



The
Zimbabwe
National
Maternal
and
Neonatal
Health
Road Map
2007-2015



Government of Zimbabwe
Ministry of Health and Child Welfare
Harare, October 2007

Foreword

Like many other sub-Saharan African countries, Zimbabwe bears a heavy burden of high maternal, neonatal and child mortality when compared to countries in other regions of the world. The Maternal Mortality Ratio continued to increase over the years, from 283 deaths per 100,000 live births (ZDHS 1994) to 578 deaths per 100,000 live births in 1999 before declining slightly to 555 deaths per 100,000 live births in 2005 (ZDHS 2005-6). The Under-Five Mortality rate is currently 82 deaths per 1,000 live births (ZDHS 2005-6), which shows an improvement when compared to 102 deaths per 1,000 live births in 1999. Related to this is the Neonatal Mortality rate which was 19 deaths per 1,000 live births in 1988, with an increase to 29 in 1999, and a decrease to 24 per 1,000 live births in 2005-6.

The international community; and Zimbabwe in particular, continues to address maternal and neonatal health challenges as reflected by several international agreements adopted by most countries aimed at reducing maternal and neonatal mortality. The first international declaration underlining the importance of primary health care (PHC) was the 1978 Alma-Ata Declaration. The declaration expressed the need for urgent action by all governments, all health and development partners, and the world community to protect and promote the health of all the people of the world. The PHC approach was then adopted by the majority of developing countries as the key to achieving the goal of “Health for All”¹.

In 1987, the Safe Motherhood Initiative was launched in Nairobi, Kenya, where an international call was made to reduce maternal mortality and morbidity by half by year 2000. The position was reaffirmed during the International Conference on Population and Development (ICPD) in Cairo, Egypt in 1994 with the adoption of the forward-looking 20 year Programme of Action (PoA) that calls upon all countries to strive to reduce maternal and neonatal mortality.

In 2000, Zimbabwe was among the 189 Member States at the Millennium Summit that adopted The Millennium Declaration; with 8 interlinked goals and a number of associated targets to improve people’s lives by the year 2015. These include targets to reduce the maternal mortality ratio by three quarters and to reduce by two thirds the under-five mortality rate between 1990 and 2015.

The MNH Road Map provides a strategic framework for addressing maternal and neonatal health challenges currently facing Zimbabwe. The Road Map is an overarching strategy for scaling up the national response to reduce the current levels of maternal and neonatal mortality and morbidity in line with the MDG health related targets.

Additionally, by building on the concept of the “three ones”, this document brings together all national stakeholders to support one national MNH programme, one national MNH coordination mechanism, and one national MNH Planning, Monitoring and Evaluation Framework. This concept will improve the implementation of activities which will directly contribute to reductions in the unnecessary and all-too-frequent maternal and neonatal morbidity and mortality.

¹ Maternal and Child Health is one of the eight elements of the Primary Health Care approach towards the achievement of the goal of “Health for All” agreed to at the 1978 Alma-Ata Declaration.

The Ministry of Health and Child Welfare would like to acknowledge the generous technical and financial contributions from all organisations and institutions that participated in the development of the Maternal and Neonatal Health (MNH) Road Map. The Ministry received support from UNFPA during a series of consultations with stakeholders leading to the development of the road map. The World Health Organization provided overall technical guidance throughout, and UNICEF provided valuable technical support, especially on the neonatal and PMTCT components in the Road Map. The Zimbabwe National Family Planning Council actively participated and thus ensured Family Planning and Adolescent Sexual and Reproductive Health issues were represented to make the life cycle approach complete. The University of Zimbabwe's Medical School Departments of Obstetrics and Gynaecology, and Paediatrics provided invaluable technical expertise in clinical aspects of maternal and neonatal health. Special mention also goes to the various MOHCW sections which include the Reproductive Health, AIDS & TB, Expanded Programme on Immunization, and the Nutrition and Malaria Units, for leading the Road Map development process and harmonising various stakeholder and technical inputs with national priorities and strategic frameworks.

Great appreciation is also extended to all individuals listed elsewhere in this document; who were instrumental in the development of the Road Map. Furthermore, the Ministry of Health would like to extend its gratitude to all past and current donor partners who have offered specific support for MNH activities as well as financial and technical assistance for other aspects of health service delivery.

Most importantly the Ministry of Health and Child Welfare would like to acknowledge the dedicated service and hard work of all health personnel at all levels of service delivery, who are on the front-line of national efforts to ensure a smooth journey before, during and after pregnancy for mothers and their new born babies.

Hon. Dr. P.D. Parirenyatwa
Minister for Health and Child Welfare
Harare, October, 2007



Preface

In response to the high maternal and neonatal mortality rates in Africa, the African Union proposed an African Road Map aimed at providing guidance to governments in developing country-specific Road Maps to accelerate the attainment of the Millennium Development Goals related to maternal and newborn health. The objectives of the Road Map are to provide skilled attendance during pregnancy, childbirth, and the postnatal period at all levels of the health care delivery system; and to strengthen the capacity of individuals, families, communities, civil society organizations and Governments to improve maternal and newborn health².

Zimbabwe has responded to the call by the African Union and the subsequent Special Session of the Conference of African Union Ministers of Health³ by developing its own country-specific MNH Road Map to address the current maternal and neonatal health challenges facing the country.

What is a Maternal and Neonatal Health Road Map?

The MNH Road Map is a national framework for planned activities aimed at significantly improving maternal and newborn health services at institutional and programme levels. The Road Map is meant to provide the basis for an increased and long term investment to reduce the current levels of maternal and neonatal mortality and morbidity, and to provide guidance to all strategic partners, stakeholders and programmes for a more coordinated, multi-sectoral and national response to improved health service delivery at all levels: from community based services to rural health facilities, to district and provincial referral centres, through to highly specialized tertiary hospitals.

Why a Maternal and Neonatal Health Road Map?

The MNH Road Map builds on the agreements and objectives of various international conferences and summits in response to the observed shortcomings in the health of specific populations and health systems across the world. These include the Safe Motherhood Initiative (1987), the ICPD Programme of Action (1994) and the Millennium Summit (2000). In order to better comply with the internationally set aims following these conventions, in particular the Millennium Development Goals, the Road Map was created to prioritise and scale up evidence-based, up-to-date and cost effective strategies and activities that can reduce maternal and neonatal morbidity and mortality. In the context of Zimbabwe, MDG goals 4 (to reduce Under Five Mortality), 5 (to improve Maternal Health), and 6 (to combat HIV and AIDS, Malaria and other diseases), are all given high priority.

² Regional Reproductive Health Newsletter, August 2004: *Road Map: African Union resolves to tackle Maternal Mortality*. WHO/AFRO – Division of Family and Reproductive Health (DHR)

³ Special Session of the Conference of African Union Ministers of Health was held in Maputo, 18-22 September 2006, and was attended by delegates from 46 African Union Member States and representatives from many organizations culminating in the “Maputo Plan of Action” on Universal Access to Comprehensive Sexual and Reproductive Health Services in Africa.

Through recognising that technical and financial resource constraints present a serious challenge to attain the health related MDG goals and targets, the Road Map is designed as a basis to mobilize sufficient human and financial resources for MNH services. In this regard, the Road Map will be supplemented by costed annual work plans, which, will include committed national and donor support for each year, as well as identify gaps and areas for further funding.

Who are the target users of the Maternal and Neonatal Health Road Map?

The Maternal and Neonatal Health Road Map is intended for use by policy makers, by health managers, by service providers, by United Nations and civil society partners, by the donor community, and by other MNH stakeholders at all levels. It will promote synergies as well as leveraging of human and financial resources in the planning, implementation, monitoring and evaluation of MNH interventions.

As the single national over-arching strategy document, the Road Map is designed around a Partnership approach. We anticipate that this national Partnership will ensure the most collaborative, transparent and effective utilization of the scarce resources available to support the National Maternal and Neonatal Health Program.

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List of Abbreviations

ANC	-	Antenatal Care
ARV	-	Anti Retro Viral
BEmOC	-	Basic Emergency Obstetric Care
BEmONC	-	Basic Emergency Obstetric and Neonatal Care
CBD	-	Community Based Distributor
CEDAW	-	Convention for the Elimination of all forms of Discrimination against Women
CEmOC	-	Comprehensive Emergency Obstetric Care
CEmONC	-	Comprehensive Emergency Obstetric and Neonatal Care
CPR	-	Contraceptive Prevalence Rate
CRC	-	Convention for the Rights of the Child
CSO	-	Central Statistics Office
EmOC	-	Emergency Obstetric Care
EmONC	-	Emergency Obstetric and Neonatal Care
EPI	-	Expanded Programme on Immunization
FANC	-	Focused Antenatal Care
FP	-	Family Planning
FSB	-	Fresh Stillbirth
GMO	-	General Medical Officer
HMIS	-	Health Management Information System
ICPD	-	International Conference on Population and Development
IEC	-	Information, Education and Communication
LMIS	-	Logistics Management Information System
MDG	-	Millennium Development Goals
MNH	-	Maternal and Neonatal Health
MOHCW	-	Ministry of Health and Child Welfare
MVA	-	Manual Vacuum Aspiration
NAC	-	National AIDS Council
NHA	-	National Health Accounts
NBS	-	National Blood Services
NND	-	Neonatal Death
OBGYN	-	Obstetrician/Gynecologist
OI	-	Opportunistic Infection
PASS II	-	Poverty Assessment Study Survey
PCN	-	Primary Care Nurse
PFMS	-	Public Finance Management System
PHC	-	Primary Health Care
PICT	-	Provider Initiated Counselling and Testing
PIH	-	Pregnancy Induced Hypertension
PMR	-	Perinatal Mortality Ratio
PMTCT	-	Prevention of Mother to Child Transmission
PNC	-	Postnatal Care
PSC	-	Public Service Commission
RGN	-	Registered General Nurse
RH	-	Reproductive Health
RHCS	-	Reproductive Health Commodity Security
SB	-	Stillbirth
SCM	-	State Certified Midwife
SRH	-	Sexual and Reproductive Health
STI	-	Sexually Transmitted Infection
TBA	-	Traditional Birth Attendant
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children Fund
VCT	-	Voluntary Counselling and Testing
WHO	-	World Health Organization
ZDHS	-	Zimbabwe Demographic and Health Survey

1. Overview of the Road Map

The Maternal and Neonatal Health Road Map starts with a situation analysis that portrays the general socio-economic environment and its repercussions for the current conditions of maternal and neonatal morbidity and mortality in the country. The situation analysis is followed by a synopsis of the current and proposed national response to the maternal and neonatal health challenges facing the country. The last section covers the framework for the coordination, implementation, monitoring and evaluation of the MNH Road Map.

What are the guiding principles of the Road Map?

In developing the Zimbabwe MNH Road Map the following guiding principles for the introduction of appropriate interventions were adopted:

- **Country ownership**: It is acknowledged that the Government of Zimbabwe, through the Ministry of Health and Child Welfare, is the main custodian of the health of its citizens, therefore all actions and programmes aimed at achieving the MDG targets are initiated with and coordinated by the government.
- **Equity, access and acceptability**: The Road Map prioritizes the scaling up of programmes and activities which are acceptable, accessible and affordable for all Zimbabweans, especially the poor, vulnerable groups and under-served populations.
- **Health systems approach**: The MNH Road Map provides a framework for the provision of comprehensive maternal and neonatal health, family planning, HIV and AIDS, and STI services by integrating planning and service delivery to obtain more effective and efficient outcomes for both clients and health delivery staff.
- **Evidence-based**: The interventions proposed in this MNH Road Map are evidence based, up-to-date and cost- effective.
- **Clear definition of roles and responsibilities**: The responsibilities of all essential stakeholders and players in the implementation, monitoring and evaluation of priority interventions are clearly delineated and defined.
- **Partnership**: The MNH Road Map promotes partnerships and joint programming among various stakeholders to maximize resource use, to avoid duplication of efforts and promote synergies at all levels; ensuring one system for planning, implementation, monitoring and evaluation of interventions.
- **Complementarities**: This MNH Road Map is built on existing programmes, while recognising the comparative advantages of the different non-health sectors in the planning, implementation and evaluation of proposed programmes and services for maternal and neonatal services.

What is the Structure of the Road Map?

This Road Map is divided into two parts:

1. A narrative part which presents the MNH situation and the context in which the Road Map was developed, and the response of the government to maternal, neonatal and child health issues.
2. The Logical Framework that summarises the principal and specific objectives of the Road Map, and selected priority activities together with indicators, sources of verification, as well as risks and assumptions.

These two essential parts of the Road Map need to be complemented by Annual Costed Workplans which will specify more detailed activities, targets and budgetary requirements.

How will the Road Map be implemented?

The Road Map is to be implemented in two phases:

- **Phase one: (Initial phase): 2007 to 2010**

This phase is based on the situation analysis presented in this document and prioritizes the supply related issues of the interventions: to make services available first, before fully focusing on problems relating to demand in the second phase.

Some activities planned for this phase are more “emergency response” in nature, and are designed to provide immediate and measurable results, while other activities are proposed to establish a foundation for longer term development oriented strategies in the second phase. All activities are summarised in relationship to the Four Pillars of Safe Motherhood and the Three Delay Model presented later in the document.

- **Phase two (Consolidation Phase): 2011 to 2015**

This phase consolidates the activities of the initial phase, builds on the developmental foundation established earlier, and sets the pace for more targeted scaling up of priority interventions. Phase 2 interventions include activities to approach long term issues of behavioural change at the community level, while simultaneously addressing more sustainable capacity development at all levels.

2. Situation analysis

2.1 SOCIOECONOMIC ENVIRONMENT

A current demographic profile provides an insight into the current and future health status of the population of Zimbabwe. In 2002 the population of Zimbabwe was estimated at 11.6 million people. Given a low total fertility rate of 3.8, and a population growth rate declining from 3.5 in 1990 to 1.4 in 2005, as well as a markedly reduced life expectancy at birth from 60 in 1990 to 37 years in 2005, the total population is estimated to be 13 million in 2007. The population is relatively young with people under 18 years forming 48% of the population; while 55% is between 15 and 49 years of age (CSO, 2002).

During the past few years, Zimbabwe has experienced increasingly challenging socio-economic conditions hampering all areas of development. Recurrent droughts, food insecurity and the HIV/AIDS pandemic have created serious impediments to the health of the general population. The economy has continued to shrink continuously: inflation has soared to above 7,000% and the proportion of households below the food poverty line has doubled from 20% to 48% (PASS II, 2003).

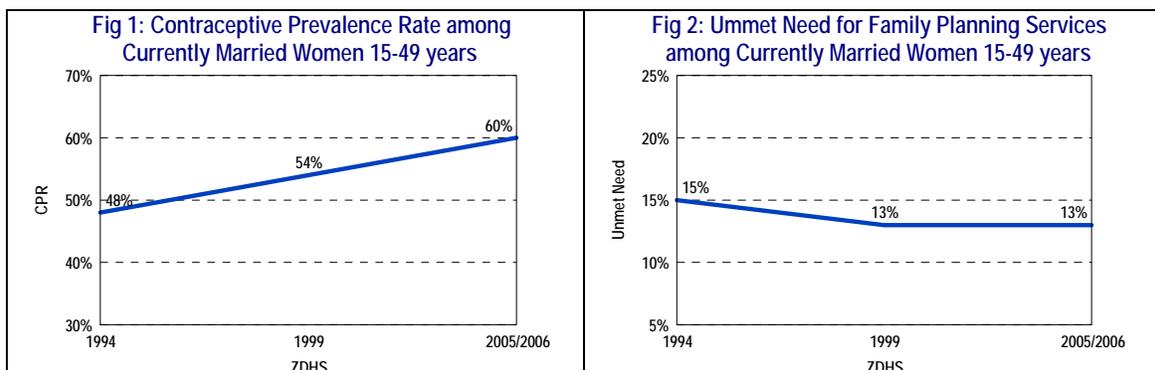
The shortage of foreign currency for a country that mainly relies on imported supplies, drugs and equipment, the emigration of skilled manpower, and the eroded incomes for those still in post, have created an environment in which the capacity for the health sector to meet the health needs of the population has been severely compromised. At the household and community level decisions to use available resources for health are now competing with the necessity to spend money on other basic unmet needs. In addition, the lack of resources altogether often leave women with decreased financial decision making power, thus increasing already existing gender imbalances.

Despite these growing needs at all levels, paradoxically, there has been a tremendous decline in development assistance to the country since the late 1990s.

2.2 MNH RELATED MORBIDITY AND MORTALITY

2.2.1 Family Planning

Perhaps the most important interventions to reduce maternal and neonatal morbidity and mortality is to develop and sustain a strong national Family Planning programme designed to prevent unwanted pregnancies, and to encourage child spacing.

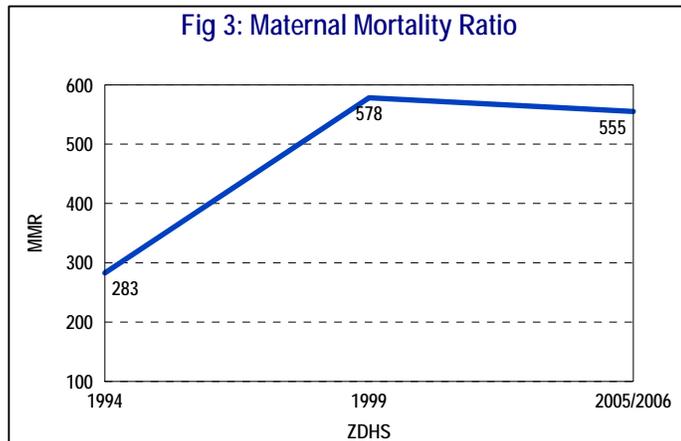


In this regard, the Contraceptive Prevalence Rate in Zimbabwe has increased steadily from 38% in 1984 to 60% in 2006, and is now one of the highest rates in Sub-Saharan Africa. The Total Fertility Rate has declined from 4.0 in 1999 to 3.8 in 2006 (ZDHS, 2005-6).

However, the unmet need for contraception has remained static at 13% for the period 1999 to 2006. The graphs above illustrate current trends in CPR and unmet needs for contraception.

2.2.2 Maternal Health

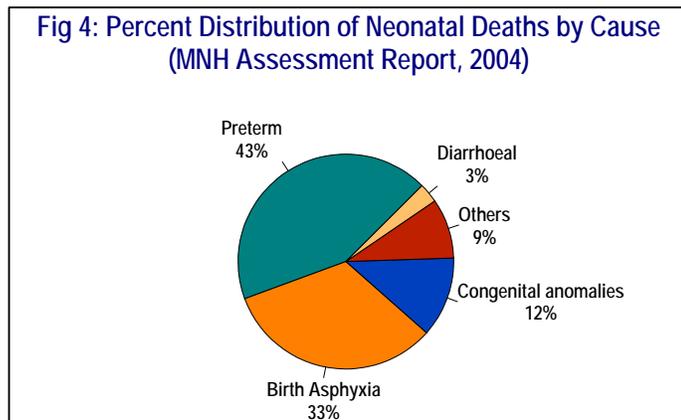
The Maternal Mortality Ratio has slightly declined from 578 deaths per 100,000 live births in 1999 to 555 deaths in 2005/6. However, this figure remains significantly high. There was an increase in women attending at least one antenatal care visit from 81% in 1999 to 94% in 2006. Yet skilled attendance at delivery declined from 73% in 1999 to 69% in 2006 while institutional deliveries declined from 72% to 68% over the same period (ZDHS 1999, 2005/6).



2.2.3 Neonatal Health

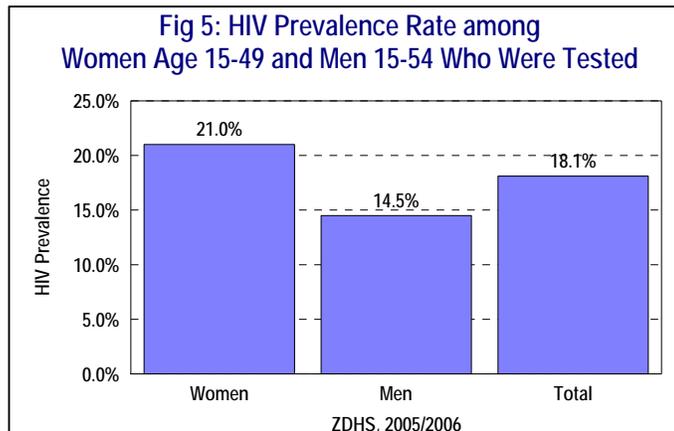
The Under Five Mortality Rate declined from 102 deaths per 1,000 live births to 82 deaths per 1,000 live births between 1999 and 2006. The Neonatal Mortality Rate was 24 per 1,000 live births in 2006 indicating a decline from 29 per 1,000 live births in 1999.

The major causes of Neonatal deaths are Pre-maturity and Asphyxia as shown in Figure 4.



2.2.4 HIV and AIDS

Despite a decline in HIV seroprevalence from 24.6 % in 2003 (ANC Surveillance) to 18.1% in 2006 (ZDHS), Zimbabwe remains one of the countries hit hardest by the pandemic, with an estimated 3,200 AIDS related deaths per week and 160,000 new infections in 2005. Figure 5 shows the HIV prevalence rate in 2006 by sex. The decline in HIV seroprevalence can be attributed to changes in sexual



behaviour, including a reduction in partners and increased condom use with non-regular partners, but also to increased HIV related mortality.

Of the estimated 1.61 million people living with HIV/AIDS in Zimbabwe, 56 per cent are women. HIV sentinel surveillance among pregnant women attending Ante Natal clinics declined from 21.3% in 2004 to 17.7% in 2006 (2004 ANC surveillance and 2007 preliminary ANC surveillance). More than 90% of Zimbabwe's 350,000 young children with HIV and AIDS were infected through mother to child transmission. Also in 2005, only 9% of pregnant women and infants received ARV prophylaxis for PMTCT of HIV.

2.2.5 Gender Based Violence

Gender-Based Violence remains a challenge of great proportion: in Zimbabwe at least 25% of women aged 15 - 49 years have experienced sexual violence, with a range between 25% and as many as 55%, and variation occurring by region, marital status, and level of education (ZDHS 2005/6). Young women are thus very vulnerable to increased reproductive health risks and gender based violence risks, including exposure to unintended pregnancies, unsafe abortions, sexually transmitted infections, HIV, and physical and emotional abuse.

Additionally, traditional socio-cultural attitudes, values, norms and beliefs, as well as weak legal and policy frameworks, sustain unhealthy practices related to the life cycles of women and their newborn babies.

2.3 MATERNAL AND NEONATAL HEALTH SYSTEMS

2.3.1 Policy Environment

The UN Convention for the Rights of the Child (CRC) which took place in 1989 formally established the rights to which all children are entitled, including the right to life and good health. The government of Zimbabwe ratified and signed the statutes of this convention as well as of the UN Convention for the Elimination of all forms of Discrimination against Women (CEDAW).

The Government of Zimbabwe is also a signatory to a number of important international and legal instruments that implore governments to create an enabling environment for the delivery of MNH services. Notable among these are:

- The International Conference on Population and Development Program of Action (1994)
- The Millennium Declaration (2000),
- The Abuja Declaration (2000),
- The Maputo Plan of Action (2006).

In order to address the inequities of the colonial era, in 1980 Zimbabwe adopted a National Health Policy aimed at uplifting the health of the formerly disadvantaged. This policy was publicised in a document entitled “Equity in Health”. In congruence with this policy, in April 2006 government reviewed guidelines on user fees at public health facilities. The key principle for the delivery of quality health services was that “everyone requiring services must pay or be paid for”, with the exception of children under five years of age who were exempted from paying consultation fees if they had a referral and a Road to Health Card. Pregnant women had to pay for services and were even subject to paying a penalty (150% of consultation fees) for bypassing the referral system.

The Reproductive Health Policy was developed in 2003. Presently, this policy provides the framework for the provision of integrated maternal health, family planning, HIV and AIDS, and STI services in Zimbabwe.

In response to the growing HIV and AIDS epidemic a National HIV and AIDS Policy was launched in 1999. It set up a multi-sectoral National AIDS Council (NAC) to coordinate the overall HIV/AIDS response as well as a National AIDS Trust Fund (also called the “AIDS Levy”). This Trust Fund was financed by a 3% levy on all taxable income paid to the government to fund and support aspects of the HIV/AIDS response in all sectors. The HIV and AIDS Policy and Strategic Framework was updated in 2005 to address some of the weaknesses identified in the 1999 policy, such as inadequate attention to child-related issues.

2.3.2 Health System Expenditure and Financing

The MOHCW has four main budget lines for administration, curative services, preventive services and research. Though there is some overlap between curative and preventive services, preventive and public health interventions have continued to be grossly under funded. This is worsened by the fact that the majority of private sector resources are allocated to curative and administrative services. The national budget for health is distributed to provinces and districts mainly on the basis of population size; with additional consideration being given to disease burden. Provinces and districts practice shadow budgeting with very limited scope for allocating savings in one line item to another under-funded line item. Expenditure is diligently tracked through the Public Finance Management System (PFMS).

The MOHCW has published National Health Accounts (NHA) for the specific years 1994, 1998/99, and for 2001. These Accounts provide a basis for tracking funds provided to and within the health sector. Health expenditure estimates for other years are based on estimates which have inherent methodological limitations. From available

data, it appears that total health expenditure as a percent of GDP fell significantly from 10.8% in 1998 to 6.4% in 2001 (MOHCW, 2001), and rose slightly again to 7.0% in 2005. However, the total expenditure on health per capita (in US\$ at the official rate of exchange) decreased by about 50% from US\$261 in 1998 to US\$137 in 2005. Given the prevailing hyper-inflationary environment the current situation is likely to have deteriorated further over the last two years.

In the 2001 NHA report, Public Health spending alone, constituted 3.7% of GDP, whilst private health spending constituted 4.1% of GDP and donor partners provided 0.9% of GDP (36.9%, 50.1% and 13%, respectively). With an estimated population of 11.6 million, the total national health expenditure per capita could be estimated at US\$37.26. The Public Health spending per capita was US\$13.73, while private health spending was US\$18.68. Donor partner contribution was US\$4.84 per capita and the contribution of households was US\$8.55.

From 1980 to the late 90's the Government pursued policies designed around a commitment to growth with equity. Unfortunately this period coincided with dwindling external resources, shrinking household incomes, and a growing HIV/AIDS epidemic. During this period, diminishing wages in real terms, and out-migration of a significant portion of the health labor force contributed to an overall weakening of the health system. The contribution of private insurance remained stagnant at an average of 25% of total private health expenditure with the remainder being borne by individual households. The strain on individuals and families has been very challenging and the decline of out-of-pocket expenditure as a percentage of private health expenditure declined from 75.2% in 1998 to 49.6% in 2005 strongly indicates that many individuals can no longer afford medical care.

There is no national health insurance and social safety networks are very limited. Though there is an official policy and a circular instructing public health facilities not to charge user fees at the district level and below, its interpretation and implementation has seen most people, including pregnant women, failing to access services.

2.3.3 Human Resources for Health

In the National Health Strategic plan 1997-2007 with the theme: 'Working for Quality and Equity in Health', Government reaffirms its commitment to equity in health which has been the guiding principle for policy since 1980; and to the identification of human resources for health as the key to realising this objective.

Government employs 65% of the national health workers through owning and managing 70% of the national stock of health facilities and through grant support to 75% of the private not for profit facilities run by missions and local authorities (Initiatives Incorporated, 2000). Human resource expenditure was 47% of Public health Expenditure in 1999 but decreased to about 34% in 2003/4 (Ministry of Finance and Economic Planning, 2004). This paradoxical decline in expenditure on human resources at a time when the health system is failing to meet demand does not reflect a policy shift on part of government but shows the devastating effects of 'brain drain' caused by the worsening economic environment.

The brain drain in Zimbabwe occurs in various ways: the usual external migration has been the most significant and obvious but the internal brain drain, though less well documented, is now becoming more significant. The latter may happen through the exodus of health workers from the public sector to non governmental organisations and some forms of private sector where their skills are not efficiently used; but, even more alarmingly, “brain drain-in-situ” occurs where workers report for duty, usually late, and resort to various non-productive coping strategies, before ending their day’s tasks earlier than stipulated.

There has been tremendous investment in infrastructure to bring the domestic production of key human resources to a level at which the country should not require imported labour in the health sector. The main challenge currently is lack of tutors, tutorial materials and other supplies and equipment necessary to impart skills to meet the set standards. Escalating subsistence costs during post graduate training has seen the number of medical doctors enrolling for specialist training, including Obstetrics and Gynaecology, falling to unacceptable levels. This has created a shortage of well trained doctors, especially at the central hospitals, thus over burdening the existing specialists while exposing junior doctors to limited supervision. The production of midwives is also being threatened by a low number of enrolments as there are no meaningful improvements in remuneration and/or recognition upon completing the post basic training.

More than two thirds of the population lives in rural areas but nearly two thirds of the post establishments are in urban areas; with Harare and Bulawayo accounting for nearly 90% of the urban quota. This is further accentuated by a skewed rural-urban disparity in vacant posts.

To mitigate the brain drain and rural-urban disparity, the MOHCW has started various initiatives. A new calibre of nurse, Primary Care Nurse (PCN); trained specifically for the Zimbabwean primary health care system was introduced mainly for rural clinics; Additionally, a mandatory one year of district experience has been made a requirement for unconditional registration of medical doctors, and also serves as a prerequisite for getting a certificate of good standing; Other non-financial incentives, though minimal in scope, have been introduced to encourage doctors to work in rural areas as well.

Prior to 2005 the establishment of posts, employment and remuneration of health workers was the responsibility of The Public Service Commission, under a different Ministry, yet managed by the MOHCW. Since then, the Health Services Board has taken over all the human resource for health issues including the mandate to improve the working conditions for health workers.

2.4 ORGANISATION OF MNH SERVICES

All health services in the public sector, particularly at primary care and district level, are integrated by what is called the “supermarket approach”. Maternal and neonatal health services are integrated within the overall health delivery system.

In the public sector, the health system is organized through a hierarchical system with each higher level carrying out more specialized functions as well as supervising the lower level. This hierarchical system in Zimbabwe is designed around 4 referral levels consisting of, in increasing levels of sophistication:

- Primary (rural/ urban health centre) level,
- Secondary (district hospital) level,
- Tertiary (provincial hospital) level and
- Quaternary (national or central hospital) level.

The district is the focus of health delivery for the end user. Each district has a network of primary care facilities (a Rural Health Centre or clinic) which are supposed to provide the first level of contact between the community and the health system, though in practice some patients bypass this first level facility. Each district has in principle a designated district hospital to which all the primary care facilities refer those cases they cannot handle.

In addition to government provided services (both central and local government), there is also an active private sector which can be divided into not-for-profit and for-profit categories. The not-for-profit category includes church/mission run health services as well as NGO provided services. The church/mission run health services are included within the category of public sector health services since they are largely managed under the same rules as government run services, are subsidized with public funds and largely suffer from the same problems as government owned facilities.

NGO health services are managed similarly as public sector health services although they do not receive public funds but are largely financed by donors.

The for-profit private sector is largely confined to the major urban areas. It is made up of doctors with private practices, hospitals with in-patient facilities, nursing homes, private pharmacies as well as other specialized health services e.g. those for rehabilitation of the disabled. As services in the public sector deteriorate, the for-profit private sector is starting to play a more important role in providing health services to a greater proportion of the population, particularly in the urban areas. This includes giving direct care to patients, providing diagnostic services and manufacturing of medicines and equipment by an active pharmaceutical sector. The table below summarises the availability of maternal and neonatal health services by level.

Table 1: An Overview of Maternal and Neonatal Health Services by Level

<i>Maternal and Neonatal Health Services: C=Community, P=Primary, S=Secondary, T=Tertiary, Q=Quaternary</i>	C	P	S	T	Q
Adolescent Sexual and Reproductive Health	X	X	X	X	X
Provide youth friendly sexual and reproductive health services	X	X	X	X	X
Educate adolescents about sexual and reproductive health and rights in a life skills context	X	X	X	X	X
Refer youth people for sexual and reproductive health services as appropriate	X	X	X	X	X
Family Planning including PMTCT of HIV	X	X	X	X	X
Provide information on family planning services (sources)	X	X	X	X	X
Provide counselling on family planning including dual protection	X	X	X	X	X
Provide appropriate family planning services including male and female condoms within the context of a national Comprehensive Condom Programme	X	X	X	X	X
Provide emergency contraception		X	X	X	X
Provide ARV prophylaxis for rape victims		X	X	X	X
Refer clients for specialist services that you cannot provide	X	X	X	X	X
Provide HIV counselling	X	X	X	X	X
Provide HIV testing		X	X	X	X
Antenatal Care including PMTCT of HIV	X	X	X	X	X
Provide counselling on pregnancy	X	X	X	X	X
Provide counselling on STIs	X	X	X	X	X
Provide counselling on nutrition and breastfeeding	X	X	X	X	X
Provide counselling on Family Planning	X	X	X	X	X
Nutrition for the pregnant mother (balanced diet)	X	X	X	X	X
Refer complications of pregnancy	X	X	X	X	X
Detect women with STI's/RTI's	X	X	X	X	X
Treat women with STI/RTIs		X	X	X	X
Provide prophylaxis for Tetanus		X	X	X	X
Provide prophylaxis for Anaemia (iron and folic acid)		X	X	X	X
Provide prophylaxis for Malaria (Intermittent Preventive Treatment 1,2,3)	X	X	X	X	X
Detect complications of pregnancy	X	X	X	X	X
Manage selected cases and refer appropriately		X	X	X	X
Maintain and distribute appropriate drugs and supplies		X	X	X	X
Provide HIV testing		X	X	X	X
Manage complications of pregnancy and refer appropriately		X	X	X	X
Delivery Care including EmONC		X	X	X	X
Perform Normal deliveries		X	X	X	X
Detect complications of delivery and refer appropriately	X	X	X		
Manage complications of delivery		X	X	X	X
Provide HIV counselling	X	X	X	X	X
Provide HIV testing		X	X	X	X
Provide ARVs for PMTCT		X	X	X	X
Provide Basic Emergency Obstetric and Neonatal Care		X	X	X	X
Provide Comprehensive Emergency Obstetric and Neonatal Care			X	X	X
Arrange transport for obstetric emergencies to next level of care	X	X	X	X	
Follow-up referred obstetric and neonatal emergencies.	X	X	X	X	
Postpartum Care including PMTCT of HIV		X	X	X	X
Provide early Postpartum care up to six weeks	X	X	X	X	X
Support exclusive breast feeding	X	X	X	X	X
\Counsel for and provide contraceptives and condoms	X	X	X	X	X
Provide nutrition education and supplements	X	X	X	X	X
Identify puerperal and neonatal complications and refer appropriately	X	X	X	X	
Manage puerperal and neonatal complications and refer appropriately		X	X	X	X
Manage rare neonatal problems and provide feedback about referred cases				X	X

3. Current National MNH Initiatives

The Government of Zimbabwe has made efforts to create an enabling policy environment for the implementation of various maternal, neonatal and child health programmes. Reproductive Health Policy and Guidelines have been developed. The MOHCW has carried out a comprehensive MNH assessment (2004) the findings of which form the basis for the MNH Road Map. The MOHCW and partners continue to procure and distribute MNH equipment, drugs and supplies guided by the gaps identified in the MNH assessment.

The MOHCW has led several initiatives to mitigate the human resource issues facing the health sector. Confronted with the worsening “brain drain” of general nurses and midwives, the Ministry has introduced a new cadre, that of Primary Care Nurses. These nurses are trained specifically for the Zimbabwean primary health care approach, to fill nursing posts at rural health centres. This initiative is being 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 precondition for the unrestricted registration to practise and the receiving of certificates of good standing. In order to maximise the capacity of the cadres at post, MNH partners have obtained approval from the Nurses Council for nurses to perform manual vacuum aspirations, to manually remove the placenta, and to insert implants. Partners are also supporting staff positions at various levels of the Government and its departments as a way of improving the management and coordination of various MNH programmes.

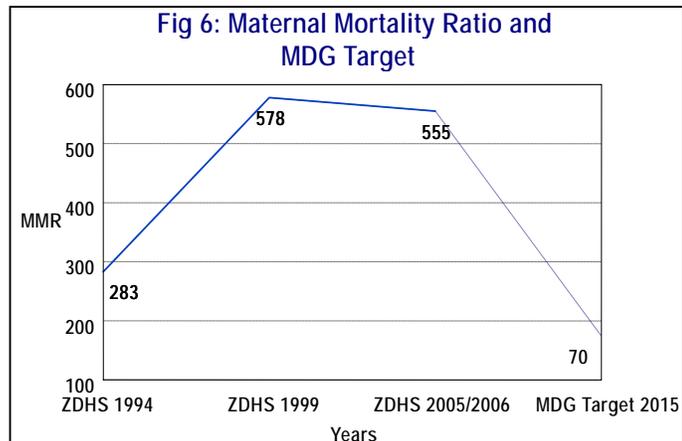
The MOHCW and its Partners are in the process of implementing various MNH programmes. These include an expanded CBD programme to improve FP services, the re-orientation of Traditional Birth Attendants to mobilise for improved skilled attendance at delivery, and the training of health service providers with Emergency Obstetric and Neonatal care skills. The Ministry is promoting Kangaroo Mother Care, expansion of comprehensive PMTCT, and promoting the Baby Friendly Hospital Initiative, all initiatives aimed at reducing neonatal deaths.

4. Proposed Response: The MNH Road Map

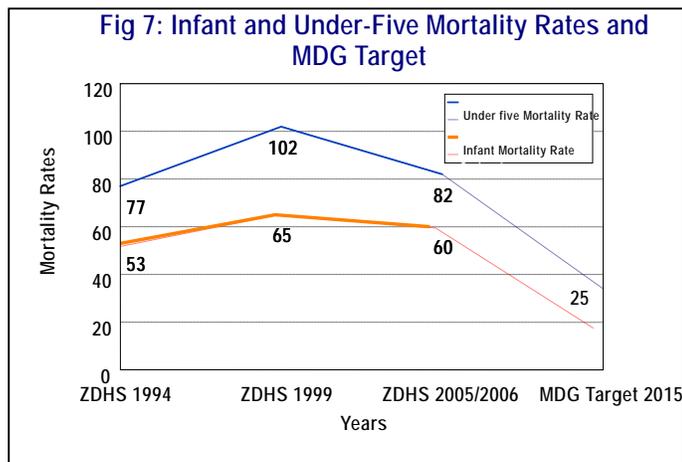
4.1 THE MNH ROAD MAP VISION

Despite the various efforts by the MOHCW and partners, the key indicators for the development of health are not on course to meet the MDG targets.

The trends and current status with regard to the Maternal Mortality Ratio show that a lot has to be done to meet the global MDG target of 70 maternal deaths per 100,000 live births by 2015 as shown in figure 6.



The trends for Infant, Neonatal and Under Five Mortality Ratios over the past 20 years in Zimbabwe show that despite improvements in the last five years, there is an obvious need to review and scale up effective MNH interventions in order to meet the MDG targets by 2015 as shown in Figure 7. Within this context, the Road Map forms a strategic framework to guide the national response to attain the MDG targets.



The Vision of the Zimbabwe Maternal and Neonatal Health Road Map is to contribute to ‘the attainment of the highest level of Reproductive Health in all Zimbabweans’ [1], and ‘to contribute to development at large’ [2]. This vision is in line with the national health policy, the national health strategic plan, and the reproductive health policy. It also reflects the government’s commitment to domesticate regional and international declarations and forms a basis for operationalizing the associated programmes and plans of action.

4.2 THE MNH ROAD MAP CONCEPTUAL FRAMEWORK

4.2.1 The Four Pillars of Safe Motherhood and New Born Health

The concept of the Four Pillars of Safe Motherhood describes comprehensively all prerequisites to be met in order for a woman to safely live through her life cycle, from informed teen age through supervised, healthy pregnancy, through safe delivery and childbirth, the safe-guarding of her newborn's healthy start of life, and through a continued, problem free reproductive life (the "life cycle approach"). In order to ensure a smooth transition between each of the phases of the life cycle, it is essential to guarantee "continuum of care". The Road Map outlines interventions that were proposed after the identification of gaps by the earlier MNH assessment as well as by the analysis at the beginning of this document, and will thus effectively build this continuum of care.

The Four Pillars of Safe Motherhood stand for 1) Family planning, 2) Antenatal Care, 3) Clean and Safe Delivery for the mother and the newborn, and 4) Essential Obstetric Care. The inseparability and interdependence of mothers and babies are assumed by the concept of the Four Pillars and therefore also greatly influence the holistic approach adopted throughout this Road Map. The concepts represented by the pillars are further developed below as they relate to the MNH context in Zimbabwe.

Pillar One: Family Planning

The vulnerability of women to morbidity and mortality is greatly increased when women who want to limit or space future pregnancies are unable to do so because Family Planning services are unavailable, inaccessible, unaffordable, of poor quality, or because the use of contraceptives is restricted. Adolescent fertility is associated with increased maternal deaths, low birth weight, pre-term births, still births and neonatal deaths. Access to Family Planning, especially by young people, will assist to reduce neonatal mortality. It is therefore of utmost importance to reach young women and men at the onset of their reproductive age, as well as all other adults, and prepare them for their future choices with appropriate

Although the current CPR is relatively high, 13% unmet demand remains, and strategies to improve family planning services should target both facility and community based distribution systems.

access to Family Planning information and services. It is encouraging to note that the Contraceptive Prevalence Rate in Zimbabwe has continued to rise, although specific increase is predominantly observed in the use of oral contraceptives. The main source for Family Planning services in Zimbabwe remains the formal health facility. A functional Community Based Distribution network is necessary to improve access to Family Planning services, especially for clients living in communities not adequately served by health facilities.

Pillar Two: Antenatal Care

Antenatal Care visits provide routine services as well as opportunities to identify women with high risk pregnancies. It is almost impossible to predict during an ANC visit, which individual woman will develop a life-threatening complication. Some women are more likely to develop complications than others, but all pregnancies should be considered at risk. Since even if a woman has received proper ANC and is correctly identified as being at risk, she may not reach or receive appropriate care at a later stage during pregnancy or delivery. Despite the high ANC coverage (94% of women going for at least one ANC visit), a significant number (32%) of women are still opting to deliver at home, and less than 10% of babies are receiving Nevirapine. Focused Antenatal Care, including birth preparedness and Provider Initiated Testing and Counselling, should become part of routine ANC services.

Focused ANC services, including PMTCT and Nutrition, should be available to all pregnant mothers

Pillar Three: Clean and Safe Delivery for the Mother and the Newborn

There is a direct correlation between the percentage of births assisted by a skilled attendant and maternal as well as neonatal survival. Since most complications and deaths occur during delivery (25%), or immediately thereafter (60%), it is absolutely critical to have skilled and equipped attendants present at the time of birth to attend to both the mother and the baby.

In 2005/6 only sixty-eight percent (68%) of pregnant women were delivered by a skilled attendant in Zimbabwe.

Skilled attendance at birth accompanied by quality obstetric care and the capacity of the attendant to take care of the mother and the newborn becomes the key to the reduction of Maternal and Neonatal mortality.

Pillar Four: Essential Obstetric and Neonatal Care

Obstetric and Neonatal First Aid

First Aid services can be provided in various degrees at all levels of the health system. In order for a woman and/or newborn with a complication to reach a Basic or Comprehensive Emergency Obstetric and Neonatal Care facility, peripheral health facilities need to be staffed, trained and equipped to stabilize major complications long enough to allow a woman to safely reach the next level of referral. These First Aid services can be provided at the majority of all health facilities.

Basic Emergency Obstetric and Neonatal⁴ Care

BEmONC refers to an (abbreviated) list of services that can save the lives of women and newborns with obstetric and neonatal complications. A health facility qualifies as a BEmONC facility if it has performed each of the following “signal functions” at least once over the preceding 3 months:

⁴ According to the Zimbabwe Reproductive Health Steering Committee, the signal functions for emergency neonatal care are as outlined.

Table 2: Signal Functions of BEmONC

Basic Emergency Obstetric Care

- Provision of parenteral antibiotics
- Provision of parenteral oxytocics
- Provision parenteral sedatives/anticonvulsants
- Manual removal of placenta
- Removal of retained products of conception (MVA or D&C)
- Assisted vaginal delivery (Vacuum/Breech Extraction)

Basic Emergency Neonatal Care

- Suctioning of newborns' airways
- Ventilating of newborns using Bag and mask
- Provision of thermal care
- Provision of parenteral antibiotics
- Provision of parenteral Vitamin K
- Provision of parenteral dextrose

Comprehensive Emergency Obstetric and Neonatal Care

To qualify as a *CEmONC* facility, all of the above services must be offered, but in addition the following functions are performed:

Table 3: Signal Functions of CEmONC

Comprehensive Emergency Obstetric Care

- Caesarean Section
- Blood Transfusion

Comprehensive Emergency Neonatal Care

- Intubation and ventilation
- Narcain
- Surgery

In Zimbabwe most primary level facilities with qualified nurses are able to offer BEmONC, and the majority of secondary as well as all tertiary and quaternary level facilities have capacity to offer CEmONC; though operating time may not always conform to the 24/7 criteria set by the WHO. There is therefore need to carry out a 'mapping' exercise to provide baseline data for monitoring and evaluation, as well as for developing strategies to upgrade and scale up coverage of EmONC services. Zimbabwe has already reached the WHO recommended aim of having at least 1 facility that offers CEmOC for every 500,000 people and 4 facilities that offer BEmOC. However, in actuality, the concentration of large numbers of people in specific areas, as well as the distribution of the facilities do not guarantee access to such services for all.

Though there are no clear guidelines on content of and coverage standards for EmNC, the MNH Road map has set out a package of interventions to form B/CEmNC. The EmOC coverage guidelines will also be adopted for EmNC to ensure that coverage of life saving interventions for the mother remains closely linked to newborn survival.

4.2.2 The Three Delay Model

The Three Delay Model highlights the challenges that women face with reproductive health issues in general, and particularly with recognising danger signs at a time when their own well being is seriously threatened, and consequently with making a decision to seek care (1st Delay), in reaching a health facility (2nd Delay), and in receiving appropriate care at a health facility (3rd Delay).

The Three Delay Model is directly related to and dependent on cultural norms, education and current socio-economic conditions.

The 1st Delay

A majority of women, men and youth in Zimbabwe have some, although limited knowledge regarding the health risks involved with lack of family planning, pregnancy and childbirth. Knowledge regarding danger signs of complications during labour, delivery and during the post partum period is particularly limited. This causes lack of any preparatory action designed to overcome the “first delay”: the time that is lost in *recognizing* the seriousness of a situation and *deciding* whether or not to seek appropriate medical attention.

Lack of knowledge about complications of pregnancy and childbirth and lack of recognition of the seriousness of particular symptoms contribute to delay in recognizing the need for medical care, whereas lack of confidence in the medical system, concern about the distance to be travelled, cost of the services, traditional beliefs and poverty related to low socio-economic status, and in some cases misplaced pressure by close relatives to stay home, are some of the factors contributing to delay in deciding when to seek medical care.

Based on the MNH assessment, it is clear that further effort must be put into ensuring that Maternal and Neonatal health issues are part of “every-day language” in the whole community. Every woman, their husbands, their mother-in laws, other relatives and community leaders must know the specific danger signs that anticipate a tragic and unnecessary death. Every family must have its’ own “emergency preparedness” action plan which spells out who will do what, and with what resources, if specific problematic maternal or neonatal symptoms are observed.

The 2nd Delay

Due to long distances between communities and health facilities, financial constraints, transport and communication problems, women often do not reach the health care facility at all, or if they do, they are seriously delayed and consequently, minor complications become unnecessarily aggravated or even fatal.

For every minute of delay due to lack of transport or means of communication, there is an increase in the possibility that a minor complication will become a life-threatening emergency

The Road Map recognizes that there is little evidence of structured or viable emergency transport and communication schemes, thus contributing to increases in the “second delay”, or the time needed for *reaching* a health facility or trained service provider, once a decision is taken to seek care. Also, communication and transportation between the different levels in the health system is erratic, and thus referrals from one level to the other may create substantial additional delays.

The 3rd Delay

The “third delay”, that of *receiving expeditious and effective care*, is critical in order to reduce Maternal and Neonatal Morbidity and Mortality. In order to address the third delay, a rural health facility must have sufficient equipment and supplies as well as trained staff able to stabilize complications, offer PMTCT services and refer a woman to the nearest district or mission hospital. Similarly, all district and mission hospitals must have sufficient staff, equipment, and supplies to manage both normal and complicated pregnancies. Based on workload statistics and service coverage in Zimbabwe, district and mission hospitals must be able to manage on average 3 complications every day of the year. Provincial and national hospitals may be required to manage on average 18 complications and perform 3 or more Caesarean sections every day of the year.

A number of distinct opportunities have been identified to immediately address the third delay:

- **Mobilize resources to procure the drugs, supplies and equipment identified as necessary.**
- **Undertake the reorientation of all Midwifery and Nursing staff to the concept of EmONC, and decentralize several carefully selected EmONC life-saving skills.**

However, the Road Map recognizes that incapacity due to lack of appropriately trained staff, essential drugs and equipment often forces referral of patients to higher levels of health care than should be needed, thus causing more delay before appropriate treatment is received. Rural health clinics, district and provincial hospitals do not function to the limits of their assumed and expected capacity, thus creating avoidable strain on the highest level of health care.

The importance of the three delays can be summarized as follows: For every single minute of unnecessary delay, there is an increase in the possibility that a minor complication will become a life-threatening emergency.

4.2.3 Relationship between the three delays and the four pillars

The “Three Delay” model has previously been used to highlight risk factors for women who are pregnant, and are in need of special care during delivery and thereafter. For the purpose of the Road Map it is useful to understand that not only during pregnancy and delivery complications should always be anticipated and where possible prevented, but that already during teenage, and the pre-pregnancy stages of a woman’s life cycle, delays in seeking or receiving care will have major implications for a healthy reproductive life later.

The following figure provides a summary of the MNH situation in Zimbabwe as analysed within both ‘The Four Pillars of safe motherhood’, and ‘The Three delays’ models.

Table 4: Analysis of the Three Delays in Relation to the Four Pillars

		Pillars			
		Family Planning	Antenatal Care	Safe Delivery and EmONC	Postnatal Care
Delay	First Delay	-High CPR and low TFR suggest high acceptability and knowledge levels of FP. -Low use of condoms for contraception suggests knowledge and decision making gaps in dual protection.	-High ANC attendance suggesting women face minimal barriers in deciding to attend ANC -Low PMTCT uptake suggests limited decision making for women regarding utilising HIV services.	Increasing home deliveries suggest low knowledge level for importance of skilled attendance, and women's limited control over allocation of household income.	Low proportion of adherence to infant feeding options suggests women have insufficient information and limited decision making power especially in the context of PMTCT of HIV.
	Second Delay	Source of FP is still Facility dominated suggesting transport barrier may be contributing to unmet need.	High ANC attendance suggests women are overcoming transport barriers.	Increasing home deliveries suggest women are not overcoming the transport and communication barrier.	Low PNC attendance suggests women are failing to overcome the transport barrier.
	Third Delay	-Inconsistent method mix. -Weakened community based sources of Family Planning.	Low coverage of various ANC package interventions (RPR, examinations, lab tests, chemo prophylaxes, etc) suggests low quality of ANC service provision.	Leading causes of maternal and neonatal mortality in Zimbabwe are mainly avoidable suggesting lack of RH commodity security at facilities as well as limited EmONC skills among health workers.	High maternal and neonatal mortality in the postnatal period suggest limited case detection and management capacity of institutions during PNC.

4.3 THE ROAD MAP AIM, LOGFRAME AND ACTIVITIES

4.3.1 The Aim of the MNH Road Map

The overall Aim of this MNH Road Map is to improve maternal and neonatal health. It will contribute to the attainment of the health related Millennium Development Goals as agreed upon in the Millennium declaration.

- **MDG 4:** To reduce Under-Five Mortality.
Target for Zimbabwe: To Reduce the Under 5 mortality rate from 77 (1994 ZDHS) to 25 by 2015.
- **MDG 5:** To improve Maternal Health.
Target for Zimbabwe: To reduce the Maternal Mortality Ratio from 283 (1994 ZDHS) to 70 deaths per 100,000 live births by 2015.
- **MDG 6:** To Combat HIV and AIDS, Malaria, & other diseases.
Target for Zimbabwe: To have halted the increase of HIV and AIDS by 2015, and to begin to reverse the spread thereafter.

4.3.2 The Objectives of the MNH Road Map

The **six objectives** of the MNH Road Map are as follows:

- **Four objectives** relate to each of the Four Pillars of Safe Motherhood, and are presented in a life cycle chronology:
 - 1: *To increase the availability and utilization of youth friendly Family Planning and HIV prevention service.*
 - 2: *To increase the availability and utilization of quality focused antenatal care including PMTCT services*
 - 3: *To improve access to skilled attendance at delivery; including EmONC.*
 - 4: *To improve access to quality PNC including PMTCT services.*
- **Two objectives** relate to improving the health systems and policy environment:
 - 5: *To strengthen the capacity of health systems for the planning and management of MNH programmes.*
 - 6: *To improve the policy environment for provision and utilisation of quality and equitable MNH services.*

A number of activities have been identified to produce specific *results* meant to achieve the above objectives:

- 1: *To increase the availability and utilization of youth friendly Family Planning and HIV prevention services*

This will be achieved through: (a) capacity building of health service providers on SRH, Family Planning and comprehensive HIV Prevention Services; (b) strengthening youth friendly SRH services; (c) expanding Community Based Distribution systems, (d) Integrating STI/HIV/AIDS, and FP programs and services, (e) community mobilization to increase demand and use of SRH and family planning services

2: *To increase the availability and utilization of quality focused Ante Natal care including PMTCT services*

The strategies that will be employed to achieve this output include: (a) capacity development on focused ANC including comprehensive PMTCT; (b) promotion of male/female condom use; (c) dissemination of updated guidelines and clinical protocols, (d) operations research as a monitoring and evaluation tool; (e) expansion of the mother/baby friendly hospitals initiative, and (f) community mobilization to increase demand and use of PMTCT.

3: *To improve access to skilled attendance at delivery; including Emergency Obstetric and Neonatal care*

This output will be achieved through: (a) community mobilization to increase demand and use of maternal and neonatal health services; (b) strengthening transport and communication systems for effective referrals; (c) capacity development of facility and community based health service providers in EmONC; (d) strengthening the waiting mothers' shelters.

4: *To improve access to quality PNC including PMTCT services*

The strategies that will be employed to achieve this output include (a) capacity development on comprehensive post-natal care including PMTCT; (b) promotion of dual protection; (c) dissemination of updated guidelines and clinical protocols, (d) operations research as a monitoring and evaluation tool; (e) expansion of the mother/baby friendly hospitals initiative, and (f) community mobilization to increase demand and use of PNC and PMTCT services.

5: *To strengthen the capacity of health systems for the planning and management of MNH programmes*

This will be achieved by ensuring: (a) RH commodity security; (b) availability of skilled human resources; (c) functional health management information systems; (d) improved health management capacity at all levels; and (e) improved financing of the MNH programme.

6: *To improve the policy environment for the provision and utilisation of quality and equitable MNH services*

This will be achieved through: (a) the review and dissemination of the RH policy; (b) the development of an SRH strategy, (c) the development of a human resource development strategy; (d) the establishment of partnerships to advocate for increased demand for and supply of quality services, and the funding for MNH services; (e) the lobbying for increased government expenditure for MNH; and (f) the advocacy for integrated SRH services and linkages with the HIV and AIDS strategies.

For the successful implementation of the MNH Road Map, it is necessary to adopt a multi-sectoral approach, to include males as essential partners of MNH programmes, to mainstream gender, to foster community involvement and participation, and to promote behavioural change.

4.3.3 Logical Framework for the National MNH Road Map

Table 5: Intervention logic, OVI, means of verification, risks and assumptions

	Intervention Logic	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
Aim	Improve Maternal and Neonatal Health	<ul style="list-style-type: none"> - Maternal Mortality - Neonatal Mortality - Under 5 Mortality 	ZDHS	
Objectives	1: To increase the availability and utilization of youth friendly Family Planning and HIV prevention service	<ul style="list-style-type: none"> - % CPR- - %Unmet need for family planning among all women - % HIV prevalence 	<ul style="list-style-type: none"> - ZDHS - ANC HIV surveillance 	Availability of HIV test kits and RH commodities on the market
	2: To increase the availability and utilization of quality focused antenatal care including PMTCT services	<ul style="list-style-type: none"> - % ANC attendance - % of pregnant women that receive iron and folate for prophylaxis - % of pregnant women that receive Anti Tetanus Toxoid - PMTCT uptake. 	<ul style="list-style-type: none"> - ZDHS - NHMIS - ANC records 	Other barriers to accessing ANC/PNC/PMTCT services are removed.
	3: To improve access to skilled attendance at delivery, including EmONC	<ul style="list-style-type: none"> - % Skilled attendance at delivery - EmONC coverage 	<ul style="list-style-type: none"> - ZDHS - Periodic EmONC evaluation - Mapping of health facilities 	
	4: To improve access to quality PNC including PMTCT services	<ul style="list-style-type: none"> - % PNC attendance - % of women who begin breastfeeding within the first hour - % of women that receive post-partum FP services. 	ZDHS	

	Intervention Logic	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
	5: To improve health system capacity, performance, monitoring and evaluation at all levels	<ul style="list-style-type: none"> - Quality of health systems performance - Functional health system as measured by 'minimum standards' for: - Commodity stock levels, vacancy rates for key posts, availability of ambulances for referrals, functional radio, telephone systems. 	<ul style="list-style-type: none"> - Periodic health systems evaluation - Mapping of health facilities (including all key systems indicators) e.g. quarterly or biannually. 	Health Infrastructure does not further deteriorate
	6: To improve policy advocacy and resource mobilization for Maternal and Neonatal Health services	<ul style="list-style-type: none"> - Quality of policy MNH environment - Policy changes effected - Government - - expenditure on health as proportion of total Government expenditure - Amount of donor resources for MNH services 	<ul style="list-style-type: none"> - Periodic policy evaluation - National budget 	Government remains committed to the MNH cause.
Expected Results	1.1 Increased capacity of CBDs in provision of quality HIV prevention and Family Planning services	<ul style="list-style-type: none"> - %CBD contribution as source of oral contraceptives - %CBD contribution as source of male condom 	<ul style="list-style-type: none"> -ZDHS -Routine information? 	CBDs remain motivated
	1.2 Increased capacity of health facilities in the provision of quality youth friendly FP and HIV prevention services	<ul style="list-style-type: none"> - % contribution as public and mission health facilities to source of oral contraceptives - % contribution as public and mission health facilities to source of male condoms - % contribution of Pill to total CPR for modern methods 	<ul style="list-style-type: none"> -ZDHS -Routine information? 	Health infrastructure does not deteriorate

	Intervention Logic	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
	1.3 Increased demand for youth friendly FP and HIV prevention services	<ul style="list-style-type: none"> - % Knowledge level for any method of contraception for men by age? - % Knowledge level for any method of contraception for women by age? - % demand for family planning satisfied 	<ul style="list-style-type: none"> - ZDHS - Program reports 	RH commodities available on the market
	2.1 Increased availability of quality focused antenatal care including PMTCT	<ul style="list-style-type: none"> - % Facilities offering FANC - % Informed of signs of complications of pregnancy during ANC - % Blood Pressure measured - % Facilities offering HIV testing for PMTCT 	<ul style="list-style-type: none"> - ZDHS - Program reports 	Brain drain does not worsen
	2.2 Increased demand for quality focused antenatal care including PMTCT	<ul style="list-style-type: none"> - % 1st ANC visit in 1st trimester - % at least 4 ANC visits - % HIV testing uptake 	<ul style="list-style-type: none"> - ZDHS - Program reports 	<ul style="list-style-type: none"> - Socio-economic environment does not further deteriorate
	3.1 Increased availability of skilled attendants at delivery	% Facilities without skilled attendant	<ul style="list-style-type: none"> - MNH Survey - Program reports 	<ul style="list-style-type: none"> - Staff remain motivated - Other barriers to access services do not worsen
	3.2 Increased coverage of EmONC services	No of hospitals that are equipped to provide basic/ comprehensive EmONC	Mapping of health facilities periodically	
	3.3 Increased demand for skilled attendant at delivery	% institutional delivery	<ul style="list-style-type: none"> - ZDHS - Program reports 	

	Intervention Logic	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
	4.1 Increased availability of quality post natal care including PMTCT	<ul style="list-style-type: none"> - % Facilities providing PNC - % sites offering ARV prophylaxis to HIV exposed babies - % of babies testing negative at 18 months - % PNC women provided information on dual protection - % PNC women attended by skilled service provider 	<ul style="list-style-type: none"> - ZDHS - Program reports 	
	4.2 Increased demand for quality post natal care	% PNC attendance	<ul style="list-style-type: none"> - ZDHS - Program reports 	
	5.1 Increased availability of RH commodities	Stock out rates for selected EmONC commodities	MOHCW Routine data	RH commodities remain available on the market
	5.2 Improved quality of information for MNH services	Completeness and timeliness of routine data	HMIS reports	Staff remain motivated to collect data
	5.3 Improved availability of human resources for MNH	<ul style="list-style-type: none"> - Vacancy rates for key posts - Training output 	<ul style="list-style-type: none"> - HR records. - Training institution records. 	Brain drain does not worsen
	5.4 Improved MNH program management capacity at all levels	Quality of MNH program management (proportion of districts who have undergone training)	MNH program evaluation	Availability of staff
	5.5 Improved communication and transport capacity	Increased number of referrals between all levels	Referral records between facilities	Resources for maintenance and running costs will be available
	6.1 Improved evidence base for MNH policy advocacy	Number of research questions addressed	<ul style="list-style-type: none"> -MNH Road Map progress reports -research findings 	Resources remain available to fund researches
	6.2 Updated evidence-based MNH policies and strategies	Number of policy gaps addressed	Policy documents	Government remains committed to MNH
	6.3 Mobilized resources for MNH services	Quantity of resources mobilized	MNH Road Map progress reports	Economic environment does not further deteriorate

4.3.4 Road Map Activities

In order to achieve the results outlined in the MNH Log Frame, a number of specific activities have been identified to achieve each objective. The following table presents a summary of these activities that are recommended to be incorporated in the Integrated MNH Annual Work Plan outlined in Annex 6.3.

Table 6: Activities for each Road Map Objective

1	Family Planning and PMTCT
1.1.1	Recruit Community Based Distributors
1.1.2	Recruit depot holders
1.1.3	Develop job aids for CBDs and depot holders
1.1.4	Train CBDs regarding family planning and HIV prevention, dual protection and referral to PMTCT and SM services
1.1.5	Train depot holders
1.1.6	Conduct supervision and follow up for the CBD and depot holder network
1.1.7	Procure bicycles for CBDs
1.1.8	Train/update health service providers in family planning skills
1.2.1	Establish/strengthen youth friendly corners at health facilities
1.2.2	Develop and distribute youth friendly SRH IEC materials
1.2.3	Recruit and train peer educators in youth friendly SRH services provision
1.2.4	Update health service providers in youth friendly SRH services provision
1.3.1	Mobilize adolescents and young people to utilize youth friendly SRH services
1.3.2	Develop and distribute FP IEC materials
1.3.3	Mobilize communities to utilize FP services
2	Antenatal Care and PMTCT
2.1.1	Conduct training in the use of the guidelines for Focused ANC including PMTCT
2.1.2	Conduct operations research to improve counseling and testing for women during ANC and PNC
2.1.3	Conduct operations research on alternative regimens for PMTCT
2.1.4	Expand implementation of PMTCT alternative regimens at PMTCT sites
2.1.5	Promote condom use during pregnancy.
2.2.1	Produce and distribute birth preparedness IEC materials
2.2.2	Develop simple print materials outlining MNH danger sign recognition and household/community preparedness strategies.
2.2.3	Distribute printed materials through all available channels.
2.2.4	Develop mass media (e.g. radio) messages as part of a national communication strategy regarding MNH danger signs.
2.2.5	Incorporate similar danger sign messages in relevant school curricula.
2.2.6	Include ANC in RH behavioural change campaigns
2.2.7	Conduct research to evaluate uptake of ANC services

3	Clean and Safe Delivery including EmONC
3.1.1	Review job descriptions and functional responsibilities of all staff cadres
3.1.2	Decentralize as many first aid and BEmONC functions to the periphery as possible
3.1.3	Update, consolidate, print and disseminate EmOC guidelines
3.1.4	Train/update health service providers in EmOC
3.1.5	Expand Obstetric and Neonatal First Aid capacity to as many primary care facilities as possible
3.1.6	Develop and disseminate guidelines and standards for waiting mothers' shelters
3.1.7	Establish more waiting mother shelters
3.2.1	Develop IEC and simple print materials outlining MNH danger sign recognition and household/community preparedness strategies
3.2.2	Distribute IEC materials through all available channels including MOHCW static and EPI outreach, ZNFPC static and community based distributions schemes, and all government and civil society CT/PMTCT sites.
3.2.3	Carry out SRH behaviour change campaigns in the community
4	Postnatal Care and PMTCT for the mother and the new born
4.1.1	Evaluate existing PNC service provision and package
4.1.2	Produce protocols for quality PNC
4.1.3	Orient service providers on quality PNC
4.1.4	Orient staff on dual protection
4.1.5	Promote dual protection
4.1.6	Assess and expand the mother-baby friendly hospital initiative
4.1.7	Improve access to OI/HAART for HIV positive women and their families.
4.1.8	Monitor and follow up HIV + women and HIV exposed babies.
4.1.9	Monitor provision of PNC services
4.2.1	Assess barriers to PNC for clients
4.2.2	Produce and distribute PNC IEC materials
4.2.3	Include PNC in RH behaviour change campaigns
5	Health Systems Capacity Strengthening
5.1.1	Expand the concept of Reproductive Health Commodity Security to include a careful selection of MNH life saving drugs, supplies and equipment.
5.1.2	Procure and distribute essential antenatal and postnatal supplies, including PMTCT commodities
5.1.3	Procure and distribute essential family planning commodities
5.1.4	Procure essential emergency obstetric and neonatal care commodities
5.1.5	Continue support for and utilization of functional storage and distribution systems for family planning commodities
5.2.1	Establish, monitor and evaluate resource tracking systems (from central to district level and below).
5.2.2	Develop and disseminate guidelines and clinical protocols
5.2.3	Carry out maternal and neonatal death audits at the health facility and community levels and provide feedback
5.2.4	Document and disseminate lessons learned during SRH programme implementation

5.2.5	Strengthen the national Health Management Information System while ensuring that MNH performance is fully reflected.
5.3.1	Undertake a structured review of staffing norms by institutional level, based on an analysis of actual and potential MNH workload.
5.3.2	Establish a long term human resource development strategy, which includes production of sufficient nursing/midwifery personnel to fill vacant posts.
5.3.3	Set up and orient CBUs and PTCs at procurement centers/units
5.3.4	Organize on-the-job training and mentoring for commodity security
5.3.5	Support pre-service training of nurses
5.3.6	Support pre-service training of doctors
5.3.7	Support post graduate training of nurses and doctors.
5.3.8	Support deployment schemes for nurses and doctors
5.3.9	Develop remuneration packages/specific incentives designed to retain health workers in Zimbabwe, and in the difficult peripheral areas at the district level and below.
5.4.1	Undertake a nationwide “mapping exercise” of every health facility in the country to identify which facilities should be upgraded to BEmONC and which to CEmONC, based on the guiding principal that first aid should be available within 1-2 hours travel time, BEmONC within 2-4 hours travel, and CEmONC within 4-6 hours travel.
5.4.2	Train provincial and district health managers in planning, implementation, monitoring and evaluation of MNH programmes.
5.4.3	Plan and conduct supervision, monitoring and evaluation of SRH programmes.
5.5.1	Procure and install radio communication systems in rural health facilities
5.5.2	Utilize all possible civil society organizations to establish and maintain MNH communication networks that link formal MOHCW and private ambulance transport systems with the community.
5.5.3	Continue structured and strategic support for all possible community referral and transport schemes.
5.5.4	Further develop revolving fund schemes by community based organizations for reimbursement of emergency transport costs.
5.5.5	Identify all potential resources for increasing the number of motorized ambulances and drivers available at strategically selected health facilities which are in greatest need.
5.5.6	Make certain that recurrent costs for fuel, maintenance and drivers of motorized ambulances are covered.
6	Improved evidence-based policy and advocacy
6.1.1	Develop a national MNH research agenda identifying priority research areas for MNH.
6.1.2	Conduct Operations Research on PMTCT plus
6.1.3	Conduct an in-depth study into the barriers and facilitators of access to RH services, including AND, Delivery by skilled attendant and PNC
6.1.4	Conduct operations research to improve counseling and testing for women during ANC
6.1.5	Support operations research to develop longer term strategies for MNH commodity security.

6.1.6	Evaluate the existing models of waiting mothers' shelters.
6.2.1	Undertake an evidence-based review of the national RH policy.
6.2.2	Link development of the national SRH strategy with the MNH Road Map.
6.2.3	Develop a human resource strategy for MNH service provision.
6.2.4	Advocate for the integration of STI/RTI/HIV/Malaria in MNH activities.
6.3.1	Cost the MNH Road Map in order to prioritize activities and identify the resource gaps.
6.3.2	Establish a national partnership forum to advocate for increased policy, technical and financial support for MNH services.
6.3.3	Organize advocacy workshops for Members of Parliament to solicit their support for MNH within the context of the national budget as well as in developing indigenous community communication and transport schemes.
6.3.4	Organize annual donor round table sessions for MNH during which progress and constraints are reviewed and technical and financial resource gaps are identified.

5. Implementation of the Road Map

5.1 PHASED IMPLEMENTATION

The MNH Road Map will be planned and implemented in two clearly defined phases and a number of specific activities have been identified for both phases:

5.1.1 The initial phase: 2007-2010

Based on the situation analysis presented earlier, a number of specific and immediate steps are identified to address each of the proposed interventions along the road to safe delivery, and the outcome of a healthy mother, and a healthy newborn baby. Although being implemented simultaneously, this phase generally prioritises the supply issues of the interventions to make services available first, before fully focusing on a further creation of demand in the second phase.

5.1.2 The consolidation phase: 2011 to 2015

During the final year of the first phase, an evaluation will be conducted to determine results from interventions implemented during the first phase. The findings and recommendations of this evaluation will form the basis for the formulation of interventions for the second phase. This second phase will thus consolidate the activities of the initial phase, build on the developmental foundation established earlier, and set the pace for more targeted scaling up of priority interventions. These include activities to approach issues of behavioural change at the community level, while simultaneously addressing more sustainable capacity development at all levels.

5.2 ANNUAL PLANNING PROCESS

On an annual basis, an integrated national MNH work plan will be developed, outlining key strategies, activities, targets, responsible partners and budget requirements. These work plans will be based upon experience and evidence-gained facts during the preceding year of monitoring, research and evaluation activities. A costing exercise will be utilized to identify available national resources, and to assist with identification of financial gaps. Wherever possible, all related MNH activities will be reflected in this integrated national MNH work plan.

5.3 MONITORING AND EVALUATION OF ROAD MAP IMPLEMENTATION

5.3.1 Routine Monitoring of Road Map Implementation

Based upon the agreed upon annual work plan, all stakeholders will establish and support routine monitoring mechanisms that will utilize the indicators and targets set out in the Road Map. Wherever possible joint monitoring exercises will be carried out to ensure lessons learned are shared between stakeholders.

5.3.2 Annual MNH Road Map Review

The MNH Road Map will benefit by an integrated and structured Annual Performance Review process at the end of each calendar year. An analysis of each objective and expected results will be undertaken to guide the development of the next Annual Work Plan, and provide assistance in prioritization of available resources. During the annual MNH Road Map review, gaps in technical and financial resources will be identified, and utilized as a foundation for resource mobilization.

In addition, the Reproductive Health Steering Committee will highlight and bring to light critical MNH programme issues requiring analysis and documentation, including equity and access monitoring. Programme progress will also be reviewed under the auspices of other related fora such as the PMTCT partnership forum, the RH Commodity Security steering committee, and the RH Steering Committee.

5.3.3 Outcome Monitoring and Evaluation

Performance management will be strengthened under specific objective 5 of the MNH Road Map. Consistent with the principles of good practice, the Road Map will, as proposed in specific objective 5, strengthen the existing HMIS and LMIS rather than establish parallel data collection and reporting systems. A revised and functional M&E performance management system for maternal and newborn health will provide robust information on which to base monitoring of the MDG targets.

There will be comprehensive end of phase 1 evaluation in 2010 in line with the MDG reporting schedule, and another at the end of phase 2 in 2014. The 2014 evaluation will form the basis for the 2015 MDG reporting schedule. This will harmonise the MDG target reporting schedule with the MNH Road Map evaluation schedule.

5.4 ROLES AND RESPONSIBILITIES OF MNH STAKEHOLDERS

The responsibilities of all essential stakeholders and players in the planning, implementation, monitoring and evaluation of MNH interventions will be agreed upon as a key result of annual MNH planning meetings. During these meetings, an Integrated MNH Annual Work Plan will be developed which clearly delineates roles and responsibilities according to each of the 6 objectives, and related activities presented in the logical framework.

6. Annexes

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