Sierra Leone Government
Ministry of Health and Sanitation

Reproductive, Newborn And Child Health Strategy 2011 - 2015

July 2011

FOREWORD

There are too many deaths of mothers, babies, and children from preventable conditions in Sierra Leone. Despite recent improvements in women's and children's health, we risk missing out on achieving the Millennium Development Goals by 2015 if further investments are not made.

The Government of Sierra Leone recognises that many of these deaths can be prevented and many of these illnesses can be treated. The Government of Sierra Leone is committed to reducing maternal and infant mortality and morbidity, and as part of the Second Poverty Reduction Strategy 2008 – 2012 "An Agenda for Change", has introduced a Basic Package of Essential Health Services, as well as the Free Health Care Initiative in a bid to improve access to health care for pregnant women, lactating mothers and children under the age of five. We have already seen an increase in the utilisation of health services. To prevent malaria, one of our most prevalent diseases, over three million long lasting insecticide treated bed nets have been distributed, with most households having received at least two bed nets.

We now have the new Reproductive, Newborn, and Child Health policy 2011-2015, which recognises the newborn as the most vulnerable member of our community, and the importance of involving the community, including fathers, in all we do.

This strategy outlines how to put this policy into action. It outlines steps to accelerate progress towards achievement of the Millennium Development Goals and focuses on equity and reducing disparities in reproductive, newborn, and child health care. The Ministry of Health and Sanitation recognises that in order to reach every woman, baby, and child in Sierra Leone with essential and life-saving interventions, we must invest in strategic areas and work in close collaboration with our partners.

The health of mothers, newborns, and children represents the well-being of all society. The GoSL is committed to providing an enabling environment so that this strategy can be implemented for the development and prosperity of all Sierra Leoneans.

Mrs. Zainab H Bangura
HONOURABLE MINISTER OF HEALTH AND SANITATION
FREETOWN, SIERRA LEONE

ACKNOWLEDGEMENTS

The previous Reproductive and Child Health strategy 2008-2010 was implemented under two draft policies, the Reproductive Health policy and the Child Health policy. The two drafts have been reviewed and incorporated into one Reproductive, Newborn, and Child Health policy 2011-2015 that will guide implementation of this Reproductive, Newborn, and Child Health Strategy 2011-2015. This would not have been possible without the financial and technical support from UNICEF, UNFPA, WHO, OPTIONS, the Midwifery School, the Midwives Association, International Rescue Committee, PCMM, Medical Research Council, District Health Management Teams, PPASL, COMAHS, Marie Stopes Sierra Leone, Njala University, World Vision, SLMDA, Private practitioners, Health For All Coalition Sierra Leone, and the Sierra Leone Broadcasting Commission.

Dr K S Daoh
CHIEF MEDICAL OFFICER
MINISTRY OF HEALTH AND SANITATION

CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
AYRSH	Adolescent Reproductive and Sexual Health
ART	Antiretroviral Therapy
AYFHS	Adolescent Youth Friendly Health Services
ARV	Antiretroviral
BCC	Behaviour Change Communication
BEmONC	Basic Emergency Obstetric and Neonatal Care
BPEHS	Basic Package of Essential Health Services
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CF	Child Feeding
CHC	Community Health Centre
CHP	Community Health Post
CHW	Community Health Worker
CHERG	Child Epidemiology Reference Group
DDMS	Director of Drugs and Medical Stores
DHMT	District Health Management Team
EBF	Exclusive Breastfeeding
EDL	Emergency Drug List
ENC	Essential Newborn Care
EPI	Expanded Programme on Immunization
FGM/C	Female Genital Mutilation/Cutting
FHCI	Free Health Care Initiative
FP	Family Planning
GoSL	Government of Sierra Leone
HMIS	Health Management Information System
HIV	Human Immunodeficiency Virus
IEC	Information, Education, and Communication
IMNCI	Integrated Management of Neonatal and Childhood Illness
IPTp	Intermittent Prophylactic Treatment in Pregnancy
ITN	Insecticide Treated Net
LLITN	Long Lasting Insecticide Treated Net
LTCP	Long Term Contraceptive Protection
MARYP	Most at Risk Young Person
MBB	Marginal Budgeting for Bottlenecks

MCHP	Maternal Child Health Post
MDGs	Millennium Development Goals
MDR	Maternal Death Review
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Survey
MISP	Minimum Initial Service Package
MoE	Ministry of Education
MoHS	Ministry of Health and Sanitation
MUAC	Mid Upper Arm Circumference
NACP	National AIDS Control Programme
NAS	National HIV/AIDS Secretariat
NGO	Non-Governmental Organisation
NHSSP	National Health Sector Strategic Plan
PBF	Performance Based Financing
PHC	Primary Health Care
PHU	Peripheral Health Units
PMTCT	Prevention of Mother to Child Transmission
PNC	Postnatal Care
PRSP	Poverty Reduction Strategy Paper
RNCH	Reproductive, Newborn, and Child Health
SBA	Skilled Birth Attendant
SLDHS	Sierra Leone Demographic Health Survey
SLDHSBS	Sierra Leone District Health Services Baseline Survey
STIs	Sexually Transmitted Infections
TB	Tuberculosis
TBA	Traditional Birth Attendant
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
WHO	World Health Organization

1. INTRODUCTION

Sierra Leone has one of the worst health indicators for maternal and child health in the world. There are high poverty levels, illiteracy, fertility rates, and teenage child bearing, and low uptake of family planning (FP) methods. Pre-marital sex among teenagers is common and usually necessitated by poverty and cultural factors. This leaves them at risk of unwanted pregnancies, unsafe abortions, sexually transmitted infections (STIs), HIV and AIDS, and dropping out of school. Sexual and gender based violence (SGBV) is endemic and female genital mutilation/ cutting (FGM/C) the norm for most females. Currently, health care delivery is ineffective because of inadequate participation of communities in health care delivery; a lack of fully functional health facilities and referral mechanisms; weak co-ordination and communication among programmes and partners; and a shortage of critical health professionals (PRSPII 2009).

Evidence shows that high maternal, perinatal, neonatal and child mortality rates are associated with inadequate and poor quality health services. Evidence also suggests that explicit, evidence-based, cost effective packages of high impact interventions can improve the processes and outcomes of health care when effectively implemented. Key effective interventions organised in packages across the continuum of care through pre-pregnancy, pregnancy, childbirth, postpartum, newborn care, and care of the child and adolescent are intended for community and facility level. In addition, they provide guidance on the essential components needed to ensure quality of care.

This Reproductive, Newborn, and Child Health (RNCH) strategy 2011-2015 outlines the strategies and key activities which are required to achieve the RNCH goals and objectives by implementing cost effective, high impact interventions. In addition, the provision of adolescent/youth friendly health services (AYFHS), strategies to address SGBV issues and other infectious and non-infectious diseases of the reproductive system are outlined. It includes key activities in cross cutting areas which are required to provide an enabling environment for effective implementation. In addition, it outlines the strategies and key activities required to effectively implement the activities for specific RNCH areas. The Basic Package of Essential Health Services (BPEHS) defines which services are provided at each level of the health system. Consequently, the key intervention areas in the BPEHS provide the operational dimensions of this RNCH strategy.
To monitor progress and ensure objectives are being met, a monitoring and evaluation (M&E) framework has been developed, and the financial investment required to accelerate progress is included.

2. SITUATION ANALYSIS

2.1 Population and Development

The social, economic, and demographic realities in Sierra Leone present an ideal environment for poor maternal and child survival. As at 2008, the estimated population of Sierra Leone was 5.5 million, with an average household population size of approximately six people. Over 40% of the population is less than 15 years of age (2004 Population Census). Sierra Leone's gross national income (GNI) per capita is US$ 809 (UNHD Report 2010). Based on consumption levels, 66% of the population could be defined as 'poor' (47% in urban areas versus 79% in rural areas). The 2010 UNDP Human Development Report ranked Sierra Leone 158th out of 169 on the Human Development Index. High poverty levels, illiteracy, high fertility rates, teenage child bearing, and the low uptake of FP methods are all closely intertwined, complex in nature, and are the strongest determinants of maternal and newborn survival outcomes.

Moreover, living conditions, and hence health outcomes, vary between certain regions of the country and between rural and urban locations. Most of the poor population is found in the northern part of the country and in rural areas. The status of maternal and child survival closely mirrors the social, economic and demographic disparities seen between these regions. The poor living conditions in rural areas are depicted by only 1% of the population having access to electricity. In contrast, 33% of the population in urban areas has access to electricity (SLDHS 2008). In rural areas, 48.5% of the population has access to an improved water supply, and only 7% has access to improved toilet facilities, whereas in urban areas, 85.2% has access to improved water, and 22.5% has access to improved toilet facilities (SLDHSBS 2009).

Poor health among disadvantaged groups results not just from the lack of material resources (food, housing, water, etc) but also from factors such as lack of empowerment and education. In most parts of Sierra Leone, women have little power to make household decisions. Only 10% of women make decisions about their own health care and that of their children (SLDHS 2008). The country has high illiteracy rates among both women aged 15-49 years (53%) and men aged 15-49 years (43%) (SLDHSBS 2009). Only 26% of women reported receiving primary school education as their highest level of education attained; only 18% of women and 26% of men have received secondary school education; and only 2% of women and 3.8% of men have received higher education beyond the secondary school level (SLDHSBS 2009).

Sierra Leone is not on track to reach the 2015 Millennium Development Goals (MDGs) for MDG 4 and MDG 5 unless acceleration takes place (Figures 1 and 2). The MMR from 1990 shows a steep decline. However the reliability of the 1990 data from which the MMR was calculated is not clear. The estimated 2010 MMR (calculated from routine maternal death reports) is similar to the 2008 MMR (SLDHS 2008) so, at least for the past two years, the decline in MMR has been fairly minimal. If the slope over the past two years is projected backwards to 1990 (dotted blue line), the estimated MMR is approximately 1500 which is thought to be a more realistic 1990 MMR (Figure 2).

Figure 1: Acceleration required to achieve MDG 4

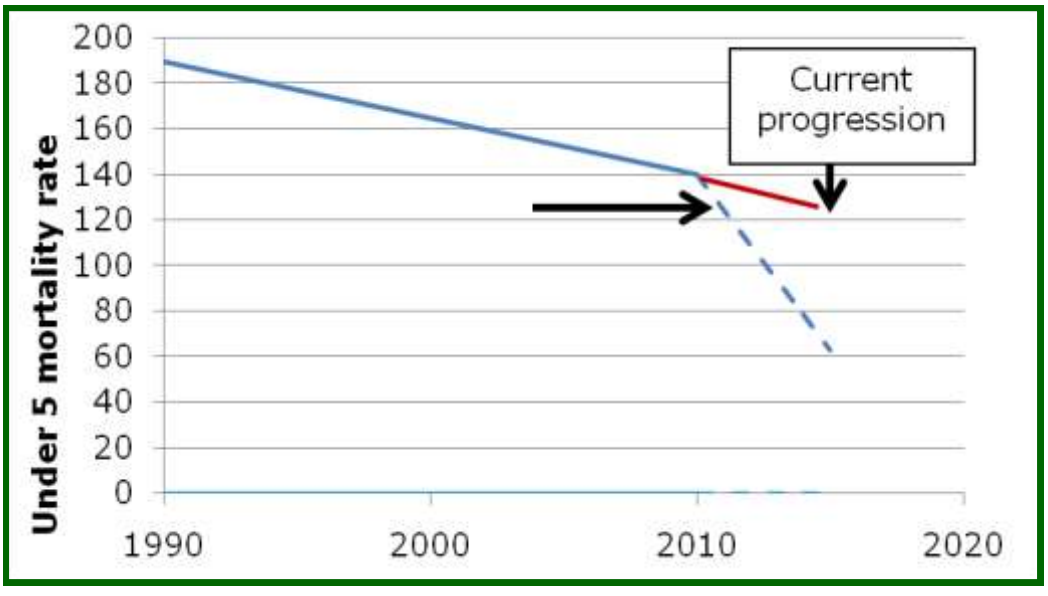
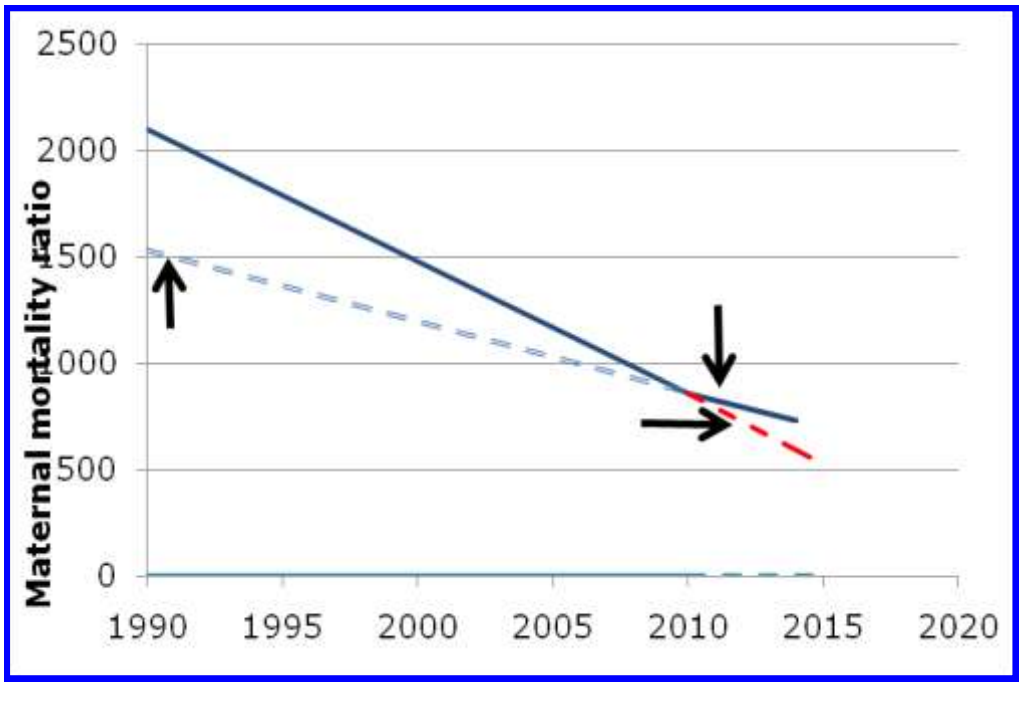


Figure 2: Acceleration required to achieve MDG 5



2.2 Adolescent Sexual Reproductive Health and Rights

Over 40% of the population is aged less than 15 years (2004 Population Census), with the average age at marriage less than 18 years. Early marriage is a major problem in the country and goes against the Child Rights Act 2007. Females start sex earlier than their male counterparts, and sex among teenagers is common and often necessitated by poverty (food insecurity and the need for school fee payments) and cultural factors. This leaves them at risk of unwanted pregnancies, unsafe abortions, STIs, HIV and AIDS, and dropping out of school. Teenage child bearing is high and contributes to one third (33%) of all pregnancies nationwide. It is highest in the Northern region (40%) and lowest in the Western region (18%). Education is strongly linked to teenage pregnancy. When pregnancies occur during the teenage years, the risk is even higher because of the competition for nutritional requirements between the mother's needs and the babies' needs—that is, between the mother's preparation for lactation and the foetal growth and development. Children of adolescent mothers are also often at greater risk of poor nutritional care and feeding practices. Women with no education are three times more likely (54%) to have begun childbearing in teenage years compared with women with the highest levels of education (17%)(SLDHS 2008).

The vulnerability of young people to sexual assault is highlighted in the records from local sexual assault centres which show that 60% of clients were aged between 11 and 15 years, and 23% were aged between six and ten years (draft Reproductive Health Policy 2007).

There are currently no specific MoHS health training or activities designed to address the specific health needs of adolescents in Sierra Leone.

2.3 Family Planning

Access to FP services is a fundamental right of individuals within the reproductive age and contributes significantly to the reduction of maternal and infant morbidity and mortality. Family planning use, or the lack of it, is one of the single most important determinants of child mortality. One in every five infants in Sierra Leone is born less than two years after a previous birth, largely as a result of low uptake of FP methods. These infants have very high infant mortality rates of 182 deaths per 1,000 live births compared with 54 deaths per 1,000 live births for infants born four years after the previous birth (SLDHS 2008). Therefore, approximately two out of every three infant deaths could potentially be avoided if effective birth spacing was undertaken (SLDHS 2008).

Family planning enables individuals and couples to decide freely and responsibly when to start a family, and the number and spacing of their children. Women in Sierra Leone bear on average 5.1 children: 3.8 in urban areas and 5.8 in rural areas. The lowest birth rate is 3.4 in the Western region and the highest is 5.8 in the Northern region (SLDHS 2008). The fertility rates vary according to maternal education and economic status. Women who have the highest education levels bear on average 3.1 children, while women with no education bear almost twice as many children. Similarly, fertility increases as the wealth of the households decreases. The poorest women bear twice

as many children as women who live in the wealthiest households: 6.3 versus 3.2 children per woman (SLDHS 2008).

The contraceptive prevalence rate in Sierra Leone is 12.1% (SLDHSBS 2009) and continues to be one of the lowest in the West African sub-region. The unmet need for FP (28%), results in complicated pregnancies and deliveries; unwanted pregnancies; unsafe abortion; STIs, including HIV/AIDS; and increased poverty (SLDHS 2008). Following the introduction of the Free Health Care Initiative (FHCI) there was an impressive initial increase in the uptake of FP. However, this does not seem to have been sustained (Health Sector Performance Review 2010).

Key contributing factors to the low contraceptive prevalence rate include the disproportionate urban to rural distribution of service providers, lack of contraceptive commodity security, disempowerment of women, a low level of male involvement, dwindling donor support and a high illiteracy rate.

2.4 Unsafe Abortion

There are no reliable statistics about the frequency of unsafe abortion in Sierra Leone, let alone enough information to establish what proportion of pregnancy related deaths are as a consequence of unsafe abortion. If global figures on the cause of death attributable to complications from unsafe abortion are used, it could be assumed that at least 13% of all maternal deaths result from unsafe abortion and that 25% of these occur in adolescents. The major causes of these deaths are haemorrhage, infection, and poisoning. Morbidity is a more common consequence of unsafe abortion than mortality with the major complications including sepsis, haemorrhage, peritonitis, and trauma to the reproductive organs. Abortion is, in fact, illegal in Sierra Leone, except in exceptional circumstances such as when the life of the mother is in danger. Despite this, many girls and women, when faced with unwanted pregnancy resort to unsafe abortion.

2.5 Making Pregnancy and Childbirth Safer

The maternal mortality ratio is high at 857 maternal deaths per 100,000 live births (SLDHS 2008). In 2009, the country established an institutional framework for maternal death reporting and reviews which was updated in 2010.

High impact interventions to prevent maternal morbidity and mortality are best delivered in four focused antenatal visits, having a delivery by a SBA, and having access to emergency care. Currently about 79.8% of pregnant women receive two antenatal care (ANC) check-ups from a skilled provider and 56% manage to attend four or more visits (SLDHS 2008). Only about 34% of pregnant women commenced ANC by their fourth month of pregnancy (SLDHSBS 2009). Hence only this small proportion has a chance of completing the four recommended visits before delivery. The fewer than recommended skilled ANC attendance translates into lost opportunities for enhancing maternal and newborn outcomes. Eighty four percent of women's most recent births were protected against neonatal tetanus (SLDHSBS 2009).

A delivery performed by a SBA is one of the key factors in improving maternal and neonatal outcomes. The GoSL is currently promoting institutional delivery and the definition of who is compe-

tent to qualify as an SBA is under discussion. Only 35.9% of births occur in health facilities (although this has increased post FHCI) and about 50.1% of the deliveries are assisted by a skilled service provider (SLDHSBS 2009). The GoSL is promoting five PHUs per district to be upgraded to be fully functional BEmONC centres, and each District and referral hospital to be fully functional CEmONC centres. Currently, insufficient numbers of health facilities are equipped and staffed to acceptable standards to provide emergency obstetric care (NHSSP 2010-2015). There are also limited functional referral systems in most districts leading to delays in the provision of comprehensive emergency obstetric care (NHSSP 2010-2015). Although it is not known what proportion of all deliveries are undertaken by these centres, it is anticipated that the number of BEmONC centres will be scaled up to around 170 and include the MCHP.

Sierra Leone's birth cohort is approximately 249,164 (projected from 2004 Census). Almost half the population of Sierra Leone lives in Freetown, the capital, and approximately 20% of all deliveries occur in the Western area. However, the largest hospital in the country (PCMH) performed only around 3,500 deliveries over a six month period in 2010 (Health Sector Performance Review 2010) despite services being free. PCMH is currently conducting a few deliveries although it is within relatively easy reach for about 20% of all pregnant women in the country.

Up to 50% of all newborn deaths occur in the first 24 hours following delivery and 75% of all deaths occur in the first week of life (Lawn, JE et al, Lancet 2005;365(9462):891-900). Skilled postnatal care (PNC) attendance during the first 24-48 hours offers the best survival lifeline for both mothers and newborns. Community based PNC is a complementary strategy to facility-based PNC to improve maternal and neonatal survival. Only 38% of mothers receive their first postnatal check-up less than four hours after delivery (SLDHS 2008) and many mothers are discharged home on the day of delivery. However, for those mothers who deliver at home, there are currently no PNC services available to provide essential promotive, preventative, and potentially lifesaving care for both mother and newborn.

High neonatal death rates are closely linked to the high maternal mortality ratio. Both are influenced by similar factors, confronted by the same bottlenecks, and socio-economic and cultural contributing factors. Consequently, the high impact, evidence-based maternal and newborn interventions have similar delivery strategies.

2.6 Neonatal, Infant and Child Health

There have been improvements in childhood indicators over the past 20 years (Figure 1). However, mortality rates remain high: the under-five mortality rate is 140 deaths per 1,000 live births and the infant mortality rate is 89 deaths per 1,000 live births. Neonates account for 40% of all the infant deaths (the neonatal mortality rate is 36 per 1,000 live births) and 25% of all under-five deaths (SLDHS, 2008). Therefore, 40% of all infant deaths take place during the first 28 days of live.

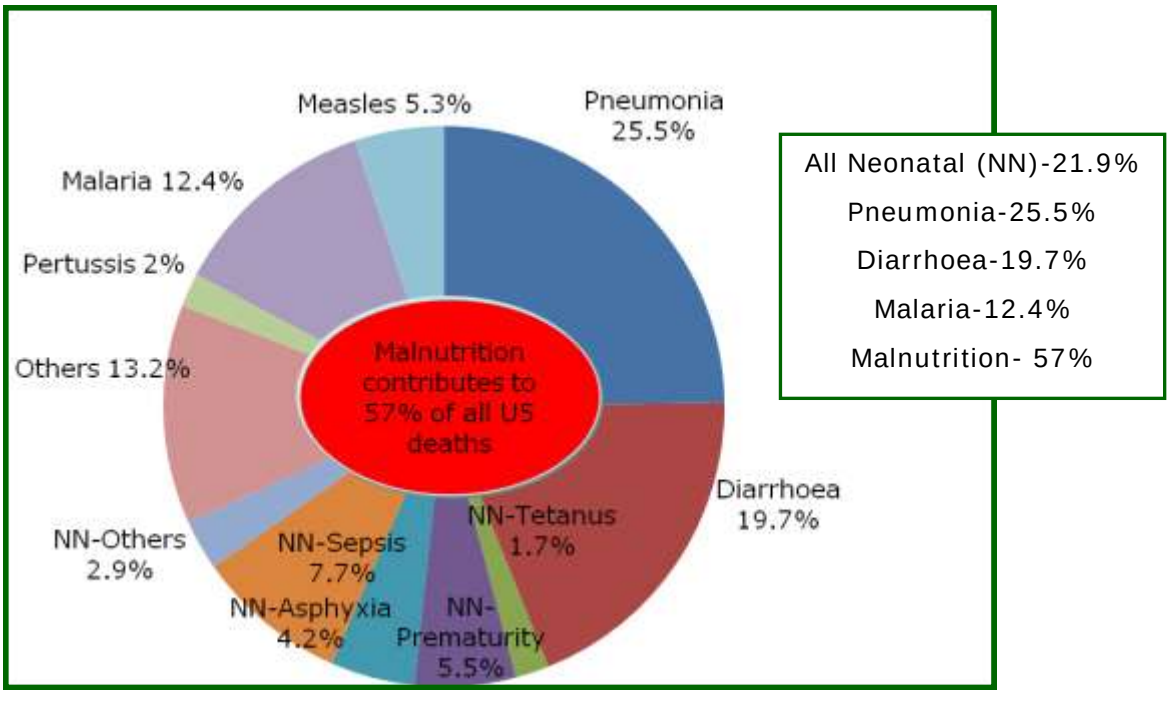
The causes of neonatal deaths, all of which relate to perinatal care, are largely from three preventable conditions: neonatal infections, prematurity, and birth asphyxia (Figure 3). Hypothermia con-

tributes to all of these conditions (Child Health Epidemiology Reference Group). There is no local data on the prevalence of low birth weight, but data from other African countries shows that one of the biggest contributors to neonatal mortality is low birth weight due to prematurity. Effective strategies to prevent certain causes of preterm birth include improving maternal nutrition; treatment and control of anaemia and malaria in pregnancy; and identification and treatment of STIs, HIV and AIDS. Although severely preterm babies require intensive care to survive, most preterm babies who die are moderately preterm, and the majority could be saved by providing extra attention to the same care that all babies need: warmth, feeding, hygiene, and early identification of illness. Kangaroo mother care involves caring for small, particularly preterm babies, by having them strapped skin to-skin to the mother's front. This highlights the importance of PNC to identify and provide extra care for these neonates.

Although no reliable source of child cause-specific mortality data exists in the country, extrapolated data from other studies indicate the commonest causes of all under-five year old deaths in Sierra Leone to be: pneumonia (25.5%), diarrhoea (19.7%), and malaria (12.4%) (Figure 3) (CHERG 2007). In addition, malnutrition is an underlying factor in 57% of all childhood deaths (SMART Survey 2010). There have been substantial reductions in the hospital case fatality rates (CFR) for the commonest childhood diseases following the introduction of the FHCI. The malaria CFR has decreased from 6.7% in 2009 to 1.7% in 2010; the diarrhoea CFR from 10.2% in 2009 to 1.3% in 2010; and the ARI CFR from 6.6% in 2009 to 1.3% in 2010 (Health Sector Performance Review 2010).

Infants born with HIV infection also have high morbidity and mortality rates. Left untreated, HIV infection progresses more rapidly in children than it does in adults. More than 30-40% of HIV-infected children die before their second birthday, with many deaths occurring in the first months of life (Coovadia et al, Lancet, 2004).

Figure 3: Cause specific mortality for under-five year olds



Currently, the uptake of child survival interventions is low at the community level. Many behaviour change interventions underlying child survival need to be delivered at the community level and reinforced at facility level. These interventions are early and exclusive breastfeeding (EBF), handwashing with soap, ORT with zinc, complete and timely immunisation, adequate nutrition, appropriate home-care, correct use of long lasting insecticide treated bed nets (LLITN), and prompt care-seeking in response to 'danger-signs'. In addition, certain facility based essential packages for child survival, namely: skilled perinatal care, care of the newborn, PNC, micronutrient supplementation, immunisation of children (and mothers against tetanus), and the integrated management of the sick neonate and child (IMNCI) are required.

The coverage of important public health interventions has for a long time been low in Sierra Leone, but has shown some improvement following the introduction of the FHCI. Only 40.5% of children were fully immunised in 2009 (SLDHSBS 2009). However, following the launch of FHCI in 2010, this increased to 75% (Health Sector Performance Review 2010). A decline in outreach activities has been noted since the introduction of the FHCI (Health Sector Performance Review 2010). Regarding malaria prevention, it was found in 2008 that only 26% and 27% of under-fives and pregnant women respectively, actually slept under an LLITN (SLDHS 2008). A recent campaign in 2010 (universal LLITN coverage campaign) to prevent malaria, provided at least two LLITNs to over 98.6% of households (Maternal Child Health Week November 2010) and significant changes in the correct use of LLITN are anticipated following this campaign.

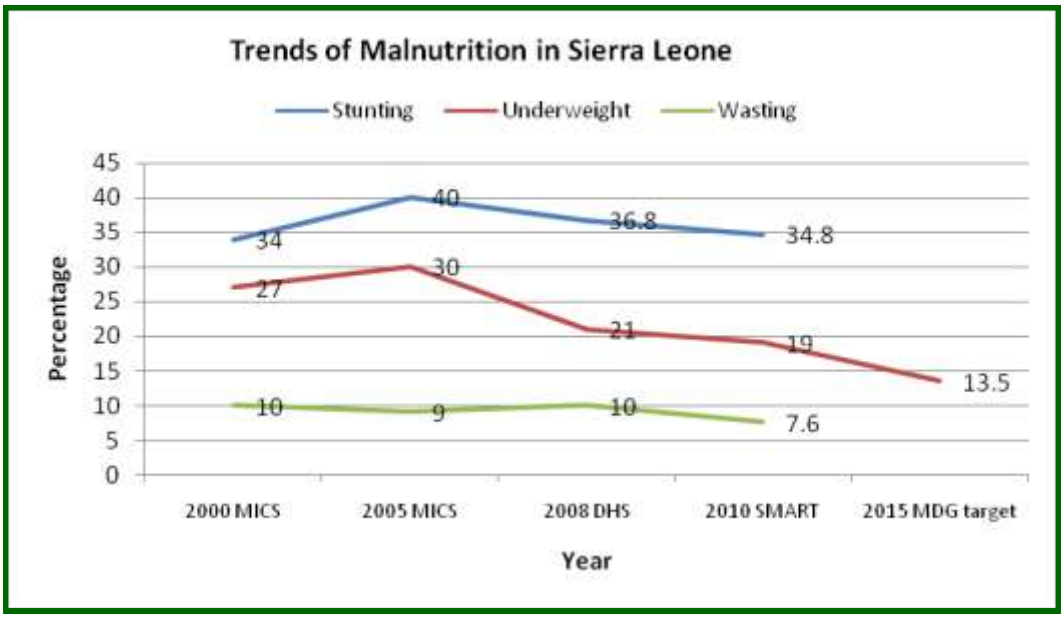
2.7 Nutrition

Optimal nutrition practices and supplements, especially exclusive breastfeeding (EBF) up to six months of age, constitute the single greatest potential impact on child survival (Bhutta, ZA et al. Lancet 2008;371:417). The period from birth to two years of age is the "critical window" for the promotion of good growth, health, and child development. Therefore, optimal infant and young child feeding (IYCF) is crucial during this period. Optimal IYCF means that mothers are empowered to initiate breastfeeding within one hour of birth, breastfeed exclusively for the first six months and continue to breastfeed for two years or more, together with nutritionally adequate, safe, age appropriate, responsive complementary feeding, starting at six months. Maternal nutrition is also important for ensuring good nutritional status of the infant as well as safeguarding women's health. The major damage caused by malnutrition takes place in the womb and during the first two years of life, and this damage is irreversible. The 2009 WHO guidelines for infant feeding in the context of HIV/AIDs, recommends EBF for up to 6 months and continued breastfeeding up to 12 months of age for children born to HIV infected women, provided the infant is on antiretroviral therapy.

The EBF rate is only 11% in Sierra Leone (SLDHS 2008). However, a higher coverage of 27.8% was recorded in 2009 (SLDHSBS 2009). Trends in other nutritional indicators are shown in Figure 4. The prevalence of underweight has reduced by one-third in five years and wasting (acute malnutrition) shows a steady decline. In 2010 underweight was found in 19% of children 6-59 months of age, with 5% being severely underweight (SMART survey 2010). The highest prevalence of underweight (22%) was in the south, while Kenema had the highest district prevalence (24%). Two percent of children aged 6-59 months had severe acute malnutrition (SAM) with a mid-upper arm cir-

cumference (MUAC) of less than 11.5cm. The highest prevalence of severe acute malnutrition was found in Pujehun district (3%). Stunting (chronic malnutrition) was identified in 35% of children 6-59 months of age, with 10% severely stunted. The highest prevalence of stunting was found in Moyamba district (45%) and the urban area had the lowest prevalence (21%).

Figure 4: Trends in malnutrition



At national level, 10% of women 15 - 49 years of age were underweight (SMART survey 2010). There was a low prevalence of global (2%) and severe acute malnutrition (2%) in this age group.
In 2008 the prevalence of iron deficiency anaemia was 76% in under five years old children, with 40% of them having severe Iron Deficiency Anaemia. Household Consumption of iodised salt is 58.2% (SLDHS 2008). Currently micronutrient supplements are mostly delivered by campaigns. Vitamin A coverage in children 6-59 months old in the last six months prior to the survey was found to be high (91%). In addition, most children (85%) aged 12 – 59 months had been de-wormed in the previous six months prior to the survey which reflects a successful national campaign in 2010 (SMART survey 2010). Pregnant women also receive iron and folic acid and are de-wormed during ANC and receive post-partum vitamin A.

2.8 Sexually Transmitted Infections, HIV and AIDS

In 2008 the prevalence of HIV in the general population was 1.5% (SLDHS 2008) and has remained stable since 2005. However, HIV prevalence among pregnant women attending ANC was 3.2% (NACP 2009) and is significantly higher than the national prevalence. Since 2002, the GoSL has accepted a multi-sector approach for combating the HIV/AIDS epidemic. Voluntary counselling and testing sites and the Prevention of Mother to Child Transmission (PMTCT) services have been scaled up nationwide (NAS Programme Report 2008). However, there are challenges in delivering effective PMTCT. The new PMTCT protocol commences treatment at 14 weeks gestation. However, many pregnant women do not receive ANC services early during pregnancy and less than half of all pregnant women give birth in a health facility (SLDHS 2008).

The key elements of a comprehensive response to PMTCT include**:**

- Primary prevention of HIV infection among women of childbearing age through AIDS education, behavioural change programs, correct and consistent condom use and STI prevention and management;
- Prevention of unintended pregnancies in HIV-infected women through FP using duo methods, including male and female condoms;
- PMTCT through provision of HIV counselling and testing, safe deliveries, antiretroviral prophylaxis and infant feeding counselling and support; and
- Care, support, and treatment to improve the quality of life of women and their infected children and families.

The successful implementation of PMTCT will therefore depend largely on the removal of bottlenecks to the delivery of all aspects of maternal and child health services.

Based on historical evidence and the National Population Based HIV Sero-prevalence Survey (2005), STIs are common (25%) in Sierra Leone and cause spontaneous abortion, infertility, low birth weight baby, congenital abnormalities, neonatal infections, and blindness. The presence of STIs is also known to facilitate the transmission of HIV. It is important to note however that for females, genital discharge does not necessarily indicate a STI and failure to recognize this may result in an over estimation of the presence of STI's. The history of genital discharge or ulcers was reported in 24.9% of respondents with female/male values of 21.6and 29.5% respectively. The highest prevalence was reported in the 45-49 year old age group in which 39.5% reported symptoms, whilst the lowest level was in the 10-19 year old age group. Although the proportion of the total population that reported a history of genital discharge was 24.9, a smaller percentage of single respondents (16.3%) as compared with their married counterparts in polygamous marriages (33.2%) and in monogamous marriages (27.9%) reported a history of STIs.

2.9 Sexual and Gender Based Violence

Sexual and gender violence is widely believed to be of near endemic proportions in Sierra Leone. Data from three sexual assault referral centres indicated that rape accounts for 83% of the case load (draft Reproductive Health Policy 2007). Ninety-four percent of young women undergo FGM/C (SLDHS 2008), with FGM/C and early marriages being closely linked to each other. FGM/C carries risks from infections and reproductive morbidities which can put a strain on sexual relationships which can in turn lead to violence.

Few health providers have the necessary knowledge to appropriately manage GBV cases, which often leads to complications and dire consequences, including death. In most African countries, including Sierra Leone, a visit to a health clinic for reproductive or health services may be what is needed to bring women and girls in contact with the health care system. As a result, reproductive health providers are increasingly recognised as playing an active role in helping to identify, support and refer victims of GBV. This role is important, as many women who experience violence will not seek help from the police or support agencies, but early identification of the problem could help limit the consequences and decrease the likelihood of further victimisation.

2.10 Other Infectious and Non-Infectious Diseases of the Reproductive System

There are no reliable statistics relating to reproductive and childhood cancers. However, given the level of high risk sexual behaviour commencing in early adolescence, cervical cancer is likely to be very common. General public awareness about breast, cervical, and prostate cancers is low despite these conditions being commonly seen by clinicians. Screening services are limited for the early diagnosis of most reproductive cancers.

There is no reliable data on obstetric fistula. However there are a few private institutions providing fistula repair services. Women with obstetric fistula are stigmatised and often ostracised from society due to incontinence, yet fistula is preventable by having a timely delivery performed by an SBA, and is potentially treatable.

There are no specific services or training on menopause and this is an area which is often overlooked.

2.10 Health System and Free Health Care Initiative

Sierra Leone remains committed to primary health care (PHC) and prevention as cost-effective strategies. Peripheral Health Units are the first level of health care delivery and are categorised as community health centres (CHC), community health posts (CHP), and MCHP. District hospitals are the second level of healthcare delivery supporting the PHUs and serving as referral points for the management of more complicated cases outside the competence of the PHUs. The RNCH services provided at each of these levels are outlined in the BPEHS. The third level of service delivery is at the tertiary level, to support district hospitals and address conditions requiring specialised care. This is complemented by the private sector, NGOs, and Faith Based Organisations (FBOs) that operate at the different levels.

Administratively, the country is divided into 14 Health Districts and 149 chiefdoms. The 14 Health Districts are sub-divided into 19 Local Councils. Out of the 19 Councils, six are City Councils and the remaining 13 are District Councils. Recently, the central government's functions have been devolved to the District Councils.

The NHSSP 2010-2015 has been translated into the BPEHS for Sierra Leone which took effect in March 2010. The BPEHS contains components, interventions and services by level of care. For maternal and newborn care, and all children under-five years of age the intervention areas include ANC; delivery and peri-natal care; PNC; FP; care of the newborn and emergency obstetric care; EPI; IMNCI; IYCF; and the promotive and public health activities related to reproductive, maternal and child health.

Health care delivery is ineffective because of the limited capacity of health facilities and lack of referral systems; lack of supportive supervision; weak co-ordination and communication among programmes and partners; and a shortage of critical health professionals etc (PRSPII 2009). In addition, there is inadequate participation by communities in health care delivery and insufficient skilled Community Health Workers (CHWs) which have been identified as a key bottleneck. In response, the CHW guidelines and manual have been developed.

Poverty and cost of health care was one of the major factors identified as a barrier to improving maternal and child health. Hence, the FHCI was developed and was launched in 2010. The FHCI focuses on the BPEHS delivered free of charge at the point of services targeting pregnant women, lactating mothers, and children aged under-five years. Approximately 250,000 pregnant women and nearly one million infants benefit from FHC services countrywide.

A review six months after the introduction of the FHCI has shown some improvements in the areas of service uptake and some evidence of an improvement in health indicators (Health Sector Performance Review 2010). More staff have been recruited to provide services. However there is still a need to ensure adequate distribution of staff based on services provided and population served (Health Sector Performance Review 2010). Sixty-five facilities and 13 district hospitals have been chosen to provide BEmONC and CEmONC services respectively. At this stage, however, only two BEmONC centres in each district have been partially equipped and many hospitals are not fully functional to provide CEmONC. There has been a substantial increase in the amount of medicines procured. However, the quantities are insufficient to meet demand and the logistical issues substantial. There was an initial four-fold increase in consultations for sick under-five year olds. This has declined somewhat, but remains three-fold higher than prior to the FHCI. Antenatal care, PNC, and institutional deliveries all increased dramatically following the introduction of the FHCI but this trend has declined (Health Sector Performance Review 2010). Nevertheless, the number of institutional deliveries has increased overall with less deliveries occurring in the community (Health Sector Performance Review 2010).

The GoSL funding of the health sector falls short of the Abuja Declaration, in which the GoSL pledged to give 15% of the total government budget, in any one year, to the health sector. In 2011, the GoSL's health budget (as a percentage of total budget) is 8.2%. As part of the performance assessment, the GoSL plans to increase the total GoSL budget allocation to health to 11% in 2012, and 12% in 2013. This excludes any additional funding from development partners and NGOs.

2.11 Major Bottlenecks to Increased Utilisation of Services

The main cross-cutting bottlenecks identified through the situation analysis include:

- Weak, fragmented and uncoordinated community level provision and promotion of high impact interventions and practices such as LLITN, household water treatment, improved hygiene and sanitation, hand washing with soap and water, early initiation of breastfeeding, EBF, management of temperature in the newborn, PNC for both mother and newborn within two days of delivery, Kangaroo Mother Care for low birth weight babies, age appropriate complimentary feeding, community based family planning and community IMNCI. The community level is weak because the existing community health workers are few and their training is not standard. They are poorly supervised, not salaried, not systematically supplied and there is no community based health information system.
- Access to adolescent friendly reproductive health services and rights is poor due to inadequate numbers of health workers with appropriate training in serving the adolescents and youth.

- Direct and indirect household health expenditure is a major factor affecting access to interventions largely as a result of the high percentage of the population that is poor.
- Weak supportive supervision by the District of PHUs and by the PHUs of Communities due to under funding and a shortage of human resources.
- Insufficient PHU outreach activities due to under funding and a shortage of human resources. Interventions that are most affected include FP, promotion of focused ANC including PMTCT, identification and support for vulnerable groups such as teenage mothers, immunisation, and home visits to lactating mothers and newborns.
- Human resource constraints in terms of numbers and skills at all levels of service delivery. The weak human resources capacity affects the provision of adolescent RH services, FP, post abortion care services, safe normal delivery services, EmONC, IMNCI, nutrition care, STI/HIV/AIDs, SGBV, other infectious and non-infectious conditions of the reproductive system.
- Poor infrastructure and a shortage of appropriate equipment and supplies for the provision of quality services such as FP, safe normal delivery services, EmONC and IMNCI.
- The referral system of communities – PHU - district hospital - referral hospitals is not functioning well because of both design and funding constraints.
- The correct, consistent and effective use of high impact interventions and practices was generally low and a major bottleneck at all levels of service delivery. This was partly a result of poor quality of care, which in itself is a consequence of limited supportive supervision and low demand promotion.

3. GOAL

To improve the RNCH, especially for mothers and children, through strengthening national RNCH systems to accelerate the achievement of the relevant MDGs.

4. VALUES AND GUIDING PRINCIPLES

The following principles from the RNCH Policy 2011-2015 apply to the development and implementation of the strategy:

Ownership and Accountability

The GoSL will play a leading role in the implementation of the policy, and will create an enabling environment for accountability and transparency.

Gender, Equity, Access, and Respect for Human Rights

All women, men, adolescents, newborns, and children will have access to health services without discrimination based on ethnicity, gender, disability, religion, political belief, economic or social condition, or geographical location, with special attention being given to the needs of under-served and vulnerable groups. The rights of health care users shall be respected and protected, and gender issues shall be mainstreamed in the planning and implementation of all health programmes. The GoSL recognises that in order to improve RNCH, social justice and poverty reduction are required to address health inequities as outlined in the PRSPII, 2009.

Ethical Considerations

The ethical requirements of confidentiality, safety, and efficacy in both the provision of health care and research shall be adhered to.

Life Cycle and Integrated Approach

The life cycle approach has been used, which recognises the continuum of health needs from birth through childhood, adolescence to adulthood, bearing in mind that any support provided to children will affect their immediate well-being as well as have an impact on their health and development in later years.

GoSL is committed to working with partners to develop integrated care pathways to ensure the continuity of care. The participation of all stakeholders, including communities, private, public, NGO, FBOs, civil society organisations and other sectors is encouraged. In addition, the integration of sexual RCNH services, including HIV prevention and treatment at all levels, will be promoted.

Public Health and Evidence Based Approach

The GoSL will use a public health approach by looking at RNCH in a broad socio-economic context, recognising the importance of engagement with partners outside the health sector in intersectoral collaboration to affect positive change. In addition, it will focus on major health issues that exert the greatest health burden in terms of RNCH morbidity, mortality and disability and implement cost-effective and high impact, evidence based, preventive and curative interventions to address them.

Community Participation and Partnerships

Community participation will be encouraged in the planning, management and delivery of health services at all levels. Partnerships with communities will facilitate scale up of desirable community and household practices.

Alignment

Alignment has been made with the NHSSP 2010-2015, the Second Poverty Reduction Strategy 2008 – 2012 “An Agenda for Change”, the FHCI, the BPEHS, and the Performance Based Financing (PBF).

5. OBJECTIVES

The RNCH objectives as stated in the RNCH 2011-2015 policy are listed below with particular reference to reaching marginalised and vulnerable populations and reducing RNCH inequalities. The objectives are:

1. To ensure the provision of comprehensive, Adolescent friendly, sexual reproductive health services;
2. To reduce the level of unwanted pregnancies in all women of reproductive age;
3. To reduce the incidence of unsafe abortion and ensure provision of post abortion care.
4. To reduce maternal and neonatal morbidity and mortality;
5. To reduce child morbidity and mortality;
6. To improve the nutritional status of women and children;
7. To reduce the incidence and prevalence of STIs, including HIV and AIDS;
8. To eliminate harmful practices such as Female Genital Mutilation (FGM), premature marriage, and domestic and sexual violence against women and children; and
9. To reduce the rate of infectious and other non-infectious conditions of the reproductive health system.

In order to meet these objectives, the GoSL and partners need to create an enabling environment so RNCH activities can be effectively implemented. This includes the following cross cutting issues:

- An ongoing financial commitment and resource allocation;
- Strengthening the health system for the delivery of quality RNCH services at all levels, including an efficient and functional referral system;
- Strengthening co-ordination, partnerships and integration;
- Promoting integrated RNCH services and practices in communities and households;
- Improving RNCH wellbeing of vulnerable and marginalised populations, including during emergencies, and incorporating gender issues; and
- Implementing evidence based practice through research and M&E.

6. STRATEGIES AND KEY ACTIVITIES

This section outlines the RNCH strategies and key activities. Specific activities will be developed by the relevant RCH programmes as part of the local authority and district annual operational plans.

6.1 Specific RNCH Strategic Areas

Objective 1: To ensure the provision of comprehensive, adolescent friendly, sexual reproductive health services

Strategy 1. **Ensure implementation of adolescent and young people's health and development strategic plan**

Key Activities

- Support implementation of Adolescent and Young People's Health and development strategic plan
- Develop/undertake adolescent friendly IEC/BCC materials and programmes
- Develop advocacy kit for ASRH
- Advocate adolescent health to policy makers
- Develop and implement the Life Skills Education and peer educator curricula based on the most at risk youth populations (MARYP)
- Secure resource materials for Life Skills Education
- Apply the MARYP approach in peer education and map MARYP populations
- Train facilitators, peer educators and teachers on use of Life Skills Education and peer educator education curricula and resource materials

Strategy 2. Ensure Adolescent/Youth Friendly Health Services (AYFHS) are delivered

Key Activities

- Develop and evaluate an AYFHS model of care
- Solicit funding for AYFHS in each district
- Equip facilities to be fully integrated and adolescent/youth focused
- Train and equip service providers with competencies to deliver effective AYFHS services
- Integrate the provision of appropriate AYFHS at all levels
- Distribute guidelines, equipment and medical supplies for the provision of AYFHS
- Support supervision

Strategy 3. Sensitize the community on adolescent reproductive health issues

Key Activities

- Develop community IEC materials
- Undertake social mobilisation for community leaders and other community stakeholders

- Update CHWs on adolescent sexual and reproductive health and Rights issues
- Advocate for community buy-in of the need for AYFHS programmes and facilities
- Support peer educator programmes
- Promote and support appropriate nutrition status and feeding habits for adolescents

Strategy 4. Strengthen research into adolescents and young people's issues

Key Activities

- Undertake relevant study and research on adolescent health
- Use the evidence from the study and research in the design of programmes to address young people
- Build capacity for research on adolescent and young people's issues

Partners

Ministry of Education, Reproductive Health, NSAHP, MGSWCA, NAS, MEST, UN agencies, NGOs

Objective 2: To reduce the number of unwanted pregnancies in all women of reproductive age

Strategy 5. Ensure the availability, access to, and utilisation of quality FP services using a wide range of contraceptive methods at both facility and community level including emergency contraception

Key Activities

- Advocate for increased funding for FP
- Develop and disseminate policy on FP
- Undertake research to identify all barriers to uptake and address findings
- Conduct in-service and pre-service training for all service providers to improve their ability to provide effective information on FP including long term contraceptive protection(LTCP) and counselling techniques that respect individual rights
- Improve access to family planning information through social marketing, mass media and community social mobilization
- Develop and distribute IEC/BCC materials for use at community and facility level
- Strengthen LMIS including use of channel at all levels
- Conduct outreach activities and community based distribution of contraceptives
- Promote and encourage male involvement in FP
- Support supervision

Strategy 6. Ensure effective counselling to facilitate acceptance and utilisation of appropriate methods of FP

Key Activities

- Include effective counselling techniques that respect individual rights as part of FP curricula in pre-service training for all relevant health staff
- Provide performance incentives

Strategy 7. Ensure better integration of FP in reproductive and maternal health, and AYFHS

Key Activities

- Incorporate FP guidelines and training into a comprehensive reproductive health package of services with a special emphasis on PNC and AYFHS
- Increase service providers' capacity to provide comprehensive sexual, reproductive health care at facility and community levels

Partners
Reproductive Health/Family Planning, School Health, HIV and AIDS, DMS, NAS, Ministry of Education, MGSWCA, MYS, UN agencies, NGOs

Objective 3: To reduce incidence of unsafe abortion and ensure provision of post abortion care

Strategy 8. Ensure that FP services are provided to prevent unwanted pregnancies

Key Activities

- Provide FP IEC/BCC and commodities at all levels: community, facility, AYFHS
- Facilitate staff training on FP (emphasizing reduction of failure rates), counselling, and service delivery
- Support supervision

Strategy 9. Ensure that quality post abortion care (PAC) is made available and accessible at all levels

Key Activities

- Develop, disseminate, and train on PAC at all levels
- Include PAC in the pre-service training for doctors and nurses
- Increase service providers' capacity to prevent, detect, respond and refer to violations leading to the need for an unsafe abortion
- Advocate for misoprostol to be on the emergency drug list (EDL) for use in PAC
- Provide information on post abortion care services through social marketing, mass media, and community social mobilization.

- Support supervision
- Provide performance incentives

Strategy 10. Ensure that there are safe and legal abortion services

Key Activities

- Advocate for laws allowing safe abortion
- Liaise with Ministry of Social Welfare, Gender and Children's Affairs to provide a safety net for vulnerable populations, especially adolescents

Partners
Reproductive Health/Family Planning, School Health, DDMS, MSWGCA, tertiary institutions, Ministry of Justice, UN agencies, NGOs

Objective 4: To reduce maternal and neonatal morbidity and mortality

Strategy 11. Ensure every pregnant woman is provided with quality focused ANC which includes FP and HIV

Key Activities

- Integrate services: ANC, AYFHS, HIV/AIDS/STI, Nutrition, Malaria
- Develop guidelines and policies for introduction of FP in ANC and PNC
- Liaise with DDMS to ensure commodities and drugs for ANC are made available in each facility
- Re-define roles of traditional birth attendants (TBAs) and other CHWs to mobilise pregnant women, especially adolescents, to go to the clinic for four ANC visits
- Develop and distribute IEC/BCC materials to promote focused ANC
- Promote adequate nutrient consumption during pregnancy, including iron folate supplementation
- Scale up adolescent health services and PMTCT services to all PHUs offering ANC
- Integrate male participation in all programmes
- Strengthen facility to provide quality care (Infrastructure and capacity building)
- Support supervision

Strategy 12. Encourage institutional delivery and provide quality care

Key Activities

- Develop and distribute IEC/BCC materials to promote safe delivery through community social mobilization and mass media.

- Promote facility based delivery by working with TBAs to mobilise women to deliver in the facility
- Develop task-shifting guidelines and train relevant staff in new skills
- Mandate institutional maternal death review (MDR) reporting
- Develop and disseminate guidelines/protocols for normal deliveries
- Develop training manuals/ curriculum for all staff
- Strengthen private/public partnerships by inclusion in all levels including policy
- Initiate conditional cash transfers targeting vulnerable and marginalized adolescent/ teenage pregnant and lactating mothers.
- Provide performance incentives

Strategy 13. Ensure that there is a skilled birth attendant for all deliveries

Key Activities

- Hold consultative meeting to define who qualifies as a SBA
- Map location and number of SBAs
- Develop and implement competency based training for SBA
- Advocate for the training of more midwives
- Additional human resources: Liaise with the Human Resources Management Office and Nursing to deploy and retain trained midwives to each BEmONC/ CEmONC facility
- Provide performance incentives

Strategy 14. Ensure delivery of and access to basic and comprehensive emergency obstetric care

Key Activities

- Strengthen CHCs and hospitals in all ENABLER components to meet EmONC compliance
- Map the distribution of EmONC services to determine geographical equity
- Scale up task-shifting protocols and undertake training in essential services, e.g. performance of caesarean section and anaesthetics
- Develop a protocol for the use and storage of Oxytocin and other uterogenic drugs
- Develop a District referral plan that ensures there is an integrated communication and transportation system
- Advocate for misoprostol on the EDL for use in post-partum haemorrhage (PPH)
- Provide performance incentives

Strategy 15. Ensure effective initial newborn care

Key Activities

- Develop and disseminate emergency newborn care (ENC) and emergency newborn care package
- Train all those performing facility deliveries in ENC and emergency newborn care
- Provide performance incentives
- Support supervision

Strategy 16. Ensure access and availability of effective PNC on days 1, 2 and 7, and 6 weeks post-partum which includes FP

Key Activities

- Develop protocol for use of misoprostol for PPH
- Develop, disseminate and train staff on protocols for all PNC activities
- Provide performance incentives
- Support supervision

Partners

Reproductive Health/Family Planning, School Health, Child Health/EPI, Nutrition, HIV and AIDS, Malaria, DDMS,UN agencies, NGOs, FBOs

Objective 5: To reduce child morbidity and mortality

Strategy 17.Develop functional promotive, preventive and curative health care to protect neonates, infants and children from common illnesses and promote their development

Key Activities

- Develop and distribute IEC/BCC at community and facility level
- Develop/review guidelines on the management of low birth weight infants
- Train CHW and health workers in all guidelines
- Provide CHW with commodities required to do preventive care
- Identify hard to reach populations and undertake integrated outreach
- Conduct community sensitization meetings to raise awareness on interventions available and the role of the CHW

Strategy 18. Develop a functional IMNCI programme

Key Activities

- Develop/review standard protocols and treatment guidelines for health staff and CHWs for the

management of common neonatal and childhood conditions at all levels

- Train, support and supervise all CHW in community IMNCI (CIMNCI)
- Train, support and supervise all facility health staff in IMNCI
- Institutionalize IMNCI in pre-service training for health staff
- Provide all commodities and equipment required for community and facility based IMNCI

Strategy 19. Develop specialist paediatric medical care

Key Activities

- Develop/review and distribute standard protocols and treatment guidelines for the management of common neonatal and childhood conditions at referral hospitals
- Train, support and supervise doctors and health staff in core paediatric and neonatal skills and institutionalize training
- Integrate paediatric care into training curriculum for doctors and other health staff.
- Review requirements to establish specialised neonatal units at referral hospitals
- Review and provide standard equipment, commodities and drugs required at referral level
- Develop expertise in the care of the child with HIV
- Develop a cadre of paediatric nurses and doctors

Partners

Child Health/EPI, Nutrition, HIV and AIDS, UN agencies, NGOs, FBOs

Objective 6: To improve the nutritional status of women and children

Strategy 20. Reduce malnutrition with a special focus on newborns, children under two-years old, adolescents, and pregnant women

Key Activities

- Undertake operational research to understand EBF, complementary feeding (CF) and women's nutritional status enablers and inhibitors.
- Incorporate findings in evidence based BCC/IEC for EBF and distribute
- Pre-service and in-service training for EBF and CF; pre-pregnancy and maternal nutrition; community management of acute malnutrition, and treatment of severe acute malnutrition; and paediatric HIV, targeting community health workers and health workers.
- Promote appropriate feeding practices and healthy diet for infants, young children, adolescents, pregnant and lactating women
- Develop/review guidelines on nutrition interventions/education for adolescents and integrate

with AYFHS and Life Skills Education

- Identify the barriers to effective growth monitoring
- Strengthen treatment of Severe Acute Malnutrition through integration of IYCF and CMAM.
- Identify those most at risk and provide prevention and treatment
- Support supervision

Strategy 21. Ensure integration of high impact nutrition interventions for women and children at all levels of health care service delivery

Key Activities

- Integrate RNCH nutrition training with reproductive health curriculum and training at all levels
- Integrate nutrition into all service delivery packages (U5, ANC, PNC, AYFHS, IMNCI, HIV, and outreach/campaigns).
- Support supervision

Partners

Nutrition, Child Health/EPI, Reproductive Health, HIV and AIDS, School Health, Ministry of Education, Ministry of Agriculture, Ministry of Water, UN agencies, World Food Programme, NGOs, FBOs

Objective 7: To reduce the incidence and prevalence of STIs including HIV and AIDS

Strategy 22. Increase the capacity and availability of STI/HIV services to provide efficient and effective services through integration

Key Activities

- Develop and disseminate specific guidelines and protocols to support integration and linkages of STI/HIV to existing reproductive services, including adolescent testing and PMTCT.
- Conduct pre-service and in-service training for health workers, including maintenance of client confidentiality and reduction of stigma.
- Scale up and improve syndromic management of STIs and provide diagnostic services.
- Scale up functional PMTCT and continue integration with ANC, delivery and postpartum care in all health facilities, both public and private.
- Scale up and improve paediatric HIV care, including paediatric HIV expertise, number of facilities providing paediatric HIV services, community education/awareness, and clear case management structures.

- Share information of scale up plans amongst relevant stakeholders.
- Conduct a quarterly review on PMTCT and paediatric HIV services.
- Screen all HIV positive clients for TB.
- Support supervision.

Strategy23. Community mobilisation and participation

Key Activities

- Develop target-specific BCC/IEC materials, including materials for promotion of male and female condoms at family level, to reduce risky behaviours in adolescents and all women and men.
- Sensitize traditional and religious leaders, NGOs and CHWs on HIV/AIDS.
- Conduct awareness raising events in communities on HIV/AIDS and promote male participation.
- Establish an effective referral and follow-up system to strengthen linkages and improve contact tracing.

Strategy 24. Increase funding for HIV/AIDS services specifically for Orphan and Vulnerable Children

Key Activities

- Establish social safety net linking multiple sectors (health, education, social welfare, etc.) to address Orphans and Vulnerable Children
- Mapping of orphans and vulnerable children (OVC) in terms of numbers, location and socio economic circumstances to get reliable data that will guide the social safety net to address OVC.

Partners: HIV and AIDS, RH, School Health, CH/EPI, Nutrition, UN, NGOs

Objective 8: To eliminate harmful practices, such as Female Genital Mutilation (FGM), premature marriage, and domestic and sexual violence against women and children;

Strategy 25. Ensure gender issues are included in reproductive health training and staff are trained to provide sensitive, responsive services

Key Activities

- Advocate for the enforcement of gender equality in health and development.
- Review current SGBV prevention and response services and programmes to identify areas for improvement and to minimise delays in accessing assessment and treatment.
- Provide capacity building and in-service training for all staff involved in the care of victims of

SGBV, including training on the forensic role of health workers, and on the short and long-term health implications of FGM/C.

- SGBV to be integrated into existing health services at all levels, establishing consistent treatment and case management protocols with a focus on confidentiality and protection.
- Establish a network for the care and support of SGBV clients by developing clear linkages and focal points for SGBV in various services (health, legal, social, FSU-police, social welfare etc.).

Strategy 26. Advocate for no more FGM/C and other forms of abuse below 18 years

Key Activities

- Develop an MOU between government and communities on no more FGM/C below 18 years
- Advocate for the short and long-term health implications of FGM/C to be included in the Life Skills Education Curriculum
- Design and implement a child abuse screening protocol for health workers, school officials, and anyone who regularly comes into contact with children
- Establish a child abuse referral protocol
- Develop a nationwide advocacy campaign targeting parents aimed at preventing child abuse and establishing positive parenting practices
- Develop an advocacy campaign targeting policy makers aimed at establishing prevention and response services related to child abuse

Partners

Ministry of Social Welfare, Gender, & Children's Affairs, Reproductive Health, School Health, Child Health/EPI, HIV and AIDS, Ministry of Education, UN agencies

Objective 9: To reduce the rate of infectious and other non-infectious conditions of the reproductive health system

Strategy 27. Ensure that screening services for cervical, breast, and prostate cancers are available and accessible

Key Activities

- Support the establishment of a national cancer register
- Undertake operational research on the disease burden of cervical, breast, and prostate cancer
- Develop screening programmes for breast, cervical, and prostate cancer
- Liaise with DDMS for the provision of testing kits and cervical cancer vaccine
- Establish survivor clubs

- Improve HR, management and facilities for the treatment of cervical, breast and prostate cancers.

Strategy28. Ensure treatment and referral services for other reproductive conditions

Key Activities

- Train service providers on early detection and appropriate treatment of other reproductive conditions
- Advocate for and support specialist medical training in the medical and surgical treatment of other reproductive system conditions

Strategy 29. Ensure that prevention, treatment, referral and re-integration services for women with obstetric fistula are in place

Key Activities

- Promote prevention, recognition, and stigma reduction through IEC/BCC
- Train staff at appropriate levels to recognise and treat obstetric fistula
- Strengthen health service delivery systems for surgical treatment of obstetric fistula
- Promote empowerment through use of obstetric fistula support groups

Strategy 30. Ensure that appropriate information is available concerning menopause

Key Activities

- Provide sensitisation and IEC to all the population about menopause
- Assist service providers in the provision of appropriate symptomatic care and counselling

Partners

Non-Communicable Diseases, Reproductive Health, UN agencies, NGOs, FBOs

6.2 Cross Cutting Strategies and Key Activities

n order to achieve the nine objectives, the following enabling and cross cutting issues need to be addressed.

Resource Allocation

Strategy 31. Justify the need for GoSL to honour the Abuja Declaration

Strategy 32. Use evidence to justify an increase in RNCH resource allocation

Key Activities

- Undertake annual health sector budget analysis
- Prepare and disseminate evidence based advocacy package for increased funding to the health sector

Strengthening the Health System

Strategy 33. Strengthen the capacity of the health system in order to deliver quality RNCH services at all levels

Key Activities

- Review the pre-service RNCH training curricula for all cadres of RNCH staff to ensure integration and incorporation of new tasks and skills
- Train all RNCH staff so they are competent to perform their role
- Recruit and deploy additional health workers based on population served and services provided
- Advocate for the training of more midwives
- Develop mechanisms for ongoing continuous education, improving staff morale, and retaining the workforce
- Establish health facilities with sufficient infrastructure, commodities, medicines, resources, functioning equipment, competent staff, and transport to provide the services as outlined in the BPEHS
- Provide logistics, transport, maintenance, communication, procurement, and supplies
- Develop and apply an integrated RNCH supervisory tool for each level of the health system
- Train supervisors and provide resources to undertake supportive supervision
- Define the management, coordination, and supervisory roles and ensure these roles are effectively communicated to relevant staff and the health facility team
- Encourage the development of transparent decision making mechanisms, clear lines of accountability and effective functioning of hospitals and other boards

Strategy 34. Ensure an efficient and functional referral system

Key Activities

- Develop and disseminate District based Referral guidelines
- Train all levels of service providers on referral systems and appropriate referral services
- Recruit and deploy service providers for all aspects of referral service
- Preposition ambulances at strategic health facilities in all the districts
- Establish a national Ambulance Hotline whereby all Districts have allocated equipment for communicating with the Hotline centre

Strengthen Co-ordination, Partnerships and Integration

Strategy 35. Strengthen the annual operational planning process at all levels

Key Activities

- Develop a MoU between the Central Ministry and District councils to agree upon specific dates and times for Annual Operation Planning and integration
- Organise and conduct a national forum to begin the process of integration between Central, Districts and other relevant stakeholders
- Encourage district councillors to become involved in advocacy on behalf of RNCH issues through regular District specific stakeholder forums
- Integrate and create links between MoHS, other Ministries, UN agencies, NGOs, private sector, non-health sectors, communities and other development partners for stronger partnership at all levels of planning and implementation, engaging a sector-wide approach

Promote Integrated RNCH Services and Practices in Communities and Households

Strategy 36. Ensure nationwide integrated services and practices in communities and households

Key Activities

- Train CHWs using the CHW policy, guidelines, and manual
- Develop comprehensive RNCH IEC/BCC strategy and materials
- Create awareness in the community to demand for and access quality skilled care for RNCH services

Improve RNCH wellbeing of vulnerable and marginalised populations, incorporating gender issues

Strategy37. Identify vulnerable and marginalised populations and ensure access to RNCH activities

Key Activities

- Disaggregate RNCH data by sex, geographical location, nutritional status and wealth quintiles
- Undertake regular outreach and campaigns of packaged RNCH interventions
- Strengthen social protection mechanisms for RNCH, including food assistance, cash transfers and other social safety nets.
- Use various methods to pro-actively identify and attend to vulnerable and marginalised populations such as pregnant women

Strategy 38. Include gender-responsive programming and implementation

Key Activities

- Train RNCH Programme staff and district teams in gender-responsive programming and planning
- Emphasize men's shared responsibility and active involvement in parenthood and sexual and reproductive behaviour at all levels, particularly at the community level

Strategy 39. Ensure that emergency preparedness plans are in place using MISP

Key Activities

- Develop and disseminate a national emergency preparedness plan for RNCH

Implement Evidence Based Practice through Research and M&E

Strategy 40. Strengthen and integrate the M&E process at all levels

Key Activities

- Harmonize RNCH indicators with the NHSSP 2010-2015
- Develop one M&E for all Programmes by integrating all M&E tools into each Programme at all levels
- Develop and assist the training of M&E officials at all levels

Strategy 41. Ensure evidence based health programming

Key Activities

- Train Programme and District teams in evidence based planning
- Identify priority research areas and undertake research

- Continue partnerships with institutions and agencies, and strengthen links with NGOs to undertake relevant operational research to evaluate the impact of various RNCH activities and develop the evidence for ongoing strategic planning
- Disseminate operational research findings and incorporate into policy, planning, and other decisions

7. MONITORING AND EVALUATION

The MoHS's Directorate of Reproductive and Child Health is responsible for the M&E of the RNCH strategy. Each RCH Programme (Reproductive Health, Child Health and EPI, Nutrition, and School Health) is responsible for developing its own M&E plan.

Impact, outcomes, outputs, and targets for the RNCH strategy are shown in the M&E framework below (Table 1). The indicators chosen, when analysed, will provide data to demonstrate progress made in the implementation of this strategy.

This RNCH M&E component has been developed to:

- Ensure that the M&E of RNCH falls within the framework of the national M&E system to avoid any possibility of a vertical approach;
- Be consistent with, and supportive of, the 10 year Health Management Information System (HMIS) strategic plan and its three year implementation plan for strengthening of the HMIS;
- Enable the RCH Programme management team and the implementers of RNCH to actively and systematically assess progress and take corrective action when necessary;
- Minimise the burden of data collection and reporting on key programme indicators; and
- Ensure that selected indicators can reasonably be attributed to programme effort.

Performance indicators will be collected using several methods, namely: routine health services-based statistics, health facility surveys (including the RCH survey), population-based surveys (also known as household surveys), the national population census and operational research. The source of data is outlined in the M&E framework. Priority operational research areas include:

- Adolescent KAP study
- Impact of model of AYFHS on adolescent behaviours
- Barriers to FP
- Impact on maternal mortality of the change from home based to facility based care
- Impact of facility and community based PNC on maternal and neonatal mortality
- Enablers/disablers of EBF and CF
- Disease burden of reproductive cancers
- Impact of PBF on selected RNCH outcomes

Information Dissemination

Summary data will be provided for various levels of stakeholders at community, district and national levels as well as other partners.

Facility level

Charts showing the performance of each health facility on certain key outputs will be produced by facility staff. This will also help the health facility staff to determine their performance and areas where attention is required.

District level

- Monthly reports showing the performance of each facility will be produced. These reports will form the basis for regular monthly reviews at District level.
- Monthly review meetings to facilitate efficient use of information, attended by DHMTs in-

charge of health facilities in the Districts, NGOs operating in the Districts, Local Council representatives, and community leaders.

- Quarterly reports will be provided on key outputs, summarising the performance of each facility within the district. This report will help Districts to assess the performance of facilities compared to each other.

National level

- Routine Data generated by the District Health Information System (DHIS) will be sent to the Directorates of Planning and Information through the Health Management Information System (HMIS). This information will be analysed to determine the performance of each district on a monthly basis.
- Health sector performance reports of core indicators will be produced and presented to all stakeholders.
- Annual review and planning meetings will be held and attended by senior MoHS officials, Programme managers, district medical officers, District Council representatives, parliamentarians, NGOs, donors, UN agencies, and civil society representatives.

Table 1: RNCH M&E Framework

Indicators	Means of Verification	Base-line	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
Impact									Continued political commitment and sufficient resources to FHC services for pregnant women and retention of trained and committed health professionals.
Maternal mortality rate (per 100,000 live births)	DHS/ Census	857 per 100,000 live births	761 per 100,000 live births	718 per 100,000 live births	670 per 100,000 live births		National /District /Gender /Wealth Quintile /Age for MMR	5 yearly /5 yearly	
Neonatal mortality rate(per 1,000 live births)	DHS	39 per 1,000 live births							
Infant mortality rate (per 1,000 live births	DHS/MICS	89 per 1,000 live births	75 per 1,000 live births	68 per 1,000 live births	61 per 1,000 live births			Each 2.5 yearly	
Under-five mortality rate (per 1,000 live births)	DHS/MICS	140 per 1,000 live births	124 per 1,000 live births	116 per 1,000 live births	108 per 1,000 live births			Each 2.5 yearly	
Total fertility rate (average number of births during a woman's life)	DHS/MICS	5.1							
Prevalence of underweight among children 6-59 months	SMART Survey						National /District /Gender	Yearly /2.5 yearly	
Outcomes									
% of pregnant women making at least four antenatal visits	RCH survey /HMIS	49%	52%	55%	58%	60%	National /District	Monthly /yearly	
% of pregnant women who receive at least two2 doses of IPTp	RCH survey /HMIS	10%	30%	40%	50%	60%	National /District	Monthly /yearly	
% of pregnant women sleeping under ITN	DHS/MICS	50%	55%	60%	65%	72%	National /District	Monthly /yearly	
% of pregnant women who are fully immunised against tetanus	RCH survey	79%	79%	79%	79%	79%	National /District	Monthly /yearly	
Prevalence of syphilis in pregnant women									

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
Prevalence of HIV in pregnant women	NACP	3.2%							
%(#) of HIV positive pregnant women who have received ARVs for PMTCT	Universal Access report/ RCH survey /HMIS	919 (31%)	60%	80%			National /District /Gender	Yearly	
%(#) of HIV positive women who received ARVs	Universal Access report.	1% (63)	5%	10%			National /District /Gender	Yearly	
% of deliveries attended by a skilled birth attendant	RCH survey /HMIS	42%	50%	60%	70%	70%	National /District /Gender	Monthly /yearly	
% of births delivered by caesarean section	RCH survey		10%	15%	15%	15%	National /District /Gender	Monthly /yearly	
% of sexually active adolescents using condoms	Universal Access report/ HMIS						National /District	yearly	
Number of new acceptors of contraceptives	Programme reports		67,000	148,000			National /District	Monthly /quarterly /yearly	
Contraceptive prevalence rate	MICS/DHS	8%	10%	12%	14%	16%	National /District /Age	2.5 yearly	
% of women/neonates receiving PNC within 2 days of birth	RCH survey						National /District /Gender	Monthly /yearly	
% of women using a modern method of contraception at 6 weeks after childbirth	RCH survey						National /District /Gender	Monthly /yearly	
% of newborns breastfed within one hour of birth (Early Initiation of breastfeeding)	RCH survey /HMIS	50.5%	51%	51%	51%	51%	National /District /Gender	Yearly /2.5 yearly	
% of infants under six month's exclusively breastfed	SMART Survey	11.2%	14%	25%	40%	50%	National /District /Gender	Yearly /2.5 yearly	

Indicators	Means of Verification	Base-line	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
Low birth weight prevalence	RCH survey					%	National /District /Gender	Yearly	
% of low birth weight receiving community based care	RCH survey /SMART Survey	0%	10%	20%	30%	43%			
% of infants complementary feeding (6-9 months)	SMART Survey	21%	25%	35%	43%	50%			
% children receiving Penta-3 before 12 months of age	EPI Cluster survey	59.7%	65%	73%	73%	73%	National /District /Gender	Monthly /yearly	
% children receiving measles immunisation	DHS/EPI Cluster survey	68%	70%	73%	73%	73%			
% of children aged under five sleeping under ITN	RCH Survey/MICS	25.8%	35%	50%	60%	72%	National /District /Gender	Yearly /2.5 yearly	
% children under five treated with ORS for diarrhoea	RCH survey /HMIS	73.4%	73%	73%	73%	73%	National/ District/ Gender	Yearly /2.5 yearly	
% children aged under five with fever receiving anti malaria treatment with 24 hours of onset	RCH survey /HMIS	30.1%	40%	55%	65%	82%	National /District /Gender	Yearly	
% of children aged under five with signs of pneumonia who received an antibiotic	RCH survey /HMIS	27.3%	35%	55%	65%	82%	National /District /Gender	Yearly	
% of 6-59 month old children given Vitamin A supplementation in the last six months	HMIS/ SMART Survey						National /District	Monthly /yearly	
% of 6-59 month old children receiving multiple micronutrients	HMIS/ SMART Survey						National /District	Monthly/ yearly	
% of health facilities undertaking integrated outreach services	Needs assessment Reports						District	Quarterly	

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
% of children with acute malnutrition that are treated at a health facility	SMART survey	11%	20%	30%	40%	54%	National /District /Gender	Yearly	• FHC is successfully incorporated for delivery of services • Nutrition becomes a priority for GoSL
% of population hand washing with soap	DHS	31%	40%	50%	60%	72%	National /District /Gender Wealth Quintile	Each 2.5 years	83.4(U) 34%(R) Access to water for the poorest is 11% compared to 91% for the richest.
% of households treating water	DHS	11%	20%	30%	55%	72%	National /District /Gender Wealth Quintile		
% of households using improved sanitation facilities	DHS/MICS	13%	20%	40%	50%	72%	National /District /Gender Wealth Quintile	Each 2.5 years	
% of pregnant women tested for HIV									
% of HIV positive clients tested for TB	Universal Access report						National /District	Yearly	
Prevalence of FGM/C		94%							
Output									
% of youth centres providing AYFHS	Programme reports						National /District	Monthly /quarterly /yearly	
% of youth centres providing AYFHS using the MARYP approach	Programme reports						National /District	Monthly/ Quarterly /yearly	
% of health facilities providing AYFHS using the MARYP approach	Programme reports						National /District	Monthly /quarterly /yearly	

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
% of service delivery points providing at least three FP methods (including dual methods)	Programme reports						National /District	Monthly /quarterly /yearly	
% of women offered counselling on FP within the PNC (6 weeks) period	Programme reports						National /District	Monthly /quarterly /yearly	
% of facilities not experiencing stock outs of FP commodities	Programme reports						National /District	Monthly /yearly	
% of BEmONC providing PAC	RCH survey						National /District	Monthly /yearly	
% of pregnant and lactating mothers receiving food supplements	HMIS/ SMART Survey						National /District	Monthly /yearly	
% of pregnant women that have been de-wormed	HMIS/ SMART Survey						National /District	yearly	
% of health facilities providing integrated PMTCT services	Universal Access report/ HMIS						National /District	yearly	
% of population living within 5 km of facility offering BEmONC essential obstetric services	RCH survey						National /District	Monthly /yearly	
% of target CHCs fully functional as BEmONC	RCH survey	0	26%	50%	70%		National /District	Monthly /yearly	
% of hospitals strengthened as CEmONC level facilities and meets the 'green' standards	RCH survey	0	100%	100%	100%		National /District	Monthly /yearly	Funding available Government commitment high
% of CHCs strengthened as BEmONC level facilities and meets the 'green' standards	RCH survey	0	100%	100%	100%		National /District	Monthly /yearly	

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
% of designated facilities providing full range of BEmONC services	RCH survey						National /District	Monthly /yearly	
No stock outs of any tracer drugs in 50% of the designated 5 BEMONC per district	RCH survey /HMIS	Estimated >40%	<20%	<10 %	<5%			Yearly	Availability of FHC Drugs .Logistic system (LMIS) in place.
No stock outs of any tracer drugs in 50% of the designated one CEMONC per district	RCH survey /HMIS	Estimated >40%	<20%	<10 %	<5%			Yearly	Availability of FHC Drugs. Logistic system LMIS in place.
Number of new midwives and new PH specialists deployed in health facilities	Monitoring reports		45	45			National /District	Monthly /yearly	
% of post-partum mothers supplemented with vitamin A	HMIS/ SMART Survey						National /District	Monthly /yearly	
Number of active CHWs	Monitoring reports						National /District	Monthly /yearly	
% (#) of health facilities providing IMNCI services	Monitoring reports						National /District	Monthly /yearly	
% of health facilities providing IYCF counselling services	Monitoring reports						National /District	Monthly /yearly	
% of children 6-23 months fed on animal foods	SMART Survey						National /District	yearly	
% of facilities with functional cold chain equipment	Needs assessment Reports						National /District	Monthly /yearly	
% of facilities providing treatment of acute malnutrition	HMIS						National /District	Monthly/ yearly	
% of health facilities providing paediatric HIV care	HMIS						National /District	Yearly	

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
% of designated facilities providing full range of BEmONC services	RCH survey						National /District	Monthly /yearly	
No stock outs of any tracer drugs in 50% of the designated 5 BEMONC per district	RCH survey /HMIS	Estimated >40%	<20%	<10 %	<5%			Yearly	Availability of FHC Drugs .Logistic system (LMIS) in place.
No stock outs of any tracer drugs in 50% of the designated one CEMONC per district	RCH survey /HMIS	Estimated >40%	<20%	<10 %	<5%			Yearly	Availability of FHC Drugs. Logistic system LMIS in place.
Number of new midwives and new PH specialists deployed in health facilities	Monitoring reports		45	45			National /District	Monthly /yearly	
% of post-partum mothers supplemented with vitamin A	HMIS/ SMART Survey						National /District	Monthly /yearly	
Number of active CHWs	Monitoring reports						National /District	Monthly /yearly	
% (#) of health facilities providing IMNCI services	Monitoring reports						National /District	Monthly /yearly	
% of health facilities providing IYCF counselling services	Monitoring reports						National /District	Monthly /yearly	
% of children 6-23 months fed on animal foods	SMART Survey						National /District	yearly	
% of facilities with functional cold chain equipment	Needs assessment Reports						National /District	Monthly /yearly	
% of facilities providing treatment of acute malnutrition	HMIS						National /District	Monthly/ yearly	
% of health facilities providing paediatric HIV care	HMIS						National /District	Yearly	
% of referral hospitals providing specialist paediatric services	Needs assessment Reports						National /District	Yearly	

Indicators	Means of Verification	Baseline	Target				Level of Disagg	Frequency	Risk/ Assumptions Comments
			2011	2012	2013	2014			
% of health facilities providing syndromic management of STIs and diagnostic services	HMIS						National /District	Yearly	
% of health facilities providing SGBV services	Special surveys						National	Yearly	
Number of women treated for obstetric fistula	HMIS						District	Quarterly /Yearly	
% of referral hospitals providing specialist reproductive health services	HMIS						National	Yearly	
% of referral hospitals with the capacity to provide treatment for obstetric fistula	Needs assessment Reports						National	Yearly	
% of Districts who sign the MoU and are compliant	Assessment Reports						District	Yearly	
% of districts submitting monthly reports	HMIS						District /Gender	Quarterly /yearly	
% of PHUs supervised at least once in the last three months using a standard checklist	Monitoring Reports						District	Quarterly	
% of health facilities with functional referral system	Monitoring Reports						District	Yearly	
Number of facilities in which at least one person has been informed on emergency preparedness including MISP	Monitoring Reports						District	Yearly	
Key health professionals by cadre per 1,000 population	HMIS						National /District	Yearly	
Percentage of GoSL revenue budgeted/ disbursed to the health sector	GoSL finance Records		8.2%	15%	15%	15%	National /District	Yearly	
Total health expenditure per capita	GoSL finance Records		$12	$			National	Yearly	
% of health sector budget for RNCH	GoSL finance Records								

8. IMPLEMENTATION COSTS AND IMPACT ON KEY INDICATORS

The costing of the RNCH strategy 2011-2015 has been done using the Marginal Budgeting for Bottleneck tool (MBB). The MBB application is an evidence-based planning, costing, and budgeting tool for health which links costs to health impact (MDGs1, 4, 5, 6 and 7), coverage of interventions and the health system requirements.

Inputs into the MBB included the evidence based interventions and activities identified in this strategy. National base lines for coverage of individual interventions were drawn from the most recent local surveys and target coverage for each intervention was estimated.

The MBB identifies:

- The major health system bottlenecks for delivery of maternal and child health services;
- The potential for reducing these bottlenecks;
- How much additional money is required to reduce these bottlenecks and achieve the MDGs 4 and 5 (and parts of MDGs 1, 6 and7); and
- The impact on certain health indicators if these bottlenecks were removed.

Additional costs to address these bottlenecks and improve coverage by intervention were generated by the MBB tool based on bottleneck reduction inputs.

Estimated Additional Funding Required to Achieve the MDGs

If MDGs 4 and 5 are to be achieved, an additional $6.6 per capita per year needs to be invested (Table 2-optimistic scenario). This investment in the health sector would also contribute to the partial attainment of MDGs 1, 6 and 7 which also require significant additional inputs from other Ministries and stakeholders. An additional $6.6 per capita investment translates into an average annual additional investment of $38.9 million (Leones 163 billion). This would be achievable if the Abuja Declaration was honoured, the additional funding was spent on the bottlenecks identified here, and development partners increased their resources.

Table 2: Potential progress in achieving MDGs according to the respective indicators and additional capita per year scenario investment to reduce identified bottlenecks

Indicators	MDG	Potential progress		
		Conservative	Modest	Optimistic
Additional investment per capita per year		3.8	5.7	6.6
% Reduction in anaemia	1	12.7%	19.6%	35.4%
% Reduction in stunting	1	4.8%	8.6%	13.1%
% Reduction in Under-five Mortality Rate	4	22.1%	28.8%	48.2%
% Reduction in Infant Mortality Rate	4	20.9%	28.8%	48.2%
% Reduction in Neonatal Mortality Rate	4	10.1%	22.6%	61.9%
% Reduction in Maternal Mortality Ratio	5	3.4%	9.3%	35.4%
% Reduction in Malaria Mortality	6	9.7%	16.6%	24.7%
% Household water treatment	7	52.9%	59.4%	67.0%
% Use of improved sanitation	7	51.9%	58.4%	66.2%
Achievement of MDGs 4 and 5 by 2015		NO	NO	YES

*Three scenarios were factored into the MBB tool based on increasing percentage reduction of the bottlenecks. The year 2010 has been used as the baseline hence aligning to the NHSSP 2010-2015. The conservative scenario adopted a 15%-45% bottleneck reduction; the modest scenario adopted a 25%-75% bottleneck reduction while optimistic scenario adopted a 30%-90% bottleneck reduction. A higher bottleneck reduction generates more need for additional money to remove the bottlenecks and better chances of meeting MDGs

1) Sierra Leone has recently benefited from universal distribution of 3.2 million LLITN. As a result about 97% of all households in the country own at least two bed nets. Hence the supply of LLITNs will not attract major cost investments in the next few years. However the main issue is the promotion of consistent usage of the nets by pregnant and lactating women and children aged under-five years.

2) The other high impact community level interventions attract modest costs. Use of other high impact interventions in PHUs and hospitals are also low. This includes facility based safe normal deliveries, EmONC and IMNCI. Budget lines have been inputted into the MBB tool, which are geared to demand awareness and promotion at community level such as: training of CHWs; monitoring; and undertaking supportive supervision.

3) PBF is soon to be implemented so budget lines that support PHU to community supervision and outreach activities such as transport, fuel, and mobility have been selected and budgeted for accordingly. District to PHU supervision is also weak, hence resources to undertake this has been added to the MBB budget.

4) FHCI has prioritised the distribution of essential drugs and related supplies, and the recruitment of and retention of additional health workers. FHCI is also focusing on improving infrastructure. Additional numbers of skilled human resources are required at all levels. Infrastructure improvement and equipment supply specifically targeting the provision of safe normal deliveries, EmONC and IMNCI at all levels are required. These items have been included in the MBB budget.

As expected, the greatest impact on the number of maternal deaths prevented would be by investing in B-EmONC and C-EmONC (Table 3, Appendix). However it should be noted that the MBB tool assumes most maternal deaths could be prevented by an SBA.

The greatest impact on the number of children's lives saved would be by scaling up community based child survival household practices (hand washing with soap, improved sanitation, EBF and CF etc) (Table 3, Appendix).

Figure 5 shows that conservative and modest coverage of high impact interventions, costing an additional $3.8 and $5.7 per capita per year respectively, would not lead to achieving MDG 4 or 5. However, acceleration would be achieved for MDG4 (Table 2 and Figure 6) and for MDG5 (Table 2 and Figure 7) with additional investment of $6.6 per capita.

Detailed budget estimates for additional resources and total budget needs, taking into account resources that are available through Government budget for 2011, is shown in Table 4, Appendix. The budget estimates are for Reproductive Newborn Child Health programmes, including specific administration and human resource needs and costs of integration with other national cross-cutting programmes such as Malaria, HIV/AIDS/PMTCT, hygiene and sanitation.

Figure 5: Marginal cost by progress towards MDGs

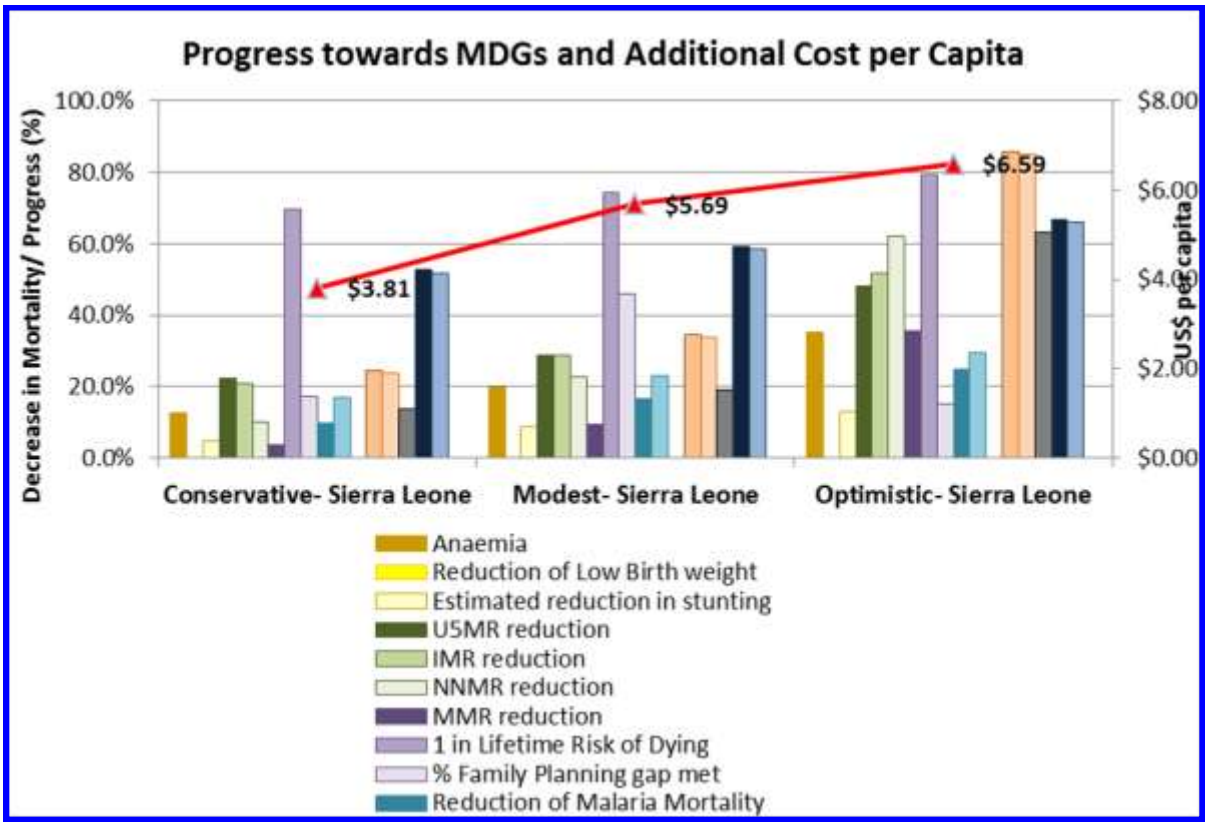


Figure 6: Attainment of MDG 4 by investment scenario

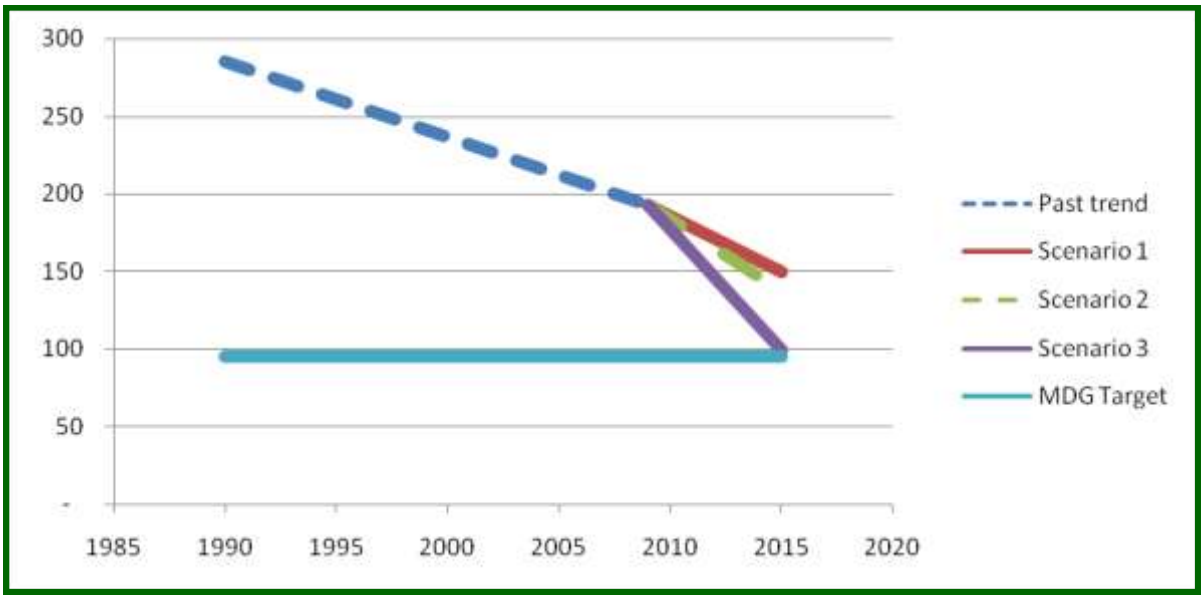


Figure 7: Attainment of MDG 5 by investment scenario

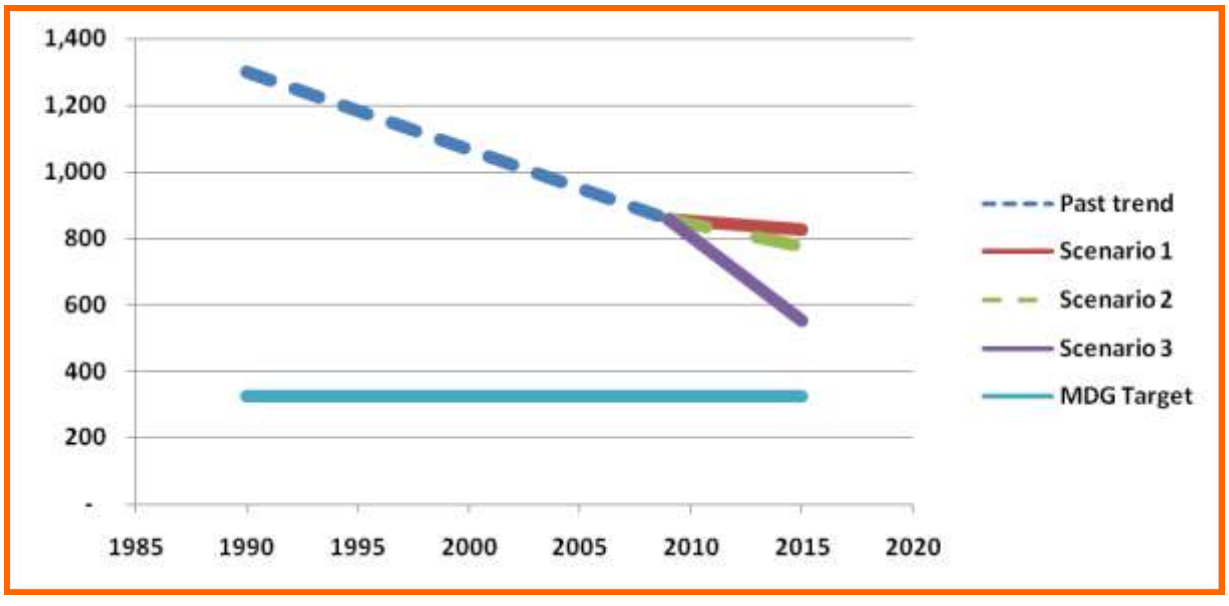


Table 3: Lives saved through selected interventions

	CHILDREN (<5 yrs old) LIVES SAVED						MATERNAL LIVES SAVED					
SELECTED INTERVENTIONS	Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone	
	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved
Children<5 sleeping previous night under insecticide treated net	1,854	49	1,854	87	1,854	220	9	2	9	3	9	3
Households treating water at home (filter, chlorine, flocculation)	2,764	178	2,764	207	2,764	399						
Improved source of drinking water	268		268		268							
Improved sanitation facility	3,168	202	3,168	236	3,168	458						
Caregivers who yesterday washed their hands with soap after defecation, before eating, feeding and food preparation.	2,734	142	2,734	179	2,734	368						
Targeted households sprayed with insecticide for malaria prevention	3,708		3,708		3,708							
Children who started breastfeeding within one hour of birth	3,192		3,192		3,192	57						
LBW infants receiving extra care	1,518		1,518	79	1,518	161						
Children 0-5 months exclusively breastfed	7,297	20	7,297	125	7,297	420						
Children aged 12-15 months receiving breast milk.	141		141		141							
Children 6-24 months receiving the minimum acceptable diet	5,939	74	5,939	152	5,939	409						
Children U5 with diarrhoea who continued feeding and received increased fluids	6,721		6,721		6,721	789						
Children U5 with diarrhoea given ORS packets or pre-packaged liquid AND zinc supplements	2,463	73	2,463	68	2,463	329						

	CHILDREN (<5 yrs old) LIVES SAVED						MATERNAL LIVES SAVED					
SELECTED INTERVENTIONS	Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone	
	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved
Children U5 with measles receiving Vit A treatment	1,787	7	1,787	4	1,787	57						
Children U5 with malaria receiving Chloroquine	2,265		2,265		2,265							
Children U5 with malaria receiving ACT	2,265	1	2,265	1	2,265	5						
Children U5 with pneumonia receiving antibiotics	5,015	16	5,015	9	5,015	88						
Children U5 with SAM receiving therapeutic feeding	1,922		1,922		1,922							
Married women with demand for FP currently using a modern method							36	12	36	17	36	7
Women 10-16 years old who received HPV vaccination												
Pregnant women with ANC 4+ and b.p. or urine sample was taken	173	2	173	6	173	18						
Pregnant women who received full dose of calcium supplements during pregnancy							115		115		115	
Mothers with birth in last 12 months protected against tetanus	188		188		188							
Pregnant women with bacteriuria screened and treated with antibiotics							24		24		24	
Pregnant women with syphilis screened and treated with antibiotics	63		63		63							
Mothers with birth in last 12 month who took iron tablets or syrup during pregnancy	35		35		35		2		2		2	

	CHILDREN (<5 yrs old) LIVES SAVED						MATERNAL LIVES SAVED					
SELECTED INTERVENTIONS	Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone	
	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved
Pregnant women who received 2+ doses of IPT during their pregnancy, at least one during an ANC visit							16	10	16	10	16	9
Pregnant women receiving multi micronutrient supplements							35		35		35	
HIV+ pregnant women age 15-49, who received a ARVs for PMTCT	443	8	443	15	443	45						
Women who used condoms during last high risk sexual intercourse	524	15	524	22	524	56						
Children age 12-23 months who received any measles containing vaccination (via vaccination card or mother's report)	539	6	539	45	539	108						
Children age 12-23 months who received DTP3	1,368		1,368		1,368							
Children 12-23 months who received Pentavalent 3	388		388		388							
Children 12-23 months who received 2 doses of Hib	2,773		2,773		2,773							
Children 12-23 months who received 3 doses of pneumococci vaccine	3,743	347	3,743	380	3,743	666						
Children 12-23 months who received rotavirus	3,228		3,228		3,228							
Children aged 6-36 months who received at least one high dose vitamin A supplement within the last 6 months	3,122	276	3,122	311	3,122	551						
Children U5 who received zinc supplements	3,573		3,573		3,573							

	CHILDREN (<5 yrs old) LIVES SAVED						MATERNAL LIVES SAVED					
SELECTED INTERVENTIONS	Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone	
	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved
Children 12-23 months receiving 2 doses IPT infant in last 6 months	2,528		2,528		2,528							
Live births delivered by a SBA in a health facility and receiving a post natal check-up within 24 hrs.	547	8	547	33	547	246	69	4	69	12	69	41
All deliveries with active management of third stage							238	16	238	56	238	137
All complicated pregnancies treated in quality EOC facility (B-EONC or C-EONC)	541	14	541	44	541	244	500	45	500	123	500	301
C-Sections in 24 Hr. EmONC facilities practicing maternal death audit as compared to need (0.5 to 0.15, according to national norms)	843		843		843	351	395		395		395	333
Health facilities offering neonatal resuscitation	238	4	238	14	238	107						
All pregnant women with risk of prematurity receiving antenatal steroids from a skilled health worker	331	5	331	10	331	155						
(Pre) Ecclampsia cases receiving Mag Sulf from a skilled health worker							46	2	46	3	46	27
New born with asphyxia, severe infection of low birth weight treated in hospital (first or second line) quality neonatal care	303	4	303	14	303	107						
Children U5 with pneumonia who received antibiotics	398	16	398	9	398	88						

	CHILDREN (<5 yrs old) LIVES SAVED						MATERNAL LIVES SAVED					
SELECTED INTERVENTIONS	Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone		Sierra Leone	
	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved	Potential lives saved (at 100% coverage)	Actual lives saved
Children U5 with dysentery or enteric fevers treated with antibiotics by a skilled health worker	154	7	154	6	154	55						
Children U5 with measles treated with Vit A by a skilled health worker	174	7	174	4	174	57						
Children U5 diarrhoea cases treated with Zinc by a skilled health worker	615	73	615	68	615	329						
Children U5 with fever Cases receiving Chloroquine from a skilled health worker	566		566		566							
Children U5 with fever who took ACT from a trained provider	33	1	33	1	33	5						
Eligible children U5 receiving ART	40		40		40							

Table 4: Budget estimates for RNCH programmes and supportive areas of operation including administration, human resources and integration with cross cutting programmes

Programmes and other areas of operation x 1000 USD		2010 Avail-able	2011	2012	2013	2014	2015	Total
Administration	Additional		8,665	7,292	4,759	4,093	3,362	**28,172**
	Sub-total	**804**	9,469	8,096	5,563	4,897	4,166	**32,192**
HR Management	Additional		2,919	4,573	6,227	7,882	9,536	**31,137**
	Sub-total	**16,000**	18,919	20,573	22,227	23,882	25,536	**111,137**
Malaria-excluding LLITNs bought in 2011 (USD 15million)	Additional		2,798	2,952	3,107	3,261	3,415	**15,533**
	Sub-total	**2,000**	4,798	4,952	5,107	5,261	5,415	**25,533**
STI/HIV/AIDS	Additional		408	795	1,183	1,570	1,958	**5,913**
	Sub-total	**2,000**	2,408	2,795	3,183	3,570	3,958	**15,913**
Hygiene and Sanitation	Additional		1,312	2,532	3,753	4,974	6,194	**18,765**
	Sub-total	**4,000**	5,312	6,532	7,753	8,974	10,194	**38,765**
TB Lebrosy	Additional		266	504	742	980	1,219	**3,711**
	Sub-total	**650**	916	1,154	1,392	1,630	1,869	**6,961**
School Health Pro-gramme	Additional							-
	Sub-total	**301**	301	301	301	301	301	**1,505**
EPI/Child Health	Additional		3,799	6,346	8,788	11,391	13,987	**44,310**
	Sub-total	**10,000**	13,799	16,346	18,788	21,391	23,987	**94,310**
RH/FP	Additional		6,407	7,311	7,625	8,928	10,203	**40,475**
	Sub-total	**12,500**	18,907	19,811	20,125	21,428	22,703	**102,975**

Programmes and other areas of operation x 1000 USD		2010 Avail-able	2011	2012	2013	2014	2015	Total
Nutrition	Additional		245	489	732	976	1,220	**3,661**
	Sub-total	**4,000**	4,245	4,489	4,732	4,976	5,220	**23,661**
Secondary and tertiary hospitals	Additional		50	73	80	86	89	**378**
	Sub-total	**718**	768	791	798	804	807	**3,968**
Hospitals and Laboratory	Additional		50	73	80	87	90	**380**
	Sub-total	**500**	550	573	580	587	590	**2,880**
Drugs and other medical supplies	Additional		1,472	2,324	3,130	4,029	4,927	**15,883**
	Sub-total	**19,390**	20,862	21,714	22,520	23,419	24,317	**112,833**
Total additional	**Total addi-tional**	**-**	**28,390**	**35,265**	**40,207**	**48,256**	**56,199**	**208,317**
Total available	**Total available**	**72,863**	**101,253**	**108,128**	**113,070**	**121,119**	**129,062**	**572,632**
Grand total	**Grand total**	**72,863**	**129,644**	**143,392**	**153,276**	**169,375**	**185,262**	**780,950**

PARTICIPANTS LIST FOR THE VALIDATION OF THE REPRODUCTIVE AND CHILD HEALTH STRATEGIC PLAN

Abdul Conteh	NTDCT
Abdul H. Sankoh	RH/FP
Ahmed M. Taqi	COMAHS
Alhassan B. Kamara	HFAC- SL
Alhassan Fouard Kanu	OPTIONS/ MOHS
Alhassan Fouard Kanu	OPTIONS/ RCHD
Amara Fornah	COMAHS
Amara Koroma	SLBC
Ami Shamit Koroma	MOHS
Aminata S. Koroma	Nutrition/MOHS
Aminata T. Koroma	CH/EPI
Andrew Kamara	
Anita Kamama	NMCP/MOHS
Anna Macauley	Marie Stopes
Augustine Kabano	UNICEF
Betty Jonah	Nutrition
Brima Queta	RCHP
David E. Williams	PPASL
Denis Brown	RCHP
Dr. A. J. Moosa	RH/School Health/MOHS
Dr. Alhassan L . Seisay	Deputy Chief Medical Office /MOHS
Dr. D. A. Bash-Taqi	MOHS/DPNC
Dr. David E. Baim	Ola During Children's Hospital
Dr. Dorothy Ochoua	UNICEF
Dr. Duramani Conteh	Dir/Hospital and Laboratory Services
Dr. Fiona Russell	UNICEF Consultant
Dr. Foday Dafae	NDS/ MOHS
Dr. G. Bernard Frazer	Private/WAAB
Dr. Heidi Jalloh- Vos	MRC
Dr. J.H. Shepherd	Principal Mid-Wifery School
Dr. Jarrie Kabba-Kebbay	UNFPA
Dr. Kennedy Ongwae	UNICEF
Dr. Lianne Kuppens	UNICEF
Dr. Louisa Gands	WHO
Dr. Lynda Foray Rahall	WHO
Dr. Michael Koroma	PCMH/ MOHS
Dr. Mike Kamara	PCMH
Dr. Momodu Sesay	NACP
Dr. Nuhu Maksa	UNICEF

Dr. Peter Sikana	UNFPA/MOHS
Dr. S. A. S Kargbo	Director /RCHD
Dr. S. Kabba-Kebbay	UNFPA
Dr. S. M. Stevens	DHMT -BO
Dr. S.J. Smith	Program Manager Malaria/ MOHS
Dr. Sarian kamara	RH/FP/ MOHS
Dr. T.K. Kargbo	SLMDA
Dr. TT Samba	MOHS
Edmond Makiu	UNICEF
Edwin S. Kamara	HED/ MOHS
Eric Kamara	HFAC – SL
Esther Murana	MOHS
Fatmata Lansana	School Health/MOHS
Fiona Russell	Consultant
Florence Bull	RH/FP MOHS
Foday Sawi	REACH
Francis A. Gbondo	World Vision
Francis N'Kamara	Ministry of Education
Georgiana Anglo	RCHD/MOHS
Haja Marie Bangura	RCHD/ MOHS
Halimatu S. Massaquoi	Concern Worldwide
Hawa B. Kargbo	RCHD/MOHS
Hawa B. Kargbo	MOHS
Heidi Jalloh-Vos	MRC
Housainatu Kanu	HIV/AIDS
Idrissa Kamara	Blood Services
Isata Sarrah Turay	Midwives Association
Isata Sowa	RCHD/MOHS
James L. Kamara	RCHP
James V. Morseray	RCHD/MOHS
John Baimba	UNICEF
John Turay	MOHS
Jonathan Abass Kamara	PRO, MOHS
Josephine M. Deen	E.H.D/ MOHS
Joy Johnson	Pharmacy Board
Joyce Njoro	REACH
Juliana Kamanda	COMAHS
Kristy Baughaman	UNICEF
Margaret James	UNICEF
May Satta Gborie	Leprosy & TB programme

Mohamed A.S. Kamara	Njala University
Mohamed S. Jalloh	RH/FP
Momodu Sesay	RCHD/MOHS
Morlia Conteh	MOHS /PRO
Mr. Sidie Y. Tunis	Hosp. & Lab. Services/ MOHS
Mueni Mutunga	UNICEF
Musa Kanu	Malaria Control Programme
Paul Sengeh	UNICEF
Pity Florence Morseray	MOHS/RCHP
Prince M. Kohp	MOHS
Prof. Yaw Adu-Gyamfi	MOHS/UNFPA/SDHSP
Ramatu Jalloh	UNICEF
Regina Parham	OPTIONS/RCH
Rev. Dr. FF Samba	CH/EPI/MOHS
Rugiatu Kanu	RCHD
Saidu Bangura	RCHD/MOHS
Sata Conteh	Marie Stopes S/L
Sheku S. Kamara	Pharmacy Board
Solade Pyre-Baliy	Nutrition/MOHS
Sr. Fatmata J. Dabo	School of Mid-Wifery Makeni
Sue Clarke	IRC
Tamba J. Charles	Environmental Division
Tony Sisule	UNICEF
Veronica Bull	MOHS