health outcomes of Zimbabwean women, children and adolescents.

The Ministry of Health and Child Care (MOHCC) through the Family Health Department gratefully acknowledge the dedication and commitment of all individuals, representatives of various developmental organisations and Ministry of Health departments who participated in the development of the Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition (RMNCAH&N) Strategy.

The Ministry is indebted to the following for their interest and enthusiasm in the development of the RMNCAH&N Strategy.

- The consultants: Dr Saul Onyango, Dr Nyasha Masuka and Dr George Shambira
- World Health organisation (WHO)
- United Nations Children's Fund (UNICEF)
- United Nations Population Fund (UNFPA)
- United States Agency for International Development (USAID)
- Maternal Child Health Integrated Program (MCHIP)
- Absolute Return for Kids (ARK)
- Save the Children
- The Family Health Directorate for coordinating the process

In addition the ministry extends sincere appreciation to all those individual officers for their contributions in the development of the RMNCAH&N.

BRIGADIER GENERAL (DR) G GWINJI
SECRETARY FOR HEALTH AND CHILD CARE

1. Background

1.1: GEOGRAPHIC AND DEMOGRAPHIC PROFILE

Zimbabwe is a land-locked country in Southern Africa with an area of about 390,757 square kilometres, bordered by Mozambique in the east and northeast, South Africa in the south, Botswana in the west, and Zambia in the north and northwest. The country is administratively divided into 10 provinces: two urban and eight rural, which are in-turn sub-divided into 63 districts. The 2 urban provinces are Bulawayo and Harare; while the 8 rural provinces are Manicaland, Mashonaland East, Mashonaland Central, Mashonaland West, Matabeleland North, Matabeleland South, Masvingo and Midlands.

The national census of 2012 reported a total population of 13,061,239 people, with 6,280,539 males and 6,780,700 females (sex ratio of 93 males/ 100 females); and annual average inter-censal growth rate (2002 – 2012) of 1.1 percent[1]. The population was relatively young, with 41 percent below the age of 15 years, those aged 15 – 64 years constituted 55 percent of the total population and the 65+ years old accounted for the remaining 4 percent. The majority (67 percent) resided in the rural areas with population density of 33 persons per square kilometre. The 2012 census report stated that average life expectancy at birth was 38 years. The Table 1 presents some of the important national socio-demographic indices.

Table 1: Selected National Socio-Demographic Data

Item	Magnitude	Data Source
Crude Birth Rate (births per 1,000 population)	*32.0*	*ZDHS 2015*
Number of women of reproductive age	*3,271,400*	*Census 2012*
Contraceptive prevalence rate	*66.5%*	*ZDHS 2015*
Unmet Need for Family Planning	*10.4%*	*ZDHS 2015*
Total Fertility Rate 15-49 (Children per woman)	*4.0*	*ZDHS 2015*
Maternal Mortality Ratio (per 100,000 live births)	*651*	*ZDHS 2015*
Infant Mortality Rate (per 1,000 live births)	*50*	*ZDHS 2015*
Under-5 Mortality Rate (per 1,000 live births)	*69*	*ZDHS 2015*
Exclusive breastfeeding rate 0-5 months:	*47.8%*	*ZDHS 2015*

[1] Zimbabwe National Statistics Agency (ZIMSTAT), 2013

1.2: ORGANISATION OF THE HEALTH SYSTEM

Health care in Zimbabwe is provided by public facilities, not-for-profit organisations, the faith-based organisations (church organisations), company-operated clinics (e.g. the mining companies), the private-for-profit clinics, and the traditional medicine sector that offers treatment for a variety of illnesses. The health care delivery system is decentralised, but with policy, regulation and administrative guidance; human resource planning; donor coordination, resource mobilisation and allocation as well as surveillance, monitoring and evaluation being part of the central government's responsibility under the Ministry of Health and Child Care (MOHCC).

At the provincial and district levels, the respective health offices, as representatives of the MOHCC, administer the health system. The Provincial Medical Office administers the provincial hospital and all district health offices within the province, including the allocation of resources, and the Provincial Medical Director reports to the Permanent Secretary, MOHCC. At the district level, the District Medical Officer administers the district hospital and all the rural health facilities within the district. The provincial and district members of staff are also charged with determining the financial, material and human resource needs of the catchment area, as well as providing regular reports to the central level.

The current National Health Strategy (2016 – 2020) further decentralizes health services into the communities by creating Health Posts especially at the existing outreach sites. However, the number of outreach posts is greater than the total number of primary care facilities and there will be need for prioritization of areas to pilot establishment of the Health Posts. The Primary Care Nurses will be deployed to Health Posts and Registered General Nurses and Midwives at the Rural Health Centres and Clinics, with doctors providing outreach technical support to the facilities at this level.

The public health delivery system comprises of 1,848 health facilities[2] organised in a hierarchical, four-tiered order as follows:

- ***Level 1: Primary Health Care Facilities:*** comprises of 307 rural health centres, 15 polyclinics, 25 mission clinics, 69 private clinics, 1,122 rural and 96 urban clinics at the entry level of care. The health facilities provide basic out-patient services including the essential package of maternal, newborn and child health (MNCH) services comprising of antenatal care, comprehensive prevention of mother-to-child transmission of HIV (PMTCT) services, normal delivery, postnatal care, full immunisation and growth monitoring/ promotion, as well as integrated management of neonatal and childhood illnesses (IMNCI) and community based health services. There are no attending physicians at this level and no diagnostic facilities. The link with, and support from the Village Health Workers (VHWs) enhances the capacity for provision of preventive and health promotion interventions at community level.

[2] MOHCC 2015: Zimbabwe Service Availability and Readiness Assessment 2015 Report

- ***Level 2: District /Mission Hospitals:*** comprises of 44 government district hospitals and 62 mission hospitals (some designated as district hospitals in districts without a government hospital), 62 rural hospitals and 32 private hospitals. In addition to services provided at the primary health care level, these facilities have capacity for diagnostic services and to conduct surgical procedures, provide comprehensive emergency obstetric and newborn care that includes caesarean section, management of opportunistic infections/ antiretroviral treatment (OI/ART) services, safe blood transfusion and comprehensive management of newborn and childhood illnesses, including emergency paediatric care.
- ***Level 3: eight (8) Provincial Hospitals:*** constitute the highest referral level within the province and its establishment includes specialists in different medical disciplines. The mandate is management of complicated paediatric, obstetrical, gynaecological and adult medical as well as surgical cases referred from the district level.
- ***Level 4: six (6) Central Hospitals:*** constitute the apex in the hierarchy of health care in the country, with specialists in various medical disciplines. In addition to providing specialist services and managing the complicated referred cases, these institutions are actively involved in training of medical, nursing and paramedical personnel. One is a specialist psychiatry hospital while the rest offer RMNCAH&N services.

Delivery of health services was guided by the National Health Strategy (2009-15) under the theme *"Equity and Quality in Health: A People's Right"*, and currently by the new National Health Strategy (2016 – 2020) under the theme *"Equity and Quality in Health: Leaving No One Behind"*.

1.3: HEALTH SECTOR FINANCING

Financing of health care in the country is from several sources that include: government allocations, private voluntary organizations, medical aid health insurance schemes, direct out of pocket payments and development assistance from both bilateral and multi-lateral partners. Government is the major source of health financing in the public sector with taxation being the main source of revenue, but the decline in economic performance experienced from 2000 to 2008 resulted in less revenue and funding for the health sector and Zimbabwe has not yet met the Abuja Declaration target of 15% of the national budget.

In 2010, of the Total Health Expenditure (THE), government funding accounted for 18%, donors 19%, private companies and others 24%, and out-of-pocket (OOP) 39%. Preliminary results of the 2015 National Health Assessment Indicate that government contributed 20.52 % of THE, a slight increase from 2010, corporations contributed 27.66% again an increase from 2010, households contributed 27.04% and donors contributed 24.26% an increase from 2010. The government contribution of only 20% remains very low and this exposed 7.6% of households surveyed in the 2015 NHA to catastrophic health expenditure of which 13% were the poorest households and 3% were from the richest households.

As illustrated in Figure 1, the Government per capita budget allocation increased steadily from 2009 to 2013 to almost reach the then WHO recommendation of $34 PPP. However of the allocated budget, actual disbursement ranged from 60-80% and was mostly salaries of health workers, which made the health programs heavily dependent on private and external funding.

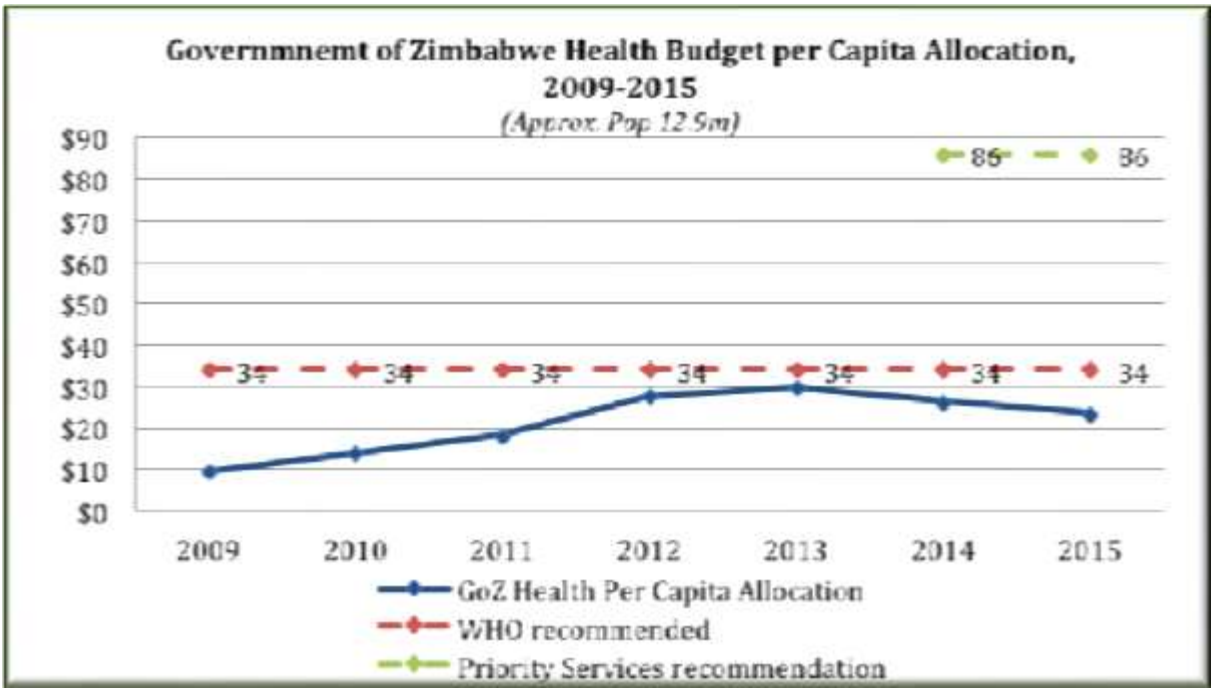


Figure 1: Trend in Government Health Expenditure from 2009 to 2015

Zimbabwe had a highly effective health system in the 1980s and 1990s characterised by highly motivated professional health staff; functioning information and logistical support systems and an efficient organizational structure based on national governance, provincial leadership, and district management of the health system. However the economic challenges of 1999 to 2008 progressively undermined this system, causing it to deteriorate to a near-collapse state. As a response to the Health Sector Investment Case, a multi-donor pooled fund, the Health Transition Fund (HTF) was established in 2011 to support the National Health Strategic Plan developed by the Ministry of Health and Child Care, and to address the identified bottlenecks. The Health Transition Fund was implemented from 2011 to 2015.

The Health Development Fund (HDF) is the successor to the HTF and is being implemented over the period from 2016 to 2020. The HDF is a pooled funding mechanism through which contributing donors jointly support the entire Health programme with no earmarking of funds. The Health Development Fund has a five-year budget of about four hundred thirty five million dollars ($435m). The 2016 HDF work plan was funded by United Kingdom Department for International Development, European Union, Irish Aid, Sweden and GAVI with the funds being made available to the Ministry of Health and Child Care through UNICEF and UNFPA. The major challenge for the HDF is inadequate fiscal space from Government, which has meant heavy reliance on donor funds in the face of reduced donor funding.

2. Context for the RMNCAH&N Strategy

2.1: INTRODUCTION

The Zimbabwe Agenda for Sustainable Social and Economic Transformation (ZIMASSET) is the national blueprint that outlines the country's development priorities from 2013 to 2018. At the sector level, the Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy (RMNCAH&N) 2017 – 2021 has been properly aligned to the vision, mission, goals and objectives spelt out in the new National Health Strategy (2016 – 2020). As a result, the prioritised interventions in this Strategy feed logically into the goals of the National Health Strategy, which in turn feed into the key results areas of the ZIMASSET.

The development of this Strategy has taken special cognisance that Zimbabwe is still confronted with the unfinished agenda from the Millennium Development Goals (MDG), since it was not possible to attain the targets. For instance, the MDG target related to maternal health was to reduce the Maternal Mortality Ratio (MMR) to about 174 deaths per 100,000 live births[3], but the Zimbabwe Demographic and Health Survey (ZDHS) 2015 Report stated a national MMR of 651 deaths per 100,000 live births. Consequently, while the RMNCAH&N Strategy has taken into account targets for the Sustainable Development Goals (SDGs), the focus will be on the unfinished agenda from the MDGs.

Improved maternal, neonatal, child and adolescent health outcomes involve the interventions and activities of various stakeholders from different departments in the Ministry of Health and Child Care, as well as the other government sectors at all levels, the implementing partners, donors and development partners. The Strategy has therefore taken into account the importance of coordination and collaboration linkages among the various stakeholders and programmes.

The program specific departments under the division of Preventive Services in the Ministry of Health and Child Care have been operating in silos resulting in fragmentation of services and inherent inefficiencies associated with vertical health programs. The RMNCAH&N strategy puts together all prioritized initiatives to improve maternal, newborn, child and adolescent health including the nutrition and HIV related interventions.

2.2: INITIATIVES TO IMPROVE RMNCAH&N

2.2.1: Promotion of Primary Health Care

Zimbabwe adopted the Primary Health Care (PHC) approach in 1980, which has underpinned the functional structure of the health care delivery system in the country. The commitment towards the PHC approach was re-affirmed in the Ouagadougou

[3] National Health Strategy 2016 – 2020

Declaration on PHC and Health Systems Strengthening of 2008. The key to this approach hinges around delivery of quality health care to the majority of population and increasing community access to the available health services. Under the framework of the primary health care approach, the initiatives to improve the health of mothers, newborns, children and adolescents include:

- Focused antenatal care
- Birth under skilled service providers
- Emergency obstetric and newborn care
- Postnatal care programme
- Family planning
- Prevention and control of cervical cancer
- Adolescent Sexual Reproductive Health (ASRH)
- Expanded programme on immunization (EPI)
- Infant and young child feeding
- Elimination of mother to child transmission of HIV (eMTCT) and antiretroviral treatment (ART)
- Integrated management of neonatal and childhood illness (IMNCI)
- Community growth promotion and monitoring through village health workers

Provision of health care services is through a "supermarket" delivery approach, where preventive and curative health services for mothers, newborn babies, children and adolescents were available for access at a single visit.

2.2.2: Mitigation of Challenges in Human Resources for Health

Confronted with worsening 'brain drain' of general nurses and midwives, the Ministry of Health introduced a new cadre called the Primary Care Nurses (PCN). These nurses were trained specifically to provide services within a framework of the Zimbabwean primary health care approach and to fill the nursing posts at rural health facilities. The initiative was complemented by a strategy designed to retain medical doctors at district level by requiring them to first work for an extended period in the districts as a pre-condition for unrestricted registration to practice. The RMNCAH&N partners obtained approval from the Nurses Council for nurses to perform manual vacuum aspirations, to manually remove the placenta, and to insert implants. The partners also supported staff positions at various levels of government departments in a bid to improve the management and coordination of interventions under the MNH programme.

More recently, midwives are authorised to perform neonatal resuscitation and to administer antibiotics, though it still does not extend to administration of antenatal corticosteroids where there is an indication for it. The cadre of Clinical Officers has been introduced and being equipped with skills to provide obstetric services, including conducting caesarean sections. In addition, deliberate effort is being made to train and

deploy Nurse Anaesthetists to improve emergency obstetric and neonatal care (EmONC). To complement this, Maternal and Perinatal Mortality Review meetings have been instituted to promote audits and review MNCH data at provincial and district levels.

2.2.3: Creation of Favourable Legal and Policy Environment

Numerous legal and policy documents, at the international as well as national levels, provide the conducive environment and framework for the operationalization of this Reproductive, Maternal, Neonatal, Child, Adolescent Health, and Nutrition Strategy. At the international level, Zimbabwe is a signatory to a number of important legal instruments that bind governments to create an enabling environment for delivery of maternal, neonatal, child and adolescent health services including:

- The UN Convention for the Rights of the Child (1989)
- The International Conference on Population and Development (ICPD) Programme of Action (1994)
- The Millennium Declaration (2000)
- The Abuja Declaration (2001)
- The Regional Child Survival Strategy for the African Region developed by WHO, UNICEF and the World Bank and adopted by the 56th Regional Committee of Health Ministers in August 2006
- The Maputo Plan of Action (2006)
- Ouagadougou Declaration (2008) on Primary Health Care and Health Systems in Africa
- The United Nations Commission on Life-Saving Commodities for Women and Children
- The CARMMA post 2015 that focuses on achieving the elimination of preventable maternal and child deaths by 2030
- WHO and the African Union Commission commitments on universal health coverage and ending preventable maternal and child deaths by 2030 (April 2014)
- Agenda 2063 – The Africa we want: with 7 common aspirations including "An Africa whose development is people driven, especially relying on the potential offered by its women and youth"

More recently, Zimbabwe made the commitment towards the Global Strategy for Women's, Children's and Adolescents' Health (2016 – 30), which is particularly pertinent to this Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy. Zimbabwe is also one of the signatories to the 2011 United Nations General Assembly Political Declaration on HIV and AIDS that set a global target of placing 15 million people on ART by 2015[4]. Recent global commitments, such as the *Double Dividend*

[4] Resolution 65/277. Political Declaration on HIV/AIDS: Intensifying Our Efforts to Eliminate HIV/AIDS. United Nations General Assembly, New York, 2011.

approach through WHO, UNICEF and EGPAF (focusing on 0-5 year olds), PEPFAR's *Accelerating Children's HIV Treatment* (ACT – focusing on 0-19 year olds) and the *All In 1* initiative led by UNICEF and UNAIDS (10-19 year olds), have given impetus to the initiative to accelerate ART services for infants, children and adolescents.

At the national level, the Reproductive Health policy provides the framework for the provision of integrated maternal health, family planning, STI, HIV and AIDS services. The HIV and AIDS policy was updated in 2005 to address some weaknesses such as inadequate attention to child-related issues. Specific legislation that protect maternal, newborn, child and adolescent health in the country 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

2.3: THE RMNCAH&N CONCEPTUAL FRAMEWORK

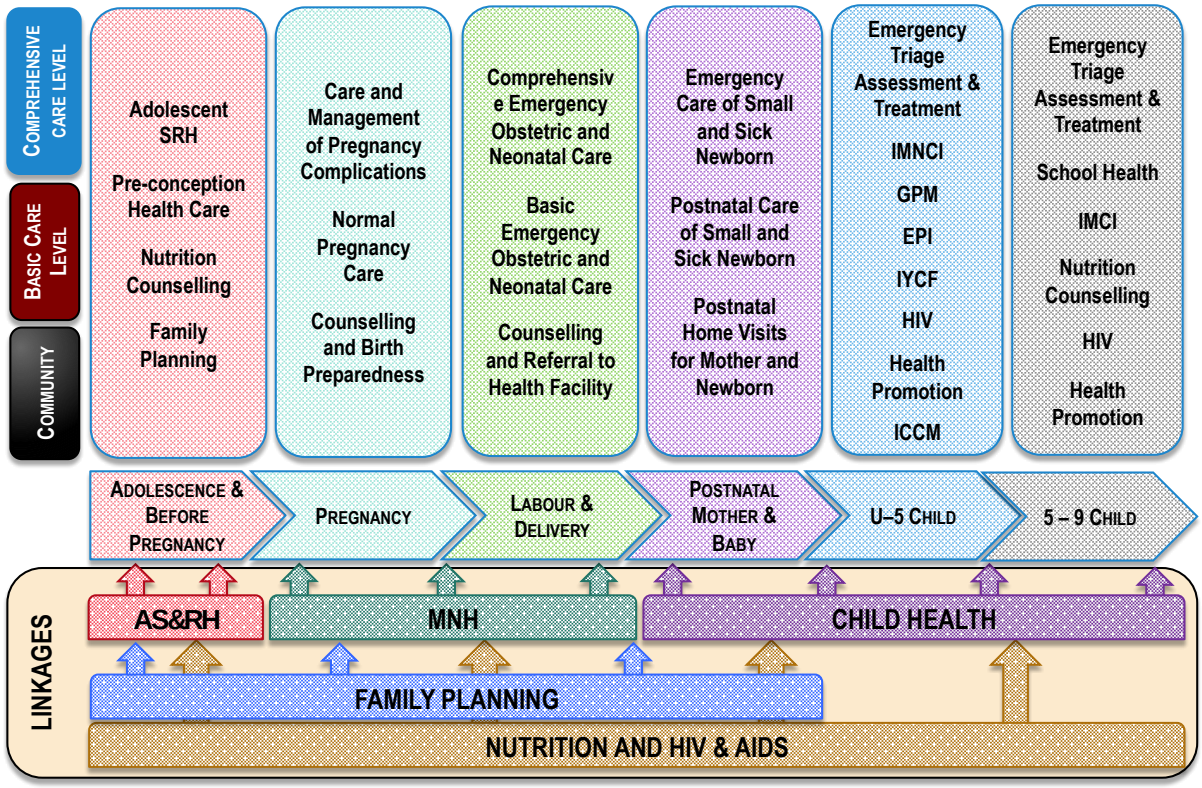


Figure 2: The Life Cycle Continuum of Care across the Levels of Service Delivery

Figure 2 illustrates the conceptual framework underpinning the RMNCAH&N Strategy, which is based on continuum of two types:

a) Continuum across the different level of service delivery from the community where primary health care is provided, via the basic care level comprising of secondary health care facilities, to the comprehensive level comprising of tertiary and quaternary level health facilities. The complexity and capacity to deal with complicated issues increases along the continuum;

b) The life cycle continuum of care that covers the periods from adolescence and before pregnancy, through pregnancy, labour and delivery, the postnatal for mother and baby, the under-five child and ends at the pre-adolescent child age 5 – 9 years.

In terms of linkages, there are 3 distinct programme areas namely: Adolescent Sexual and Reproductive Health (ASRH), Maternal and Neonatal Health (MNH), and Child Health (CH). The Family Planning programme cuts across the ASRH and MNH, while the Nutrition, HIV and AIDS programmes cut across all: ASRH, MNH and CH.

2.4: DOUBLE DIVIDEND OF RMNCAH&N AND HIV INTERVENTIONS

The RMNCAH&N platform provides an excellent vehicle for reaching the women, newborn babies, children and adolescents with services. The ZDHS 2015 reported high coverage of maternal, newborn, child and adolescent health services and any coverage gaps observed in HIV-related interventions points towards weaknesses in integration and lost opportunities for service delivery. Double Dividend refers to "a strategic approach towards achieving the dual goals of improving child survival and accelerating the response to paediatric HIV and AIDS"[5]. However, within the context of this Strategy, the operational definition has been broadened as follows: ***a strategic approach towards achieving the dual goals of improving maternal, newborn, child and adolescent health, and eliminating mother to child transmission of HIV***.

The fundamental change under the Double Dividend approach will be the shift in focus from isolated programme interventions to "super-market", integrated approach that puts the all clients' needs at the centre of service delivery. This will require greater alignment, synergy and collaboration between the HIV programmes, and those traditionally delivered through the reproductive, maternal, newborn, child, adolescent health and nutrition platform. The following are among the dimensions that will require specific attention:

- ***Management and Coordination:*** Clear programmatic leadership, joint planning with effective involvement of all stakeholders, and joint accountability for achieving results at all levels;

[5] Double Dividend Harare Meeting Technical Summary, 23rd to 25th April 2014.

- ***Package Definition:*** Defining the optimum joint package of services that the client (Newborn baby, child, adolescent, mother, male partner etc.) will get from the clinic or service delivery point for purposes of standardisation;

- ***Capacity Enhancement:*** Building capacity of service providers through training, attachments, clinical mentorship and support supervision as well as strategically increasing the number of providers at implementing sites through additional recruitment and task sharing or shifting;

- ***Programme Monitoring:*** Strengthening the existing system to enable better client tracking across the different service delivery points through use of the electronic patient monitoring system currently being piloted. It also requires harmonisation of indicators and alignment to the specific intervention areas;

- ***Quality Improvement:*** Implementing continuous quality improvement activities through an integrated approach, with regular analysis of issues and identification of the underlying gaps as well as barriers to provision and uptake of the services.

2.5: SCOPE OF THE RMNCAH&N STRATEGY

The scope of the RMNCAH&N strategy will include five programmatic areas along the life cycle of the continuum of care and will integrate nutrition and HIV and AIDS as crosscutting issues, as illustrated in the Table 2.

Table 2: Summary of the Scope for RMNCAH&N Strategy

Program	Components
1. Reproductive Health	○ Family Planning ○ Prevention of Cervical Cancer
2. Maternal and Neonatal Health	○ Antenatal Care ○ Clean and Safe Delivery ○ Emergency Obstetric Care ○ Postnatal care ○ Prevention of Mother-to-Child Transmission of HIV ○ Essential Care for Every Baby ○ Care for Premature Babies ○ Care for Small Newborn Babies ○ Care for Sick Newborn Babies
3. Child Health	○ Expanded Program of Immunization ○ Integrated Management of Neonatal and Childhood Illnesses ○ Emergency Triage Assessment and Treatment of sick

Program	Components
	children ○ Early Infant HIV Diagnosis, Paediatric HIV Care and Antiretroviral Treatment
4. Adolescent Sexual & Reproductive Health	○ Sexual and Reproductive Health & HIV ○ Integrated Youth Friendly Services ○ Protective Environment
5. Nutrition	○ Integrated Infant and Young Child Feeding ○ Micronutrient Deficiencies ○ Management of Childhood Malnutrition ○ Management of Adult Malnutrition

2.6: QUALITY OF CARE

The Quality Assurance Directorate of the Ministry of Health and Child Care has put in place the Quality Assurance and Quality Improvement (QA and QI) Policy, together with a Strategy to operationalize it during the period from 2016 to 2020. The QA and QI strategy outlines a two dimensional framework i.e. horizontal and vertical to support continuous improvement and sustain high quality care at all levels of the Zimbabwe health system and across all priority technical areas. The RMNCAH&N Strategy will be adopting the Quality Assurance and continuous Quality Improvement approaches that underpin the Policy and Strategy in general and ensure the realization of the activities outlined in the QA and QI framework, which are applicable to RMNCAH&N, in particular.

In general, there has been improvement in coverage of maternal, neonatal, child and adolescent health interventions in the country. However, the relatively high coverage of services has not been accompanied by the expected reductions in the morbidity and mortality rates. In line with recommendations from the World Health Organisation, the focus under this Strategy will involve a shift towards addressing issues related to quality of care as a major contributory factor. This will involve deliberate actions at the service delivery points to utilise the quality improvement indicators, tools, and principles on a regular basis to measure performance and improve the system and process of health care delivery.

Effective utilization of quality improvement indicators and tools requires capacity building of knowledge and skills of managers and health care providers on how to accurately measure and interpret the indicators, indicator results and apply the principles of quality improvement to improve the quality of RMNCA&H service delivery.

As per the Donabedian model of quality of care, in order to have better health outcomes, the required structure and the right processes of delivery of care should be in place. In order to put the right process of delivery of care in place, analysing the current process of

delivery care is required. Continuous Quality improvement tools including 5S can be utilized to assess the process of delivery of care and improve it accordingly. The proper application and utilization of quality improvement requires their integration into the routine RMNCAH&N activities (e.g. Trainings, Supervision and mentorship and plans.

In addition to having the required resources and process and systems in place for delivery quality health service, proper organization of the work environment would play an important role in minimizing wastage of time, resources, and increase motivation of health care providers. The work environment can be arranged properly using the 5S concept (Sort-Set-Shine-Standardize and Sustain). This is an inexpensive concept, which could be utilized to properly organize the work environment for effective delivery of RMNCAH&N services. The prioritization is based on evidence that effective, high-quality care can prevent and influence the successful management of complications and thus contribute towards reduction in the morbidity and mortality among mothers, newborn babies, children and adolescents.

3. Situation Analysis

3.1: REPRODUCTIVE HEALTH

3.1.1: Family Planning

The ZDHS 2015 reported use of modern family planning methods among currently married women to have increased from 50% in 1999 to 66% in 2015, while the use of traditional contraceptive methods declined from 3% to <1% during the same period. The most commonly used methods are the pill (41%), injectables (10%) and implants (10%). The contraceptive use increased with age to a peak of 71% among the 30 – 39 age group, and the women in urban areas were more likely to use contraceptives (71%) than those in the rural areas (63%). In terms of provincial variation, modern contraceptive use was highest in Bulawayo and Mashonaland West (each with 71%), and lowest in Manicaland (57%) and Matabeleland South (60%).

As illustrated in Figure 3, its noteworthy that only 39% of the sexually active unmarried girls age 15 – 19 years reported use of modern family planning methods and less than half of their peers who were married (45%). Overall, 21% of maternal deaths occurred in girls aged 15-19 years, which further underscores the need for their prioritization with family planning services. Other challenges highlighted include lack of guidelines for immediate post partum contraception and no guidelines for the program for management of obstetric fistulae.

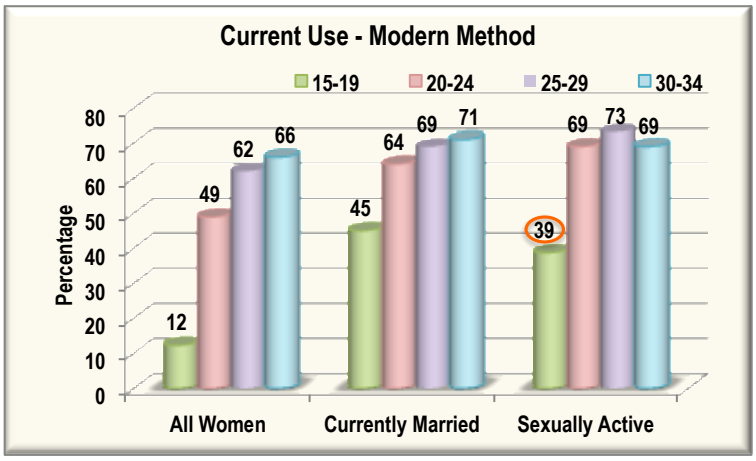


Figure 3: Current Use of Modern Family Planning Methods by Age Group

The key areas prioritized under this Strategy include:

- Diversification of contraceptive methods with a focus on long acting and permanent methods;
- Interventions for adolescents to improve knowledge on sexuality and use of contraceptives;
- Dual protection methods to also prevent the Sexually Transmitted Infections, including HIV;
- Strengthen family planning method mix, especially the long acting and permanent methods; and
- Strengthen post-partum family planning.

3.1.2: Prevention of Cervical Cancer

Cervical cancer, though easily prevented, is one of the leading causes of deaths among women. An estimated 2,270 women are diagnosed and 1,451 die from cervical cancer every year in Zimbabwe[6]. Screening is recommended via the Papanicolau (Pap) test or the Visual Inspection with Acetic Acid and Cervicography (VIAC) for women from the time of being sexually active. The ZDHS 2015 reported overall 79% of women had heard of cervical cancer but only 13% ever had a cervical examination. Among those who reported having a cervical examination, 90% had been done in the previous 3 years and 66% had within the previous 12 months. Matabeleland North registered the highest proportion of women who had cervical examination within the previous 12 months (79%) followed by Masvingo (75%) while lowest was from Manicaland (53%) and Bulawayo (57%). Women in the urban areas were more likely to report having a cervical examination (21%) when compared to those from rural areas (7%). The women from Harare province (24%) and Bulawayo province (21%) had the highest proportion while those from Manicaland (6%) had the lowest proportion.

A draft five-year Cervical Cancer Prevention and Control Strategy has been developed. In the past 5 years, the Ministry of Health and Child Care has been rapidly scaling up screening of cervical cancer using VIAC and over 90 VIAC sites have been set up countrywide. In total, 693,854 women were screened for cervical cancer, with a VIAC positivity rate of 7%. Out of all the VIAC positive women, 58% were treated with either cryotherapy or Loop Electrosurgical Excision Procedure (LEEP). A pilot on HPV vaccination has also been conducted in Marondera and Beitbridge districts. The MOHCC intends to rollout the vaccination programme to all districts in the country.

The key interventions prioritised under this Strategy include:

- Expansion of the cervical cancer screening services
- Strengthen treatment of pre-cancerous lesions
- Increasing awareness about cervical cancer
- Roll out vaccination of the girls age 10 – 14 years against HPV to all the districts
- Integration of cervical cancer screening services into RMNCAH&N Services
- Continuous quality of care improvement

3.2: MATERNAL AND NEONATAL HEALTH

3.2.1: Maternal Mortality and Main Causes

The Maternal Mortality Ratio (MMR) measured in deaths per 100,000 live births, increased from 612 in the 2005-06 report of the ZDHS to a peak of 960 in 2010-11, which was followed by a decline to 651 in 2015. Despite the decline, MMR was still unacceptably

[6] ICO Information Centre on HPV and Cancer, 2016

high and the figure was much higher than the set MDG target of 174 deaths per 100,000 live births.

The trend in top causes of maternal deaths in the country as reported through the national Health Management Information System (HMIS) from 2012 to 2016 has been illustrated in Figure 4. It revealed that **haemorrhage** has been the main cause of death, declining from 32% in 2012 to 24% in 2015 but increased to a peak of 34% in 2016. The **hypertensive disease** of pregnancy or eclampsia accounted for 14% in 2012, declined to 7% in 2013 but increased to 13% in 2014 and 16% in 2016. **Infections** accounted for 15% in 2012, increased to 18% in 2013, peaked at 20% in 2015 and then declined to 14% in 2016.

AIDS related conditions accounted for 15% of maternal deaths in 2012 and increased to 17% in 2013. However, it has declined gradually to account for 11% of maternal deaths in 2016. It is noteworthy that **malaria in pregnancy** was the fourth most common cause of death in 2013 (9% of maternal deaths) and accounted for 12% of maternal deaths in 2013 and 2014, respectively.

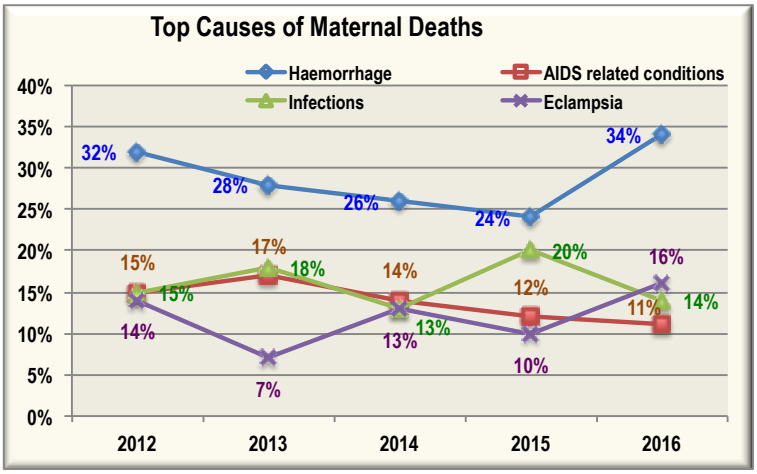


Figure 4: Trend in the Top Causes of Maternal Deaths 2012-2016

Source: HMIS

Gender based violence constitutes a crosscutting factor that significantly influences maternal and neonatal health. The ZDHS 2015 reported more than one-third (35%) of women age 15 – 49 years experienced physical violence since the age of 15 years and 15% had experienced physical violence with the 12 months preceding the survey. More specifically, 6% of the women who had ever been pregnant experienced violence during one or more of their pregnancies. This has great implications for maternal as well as neonatal morbidity and mortality.

3.2.2: Coverage of the Interventions to Reduce Maternal Morbidity and Mortality

The key interventions for reduction of maternal morbidity and mortality in the country shall be delivered through the following:

i) **Antenatal care** with focus on quality delivery of recommended package of interventions:

The ZDHS 2015 reported high coverage of antenatal care, with 93% having received care at least once during the pregnancy but the proportion that made at least four visits declined to 76%. According to the World Health Organisation, antenatal care models with a minimum of eight contacts are recommended to reduce perinatal mortality and improve

women's experience of care[7]. It requires beginning antenatal care early in the pregnancy but only 39% of the women reported making first ANC visit during the first trimester.

Out of all the women who attended ANC, 98% had a blood sample taken for examination, 97% had their blood pressure measured, and 68% had the urine sample taken for examination. Of those who had given birth, 83% took iron for prophylaxis and only 3% took medicines for intestinal parasites. Overall, 54% of the births were protected against neonatal tetanus, highest in Mashonaland West province (67%) and lowest in Harare (45%).

ii) **Clean and safe delivery** addressing the major drivers of maternal mortality (access to skilled care at delivery):

Skilled attendance in a well-equipped setting is necessary for appropriate care at delivery and ZDHS 2015 reported 78% of mothers delivered under skilled providers, 77% within a health facility setting and 20% at the home setting. Delivery under skilled providers was highest in Bulawayo province (95%) and lowest in Mashonaland West (67%), while Manicaland had the highest reported deliveries by traditional birth attendants (18%).

iii) **Emergency obstetric care**, including management of pre-eclampsia and eclampsia, haemorrhage and sepsis:

Caesarean sections can reduce maternal and neonatal mortality and the complications of childbirth such as obstetric fistulae though its use without medical indication can put women at risk of complications. The ZDHS 2015 reported 5% of births delivered by caesarean section, highest in Bulawayo province (15%) and lowest in Mashonaland Central (2%).

iv) **Postnatal Care** with focus on major drivers of maternal mortality:

National guidelines recommend postnatal health check on day 1, day 3 and day 7 within the first week of delivery. The ZDHS 2015 reported 57% of women received postnatal care within 2 days after delivery though overall 68% of the women received postnatal care. Highest proportion who received timely postnatal care was in Matabeleland South (82%) and lowest in Masvingo (44%). Approximately one-third of the women (32%) did not have any postnatal check at all, highest in Manicaland province (49%) and lowest in Bulawayo (11%).

v) **Prevention of mother-to-child transmission of HIV** (management of HIV and AIDS as an indirect cause of maternal mortality):

The programme adopted the provider-initiated HIV testing and counselling as well as the option B+ that provides life-long treatment for the mother and prophylaxis dose to the child. As of December 2014, 1,485 health facilities out of 1,560 that provide MNCH services (95%) were offering the Option B+ package. The overall PMTCT uptake of ARVs

[7] World Health Organisation, 2016. *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*

increased from 82% in 2013 to 84% in 2015. Male partner involvement in PMTCT increased from 10% in 2011 to 23% in 2015.

vi) **Malaria in Pregnancy** with focus on high prevalence provinces of Manicaland, Mashonaland East and Mashonaland Central:

Malaria transmission is seasonal (November to May) with most of the burden (83%) in 3 eastern provinces of Manicaland, Mashonaland East and Mashonaland Central. Manicaland is responsible for approximately half of all malaria cases in the country as well as one-third of all malaria deaths. The draft Malaria Indicator Survey Report 2016 revealed that 36% of women age 15 – 49 years, and 24% of pregnant women slept under Long Lasting Insecticide-treated Nets (LLIN). In addition, 37% of pregnant women had received at least two doses of Intermittent Preventive Therapy in pregnancy (IPTp).

3.2.3: Neonatal Mortality and Main Causes

According to ZDHS 2015, the Neonatal Mortality Rate (NMR) measured in deaths per 1,000 live births, increased from 24 in in 2005-06 to a peak of 31 in 2010-11 and then declined slightly to 29 in 2015. It is noteworthy that unlike the Infant Mortality Rate, the NMR did not have a consistent decline over that period. In terms of provincial variation, the NMR was highest in Mashonaland West (46 deaths per 1,000 live births) and lowest in Matabeleland South (16 deaths per 1,000 live births).

Figure 5 illustrates the main causes of neonatal deaths in Zimbabwe based on the Child Health Epidemiology Reference Group of the World Health Organisation (WHO/CHERG) report of 2015. The highest proportion died due to prematurity (34%), birth asphyxia and birth trauma (29%), followed by sepsis and other infectious conditions, including pneumonia (21%). The report of MOHCC pilot project on Newborn Care Corners documented the main causes of neonatal death as prematurity (44%), asphyxia (41%), and infection (11%).

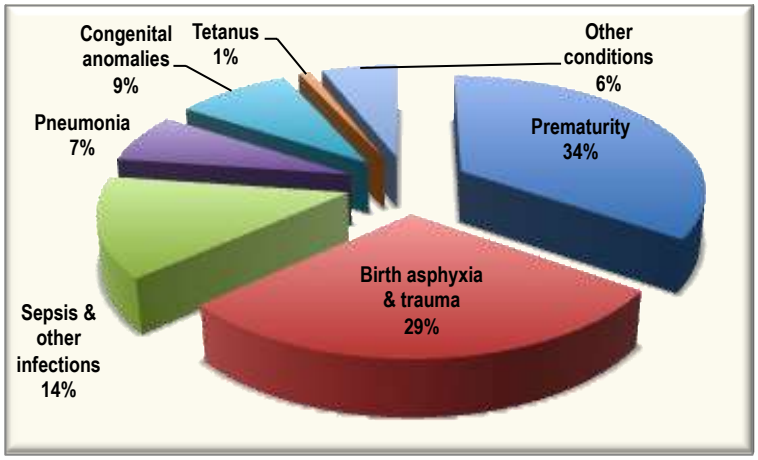


Figure 5: The Main Causes of Neonatal Death in Zimbabwe
Source: CHERG/WHO/UNICEF, 2015

According to DHIS2 there were in total of 6,447 stillbirths in 2016, of which 2,444 (38%) were fresh stillbirths and 4,003 (62%) macerated stillbirths. However, it is possible that macerated stillbirths were over-reported to avoid the explanations required when a fresh stillbirth occurs. There were wide differences between provinces and central hospitals in the still birth rate per 1,000 deliveries, ranging from 5 per 1,000 in Bulawayo and Harare province to 48 per 1,000 for Harare Central Hospitals.

3.2.4: Coverage of Interventions to Reduce Neonatal Morbidity and Mortality

The high impact, low-cost interventions recommended by the World Health Organisation to address deaths in the first 28 days of life revolve around the following areas:

i) **Essential Care for Every Baby** (ECEB) at the time of birth:

Includes all the basic interventions that all neonates are entitled to such as delivery by a skilled birth attendant, clean birth practices, emergency newborn care, newborn resuscitation, immediate care for the newborn baby, and breastfeeding initiation and support within the first hour after birth.

Postnatal care services for the newborn should start as soon as possible after the child is born with timing similar to the mother, on day 1, day 3 and day 7 within first week after birth. According to the ZDHS, 73% of children in 2015 received postnatal health check within the first 2 days after birth. Timely postnatal check up was highest in Matabeleland South (87%) and lowest in Manicaland (60%). The proportion of children who did not receive any postnatal care was highest in Manicaland (33%), and lowest in Bulawayo (8%).

The ZDHZ 2015 explored six signal functions that were performed during the postnatal care within 2 days of birth: umbilical cord examined, temperature measured, counselling on danger signs, breastfeeding counselling, breastfeeding observation and weight measured. Overall, 48% of births had all the 6 signal functions performed during the first 2 days after birth. In terms of provincial variation, all the 6 signal functions were performed most in Matabeleland South (73%) and least in Mashonaland West (25%).

ii) **Care for the premature babies** or the babies who were born too soon:

To facilitate delivery of services, equipment for baby resuscitation and warmers were procured and distributed to 12 district hospitals. Additional equipment was procured to cover 41 health facilities in 2014, which was distributed to district and mission hospitals. In addition, there was procurement and distribution of kits (equipment, supplies, medicines and consumables) to the 20 districts; and 5,000 penguin suction bulbs. In addition, 119 health workers had undergone the Trainer of Trainers' course on Helping Babies Survive (HBS) strategy.

iii) **Care for small newborn babies**:

There has been development and production of 400 Kangaroo Care Facilitator and 4,000 Participant Training manuals. Kangaroo Mother Care equipment and supplies were procured to cater for the 20 pilot district hospitals. As of December 2016, 120 midwives and nurses based at the district hospitals had been trained in Kangaroo Mother Care. The post-training follow up has also been conducted in all the 20 starter districts.

iv) **Care for sick newborn babies**:

Includes the management of neonatal sepsis, addressing neonatal jaundice and preventing brain damage after birth-related oxygen deprivation. A key challenge in scaling up the

interventions is posed by lack of a clear policy for use of antibiotics by the community-based service providers.

3.3: CHILD HEALTH

3.3.1: Under-Five Mortality and the Main Causes

The ZDHS 2015 reported Under-five Mortality Rate (U5MR) of 82 deaths per 1,000 live births in 2005-06, which increased to a peak of 84 deaths per 1,000 live births in 2010-11, and then declined to 69 deaths per 1,000 live births in 2015. The trend in Infant Mortality Rate (IMR) revealed a consistent pattern of decline from 60 deaths per 1,000 live births in 2005-06 to 57 in 2010-11 and 50 per 1,000 live births in 2015. Closer analysis showed that the Post-Neonatal Mortality Rate followed a similar pattern of consistent decline, from 36, to 26 and 21, respectively. It was only the Neonatal Mortality Rate that increased from 24 deaths per 1,000 live births, to 31 deaths per 1,000 live births and then only declined slightly to 29 deaths per 1,000 live births in 2015.

The UNICEF Trends in Child Mortality Report 2015 stated that one-third of deaths occurred among children 0 – 1 month of age, followed by another third among those aged 1 – 11 months, leaving the remaining third among those aged 12 – 59 months. In other words, infants alone accounted for 67 percent of all deaths among the under-five children in Zimbabwe. At the provincial level, U5MR was lowest in Bulawayo (48 deaths per 1,000 live births) and highest in Mashonaland Central (91 deaths per 1,000 live births). The other provinces with U5MR higher than the nation average were Masvingo, Matabeleland South, Midlands and Harare.

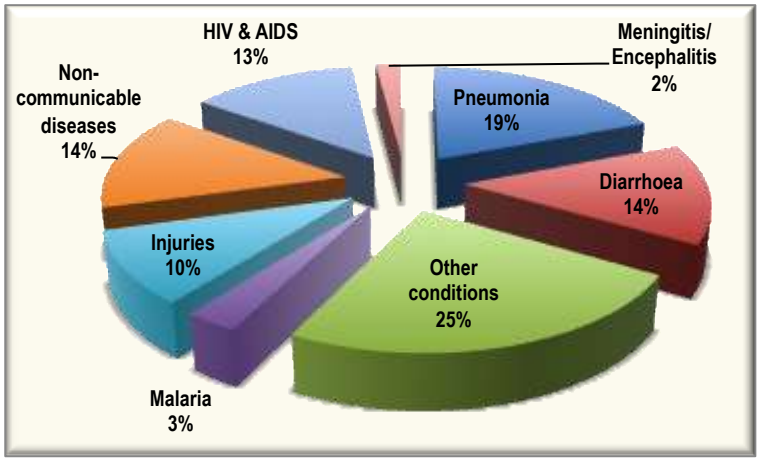


Figure 6: Main Causes of Death among Children Age 1-59 Months
(Source: CHERG/WHO/UNICEF, 2015)

As illustrated in Figure 6, the main direct causes of death among children age 1 – 59 months included **pneumonia**, **diarrhoea**, **HIV and AIDS.** Other important causes of death are the non-communicable diseases and injuries.

3.3.2: Coverage of Interventions to Reduce Under-5 Morbidity and Mortality

The high impact interventions for reduction of under-five morbidity and deaths include:

i) **Immunisation** (Expanded Programme on Immunisation)

Immunisation of children against the vaccine preventable diseases is among the high impact interventions to prevent child morbidity and mortality. The child in Zimbabwe is fully immunized after receiving a single dose of the BCG vaccine, two doses of Rotavirus vaccine, 3 doses each of the Pentavalent (DPT+HepB+Hib), oral Polio and Pneumococcal conjugate vaccines; and one dose of the Measles & Rubella vaccine.

The ZDHS 2015 reported increased immunisation coverage from 53% in 2006-06 to 76% in 2015 whilst the proportion of unvaccinated children declined from 21% to 10% during the same period. There was a wide variation in immunization coverage ranging from the lowest of 62% in Masvingo to the highest of 91% in Matabeleland North province. More specifically, the coverage of rotavirus 1 and 2 remained low at 55% and 50% respectively, despite the finding that diarrhoea is the second most common cause of death in the post-neonatal period in Zimbabwe.

ii) Integrated Management of Neonatal and Childhood Illness (IMNCI)

Of the 4% of children who had signs and symptoms of respiratory disease in the 2 weeks preceding the ZDHS 2015, approximately half (51%) sought care. Out of the 17% who had diarrhoea, only 39% sought care whilst of the 14% who had fever, 45% sought care. Children with diarrhoea who were taken to a health facility or provider for treatment or advice was highest in Matabeleland North (62 %) and lowest in Midlands (27%).

The same report stated that 78% of children with diarrhoea received some form of ORT, 59% were given increased fluids, 48% were given Ready-made Home Fluids, and 41% were given fluid from ORS sachets, the use of which has almost doubled from 21% in 2010-11. Only one-fifth of the children were given zinc supplements, and 7% received antibiotics. It is noteworthy that one in five children with diarrhoea did not receive any treatment and the proportion has remained constant since 2010-11.

iii) Emergency Triage Assessment and Treatment of sick children (ETAT)

Aimed at giving health professionals and allied staff appropriate knowledge, skills and attributes in providing health care for sick children in resource scarce settings, with a focus on the hospital setting. Training has been designed to introduce most up to date approaches to providing high quality care and improved safety *using available resources.* As of December 2016, the national Training of Trainers (TOT) had been conducted and training had taken place in 4 provinces of Harare, Manicaland, Mashonaland East and Matabeleland South.

iv) Early Infant HIV Diagnosis, Paediatric HIV Care and Antiretroviral Treatment

Nevirapine prophylaxis for reduction of mother-to-child transmission of HIV was provided to 75% of exposed infants in 2015, which reflected a decline from 88% in 2014. Cotrimoxazole prophylaxis against Pnemocystis Jiroveci Pneumonia and bacterial infections was initiated to 60% of infants at six weeks of age in 2015, which was an increase from 52% in 2014.

There were 1,485 health facilities that collected the dried blood spot (DBS) samples for early diagnosis of HIV among exposed infants (95% of all the MNCH facilities) by December

2014 that reflected progressive increase in number from 379 health facilities in 2010 to 1,442 facilities in 2013. The coverage for early infant diagnosis of HIV (EID) at 6 weeks of age among those exposed was estimated at only 45%. The key challenge identified was the weak integration of EID within the MNCH platform that resulted in missed opportunities for identification of the exposed infants. Linkage of exposed infants to the tuberculosis services was also identified to be weak due to the same challenge.

Analysis of the trend in number of children under the age of 14 years, who were initiated on antiretroviral treatment revealed a consistent increase from 20,166 in 2010 to 55,061 in 2014, an achievement that was made more sustainable in 2013 by adoption of the recommendation to initiate all HIV positive children less than age of 5 on ART.

v) Water and Sanitation Hygiene

According to ZDHS 2015, access to an improved source of drinking water was 97% in urban households and 69% in rural households. Among households using piped water or water from a tube well or borehole, 72 % had water available to them without an interruption of at least 1 day. ▫Most households (86%) did not treat their drinking water: 80% among urban households and 88 % among rural households. In Zimbabwe 6% of households boiled their water, and 8% used bleach or chlorine. Nevertheless, overall 14% of households were using an appropriate treatment method, 19% in urban areas and 11% in rural areas.

An improved sanitation facility was used by 37% of the households, while 23% did not use any toilet facility. The rural households were more likely to have an unimproved toilet facility or have no toilet at all when compared with urban households (48% and 5 %, respectively). Diarrhoea was slightly more prevalent among children whose households did not have an improved source of drinking water (18%) compared with children from households that did (16%). Similarly, diarrhoea was more prevalent among children whose households did not have an improved toilet facility (17 %) or who shared a facility with other households (20%), compared with households with an improved, unshared toilet facility (14%). The prevalence was highest in Mashonaland West (23%) and lowest in Matabeleland South (9%).

3.4: ADOLESCENT SEXUAL & REPRODUCTIVE HEALTH

The key challenges facing adolescents and young people in Zimbabwe revolve around high rates of unplanned pregnancies, early marriages and childbearing with the accompanying high maternal mortality, the high prevalence of HIV, and gender based violence. The major drivers have been identified as i) poverty ii) lack of access to information on ASRH iii) inadequate relevant service delivery and iv) inadequate policy, regulatory framework.

3.4.1: Early Marriage and Childbearing

Childbearing at an early age greatly disempowers women, reduces women's educational and employment opportunities and is associated with higher levels of fertility and mortality. It is particularly affects adolescents living in the rural areas and those from poor backgrounds. The 2014 Multiple Indicator Cluster Survey (MICS 2014) reported one in

every four adolescent girls age 15 – 19 years (25%) were married or in union by age 18, compared to 2% of males from the same age group.

The ZDHS 2015 reported 22% of the 15-19 year females had started child bearing, with 17% having given birth to their first baby and 5% pregnant with their first baby at the time of the survey. Teenage childbearing had only declined slightly from 19% in 2010-11 to 17% in 2015. Teenagers in rural areas were almost three times as likely as their urban peers to begin childbearing: 27% compared to 10%. The provincial variation was from lowest of 10% in Harare to 31% in Mashonaland Central.

The ZDHS 2015 showed that the Age-Specific Fertility Rate of young women age 15 – 19 years measured in births per 1,000 women, increased from 114 in 2005-06, to 118 in 2010-11, which was followed by a decline to 112 in 2015. This has implications on maternal mortality and the MICS 2014 reported maternal deaths to account for 24% of all female deaths in this age group, while the ZDHS 2015 reported 20.2%.

3.4.2: STIs, HIV and AIDS

Among the sexually active young people age 15 – 24 years, ZDHS 2015 reported 9.2% of the females and 11.1% of the males had either Sexually Transmitted Infection (STI), bad smelling or abnormal discharge. The self-reporting was higher among the younger females age 15 – 19 years (10.3%) than in the older age group of 20 – 24 years (8.7%).

HIV continues to be a major health problem for adolescents and young people in Zimbabwe. The ZDHS 2015 reported only 41% of males and females of age 15-19 years had comprehensive knowledge of HIV, which was much lower among the younger sub-group of 15 – 17 years (37%) than the 18 – 19 years (49%). Male circumcision among those of age 15 – 19 years as a strategy for HIV prevention increased from 5% in in 2010-11 to 23% in 2015. Condom use during sexual intercourse with a non-marital, non-cohabiting partner was reported by 79% of the young men age 15 – 19 compared to 47% of females of the same age.

The HIV prevalence among the younger adolescents of age 10 – 14 years was 2.7%, slightly higher among the females (2.9%) than the male peers (2.5%). Among the older adolescents of age 15 – 19 years, prevalence was 3.2%, with females higher at 4% and the male peers at 2.5%. The preliminary findings of Zimbabwe Population-based HIV Impact Assessment (ZIMPHIA 2015-2016) reported an even more prominent gender disparity among the 20 – 24 year olds with three times higher prevalence among the females (8.5%) compared to the males (2.7%).

The *"All IN: Country Assessment to Strengthen Adolescent Component of National HIV Program in Zimbabwe (2015)"* report showed that half of adolescents in need of ART were not on treatment, which has implications on morbidity and mortality.

3.4.3: Gender Based Violence

Gender Based Violence is unacceptably high and remains a serious concern as well as impediment to the active participation in development by girls and women. The National

Baseline Survey on Life Experiences of Adolescents (NBSLEA 2011) highlighted the scale of violence against adolescents and the various forms of violence they experience: sexual, physical and emotional abuse. It revealed that 2.2 % of males and 13.9 % of females age 18 – 24 years had experienced physical and sexual violence. Approximately 33% of females age 18-24 years indicated they had experienced some form of sexual violence before reaching the age of 18 years, while 9% of the males reported the same.

Zimbabwe has developed a National Gender Based Violence Strategy, based on the key pillars of GBV programming, namely: leadership, prevention, service provision, coordination, research and documentation and Standard Operating Procedures for Safe Shelters (2012). The policy framework has been strengthened but the implementation has remained weak.

The priority interventions for adolescents and young people under this Strategy include:

i) Increasing safe sexual and reproductive health and HIV practices among adolescents and young people through improving their knowledge and life skills;

ii) Strengthening quality of youth friendly integrated SRH and HIV services;

iii) Strengthening protective environment for adolescents and young people through enforcement of a legal and institutional framework that protects adolescents and improving parent to child communication.

3.4.4: School Health Programme

The school health programme targets the primary and secondary schools provides one of the best platforms for health promotion interventions. Among the key benefits is the opportunity to target children between age 6 – 9 years, who have outgrown the period of childhood illnesses and tend to be relatively more healthy; and the adolescents age 10 – 19 years. Effective school health programmes influence the knowledge, attitudes and practices at an earlier age so that by the time children grow into adults, they are in better position to make informed decisions in relation to adopting healthy lifestyles. It also provides the opportunity to prevent illnesses through interventions such as vaccinations, to screen for illnesses such as malnutrition, and to appropriately treat the identified conditions. In addition to the direct benefits to the children, school health programmes can have indirect benefits at the family level through the "child-to-parent" education where the children influence the knowledge as well as practices of their parents at home.

The draft School Health Policy has been developed by the Health Promotion department in close collaboration with the Education sector, to provide the framework for revitalising the school health programmes. The RMNCAH&N Strategy will reap the direct as well as indirect benefits from an effective school health programme, and shall be complementary and synergistic. Consequently, the strategic linkages shall be maintained with the school health programmes during the planning and implementation of interventions under this Strategy.

3.5: NUTRITION

3.5.1: Integrated Infant and Young Child Feeding

Optimal infant and young child feeding (IYCF) during the first 2 years of life is closely linked to reduced morbidity and mortality, with the following as recommended practices: early initiation of breastfeeding within 1 hour of birth; exclusive breastfeeding for the first 6 months of life; introduction of nutritionally adequate, safe, complementary foods (solid and semisolid) at 6 months; and gradual increases in the amount of food given and frequency of feeding as the child gets older together with continued breastfeeding through age 2 years. It is also important to provide a diverse diet, from different food groups to take care of the growing micronutrient needs.

The ZDHS 2015 reported 58% of the children were breastfed within one hour of birth and 93% started breastfeeding within the first day of life. Pre-lacteal feeding is not recommended but overall, 13% of the neonates were given. Initiation of breastfeeding within one hour of birth was higher among children born at the health facility (61%) than those born at home (44%). Matabeleland South province had the highest proportion of children breastfed within 1 hour (81%) and Manicaland the lowest (43%). Overall, 48% of the children below the age of 6 months were exclusively breastfed and by age of 4 to 5 months, only 20% were benefiting from exclusive breastfeeding.

The World Health Organisation minimum acceptable diet recommendation is a combination of dietary diversity and minimum meal frequency. Whereas 28% of the children age 6 – 23 months had an adequately diverse diet and 35% had been fed the minimum number of times, only 8% met the standards for minimum acceptable diet.

3.5.2: Micronutrient Deficiencies

Anaemia is a condition marked by low levels of haemoglobin in the blood and iron deficiency is estimated to be responsible for causing the condition in half of the cases. The ZDHS 2015 reported 37% as prevalence of anaemia in children age 6 – 59 months, which reflected a marked decline from 56% in 2010-11. The prevalence of anaemia was lowest in Masvingo province (29%) and highest in Harare (42%). Overall, 46% of children age 6 – 23 months consumed iron-rich foods in the day or night preceding the survey.

Vitamin A is vital for enhancing vision, promoting growth and boosting the immunity in children. Supplementation of vitamin A for the under-five children is among the high impact and effective interventions in Zimbabwe. Vitamin A rich food was reportedly consumed by 72% of the children age 6 – 23 months on the day or night preceding the survey. The proportion of children age 6 – 59 months who received vitamin A supplementation increased only slightly from 66% in 2010-11 to 67% in 2015.

Among women age 15 – 49 years, 27% was anaemic, with 20% in the category of mild anaemia, 6% moderate and 1% severe anaemia. The prevalence of anaemia was highest in Matabeleland South province (43%) and lowest in Manicaland and Mashonaland East (each with 22%). Supplementation of iron and folic acid during pregnancy was reported by 83%

of the women though only 40% took for the recommended minimum of 90 days, while 17% did not take any iron supplements at all. Mashonaland Central (55%) registered the highest proportion of women who took supplements for at least 90 days and Harare the lowest (19%).

3.5.3: Childhood Malnutrition

Stunting or low height-for-age, is a sign of chronic under nutrition that reflects failure to receive adequate nutrition over a long period. As illustrated in Figure 7, prevalence of stunting declined from 35% in 2005-06 to 27% in 2015, is higher in rural areas, and also among boys (30%) than girls (24%). Provincial variation showed Matabeleland South registering the highest (31%) and Bulawayo the lowest prevalence (19%).

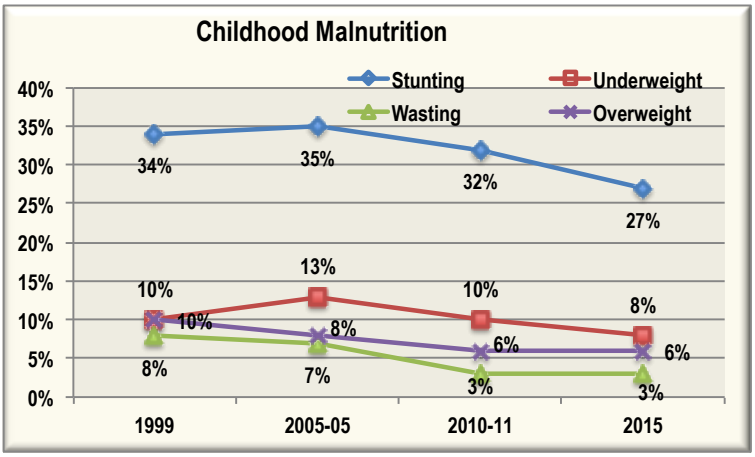


Figure 7: Trend in Malnutrition among U5 Children from 1999 to 2015
Source: ZDHS 2015

Wasting or low weight-for-height, is a measure of acute under nutrition that reflects failure to receive adequate nutrition in the period immediately before the survey. As illustrated in Figure 5, the prevalence declined from 8% in 1999 to 3% in 2010-11, a level it remained in 2015.

Underweight or low weight-for-age, is a composite index that takes into account both acute and chronic under nutrition. The prevalence increased from 10% in 1999 to 13% in 2005-06 and declined to 8% in 2015.

Overweight or high weight-for-height, is a measure of over nutrition and on the opposite side of wasting. The prevalence declined from 10% in 1999 to 6% in 2010-11 and 2015. Overweight is more prevalent in the urban areas compared to the rural.

3.5.4: Adult Malnutrition

The trend in the nutritional status among adult males (2010-11 to 2015) and females (1999 to 2015) reported in the ZDHS 2015 has been presented in Figure 8. The proportion of women with underweight remained relatively constant, from 6% in 1999 increasing to 9% in 2005-06 and then declining to 6% in 2015. Matabeleland North (11%) and Matabeleland South (12%) had the highest proportion of underweight women. The prevalence of overweight and obesity on the other hand declined slightly from 27% in 1999 to 25% in 2005-06 and has increased to 35% in 2015. It increased with age, 13% among those aged 15 – 19 years and 54% among women age 40 – 49 years. Women in urban areas were more overweight 46%) than those in the rural areas (28%). Approximately half of the women in Bulawayo (46%) and Harare (48%) were overweight or obese.

The proportion of underweight males on the other hand, declined from 15% in 2010-11 to 13% in 2015 while the overweight and obese men increased from 9% to 12%. Overweight and obesity increased with age, from 1% among the males age 15 – 19 years to 24% among those age 40 – 49 years. The prevalence of overweight and obesity was also higher in the urban area (21%) compared to the rural area (7%).

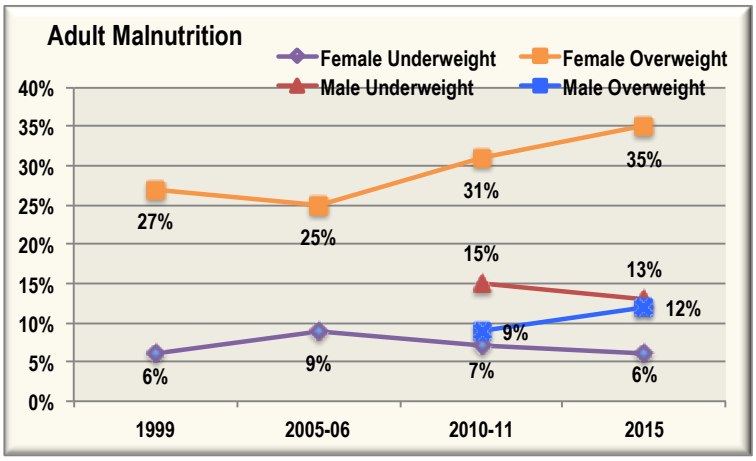


Figure 8: Trend in Malnutrition among Adult Females and Males

Source: ZDHS 2015

The prioritised interventions under nutrition include:

i) Integrated infant and young child feeding

ii) Micronutrient deficiencies among children and adults

iii) Management of childhood malnutrition

iv) Management of adult malnutrition

3.6: HEALTH PROMOTION

The 2016 baseline survey conducted by MCHIP in Manicaland revealed that 80% of women had knowledge about timing for first ANC booking in 1st trimester and virtually all were aware about importance of health facility delivery. However, the most frequent danger sign cited was vaginal bleeding/ discharge by 57% and other signs scored <10%. Whereas birth preparedness plan was considered important by the majority (97%), pre-planning for transport to a health facility was stated by only 10%; emergency funds by 26%; and need to secure an escort by only 8%.

Advocacy, social mobilization, health communication and other behaviour change communication interventions are an important component of the interventions to improve knowledge, influence attitudes and create the conducive environment for adoption of recommended health practices and skills. The interventions have to be culturally appropriate and delivered through a variety of channels such as mass media, interpersonal counselling, and women's groups. The messages should be tailored to the context and target specific groups such as women, men, girls, boys, and their families as well as advocacy with the influential leaders, and other decision-makers.

Health communication is more effective if it involves dialogue and problem solving skills and is provided through participatory or empowering approaches where the communities are actively involved in decision-making for their own health. The RMNCAH&N Strategy will focus on use of peer groups such as the women's groups, male involvement and

adolescent peer groups, as well as other community based efforts that aim at improving knowledge of danger signs and reduction in the 1st delay to access health care. There will also be raising of community awareness on health problems and encouraging dialogue and community involvement in improvement of maternal, newborn, child and adolescent health.

In terms of implementation, health promotion, advocacy, social mobilization and behaviour change communication shall be under the overall coordination of the Health Promotion Department of Ministry of Health and Child Care.

3.7: CROSS CUTTING HEALTH SYSTEMS STRENGTHENING

3.7.1: Policy, Leadership and Governance

There was high political leadership and commitment towards prioritising reproductive, maternal, newborn, child, adolescent health, and nutrition interventions as evidenced by the international and regional level agenda that government had been signatory to. At the national level relevant policies, guidelines and strategies were articulated and put in place to provide the appropriate environment for maternal, neonatal, child and adolescent health. The policy frameworks cover important topics including expanded coverage of IMNCI to the newborns 0 – 7 days old. The key gaps identified included the following:

- Existing policies and guidelines not sufficiently implemented partly due to inadequate trained personnel, limited funds and other resources;
- Despite the well-defined decentralised system for health services, critical decision-making still tended to take place at the central MOHCC level resulting in lower impact at the service delivery level.

3.7.2: Health Financing

The preliminary results of the National Health Accounts 2015 showed that health expenditure was 10.32% of GDP in 2015, at $95.38 per capita. However, it is worrisome that Out-of-Pocket (OOP) expenditure by households was 25.79% of Total Health Expenditure (THE). A total of 7.6% of households suffered Catastrophic Health Expenditure (CHE) of which 13.4% were poor households and 2.8% were from the richest households. This scenario presented a financial burden and barrier to accessing health services including for maternal, neonatal, child and adolescent health. The preliminary results also showed an undesirable skew in expenditure towards curative care at 61% of THE, whilst spending on prevention was 10.93% of THE.

Financial protection when accessing health services remained low, especially for the low-income groups. Access to health services remained primarily dependent upon highly regressive OOP payments. As a principle, Government introduced user fee exemptions in public facilities for selected services, including for pregnant and lactating women, children under the age of 5 years and elderly persons above 70 years of age.

Nevertheless, facilities had not received the needed budgetary support, which resulted in various challenges such as informal charges, and drug stock outs. Recent efforts, such as the introduction of Results Based Financing (RBF) mechanism for essential services, increased access to services in the selected districts included in the pilot phase. However, none of these efforts has been scaled nationally with RBF schemes only covering a limited range of selected interventions. In addition, RBF schemes are still largely donor dependent.

The MOHCC is at an advanced stage of formulating of a Health Financing Policy based on solidarity and that will prioritize prepayment, risk pooling, cross-subsidization and efficient strategic purchasing of services.

The Health Development Fund (HDF) supported the interventions in all rural districts in the country with focus on four thematic areas, namely:

i. Maternal, child and newborn health and nutrition;
ii. Medical products, vaccines and technologies (medicines and commodities);
iii. Human resource for health (health worker management, training and retention scheme);
iv. Health policy, planning and finance (Health Service Fund Scheme and Research).

The main objective was to cover the running and maintenance costs of the health facilities to enable provision of basic health services free of charge to pregnant women and children under five years of age. As a result of the funding, about 94% of primary care facilities were able to abolish user fees. Some of the challenges highlighted include:

- Huge financial gap that the health sector is facing to fully implement at the central, provincial and district hospital levels since the HTF-RBF support is currently limited to the primary health centres and clinics;
- Questionable sustainability of programs due to predominant support through donor funds;
- Continued charging of user-fees at the health facilities for MNCH contrary to the existing government policy;
- Maternal care services are free at the primary care facilities but clients are expected to pay when referred to the secondary and tertiary levels of care.

3.7.3: RMNCAH&N Services Delivery

A very high level of availability for maternity services was documented by the Vital Medicines Availability and Health Services (VMAHS) Quarter 4, 2016 Report[8] which revealed 97.6% of the 1,423 health facilities surveyed provided ANC, delivery and postnatal care services. The full maternity services (ANC, delivery and PNC services inclusively) were

[8] Health Development Fund: Vital Medicines Availability & Health Service Survey Quarter4, 2016 (Oct – Dec)

available at all the secondary level facilities, 24 hours per day and 94% of the primary health care facilities.

Basic emergency obstetric and newborn care (BEmONC) services were being offered at 97.5% of the health facilities, with administration of uterotonic drugs most available (98.4%) but less available were the manual removal of the placenta (74.4%) and removal of retained products (27.2%). However, only 23.6% of the health facilities concurrently offered all the six signal functions of BEmONC. Comprehensive emergency obstetric and newborn care (CEmONC) was offered by 64.2% of the CEmONC sites, and 71.4% of the district hospitals with the main challenge being related to provision of blood transfusion. The proportion of district hospitals performing caesarean section increased from 88.5% in Quarter 3 to 94.1% in Quarter 4 of 2016.

In relation to the capacity for delivery of services on integrated management of neonatal and childhood illness (IMNCI), including HIV and severe acute malnutrition, 89.8% of the health facilities had at least one trained staff member. The proportion of secondary health facilities with trained staff was higher than the primary health care facilities. Initiation of paediatric antiretroviral treatment was being done at 96.6% of the health facilities. In addition, 97.2% of the health facilities had trained staff to collect dry blood spot samples for diagnosis of HIV among the exposed infants. There was at least one trained staff to manage severe acute malnutrition at 82.5% of the hospitals and 74.2% of the primary health care facilities. In addition, 72.9% of the health facilities had at least one trained staff in infant and young child feeding. Some of the challenges highlighted include:

- Approximately 7.4% (106) health facilities were charging user fees for ANC services and 4.1% (53) charged user fees for full maternity services, which could be a deterrent to service utilisation. For instance, 22 secondary and higher level facilities were charging for full maternity services and 13 for antenatal care. Most of the primary health care facilities charging for ANC (61.5%) were in the urban areas;
- Approximately 35.1% of the health facilities were charging for child health services, though it represented a decline from 38.4% in the previous quarter. The user fees were more common at the secondary and higher health facilities (83.3%) than at the primary health care facilities (30.9%); and at urban (81.9%) that at the rural health facilities (28.2%);
- The quality of services still had significant room for improvement e.g. anaesthesia, partly attributed to inadequacy of the quality of care improvement programme;
- Services were still designed along the programmes as opposed to being “client-centred” and based upon the “supermarket” approach.
- Coverage of various interventions remained inadequate within the low-income groups in Zimbabwe, for instance the 2014 Equity Watch report indicated high differentials in health outcomes associated with socio-economic disparities in equity. Disparities were also noted between geographical locations with rural households having worse indicators than urban households, as well as variances between provinces.

3.7.4: Human Workforce

The VMAHS Quarter 4, 2016 Report indicated that a total of 14,614 nurses were in post at the time of the survey compared to 14,989 in Quarter3, 2016. There were more Registered General Nurses compared to the Primary Care Nurses (PCNs) and the State Certified Nurses (SCN), in all levels of the health care delivery system. In total, 1,352 doctors were in the hospitals, mostly at the central hospitals followed by the district hospitals, with 80.4% of district hospitals having at least 3 doctors in post. Furthermore, 96.3% of the health facilities had at least one midwife or PCN to provide BEmONC services; and 97.8% with at least one trained health worker in PMTCT.

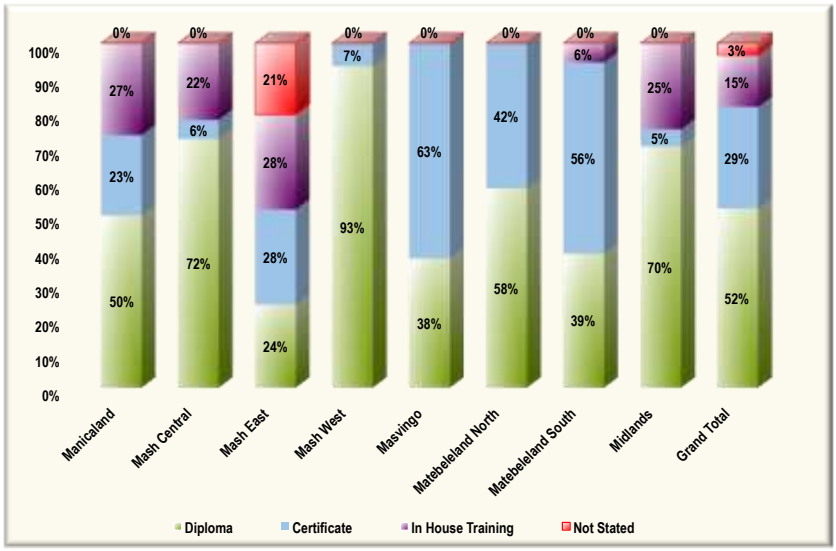


Figure 9: Provincial Variation of Nurse Anaesthetists by Qualification
(Source: ARK Report)

Up to one-quarter of the deaths resulting from obstructed labour, haemorrhage and infection could be avoided if safe surgery and anaesthesia were universally available. An analysis conducted revealed that in the 8 rural provinces 242 Nurse Anaesthetists were required to provide services but only 90 were available leaving a gap of 152. The qualification of Nurse Anaesthetists by province has been summarised in Figure 9 and shows that those at diploma level range from 93% in Mashonaland West to only 24% in Mashonaland East.

As of December 2016, in total 31 Clinical Officers with capacity to provide obstetric services including conducting caesarean sections, had been trained and deployed to 54% of the rural districts and 20 were in training. In relation to availability of health professionals to conduct caesarean section, the VMAHS Quarter 4 report stated that 89.3% of the district hospitals had either a doctor or clinical officer with the capacity. In addition, only about half (51.8%) of the district hospitals performing caesarean section had at least 2 health professionals providing anaesthesia for emergency obstetric surgery.

The Guidelines for conducting on-the-job training of service providers in RMNCAH services have been developed and will address the challenge of workshop-based training that was quite costly and considered predominantly theoretical. Some of the challenges highlighted in relation to human resources for health included:

- The midwives not being fully authorised to administer the core set of life-saving interventions such as administration of antenatal corticosteroids although they are authorised to perform neonatal resuscitation and administer antibiotics.;

- Inadequate capacity for provision of essential obstetric and neonatal care especially in rural provinces due to shortage of General Medical Officers, Clinical Officers and Nurse Anaesthetists
- Shortage of midwives, which limits the capacity for provision of quality MNCH services;
- Pre-service training for nurses lacking in competence for emergency obstetric and neonatal care, which results in a critical skills gap in the delivery of quality MNCH services;
- Poor staff motivation due to low salaries and poor working conditions;
- Weak enforcement of transparency and accountability measures due to bureaucratic processes.

3.7.5: Access to Medicines, Commodities and Technologies

Reliable access to quality medicines, commodities and technologies constitute a key cornerstone for delivery of quality RMMNCAH&N services and hence an important contributor towards reduction of morbidity and mortality. The VMAHS routinely tracked availability of 25 essential medicines and commodities but during Quarter 4 increased to 30. Overall, availability of at least 80% of the medicines was 92.8% during the quarter, almost all health facilities had at least 50% of the medicines and commodities tracked and no facility was completely stocked out of the tracked medicines and commodities. The availability was slightly lower at the primary health care facilities (92.5%) than at the secondary and higher levels (95.6%). The least available medicines were hydralazine injection, calcium gluconate injection, misoprostol tablets and ampicillin.

Availability of ARVs for children was tracked using Kaletra and 73.9% of the health facilities had either the tablets or syrup in stock on day of the survey, which reflected a decline from 79.2% in Quarter 3, 2016. The survey results showed 94.1% availability of at least 70% (i.e. 6 out of 8) of the childhood vaccines tracked, slightly lower at the primary health care facilities (93.8%), that at the secondary and higher level facilities (97.4%). All the tracked antibiotics were available at 69.8% of the health facilities, higher at the primary health care facilities (78.8%) than at the secondary and higher level facilities (55.3%). Condoms (male and female) and injectables were among the family planning commodities available at more than 96% of the health facilities but less available were oral contraceptives (78.1%), implants (61.9%) and IUCDs (5.1%).

Recent assessment revealed that medicines for anaesthesia were generally available at most facilities, at least one drug in each category of anaesthetic drugs but the medicines for emergency management were incomplete at most health facilities. The equipment for anaesthesia was generally available but challenges related to their regular maintenance. It was also observed that too many brands of anaesthetic equipment were in use, which did not encourage cost effective maintenance contracts.

Some of the challenges registered for the supply chain management system:

- Recurrent stock-outs of essential drugs, vaccines and medical supplies, which was partly attributed to insufficient funding

- Lack of electronic logistics data management limits the effectiveness and efficiency of the overall supply chain management system

3.7.6: Health Information System

There is a well-structured national Health Information System (HIS) in place and reforms were recently implemented for its further improvement. Interventions were prioritised to increase communication and coordination of patients' records, patient care and referral. In addition, there was improvement in data collection processes, overall quality improvement in the HIS; and deliberate attempts at more effective use of data for feedback and decision-making. The DHIS2 was reported to be fully functional, albeit with challenges related to quality and timeliness of the reports. The RMNCH scorecard that is a management tool to track performance was introduced during the second quarter of 2014 with support from UNICEF, WHO, UNFPA and the African Leaders' Malaria Alliance (ALMA)[9]. It was subjected to pressure testing during the 2nd to 4th quarters of 2014 before undergoing a full review at beginning of 2015. The indicators were harmonised and a consensus reached on the denominators. The revised scorecards were published on a quarterly basis in 2015 and decentralisation to the provincial level was done in 2016.

The findings from a recent assessment on the availability of documents and registers in selected districts are summarised in Figure 10, categorises as "Available and adequate", "Available but inadequate" and "Not available". It revealed that the partogram and the Labour & Delivery Ward Registers were the most available while the Abortion and the Newborn Unit Registers were least available. Some of the weaknesses and potential areas for further improvement identified include:

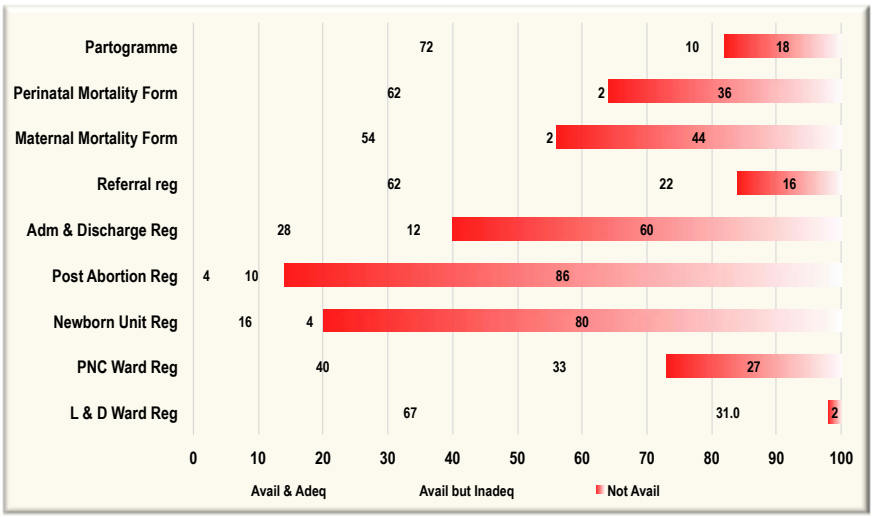


Figure 10: Availability of Documents and Registers in Selected Districts
(Source: ARK Report)

[9] The African Leaders' Malaria Alliance (ALMA) consists of the 49 heads of state of African countries with malaria control programs, with a small secretariat headed by Joy Phumaphi (ex Minister of Health Botswana), which has supported an African regional malaria scorecard since 2011. The scorecard is updated quarterly with internationally available data, is reviewed at African Union meetings or other venues (e.g. annual World Health Assembly) and is linked to pledges and follow-up on actions. In 2012 ALMA leaders requested that the scorecard include RMNCH indicators, which has continued to the present.

- Too many registers for different programmes, often with duplicated data and subjecting the health workers to unnecessary workload in filling the records;
- Record keeping at the health facility level and monitoring was generally weak, which included the complete failure to record adverse events;
- MNH programme reviews tended to focus on the coverage indicators with less attention being paid towards the quality aspects;
- Data validation and quality assurance was not being regularly undertaken for the maternal and newborn health services
- Low data reporting by providers, mainly in the private sector and inconsistent evaluation of the system;
- Limited use of the MNCH data in particular, to inform the decision making in child survival;
- The community-level indicators have not been well included in the national Health Information System.

3.7.7: Community Health System

Village Health Workers (VHWs) are volunteers usually selected by the elders in their villages because of the respect they have earned in their communities, who play an essential role in the primary health care system in the country. They are undergo a standardised training for eight weeks and are equipped through on-going trainings. They also receive VHW kits including uniforms, basic medical supplies, a bicycle and a token monetary incentive of $14 per month. A bicycle constitutes a low-cost and sustainable mode of transport for travelling up to 20 km a day to access the remote rural families. Each VHW is expected to cover a total of 100 households in communal areas. Village health workers mainly provide preventive health care through health promotion and minor curative care for treatment of minor ailments. They also conduct sessions that bring young mothers, elderly women and community leaders together to discuss a wide range of health and nutrition, hygiene and sanitation related issues such as infant feeding.

Findings from the VMAHS Quarter 4, 2016 Report showed that there were in total 15 517 VHWs in the country, which did not include those trained in fourth quarter of 2016. In terms of provincial level distribution, the highest number of VHWs was registered in Mashonaland East and Manicaland while the lowest numbers were in Matabeleland South, Masvingo and Matabeleland North. It is important to note that VHWs were predominantly deployed in the eight rural provinces in the country. The strong foundation of community literacy and education was recognised to be an important opportunity that could be utilised to improve the community health system. Some of the important weaknesses observed include the following:

- Lack of a well-defined policy framework for the engagement and remuneration of the community cadres involved in health services delivery;

- Poor supportive supervision, continuous Quality Improvement systems and coordination with the other multiple cadres and community service providers under the different programmes, with some of these cadres playing multiple roles resulting in fragmentation and duplication of efforts;

- Lack of a consistent database of village health workers, posing challenges to the provision of support and follow up:

- The village health workers were not permitted to provide some important interventions such as the life-saving antibiotics for ARI;

- Low male involvement and overall community understanding of the need for MNCH services, as well as limited awareness of availability and benefits of services;

- Lack of adequate capacity to deal with misconceptions and religious beliefs as well as cultural norms that hinder uptake of MNCH services, for instance the religious objectors.

4. The RMNCAH&N Strategic Framework

4.1: STRATEGIC VISION AND MISSION

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 preventable common childhood illnesses and are able to survive, grow and develop to their full potential thereby fulfilling their role in the socioeconomic development

Strategic Mission

- To provide high quality comprehensive and integrated reproductive, maternal, newborn, child, adolescent health, and nutrition services by scaling up proven cost effective interventions at high population coverage through family/ community, outreach and health facility level care

4.2: STRATEGIC GOAL AND OBJECTIVES

Broad Objectives

1) To increase the Modern Contraceptive Prevalence Rate to 68% by 2020
2) To reduce the maternal mortality Ratio from 651 to 300 by 2020
3) To reduce the Neonatal Mortality Rate from 29 to 20 deaths per 1,000 live births by 2020
4) To reduce the Under-five Mortality Rate from 75 to 50 deaths per 1,000 live births by 2020
5) To reduce the age-specific fertility rate for 15-19 age group from 110 per 1,000 women to 99 per 1,000 By 2020
6) To reduce mortality and morbidity due to malnutrition by 50% by 2020

Strategic Objectives

1. To create an enabling environment for provision and utilization of quality and equitable RMNCAH&N services
2. To strengthen the capacity of health systems for planning, management and service delivery of RMNCAH&N programmes
3. To increase the utilisation of quality RMNCAH&N services

4.3: MAJOR STRATEGIC APPROACHES

The strategic approaches are based on the current RMNCAH&N 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; introducing a robust, continuous quality of care improvement approaches and increasing access to quality coverage with high impact cost effective interventions in an integrated manner. Building of the human resource capacity is particularly critical.

- ***Empowering families and communities*** especially the poor, hard-to-reach and marginalized, which is essential to avoid disparities in access to services. Communities shall 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 scaling up of resource mobilization and allocation of these resources towards interventions that will lead to the intended reduction in maternal, newborn and child mortality as well as increase uptake of reproductive health, nutrition and HIV related services.

- ***Phased planning, and implementation*** that involves implementation in clear phases with timelines and benchmarks to enable re-planning for better results. The priority will be on building and strengthening existing health infrastructures, effective use of data to inform policy, planning, implementation and practice; as well as prioritization of continuous quality of care improvement and implementation at large scale.

- ***Strengthening maternal, perinatal and child death surveillance and response*** and accountability for mothers, newborn babies and children.

- ***Mobilization of resources*** from a variety of sources at local, district, provincial, national and international level, utilizing data from monitoring and evaluation to provide the strong evidence to influence donors especially. While the strategy recognizes the importance of resources, it also spells out the need for efficiency while utilising those resources.

- ***Establishing 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.

4.4: GUIDING PRINCIPLES

The Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition Strategy will be guided by the National Health Strategy (2016 – 2020), whose ultimate goal is to have a healthy population with equitable access to quality services through a strengthened health system. The guiding principles shall include:

- ***Continuum of Care:*** Availability of basic services at the community and primary care level, becoming more complex and comprehensive at the secondary level to highly specialised care services at the tertiary and quaternary levels with an effective referral network and linkages. The continuum of care is also 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. Interventions will have a synergistic effect that enable the country to harness resources for significant short-term and long-term impact on maternal, neonatal and child survival.

- ***Quality:*** Emphasis will be on the provision of quality services with particular focus on wide scale implementation of continuous quality improvement strategies for reproductive, maternal, newborn, child, adolescent health, nutrition and the HIV related services.

- ***Equity and Accessibility:*** Emphasis shall be on the provision of equitable services. Targets have been set to reduce gaps in coverage of maternal, newborn, child, adolescent health, nutrition and HIV-related interventions, as well as differences in mortality rates between the rich and poor. Mechanisms are in place to ensure services reach the poor, marginalized and hard to reach populations. Evaluation frameworks will include measurement of wealth quintiles in order to ascertain access to services and the impact of interventions across the socio-economic groups in the country.

- ***Integration:*** The interventions shall be delivered in an integrated manner to avoid duplication, improve efficiency and increase coverage levels in order to achieve the intended results. Services targeting RMNCAH&N conditions and the high-impact, low cost interventions for attaining the optimum results in maternal, neonatal, child and adolescent health will be integrated in each service delivery mode at all levels: household, community, primary health care unit and hospitals.

- ***Multi-sectoral Approach:*** Maternal, neonatal, child and adolescent health is linked to various sectors such as education, social welfare, agriculture, justice, civil society, faith based organizations, NGOs and economic development. The RMNCAH&N Strategy focuses on sustained multi-sectoral collaboration for the benefit of the mother, newborn, child and the adolescent. The multi-sectoral approach will develop new partnerships and strengthen existing ones in order to fully integrate maternal, newborn, child and adolescent health interventions at the national, provincial, district, health facility and community levels in a sustainable way.

- ***Leadership and Political will:*** The State shall 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 maternal, neonatal, child and adolescent health efforts. The demonstration of political support from the highest level will galvanise action and ensure successful efforts in advocating for maternal, newborn, child and adolescent health as a priority in government's agenda.

- ***Partnership:*** Coordination and joint programming shall involve all stakeholders including international and regional organisations committed to supporting maternal, newborn, child and adolescent health; central and local government structures, private and faith-based sectors, academia, professional organizations, civil society institutions, as well as communities. Focus will be on improving collaboration and maximizing use of the limited resources by avoiding duplication of effort and promoting synergy.

- ***Human Rights and Gender in Health:*** The right to life is a basic human right and hence mainstreaming of gender throughout the programmes and adoption of a human rights approach shall be the basis of planning and implementation under this RMNCAH&N Strategy. More specifically, women and children's rights (including the adolescents) are important human rights to be respected at all times, in order to uphold the dignity that facilitates women and child development and participation.

4.5: LOGICAL FRAMEWORK

Results	Objectives	Strategies
1. Increased MCPR 2. Reduced MMR 3. Reduced NMR 4. Reduced U5MR 5. Reduced ASFR (15-19 years) 6. Reduced morbidity and mortality due to malnutrition	1. To create an enabling environment for provision and utilization of quality and equitable RMNCAH&N services	○ Policy leverage
		○ Leadership and governance
		○ Financing for RMNCAH&N
	2. To strengthen the capacity of health systems for planning, management and service delivery of RMNCAH&N programmes	○ Services delivery
		○ Human resources for health
		○ RMNCAH&N commodity security
		○ Health management information system
		○ Community systems for RMNCAH&N
	3. To increase the utilisation of quality RMNCAH&N services	○ Delivery of RMNCAH&N Programme-specific interventions

5. Linkages with Other Strategies and Interventions

The Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy is based upon the National Health Policy and feeds logically into the Zimbabwe Agenda for Sustainable Economic Transformation (ZimAsset), through the National Health Strategy 2016 – 2020 whose theme is *"Equity and Quality in Health: Leaving No One Behind"*. The National Health Strategy provides the framework for attaining all the health and health-related goals and projects. The Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy was developed in line with other relevant national policies and strategies, including those from the related sectors.

5.1: HEALTH SYSTEMS LINKAGES

There may be negative consequences when interventions are managed along separate, vertical programme arrangements. This is particularly pertinent in the context of reproductive, maternal, neonatal, child, adolescent health, nutrition, malaria in pregnancy and HIV related interventions that by default span across different sectors as well as departments within the Ministry of Health and Child Care. Consequently, implementation of the RMNCAH&N Strategy will require strengthened, integrated health systems that support the continuum of reproductive, maternal, neonatal, child and adolescent health. It will be especially important to create operational synergies between the different programmes and services that contribute towards maternal, neonatal child and adolescent health, and to address the health system weaknesses in order to attain the set targets. The following are important linkages within the health systems building blocks.

- ***Service Delivery:*** Services, including those addressing emergencies, should be continuously available and accessible in a way that is appropriate to the target communities. This will require improvement of the service delivery platforms with added capacity to integrate maternal, neonatal, child and adolescent health services at the primary care as well as secondary levels. It will also require improvement of the referral and discharge linkages as well as coordination with other services (both within and outside the health system e.g. the **private sector** health service providers). The focus will be on promotion of the "supermarket" approach to delivery of services, which address the specific needs of the mother, neonate, child and adolescent during each visit. Inadequate care and/or a poor relationship between the client and service provider impact negatively on the continued utilization of available health services, with adverse consequences for the mothers, neonates, children and adolescents.

- ***Infrastructure, Equipment and Supplies:*** Optimal delivery of maternal, neonatal, child and adolescent health services will require the availability of basic infrastructure, medical equipment and essential commodities, including the essential medicines. The Pharmacy Department and related structures such as Natpharm, will

therefore have to build an integrated and effective supply chain to support improved service delivery for maternal, neonatal, child and adolescent health. The aim should be to ensure reliable availability of essential commodities, equipment and supplies at the service delivery point and community levels.

- ***Human Resources for Health:*** Availability of skilled and motivated front-line staff at the health facility and the community level, is essential for effective delivery of integrated reproductive, maternal, neonatal, child, adolescent health, nutrition and HIV related services. This is particularly crucial for the hard-to-reach populations and for those without easy access to health-care facilities. The Human Resource Department will ensure continuous access to appropriate integrated maternal, neonatal, child and adolescent health services by strengthening human resource capacity with adequate numbers and appropriate skills mix at the service delivery points. There will be need for accurate identification of gaps, hiring, appropriate remuneration, motivation and ensuring retention at the service delivery points, particularly in geographic and programmatic areas that are most underserved. On-the-job training and support of service providers through supervision and mentorship will be necessary to ensure that staff competence is up to date and to keep staff interested as well as motivated. It will also provide the opportunity to monitor performance and maintain quality of care.

- ***Strategic Information:*** Regular review and use of data with stakeholders at all levels is essential to foster a culture of accountability as well as to make best use of the data for timely policy and programmatic decision-making. The Monitoring and Evaluation Department will provide the linkage for strengthening the national health information management system that is efficient and responsive to the needs of maternal, neonatal, child and adolescent health. Areas for particular attention include improvement of the community monitoring systems and vital registration systems, integration of information/data into DHIS2, assessment and improvement of data quality. It will involve adoption of innovations such as mHealth and related technologies to improve the management of data.

- ***Community Health System:*** It is critical to understand and address barriers to demand for maternal, neonatal, child and adolescent health services in order to ensure that the key interventions and approaches undertaken are equitable, relevant and acceptable to the local community. The Health Promotion Department will provide the linkage to strengthen demand creation and innovative approaches to community education and social mobilisation for improved maternal, neonatal, child and adolescent health. High on the agenda will be responding to socio-cultural factors that hinder uptake and utilisation of services such as the hard-to-reach populations and the religious objectors.

5.2: LINKAGES TO OTHER RELATED NATIONAL STRATEGIES

The Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy provides the framework for operationalizing the continuum of care from the community

and primary care level, via the secondary level to tertiary, and quaternary levels with referral and discharge linkages. It also operationalizes the life cycle continuum from adolescence through pregnancy, childbirth, infancy, childhood to the pre-adolescent stage. It is based upon the following specific national strategies: Family Planning, Cervical Cancer Prevention and Control, Maternal and Neonatal Health, Child Survival, Adolescent Sexual & Reproductive Health, and Nutrition. It has direct linkages to the following programmes and the related strategies:

1) HIV and AIDS programmes and Strategic Plans
2) Malaria control programme
3) The School Health Programme
4) Water, Hygiene and Sanitation
5) The Psycho-Social Support Programme, especially within the context of gender-based violence
6) The Quality Assurance/ Quality Improvement Strategy.

5.3: LINKAGES TO THE GLOBAL AND REGIONAL STRATEGIES

At the global level, the Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy has been aligned to the following key strategies and plans:

- ***Sustainable Development Goals*** (SDGs) and the established targets
- ***Every Newborn: An Action Plan to End Preventable Deaths*** (June 2014), which sets out a clear vision of how to improve newborn health and prevent stillbirths by 2035.
- ***The Global Strategy for Women's, Children's and Adolescents' Health (2016 – 2030): Survive, Thrive, Transform***, which is the updated global strategy for the post-2015 era. Developed under the United Nations Secretary-General's "Every Woman Every Child" movement, it spans 15 years of the Sustainable Development Goals (SDGs) and provides guidance to accelerate momentum for women's, children's and adolescents' health by 2030.
- ***Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition*** (2014). Endorsed by the World Health Assembly, it aims to alleviate the double burden of malnutrition in children, starting from the earliest stages of development.
- ***Global Vaccine Action Plan 2011 – 2020***
- ***Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea by 2025***

6. The RMNCAH&N Implementation Framework

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
1. To improve the policy environment for provision and utilization of quality and equitable Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services	1.1: Improved **policy** environment for RMNCAH&N services	1.1.1: Address policies that support introduction and uptake of high impact interventions at all levels	No. of policies that support RMNCAH&N interventions	X	X			
		1.1.2: Introduce and/or enforce policies that support increased finances for RMNCAH&N services, and that protect clients from user fees.	No. of policies to support increased finances	X	X			
		1.1.3: Print and widely disseminate the relevant national RMNCAH&N policies and guidelines	No. of policies and guidelines printed	X	X			
	1.2: Improved **leadership and governance** for Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services	1.2.1: Re-structuring of ZNFPC in line with the new strategy to improve funding and strengthen the FP programme	Report of ZNFPC re-structuring	X	X			
		1.2.2: Advocacy for the revision of organisational structure of Ministry of Health and Child Care to harmonize coordination	Advocacy report on revision of structure	X	X			
		1.2.3: Leadership development for health workers at all levels, especially the health facility	No. of health workers with leadership skills	X	X	X	X	X
		1.2.4: Regular stakeholder meetings to strengthen coordination and implementation of integrated RMNCAH&N services at all levels	No. of meetings conducted	X	X	X	X	X
		1.2.5: Review and update of national RMNCAH&N guidelines, protocols and training packages	Updated protocols and packages	X	X	X	X	X
	1.3: Enhanced **health financing** for Reproductive, Maternal,	1.3.1: Advocacy for increased funding allocation from the national fiscus for RMNCAH&N services through the parliamentary portfolio committee on health	Advocacy report for increased funding	X	X			

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
	Newborn, Child, Adolescent Health and Nutrition services	1.3.2: Operationalization of the payment exemption policy for RMNCAH&N services	Functional exemption policy	X	X	X	X	X
		1.3.3: Strengthening public-private partnerships in health financing with emphasis on Domestic Resources Mobilisation	Functional PPP health financing framework	X	X	X	X	X
		1.3.4: Introduction of performance-based system that improves quality of care	Availability of PB system	X	X	X	X	X
2. To strengthen the capacity of health systems for planning and management of Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition programmes	2.1: Improved **services delivery** for Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition	2.1.1: Strengthen capacity of primary care facilities to provide the basic RMNCAH&N services	No. of functional primary facilities	X	X	X	X	X
		2.1.2: Strengthen the capacity of secondary and tertiary health facilities to provide comprehensive RMNCAH&N services	No. of functional facilities	X	X	X	X	X
		2.1.3: Strengthen transport and communication system for effective referrals of clients and patients	No. of clients & patients referred	X	X	X	X	X
		2.1.4: Engagement of the private practitioners in improving coverage and quality of RMNCAH&N services	No. of private practitioners involved	X	X	X	X	X
		2.1.5: Implementation of the continuous quality of care improvement policy/ activities for RMNCAH&N	N. of QA/ QI activities conducted	X	X	X	X	X
	2.2: Strengthened **human workforce** for Reproductive, Maternal, Newborn, Child, Adolescent	2.2.1: Training and deployment of critical health worker cadres to ensure adequate numbers and skills mix for delivery of quality RMNCAH&N services	No. of services providers deployed	X	X	X	X	X
		2.2.2: On-Job-Training (OJT), blended clinical attachments and mentorship in line with the national guidelines	No. of services providers trained	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
	Health and Nutrition services delivery	2.2.3: Review of pre-service training curricular for the health workforce, in line with requirements for provision of high quality RMNCAH&N services	Availability of pre-service updated curricula	X	X	X	X	X
		2.2.4. Production and distribution of job-aides and related materials for service providers' capacity building	No. & type of job-aides produced	X	X	X	X	X
		2.2.5: Regular support and technical supervision as well as mentorship to ensure quality implementation	No. of supervision & mentorship visits conducted	X	X	X	X	X
		2.2.6: Incentivise and retain critical staff at all levels of the health system	No. of critical staff retained	X	X	X	X	X
2. To strengthen the capacity of health systems for planning and management of Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition programmes	2.3: Improved availability of **essential medicines and commodities** for Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services delivery	2.3.1: Procurement of medicines, supplies and equipment for delivery of quality RMNCAH&N services	Medicines and commodities procured	X	X	X	X	X
		2.3.2: Distribution of medicines, supplies and equipment for delivery of quality RMNCAH&N services	Availability of medicines and commodities	X	X	X	X	X
		2.3.3: Strengthen the Logistics Management Information System for delivery of quality medicines, supplies and equipment for RMNCAH&N services	Functional LMIS for RMNCAH&N	X	X	X	X	X
		2.3.4: Financing modalities for medicines, supplies and equipment for delivery of quality RMNCAH&N services	Availability of financing modality	X	X	X	X	X
	2.4: Improved **health management information system** for Reproductive,	2.4.1: Harmonisation and standardisation of registers and related tools to ensure collection of all the key indicators for RMNCAH&N services	Availability of standardised tools	X	X	X	X	X
		2.4.2: Regular RMNCAH&N programme reviews at the provincial and district levels with focus on	No. of reviews conducted	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
	Maternal, Newborn, Child, Adolescent Health and Nutrition services	the quality of care						
		2.4.3: Regular data validation and quality assurance for the RMNCAH&N data	No. of validation and QA activities conducted	X	X	X	X	X
		2.4.4: Strengthen clinical audits to assess near-misses and other morbidities	No. of clinical audits conducted	X	X	X	X	X
		2.4.5. Strengthen maternal and perinatal death surveillance and response	Availability of surveillance & response system	X	X	X	X	X
		2.4.6: The eHealth management information system	Availability of functional eHealth	X	X	X	X	X
		2.4.7: Support operational research and generation of evidence on RMNCAH&N	No. of operational research studies conducted	X	X	X	X	X
2. To strengthen the capacity of health systems for planning and management of Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition programmes	2.5: Improved **community systems** for Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services	2.5:1: Support the provision of integrated outreach services to hard-to-reach communities	No. of hard-to-reach communities served	X	X	X	X	X
		2.5.2: Scale up the village level coverage of integrated community RMNCAH&N services by VHWs	No. of villages covered	X	X	X	X	X
		2.5.3: Develop/ Update the communication strategy to enhance community participation and involvement in RMNCAH&N, including the male partners	Availability of Communication Strategy	X	X			
		2.5.4: Support community education and social mobilisation for integrated RMNCAH&N services	No. community interventions	X	X	X	X	X
		2.5.5: Build capacity of community-based organisations to conduct community dialogue	No. of CBOs strengthened	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
		on RMNCAH&N						
		2.5.6: Provide supervision, mentorship and technical support to CHWs for improved performance	No. of CHWs supported	X	X	X	X	X
		2.5.7: Promote social accountability systems[10] that empower communities, community leaders and CBOs to detect and address issues related to health worker accountability and quality of care and provide feedback for appropriate action.	Availability of social accountability system	X	X	X	X	X
		2.5.8: Harmonise VHW Registers and strengthen the community HIS component, including the use of ICT for data management	Harmonised Register	X	X			
		2.5.9: Support operationalization of the CHW Framework	Report of operational framework	X	X			
		2.5.10: Introduction of Health Posts	No. of Health Posts established	X	X	X	X	X
	3.1: Improved availability and access to quality Family Planning and related SRHR services	3.1.1: Diversifying the availability of contraceptives with focus on LAPM	No. of clients served	X	X	X	X	X
		3.1.2: Provision of comprehensive fertility services	No. of clients served	X	X	X	X	X
		3.1.3: Provision of both male and female condoms for protection against unintended pregnancies and STIs, including HIV	No. of condoms distributed	X	X	X	X	X

[10] **Social accountability** can be defined as an approach towards building accountability that relies on civic engagement, i.e., in which it is ordinary citizens and/or civil society organizations who participate directly or indirectly in exacting accountability (World Bank, 2004).

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
3. To increase the utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services		3.1.4: Community-based integrated FP and related SRHR services especially in hard-to-reach areas	No. of hard-to-reach communities served	X	X	X	X	X
		3.1.5: Integration of FP services with MCH, HIV&AIDS, screening of cancers and other related ARHR services	No. of facilities providing integrated services	X	X	X	X	X
		3.1.6: Life skills training and livelihood programmes to young people to improve quality of lives	No. of programmes implemented	X	X	X	X	X
		3.1.7: Provision of integrated youth-friendly services using appropriate evidence-based inclusive models	No. of facilities providing integrated services	X	X	X	X	X
	3.2: Increased awareness, advocacy and utilisation of cervical cancer prevention and treatment services	3.2.1: Awareness creation and advocacy for cervical cancer prevention and treatment services	No. of campaigns conducted	X	X	X	X	X
		3.2.2: Provision of integrated VIAC 'see and treat' services for cancer prevention at health facilities	No. of women screened	X	X	X	X	X
		3.2.3: Establishment of an electronic consultation system to minimise referral of clients	No. of clients served	X	X	X	X	X
		3.2.4: Provision of vaccination against HPV to girls age 10 – 14 years	No. of girls vaccinated	X	X	X	X	X
		3.2.5: Establishment of oncology centres of excellence for institutional and technical capacity in cervical cancer management	No. of functional institutions	X	X	X	X	X
	3.3: 90% of pregnant women received the recommended package of antenatal care	3.3.1: Birth preparedness, health education and counselling to women on the prioritized topics (danger signs, nutrition, breastfeeding, family planning)	No. of mothers counselled and prepared	X	X	X	X	X
		3.3.2: Prophylaxis (TT), nutrition assessment, BP monitoring and supplements to prevent	No. of mothers provided services	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
3. To increase the availability and utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services		anaemia (iron+ folic acid)						
		3.3.3: Haemoglobin, malaria, HIV, syphilis tests, urinalysis (protein) and treatment, including ARVs for all the positive women	No. of mothers provided services	X	X	X	X	X
		3.3.4: Detection and appropriate management of the complications of pregnancy	No. of mothers with complications managed	X	X	X	X	X
		3.3.5: Antenatal corticosteroids for women at risk of birth from 24-34 weeks of gestation (who meet the appropriate conditions)	No. of at-risk mothers given corticosteroids	X	X	X	X	X
		3.3.6: Prevention and treatment of malaria, including use of ITNs and IPT in pregnancy	No. of mothers managed for malaria	X	X	X	X	X
	3.4: 90% of mothers delivered under the support of skilled service providers	3.4.1: Appropriate monitoring of labour progress (partograph) under hygienic conditions to prevent infection	No. of mothers with proper monitoring of labour	X	X	X	X	X
		3.4.2: Detection of delivery complications and appropriate management (emergency obstetric care)	No. of mothers with complications managed	X	X	X	X	X
		3.4.3: Active management of third stage including injectable oxytocics for the fourth stage	No. of mothers with actively managed labour	X	X	X	X	X
		3.4.4: Ensure availability of blood for transfusion of the mothers who need it	No. facilities with blood	X	X	X	X	X
		3.4.5: Mother-baby friendly practices	No. of MBFH facilities	X	X	X	X	X
		3.4.6: HIV tests and ARVs for all the positive women	No. of HIV positive mothers given ARVs	X	X	X	X	X
	3.5: 90% of mothers received the	3.5.1: Education on postnatal danger signs and importance of early health seeking	No. of mothers counselled	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
	recommended postnatal care package starting within 2 days after birth, at 1 week and 28 days	3.5.2: Screening and detection of danger signs with prompt appropriate management	No. of mothers given treatment	X	X	X	X	X
		3.5.3: HIV tests and ARVs for all the positive women	No. of HIV positive mothers given ARVs	X	X	X	X	X
		3.5.4: Immediate Post-partum long term and dual protection family planning methods	No. of mothers given PP contraceptives	X	X	X	X	X
3. To increase the availability and utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services	3.6: 90% of newborn babies received the recommended postnatal care package starting within 48 hours after birth, at 1 week and 28 days of age	3.6.1: Detection of danger signs for the neonates and appropriate management including at community level	No. of neonates identified and treated	X	X	X	X	X
		3.6.2: Initiation of breastfeeding within first hour after birth	No. of neonates breastfed in 1st hour	X	X	X	X	X
		3.6.3: Helping Babies Survive for neonates with birth asphyxia	No. of neonates resuscitated	X	X	X	X	X
		3.6.4: Kangaroo Mother Care for the small neonates	No. small neonates given KMC	X	X	X	X	X
		3.6.5: Injectable antibiotics for infected neonates	No. of infected neonates treated	X	X	X	X	X
		3.6.6: Prophylaxis against tuberculosis (BCG vaccination)	No. of children given BCG	X	X	X	X	X
		3.6.7: ARVs for all HIV exposed neonates	No. of children provided ARVs	X	X	X	X	X
	3.7: 90% of children age 1 – 59 months received the	3.7.1: Immunisation at health facilities and at outreaches for hard-to-reach communities, according to the national schedule	No. of outreached conducted in hard-to-reach communities	X	X	X	X	X
		3.7.2: Surveillance and documentation of adverse events following immunisation	No. of adverse events reported	X	X	X	X	X
		3.7.3: Mother/ baby friendly hospital initiative (BFHI) at health facilities and in the	No. of health MBFH facilities	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
	recommended care package	community						
3. To increase the availability and utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services		3.7.4: Education, counselling and support for mothers to breastfeed exclusively for first 6 months	No. of mothers counselled on EBF	X	X	X	X	X
		3.7.5: Education, counselling and support of mothers on age-appropriate complementary feeding practices for young children	No. of mothers counselled	X	X	X	X	X
		3.7.6: Community-based vitamin A supplementation according to national schedule	No. of children provided vitamin A	X	X	X	X	X
		3.7.7: Growth promotion and monitoring on basis of height, weight and MUAC	No. of children assessed	X	X	X	X	X
		3.7.8: Assessment, classification and treatment according to the IMNCI protocol (diarrhoea, ARI, malaria, malnutrition)	No. of facilities implementing IMNCI	X	X	X	X	X
		3.7.9: Emergency Triage Assessment and Treatment of sick children	No. of facilities with ETAT	X	X	X	X	X
		3.7.10: Assessment of mothers for tuberculosis and provision of Isoniazid Preventive Therapy (IPT) for all under-five contacts	No. of U-5 children provided IPT	X	X	X	X	X
		3.7.11: Identification of children with disability and appropriate referral	No of disabled children referred	X	X	X	X	X
	3.8: 90% of HIV exposed infants tested by DNA PCR at age 2 months and linked to appropriate care and treatment	3.8.1: Collection of samples for HIV test using DNA PCR and provision of the results	No. of samples tested by PCR	X	X	X	X	X
		3.8.2: Provision of co-trimoxazole (CTX) prophylaxis for the HIV exposed children	No. exposed children provided CTX	X	X	X	X	X
		3.8.3: Initiation of ART for children who tested PCR positive and provision of ART to infected children	No. of HIV positive children initiated on ART	X	X	X	X	X

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
3. To increase the availability and utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services		3.8.4: Provision of Isoniazid preventive therapy (IPT) to all HIV positive children according to national guidelines	No. of HIV positive children received IPT	X	X	X	X	X
	3.9: 85% of 5 – 9 year olds received the comprehensive school health package	3.9.1: Provision of theoretical and practical health education through the school curriculum, including on age-appropriate sexual and reproductive health and life-skills	No. of schools providing health education programs	X	X	X	X	X
		3.9.2: Provision of opportunity for physical education to promote wellness, including the children with disabilities	No. of schools with physical education programs	X	X	X	X	X
		3.9.3: Provision of psycho-social support services at schools and referral for sexual and reproductive health services	No. schools providing psycho-social services	X	X	X	X	X
		3.9.4: Screening for common communicable and non-communicable diseases, mental health, oral health, malnutrition and developmental challenges	No. of children screened for common conditions	X	X	X	X	X
		3.9.5: Provision of preventive, diagnostic, care, treatment and support services for common diseases, chronic conditions and in emergency situations	No. of emergency situations with integrated services	X	X	X	X	X
		3.9.6: Provision of nutrition services as an integral part of the broader School Feeding Programme	No. of schools with integrated nutrition services	X	X	X	X	X
	3.10: Increased availability and affordability of quality youth friendly integrated SRH and HIV services	3.10.1: Expansion of youth friendly integrated ASRH and HIV services to the hard-to-reach areas and underserved at-risk populations	No. of programs in hard-to-reach areas	X	X	X	X	X
		3.10.2: Enrolment of adolescents in current programmes such as ART, PMTCT, counselling, VMMC	No. of adolescents enrolled	X	X	X	X	X
		3.10.3: Advocacy for decentralised adolescent	Advocacy report on	X	X			

Objective	Results	Key Interventions	Indicator	Time-Frame (Year)				
				2017	2018	2019	2020	2021
		ART and STD treatment services in private and public sectors	decentralised services					
		3.10.4: Piloting support to existing CHWs to provide information to pregnant adolescent girls and young women	No. of piloted programs	X	X	X	X	X
		3.10.5: ASRH and HIV integration in school, community and facility based interventions	No. of school & community interventions	X	X	X	X	X
		3.10.6: ASRH linkages with sustainable livelihoods programmes	No. of sustainable livelihood programs	X	X	X	X	X
3. To increase the availability and utilization of quality Reproductive, Maternal, Newborn, Child, Adolescent Health and Nutrition services, including the PMTCT services	3.11: Reduced prevalence of malnutrition in the community	3.11.1: Screening, identification and management of severe acute malnutrition at all levels	No. of cases identified & managed	X	X	X	X	X
		3.11.2: Promotion of communication on healthy lifestyles and consumption of diversified diets	Types of communication promoted	X	X	X	X	X
		3.11.3: Promotion of physical activity and exercises of recommended duration	Types of exercises being promoted	X	X	X	X	X
		3.11.4: Promotion of health screening and wellness days through health facility and community based platforms	No. HF & community screening events	X	X	X	X	X

7. Monitoring & Evaluation Framework

7.1: INTRODUCTION

The Reproductive, Maternal, Newborn, Child Adolescent Health, and Nutrition Strategy will be the basis for development of detailed Annual Work Plans to guide implementation and provision of quality services all levels. It will be critical to continually track implementation of the annual plans using a standard integrated tool, in order to determine whether the results are aligned to the outcomes spelt out within this Strategy. Attainment of the results outlined in the implementation framework will require the contributions and collaboration from various stakeholders from the public sector, development and implementing partners, the civil society and private sector. It will also require inputs from the different levels of health care delivery system ranging from the national, provincial, district to the sub-district. An agreed upon monitoring and evaluation framework will serve as the basis for all stakeholders and partners to measure achievements, identify gaps and trigger the corrective actions as appropriately as possible.

The Monitoring and Evaluation Framework has been structured to include the core set of indicators for monitoring progress towards the Sustainable Development Goals (SDGs) and the Global Strategy targets[11]. It includes process indicators to support monitoring the programme and situation-specific progress, which informs decision-making at the implementation level. The Ministry of Health and Child Care will track indicators through the available HMIS/ DHIS2 system from which quarterly reports will be generated for dissemination during scheduled meetings and other related fora.

The development of this Monitoring and Evaluation Framework was through a highly participatory process with stakeholder input in its design and during the prioritisation of operations research. The key stakeholders from national, provincial and district levels were consulted before finalisation of the Framework.

7.2: OBJECTIVES OF THE M&E FRAMEWORK

The main objectives of the Monitoring and Evaluation Framework for the RMNCAH&N Strategy are as follows:

1) To provide the basis for the development of the data and information flow mechanism, indicators of progress and tools for data collection;
2) To guide all stakeholders in measuring the progress on implementation of interventions under the Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition Strategy; and

[11] Global Strategy for Women's, Children's and Adolescents' Health (2016 – 2030)

3) To guide the continuous tracking of MNH programmes in terms of inputs, outputs, outcomes and impact.

The principles that guide operationalization of this M&E framework shall be drawn from, and based upon the Guiding Principles of the Government of Zimbabwe National M&E Policy.

7.3: CORE INDICATORS FOR THE RMNCAH&N M&E FRAMEWORK

The core indicators have been selected to measure the impact and outcomes at national and provincial and district levels. Sources of data will include the routine Health Management Information System, and the special studies and surveys such as: Zimbabwe Demographic Health Survey (ZDHS), Multiple Indicator Cluster Survey (MICS) Service availability and readiness Assessments (SARA) etc.

7.3.1: Indicators for Measuring Impact

At the impact level, the indicators for this Maternal and Neonatal Strategy will include the following:

- Total Fertility Rate
- Maternal Mortality Ratio
- Adolescent Mortality Rate
- Adolescent Birth Rate [10 – 14 years]; [15 – 19 years]
- Under-5 Mortality Rate
- Perinatal Mortality Rate
- Neonatal mortality rate
- Stillbirth Rate
- Prevalence of stunting among children under 5 years of age

7.3.2: Indicators for Measuring Outcomes

The indicators for measuring outcomes are summarised and presented in the Table below.

Programme Area	Indicators
Reproductive Health	Percentage of women of reproductive age 15 – 49 years who have their need for family planning satisfied with modern methods
	Modern contraceptive prevalence rate by method and age group
	Proportion of women age 15 – 49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

Programme Area	Indicators
	Proportion of women age 30 – 49 years who report they were screened for cervical cancer
	Proportion of rape survivors who received HIV post-exposure prophylaxis (PEP) within 72 hours of an incident occurring
Maternal Health	Proportion of women age 15 – 49 years who made the recommended 8 or more antenatal care visits
	Proportion of women in antenatal care who were screened for syphilis during pregnancy
	Proportion of births attended by skilled health personnel
	Proportion of women who have postpartum contact with a health provider within 2 days of delivery
	Caesarean sections as a percentage of all live births
	Proportion of mothers who received uterotonics for the management of fourth stage of labour
	Percentage of pregnant and lactating women living with HIV who received antiretroviral therapy (ART) for PMTCT
	Percentage of pregnant women receiving at least 3 doses of Sulphadoxine-Pyrimethamine
	Proportion of pregnant women that have birth preparedness plans
	Proportion of women with knowledge of danger signs of obstetric, neonatal and child health complications
Newborn	Proportion of infants who were breastfed within the first hour of birth
	Proportion of newborn babies who have postnatal contact with a health provider within 2 days of delivery
	Prevalence of low birth weight
	Proportion of low birth weight babies receiving Kangaroo Mother Care (KMC)
	Percentage of babies not breathing/ crying at birth who were successfully resuscitated
Child Health	Proportion of infants <6 months who are fed exclusively with breast milk
	Percentage of children with diarrhoea receiving oral rehydration salts (ORS) and zinc
	Proportion of children with suspected pneumonia taken to an appropriate health care provider
	Percentage of children with fever for whom treatment was sought from a health facility
	Percentage of children age 12 – 23 months who were fully immunized
	Proportion of children age 6 – 23 months who received a minimum acceptable diet (MAD)

Programme Area	Indicators
	Percentage of children under 5 years using insecticide-treated nets (ITNs)
	Proportion of village health workers dispensing Vit A to children aged 6-59 months
	Proportion of HIV exposed infants accessing ARV prophylaxis
	Proportion of children under 5 years of age whose births have been registered with a civil authority
	Proportion of HIV positive children accessing antiretroviral therapy
Nutrition	Prevalence of anaemia in women age 15 – 49 years, disaggregated by age and pregnancy status
	Prevalence of anaemia in children age 6 – 69 months
	Prevalence of wasting (weight for height <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age
	Prevalence of overweight (weight for height >+2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age
Adolescent Sexual and Reproductive Health	Proportion of men and women aged 15 – 24 years with basic knowledge about sexual and reproductive health services and rights
	Proportion of women age 20 – 24 years who were married or in a union before age of 15 years and before age 18 years
	Proportion of young women and men age 18 – 29 years who experienced sexual violence by age 18 years
	Proportion of ever-partnered women and girls age 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months
	Proportion of young women and men age 18 – 29 years who experienced sexual violence by age 18 years
	Prevalence of sexually transmitted infections among adolescents and young people
	Prevalence of HIV among adolescents and young people
Cross-cutting	Proportion of women and children who needed referral who went for referral
	Proportion of villages with village health workers implementing RMNCAH&N interventions
	Proportion of communities that have set up functional Health Centre Committees
	Proportion of households with at least 1 ITN for every 2 people and/or sprayed by indoor residual spray (IRS) within the last 12 months
	Percentage of population using safely managed sanitation services including a hand-washing facility with soap and water

7.4: THE EVALUATION FRAMEWORK

The Reproductive, Maternal, Newborn, Child, Adolescent Health, and Nutrition programmes will be evaluated based on an agreed set of indicators, both qualitative and quantitative. Under this evaluation framework, three main types of evaluations will be undertaken:

1. Mid-term evaluation of the RMNCAH&N Strategy at the end of 2019
2. Special evaluative studies of the RMNCAH&N Strategy
3. Final Evaluation of the RMNCAH&N Strategy at the end of 2021

Nevertheless, within the highly dynamic environment conducting of annual programme reviews will be highly recommended. The evaluative studies will be conducted by external and independent agencies such that the process is free from bias and ensures objective as well as credible results. The objectives of the evaluation studies will focus on: accountability, learning and taking stock of results achieved. The Strategy Steering Committee shall have the overall responsibility of commissioning the evaluative studies.

7.4.1: Mid Term Evaluation of the RMNCAH &N Strategy 2017-2021

The primary purpose of the mid-term evaluation will be to assess the progress made in implementation of the interventions within the RMNCAH&N Strategy at the halfway period, against the set targets. This will provide the opportunity for recommending consolidation, modification or revision where needed, to the direction and focus of the interventions. It will also provide opportunity to revisit the goal and objectives if the circumstances so dictate. The following are examples of questions that will guide the mid-term review, which can be adjusted based on the need.

- Are there signs of advances towards the outcomes?
- What challenges are causing delays?
- What has changed in the context?
- Are there new opportunities?
- How can the challenges be overcome?
- Is it feasible to complete with the remaining resources and the existing context?

7.4.2: Special evaluative studies

The decision on the specific type of special evaluative study to be undertaken will be influenced by the presenting need at that time and unanswered questions arising from amongst the implementers. Examples of special evaluative studies include:

1. Impact assessment studies
2. Process evaluations

3. Value for money evaluations

7.4.3: End of Term Evaluation of the MNH Strategy

Evaluation generates knowledge about the magnitude and determinants of programme performances, provides information about what worked well and what did not, and why. It also provides information on whether underlying programming theories and approaches used were valid. The end of term evaluation of the RMNCAH&N Strategy will promote learning and accountability, which shall be enhanced through:

1) Measuring the effectiveness, relevance, efficiency, and sustainability of the RMNCAH&N programmes;
2) Wide dissemination of the information to stakeholders and holding discussions; and
3) Using the findings to guide the decision-makers in informed resource allocation and replication of successful strategies.

8. Bibliography

1) Every Woman Every Child. *Indicator and Monitoring Framework for the Global Strategy for Women's, Children's and Adolescents' Health (2016 – 2030).* Sustainable Development Goals, 2016.

2) Health Development Fund. *Vital Medicines Availability & Health Services Survey: Quarter 4, 2016 (October – December)*

3) ICO HPV Information Centre. *Zimbabwe Human Papillomavirus and Related Cancers, Fact Sheet 2016.* (June 14, 2016)

4) MOHCC (Zimbabwe Ministry of Health and Child Care). *Draft Zimbabwe Cervical Cancer Prevention and Control Strategy (ZCCPCS)*

5) MOHCC (Zimbabwe Ministry of Health and Child Care). *The Zimbabwe National Maternal and Neonatal Health Road Map 2007 - 2015.* Harare, Government of Zimbabwe: October 2007

6) MOHCC (Zimbabwe Ministry of Health and Child Care). *The National Health Profile 2014 Report.* Harare, Government of Zimbabwe: 2014

7) MOHCC (Zimbabwe Ministry of Health and Child Care). *Final Kangaroo Care Assessment Report.* Harare, Government of Zimbabwe: 29 May 2015

8) MOHCC (Zimbabwe Ministry of Health and Child Care). *Zimbabwe National Nutrition Strategy 2014 – 2018.* Harare, Government of Zimbabwe: 2014

9) MOHCC (Zimbabwe Ministry of Health and Child Care). *Zimbabwe's National Child Survival Strategy (2016 – 2020).* Harare, Government of Zimbabwe: November 2015

10) MOHCC (Zimbabwe Ministry of Health and Child Care). *Visual Inspection with Acetic Acid and Cervicography Facility Rapid Assessment Report.* Harare, Government of Zimbabwe: September 2016

11) MOHCC (Zimbabwe Ministry of Health and Child Care). *The National Health Strategy for Zimbabwe 2016 – 2020: Equity and Quality in Health: Leaving no one Behind.* Harare, Government of Zimbabwe: 2016

12) MOHCC (Zimbabwe Ministry of Health and Child Care). *Zimbabwe National Family Planning Strategy (ZNFPS) 2016 – 2020.* Harare, Government of Zimbabwe: 2016

13) MOHCC (Zimbabwe Ministry of Health and Child Care). *National Adolescent and Youth Sexual and Reproductive Health (ASRH) Strategy II: 2016 – 2020. Stepping up for good Sexual and Reproductive Health Outcomes for Adolescents and Youth in Zimbabwe.* Harare, Government of Zimbabwe: 2016

14) Tsitsi Magure, Gwendoline Chimhini, Tarisai Marere. *Interventions for Improving Perinatal and Neonatal Health Outcomes in Zimbabwe*: *Continuum of care from Pregnancy to Newborn Care*.

15) World Health Organisation. *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*. Geneva: World Health Organisation; 2016

16) World Health Organization, United Nations Children's Fund. *Guideline: updates on HIV and infant feeding: the duration of breastfeeding, and support from health services to improve feeding practices among mothers living with HIV*. Geneva: World Health Organization; 2016

17) Zimbabwe National Statistics Agency (ZIMSTAT). *Multiple Indicator Cluster Survey 2014, Key Findings*. Harare, Zimbabwe: ZIMSTAT; 2014

18) Zimbabwe National Statistics Agency (ZIMSTAT). *Multiple Indicator Cluster Survey 2014, Final Report*. Harare, Zimbabwe: ZIMSTAT; 2015

19) Zimbabwe National Statistics Agency and ICF International. *Zimbabwe Demographic and Health Survey 2015: Key Indicators*. Rockville, Maryland, USA: Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International; 2016

20) Zimbabwe National Statistics Agency and ICF International. *Zimbabwe Demographic and Health Survey 2015: Final Report*. Rockville, Maryland, USA: Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International; 2016