THE REPUBLIC OF UGANDA

Investment Case

for

REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH SHARPENED PLAN FOR UGANDA

2016/17 – 2019/20

April 2016

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LIST OF ACRONYMS

ACS	Adreno-corticosteroids
AIDS	Acquired Immuno Deficiency Syndrome
ANC	Antenatal Care
APR	A promise Renewed for Child Survival
ARVs	Anti-Retroviral Drugs
BDR	Birth and Death Registration
BEmONC	Basic Emergency Obstetric and Neonatal Care
BFHI	Baby Friendly Hospital Initiative
BNA	Bottle Neck Analysis
CARMMA	Campaign for Accelerated Reduction of Maternal Mortality in Africa
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CH	Child Health
CHEW	Community Health Extension Worker
CRVS	Civil Registration and Vital Statistics
CSO	Civil Society Organisations
DHO	District Health Office
DPT	Diphtheria Pertussis Tetanus Vaccine
EBF	Exclusive Breast Feeding
EID	Early Infant Diagnosis
EMDL	Essential Medical Devices List
EMHSLU	Essential Medicines and Health Supplies List of Uganda
EML	Essential Medicines List
EPI	Expanded Programme on Immunisation
ETAT	Emergency Triage and Treatment
FIGO	International Federation of Gynaecologists and Obstetricians
FP	Family Planning
GAPPD	Global Action Plan for Pneumonia and Diarrhoea
GH	General Hospital
HBB	Helping Babies Breathe
HC	Health Centre
HCT	HIV Counselling and Testing
HIV	Human Immuno Deficiency Virus
HMIS	Health Management Information System
HPAC	Health Policy Advisory Committee
HPV	Human Papilloma Virus
HRH	Human Resources for Health
HSD	Health Sub-District
HSDP	Health Sector Development Plan
HSSIP	Health Sector Strategic Investment Plan
ICD	International Classification of Diseases
iCCM	Integrated Community Case Management
IMCI	Integrated Management of Childhood Illnesses
IMPAC	Integrated Management of Pregnancy and Child Birth
IMR	Infant Mortality Rate
IPT	Intermittent Presumptive Treatment
ITN	Insecticide Treated Nets
JMS	Joint Medical Store
LAM	Lactation Amenorrhea
LCs	Local Councils
LiST	Lives Saved Tool
LLIN	Long Life Insecticide Treated Nets
LMIS	Logistics Management Information System
LOGIC	Leadership in Obstetrics &Gynaecology for Impact & Change
LTFP	Long Term Family Planning
M&E	Monitoring and Evaluation
MCHTWG	Maternal Child Health Technical Working Group
MDG	Millennium Development Goal
MPDR	Maternal and Perinatal Death Reviews
MMR	Maternal Mortality Ratio
MVRS	Mobile Vital Records System
NDA	National Drug Authority
NDP	National Development Plan
NIRA Authority	National Identification and Registration
NMCP	National Malaria Control Programme
ORS	Oral Rehydration Salt
PAC	Post Abortion Care
PHP	Private Health Provider
PMTCT	Prevention of Mother to Child Transmission
PNC	Post Natal Care
PNFP	Private Not For Profit
PPH	Post-Partum Haemorrhage
PPP	Private Public Partnerships
QPPU	Quantification and Procurement Planning Unit
RAIC	Rapid Assessment of Interventions and Commodities Tool
RMNCAH	Reproductive, Maternal, Neonatal Child and Adolescent Health
ROPA	Registration of Persons Act
RRH	Regional Referral Hospital
SBA	Skilled Birth Attendant
SDGs	Sustainable Development Goals
SMC	Social Marketing of Condoms
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infections
TT	Tetanus Toxoid
U5MR	Under -Five Mortality Rates
UDHS	Uganda Demographic Health Survey
UHSSP	Uganda Health Systems Strengthening Project
URSB	Uganda Registration Services Bureau
VHT	Village Health Team
WHO	World Health Organisation

FOREWORD

I have been greatly encouraged by the progress made in Uganda towards many of the Millennium Development Goals (MDGs), particularly in reducing the population that lives in poverty, suffering from hunger, gender equality and empowerment of women, access to safe water and expanding access to information and communication technology. The chances of survival for women and children has increased and progress has been made against a number of causes of preventable maternal and child deaths across the continuum of care from pre-pregnancy, childbirth and post- natal periods, to infancy and childhood.

A surge of new commitments and advocacy has helped to advance women's and children's health and well-being in the country. Yet still, there is a major unfinished development agenda. Recent demographic and health survey findings show that progress has been slow in meeting the targets of MDGs 4 and 5. With the launch of UN Global Strategy for Women's, Children's and Adolescents' Health, and with agreement by Member States on an ambitious 2030 agenda for Sustainable Development, it is time for Uganda to build on the momentum achieved over the past five years.

I believe Uganda could and should do more to save the lives and improve the well-being of women and children. Government of Uganda recognizes that fulfilling this and achieving the Sustainable Development Goals (SDGs) will require new evidence-based approaches backed by innovative and sustainable financing mechanisms. Uganda developed and launched the Reproductive Maternal Newborn Child and Adolescent Health (RMNCAH) Sharpened Plan in November 2013 to accelerate the attainment of the MDGs. The country has since updated the RMNCAH Sharpened Plan and developed an Investment Case to accelerate progress through five strategic shifts. Rather than new plans or system wide changes, these strategic shifts provide new ways of thinking, behaving and/or responding differently so as to achieve remarkable impact on mortality in the country.

The investment case aspires for Universal Health Coverage, so every family can access quality healthcare and no family has to face financial hardship receiving the health services they need. It will help set in favorable social, health, and demographic trends in the country and avert needless deaths and disability. Scaling up these essential interventions from current levels is estimated to prevent more than 6,350 maternal, 30,600 new-born and 57,600 children (2-59 months) lives over the five years. Reducing death and disability will free up scarce financial and economic resources. By helping adolescents to realize their rights to health, well-being and full participation in health, we are equipping them to attain their full potential as adults. All of this is in Government's national interest. Expanded coverage of family planning, in particular, will yield significant benefits.

The plan commits us to expand critical demand side and the supply side health care intervention where evidence suggests the greatest gains could be made, particularly amongst the poor and vulnerable. High impact investments will include expanded family planning, immunization; promotion of breastfeeding and improved nutrition; emergency obstetric care; training and supervising health workers;

ensuring that drugs get to rural populations by strengthening the supply chain; better collection of data through improving health information systems; allocating resources to supporting good governance through informed and transparent decision making; and investing in health financing mechanisms that reduce barriers to essential care and protect people from financial distress.

The additional investment required for high coverage of essential health interventions for women and children is expected to rise from US 336 million in the first year to US 400 million in the last year of the plan, with a cumulative total of US$ 1,874.2 million in 2016-2035 (constant 2000 US dollars). It is important to ensure that this plan is rigorously monitored, priority actions and health interventions remain on course and remedial actions are quickly instituted so as to achieve the required impact by 2030.

The plan will draw from multiple sectors and implementers, with each user level being able to access the information most useful at that level and using one single system to which all data entry and interpretation must conform. As the numbers of maternal and child deaths decline, it becomes increasingly important to be able to identify and track the most marginalized and impoverished populations where mortality is highest. This cannot be accomplished without improving country systems to reliably track and measure births, deaths and causes of death. Improved measurement through civil registration and vital statistics will greatly enhance our ability to monitor resources, track mortality change and lives saved, protect human rights, and protect vulnerable populations.

I, therefore, call upon all the stakeholders; Government, Civil Society, Development Partners, Parliamentarians, as well as the private sector who have pledged for priority actions to this sharpened SDG accelerated plan to join hands with Government of Uganda to implement this sharpened plan and investment case to prevent the unnecessary loss of mothers and children in Uganda.

Hon. Dr. Jane Ruth Aceng

MINISTER OF HEALTH

ACKNOWLEDGEMENTS

The Ministry of Health wishes to acknowledge all those individuals, institutions and organisations that contributed towards the development of the Reproductive, Maternal, Neonatal and Child Health (RMNCH) Acceleration Plan. In particular, the Ministry would like to appreciate efforts made by the Department of Planning and Community Health for their untiring support to the process that finally culminated into this plan. Their efforts to bring together various Stakeholders and actors to the consultative meetings during the entire process of developing this Acceleration Plan are highly appreciated.

Special recognition is made of the efforts and commitment of the Technical Working Group of the RMNCH Cluster, Civil society organizations, Members of Parliament, District Health Officers, and members of professional bodies especially the Association of Gynaecologists and Obstetricians of Uganda, along with the different development partners and other stakeholders who participated and generously contributed at the various meetings convened during the development process.

The successful development of this RMNCH Acceleration Plan was made possible with financial and technical support from UNICEF. Technical support to costing of the plan was provided by WHO, using the UN OneHealth tool. In addition, UNFPA, USAID and Save the Children contributed significantly to the entire process through technical inputs and by driving the process along. The Ministry of Health would furthermore wish to thank all those individuals, institutions and organization's that helped to review the document as it evolved.

Finally, I would like to extend vote of thanks to the team of Consultants and the Ministry of Health technical team.

Prof. Anthony K. Mbonye

AG. DIRECTOR GENERAL HEALTH SERVICES

EXECUTIVE SUMMARY

Uganda has made progress in improving RMNCAH indices over the past 2 decades but RMNCAH conditions currently account for over 60% of Years of Life Lost in Uganda. The RMNCAH conditions thus constitute a major public health problem. Maternal mortality rates fell by only 20% over the past 20 years, decreasing too slowly to achieve national targets. The unacceptably high number of maternal deaths annually in Uganda account for 2% of the annual maternal deaths globally. The major causes of maternal deaths are preventable with the three leading causes being haemorrhage, obstructed labour and complications from abortion. Almost 28% of maternal deaths in Uganda occur in young women aged 15 – 24 years. The overall adolescent birth rate in the age category 15-19 years is at 135 per 1000 livebirths, which ranks among the highest in Sub-Saharan Africa driving both total fertility and population growth rates. Adolescents aged 15-19 contribute 17.6% deaths due to pregnancy related conditions. Stillbirths and child deaths are 50% more likely for babies born to mothers younger than 20 than for those aged 20-29 years.

Uganda realized a steady reduction in child mortality rates between 1995 and 2016 from 156 to 64 per 1,000 live births with the annual rate of reduction increasing dramatically from 1.2% per year to 8.1% per year between 2006 and 2011. While the infant mortality rates have followed a similar trend, neonatal mortality is decreasing at a slower pace with newborns experiencing a disproportionate burden of deaths among this age group. About 42,000 newborn babies died in 2014 out of the 130,900 children who died before their 5th birthday in 2014. Under-five mortality is mostly attributable to neonatal conditions as well as three common childhood illnesses: malaria, pneumonia, and diarrhoea often in synergy with underlying malnutrition. An estimated 33 million cases of malaria, diarrhoea and pneumonia go untreated every year in Uganda representing a critical treatment gap. Neonatal deaths occur mainly from preterm births, birth asphyxia and severe infection. An additional 38,000 babies die each a year in Uganda from stillbirths. This five year RMNCAH investment case is anchored on the revised Health Sector Development Plan targets for 2020 of reducing MMR from 336 to 219 per 100,000 live births, U5MR from 64 to 47 per 1,000 live births, IMR from 43 to 32 per 1,000 live births, NMR from 27 to 15 per 1,000 live births and teenage pregnancy rate from 25% to 14%.

In line with the Sustainable Development Goals and the need for more universal access, the main thrust of this investment case is the prioritisation of bottlenecks to scaling high impact interventions. To achieve this, the investment case will focus on five strategic shifts and delivery of a priority intervention package at all levels of the health system.

The five strategic shifts are:

1. Emphasising evidence-based high-impact solutions;
2. Increasing access for high-burden populations;
3. Geographical focusing/sequencing;
4. Address the broader multi-sectoral context;
5. Ensuring mutual accountability for RMNCAH outcomes.

The first shift is centred on the roll-out of a priority intervention package that addresses the “continuum of health care” that extends through adolescence, pregnancy, childbirth and childhood. There is a rising trend in coverage of interventions along the continuum of care and this has to continue towards the national targets. However, some high impact interventions have very low coverage, wide disparities and so need extra effort to curtail the large number of women, babies and children dying and set the path to sustain initial gains. Thus, more investment is needed accelerate coverage and quality of selected high impact interventions in the 5 years and reduce disparity within coverage of interventions along the continuum of care.

Implementing the priority intervention package at scale will avert an additional 6,350, 30,600, 57,600 maternal, new-born and child deaths respectively. These gains will translate into reductions in maternal, new-born and child mortality rates.

Effective introduction of the package of high priority interventions requires a clear strategy for delivering the package, so the second shift focuses on the mechanisms needed for delivery the package. Uganda is rich in innovations that address the widespread challenges in delivering quality services, but many of these have remained at a small scale or pilot level as different actors focus on different parts of the care continuum and in different parts of the country. The emphasis in the Sharpened Plan is on moving to wider scale and operating in a more coordinated way so as to ensure that the full package is delivered in a comprehensive manner.

To do this will require key inputs such as infrastructure, staffing, and financing. However, these must be accomplished by a set of approaches and mechanisms to improve service delivery:

1. Strengthening district management for improved RMNCAH outcomes;
2. Scaling up community-based service delivery;
3. Developing capacity through skills hubs
4. Scaling up results-based financing for facilities;
5. Scaling up vouchers;
6. Strengthening demand for RMNCAH services.

Collectively these address the major constraints to improving RMNCAH outcomes, largely by focusing on the key cross-cutting issues in the health sector – human resource, quality of care, supply chain management, and demand generation. The third shift is around geographical focusing and sequencing. The package of priority interventions should be available to everyone in Uganda. However, it is not possible to scale the package up to every district simultaneously. Therefore, it is necessary to determine the optimal sequence for rolling out the package.

This is particularly important given the challenges of fragmentation around RMNCAH in Uganda: too often, partners use their own criteria to select their own set of districts, and then proceed to implement some elements of the package using one or a few service delivery mechanisms. To address this, the roll-out approach will concentrate first on ensuring that high priority districts receive the complete package of priority interventions using the full suite of service delivery mechanisms (or as many of the mechanisms are necessary to ensure full coverage). This requires closer collaboration between key partners than has often been the case in the past, and so the Sharpened Plan will only succeed if partners agree to align behind it. The roll-out of the plan will start with the districts where most deaths occur and the highest RMNCAH burden exists in the country.

At its core, the high RMNCAH burden is rooted in inequalities within the social determinants of RMNCAH over the life course of women. Therefore, the fourth shift is around the multi-sectoral action needed to tackle the drivers of disparities contributing to preventable deaths in the country. Working across sectors for RMNCAH is still very challenging in Uganda, especially at national level. The sharing and use of compelling data to make the case for RMNCAH health will be critical in gaining support and advocacy across other sectors within the national level multi-sectoral coordination mechanism. Nowhere is a multi-sectoral response more important than around adolescent health and well-being, so this shift has a particular focus on adolescents. Another area in which a multi-sectoral response is crucial to improve RMNCAH outcome is to nutrition but since a comprehensive national nutrition plan is currently under development, this plan does not attempt to address the full spectrum of approaches to improving nutrition.

The final shift is around ensuring mutual accountability. This shift calls for an effective, sound public system that is responsive to people's needs, supports information sharing, permit scrutiny so that citizens can see exactly where their resources are spent. Annual RMNCAH Assemblies will serve as the main platform for accountability at national and regional/districts levels. This will be complemented by focusing on strengthening key systems for producing the data that is at the heart of accountability: civil registration and vital statistics, routine monitoring and feedback systems, and the ability of the country to track resources.

The investment costs are estimated to be US $ 1,874.2 million which are expected to rise from US 336

million in the first year to US 400 million in the last year of the plan. The priority intervention cost account for 63% of the plan, followed by the Health system strengthening interventions s at 31%, and the SBCC and CRVs at 5% and 1% respectively. The total investment case financial gap for the five years is estimated at 500 million USD. Though the gaps vary by year, the annual average financial gap is estimated at 100 million USD.

01: OVERVIEW

1.1 Background

Uganda has made progress toward improving health of children, newborns, adolescent boys and girls, women and men in the country. However, the country still ranks among the top 10 countries in the world with high maternal, newborn and child mortality rates (SOWM, 2015). Uganda has a population of 34.8 million people (Census, 2014) and a very high annual growth rate of 3.03% attributed to the high total fertility rate of over six children per woman observed for the last 4 decades against the backdrop of declining mortality rates. The population will hit 40.4 million in 2020, an increase of over 4.6 million people between 2015 and 2020 of which about 20% will be women within 15-49 years of age and an equal proportion are children below 5 years (UBOS 2014). Uganda has the youngest age structure in the world, with more than a half (57%) of Uganda's population under age of 18 years. About 72% of Ugandans live in rural areas but the urban population is rapidly increasing depicting a five-fold increase in the last 3 decades. Life expectancy at birth in Uganda has increased from 47 and 45 years in 2000/01 for females and males respectively, to 63 and 64 years by 2015 (Census 2014). Generally, Uganda still has poor Reproductive Maternal Neonatal Child Adolescent Health (RMNCAH) indicators. Neonatal Mortality Rate (NMR) has remained stagnant for the last decade though Maternal Mortality Rate (MMR) and child mortality trends show significant reductions.

Administratively, the country has 112 districts, 181 counties and 22 municipalities and 174 town councils, 1,382 sub counties, 7,138 parishes and 66,036 villages (Census, 2014). The District populations vary considerably with a median of 240,000 people with more than half (59) of the districts having less than 250,000 persons and comprising less than one third (29%) of the population. The median Sub-County population is 30,000. Poverty remains deep-rooted in the rural areas with 19.7% of Ugandans living below the poverty line is in 2012 (The State of Uganda Population Report 2014).

1.2 The National RMNCAH Policy Environment

This sharpened plan is anchored on the Health Sector Development Plan (HSDP) 2015/16 – 2019/20, which is the overall health sector planning framework that provides the strategic focus of the sector in the medium term. It thus contributes to the second National Development Plan (NDP II), the second National Health Policy (NHP II) imperatives of the country, and to the overall Uganda Vision 2040. The HSDP 2015/16 – 2019/20 prioritises Maternal, Child and Newborn mortality reduction and recognises that high mortality is not due to lack of appropriate policies in Uganda but rather due to inadequate policy implementation. The Sharpened plan 2016 - 2020 forms the overall approach for the sector to accelerate progress towards reduction of maternal mortality targets set in the HSDP. It focuses on strengthening the National Health Service delivery system, and prioritisation of a package of technical interventions and strategies that will realize the largest health impact for the country based on the latest evidence on effectiveness.

The sharpened plan, 2013 was revised and aligned with the Health Sector Strategic Investment Plan (HSSIP) 2014/15-2019/20 that involved extending the timeframe to 2020, further prioritisation of investment packages including adolescent Sexual Reproductive Health (SRH) component and inclusion of Civil Registration and Vital Statistics (CRVS) for strengthening accountability and monitoring of RMNCAH results. The investment component of this document proposes the medium-term investment needed, in addition to an increase in operational expenses, to ensure that the required human resources, infrastructure, inputs and governance structures can deliver essential interventions.

1.3 Development Process and tools Used

The development of this Sharpened Plan involved a 2-phase process. Phase 1 of the plan led to the Sharpened Plan for the period 2013 - 2017. In phase 2, the Sharpened Plan was revised to develop the current document, the Uganda RMNCAH Investment case 2016 to 2020. The current Sharpened Plan adds Adolescent Health strategies and interventions and aligns targets with the current HSDP 2015/16 - 2019/2020. It also integrates CVRS to improve on accountability and RMNCAH response in the country as part of the RMNCAH investment case 2015/16 - 2019/2020. The process of planning is summarised below

Analysing the trends: The Rapid Assessment of Interventions and Commodities Tool (RAIC) was used to collect information on the country, programme and RMNCAH commodity specific profiles. In addition, an equity analysis was done using data from the Uganda Demographic Health Survey (UDHS) to reveal patterns of disparities related to geographic locations (regions), wealth groups, gender, urban-rural divides, ethnic groups, educational levels.

Identifying Barriers and Bottlenecks: The Bottleneck Analysis (BNA)[1] was used to determine and prioritise factors that limit the attainment of adequate coverage and the highest impact on RMNCAH. Using tracer indicators, the bottleneck analysis considered the three platforms of service delivery (the population level, the community and the individual or clinic platforms) and identified the key bottlenecks therein. This document draws on existing analyses (e.g., the Service Availability and Readiness Assessment, the Service Delivery Index) and existing strategies and plans (e.g., the CIP).

Developing strategic shifts including prioritisation of high impact interventions: Through consultative and interactive MoH led processes, including workshops and meetings of Technical Working Groups (TWGs), the country adopted five strategic shifts. The Lives Saved Tool (LiST) was used to prioritise high impact interventions for RMNCAH based on their effectiveness in reducing deaths and saving lives of women and children.

Costing: The One-Health Costing Tool (OHT) was used for costing scale up of priority high impact interventions and key health system investments

1.4 Outline of the Document

Chapter 1 sets the background to the plan and the local context within which the plan is designed, period covered by the plan, and how the plan was developed. Chapter 2 describes the progress towards the achievement of HSDP and health related Sustainable Development Goals (SDGs) related to RMNCAH targets and the road ahead for different indicators. This chapter discusses the disparities therein. Chapter 3 identifies and discusses bottlenecks that hinder the effective implementation of priority interventions. Chapter 4 defines the goal and strategic shifts and how they can be operationalised. It provides a roadmap to address RMNCAH gaps, beginning by forecasting estimates of lives to be saved through scale up of selected cost effective interventions. Chapter 5 outlines the implementation mechanisms which are aligned to the existing health sector governance, management and coordination structures. Chapter 6 provides the performance monitoring framework for the sharpened plan and the set of RMNCAH targets for national and sub-national levels. Chapter 7 provides the resources required to remove health system barriers and deliver the high impact packages within the five strategic shifts. It also provides the forward looking picture of available resources and the current funding gaps.

[1] The BNA approach was derived from the Tanahashi Model (1979)

02: THE ROAD AHEAD

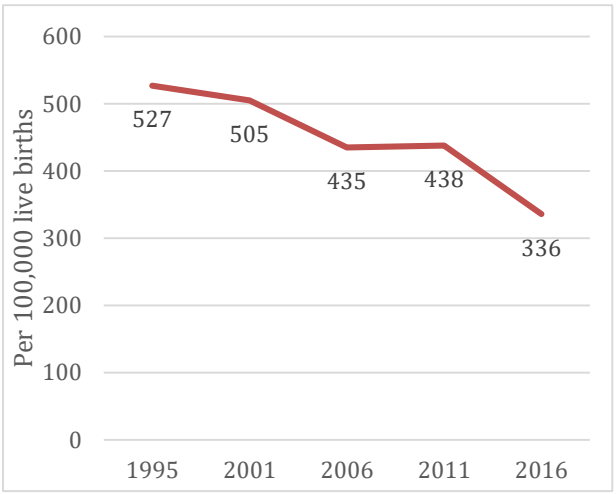
The global burden of disease study 2010 indicated that RMNCAH conditions account for over 60% of Years of Life lost in Uganda thus constituting a major public health problem for the country. Based on the current state, this chapter outlines the road ahead for the country in reaching targets set for 2020 in the HSDP 2015/16–2019/20 with a view of achieving the longer-term SDG targets by 2030.

2.1 Improving Maternal Health

2.1.1 Reducing Maternal Mortality

Maternal mortality in Uganda has declined from 505 deaths per 100,000 live births in 1995, to 336 deaths per 100,000 live births in 2016. This translates to an average of 18 women dying every day. The HSDP target is to reduce maternal mortality ratio to 219 by 2020 and yet the SDG target by 2030 is "less than 70 per 100,000 live births".

Figure 1: Trends of Maternal Mortality Ratio



The MMR has fallen by approximately 33% over the past 20 years, which is still lower than the global reduction of 45% over the same period. Uganda's MMR has improved from 527 in 1995 to 336 per 100,000 live births in 2016. Uganda accounts for 2% of annual maternal deaths globally. An unacceptably large number estimated at 65,700 maternal deaths occur annually in the country and the rate of decline is too slow to enable the country meet the SDG targets. The national lifetime risk of maternal mortality is approximately 1 in 45 for 2015 compared to the global lifetime risk of maternal mortality approximated at 1 in 180 for 2015.

Therefore, urgent effort is needed to first tackle the immediate causes of death for the majority of women, while putting in longer-term efforts to strengthen the health system and working on the social determinants that majorly lie outside the health sector. Immediate results are expected from tackling haemorrhage accounting for 42% of deaths, obstructed or prolonged labour at 22% and complications from unsafe abortion at 11% (MPDR 2012/13). This is in addition to the major conditions that are exacerbated by pregnancy and contributing to this mortality including malaria, maternal anaemia, HIV/AIDS and hypertensive disorders.

2.1.2 Skilled Birth Attendance

The proportion of births occurring in health facilities rose from 38% in 1995 to 73% in 2016 and by a skilled birth attendance from 42% to 74% in 2006 and 2016 respectively. This increasing trend in skilled birth attendance has occurred across all regions of the country including hard-to-reach rural areas.

There is significant progress towards the national target of 75% Skilled Birth Attendance (SBA) over the last five years, increasing 21% over the last five since 2011. Still a number of pregnant women, about 416,000 women in the country are still not delivered by a skilled birth attendant annually.

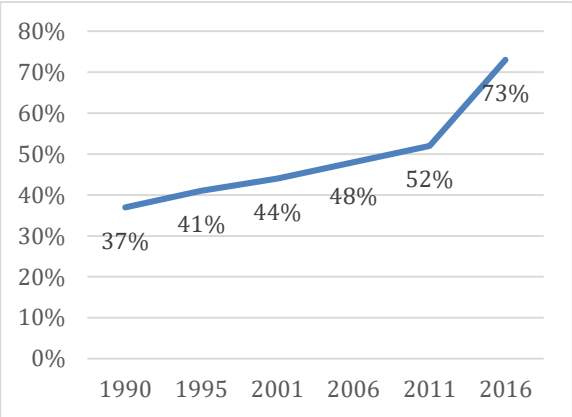


Figure 2 Trend institutional Delivery

The increasing coverage in SBA should be contributing to the reduction in MMR in Uganda. Despite having more women accessing SBA, many babies still die after reaching facilities implying that the quality Emergency Obstetric and Neonatal Care (EmONC) service delivery is insufficient even when coverage increases. Now that coverage seems to be improving, there is also need to expand the country measurement of SBA from merely "skilled birth attendant" or "institutional delivery" to include conformity to quality of care standards.

2.1.3 Antenatal Care

The proportion of pregnant women who receive a minimum of four antenatal visits has increased over the last decades, at 60% in 2016 and 47.2% in 1995, against the HSDP target of 65% by 2020. While 97% of women received antenatal care from a skilled provider at least once during pregnancy in 2016, the first ANC visit is usually delayed occurring after the first trimester of pregnancy.

Uganda has had Antenatal Care (ANC) coverage rates in excess of 90% for the last decades but with little progress, in the timing of the first visit and the number of women with the recommended minimum of four visits per pregnancy. Only 21% of women made their first ANC visit before the 4th month of pregnancy in 2011 and the median gestation age for the first antenatal visit was 5.1 months. Attendance of at least four ANC visits between 2011 and 2016 has increased from 47% to 60%. Even with incentives such as Long Lasting Insecticide Nets (LLINs) or mama kits provided, women do not return for subsequent antenatal care. The quality of ANC is poor. For example, only 1% of pregnant women in the last five years received and took the ideal minimum number of Iron-Folic Acid tablets despite 31% of pregnant women in Uganda being anaemic. Coverage of Intermittent Presumptive Treatment second dose (IPT2) for malaria has improved from a lowly 27% in 2011 to 45% in 2016. IPT3 is far lower at only 17% and still far below the 84% HSDP target. ANC 4+ coverage and the required quality. Innovative steps need to be taken to overcome this long inertia especially by improving quality from provider and client perspectives and, mobilising more mothers to start ANC within the first trimester.

2.2 Improving Adolescent Health

Over the past two decades, global and national concern for the health and development of the adolescents has resurged. This has largely been due to the realization that adolescents 10-19 years constitute significant percentage of the national populations and therefore are a major demographic force with significant potential to influence the future RMNCAH trends and social economic development of the country. Adolescents are highly vulnerable to various social vices and health risks which lead to long-term health and social problems. Adolescents constitute a large proportion of pregnant women. Adolescent pregnancy is carries significant health risks for the mother and the child, contributing to high maternal, neonatal and child mortality

Although adolescence appears to be a relatively healthy period of life, this population (24% of the national population) has a relatively high burden of disease (more than 33% of the disease burden). Almost 28% of maternal deaths in Uganda are attributed to young girls aged 15–24 years and 60% of premature deaths among adults are associated with behaviours or conditions that began or occurred during adolescence.

Although declining, Uganda still has one of the highest rates of adolescent pregnancy and HIV incidence among young people in Sub-Saharan Africa. Overall teenage birth rate or proportion of births per 1,000 women aged 15-19 years decreased from 204 to 135 between 1995 and 2011 with 24% giving birth to their first child before turning 19 years. This is associated with a range of

complications such as unsafe abortions, obstructed labour and obstetric fistulae and a manifestation of early sex debut and unprotected sex. The median age at first sexual intercourse for women age 25-49 is 16.8 years and of first marriage is 17.9 years. Teenage pregnancy is higher among uneducated girls: 35% of girls without education have already had a baby, compared to 17% of girls with secondary education (UBOS 2016). Young women are also disproportionately affected HIV, with 3.0% prevalence among women aged 15-19 years versus 1.7% among men of similar age. In addition to increasing rate of HIV, other STIs, the country is experiencing an increase in adolescent malnutrition (under nutrition and obesity), alcohol and substance abuse, mental and neurological disorders including depression and anxiety disorders as well as injuries, road traffic accidents and sexual and gender based violence among this age group. An estimated 20% of young people experience some form of mental illness such as depression, suicidal tendencies, mood disturbances, substance use and abuse and eating disorders.

Teenage pregnancy rate reduced from 31% to 24% between 2001 and 2011 with an increase to 25% in 2016. This is far from the HSDP target of 14% by 2020. Currently, 360,000 teenage pregnancies occur annually. The current average rate of reduction in teenage pregnancies is so slow at 3% per year over the last 10 years. Therefore, it is necessary to accelerate annual efforts to at least 9.4% per year if the country is to reach the target of 14% teenage pregnancy rate by 2020. These efforts will focus on delaying sex debut and increasing contraceptive use among sexually active adolescents. A comprehensive package[2]to address adolescent health needs should be implemented through the multisectoral approaches and using the three point access model of school, health facility and the community[3].

2.3 Family Planning

Contraceptive prevalence rate among all married women (age 15-49 years) increased from 15% in 1995 to 39% in 2016. The national commitment is to increase the modern contraceptive prevalence rate (mCPR) amongst married and women in union to 50% by 2020. The proportion of all married women (age 15-49 years) who wished to delay or avoid pregnancy but did not use any contraceptive increased from 22% in 1995 to 34.3% in 2011 but again declined to 28% in 2016, compared to the target of 20%. The national commitment is to reduce unmet need for family planning to 10% by 2020

Modern contraceptive prevalence (mCPR) has increased by 8% points between 1995 and 2001, stagnating between 2001 and 2006 and rapidly shooting up in 2016. The contraceptive prevalence rate has been growing at an average of 1% per year between 1995 and 2011. Despite these improvements, only 35% of currently married and 51% of unmarried sexually active women were using a modern contraceptive method in 2016. The percentage of the demand for family planning that is satisfied with modern contraceptive methods has also increased from 17% in 1995 to 52% in 2016.

Uganda still has one of the highest unmet need (above 28%) for family planning in Sub-Saharan Africa. The unmet need for modern FP expectedly varies by age groups of married women at 30.4% among adolescents (15 – 19 years) and 22.4% among women aged 45 – 49 years. This high unmet need also contributes to almost half (43%) of all pregnancies being unintended in Uganda. There is also a high discontinuation rate with 43% of family planning users in Uganda discontinuing within 12 months of starting its use mainly due to health concerns/fear of side effects (32%) and desire to return of fertility (25%).

Only 23% of women aged 15 – 49 years who are not using mFP and got in contact with a health worker, discussed FP and only 9% of all none users were visited by a field worker to discuss FP in 2011 (UDHS 2011). Only 16% of women who gave birth in facilities and 28% of women with a

[2] Adolescent package of health services should address; early pregnancy and child birth, increasing rate of HIV, other sexually transmitted infections, malnutrition (under nutrition and obesity), alcohol and substance abuse, mental and psychological well being including management of depression and anxiety disorders, Injuries and road traffic accidents, sexual and gender based violence, management of communicable and non communicable diseases, physical activity.

[3] Addressing determinants of adolescent health require multisectoral coordination, implementation and monitoring mechanisms under; Ministry of Health, Ministry of Education, Science, Technology and Sports, Ministry of Gender, Labour and Social Development, Ministry of Water and Environment, civil society and the Private sector.

miscarriage or abortion, were counselled on FP before discharge. These figures indicate huge missed opportunities for counselling and promoting birth spacing and control at both facility and community integrated outreaches Injectable contraceptive is the most preferred method by most prospective users. Relatedly, more than half (54%) of currently married users are on injectable methods while 84% of all sexually active unmarried women use male condoms or injectable contraceptives. The UDHS also shows that majority of mFP users obtain their services from private hospitals/clinics (40%), Health Centres (29%) and government hospitals (14%) totalling up to 83% of all users. In order to reach the targets, the country will need to ensure that an extra 2 million women in union become modern contraceptive users over the next five years and work towards preventing discontinuation. The Uganda Costed Implementation Plan (CIP) 2015-2020 with cost effective interventions to address mFP demand and supply and advocacy for increasing mFP uptake.

2.4 Ending Preventable Newborn and Under Five Mortality

2.4.1 Ending Preventable Under Five Mortality

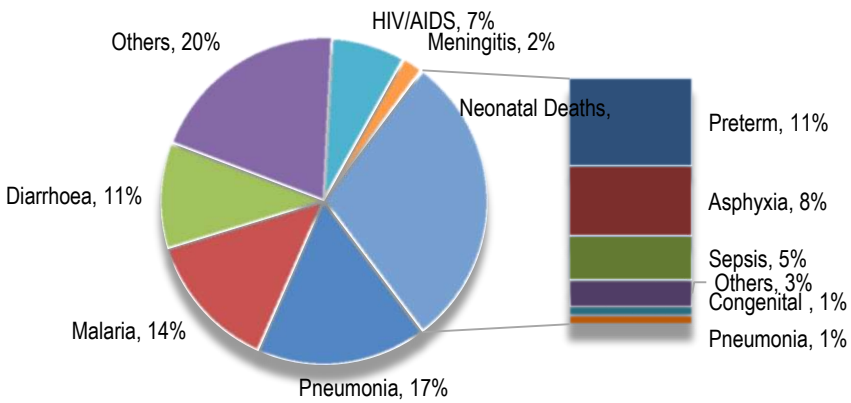
The number of under-five deaths has fallen from 167 per 1,000 live births in 1990 to 64 in 2016. The national target for 2020 is 47 per 1,000 live births and the SDG global target for 2030 is 25 or fewer deaths per 1,000 live births.

Though Uganda has made progress in reducing child mortality, currently 135,000 children still die per year of preventable causes. The three main killers of children below five years are pneumonia, malaria, diarrhoea and infections such as HIV account for more than 70% of the child deaths (Figure 4).

Under-nutrition underlies half of all under-five deaths but other important factors influencing child survival in Uganda include poor household or caretaker childcare practices. For example, only 18% of children with diarrhoea are given increased amounts of fluids and only 6% of these given more food to eat. Sixty-six percent of infants under age 6 months are exclusively breastfed. The percentage of children exclusively breastfed decreases sharply with age from 83% of infants age 0-1 month to 69% of infants age 2-3 months and, further, to 43% of infants age 4-5 months (UDHS 2016).

However, use of some life-saving preventive childhood interventions in Uganda is fairly high, for example, exclusive breastfeeding (66%), vitamin A supplementation (78%), and Hib-3 vaccine (79%). Compared to other leading causes of mortality, slower progress has been made in management of pneumonia and other respiratory infections with a large "treatment gap". Only 31% of children with suspected pneumonia receive antibiotics, 47% of children with diarrhoea received a rehydration solution from an oral rehydration salt (ORS) packet; 40% were given zinc supplements, and 30% received both ORS and zinc supplements far below the national target of at least 80%.

Figure 3: Causes of Child Mortality in Uganda (2010)

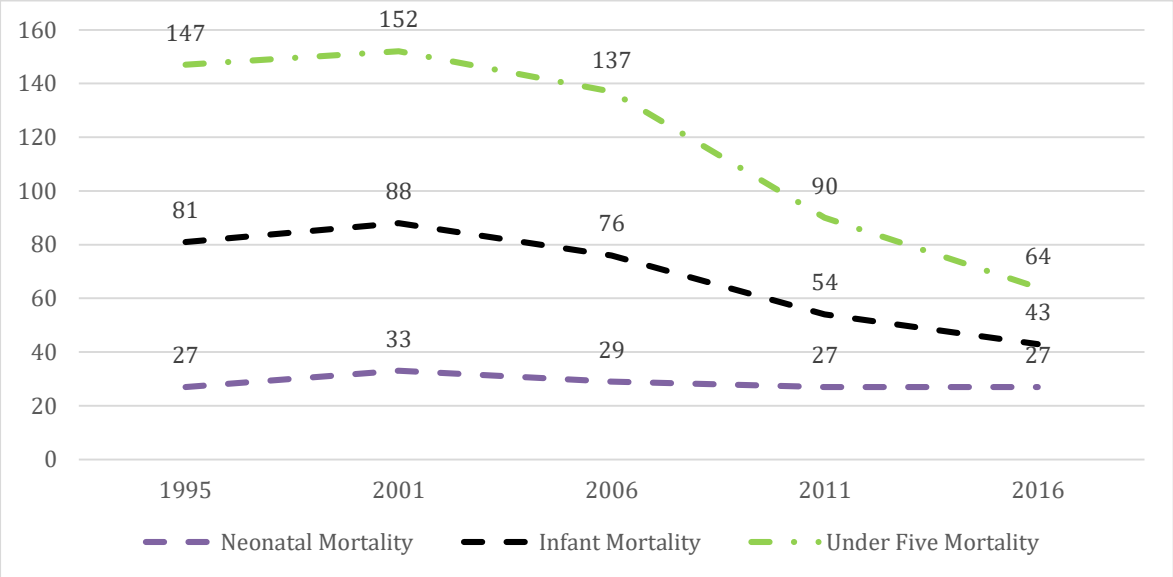


2.2 Ending Preventable Newborn Deaths

The number of infants under 1 month dying has fallen from 33 per 1,000 live births in 2001 to 27 per 1000 live births in 2016, implying that currently 11 babies die per day in Uganda. The national target is to reduce NMR to 15 by 2020 while the longer term SDG target for 2030 is 12 or fewer neonatal deaths per 1,000 live births

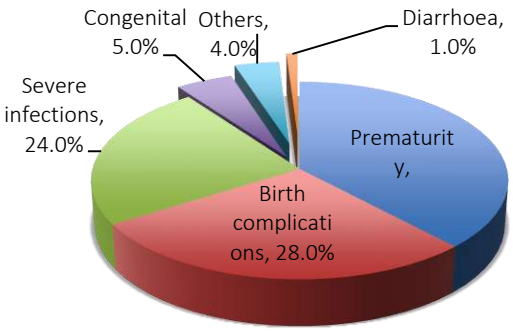
In Uganda, neonatal mortality is decreasing at a slower pace than mortality amongst children 1–59 months and maternal mortality, at 2.1% per year and 5.2% per year, respectively.

Figure 4: Trends in Newborn, Infant and Child Mortality in Uganda (UDHS)



One third of all under five deaths occur in neonatal period (0 -28 days of life). In 2011, about 40,000 newborn babies died during the first month of life and 90% of these died of prematurity and its complications, birth asphyxia and infection.

Figure 5: Causes of Neonatal Mortality



Neonatal mortality rate is slightly higher in urban at 31 per 1,000 live births compared to rural areas at 30 per 1,000 live births. Small babies who are either preterm or small for gestational age or both are especially vulnerable, accounting for more than 80% of neonatal deaths in sub-Saharan Africa (Lawn JE et al 2014). Only 34% receive post-natal check-up within 6 days after birth. Stillbirths claim about 38,000 babies a year in Uganda.

2.5 Universal Health Coverage

The median composite coverage index of eight RMNCH indicators in four intervention areas: family planning, maternal and newborn care, immunization, and treatment of sick children – increased by 11% and 4% points in the poorest and the richest wealth quintiles, respectively, resulting in the reduction of wealth-related inequality. The same index increased by 10 and 5 percentage points in rural and urban areas, respectively, narrowing down place-of-residence inequality

Uganda prioritises full population coverage of Uganda National Minimum Health Care Package (UNMHCP) through providing a universal entitlement to publicly financed health care services and health services access for all policy since 2000. However, the benefits of this universal entitlement favour the richer income groups, more educated and urban dwellers. While the country aspires to achieve Universal Health Coverage (UHC), inadequate health financing remains a huge challenge and the mechanism of health financing to deliver UHC and is addressed within the Health Financing Strategy 2015-2025.

Furthermore, health expenditures in Uganda are rising and this has significant repercussions to individuals and households in poorer population quintiles. An estimated 1.5 million Ugandans are pushed below the poverty line due to healthcare payments (Zikusooka et al 2014).

Health sub-Accounts for the financial year (FY) 2009/10 shows that households shoulder the biggest component of about 74% of the RH funding and 62% of child health. Critical inequalities exist in use of services and need to be tackled if UHC is to be achieved, the urban dwellers and wealthier are generally twice better off than the rural majority or poorest in terms of RMNCAH indicators and significant geographical inequities are shown Table 1. Achieving success will require increased funding as well as ensuring that resources for RMNCH are used effectively, equitably, and efficiently.

Table 1: Regional RMNCAH Disparities

	TFR	FP Unmet need	CPR	PNM	NMR	U5MR	Teenage pregnancy
Kampala	3.3	17%	48%	33	27	65	22%
Central 1	5.6	27%	37%	47	44	109	19%
Central 2	6.3	35%	34%	44	31	87	23%
East Central	6.9	42%	32%	28	23	106	31%
Eastern	7.5	38%	26%	32	24	87	30%
Karamoja	6.4	21%	8%	48	29	153	30%
North	6.3	43%	24%	22	31	105	26%
West Nile	6.8	43%	15%	39	38	125	26%
Western	6.4	30%	33%	54	30	116	23%
Southwestern	6.2	37%	30%	48	33	128	15%

Source: UDHS 2011

2.6 Ending Malnutrition

There has been an essential reduction in hunger and under nutrition since 1995. The problem of underweight children has reduced by half from 25.5% in 1995 to 11% in 2016. Because of chronic under-nutrition, a third of the children under five are stunted (have low height for their age).

As shown below, nutrition indicators are still poor. Severe Protein and Energy Malnutrition (Kwashiorkor and Marasmus) and anaemia remain among the 10 top direct causes of under 5 mortality. Malnutrition is the underlying cause in nearly 60%, 45% and 25% of infant, under five and maternal deaths respectively.

Only 10.2% of children aged 6-23 months consume a minimal acceptable diet with stark contrasts between regions (7% in the North and 36% in East Central). Micronutrient malnutrition is high. Vitamin A deficiency among children and women stands at 20% and 19%, and anaemia at 75% and 49% respectively with malnourished mothers more likely to deliver low birth weight babies (MoH, 2013). Women in the age group of 15-19 are most likely to be undernourished compared with other age groups, with 14% having a Body Mass Index below 18.5 (UDHS 2011). Obesity is also becoming a key public health issue with showing an increase in overweight and obesity among women from 5% in (UDHS, 1995) to 19% (UDHS, 2011). Iron deficiency anaemia is among the top five leading causes of years lived with disability (YLDs) in Uganda. Between 2006 and 2011, the prevalence of maternal anaemia among pregnant women fell by less than 1%.

The causes of under nutrition vary by region but include availability and access to food, lack of dietary diversity, cultural and social traditions, and poverty levels. Production does not guarantee improved nutrition, as seen in the southwest region, considered the "food basket" of Uganda, which has one of the highest prevalence rates of stunting in children under five. Similarly, increasing income does not guarantee improved nutrition: Anaemia, vitamin A deficiency and wasting in children are independent of wealth and affect all economic groups. Under nutrition disproportionately affects rural areas, where rates of stunting are over 36% compared to 19% in urban areas. The country is developing a comprehensive multi-sectoral plan to tackle nutrition problems in the country.

2.7 Ending AIDS, Tuberculosis and Malaria

Women and children bear a heavy burden of HIV/AIDS, Tuberculosis (TB) and malaria, which exacerbates other RMNCAH problems. These diseases are the leading causes of deaths among women and children in Uganda. Inequities relating to gender, poverty and educations in accessing health services share the same pattern as RMNCAH disparities.

There are multiple points along the RMNCAH continuum of care where HIV/AIDS, TB and malaria strategies should be integrated and the key entry points are family planning, antenatal care, Prevention of Mother-To-Child Transmission of HIV (PMTCT), post-natal care, and provision of nutrition and psychosocial support for vulnerable women children and adolescents. There are already national efforts to integrating HIV/AIDS, TB and malaria interventions within packages of care across the RMNCAH continuum but implementation has been slow and hampered by health system gaps in operationalizing policy guidelines at district and facility levels.

2.8 Birth and Death Registration

Birth registration process in Uganda is manually done at heath facility level. Currently, the coverage of registration of births has increased to 53.5% mainly through the Mobile Vital Registration System (MVRS) in areas where the system exists. Only 22% of maternal deaths reported through the HMIS were notified in 2015/16 FY

Birth Registration as part of CRVS, provides children with their first Right, the Right to legal identity, and official recognition by the State. Despite the efforts to achieve universal birth registration, registration of all children at birth remains an elusive challenge in Uganda. An estimated 49% of births of children under 5 years of age remain unregistered. According to the national CRVS assessment 2015, registration of deaths in Uganda is passive and the mechanisms for enforcement of registration of deaths are inexistent. With a Crude Death Rate of 9 per 1,000 population (World Bank 2013), the estimated number deaths in Uganda in 2014 were 315,000. However, in 2014/15, less than 1% (3,340) Long Death Certificates were issued including for persons that died before 2014/15.

The road ahead is to build the CRVS system in Uganda to achieve universal coverage of both birth and death registration in Uganda. By ensuring that all births in health facilities are registered, and mobilisation done during ANC, PNC and immunisation contacts, an estimated target of 80%-90% of births registered per year can be achieved by 2020. Death registration is extremely limited and the system needs building.

2.9 Provision of Water and Sanitation

The proportion of population using improved drinking water sources and sanitation facilities has improved from 52% to 70% and 52% to 75% between 2001 and 2011 respectively.

SDG Goal 6 ensures availability and sustainable management of water and sanitation for all. The road ahead targets four elements namely: (1) eliminating open defecation; (2) attaining universal access to safe drinking water, sanitation and hygiene facilities for households, schools and health facilities; (3) halving the proportion of the population without access at home to safely managed drinking water and improved sanitation facilities; and (4) progressively eliminate inequalities in access. The National Service Delivery Survey 2016 shows that 6% of households do not have a toilet facility, 87% and 75% had access to safe water during the wet and dry seasons respectively, and only 22% had hand-washing facilities of which only 8% had hand washing facilities with both soap and water. Open defecation is still practiced by an estimated 3.3 million people in the country, mainly in rural areas. Elimination of this practice and ensuring water, sanitation and hygiene for every school and health facility and home are the essential steps towards reducing child and maternal mortality from the associated diseases.

2.10 Education

Universal primary education has dramatically increased primary school enrolment and reduced inequalities in access to education relating to gender, income and location. It has also increased the probability that children start school at the right age. However, quality remains poor and dropout rates and grade repetition remains high in both primary and secondary.

Education levels remain the constant cause of disparity across maternal, newborn, children and adolescent health in the country. Thus, ensuring that girls and boys remain in school for at least secondary school is a primary investment for women empowerment and improvement in their health. The Universal Primary Education (UPE) and Universal Secondary Education (USE) programmes, introduced in 1997 and 2013 respectively, have expanded access to primary and secondary education for both girls and boys. However, though the gender gap in primary schools is less than 1%, more than 5% and 10% deficit existed in number of females enrolled in secondary and tertiary schools respectively by 2013, implying that gender parity is yet to be achieved within the secondary and tertiary subsectors.

Whereas most girls start school, critical in education sector to address is that Primary 7 survival rate for girls in Uganda is only 30% (MoES 2014). Most girls drop out at primary school level suggesting that many either started school late or had repeated grades. Only 46.9% of girls were attending secondary schools in 2014 and completion rate of Senior 4 for girls that year was only 37% (MoES 2014). Furthermore, the quality of education is insufficient. Only 9% of Senior 2 female students are rated proficient in Biology (MoES 2014).

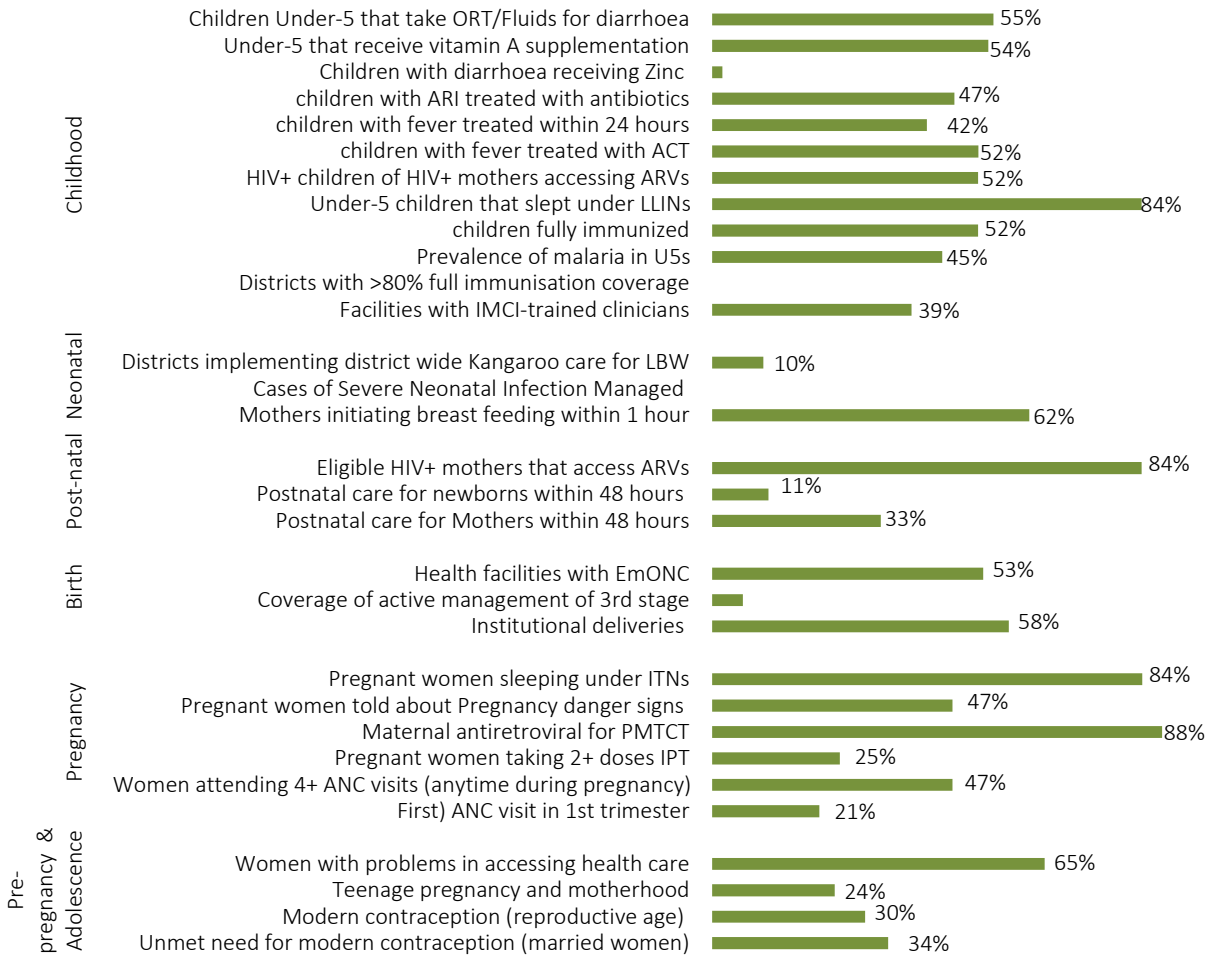
Keeping girls in school is critical for health. Uganda does not have a legal or policy position that prohibits pregnant girls or child mothers from continuing with education. Yet the practice is that most girls who become pregnant in schools are expelled and as child mothers they fail to return to complete their education. Other areas of improvement in the road ahead include rolling out early child development (ECD) implementation, management of informal schooling and supporting children with special needs and ensuring that girls stay in school longer.

2.11 Coverage of RMNCAH Interventions

The country is implementing most of the existing evidence-based interventions but individual intervention coverage is still too low to cause impact. The coverage, quality of care and the widest equity gaps within the continuum are mainly around clinical-facility based RMNCAH interventions especially care around the time of birth, when mortality risk is highest. There is thus need for not only raising the coverage of all interventions but also concerted investment if the country, and

districts, is to converge mortality rates for the richest and poorest, or educated and non-educated people. There is also need to ensure coverage across the RMNCAH continuum does not decline between each service point. Evidence from "fast progressing countries" shows that even narrowing the equity gaps for specific intervention packages for maternal and newborn health works in reducing country level mortality rates, especially where disparities are high like the case of Uganda (Kim E Dickson et al. 2014).

Figure 6: Coverage gaps of Interventions along the continuum of care against national targets



2.12 Rights, Equality and Gender Balance

The health sector takes on a 'client centred' approach as detailed in the Constitution of the Republic of Uganda (1995 as amended), the Uganda's Patients' Charter, and international human rights standards that Uganda is party to, including the Universal Declaration on Human Rights, the International Covenant on Economic, Social and Cultural Rights, The Convention on the Elimination of All Forms of Discrimination Against Women, The Convention on the Rights of the Child, The Convention on the rights of Persons with Disabilities, the African Charter on Human and Peoples' Rights and The African Charter on the Rights and Welfare of the Child.

The country has developed a number of policies and guidelines[4] addressing rights but many stakeholders at national and district levels were not knowledgeable about these laws and policies,

[4]National Youth Policy; National Policy on Young People and HIV/AIDS; Sexual and Reproductive Health Minimum Package; Affirmative Action Policy; Minimum age of sexual consent policy at 18; Universal primary and Secondary education

partly explaining the limited implementation. Consequently, awareness, capacity and interventions that tackle negative social norms and non-health sector interventions against child marriages, elimination of child labour, women trafficking are weak. Participation in planning and decision making by children and adolescents is a right, but very limited and subdued by insufficient implementation strategy and investments.

Discrimination against women and girls including gender-based violence, economic exclusion, and the lack of appropriate and affordable reproductive health services are common problems in Uganda. Unequal access to and inadequate healthcare services between women and men exist and largely stem from unequal power relation which influences decision making for health in the household. Women still do not have full control of their own fertility, which is determined by their spouses and sociocultural norms and practices. Coverage and mortality disparities in residence, education level, age and poverty levels are markers of injustice in society as well as indicators of the weaknesses in capacity of the public health system to address the needs of the most vulnerable individuals in society. Sexual and Gender Based Violence (SGBV) in Uganda is high with 60% of women have experienced violence compared to 53% of men. One in four women report that their first sexual intercourse was forced against their will.

Furthermore, about half (55%) of the children in Uganda are deprived of two or more of their rights (MoGLSD et al., 2014), with 8% of children in Uganda rated critically vulnerable or moderately vulnerable (UBOS, 2014). Currently, government spending on child protection is minimal. People with Disabilities in Uganda are about 10% thus constituting such a big number whose needs as embodied in their fundamental freedoms and rights, cannot be denied in the country's RMNCAH efforts. People with Disabilities (PWDs) have not received attention as a special group and do not receive adequate RMNCAH services. To address the human rights needs of people living with mental illness, the Mental Bill (2014) was drafted.

statutes; Domestic bill; National Population Policy; National Health Policy; National Gender Policy; Reproductive Health Policy; National reproductive health service delivery policy guidelines; Sexual and Reproductive Health Minimum Package for Uganda; Male Involvement Strategy, guidelines for managing Gender Based Violence (GBV), human rights and gender manual for service providers and policy makers etc.

03: REACHING EFFECTIVE COVERAGE: REMOVING SYSTEM BOTTLENECKS

3.1 Bottlenecks Impeding Effective Coverage

There are a number of very significant health-system bottlenecks to achieving wide and equitable coverage of care in the country as mentioned during consultations and from document review. These cut across all the health-systems building blocks. Overall, the policy framework is not a major bottleneck to the implementation of RMNCAH interventions. The critical bottlenecks are therefore in human resource management, financing, service delivery, and service utilization.

3.1.1 Leadership and Management Bottleneck

Strong leadership and management is widely accepted as essential for success and in this regard the most critical bottleneck is at the district level. The creation of new districts and increasing complexity of the health challenges has led to critical missed opportunities due to weak district and facility management in many settings. A strong management team at the district level has the potential to both strengthen delivery within the public system but also to improve co-ordination with non-state providers and make stronger linkages with civil society. Many districts do not simply have enough managers to complete the necessary functions and existing managers often lack the necessary skills and mentoring to perform optimally.

According to key informants, at the national level the existing structure needs to be updated to take into account the explosion in number of projects and partners. Consequently, interventions and programs for RMNCAH, HIV/AIDS, TB, nutrition, adolescent health and water and sanitation are not a well-integrated package organized in a continuum of care. Strengthening the Department's capacity to provide stewardship to facilitate alignment of donors and partners behind this Sharpened Plan will be important.

3.1.2 Human Resources Bottleneck

The overall lack and mal-distribution of staff remains a consistent and important bottleneck. Despite recent efforts on massive recruitment, only 69% of approved posts were filled in 2013/2014 out of the targeted 75%. Uganda has about 2,000 midwives or one midwife for every 700 births, far below the recommended ratio of 1:200 for the region. With the high population growth rate, it will be difficult for the country to attain and maintain even these low ratios. Yet, a large proportion of newly trained staff with midwifery skills are not recruited or working and, an estimated 15% is leaving service annually. Over 2,000 comprehensive enrolled nurses remain unemployed in the country.

There is significant variation in district staffing levels ranging from 30% to 90% for Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) services. About 70% of doctors, 80% of pharmacists and 40% of nurses and midwives are urban-based and serving only 12-16% of the population. The SARA 2014 reported four districts (Abim, Bugiri, Buliisa and Kyankwanzi) without any medical doctor. Remote, hard-to-reach and newly created small districts still face very major obstacles in attracting and retaining health workers due to hard living conditions. This is in spite of the package of incentives for health workers in hard-to-reach and hard-to-stay areas initiated in FY 2010/11.

There are also very high levels of absenteeism: The Human Resources for Health (HRH) strategy recognizes that about 30% of the deployed staff are absent from duty and this constitutes a big wastage. Reasons include low and delayed salary, shortage of supplies and basic equipment, lack of staff accommodation and, inadequate of supervision (MoH 2014). Nationally, only 12% (3,590) staff have

accommodation facilities, with majority of them having to travel long distances to the health facility. This means that midwives are unable to attend to mothers for 24 hours, which results in maternal and neonatal deaths. Furthermore, there are many parallel administrative demands on district health managers and service providers involving filling multitude of forms, report writing, workshops, meetings and field visits imposed by projects, partners and researchers.

The introduction of new interventions and changes in clinical protocols has not been matched by improvements in the skills of many health workers. The Service Delivery Indicators for Uganda 2013 found that only 35% of public health providers could correctly diagnose at least 4 out of 5 very common conditions like diarrhoea with dehydration and malaria with anaemia. Public providers followed only 1 out of 5 (20%) of the correct actions needed to manage maternal and neonatal complications. There is little evidence of training on equality, gender, non-discrimination and human rights principles and standards (Amandu MG et al, 2013). On the other hand, even a cursory examination of time sheets reveals a plethora trainings attended by health workers suggesting that broader approach to capacity building is required.

Finally, the government recognizes the vital role that Village Health Teams (VHTs) can play: they provide much needed support, basic treatment and link communities to much crucial services that go beyond clinical health needs. Even as volunteers, VHTs play a strong role implementing key RMNCAH life- saving interventions and could prevent up to 30% of deaths. However, VHTs have a number of challenges in taking on increasing service delivery and reporting roles and yet they remain volunteers. As a level of care, they lack accountability for performance and are easily swayed away from health facility support activities to projects that remunerate for outputs. In addition, the differences in facilitation by various implementing partners makes working with VHTs cumbersome. A more systematic incentive and support framework for VHTs and Community Health Workers (CHWs) is required.

3.1.3 RMNCAH Financing Bottleneck

Persistent low public expenditure on RMNCAH will hamper any substantial transformation in the health of women and children. Uganda's per capita spending on health of US$ 53 in 2011/12 is below WHO recommended minimum level of 60 US$ and this will worsen with the rapidly increasing population. The Total Health Expenditure (THE) is only 1.3% of GDP, against the target of 4%. The SARA 2014 indicated that donor contributions accounted for the biggest share of funding for hospitals and HC IV (28%) followed by user fees (16%). The percentage share of health sector budget for RMNCH has been in the range between 0.32% (FY 2005/06) and 1.0% (FY 2011/12), 0.94% (FY 2012/13) and 0.71% (FY 2013/14. Considering that the projected need for RMNCH is between 8 to 10% share of health sector budget, the current RMNCH budget levels are far from sufficient. There has been heavy reliance on donor funds to finance RMNCH services and commodities. Only between 3% (FY 2009/10) and 24% (FY 2011/12) of the RMNCH financing has been from internally generated government funds. Not surprisingly with low levels of public expenditure the National Health Accounts FY 2009/10 showed that households shoulder 70% and 63% of the reproductive health and child health expenditure in the country through out of pocket spending which has been shown to be highly inequitable and inefficient.

3.1.4 Health Service Delivery Bottleneck

The low levels of public expenditure have resulted in the degradation of basic infrastructure. The Auditor Report 2013 observed that although health infrastructure has expanded, the vast majority of health facilities are not fully functional, lack equipment and are poorly maintained. This has an impact on the quality of care: the SARA report categorising only 30% of the hospitals / Health Center (HC) IVs as having good capacity to offer emergency services. It also found only 49% of the hospitals/HC IVs could be judged as having good capacity for cEmONC.

Medical equipment is not well inventoried, poorly maintained, and some not installed thus limiting use and causing wastage. This is attributed to the disconnect in equipment and infrastructure planning whereby facilities may have equipment, but no space, or staff inadequately trained for their use. The Health Sector Annual Monitoring Report, 2013/14 shows that poor and substandard equipment were

delivered under the prior investments such as the District Infrastructure Support Project (DISP) and Uganda Health Systems Strengthening Project (UHSSP). Nevertheless, there are shortages for essential equipment for RMNCAH. Oxygen cylinders or functioning central oxygen supply are available at 57% of the Regional Referral Hospitals (RRHs), 41% of the government hospitals, and 13% of HC IVs and ultrasound services in only 47% of the health facilities. Maintenance of medical equipment poor with is only 37% of the health facilities having a budget line item for routine maintenance and repair and national program for equipment maintenance is poor. The Hospital and HC IV Census 2015 found that only 14% of facilities had a schedule for maintenance. Basic infrastructure especially for HC III such as electricity, water, staff quarters remain a very major obstacle to provision of quality emergency obstetric care services, especially in remote and rural areas.

There is recognition of the need to also invest in basic EmONC across 282 facilities but this needs to be accompanied by improvements in the referral network to functioning facilities that offer cEmONC. Presently the referral system between facility and non-clinical RMNCAH related services is not efficiently structured neglecting leverage opportunities with other available government, community and partner resources. Whereas all government hospitals and HC IVs have access to Ambulance transport, the HC IIIs do not fully benefit from the Health Sub-District (HSD) ambulance support, although they are least able to treat emergencies.

3.1.5 Supply chain

As in many other countries weaknesses in the supply chain is an important bottleneck in service delivery. There has been improvement in delivery times and efficient utilization of the funds, but health facilities still experience stock outs and overstocking. Indeed, RMCNAH supplies and commodities, including contraceptives account for the largest share of out of pocket expenditure for even the poor. Coordination of different funding streams for the commodities is weak, especially for family planning commodities. There are many issues hampering improvements ranging from a shortage and mal-distribution of pharmacists resulting in clinical staff taking on this function especially at district and lower level health facilities through to lack of storage space at some health facilities. The lack cold chain equipment for proper storage of some of the commodities like oxytocin is of particular concern. Presently this bottleneck is receiving a lot of attention both by government and partners.

3.1.6 Community Ownership and Demand Generation

There are a number of critical behaviours that lead to poor health outcomes. In particular poor complementary feeding practices, high levels of teenage pregnancy and low uptake of modern contraceptive methods are leading to significant poorer health and nutrition outcomes. Several national community mobilisation and Information Education and Communication (IEC) strategic documents, including the male involvement and adolescent health strategy have been developed for individual RMNCAH components. However, these national documents and materials have not been disseminated and or distributed. Behaviour change communication (BCC) interventions are hardly implemented by districts, highlighting critical gaps in planning and prioritizing feasible demand generation and community ownership actions.

There is a growing national focus on reaching the last mile that necessitates prioritization of community engagement in strategies and goals. Women and adolescent empowerment or self-efficacy to use available services adequately is a bottleneck for effective coverage. Priority populations such as adolescents, men and the urban poor, have largely been excluded from discussions and decisions around factors that most improve their RMNCAH. Families and communities play a potentially central role in RMNCAH, but their participation, especially of the adolescents, remains weak in programming implementation and monitoring of interventions. Even where this engagement has started with VHTs, the focus has been on providing information to caregivers to promote acceptability and uptake of preventive and curative elements.

Finally, a mixture of financial barriers and some cultural beliefs and social norms inhibit access especially for family planning and facility delivery. The ways in which pregnancy, delivery and adolescent health

issues are managed within families and communities and the culturally articulated ideas that surround them differ across Uganda yet service standards are not attuned to these differing cultural needs. The sometimes substantial out of pocket expenditure in delivering at a health facility or seeking care is also underestimated.

3.1.7 Health Information Management Systems

There are many information sources for RMNCAH, including those for overall health sector (and specific monitoring systems like the FP 2020 and PMA20. The Health Management Information System (HMIS) operated using the District Health Information Software Version 2 (DHIS2) is robust enough to pick indicators for RMNCAH for the health sector including adolescent disaggregated data. Routine data collection and reporting from the public and Non-Governmental Organization (NGO) facilities does not pose a big challenge. However, data from private sector is not routinely collected and reported and the community-based data does not flow into the DHIS2. The weekly disease surveillance system has incorporated reporting on maternal and neonatal deaths.

A more critical bottleneck is the weakness in data analysis, report generation, dissemination and use. Various forums exist for sharing reports but reports of routine data are not regularly availed to enable decision-making. While the DHIS2 has been rolled out to all districts, its capacity is not optimally used such as using RMNCAH dashboards to aid data use and decision-making at different levels. The systems also remain largely manual below the district level.

3.2 Platform bottlenecks

The precise mix of specific bottlenecks resulting in poor health systems performance varies across the country. Empowering district and community leaders and health workers to identify their specific bottlenecks is essential to scale up effective care at birth, neonatal resuscitation, and community mobilization as well as to develop, adapt, and introduce tools, technologies, and task shifting to reach the poorest. The capacity to use available data and information systems to conduct similar analysis at the local level is urgently needed.

04: REACHING THE TARGETS FOR 2020 AND BEYOND

4.1 What are the Goal and Objectives of the Sharpened Plan

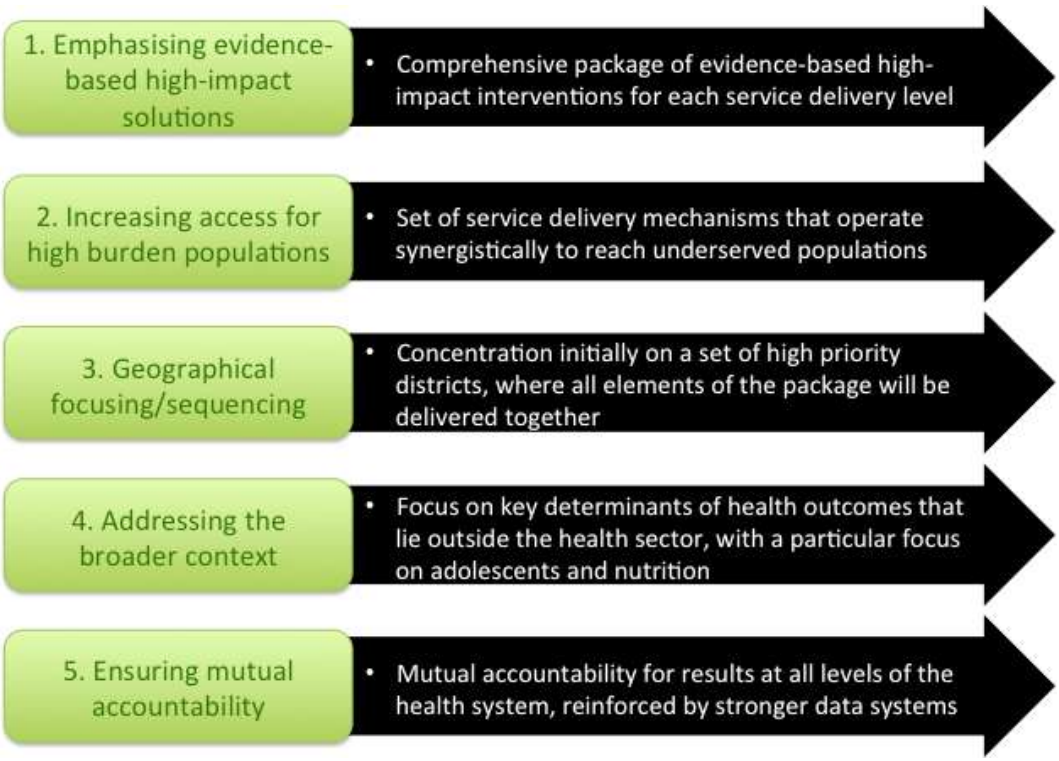
To end preventable maternal, newborn, child and adolescent deaths and improve the health and quality of life of women, adolescents and children in Uganda by saving an additional 6,350 maternal, 30,600 newborn and 57,600 children (2-59 months) lives over the five years. This will translate to the projected targets below.

- Maternal Mortality Ratio from 360 per 100,000 live births to less than 219 per 100,000 live births by 2020
- Under 5 Mortality Rate from 69 per 1,000 live births to less than 47 per 1,000 live births by 2020
- Infant Mortality Rate from 54 per 1,000 live births to less than 32 per 1,000 live births by 2020
- Neonatal Mortality Rate from 23 per 1,000 live births to less than 15 per 1,000 live births by 2020
- Teenage pregnancy rate from 24% to less than 14% by 2020

4.2 The Five Strategic Shifts

To bend the curve and achieve these results, this plan proposes five strategic shifts within a forward-looking, compelling and integrated sustainable RMNCAH agenda for moving to attain the targets set in the HSDP (for 2020) and SDGs in the longer term (for 2030). These shifts form the focus for action and introduce a paradigm shift from doing business as usual recognising the importance of leadership at all levels including districts, partners, Civil Society Organisations (CSOs) and other players.

Figure 7: The Five Strategic Shifts



4.3 Shift 1: Package of high-impact solutions

There is a rising trend in coverage of interventions along the continuum of care and this has to continue towards the national targets. However, some high impact interventions have very low coverage, wide disparities and so need extra effort to curtail the large number of women, babies and children dying and set the path to sustain initial gains. Thus, more investment is needed accelerate coverage and quality of selected high impact interventions in the 5 years and reduce disparity within coverage of interventions along the continuum of care.

Uganda is implementing the evidence-based technical interventions across the continuum of care and the target is to ensure effective universal coverage for mothers, adolescents, and children under the RMNCAH framework. To do this, a package of high-impact interventions for each level of the health system has been defined, as shown in Table 2. This package was identified through a combination of modelling the potential lives saved using the Lives Saves Tool (LiST) and expert judgment. Coverage data from the UDHS 2011 and other available sources was used as a baseline and targets were derived from various strategic documents and consultative meetings. In order to achieve the targets, high impact interventions need to be rapidly scaled up in the first two years to attain the maximum coverage and by the year 2017 and consolidate and sustain high coverage until the year 2020. See Annex 6 for more details on the modelling.

Scaling up adolescent health interventions and modern contraceptive use among sexually active women and men is necessary to rapidly achieve and sustain impact. Reaching the targeted coverage for family planning will avert an additional 2.5 million unintended pregnancies thus reducing 246,000 abortions over the strategic period. Thus the emphasis for family planning will be on i) Community distribution of contraceptives and ii) Utilizing the postpartum period stretching up to and long term and permanent methods of family planning. An estimated 6% of complicated abortions are appropriately managed annually. To appropriately manage 85% of all complicated abortion cases, an additional 173,160 women with comprehensive post abortion complications need to be reached per year. Thus a comprehensive Post Abortion Care (PAC) package (based on the national guidelines, April 2015) will be delivered at HC III above.

The top 4 high impact interventions that will save 95% (4,600) of all maternal deaths in the strategic period are (1) SBA with quality labour and delivery management[5], (2) post abortion case management, (3) use of Magnesium sulphate for pre/eclampsia and (4) Maternal sepsis case management. This will translate to MMR reduction from 336 in 2015 to 219/100,000 live births in 2020.

The interventions which will avert additional 90% (5,080) newborn deaths are (1) Labour and delivery management, (2) Kangaroo mother care, (3) Neonatal resuscitation, (4) Clean postnatal practices, (5) use of Chlorhexidine, (6) IPTp 2+ and (7) Antenatal Corticosteroids for prematurity. This will translate into a reduction in NMR from 23 in 2015 to 15 deaths per 1,000 live births in 2020. With this reduction, Uganda will be on target to achieve the SDG 2030 target of reducing NMR to below 12/1,000 live births.

The high impact integrated RMNCAH community delivered through CHWs will include the following; i) Community based surveillance of pregnancies, births and deaths through a community based HMIS linking to DHIS and CRVS; ii) Health education and promotion of community and household care practices including adolescent health education, sensitization for family planning and ANC and SBA promotion (also during ANC and PNC home visits); iii) Community based distribution of contraceptives for young adults by community health workers and; iv) Management of common newborn and child hood illnesses (malaria, pneumonia and diarrhoea).

[5]Labour and delivery management includes: AMSTL, Clean Delivery Practices and Management of 2nd Stage of Labour

Table 2: Priority Intervention Packages by level

Category	Interventions
Core package: Provided at community and HC II levels	Direct provision: Short term family planning methods, Integrated Community Case Management (ICCM), immunization, Misoprostol, KMC, antibiotics for newborn sepsis, pregnancy testing, counselling and birth preparedness, focused ANC (HIV Testing, IPT, FP, LLIN distribution, Iron/Folate) and PNC Service Supports: Referral for delivery/PAC/FP/adolescent care, follow up HIV exposed babies, linkages for adolescent/SGBV/HIV to BCC, sexuality and life skills education, socio-support, BDR, home visits for interpersonal communication on improving household and community RMNCAH practices (including household sanitation and hygiene)[6], compliance support and tracking defaulters, counselling and birth preparedness, demand creation for family planning, adolescent responsive services at facility, school and community level
Expanded package at Health Centre III	All the above plus: Direct provision: Long term family planning methods, Integrated Management of Neonatal and Childhood Illnesses (IMNCI), PAC, Basic Emergency Obstetric and Newborn Care (bEmONC), PMTCT, portable ultrasound, Anti-Retroviral Therapy (ART), adolescent friendly package of health services to include BCC and IEC material distribution Service Supports: Implement health extension and micro-planned integrated outreaches
Comprehensive Package at HC IV and general Hospitals	All the above plus: Direct provision: cEmONC, inpatient management of severe newborn and child illnesses, permanent Contraception Service Supports: Ambulance Services, Maternal Perinatal Death Surveillance and Response (MPDSR)

This set of interventions has been designed to work as a package, and so all of these should be scaled up together, as discussed further below in Shift 3.

4.4 Shift 2: Increasing access for high burden populations

4.4.1 Introduction

Effective introduction of the package of high priority interventions requires a clear strategy for delivering the package, so this shift focus on the mechanisms needed for delivery the package.

Successful programmes that have achieved relatively high levels of sustained coverage in Uganda have often started with a focus upon the specific interventions to be delivered but then combined this with a set of innovative delivery strategies that address the various bottlenecks in the system. For example, the coverage of PMTCT has now reached over 80% with the initial surge due to key inputs such as increasing supply of HIV testing kits and recruitment and training of HIV-focused health workers. However, further gains required greater integration into the main maternal and child health programme delivered through the primary health care (PHC) system. Innovations in improving the functioning of the PHC system were therefore crucial for reaching the majority of affected women and children. Examples included intensive use of programme data to show district, facility and programme managers where drop outs were occurring; active engagement with civil society and communities especially to inform them of the service; focus upon supervision and mentorship of frontline workers; and some task sharing especially for HIV testing and initiation of treatment.

[6] Involves emphasis practices identified and targeted in village micro-plans within each local village context involving care and development, prevention and care seeking.

Uganda continues to be rich in innovations that address the widespread challenges in delivering quality services. However, many of these have remained at a small scale or pilot level as different actors focus on different parts of the care continuum and in different parts of the country. For the Sharpened Plan various stakeholders have been consulted as to which service delivery innovations would be best suited to overcome the specific bottlenecks that have been identified for RMNCAH, as summarised in Chapter 3. In this selection account was taken of existing large-scale initiatives that address broader health systems strengthening (such as those focused upon the supply chain) and so these were not prioritised here.

4.4.2 Key inputs

As outlined in Chapter 3 recent health facility surveys have found significant shortcomings in staffing and physical infrastructure especially in the most under-served areas. This plan calls for expansion in the number of public sector health facilities with a focus on ensuring that all districts have cEmONC facilities and all sub-counties have bEmONC facilities. Expansion and strengthening of these primary care facilities with stronger integration with public health services will improve coverage and quality of inpatient, outpatient and outreach services prioritised in this plan. This will involve long term infrastructure development below:

- Construction of 98 new HC IIIs in sub-counties that do not have any HC;
- Refurbishments and re-equipping 262 HC IIIs to be fully operational;
- Construction of decent institutional accommodation at the place of work from less than 20% to at least 30% for technical staff at HC III, IV and General Hospitals. Currently the technical staff with decent accommodation is less than 20%. This will translate to 1,276 housing units.

Another key input is additional staffing: a total of 3,000 midwives and 200 anaesthetic officers should be recruited to provide adequate coverage levels. In addition, a targeted bursary scheme for doctors, midwives and anaesthetic officers is proposed for underserved districts and HSDs. Such a scheme has proved effective in eight northern Ugandan districts and could be expanded to allow districts to attract and retain critical health worker cadres in underserved communities for both the private and public sectors. The beneficiaries are typically identified from the communities where they will ultimately be posted and hence find it easier to settle in their work places than it would have been if they had come from other communities. The Annual Health Sector Performance Report (AHSPR) 2014/15 shows that 12 hard to reach/new districts have staffing below 50%, which means it is difficult for them to implement the minimum health care package.

The final key input is financing. The situation with regard to financing of the health sector is challenging, with a high reliance on both out-of-pocket expenditure (37% of total health expenditure in 2011/12, according to the National Health Accounts) and on donor financing (46.5% of total health expenditure in 2011/12). The situation appears to have worsened since the last National Health Accounts, as according to the "Health Financing Strategy 2015/16 – 2024/25", "while the contribution of ODA to total government budget has declined from 25% in FY 2010/11 to 18% in FY 2014/15, the proportion donor resources contributing to total health budget increased from 14% to 42% within the same period". The Health Financing Strategy also notes that "[the percentage of government budget (which includes on budget ODA [official development assistance]) allocated to the health sector has stagnated at about 8.5% in the period 2010/11 - 2014/15 and it fell substantially to 6.9% in 2015/16." In addition to the evidence of substitution provided by these figures (i.e., development assistance for health is replacing domestic financing for health), general government resource mobilization remains at low levels, which impedes increasing domestic contributions to the health sector. Further, there is limited pooling of resources, including very low coverage of any form of insurance. Purchasing is primarily of inputs rather than of results, and although a purchaser-provider split has been mandated, it has not yet been operationalized.

Addressing these challenges and creating a "health financing system that responds to the dynamic aspirations of the health sector in Uganda" (as described in the vision statement of the Health Financing

Strategy) will take considerable time and effort. The Health Financing Strategy charts a course for doing this over the coming ten years, with the following objectives:

a) To enable equitable, efficient and sustainable mobilization of adequate resources to finance the delivery of essential health services in line with Health Sector Development Plans.
b) To establish and roll out a Social Health Protection system and reach 30% of the people in Uganda by 2025.
c) To increase effective pooling and strengthen strategic purchasing mechanisms that ensure the attainment of equitable and efficient resource allocation and delivery of quality health services by 2025.
d) To develop new and strengthen existing institutional arrangements that will ensure effective accountability and transparency in resource management and use.
e) To strengthen mechanisms for harmonized and effective partnerships in financing and delivery of health services, including external and private sector actors, by 2025.
f) To strengthen systems for timely generation and production of health financing and expenditure information to guide policy and decision making.

For the time period covered by the Sharpened Plan, the majority of the financing for the strategic shifts is likely to come from external assistance. However, increased financing from the government will also be critical, especially for key inputs such as the staffing and infrastructure needs outlined above.

4.4.3 Improving service delivery

Delivering the priority intervention packages successfully requires addressing the key constraints identified in Chapter 3. Uganda has a wealth of experience with innovative service delivery mechanisms that can be used to do this, but they generally have not been implemented at scale. This section describes a set of key mechanisms that will be introduced or scaled up in order to tackle key challenges in areas such as human resources for health, quality of care, supply chain, service availability, and utilization of services. These mechanisms typically address multiple bottlenecks, as summarized later in Section 4.4.3.G.

4.4.3. A Strengthening district management for improved RMNCAH outcomes

Given Uganda's decentralized health system, districts are at the centre of service delivery in the country, which means that ensuring strong district health teams is essential for the success of this plan.

The first step in this is ensuring that there is clearly defined accountability for driving progress on RMNCAH at the district level. Each district should have an assigned focal point for RMNCAH. This will often by the Assistant District Health Officer (ADHO) but could be a senior nurse or another official.

These people will be accountable for monitoring performance and the availability of key inputs (e.g., commodities) across health facilities in the district and ensuring that district health staff receive appropriate training on RMNCAH. The focal points will also be responsible for leading the process of identifying and targeting the high burden populations within the district.

The second element of strengthening district management is improving linkages between different parts of the health system:

- Ensuring that referral systems are functional, including that all health centres have up-to-date protocols for referral, that ambulances are operational and appropriately deployed, and that management and logistical challenges are addressed as they arise;
- Employing the Reaching Every Community (REC) model to strengthen ties between VHTs and health facilities (HC II), including bringing HC II's and VHTs together to develop micro-plans that map target populations and current initiatives, identify local bottlenecks, and determine appropriate solutions;
- Building strong linkages between the public sector and both private not-for-profit facilities (PNFP) and private for-profit providers (PFPs), including maintaining an accurate picture of the full set of providers in the district (e.g., through a regular mapping process) and implementing

the policy on Public Private Partnership for Health (PPPH policy) by regularly convening coordination meetings and strengthening information-sharing between the sectors;
- Coordinating district focal points for various programmes (e.g., PMTCT) to ensure synergies between efforts.

The leadership of the focal points is essential in improving these connections, so this work will be a central part of the role of these positions. However, improving this also requires the commitment of key partners, particularly those that finance or implement vertical programmes and/or deliver services through non-state actors. Development partners have an important role in ensuring that the partners they work through are encouraged and incentivized to coordinate closely with focal points and other public sector staff at the district level.

The third element is ensuring that the highest burden populations are targeted. Each district should identify and prioritise high burdened populations and provide innovative approaches to reach them. This will be crucial in reducing large disparities where they occur within districts and thus quickly reducing district mortality rates. District level analyses of facility utilisation data (from the RMNCAH Scorecard and DHIS2) and quality assurance assessment will be routinely used to identify poorly performing facilities and their catchment areas that need extra support. Poor performance will be analysed both for quality of service delivery and upstream factors hindering demand and accessibility. The priority populations under this strategic approach include: adolescents, urban poor in slums, people infringe villages, islanders/fisherfolk and migrants. Identifying and targeting outreach and innovative interventions to these populations will not only minimise coverage and mortality disparities between the district sub populations but will also quickly improve overall district RMNCAH indicators.

The final element is to use results-based approaches to reward districts that perform well and that address key equity issues. These districts will receive performance payments that can be used flexibly to address key financing gaps at the district level. A results-based approach will also be used to reinforce the linkages between the different levels of the health system, including incentivizing VHTs.

To deliver improved performance at the district level will require investments in capacitating staff; these are addressed below in section 4.4.3.C. Similarly, strengthening the availability and culture of using data for decision-making will be critical for improving the performance of district management; this is addressed below in section 4.7.

4.4.3. B Scaling up community-based service delivery

The current RMNCAH conditions are often managed at all levels of care, which defeats the purpose of the national tiered system of care. An increased focus on primary healthcare that is community based and rooted in prevention and management of simpler cases close to home will result in earlier care-seeking, reduced complications, improved health outcomes, and reduced costs for the government and for individuals. A more equitable access to the minimum health care package could be achieved by relying on these cadres but with an expanded skills package and motivation.

Community-based mechanisms – particularly VHTs and the proposed community health extension workers (CHEWs) – are the key frontline service providers and must be made clearly responsible for direct service delivery for a defined parish/village population. This includes basic preventive commodities (e.g., soap and other hygiene materials, misoprostol and short term family planning methods) and curative ICCM commodities.

The REC approach has been used in Uganda to strengthen the VHTs and bring together HC II's and VHTs to develop micro-plans, but it is not yet at scale. Scaling it up requires improving training of VHTs and in particular rationalizing the different training programmes currently done for VHTs (which typically address one or a limited number of elements of the RMNCAH continuum) into a single, comprehensive training course.

Alongside an effort to improve the capacity of VHTs, efforts must be made to retain them. The current system of relying on volunteers inevitably leads to turnover. This can be addressed through incentive mechanisms that provide opportunities for VHTs to earn money based on their performance.

To adequately monitor, forecast, quantify, source, manage and use the community commodities in appropriate and efficient ways requires strengthening of community HMIS component. Data from the community and facility will be used in informing and improving micro-planning that involves health workers and facility management committees analysing and documenting local RMNCAH issues, which they plan and implement with the involvement of the serving health facility. This will ensure that communities get informed about the services and those populations identified in the community meetings as poorly reached are engaged in activities to improve service delivery and demand based on the priority community package.

4.4.3. C Developing capacity through skills hubs

Improving the quality of care is essential to achieving better RMNCAH outcomes in Uganda. As described in Chapter 3, too many healthcare providers are unable to diagnose correctly even common conditions. Building the capacity of healthcare providers is therefore a critical investment for the country. Building capacity is also an important part of strengthening human resources for health, as it can improve provider retention and motivation.

A number of capacity building efforts are already underway (e.g., various training courses), many of which will continue in the coming years. In addition, a key new area of investment is the introduction of skills hubs. Four hubs will be based at regional health facilities that have instituted good care practices such as regular RMNCAH Quality Assurance and Quality Improvement including the use of MPDSR and respectful care. These hubs will provide healthcare workers with real-life examples of how their peers have overcome challenges similar to the ones that they face, and create a network of collaborators committed to transferring knowledge and skills.

4.4.3. D Scaling up results-based financing for facilities

The primary means of financing health services in Uganda is input-based, and that will continue to be the case for the immediate future. However, there is increasing recognition that results-based approaches can be a useful complement to this by providing incentives to facilities to deliver more and better quality RMNCAH services. A number of small scale initiatives have demonstrated that Results Based Financing (RBF) can work in Uganda and created a valuable set of lessons learned.

RBF is a flexible tool that can be tailored to address the key systems constraints that are impeding the attainment of RMNCAH outcomes. For example, payments can be tied to improvements in quality of care, can be used to incentivize the continuous provision of key commodities, or can be oriented to encourage providers to focus on specific key populations (e.g., the poorest quintile). This enables RBF to be used to address a number of key constraints identified in Chapter 3, including around quality of care, low staff productivity (including as a result of absenteeism), mal-distribution of staffing and the challenges of retention, and insufficient coverage of key interventions.

RBF is also an important mechanism because it can address constraints related to understaffing in the public sector by contracting with private providers (both PNFPs and PHPs). Further details on RBF are covered in the National RBF Framework.

One of the key elements of this plan is aligning the different approaches to RBF that have been supported by different partners, as moving to scale requires closer alignment of these different approaches.

4.4.3. E Scaling up vouchers

The use of vouchers is another mechanism that has already been tested and shown to work in Uganda, although, as with RBF, it has also not been done at scale. While RBF is a supply-side mechanism, vouchers primarily address demand-side constraints. In particular, vouchers are an important means to reduce financial barriers to utilizing services. The high reliance on out-of-pocket expenditure to finance healthcare in Uganda promotes inequality, and vouchers can be used to address this.

Although the primary rationale for the use of vouchers to is address demand-side constraints, they can also contribute to addressing supply-side challenges. In particular, the ability to redeem a voucher can be tied to an accreditation scheme or to the achievement of certain quality standards, which means

that vouchers can be used to incentivize improvements in quality of care. Similarly, because vouchers can be used at both public and private facilities, they can play a role in improving information flow across a mixed health system and promoting linkages between public and private facilities.

As with RBF, through the implementation of this plan the different approaches to vouchers currently in use will be harmonized.

4.4.3. F Strengthening demand for RMNCAH services

Demand for some important RMNCAH services, particularly modern family planning methods, is lower than desirable. VHTs are critical to address demand-side barriers such as insufficient information, poor health-seeking behaviours, and social norms that undermine progress on RMNCAH outcomes (e.g., around gender equality), particularly in rural areas. Interpersonal communication techniques are particularly important in this regard, and so will be a focus on the VHTs.

However, VHTs will not be able to address these constraints unless they form closer ties to health centres, utilize more structured processes of reaching key populations (particularly micro-planning), and benefit from capacity development, as described in section 4.4.3.C. Although these issues were discussed above in the context of service delivery at the community level, addressing them is also critical to improving demand generation.

Another key element is the development of innovative approaches to demand generation. In many cases, this will be done in partnership with the private sector, civil society organizations or other civic structures. Uganda has an extensive network of these groups that have not been fully utilized to generate demand for RMNCAH services. For example, significant investments have been made in community-based organizations that are involved in the response to HIV/AIDS, but these have not been fully leveraged to increase demand for family planning or to promote breastfeeding.

4.4.3. G Summary of how the mechanisms address key constraints

The mechanisms described above address the constraints described in Chapter 3 in multiple ways, as summarized in the table below.

Table 3: Mechanism and constraint addressed

Constraint addressed / Mechanism	Human resources for health	Quality of care	Supply chain	Demand generation
Strengthening district management	X	X	X	
Scaling up community-based service delivery	X		X	
Developing capacity through skills hubs	X	X		
Scaling up results-based financing	X	X	X	
Scaling up vouchers		X		X
Strengthened demand for RMNCAH services				X

4.5 Shift 3: Geographical focusing/sequencing

4.5.1 Introduction

The package of priority interventions should be available to everyone in Uganda. However, it is not possible to scale the package up to every district simultaneously. Therefore, it is necessary to determine the optimal sequence for rolling out the package.

This is particularly important given the challenges of fragmentation around RMNCAH in Uganda: too often, partners use their own criteria to select their own set of districts, and then proceed to implement some elements of the package using one or a few service delivery mechanisms. This results both in gaps where some populations receive no services or a suboptimal set of interventions, and in duplication where some populations are exposed to multiple partners providing similar services in an uncoordinated way. The combined effect is a reduction in efficiency and ultimately fewer results achieved.

To address this, the roll-out approach will concentrate first on ensuring that high priority districts receive the complete package of priority interventions using the full suite of service delivery mechanisms (or as many of the mechanisms are necessary to ensure full coverage). This requires closer collaboration between key partners than has often been the case in the past, and so the Sharpened Plan will only succeed if partners agree to align behind it.

There is good practice within Uganda that can be drawn on to do this, as the partners involved in responding to HIV/AIDS faced many of the same challenges and have gone through a process to rationalize their support. The lessons learned from this experience should guide the implementation of the Sharpened Plan.

4.5.2 Selection of districts

The rollout of the plan will start with the districts where most deaths occur and the highest RMNCAH burden exists in the country. Selected impact or outcome indicators have been used to categorise highest burden, middle burden and lowest burden districts. Numbers rather than rates/proportions have been used to identify districts with the highest burden as a means of accelerating country level mortality reduction. This approach recognises that district population size varies widely and aggregated rates mask actual numbers. Priority districts have been identified for all the four program areas. Across the four selected indicators, the top 40 districts contribute 60% of the burden hence ideal target for interventions to reduce overall burden (see details in Annex).

Existing projects that have used other approaches to selecting their interventions districts are not supplanted or redirected and will continue as per their plans, although all partners are encouraged to take whatever opportunities present themselves to realign to the Sharpened Plan.

Given the reality of existing commitments, that means that the roll-out to the priority districts will rely primarily on new or additional resources as they become available from the Government of Uganda and from development partners.

4.6 Shift 4: Addressing the broader context

4.6.1 Introduction

At its core, the high RMNCAH burden is rooted in inequalities within the social determinants of RMNCAH over the life course of women. Thus, multi-sectoral action is needed to tackle the drivers of disparities contributing to preventable deaths in the country. Accessible, quality health care is essential, but much more is needed. Higher maternal mortality or teenage pregnancy in some populations is often not because of a need to increase clinical encounters, but because of the environment in which the mother lives, her nutritional status, her quality of health prior to the pregnancy, her levels of social support, her

access to transportation, formal education and the cultural competence of service providers. Place based approaches informed by health sector data will identify areas and community pockets that need improvement in critical RMNCAH social determinants. This means that solutions will not only focus on simply increasing access to RMNCAH care, but also on galvanizing other sectors towards holistic solutions that improve community conditions for those identified populations.

Working across sectors for RMNCAH is still very challenging in Uganda, especially at national level. Making the broad changes called by this shift will need increased collaboration between sectors and engaging extra players including the business community, legislators, religious and cultural leaders and community groups especially at district level. RMNCAH data will be at the centre of raising attention on RMNCAH structural determinants. The sharing and use of compelling data to make the case for RMNCAH health will be critical in gaining support and advocacy across other sectors within the national level multi-sectoral coordination mechanism. Capacity to capture, analyse and translate this data in ways that are accessible and usable to multiple audiences, including policymakers in other sectors is important in propelling guidance from the health sector. To increase the likelihood of action, RMNCAH Monitoring and Evaluation (M&E) products will be focused on the life stage and population groups that other sectors use in planning and monitoring.

Nowhere is a multi-sectoral response more important than around adolescent health and well-being, so this shift has a particular focus on adolescents, as described below. Another area in which a multi-sectoral response is crucial to improve RMNCAH outcome is to nutrition. A comprehensive national nutrition plan is currently under development, so the Sharpened Plan does not attempt to address the full spectrum of approaches to improving nutrition. However, the package of priority interventions addresses a number of aspects of nutrition, including through household care practices, iron-folate provision, and the encouragement of breastfeeding. The priority intervention package also includes household sanitation and hygiene, which is an important way to address the contribution that water and sanitation systems contribute to RMNCAH outcomes.

4.6.2 Adolescent health and well-being

Improving adolescent health requires promoting a package of standard services grounded on evidence-based programming with appropriate linkages including between health facilities, schools and the community in the context of a multi-sectoral approach. In order to provide for effective coordination of the multi-sector response to adolescent health, MOH and its partners have established the Adolescent Health Technical Working Group (ADH-TWG), which has broad representation. The country also has a "National Strategy to End Child Marriage and Teen Pregnancy", led by the Ministry of Gender, Labour, and Social Development, which will support approaches that contribute to improving adolescent health and well-being, particularly by reducing child marriage. Efforts for evidence-based programming and policy require a clear standardised package and ADH data and efforts are in place to disaggregate data as much as possible by age and sex from the different sources. Three key investment areas for adolescent health will be focused on:

- Provision of appealing and actionable data/information on adolescent health: To address the unique health problems associated with the adolescent years, policy-makers, implementing partners, health-care providers, teachers, religious, community leaders and parents must expand the knowledge base on adolescent problems. The adolescent health data will measure adolescent health outcomes at the community level and act as a tool for propelling adolescent participation. It will also enable young people to understand better the determinants of their health, and consequently feed into their communities and into service provision. This data also empowers adolescents and youth leaders with information and skills to be able to participate in relevant policy dialogue, service delivery and all forms of meaningful contribution. There is also need to ensure and allow for meaningful and effective youth participation and engagement through creation and facilitation of platforms like the adolescent health working group and working with youth networks and coalitions especially with the vulnerable groups like adolescents living with HIV, Adolescents with disabilities and very young adolescents especially girls.

- School-based or school-linked health facilities promoted and implemented as adolescent health sites: The sites provide confidential care to adolescents, including health education, screening, acute care and mental health services, and preventive sexual healthcare. They will also support and keep girls in school and tackle risky behaviours. The adolescent package of health services should address; pregnancy timing and child birth, increasing incidence of HIV, other sexually transmitted infections, malnutrition (under-nutrition and obesity), alcohol and substance abuse, mental and psychological well-being including depression and anxiety disorders, Injuries and road traffic accidents, sexual and gender based violence, management of communicable and non-communicable diseases, physical activity and immunisations (Human Papilloma Virus and Tetanus Toxoid). Working with schoolteachers offers opportunity to integrate sexuality and life skills education as well as offering adolescent health services. Adolescent's participation in managing and implementing adolescent health sites will catalyse peer-to-peer education and support.

- Establish pipeline for rapid scale up on effective local context innovations: Mostly small-scale projects have produced the body of knowledge about how best to tackle adolescent health issue programs function. These provide the foundation for scaled-up efforts and help improve health systems in ways that will benefit adolescent health efforts in the country. Support is needed to create alliances on annual multi-sectoral forum for the adolescents and young people to articulate and share experiences and good practices and successful models and design scale up.

4.7 Shift 5: Ensuring mutual accountability

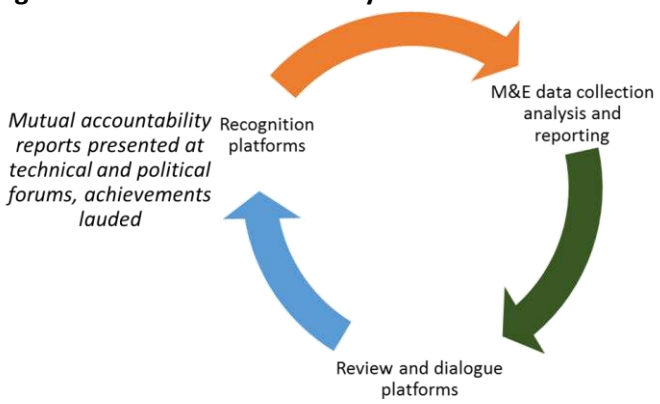
4.7.1 Introduction

This shift calls for an effective, sound public system that is responsive to people's needs, supports information sharing, permit scrutiny so that citizens can see exactly where their resources are spent. Political, managerial and social accountability will encourage implementation of commitments to RMNCAH. This plan provides opportunity to revitalize existing reporting and accountability structures like the Task Force for reducing Infant and Maternal Death chaired by the Ministry of Finance, and the Health Sector Quality Improvement Framework and to complement existing performance tools and oversight review processes at national, district, and sub-district levels (HMIS, MPDR profiles, and scorecards).

Mutual accountability with implementing partners will follow the government accountability mechanism where government and donor performance and behaviour are discussed in the quarterly RMNCAH meetings and RMNCAH Assemblies at national and district levels. Other accountability mechanisms include Civil Society Advocacy as well as Citizens Report Cards (CRC) that annually provide perceptions of healthcare users on service accessibility, availability and quality.

The accountability framework proposed provides for a cyclical process of three key actions namely monitoring, reviewing and taking remedial actions during implementation as shown in Figure 8.

Figure 8: Mutual Accountability Framework



The Annual RMNCAH Assemblies will serve as the main platform for accountability at National and Regional/Districts levels. A small team of partner representatives will compile Mutual RMNCAH Accountability Reports annually that cover achievements and failures against outcome and impact indicators and recommendations of beneficiaries. Other independent analytical inputs especially by CSOs and academia will be sought.

Several other mechanisms will be used to support accountability throughout the system, as described below. In addition, it is important to read this section in conjunction with Section 4.9, which addresses how the Sharpened Plan will be monitored.

4.7.2 Civil Registration and Vital Statistics

The CRVS are essential elements in scaling up RMNCAH and are critical for accountability as the most reliable source of high quality, timely, continuous and reliable outcome data disaggregated by income, gender, age, ethnicity, disability, geographic location and other characteristics relevant in RMNCAH context. Civil Registration is the continuous, permanent and compulsory recording of information on the occurrence and characteristics of vital events (e.g. birth, death, cause of death, marriage, adoption, etc.); and Vital Statistics consists of the compilation, analysis, evaluation, presentation and dissemination of data generated from vital events. In Uganda, CRVS is still in its formative stages and has over the years been handled by several institutions. There is a legal strong legal and regulatory framework for introduction of compulsory civil registration in Uganda. The recently enacted Registration of Persons Act (ROPA) 2015 - Cap 309 Laws of Uganda, places civil registration under the newly established National Identification Registration Authority (NIRA), while vital statistics is the mandate of the UBOS. To date, birth registration is estimated at 60% and covering only 62 districts. On the other hand, death registration has hardly taken off.

The Objectives of the CRVS are (1) To strengthen the principle CRVS institutions (NIRA and UBOS) to make them more able to carry out their mandate; (2) To increase access, coverage and quality of Birth Registration services from the current 60% to 90% by 2020; (3) To increase access, coverage and quality of cause-of-death reporting and Death Registration services to at least 80% by 2020.

Investment is thus needed to develop the technical capacity for institutions at all levels and ensuring supporting infrastructure and technologies are in place to enable efficient registration, monitoring, archival and retrieval of births and deaths system. All the CRVS building blocks will require development in the longer term but priority is placed on Birth and Death registration especially in the rural areas. The process will be undertaken in a phased manner prioritizing the needy rural areas, strengthening national institutions by improving and scaling up the infrastructure for electronic registration, build capacity of personnel of registration and statistical agencies, and for health personnel on International Coding of Diseases (ICD) 10 coding (including automated techniques), setting up a system for M&E including indicators for birth registration, using birth certificate unique identifiers, and HMIS that combine data from facilities, administrative sources and surveys. Areas of Investment are:

i) Development of National Civil Registration (CR) policy and establish CRVS Monitoring and Evaluation system, and strengthen analysis and use of CRVS data.
ii) Dissemination of the ROPA 2015 at all levels
iii) Development of CR strategy
iv) Acquiring the necessary notification and registration human resource
v) Supplying and management of BDR tools and equipment
vi) Strengthening the CRVS coordination and oversight structures at sub-county, district and national level
vii) Development and implementation of a CR communication strategy
viii) Scaling up and consolidation of Birth Registration System activities from 62 to 112 districts
ix) Introduction of BDR mobile services (outreaches)
x) Establishment of a Death Registration and classification System
xi) Development of a community cause-of-death reporting strategy and implementation plan (using innovative ways such as verbal autopsy)
xii) Development of standard pre-service and in-service training curricula on certification of cause of death and ICD coding
xiii) Norms and standards setting for cause-of-death reporting and ICD coding

xiv) Development of customized module for cause-of-death and ICD coding and reporting through DHIS2

xv) Capacity building for clinical staff and Maternal and Perinatal Death Audit Committees on cause-of-death reporting according to ICD guidelines

4.7.3 Routine monitoring and feedback systems

A strong HMIS is the backbone of the RMNCAH monitoring system. There is a need for a single data standard/system for RMNCAH. The lack of this single data standard prohibits interoperability between the many RMNCAH information systems in the country. The first step will be to develop one common data dictionary and strategies for compliance and reporting based on the DHIS2. This will allow automation and use of integrated dashboards that include different partner projects for better district and national level oversight and resource allocation.

Performance reporting will be built within the existing sector M&E strategy for effective government stewardship and sustainability. The System strengthening indicators will be constituted into the health sector M&E plan and summarised, analysed and interpreted through the health sector monthly, quarterly and annual review processes. The RMNCAH community scorecard is an automated, customized, dynamic management tool to strengthen accountability and drive action at different levels for improved RMNCH performance at all levels level (administrative and health system).

Another routine element (which is highlighted in the priority intervention package) is MPDSR. Regularly conducting reviews at the facility level is important for ensuring real-time identification of problems and for accurately tracking changes in mortality patterns. MPDSR is also critical for enabling facilities to make changes to their approaches by learning lessons about what is working and what is not working.

The final routine element is the provision of data to other sectors and monitoring of key determinants and interventions beyond the health sector to strengthen multi-sectoral action on disparity drivers. Disaggregating data for indicators for both health and non-health sector interventions will facilitate a greater equity and rights focus and also reinforce attention to determinants, given that the drivers of RMNCAH disparities mostly lie beyond the health sector

For routine systems to contribute fully to providing data for decision-making, capacity needs to be built. This includes establishing a RMNCAH Knowledge Management and Learning hub within a strengthened M&E system to capture and disseminate successful in-country innovations.

4.7.4 Tracking of resources

It is currently difficult to track the amount of expenditures that made annually on RMNCAH from each of the three main sources: public spending, out-of-pocket expenditure, and developing partner resources. The lack of clarity around financing flows has made collaboration and coordination more difficult, and has hindered the government's stewardship role.

The country has conducted National Health Accounts that provide some valuable information, but it is important to produce these annually and more rapidly than has been possible in the past so that the information can feed into decision-making processes. Additionally, at the district level RMNCAH focal points will have an important role in keeping track of financing, which will only be possible if key partners commit to sharing information at the district level.

05: IMPLEMENTATION MECHANISMS

As outlined in the HSDP, governance responsibility and leadership for this investment case and meeting the targets lies with the MoH. The MoH will provide policies, guidelines, build capacity, monitor the health sector, and coordinate partners to support the decentralized levels in implementation. This section describes proposed management structures and institutional coordination arrangements necessary to ensure success of the investment case.

5.1 Management, Coordination, and Accountability Structure

This investment case relies on RMNCAH Sharpened Plan as the shared priority plan for all stakeholders at all levels. The MoH will be the steward in the planning, financing, implementation, and performance monitoring of the RMNCAH Sharpened Plan within existing governance structures.

Though mainly within the health sector, the responsibility for implementing some critical elements in the RMNCAH Sharpened Plan includes other relevant ministries, departments and agencies. These include Ministry of Education and Sports, Ministry of Gender, Labour and Social Development, Ministry of Agriculture, Ministry of Local government and Ministry of Internal Affairs – (NIRA), development partners, civil society, community-based organisations, professional associations, faith-based organisations, voluntary agencies, and the private sector, amongst others. The HSDP outlines the existing Governance, Management and Partnership Structures in the health sector that will guide this investment case.

At national level, the Top Management Committee chaired by the Minister, will remain responsible for policy decisions and direction for the investment case and decide on possible major alterations in the implementation mechanism if need arises. The Health Policy Advisory Committee (HPAC), a forum for the Government, HDPs, CSOs and other stakeholders will provide continuous oversight on implementation pace and direction, generate input from HDPs and guide on possible major alterations in the implementation mechanism. The Senior Management Committee (SMC) will be responsible for discussing and guidance on technical interventions and ensuring harmony with the HSDP and submitting position papers to HPAC. The MCH TWG will provide the technical coordination for the implementation mechanism. Technical reports will be debated and specific recommendations forwarded to SMC in form of reports to HPAC and Top Management agenda. The MCH TWG will constantly cooperate with other TWGs to address particular cross cutting issues within health system strengthening including Medicines, Human Resources, Supervision Monitoring Evaluation and Research TWG, Health Information, Nutrition.

The Ministry of Health MCH department spearheaded by the Commissioner will be responsible for programmatic actions to ensure planning, development, management and measurement of key RH, CH and ADH interventions results. The Assistant Commissioners RH and CH will be the focal persons and will coordinate key players through existing technical sub committees or steering e.g. Family Planning, Newborn health, MPDSR etc. The divisions will be responsible for building capacity in weak areas and organisational development for key players in collaboration with the Professional Associations and Councils to foster outcomes, orientation, review administrative health and administrative information and prepare reports linked to the investment.

Interventions that will be applied at regional level through the RRHs and other approved Regional Structure include coordination, training and supportive supervision and monitoring of quality of RMNCAH service delivery for districts within the catchment areas. Skills labs and simulation hubs will be promoted to support training of health workers, establish a training data base focusing on six core training packages.

The core level of management will be at the district level. District Health Management Team (DHMT) headed by the DHO will be responsible for effective co-ordination between all health related players in

the district through RMNCAH district coordination committees. It is responsible for planning, organizing, M&E of services in the overall district health system where implementation occurs. Decentralisation of the management to implement the plan will require districts taking responsibility and being empowered to scale up activities. To minimise transactional costs, implementation will restrict the use of intermediate bodies to the completely necessary cases and thus will work towards orienting the management role of the DHOs and facility managers for more result oriented operational implementation.

HSD Management Team as the technical arm of the Constituency Health Committee will ensure effective planning, onsite trainings; quality reviews and mapping comprehensive referral networks of services of all RMNCAH related players. The Health Unit Management Committees (HUMC) composed of stakeholders from the health facility, local administration and community will be responsible for planning facility service delivery, linking facility with service users, and promoting quality health service delivery including ensuring local cultural responsiveness.

The engagement of non-state actors including development partners, CSOs, private sector, philanthropic foundations, professional bodies and academic institutions will cover a range of interactions which can be grouped under the following overarching categories: participation, resources, evidence, advocacy, technical collaboration and accountability. Academic institutions will be engaged in pursuit and dissemination of knowledge through research, education and training. Two main existing platforms will be used to engage these actors.

The CSO coalition for RMNCAH – a coalition constituting several organisations, entities and individual member with non-profit, public interest goals, with the authority to speak for their members through their authorised representatives exists. The coalition includes organizations (e.g. White Ribbon Alliance, World Vision, Save the Children Fund, Program Access on Communication and Education (PACE), AMREF), civil society groups and networks, faith based organizations, professional groups, voluntary agencies and grass root community organizations.

Private sector entities – commercialised enterprises or businesses that are intended to make profit and business associations that do not intend a profit for themselves but represent the interest of their members, which are private enterprises will be engaged through the Uganda Medical Health Federation which will coordinate them to develop their specific activities and plans.

The Annual RMNCAH Assemblies will serve as an annual platform to convene different players at all levels for mutual accountability that covers achievements or results and resource tracking.

06:PERFORMANCE MONITORING

Measuring performance against set targets in the Sharpened Plan will guide investment and operational planning. M&E of the Sharpened Plan will mainly rely on existing HMIS/DHIS2, support supervision data systems and a strengthened CRVS system. There will be need to strengthen the process monitoring, data analysis and review capacity for RMNCAH, so as to generate M&E products relating to financial expenditures, source of funds, geographic location and coverage of implemented activities, and output-level results aligned to the set RMNCAH targets for national and sub-national levels.

Several categories and levels of indicators will be collected as shown in the M&E matrix. Key performance indicators will hinge on strategic investment priorities to assess performance progress towards achievement of the core results and will be presented in a dashboard format to provide a snapshot view of the implementation status on a quarterly, bi-annual and annual basis and reviewed at national and district level joint review meetings. A formal midterm evaluation of the investment case will be made mid-way to assess progress and areas of preventive or corrective action towards the targets indicated in the table below starting in year 2 of implementation.

Table 4: Estimated performance targets7

	Current need service	Currently receiving services		Did not get care	Projected Popn/need at 2020	Target coverage	Additional #s covered /year
		%	#				
Family Planning							
Current mFP Users	3,266,042	30 %	983,079	2,282,964	3,788,609	50%	911,226
Unmet need	1,735,085	30%	520,525	1,214,559	2,012,699	50%	485,824
Maternal and Labour and Delivery							
Number of women attending ANC 4th visit	1,700,000	43%	731,000	969,000	1,972,000	85%	945,200
Number of Women with Abortion complications managed	180,000	3.3%	5,940	174,060	208,800	85%	171,540
Number of Women delivered by Skilled Birth Attendant	1,700,000	57%	969,000	731,000	1,972,000	89%	707,200
Number of mothers with PPH managed	714,000	53%	378,420	335,580	828,240	85%	325,584
Number of mothers with Sepsis managed	204,000	53%	108,120	95,880	236,640	85%	93,024
Number of mothers with Eclampsia/Pre-eclampsia managed	204,000	53%	108,120	95,880	236,640	85%	93,024
C/S	225,000	5.3%	11,925	213,075	261,000	8.3%	209,925

7 Key Assumptions:

- 30% of abortions are complicated
- 42% of all Maternal Deaths are contributed by Haemorrhage (Antepartum and postpartum)
- Maternal Sepsis contributes 12% of all Maternal Deaths
- 12% of all Maternal Deaths are contributed by Pre-/Eclampsia
- 15% of all deliveries will be complicated and require emergency intervention including caesarean section
- 11.8% of all births in Uganda are low birth weight babies
- 15% of all newborns at birth will require breathing support/resuscitation (WHO)
- 15% of all newborns will suffer from newborn infections (WHO)
- 15% of all U5 children have an episode of acure respiratory infection I in one year (UDHS 2011)
- 30% of all children tested positive for malaria RDT (MIS, 2014/15)
- 23% of all children 0-5 years (UNICEF)
- 4.7% of all children below 5 years are severely wasted (UNICEF)

	Current need service	Currently receiving services		Did not get care	Projected Popn/need at 2020	Target coverage	Additional #s covered /year
		%	#				
Newborn							
Number of preterm and LBW initiated on KMC	17,700	10%	1,770	15,930	20,532	50%	15,682
Number of Newborns with asphyxia successfully resuscitated at Birth	225,000	53%	119,250	105,750	261,000	75%	102,600
Number of Newborns with infections managed	225,000	34%	76,500	148,500	261,000	90%	145,350
Child							
Number of Children with Pneumonia given antibiotics	1,202,874	47%	567,756	635,117	1,395,334	85%	618,277
Number of Children with Malaria given ACT	2,405,748	52%	1,253,395	1,152,353	2,790,667	75%	1,118,673
Number of Children with Diarrhoea managed	1,844,407	55%	1,014,424	829,983	2,139,512	85%	804,161
Number of Children with severe wasting managed	376,900	10%	37,690	339,210	437,205	50%	333,934

07: RESOURCE REQUIREMENTS

7.1 Costing Assumptions

The key features of the interventions and estimates, and the assumptions used in generating them, are outlined

- The analysis on cost and impact were done using the One Health tool, which incorporates epidemiological models for predicting health impact based on the LiST contextualised to Uganda. The base year for the country population (34.5 million) and intervention coverage estimates used in the costing process was (2013/14). The estimates incorporate inflation of 6.4% as forecasted by the UBOS and Bank of Uganda.
- The unit price of the commodities was based on multiple sources to cover the different commodities. These sources, used in costing the HSDP, included indicative price index of WHO 2013, UNICEF, CHAI, the Global Fund VPP indicative price index 2012, as well as the National Medical Stores Price list 2013. Program specific costs (program management, governance, HRH and HMIS) were derived from GoU standing rates, and computed using Activity Based Costing (ABC). The estimates covered in this plan are based on the health systems and services perspective and thus do not fully include societal costs.
- In estimation of additional costs, it was assumed that coverage of all interventions would be maintained at 2014/15 levels by 2020. Therefore, additional costs are incremental estimates required to scale up interventions above the 2014/15 level.
- Financial resource commitments for the first three years were used to estimate annual averages from which the five year financial commitments were calculated.
- Reported financial commitments from partners are not disaggregated by interventions and as such not directly comparable to costed estimates using the OHT which were based on detailed intervention costs.
- The NHA report FY2009/10 showed that Household out of pocket expenditure contributed 74% and 62% of the Total Health Expenditure on SRH and Child Health respectively and these OOP estimates were not included in the in the resource mapping.

7.2 Cost Estimates

The costing analysis weighs three scenarios:

- Scenario one assumes that coverage of each intervention was maintained at the 2014/15 levels for the five years and was estimated to require a total of US $ 1.6 billion. This total includes an additional US $70.4 million over the five years due to estimated 3.2%[8] annual population growth and assumes no change in the current the disease burden.
- Scenario two assumes rapid scale of the prioritised core and expanded service packages (see table 2) country wide. Matching health system investments in this scenario include construction and equipping of Maternity wings in 150 HC IIs[9] and recruiting critical cadres of 2,610 Midwives, and 200 Anaesthetists which take 82% of the health system investments (see annex 8). This scenario would require an estimated total of US $ 1.92 billion, which includes US $ 276.8 million as additional resources over the five years.
- Scenario three assumes implementation of the wider comprehensive service package country wide within the five years. This requires higher investments in health system strengthening including construction and equipping of 360 maternity wings (in 98 new HC IIIs and existing 262 facilities), construction of 1,200 staff housing units (representing about 10% of the country need). Additionally, it assumes recruitment of health workers to reach the HSDP target of 75%

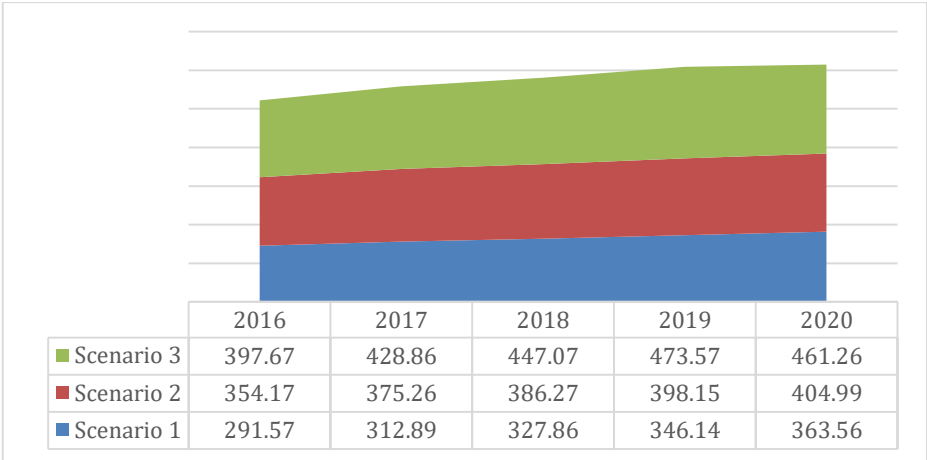
8 Provisional 2014 Census results, UBOS, 2014

9 350 lack BEmOC facilities (HC III) of which 98 do not have any facility while 262 sub-counties in the country were underserved with HC III (i.e below 80% coverage)

staffing capacity by 2020 (1,220 medical officers, 10,000 midwives, 640 Anaesthetists 14,000 nurses,) as the biggest cost drivers. Other investments assumed include expansion of central medical stores and rehabilitating medicines and supplies storage in about 1,587 health facilities country wide during the plan period[10]. This scenario is estimated to cost US $ 2.20billion over the planned period which includes US $ 560 million as additional resources over the same period.

An average annual per capita investments of US$ 1.42 in scenario two, MMR would translate into a 2.2% annual reduction rate in MMR compared to US$ 2.88 average annual per capita investments and 3% annual reduction rate in MMR under scenario three. This translates to annual per capita investment of US$ 0.65 for each percentage point in maternal mortality reduction for scenario two compared to US$ 0.96 under scenario three. Similarly, US$ 0.23 compared to US 0.36 is need for a percentage point reduction in U5MR. Therefore, scenario two is adopted as the best buy for investment as it is more cost efficient.

Figure 9: Comparison of the three funding Scenario



	2016	2017	2018	2019	2020
Scenario 3	397.67	428.86	447.07	473.57	461.26
Scenario 2	354.17	375.26	386.27	398.15	404.99
Scenario 1	291.57	312.89	327.86	346.14	363.56

7.3 Cost estimates for Priority Areas

This RMNCAH Sharpened plan/investment case recommends delivery of three sets of integrated service packages as "best buys" for achieving the RMNCAH targets in the HSDP. Quick returns on increased investment are expected if the proposed high impact service packages are made. The community package provides the highest dividends at lowest investment costs. Establishing bEmONC ready and accessible facilities at sub-county level will increase access to quality skilled birth attendance especially for the poor majority. Service delivery improvements at the lower levels will yield returns in terms of system performance at HC IV and hospital levels by reducing patient loads and assisting referral. Equipping HC IV and General Hospitals for cEmONC would will only make a significant difference if other investments such as effective emergency transport to these facilities and financial or other impediments to their attendance are addressed. Addressing access issues in high burdened urban districts like Kampala and Wakiso requires providing financial support to the poorest urban families through voucher schemes. This would allow eligible families to access private sector for quality RMNCAH services without investing in public sector infrastructure. This will require strengthening of management capacity of district staff to administer and supervise proposed vouchers schemes and private sector results based funding, and prepare for the national health insurance scheme in the longer term.

[10] Assessment of the physical conditions of medicines stores in public health facilities - March 2013.

Based on scenario two, the estimated costs, over the five years, for the Core Community Package implemented countrywide is US$ 27 million. The expanded package cost estimates increase to US$ 181 million due to equipment procurement and infrastructure upgrade needed for operationalizing bEmONC at sub-County level. The Comprehensive Package implemented at HC IV level and higher is estimated at US$ 65 million. The composition of the package may change over time, depending on local contexts of the district RMNCAH burden and district health system capacity.

Table 5: Cost Estimates for priority packages over the five years

Delivery of Priority Packages	Amounts in US $	Additional Pa capita (US $)
Community Package	27,004,934	0.70
Expanded package at Health Centre III and above	181,494,225	4.69
Comprehensive Package at HC IV and above	65,648,823	1.69
Totals	**274,147,982**	**7.08**

The costing analysis has estimated the additional costs in 2016 - 2020 of increasing access to the RMNCAH priority packages in Uganda to be US$ 274 million, including systems investments. While costs vary depending on packages and delivery levels, estimates show that the average additional per capita investments per year are US$ 0.70, US$ 4.69, and US$ 1.69 for the core, expanded and comprehensive packages respectively. Trained VHTs can effectively apply the interventions in the core package at community level without significant health system strengthening costs, e.g. changes in behaviour such as family/household level prevention, treatment and health promotion practices.

The longer-term health system strengthening investments will make substantial improvements in the capacity to deliver integrated RMNCAH intervention packages along the continuum of care. The prioritised investments costed include improving access, quality and routine demand for skilled delivery at HC III (BEmONC) as the weakest link along the continuum of care with Midwives and Nurses as primary providers. This entails refurbishments and equipping of 150 the maternity wings at HC IIs. Commodities for the additional numbers to be reached have been costed to enable delivery of bEmONC, Family planning services and management of sick children. This will enable more mothers, newborns and children to access all priority interventions including early detection of complications and a functional district referral system for management of severe and complicated cases at HC IV and above where the comprehensive package is provided.

Both shorter and longer-term health system investments grounded now in the five strategic shifts are needed to ensure delivery of these packages and remove bottlenecks to scale up along the continuum of care. Success requires investing in human resource management capacity building, recruitment of 2,610 midwives as well as training, support supervision, clinical mentoring and institutionalising data-based RMNCAH quality improvement practices to ensure delivery of standards-based case management.

Investments are additionally needed to strengthen RMNCAH stewardship at different levels including supporting M&E use for decision making, multi-sectoral action and tracking adolescent health, mutual accountability processes and micro-planning at facility level. Investment is critical to develop the nascent CRVS in the country. Unless government and development partners mobilize these resources, the country is unlikely to achieve the set national (2020) and the longer-term SDG (2030) targets.

7.4 Resource Mapping and Bridging the Financial Gap

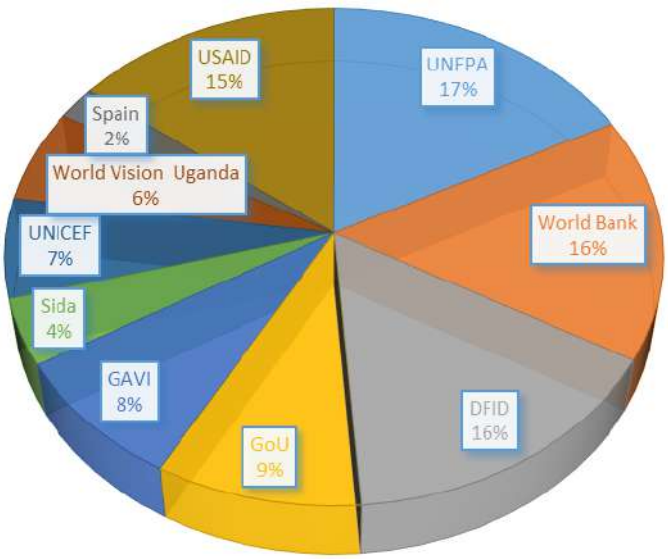
7.4.1 RMNCAH Commitments

The RMNCAH commitments were established from the analysis of comprehensive resource mapping using a contextualised tool adapted from the RMNCH Trust Fund. The mapping processes was participatory and used dialogue processes with key stakeholders. Government commitments were

estimated using assumptions and projections from review of national health accounts and the health sector development plan. RMNCAH partners in the country completed the resource mapping tool providing resource commitments for the first three years of the investment case. Only the first year represented full disclosure of resource commitments by partners. Data collected from partners was then used to estimate the annual average resource commitments and hence the projected five years' resource commitments.

An assumption of 5% annual resource increase of partner and government commitments was built in for estimations for the 4th and 5th year of the investment case (see annex 12 for the full 5 years resource commitments). Others assumptions necessary for interpretation and use of these findings are resented in annex 9. The total resource commitments for the five years are estimated at 1.1 billion USD. This represents approximately 1 billion USD (91%) from the external sources and 86 M USD (9 %) from the Government of Uganda over the strategic period. The leading funders for RMNCAH resources over the projected five years are: UNFPA (161 M USD), World Bank (147 M USD), DFID (145 M USD), USAID (135 M USD), GoU (86 M USD), GAVI (78 M USD), SIDA (50 M USD), UNICEF (60 M USD), World Vision Uganda (56 M USD) and Spain (20 M USD) as shown in figure 10 below. A complete partner resources commitment data is presented in annex 12.

Figure 10: Proportions of contributions to RMNCAH resource commitments by the top ten leading funders



The resource mapping is aligned to the priority packages of high impact interventions of the investment case. Reported resource commitments were mapped for each priority package using the data provided in the mapping tool for all the five years as in table 6 below.

Table 6: Resources by Intervention Package

Intervention Package	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Community Package	40,799,079	42,839,033	44,980,985	47,230,034	49,591,536	225,440,667
Comprehensive Package at HC IV and above	14,377,152	15,096,010	15,850,810	16,643,351	17,475,519	79,442,842
Expanded package at Health Centre III and above	55,456,509	58,229,335	61,140,801	64,197,841	67,407,733	306,432,220
Other	90,504,264	95,029,477	99,780,951	104,769,999	110,008,499	500,093,189
Grand Total	201,137,005	211,193,855	221,753,548	232,841,225	244,483,286	1,111,408,919

In order to understand the geographical distribution of commitments, resources were further mapped against the 10 regions of the UDHS 2011 presented in table 7 below. Estimates of resource commitments for districts and the different RMNCAH cost categories were further derived and are presented in annex 10 and 11 respectively.

Table 7: Resource Commitments by regions

Region	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Central 1	5,501,303	5,776,368	6,065,187	6,368,446	6,686,869	**30,398,173**
Central 2	5,556,313	5,834,128	6,125,835	6,432,127	6,753,733	**30,702,135**
East Central	9,666,615	10,149,946	10,657,443	11,190,316	11,749,831	**53,414,152**
Eastern	28,307,290	29,722,655	31,208,788	32,769,227	34,407,688	**156,415,648**
Kampala	13,238,110	13,900,015	14,595,016	15,324,767	16,091,005	**73,148,914**
Karamoja	12,512,522	13,138,148	13,795,055	14,484,808	15,209,048	**69,139,581**
Nation-wide	79,324,498	83,290,723	87,455,259	91,828,022	96,419,423	**438,317,924**
North	16,483,090	17,307,244	18,172,607	19,081,237	20,035,299	**91,079,476**
South West	12,271,191	12,884,750	13,528,988	14,205,437	14,915,709	**67,806,074**
West Nile	7,359,447	7,727,420	8,113,791	8,519,480	8,945,454	**40,665,592**
Western	10,916,626	11,462,457	12,035,580	12,637,359	13,269,227	**60,321,251**
Totals	**201,137,005**	**211,193,855**	**221,753,548**	**232,841,225**	**244,483,287**	**1,111,408,921**

7.4.2 Investment Case Resource Gaps

The Uganda RMNCAH Investment Case is costed in three scenarios; the first scenario assumes that current intervention coverage will be maintained and is estimated to cost 1.6 billion USD for the next five years; scenario 2 assumes a rapid scale up of prioritised core and expanded packages countrywide and is estimated to cost 1.92 billion USD for five years; and scenario three assumes that the expanded package will be delivered countrywide at an estimated cost 2.2 billion USD. With the projected resource commitments of 1.1 billion USD for five years, the estimated RMNCAH resource gap is USD 500 million, 920 million and 1.1 billion for scenario 1, 2 and 3 respectively. Scenario one presents a feasible and efficient option for high impact investment with an average annual resource gap of USD 100 million. The corresponding intervention package resource gaps for scenario one are

7.4.3 Bridging the Financial Gap

In bridging the 274million USD financial gap for the investment, this Sharpened Plan links to the Health Sector Financing Strategy along the four priority themes.

- Increase domestic resources for RMNCAH in the health sector through evidence based advocacy for increased government contribution to RMNCAH. RMNCAH financing and expenditure information generated through NHA sub-account, efficiency studies and

RMNCAH strategic financial information data base will be used to reduce the current heavy reliance on OOP, and over dependence on external resources.

- Increasing efficiency and effectiveness from the existing resources by strengthening mechanisms of governance and accountability, aligning partners to the "best buys", rationalization and additionality. More efficiency gains are expected from the introduction of PBF/RBF schemes/mechanisms to scale in the public and private sector as well as focusing on costing the provision of RMNCAH priority packages.
- Increase amount and predictability of external resources for RMNCAH: Development partners are expected to remain a major financing source for RMNCAH in Uganda. Utilizing the "A Promise Renewed" pledges, the sector will require firm financial commitments from partners for RMNCAH for the Sharpened Plan and establish initiatives such as pooled funding to address the challenge of unpredictability and increasing efficiency.
- Other slower initiatives for sustainable financing of the RMNCAH gap are spelt out in the Health Sector Financing Strategy and include; Increase contribution of prepayment to the health sector such as the National Health Insurance Scheme combining resources from all other health insurance schemes in the country.

7.4.4 Limitations and assumptions

This resource mapping was faced with several limitations which should be taken into consideration in the utilisation of the data presented in this report. The following were identified as the limitations of this exercise.

- Activities reported were too broad: Most of the partners reported very broad resource commitments making it difficult to accurately allocate the activities/cost areas, objectives, intervention package and cost categories of investment case;
- Most partners only provided resources for 2016/2017: Partners were not able to provide resource commitments for all the five years. In this report, only 2016/2017 is considered as having near complete data on the available resources.
- Inaccuracies in reporting of resources along the funding chain: Where the source of funds was in country and both the funding organization and the implementing organization completed the resource mapping tool, there were challenges with matching of the funds by the two organizations and adjusting estimates for double reporting.
- Data validation: Although a data validation meetings were organized as part of this process, most of the partners were not available to validate data on the information provided. Periodic update and validation of the presented data may be needed as part of implementation monitoring of the investment case.

08: APPENDICES

Annex 1: A call to action – we all have a role to play

A number of stakeholders are committed to delivering the RMNCAH Plan in the next 5 years. Their commitments are outlined below.

Government of Uganda (National and district levels)

Since 2010, the Uganda Government is committed to the reduction of maternal and newborn death in Uganda. In this sharpened plan the government is committed to (i) providing evidence-based policy guidance and programmes prioritized to specific localities, contexts and populations, (ii) ensuring coordinated partnerships including strengthening of community systems and integration of RMNCAH services, ensuring access to lifesaving RMNCAH services for high burden districts and populations within districts, (iii) generate district and specific population strategic data to inform policies, development and funding frameworks for underserved populations, (iv) strengthen the capacity of districts to develop, implement, monitor RMNCAH programs (v) harmonise and promote standards, guidance and tools for priority RMNCAH interventions, (vi) ensure that health financing strategies incorporate access to RMNCAH services, use of data for evidence based decisions, (vii) estimate and forecast impact of individual and combined packages of RMNCAH interventions at all levels including community level.

United Nations and Other Multi Bi Lateral Organization

The United Nations and other Multi and Bi-lateral organizations commit to (i)-provide leadership in advocacy for RMNCAH outcomes for underserved populations through government structures, (ii)-support scale up and implement prioritized RMNCAH services, (iii)-providing guidance and support in development standards, quality control and regulation, (iv)-Promoting access to and the use of new service delivery approaches and technologies and (v)-Enhance national capacity for surveillance, monitoring and evaluation.

Forums in Parliament

Members of the 9th parliament have chosen to make commitments to(i)- draft and table a private member team on reproductive maternal newborn and child health, (ii)- conduct constituency outreach activities to educate the population on RMNCAH with a focus on fostering capacity to demand rights to health services, family planning and child spacing and on improving health seeking behaviour to avoid "the first delay", birth preparedness, maternal and infant nutrition, (iii)-ensure the budgetary allocation for health is increased to 15% in accordance with the Abuja Declaration to enable recruitment and retention of midwives, functionality of village health teams and availability of RMNCAH commodities and equipment.

Civil Society Organization

Civil Society Organisation's complementary role and renewed commitment is tailored towards working closely with government to (i) identify high burden districts using agreed criteria and also support community participation in the process, (ii)- monitor and track Uganda's commitments to A Promise Renewed (APR) feeding this back to the national health and development plans including reporting on the global process to stimulate actions at various levels, (iii)- advocate and support the uptake of the country led MDG 4 and 5 subnational countdown-a tool used globally to track specific RMNCAH indicators (iv) Support scale up and implement prioritized RMNCAH services (v) Track clearly defined district indicators to strengthen and guide the country in planning, as well as in allocating resources and ownership of the problem, (vi)-leverage of resources and expertise in integrating health with other sectors and work more effectively towards a shared goal of ending preventable deaths, (vii)- mobilise citizens to call on government to increase investment in high impact maternal and child interventions including more universal immunization, nutrition, EmONC coverage and elimination of HIV mother to child transmission.

Cultural Institutions

In 2013, Queen Mothers and Women Cultural Leaders Network will advocate for expansion of services to reach all the under-served populations in their respective areas of jurisdiction. Cultural institutions will contribute to mobilization of citizens to access, utilise and adhere to high impact service intervention packages, address cultural norms, taboos and practices that are detrimental to RMNCAH, utilise existing cultural institutions to address sexual and gender based violence and support all efforts to uplift the status of women and girls in society.

Interreligious Council

The interreligious Council is committed to providing holistic health services especially to mostly needy population sub groups e.g. children, women of reproductive age, pregnant mothers, People Living with HIV and orphans.

Private Sector

The Private sector commits to work with partners to map out high burden districts to ensure private facilities in high burden districts strengthen RMNCAH services. Strengthen the 'Touch & Save Lives' Campaign in underserved populations, mobilise resources for research based RMNCAH interventions in the private sector and co-invest in building capacity of private health facilities to ensure accessible RMNCAH services. This will be strengthened through fostering the public-private partnership with increased RMNCAH access to targeted communities.

Uganda Private Midwives Association

The Uganda Private Midwife Association is committed to saving lives of mothers and their new-borns. As an association they will aim at providing PMTCT, EmONC / resuscitation, post abortion care and treatment of malaria in pregnancy. They will also aim at scaling up family planning, sexual and gender based violence and adolescent health. Through these interventions they will focus on high burden underserved populations and hard to reach areas.

Health Care Workers and their Professional Associations

Several health workers and professional associations such the Association of Obstetricians and Gynaecologists of Uganda will provide technical assistance and advocacy for underserved populations. The professional associations will also support the development of standards and guidelines for the public and private sector in family planning and EmONC. Other professional bodies like the Uganda Paediatric Association will work with other professional bodies to improve the capacity of health workers as to provide quality reproductive health and MNCH services through in-service training and mentorship.

Annex 2(a): Summary Log-frame for the Sharpened Plan

Hierarchy of Aims	Objectively Variable Indicators (OVI)	Means of Verification	Timing of Data Collection	Responsibility
Goal To end preventable maternal, newborn, child and adolescent deaths and improve the health and quality of life of women, adolescents and children in Uganda	• Maternal Mortality Ratio from 438 per 100,000 live births to 219 per 100,000 live births by 2020 • Under 5 Mortality Rate from 90 per 1,000 live births to 47 per 1,000 live births by 2020 • Infant Mortality Rate from 54 per 1,000 live births to 30 per 1,000 live births by 2020 • Neonatal Mortality Rate from 27 per 1,000 live births to 15 per 1,000 live births by 2020 • Teenage pregnancy rate from 24% to 14% by 2020	Reports: UDHS 2010/11 UDHS 2015/16 UDHS 2020/21	Every 5 years	UBOS
Purpose To redirect and refocus efforts towards accelerating the attainment of universal coverage in Uganda	• Coherent, prioritised and funded country led integrated RMNCAH sharpened plan • Commitments and mutual accountability for sustained collective action by government, development partners, private sector, and CSOs • Transparency and evidence based planning and reporting to accelerate progress and deliver results	Reports HMIS MPDR Score Card	Quarterly Annually	MoH-M&E Unit DHO (MCH) Facility in-charges
Output 1 Greater coverage in high-burden districts and populations	• Proportion of regions, districts or sub-districts with previously highest mortality registering a 50% reduction in institutional mortality by 2020 • Proportion of regions, districts or sub-districts with previously highest mortality with increased budget allocations to high impact interventions by 2020. Target 90% • Percentage narrowing in midwives staffing differences between regions, districts or sub-districts with previously highest mortality rates compared to those with lowest mortality: Target 20% by 2020 • Percentage of sub counties with functional HC IIIs • Plans and decisions made based on equity, gender and rights sensitive data available (resource allocations, staff positions created, involvement of beneficiaries)	UDHS HMIS Special Surveys	Quarterly Annually	MoH-M&E Unit DHO (MCH) Facility in-charges
Output 2 Expanded coverage of high impact interventions	• Proportion of facilities with no stock outs of lifesaving commodities raised to 80% • Percentage of sub counties with functional HC IIIs: Target 100% by 2020 • Proportion of nurses, midwives, VHTs providing lifesaving interventions increased to >60% • Unmet need for contraception reduced from 34. 4% to 10% • Percentage of HC IVs with comprehensive EmONC to over 80% • Health professionals trained and providing youth friendly information and health services • Percentage children treated for diarrhoea with zinc and ORS • Percentage newborn receiving treatment for sepsis 0-28 days	HMIS Score Card Supervision reports Track20	Annual	MoH
Output 3 Non health sector interventions that impact on maternal, newborn and child vulnerability and deaths harnessed	• Teenage pregnancy and motherhood reduced from 24% to <15% • Girls married by age 18 reduced from 46% to <10% • Stunting among children Under 5 years reduced from 33% to <25% • Anaemia in non-pregnant women reduced to <20% • Households with access to improved sanitation increased from 16% to >80% • Out-of-pocket expenditures for the poor reduced to < 15%-move to relevant section	UDHS HMIS Special Surveys	Annual	MoH
Output 4 Collective action and mutual accountability for ending preventable maternal, newborn and child deaths	• All planned quality RMNCAH performance reports produced, debated and used to strengthen RMNCAH resources allocation • Proportion of commitments met on schedule by each partner (includes private sector and civil society) to >75% • Proportion of resources allocated and spent based on previously made commitments and goals to >75% • 90% of children under 5 years are registered and issued Birth Certificates by 2020 • 80% of births registered within 30 days of occurrence by 2020	Joint RMNCH program reviews NHA for RH & CH NIRA	Annual	MoH

Hierarchy of Aims	Objectively Variable Indicators (OVI)	Means of Verification	Timing of Data Collection	Responsibility
	• 50% of deaths in a given year are continuously reported, registered and certified with key characteristics by 2020 • 100% maternal and perinatal deaths in hospitals and HC IVs notified, assigned cause of death, ICD Code and registered by 2020 • 100% of deaths in hospitals have causes of death reliably determined, ICD coded and registered by 2020 • 50% of deaths in communities have probable cause of death determined, coded and registered by 2020 • Percentage of health facilities conducting maternal and perinatal deaths reviews and response			

Annex 2(b): M&E Framework

Life Cycle Phase	Outcome	Objective verifiable indicator			Means of verification				Assumption
		Indicator Description	Baseline	Target (2020)	Responsible person	Collection method	Source	Frequency	
Pre-pregnancy & Adolescence	Teenage pregnancy rate reduced from 24% to 14% by 2020	Unmet need for modern contraception (married women)	28%	29.3%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Increased use of implants
		Health professionals trained and providing youth friendly information and health services	NA	50%	MoH (M&E) unit	Non routine data sources	HFA	Annual	Adolescent friendly health services are implemented to 100% of the districts.
		Modern contraception (reproductive age)	35%	42.1%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 Years	Increased use of long term contraception
							HMIS	Annual	
		%Teenage pregnancy	25%	15%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 Years	Continued roll out of SSE
							HMIS	Annual	
		% Women with problems in accessing health care	65%	30%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Sustained socio-economic growth
Pregnancy	Reduced Maternal Mortality Ratio from 438 per 1,000 live births to 211 per 100,000 live births by 2020	% post abortion care clients who left the facility with a contraceptive method	NA		MoH [M&E] unit	Routine data	HMIS	Annual	
		% First ANC visit in 1st trimester	21%	50%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 Years	Increased capacity of health facilities
							HMIS	Annual	
		% Women attending 4+ ANC visits (anytime during pregnancy)	60%	69%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 years	Increased capacity of health facilities
							HMIS	Annual	
		% Pregnant women taking 2+ doses IPT	45%	93%	MoH [M&E] unit	Routine &Non-routine data	UDHS, MIS	5 & 2 5 years	Increased capacity of health facilities
							HMIS	Annual	
		% pregnant women accessing antiretroviral for PMTCT	88%	95%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 years	Continued roll out of Option B+
							HMIS	Annual	
		% Pregnant women told about Pregnancy danger signs	47%	80%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Availability of Job aides at lower levels
		% Pregnant women sleeping under ITNs	64%	90%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Sustainable partnerships in ANC LLIN distribution
Birth	Reduced the Infant Mortality Rate from 54 per 1,000 live births to 30 per 1,000 live births by 2020	% Institutional deliveries	73%	89%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 years	Increased capacity of health facilities offering delivery services
							HMIS	Annual	
		Increase coverage of active management of 3rd stage	6%	15%	MoH [M&E] unit	Routine data	HFA	Annual	All institutional deliveries use uterotonics
		% stillbirth rate	TBD	12%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 & 2 5 years	Staff retained in peripheral facilities
							HMIS	Annual	
Post-natal		% Postnatal care for Mothers within 48 hours	54.3%	70%	MoH [M&E] unit	Routine &Non-routine data	UDHS	5 years	Functioning VHT strategy for mobilisation
							HMIS	Annual	
		% Postnatal care for newborns within 48 hours	11%	85%	MoH [M&E] unit	Routine data	HMIS	Annual	Functioning VHT strategy for mobilisation
		% eligible HIV+ mothers that access ARVs	84%	95%	MoH [M&E] unit	Routine &Non-routine data	UPHIA Survey	5 years	Continued roll out of Option B+
							HMIS	Annual	
Neonatal	Reduced Neonatal Mortality Rate from 27 per 1,000 live	% of mothers initiating breast feeding within 1 hour	62%	80%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Maybe scale up of BFHI
		% Cases of Severe Neonatal Infection Managed	0%	85%	MoH [M&E] unit	Routine &Non-routine data,	UDHS	5 years	Availability of facility amenities (water, light and sanitation)
							HMIS	Annual	

Life Cycle Phase	Outcome	Objective verifiable indicator			Means of verification				Assumption
		Indicator Description	Baseline	Target (2020)	Responsible person	Collection method	Source	Frequency	
	births to 10 per 1,000 live births by 2020	% Districts implementing district wide Kangaroo care for LBW	10%	60%	MoH [M&E] unit	Routine &Non-routine data	HMIS	Annual	Available space and trained health workers
							HFA	Annual	
Childhood	Reduced Under 5 Mortality Rate from 90 per 1,000 live births to 53 per 1,000 live births by 2020	% Facilities with IMCI-trained clinicians	39%	90%	MoH [M&E] unit	Routine & Non-routine data	HMIS	Annual	Staff retention in peripheral units
		% Districts with >80% full immunisation coverage	0%	90%	MoH [M&E] unit	Routine & Non-routine data	Immunization Survey	3 years	Improved cold chain management
							HMIS	Annual	
		Prevalence of malaria in U5s	30% (2015)	<25%	MoH [M&E] unit	Non-routine data	MIS	2 - 5 years	Sustained LLIN distribution
		% children fully immunized	55%	80%	MoH [M&E] unit	Routine & Non-routine data	UDHS	5 years	Improved cold chain management
							Immunization Survey	3 years	
		% Under-5 children that slept under LLINs	62%	90%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Sustained LLIN distribution at ANC
		% HIV+ children accessing ARVs	52%	90%	MoH [M&E] unit	Routine & Non-routine data	UPHIA Survey	5 years	Option B+ scale up
							HMIS	Annual	
		% children with fever treated with ACTs	52.1%	85%	MoH [M&E] unit	Non-routine data sources	UDHS, MIS	5 years	VHT strategy implementation
		% children with fever treated within 24 hours	42%	80%	MoH [M&E] unit	Non-routine data sources	UDHS, MIS	5 years	VHT strategy implementation
		% children with ARI treated with antibiotics	47.4%	85%	MoH [M&E] unit	Non-routine data sources	UDHS	5 years	Policy on antibiotics at community level
		% Children with diarrhoea receiving Zinc	40%	85%	MoH [M&E] unit	Non-routine data sources	UDHS	5 years	Increased private sector contribution
		% Under-5 that receive vitamin A supplementation	54%	80%	MoH [M&E] unit	Routine & Non-routine data	UDHS	5 years	Sustainable partnerships; long-term funding
							HMIS	Annual	
		% children Under-5 that take ORT/Fluids for diarrhoea	47%	85%	MoH [M&E] unit	Non-routine data sources	UDHS	5 Years	Sustainable partnerships; long-term funding
Cross-cutting areas	To end preventable maternal, newborn, child and adolescent deaths and improve the health and quality of life of women, adolescents and children in Uganda	% DHOs with capacity to analyse data, plan and implement RMNCAH programs	Baseline	95%	MoH [M&E] unit	Routine & Non-routine data	HMIS	Annual	ADHOs (MCH) per district
		Prevalence of stunting among children Under-5 years	29%	<20%	MoH [M&E] unit	Routine & Non-routine data	UDHS,	5 years	Minimal social disasters
		% Anaemia in pregnancy	Baseline	20%	MoH [M&E] unit	Routine & Non-routine data	UDHS, MIS	5 years	Sustained socioeconomic growth
		% Households with improved sources of drinking water	74.8%	85%	MoH [M&E] unit	Routine & Non-routine data	Household Survey	2 -3 Years	Sustained socioeconomic growth
		% Girls married by age 18	46%	10%					
		% households with improved sanitation	33.8%	50%	MoH [M&E] unit	Routine & Non-routine data	Household Survey	2 -3 Years	
		% facilities holding MPDSR	12.8%	90%	MoH [M&E] unit	Routine & Non-routine data	HFA	5 years	Incentivised QI
							HMIS	Annual	

	Outcome	Objective verifiable indicator			Means of verification				Assumption
		Indicator Description	Baseline	Target (2020)	Responsible person	Collection method	Source	Frequency	
Health system strengthening	Strengthened Procurement and supply chain management	% Facilities in district reporting no stock outs of one or more RMNCAH lifesaving commodities	TBD	80%	MoH [M&E] unit	Routine data	HMIS	Quarterly	Output indicator
		% districts with district level pharmaceutical staff in place	TBD	100%	MoH	Routine	HRIS	6 monthly	Input indicator
	Health workforce	% Narrowing in midwives staffing (public + private) differences between districts and within districts		50%	MoH, DHO	Administrative records	HRIS	Annually	Input indicator
		Proportion of regional hospitals offering in-service reskilling that quarter	TBD	100%	Hospital Superintendent	Administrative records	Hospital	Quarterly	Output indicator
		Health workers newly recruited at hard to reach PHC facilities in the past 12 months	TBD		DHO	Administrative records	District	Annually	Output indicator
		%of hard to reach villages in district with CHEWs/VHTs recruited	TBD	60%	DHO	Administrative records	District	Annually	Output indicator
		% districts with health managers trained in health leadership and management	10%	100%	MoH	Training report	District	Annually	Input indicator
	Information/ monitoring and evaluation	% Districts with timely RMNCAH analytical quarterly and annual reports	0	100%	DHO	Reports	District	Quarterly	Output indicator
		% National RMNCAH analytical quarterly and annual reports produced on time	0	100%	MoH	Reports	MoH	Quarterly	Output indicator
		% Private sector outlets reporting in HMIS in district	TBD	80%	DHO	Reports	District	Quarterly	Output indicator
	Health financing	% private sector providers included in results based funding	0%	50%	DHO	Reports	District	Quarterly	Output indicator
		Out-of-pocket expenditures on RMNCAH as % of total health expenditure	66%	15%	MoH	Study	NHS	Annual	Output indicator
	Stewardship and governance	Support supervision reports showing progress from previous action points	NA	100%	RPMT, Districts, professional councils	Reports	District	Quarterly	Output indicator
		Annual RMNCAH Assembly held	1	1	MoH, DHO	Reports	MoH, District	Quarterly	Output indicator
		% Districts with previously the highest mortality rates registering a 50% reduction in mortality	0	90%	MoH	BDR	CRVS	Annual	CRVS scale up
		% sub-districts with previously the highest mortality rates registering a 50% reduction in mortality	0	90%	DHO	BDR	CRVS	Annual	
		% narrowing in midwives staffing differences between districts	TBD	20%	MoH	Reports	MoH	Quarterly	Output indicator
		% narrowing in midwives staffing differences between sub-districts	TBD	20%	DHO	Reports	District	Quarterly	Output indicator
		% facilities reporting at least 20% reduction in absenteeism of health workers from last year	TBD	100%	DHO	Reports	District	Quarterly	Output indicator
		Index of service readiness by district and for intervention package by level	TBD	100%	RPMT	Reports	District	Quarterly	Index to be developed
	Service delivery: access / availability	% deliveries in EmONC Facilities in district	TBD	100%	DHO	HMIS	HMIS	Monthly	
		% HC IVs in district performing cEmONC	TBD	100%	DHO	HMIS	HMIS	Monthly	
		% of facility births receive high-quality care	TBD	90%	DHO, MOH	Quality Assessments	Assessment reports	Quarterly	

	Outcome	Objective verifiable indicator			Means of verification				Assumption
		Indicator Description	Baseline	Target (2020)	Responsible person	Collection method	Source	Frequency	
		% HC IIIs in district performing bEmOC	TBD	100%	DHO	HMIS	HMIS	Quarterly	
		% sub-Counties with EmOC facilities	80%	100%	MoH	Administrative reports		Annual	
		% HSDs with Ambulances covering more than 50 kms per day (average of the last two quarters) (%)	TBD	100%	DHO	Administrative reports		6 monthly/annually	
		% facilities /VHTs with RMNCAH case management quality standards met	TBD	100%	DHO, National teams	Supervision tool	Supervision report	Quarterly	Case Management Standards for the priority interventions
		% HSD with functioning referral monitoring system (referral Map, referral completion)	TBD	100%	DHO	HMIS	HMIS	Quarterly	
		Direct obstetric case fatality rate; Intrapartum and very early neonatal death rate	TBD	<1%	Medical sup	MPDR			Output for large volume hospitals
		HSD with emergency transportation time to cEmONC less than 30 minutes	TBD	100%	DHO	Administrative reports		annually	Output indicator
	Community level	% Pregnant women registered in the first trimester out of the total expected pregnancies (%)	TBD	100%	DHO	VHT register	HMIS	Monthly	Output indicator
		Registered pregnant women who delivered at health facility (%)	TBD	100%	DHO	VHT register	HMIS	Monthly	Output indicator
		%Sick newborns identified and referred by CHWs	TBD	100%	DHO	VHT register	HMIS	Monthly	Output indicator
		% CHWs using Gentamicin and dispersible amoxicillin to manage Possible Bacterial infection in newborns	TBD	100%	DHO	VHT register	HMIS	Monthly	Output indicator
		% deliveries in community given Misoprostol	TBD	100%	DHO	VHT register	HMIS	Monthly	Output indicator
	CRVS	Development and Adoption of the National CRVS Strategy (including communication and M&E Plans)	-	-	NIRA	-	NIRA	One off	Output indicator
		%health facilities notifying all birth into the births registration system	?	100%	Facility In-charge	CRVS forms	NIRA	Annual	Output indicator
		%health facilities using ICD for death registration	?	100%	Facility In-charge	CRVS forms	NIRA	Annual	Output indicator
		% pilot/scale up districts using community-based verbal autopsy tool for cause-of-death notification	0	100%	DHO		NIRA	Annual	Output indicator
		% Registered births in a given year	60%	90%	NIRA, DHO	BDR tools	NIRA	Annual	Output indicator
		% Registered deaths in a given year	?	60%	NIRA, DHO	BDR tools	NIRA	Annual	Output indicator

Annex 3: Bottleneck Analysis Methodology

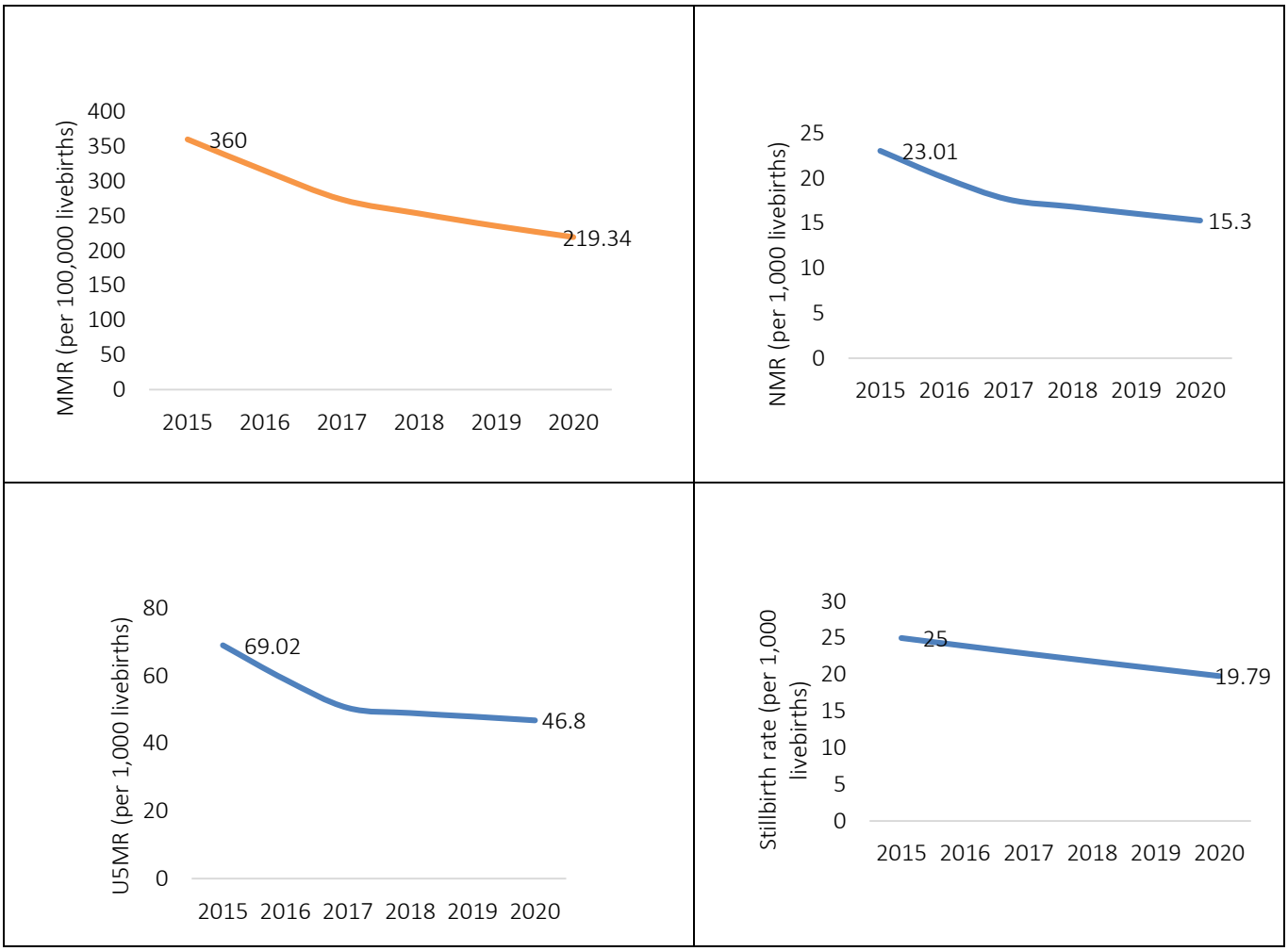
A bottleneck analysis (based on Tanahashi framework) was done to understand hindering critical systemic bottlenecks hindering attainment of effective coverage of the key RMNCH+A interventions at national level. The focus of the BNA was on the relationship between six determinants of coverage. Both supply side and demand side bottlenecks (components of health system that limit the overall capacity or performance) are affecting scaling up of RMNCAH interventions in the country. Unless the bottlenecks are targeted, efforts to strengthen health systems will have little effect, thus identifying bottlenecks in health service delivery helps in setting priorities. The six determinants are;

1. Availability of essential commodity inputs such as drugs, vaccines and supplies
2. Availability of human resources for the delivery of high impact, evidence based interventions
3. Geographical accessibility of facility, outreach and community services to the clients
4. Initial utilization of multi-contact health services, that can also be influenced by the financial accessibility, knowledge and perception of the service
5. Timely continuous utilization as per recommended contacts for services
6. Effective, quality coverage of the population in need of an intervention who have received adequate components of that intervention in a timely and complete manner

This bottleneck analysis approach exercise was an opportunity to break the walls of vertical programmes and promote an integrated RMNCAH approach along the service delivery platforms (community/households, population/outreach and individual/clinical level). Tracer interventions were selected not only as proxies for all interventions in each delivery platform but also to reflect in an integrated manner the various programme areas. The logic behind conducting the bottleneck using one intervention as a “tracer” is that the coverage determinants for each intervention in a package are delivered in a similar enough manner that the constraints identified for that tracer are assumed to adequately reflect the system barriers facing other interventions in the same package and platform. The BNA was followed by a causal analysis, which identified the root causes of bottlenecks using the “5 WHYs” approach.

The bottleneck and root-causes analyses were performed by a multi-disciplinary group of experts working at central and district levels, including staff from mainly MoH, UN agencies, bilateral partners and NGOs. Participants were first oriented on how to conduct a BNA exercise before being split in three groups following the service delivery levels.

Annex 4(a): Projected Mortality Reduction (Maternal, Newborn, Child and Stillbirths)



Annex 4(b): Additional Lives saved by intervention for mothers, newborns and children by interventions

Program Area	Interventions	Impact per Year					
		2016	2017	2018	2019	2020	Total
Newborn	Promotion of breastfeeding	495	908	1,305	1,673	2,010	6391
	Labour and delivery management	349	688	1,016	1,331	1,629	5013
	Clean postnatal practices	604	1,073	1,010	955	904	4546
	KMC - Kangaroo mother care	372	723	709	694	678	3176
	Chlorhexidine	230	408	384	363	344	1729
	Antibiotics for pPRoM	99	197	292	385	473	1446
	Full supportive care for sepsis/pneumonia	211	305	267	231	195	1209
	Injectable antibiotics	193	280	245	211	178	1107
	Neonatal resuscitation	75	147	218	285	350	1075
	IPTp - Pregnant women protected via IPT or LLIN	68	135	201	267	331	1002
	Folic acid supplementation/fortification	104	209	208	207	206	934
Maternal	Maternal Sepsis case management	139	259	240	221	202	1061
	Labour and delivery management	79	151	218	278	331	1057
	AMTSL--active management of the third stage of labour	80	152	217	274	323	1046
	Post abortion case management	88	172	170	167	164	761
	MgSO4 management of eclampsia	69	122	163	191	207	752
	MgSO4 - Management of pre-eclampsia	37	72	105	136	164	514
	Hypertensive disorder case management	31	60	88	114	137	430
	Antibiotics for pPRoM	21	41	61	79	97	299
	Clean birth practices	11	21	31	40	49	152
Child (1 - 59 months)	Oral antibiotics for pneumonia	1,454	2,596	2,477	2,432	2,362	11,321
	Oral antibiotics for pneumonia	1,454	2,596	2,477	2,432	2,362	11,321
	Antimalarials - Artemesinin compounds for malaria	1,244	2,404	2,412	2,413	2,406	10,879
	ORS - oral rehydration solution	1,319	2,150	1,988	1,849	1,710	9,016
	Pneumococcal	456	1,387	1,786	1,903	2,057	7,589
	Zinc - for treatment of diarrhea	468	762	704	655	606	3,195
	Therapeutic feeding - for severe wasting	312	561	538	525	510	2,446
	Improved sanitation - Utilization of latrines or toilets	148	288	422	549	667	2,074
	LLIN/IRS	208	418	419	419	418	1,882
	Rotavirus	112	314	387	403	427	1,643
	H. influenzae b	29	274	370	373	416	1,462

Annex 5: Assumptions for modelling

	Community + HC II	HC III	HC IV + Hospital	Focus
Maternal Mortality				
Obstetric haemorrhage	30%	40%	70%	Availing misoprostol at community and HC II level, can save about 30% of women without further referral
Obstructed labour and uterine rupture	0%	5%	90%	Ensuring ambulance referral system for HSD Ensuring all HC IV and above have cEmONC and bEmONC for HC III
Postpartum sepsis/Complications of unsafe abortion	0%	30%	70%	Availability of Amoxicillin and MVA at HC II level for PROM or removal of retained products may save up to 30% without need for surgical intervention at higher levels
Indirect causes aggravated by pregnancy	20%	30%	20%	Mainly malaria, anaemia, HIV/AIDS and cardiovascular disease managed through improved quality and continued ANC
Newborn Mortality				
Preterm	40%	50%	60%	40% of preterm babies could be saved by KMC at community level
Asphyxia	0%	75%	70%	No community level management but all HCs should have basic resuscitation capacity
Infections	40%	50%	60%	Providing oral amoxicillin at community level Introduce Outpatient management of PSBI
Child Mortality				
Malaria	60%	40%	30%	The functioning of community health workers within iCCM and ensuring IMCI at facility level
Pneumonia	20%	50%	70%	
Diarrhoea	60%	40%	20%	
Adolescent SRH	60%	40%	10%	Three point access model to scale; equipping health facilities, schools and communities to provide adolescent responsive services
Family Planning	60%	40%	10%	Focusing on distribution at community level, postpartum long acting contraception and accessible pregnancy test

Annex 6: Summary of Strategic Framework

GOAL: TO END PREVENTABLE MATERNAL,NEWBORN, CHILD AND ADOLESCENT DEATHS AND IMPROVE THE HEALTH AND QUALITY OF LIFE OF WOMEN, ADOLESCENTS AND CHILDREN IN UGANDA	
Impact	1. Reduced Maternal Mortality Ratio from 438 per 1,000 live births to 211 per 100,000 live births by 2020 2. Reduced Under 5 Mortality Rate from 90 per 1,000 live births to 53 per 1,000 live births by 2020 3. Reduced the Infant Mortality Rate from 54 per 1,000 live births to 30 per 1,000 live births by 2020 4. Reduced Neonatal Mortality Rate from 27 per 1,000 live births to 10 per 1,000 live births by 2020 5. Teenage pregnancy rate reduced from 24% to 14% by 2020
PURPOSE: TO REDIRECT AND REFOCUS EFFORTS TOWARDS ACCELERATING THE ATTAINMENT OF UNIVERSAL COVERAGE IN UGANDA	
Key result	1. Coherent, prioritised and funded country led integrated RMNCAH sharpened plan 2. Commitments and mutual accountability for sustained collective action by government, development partners, private sector, and CSOs 3. Transparency and evidence based planning and reporting to accelerate progress and deliver results

STRATEGIC OBJECTIVES			
1.0 To accelerate greater coverage in high-burden districts and populations	2.0 To expand coverage of high impact interventions in all districts	3.0 To harness non health sector interventions that impact on maternal, newborn, child and adolescent vulnerability and deaths	4.0 To develop and sustain collective action and mutual accountability for ending preventable maternal, newborn and child deaths
Key Result			
1.1 High burdened geographical areas and populations identified and differentially supported. 1.2 Tested models for reaching marginalised and vulnerable populations scaled up 1.3 Increased physical and financial access to facilities that offer RMNCAH services 1.4 Reduced midwifery coverage disparities between regions and within districts 1.5 Equity and gender sensitive data and information used for decision making within a rights based approach	2.1 Increased critical cadre at health facility level (at least to HC III level) 2.2 Enhanced access to and use of life-saving RMNCAH commodities and equipment 2.3 Scaled and sustained demand and supply of highest impact, evidence-based interventions 2.4 Advocacy/Develop appropriate lifesaving task-shifting regulations and policies implemented (expand to all levels) 2.5 Enhanced uptake of community level RMNCAH interventions	3.1 RMNCAH prevention targets and services integrated in non-health programs 3.2 Women, men, boys or girls are empowered to make RMNCAH decisions 3.3 Environmental health factors e.g., water, sanitation and hygiene, Education, Gender 3.4 RMNCAH multisectoral task force Established and functional	4.1 Functioning transparency and mutual accountability mechanism 4.2 Linking results to resources 4.3 Unified MNCA survival voice, shared targets in the RMNCAH score card, harmonized approaches and common metrics across levels and partnerships 4.4 Mutual assessments of progress in implementing agreed commitments 4.5 Increased visibility and use of RMNCAH scorecard. 4.6 A functional National Civil Registration and Vital Statistics system in Uganda
Indicators and Targets			
• Proportion of regions, districts or sub-districts with previously the highest mortality rates registering a 50% reduction in institutional mortality by 2020 • Proportion of regions, districts or sub-districts with previously highest mortality rates with increased budget allocations to high impact	• Proportion of facilities with no stock outs of lifesaving commodities raised to 80% • Percentage of sub counties with functional HC IIIs: Target 100% by 2020 • Proportion of nurses, midwives, VHTs	• Teenage pregnancy and motherhood reduced from 24% to <15% • Girls married by age 18 reduced from 46% to <10% • Stunting among children Under 5 years reduced from 33% to <25% • Anaemia in non-pregnant women	• All planned quality RMNCAH performance reports produced, debated and used to strengthen program management and resources allocation • Proportion of commitments met on schedule by each partner (includes private sector and civil society) to >75%

interventions by 2020. Target 90% • Percentage narrowing in midwives staffing differences between regions, districts or sub-districts with previously highest mortality rates compared to those with lowest mortality: Target 20% by 2020 • Percentage of sub counties with functional HC IIIs • Plans and decisions made based on equity, gender and rights sensitive data available (resource allocations, staff positions created, involvement of beneficiaries)	providing lifesaving interventions increased to >60% • Unmet need for contraception reduced from 34. 4% to 10% • Percentage of HC IVs performing comprehensive EmONC to over 80% • Health professionals trained and providing youth friendly information and health services • Percentage children treated for diarrhoea with zinc and ORS • Percentage newborn receiving treatment for sepsis 0-28 days	reduced to <20% • Households with access to improved sanitation increased from 16% to >80% • Out-of-pocket expenditures for the poor reduced to < 15%	• Proportion of resources allocated and spent based on previously made commitments and goals to >75% • 90% of children under 5 years are registered and issued Birth Certificates by 2020 • 80% of births registered within 30 days of occurrence by 2020 • 50% of deaths in a given year are continuously reported, registered and certified with key characteristics by 2020 • All maternal and perinatal deaths occurring in hospitals and HC IVs to be notified, assigned cause of death, ICD Code and registered by 2020 • 100% of deaths in hospitals have causes of death reliably determined, ICD coded and registered by 2020 • 50% of deaths in communities have probable cause of death determined, coded and registered by 2020 • Percentage of health facilities conducting maternal and perinatal deaths reviews and response

Annex 7: District Categories by selected RMNCAH indicators along the continuum of care

Indicators	Highest Burden Districts	Middle burden Districts	Lowest Burden Districts
Unmet Need for Family Planning	Wakiso, Arua, Kampala, Mubende, Kibaale, Tororo, Kasese, Mukono, Iganga, Yumbe, Kamuli, Mayuge, Kabale, Jinja, Mbale, Gulu, Isingiro, Ntungamo, Mbarara, Hoima, Lira, Nebbi, Oyam, Bugiri, Luwero, Apac, Buikwe, Pallisa, Kabarole, Rakai, Busia, Manafwa, Buyende, Kayunga, Kyenjojo, Kamwenge, Kiruhura, Rukungiri, Mityana, Sironko	Namutumba, Kisoro, Amuria, Zombo, Kole, Luuka, Adjumani, Kaliro, Kumi, Soroti, Agago, Alebtong, Butaleja, Namayingo, Kanungu, Ibanda, Sheema, Koboko, Masindi, Bushenyi, Kitgum, Kyegegwa, Kaberamaido, Kiryandongo, Serere, Bududa, Amuru, Maracha, Budaka, Masaka, Pader, Dokolo, Kibuku, Kyankwanzi, Sembabule, Lwengo, Bukedea, Nakaseke, Mitooma, Bundibugyo	Bulambuli, Mpigi, Nakasongola, Katakwi, Amolatar, Moyo, Lamwo, Ngora, Nwoya, Kiboga, Kalungu, Rubirizi, Buhweju, Otuke, Gomba, Kapchorwa, Bukomansimbi, Kotido, Kween, Nakapiripirit, Kaabong, Buliisa, Bukwo, Buvuma, Napak, Butambala, Lyantonde, Amudat, Abim, Moroto, Ntoroko, Kalangala
Neonatal Mortality	Wakiso, Kampala, Arua, Kibaale, Rakai, Mubende, Kasese, Mukono, Yumbe, Kabale, Hoima, Isingiro, Ntungamo, Mbarara, Nebbi, Kabarole, Luwero, Gulu, Buikwe, Masaka, Kyenjojo, Lira, Kamwenge, Sembabule, Lwengo, Tororo, Oyam, Mbale, Iganga, Kayunga, Apac, Kamuli, Mpigi, Mayuge, Kiruhura, Jinja, Rukungiri, Mityana, Kisoro, Pallisa	Zombo, Bugiri, Adjumani, Masindi, Manafwa, Kanungu, Kyegegwa, Ibanda, Sheema, Kalungu, Kiryandongo, Koboko, Bushenyi, Kole, Busia, Buyende, Sironko, Maracha, Agago, Gomba, Alebtong, Bundibugyo, Bukomansimbi, Kyankwanzi, Amuria, Kitgum, Kumi, Mitooma, Nakaseke, Soroti, Amuru, Butaleja, Namutumba, Pader, Dokolo, Nakasongola, Luuka, Kaliro, Moyo, Kotido	Namayingo, Kaberamaido, Bududa, Serere, Budaka, Nakapiripirit, Kaabong, Kibuku, Kiboga, Amolatar, Bukedea, Butambala, Bulambuli, Rubirizi, Napak, Lamwo, Lyantonde, Buhweju, Katakwi, Nwoya, Ngora, Buliisa, Otuke, Amudat, Abim, Moroto, Buvuma, Kapchorwa, Kalangala, Kween, Bukwo, Ntoroko
Teenage Pregnancy	Wakiso, Kampala, Kibaale, Tororo, Kasese, Mubende, Iganga, Kamuli, Mbale, Mayuge, Jinja, Mukono, Hoima, Bugiri, Pallisa, Arua, Gulu, Kabarole, Manafwa, Lira, Luwero, Busia, Oyam, Rakai, Buikwe, Buyende, Kyenjojo, Kamwenge, Apac, Sironko, Sembabule, Kayunga, Amuria, Kumi, Kabale, Namutumba, Soroti, Mityana, Sheema, Butaleja	Luuka, Kaliro, Isingiro, Ntungamo, Yumbe, Mbarara, Namayingo, Masindi, Kaberamaido, Serere, Bududa, Budaka, Kyegegwa, Kole, Kibuku, Kiryandongo, Agago, Alebtong, Bukedea, Masaka, Nebbi, Bulambuli, Kotido, Lwengo, Kitgum, Bundibugyo, Nakapiripirit, Kaabong, Katakwi, Amuru, Kyankwanzi, Mpigi, Kiruhura, Pader, Rukungiri, Dokolo, Nakaseke, Ngora, Napak, Kisoro	Nakasongola, Amolatar, Kanungu, Ibanda, Kalungu, Zombo, Bushenyi, Lamwo, Adjumani, Kiboga, Amudat, Nwoya, Abim, Kapchorwa, Moroto, Gomba, Koboko, Kween, Bukomansimbi, Maracha, Mitooma, Bukwo, Otuke, Buliisa, Buvuma, Moyo, Butambala, Rubirizi, Buhweju, Lyantonde, Ntoroko, Kalangala
Child Mortality	Wakiso, Kibaale, Kasese, Arua, Kabale, , Hoima, Kampala, Isingiro, Ntungamo, Mbarara, Tororo, Kabarole, Iganga, Mubende, Kamuli, Mayuge, Jinja, Kyenjojo, Kamwenge, Mukono, Mbale, Yumbe, Rakai, Kiruhura, Bugiri, Gulu, Rukungiri, Lira, Kisoro, Oyam, Luwero, Pallisa, Nebbi, Busia, Apac, Buyende, Buikwe, Masindi, Manafwa, Kyegegwa	Kanungu, Ibanda, Sheema, Kiryandongo, Bushenyi, Kayunga, Kotido, Nakapiripirit, Sironko, Kaabong, Namutumba, Bundibugyo, Mityana, Luuka, Kaliro, Amuria, Masaka, Namayingo, Mitooma, Kumi, Sembabule, Napak, Soroti, Lwengo, Kole, Butaleja, Zombo, Agago, Adjumani, Alebtong, Mpigi, Kaberamaido, Serere, Bududa, Kitgum, Koboko, Budaka, Kibuku, Amudat, Amuru	Abim, Bukedea, Pader, Dokolo, Maracha, Moroto, Kyankwanzi, Rubirizi, Bulambuli, Buhweju, Nakaseke, Kalungu, Katakwi, Nakasongola, Amolatar, Gomba, Buliisa, Ngora, Moyo, Lamwo, Bukomansimbi, Nwoya, Kiboga, Otuke, Kapchorwa, Kween, Butambala, Bukwo, Lyantonde, Ntoroko, Buvuma, Kalangala

- The prioritisation is based on burden due to numbers rather than rates. This allows the country to target geographical areas that are contributing most to the results indicated in the Sharpened plan goals and quickly achieve impact. This is in line with strategic shift 1 which recognises that business as usual has been focusing on areas that have higher rates and thus failing to achieve the desired rate of improvement.
- The burden is calculated from population census (2014) preliminary results to derive district populations and the UDHS 2011, which provides regional rates. The assumption was that regional rates apply to all the districts in the region.
- The prioritisation is based the priority technical intervention areas namely family Planning, maternal/newborn, child and Adolescent Health. Of the 112 districts in the country, the "highest burdened" 40 Districts generally contribute 60% of the national burden, the next 40 districts contribute 30% and the rest of the districts 10%
- Please note that Strategic Shift 2 works towards every district in the country to strengthen intervention that reach district specific high burdened populations.
- It is also expected that districts have peculiarities that will not adequately be addressed at national level. So the increased attention to the national priority districts will still work towards assisting those districts to reach the high burdened with effective services, thus reducing intra-district RMNCAH disparities.

Annex 8: Details of the five year plan costs (US $ millions)

Service Packages	2016	2017	2018	2019	2020	Total
Family Planning	34.74	37.86	41.12	47.08	50.84	211.6
Skilled Birth Attendance	83.91	86.93	86.99	88.33	87.67	433.8
Post abortion and Sepsis Management	1.13	1.26	1.24	1.21	1.18	6.0
Child Health	46.56	51.14	53.42	55.41	56.92	263.5
Integrated Package at Community level	40.20	43.56	44.13	45.75	47.18	220.8
Sub Totals	*206.54*	*220.76*	*226.89*	*237.78*	*243.79*	*1,135.8*
Social Behavioral Change Communication						
Advocacy	9.87	10.04	9.24	8.83	8.54	46.5
Communication, Media and Outreach	5.38	5.77	6.20	6.59	7.14	31.1
Sub Totals	*15.25*	*15.81*	*15.43*	*15.42*	*15.68*	*77.60*
Health Systems Strengthening						
Human Resources						
Health workforce Remunerations	80.70	87.12	93.17	98.55	103.86	463.4
Training	6.57	6.35	5.92	5.65	5.06	29.5
Supervision	2.08	2.08	2.08	2.08	2.08	10.4
M&E/Knowledge Management and Learning	2.46	2.45	2.55	2.29	2.44	12.2
Infrastructure refurbishment	16.53	15.83	15.83	10.41	4.46	63.0
Health Financing	2.10	2.10	2.11	2.11	2.11	10.5
Health Information System	5.88	7.92	10.02	11.98	13.81	49.6
Leadership and Governance	10.13	9.89	9.05	8.65	8.54	46.3
Sub Totals	*126.46*	*133.74*	*140.72*	*141.71*	*142.37*	*685.00*
Civil Registration and Vital statistics	5.93	4.95	3.23	3.24	3.15	20.49
Totals	354.17	375.26	386.27	398.15	404.99	1,918.9

Annex 9a: Assumptions used in undertaking the RMNCAH resource mapping

1. In some cases, resource commitments were reported as block health service delivery interventions like "procurement of health commodities" under National medical stores submissions. In cases where the activities cover many health functions, it was ***assumed that 25 % of those costs are related to RMNCAH***.
2. Given the difficulty in getting resource commitments for all the five years and with most partners providing a complete picture of resources for year one (2016/2017) only, the total resources for the five years have been calculated using year 2016/2017 as the base with an ***assumption of 5 % annual increase of the reported resource commitments.***
3. Resources along the funding chain. Where the resources where not consistent along the funding chain, ***the reported amount at the lowest funding chain was used***. For example, if UNICEF received money from KOICA and UNICEF used these funds to finance a CHAI activity and the resources do not match, the resources reported by CHAI were used.
4. Allocation of activities by investment case objectives, interventions, packages and cost categories. Given the broad reporting of activities by the RMNCAH players, the activities were allocated to the investment case objectives, interventions, packages and cost categories based on the weight of that activity by the various categories. For example, if an activity involved several other specific activities but the bigger part of the activity involved training community health volunteers on iCCM, then the activity would be classified under child health objective, community package, intervention as training and cost category as in-service training costs.
5. Allocation of resources across the districts in a region. Where a partner completed the tool and reported that they are implementing interventions across the districts and provided only a block figure for the region, resource commitments per district were identified by dividing the regional resource commitments by number of districts.

Annex 9b: Resource commitments by cost category

Cost Category	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Infrastructure (construction or rehab)	14,400,106	15,120,111	15,120,111	15,876,117	16,669,923	77,186,368
Medical commodities	55,290,367	58,054,885	58,054,885	60,957,629	64,005,511	296,363,276
Medical equipment	5,918,276	6,214,190	6,214,190	6,524,900	6,851,145	31,722,701
Meetings	3,753,462	3,941,135	3,941,135	4,138,191	4,345,101	20,119,023
Non-medical equipment	483,966	508,164	508,164	533,573	560,251	2,594,118
Non-medical supplies	10,263,555	10,776,733	10,776,733	11,315,569	11,881,348	55,013,937
Other	52,834,404	55,476,124	55,476,124	58,249,930	61,162,427	283,199,009
Other staff remuneration/incentives	477,482	501,356	501,356	526,423	552,745	2,559,361
Overhead/General administration	9,190,115	9,649,621	9,649,621	10,132,102	10,638,707	49,260,167
Professional and Technical Services (TA)	14,808,287	15,548,701	15,548,701	16,326,136	17,142,443	79,374,268
Program management/ supervision	40,000	42,000	42,000	44,100	46,305	214,405
Program Management/Supervision	12,824,034	13,465,236	13,465,236	14,138,498	14,845,423	68,738,427
Publication, Advertising, Communication, Printing, etc.	1,623,509	1,704,684	1,704,684	1,789,918	1,879,414	8,702,210
Research	5,810,219	6,100,729	6,100,729	6,405,766	6,726,054	31,143,498
Salaries	2,695,016	2,829,767	2,829,767	2,971,255	3,119,818	14,445,622
Training (in-service)	10,610,209	11,140,719	11,140,719	11,697,755	12,282,643	56,872,045
Tuition (post grad/pre-service training)	114,000	119,700	119,700	125,685	131,969	611,054
Grand Total	201,137,005	211,193,855	211,193,855	221,753,548	232,841,225	1,078,119,489

Annex 9c: District level RMNCAH resource commitments

Table 8: The 10 Highest Funded Districts

District	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Kampala	13,238,110	13,900,015	14,595,016	15,324,767	16,091,005	63,337,427
Soroti	5,166,176	5,424,484	5,695,709	5,980,494	6,279,519	28,079,283
Lira	4,781,893	5,020,987	5,272,037	5,535,639	5,812,421	26,231,947
Serere	4,624,733	4,855,969	5,098,768	5,353,706	5,621,392	24,380,811
Abim	3,659,080	3,842,034	4,034,135	4,235,842	4,447,634	19,980,853
Butaleja	3,463,382	3,636,551	3,818,378	4,009,297	4,209,762	18,882,643
Amuru	3,253,817	3,416,508	3,587,333	3,766,700	3,955,035	16,841,334
Adjumani	2,317,534	2,433,410	2,555,081	2,682,835	2,816,977	12,283,651
Hoima	1,887,930	1,982,327	2,081,443	2,185,515	2,294,791	10,388,852
Bundibugyo	1,852,427	1,945,048	2,042,301	2,144,416	2,251,636	7,984,191

Table 9: The 12 least Funded Districts

Districts	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Alebtong	126,604	132,935	139,581	146,561	153,889	640,605
Amolatar	78,094	81,999	86,099	90,404	94,924	753,363
Arua	342,876	360,020	378,021	396,922	416,768	1,589,867
Dokolo	92,166	96,774	101,613	106,694	112,028	471,690
Kagadi	61,244	64,307	67,522	70,898	74,443	338,414
Kakumiro	61,244	64,307	67,522	70,898	74,443	589,550
Kisoro	267,854	281,247	295,309	310,074	325,578	1,302,325
Manafwa	121,630	127,711	134,097	140,801	147,841	598,682
Nakaseke	61,244	64,307	67,522	70,898	74,443	630,202
Otuke	301,299	316,364	332,182	348,791	366,230	1,428,868
Rubanda	107,143	112,500	118,125	124,031	130,233	743,523
Sironko	231,775	243,364	255,532	268,308	281,724	998,979

Annex 9d: Total RMNCAH Commitments by Financing Agent

Financing Agent	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
AMREF	2,881,046	3,025,098	3,176,353	3,335,170	3,501,929	15,919,596
CHAI	1,354,194	1,421,904	1,492,999	1,567,649	1,646,031	7,482,777
DFID	26,295,981	27,610,780	28,991,319	30,440,885	31,962,930	145,301,896
GAVI	14,070,226	14,773,737	15,512,424	16,288,045	17,102,447	77,746,879
GOU	6,378,479	6,697,403	7,032,273	7,383,887	7,753,081	35,245,124
Islamic Development Bank	4,679,510	4,913,485	5,159,159	5,417,117	5,687,973	25,857,245
JSI	184,165	193,373	203,042	213,194	223,854	1,017,628
KOICA	3,067,500	3,220,875	3,381,919	3,551,015	3,728,565	16,949,874
Living Goods	791,246	830,809	872,349	915,966	961,765	4,372,135
Marie Stopes Uganda	2,315,489	2,431,264	2,552,827	2,680,468	2,814,492	12,794,541
PSI	764,489	802,714	842,850	884,992	929,242	4,224,286
Save the Children Uganda	3,827,293	4,018,658	4,219,591	4,430,570	4,652,099	21,148,212
SIDA	7,163,884	7,522,078	7,898,182	8,293,091	8,707,745	39,584,979
SPAIN	3,600,701	3,780,736	3,969,772	4,168,261	4,376,674	19,896,143
UNFPA	29,179,734	30,638,721	32,170,657	33,779,190	35,468,149	161,236,450
UNICEF	10,840,112	11,382,118	11,951,224	12,548,785	13,176,224	59,898,463
UNOPS	679,510	713,485	749,159	786,617	825,948	3,754,720
UPMB	350,116	367,622	386,003	405,303	425,568	1,934,612
USAID	24,350,000	25,567,500	26,845,875	28,188,169	29,597,577	134,549,121
WHO	1,157,900	1,215,795	1,276,585	1,340,414	1,407,435	6,398,128
World Bank	26,527,280	27,853,644	29,246,326	30,708,642	32,244,074	146,579,966
Government of Uganda	15,596,713	16,376,549	17,195,377	18,055,145	18,957,903	86,181,687
BTC	1,843,125	1,935,281	2,032,045	2,133,648	2,240,330	10,184,429
Global Fund	3,159,768	3,317,756	3,483,644	3,657,826	3,840,718	17,459,713
WV Uganda	10,078,544	10,582,471	11,111,595	11,667,174	12,250,533	55,690,318
Grand Total	**201,137,005**	**211,193,855**	**221,753,548**	**232,841,225**	**244,483,287**	**1,111,408,921**

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