

NIGERIA EVERY NEWBORNACTION PLANA Plan To End Preventable
Newborn Deaths in Nigeria







FEDERAL MINISTRY OF

NIGERIA **EVERY NEWBORN ACTION PLAN**

A Plan To End Preventable Newborn Deaths in Nigeria

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FOREWORD

Each year in Nigeria over seven million babies are born, of whom 240,000 die during their first month of life. Despite our gains for child survival whereby the under-five child mortality has decreased from 91 deaths per 1,000 live births in 1990 to 43 deaths per 1,000 live births in 2015, available data shows that the decline for newborn deaths has been much slower. Neonatal deaths now account for 32 percent of all under-five child deaths. Most of these deaths are caused by complications related to prematurity, birth asphyxia and infections. This trend requires an accelerated response to achieve remarkable reduction in under-five mortality rate.

The Newborn Situational Analysis reports of 2009 and 2011, as well as the "Bottleneck analysis on neonatal health" of 2013, culminated in the Nigeria launch of "Call to action on Newborn health" at the first National Newborn Health Conference in 2014. This call to action provided the framework for the development of the Nigeria Every Newborn Action Plan (NiENAP).

The NiENAP lays out a vision to end preventable stillbirths and newborn deaths by accelerating progress and scaling up evidence- based high-impact and cost effective interventions. The plan is guided by the principles of country-leadership, integration, accountability, equity, human rights, innovation and research. This blue print outlines our commitment as government and stakeholders to repositioning newborn health as we implement approaches that impact on the lives of newborns for improved health outcome.

I therefore call on all, partners, civil society groups, donors, the private sector and other stakeholders to work with government at all levels in implementing this plan. We must ensure that our babies not only breathe, but they must also "survive, thrive and transform" in order to reach their full potentials.

Kaven

Prof. Isaac F.Adewole, FAS, FSPSP, DSC (HONS). Honourable Minister of Health November: 2016

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Nigeria under-five mortality especially the neonatal mortality rate is unacceptably high, thus the development of the Nigeria Every Newborn Action Plan is a major milestone in the bid to end preventable still births as well as newborn deaths.

I wish to express sincere gratitude to individuals, academic institutions, professional associations and development partners who contributed considerable time and efforts in the conception and birth of this dream. Special thanks go to representatives of State Ministries of Health, the Nigeria Society of Neonatal Medicine (NISONM), Pediatrics Association of Nigeria (PAN), Society for Obstetrics and Gynecologists of Nigeria (SOGON) as well as the National Association of Nigerian Nurse and Midwives (NANNM) for their hard work and technical inputs. I commend the unflinching support of our Development Partners notably: Save the Children International, MCSP, WHO, UNICEF, the Health Strategy Delivery Fund, Health Strategy Delivery Fund and CHAI for the time and resources committed towards repositioning newborn health in Nigeria by the development of this document.

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Finally, I will like to appreciate the Newborn branch team, Child Health Division of the Department of Family Health under the leadership of Dr A.R Adeniran, for the drive, team spirit and concerted effort demonstrated from planning to execution of the entire development process.

Dr. (Mrs.) Adebimpe Adebiyi, mni Director, Family Health Department November: 2016

ACRONYMS

AFRINEST	African Neonatal Sepsis Trial
BEmOC	Basic emergency obstetric and new- born care
CEm0C	Comprehensive emergency obstetric and newborn care
CHEW	Community health extension worker
DHS	Demographic and Health Survey
ENAP	Every Newborn Action Plan
FMOH	Federal Ministry of Health
FGON	Federal Government of Nigeria
HIS	Health information system
IGME	Interagency Group for Child Mortality Estimation
IMNCH	Integrated maternal, newborn and child health
ISS	Integrated Supportive Supervision
КМС	Kangaroo mother care
LGA	Local government authority/area
мсн	Maternal and child heath
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MNCH	Maternal, newborn and child heath
MNH	Maternal and newborn health

MPDSR	Maternal and Perinatal Death Surveillance and Response
NiENAP	Nigeria Every Newborn Action Plan
NHIS	National Health Insurance Scheme
NHMIS	National Health Management Information System
РНС	Primary healthcare centre
PRMNCAH	Partnership for Reproductive and Maternal, Newborn, Child, and Adolescent Health
RMNCAH+N	Reproductive, maternal, newborn, child, and adolescent health and nutrition
SBCC	Social and behaviour change communication
SDG	Sustainable Development Goal
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SOML	Saving One Million Lives
SSHIP	State-Supported Health Insurance Programme
SURE-P MCH	Subsidy Reinvestment and Empowerment Programme for Maternal and Child Health
U5MR	Under five mortality rate
who	World Health Organization

Each year in Nigeria over seven million babies are born: 240,000 of these babies die in their first month of life with 94,000 dying on the day of birth; in addition, there are nearly 314,000 stillbirths. While Nigeria has made significant progress in decreasing child mortality, the country has not achieved Millennium Development Goal 4 for child survival, primarily due to inadequate reduction of neonatal mortality. As the world transitions to achieving sustainable development goals, it is clear that Nigeria must accelerate efforts to improve outcomes for its newborns.

At the 2016 World Health Assembly, the Federal Government of Nigeria endorsed the Global Strategy for Women's, Children's, and Adolescents' Health, a roadmap for ending all preventable deaths of women, children, and adolescents within a generation. The global strategy includes the targets and objectives of the global Every Newborn Action Plan, launched in 2014, and Ending Preventable Maternal Mortality, launched in 2015.

Inspired by these documents and its global commitments, this *Nigeria Every Newborn Action Plan* (NiENAP) sets forth specific actions necessary to achieve significant mortality and coverage targets by 2030. It lays out the Nigeria's vision of a country "with no preventable deaths of newborns and stillbirths, where every pregnancy is wanted, every birth celebrated; and women, babies, and children survive, thrive, and reach their full potential." Guided by the principles of country leadership, integration, accountability, equity, human rights, innovation, and research, the NiENAP presents a set of intervention packages aligned with the 10 key areas of the National Health Policy 2016–2021. The intervention packages follow a four-pronged approach of (1) promotion of facility-based deliveries at scale addressing equity issues, (2) strengthening of community-based interventions, (3) strengthening of facility readiness for providing quality care for the newborn, and (4) provision of quality care for the newborn with focus on labour, birth, and immediate care after birth during the first week of life.

Tracking progress towards achievement of the ambitious agenda laid out in the NiENAP is paramount. Thus, the document defines a set of preliminary, national-level milestones and steps taken to identify core indicators that should be tracked to ascertain progress toward meeting targets. The schedule for achieving key milestones and responsibility for tracking progress will be determined by the National Subcommittee on Newborn Health in consultation with stakeholders.

The NiENAP is a concerted effort towards translating Nigeria's commitments into meaningful change for newborns. The aim is that this document will serve as a framework for each of Nigeria's 36 states and Federal Capital Territory – in collaboration with many stakeholders and partners – to develop their own action plans, adapting the NiENAP as needed to their unique contexts.

1.0 INTRODUCTION

In the past two decades, Nigeria has made significant progress in reducing child mortality.¹ However, the country has been unable to achieve Millennium Developmental Goal 4 for child survival, primarily due to the inadequate reduction in neonatal mortality.

As the world transitions from the Millennium Development Goal (MDG) era to achieving sustainable development goals (SDGs), it has become increasingly clear that Nigeria must accelerate efforts to improve outcomes for its newborns. At the World Health Assembly 2016, Nigeria committed to the Global Strategy for Women's, Children's, and Adolescents' Health (A69/A/CONF./2), a road-map for ending all preventable deaths of women, children, and adolescents within a generation.^{2,3} The global strategy includes the targets and objectives of the global Every Newborn Action Plan (ENAP), launched in 2014,⁴ and Ending Preventable Maternal Mortality, launched in 2015.⁵

1.1 Development of the Nigeria Every Newborn Action Plan

Nigeria's commitment to newborns reflects the increasing global interest in this extremely vulnerable group. In 2014, when the global ENAP was launched and adopted as a World Health Assembly resolution, the Federal Government of Nigeria (FGON), in conjunction with key stakeholders, began adapting this global drive into a Nigeria-specific plan.

There were two sets of newborn situation analysis reports, in 2009 and 2011.^{6,7} A bottleneck analysis on newborn health was conducted in 2013 to understand the challenges around newborn health in Nigeria and to articulate possible solutions.

In October 2014, the Federal Ministry of Health (FMOH) organized the first National Newborn

Health Conference. During this meeting, the FMOH launched Nigeria's "Call to Action" to save newborn lives.^{8,9} With this came the special commitment to develop this Nigeria Every Newborn Action Plan (NiENAP) as part of a concerted effort to end preventable neonatal deaths.

All these actions formed the basis for the development of the NiENAP, which was achieved through a series of stakeholder engagements and the engagement of both international and indigenous consultants.

1.2 Overview of the Nigeria Every Newborn Action Plan

The NiENAP lays out a vision and a plan for Nigeria to end preventable newborn deaths and stillbirths, accelerate progress, and scale up high-impact, cost-effective interventions. The NiENAP is a concerted effort towards translating commitments into meaningful change for newborns. It will serve as a framework for Nigeria's 36 states to develop their own area-specific action plans.

NiENAP is guided by the principles of country leadership, integration, accountability, equity, human rights, innovation, and research. It presents the intervention packages required for newborn health through a four-pronged approach of (1) promotion of facility-based deliveries at scale addressing equity issues, (2) strengthening of community-based interventions, (3) strengthening of facility readiness for providing quality care for the newborn, and (4) provision of quality care for the newborn with focus on labour, birth, and immediate care after birth during the first week of life. Priority activities for newborn health are located within the 10 key areas of the Nigerian health systems and align with the National Health Policy 2016–2021.¹⁰

1.3 The Global Picture

The world has witnessed remarkable improvements in maternal and child survival since 1990. Yet this is still an unfinished agenda, as many countries did not reach their targets for child and maternal survival, and inequities within countries remain. Globally, neonatal deaths decreased from 5.1 million in 1990 to 2.7 million in 2015.¹¹ However, the reduction in neonatal mortality has been less (47 percent) than that of under-five mortality (58 percent). Around three-quarters of neonatal deaths take place in the first week of life, many on the first day.¹² To achieve the desired impact with the SDGs, it is essential for every country to address neonatal mortality, focusing on the first week of life and especially the day of birth. Perhaps the even more challenging issue is the need for 63 countries – including Nigeria – to *accelerate* the rate of reduction of these deaths to achieve the SDG target of a neonatal mortality rate of 12 or fewer deaths per 1000 live births by 2030.¹³

2.0 THE STATE OF NIGERIA'S NEWBORNS

Nigeria is situated in West Africa. It occupies approximately 923,768 sq. kilometres of land and shares borders with Republic of Benin in the West, Chad and Cameroon in the East, and Niger in the North, while in the south it lies on the Gulf of Guinea on the Atlantic Coast. Nigeria is a federal constitutional republic comprising of 36 states and a Federal Capital Territory, grouped into six geopolitical zones: north central, north east, north west, south east, south south, and south west. There are 774 constitutionally recognized local government areas and six area councils (of the Federal Capital Territory). The country is the most populous nation in Africa and the seventh most populous in the world with an estimated population of 182.2 million in 2015.

Each year in Nigeria over seven million babies are born, of whom 240,000 die during their first month of life with 94,000 on the day of birth.¹⁴ According to the latest Nigeria Demographic and Health Survey (DHS), the neonatal mortality rate was 37 per 1000 live births in 2013.¹⁵ In addition, there are nearly 314,000 stillbirths.¹⁶ Given its large population, Nigeria has a high burden of newborn deaths and stillbirths.^{17, 18} Maternal mortality is also high in Nigeria, with an estimated 45,000 maternal deaths annually and a maternal mortality ratio of 576 deaths per 100,000 live births in 2013.¹⁹

2.1 Newborn Mortality Trends and Disparities

Childhood mortality, including newborn deaths, remains high and the rate of reduction is slow. **Figure I** shows the changes in the three components of childhood mortality rates from 1990 to 2015. Using the global mortality estimates, the annual rate of reduction for neonatal mortality was slower (1.5 percent per year) than for post-neonatal under-5 mortality (2.7 percent per year).²⁰

Neonatal mortality rates vary by socioeconomic characteristics such as wealth, maternal education, geographic zone of residence, and place of residence. The inequities are captured in **figure 2** and are greater in rural than urban areas, in the northwest zone than the south-south zone, and among uneducated mothers than mothers with more than secondary education.



Figure 1. Changes in childhood mortality, 1990 to 2015

Source: UN Interagency Group for Child Mortality Estimation (IGME) mortality estimates, accessed 2016; Demographic and Health Survey (DHS 1999, 2003, 2008, 2013) and Multiple Indicator Cluster Survey (MICS 2008, 2011).



Figure 2. Disparities in neonatal mortality

Source: Nigeria DHS 2013.

2.2 Causes of Neonatal Mortality

The major causes of neonatal mortality in Nigeria include complications of preterm birth, adverse intrapartum events, including birth asphyxia, and neonatal infections including sepsis, pneumonia, and tetanus²¹ (figure 3).



Figure 3. Causes of child and neonatal mortality

Data source: WHO and Maternal and Child Epidemiology Estimation Group (MCEE) 2015 data.unicef.org

Prematurity is primarily a predisposing condition, and except in cases of extreme immaturity bordering on viability, death is mainly due to complications, accounting for nearly a third of all neonatal deaths. Preterm babies' risk of death is 12 times higher than that for full-term babies; premature babies also have an increased risk of disability.²²

Adverse intra-partum events including birth asphyxia account for about 31 percent of neonatal deaths in Nigeria. This cause frequently has a direct link to quality of care during childbirth.

Infections including sepsis, pneumonia, tetanus, and meningitis result in over 26 percent of neonatal deaths. Some complications of prematurity are also related to infections. Infections may contribute to a greater extent to neonatal mortality than estimated by the World Health Organization (WHO). A social and verbal autopsy report carried out in Nigeria in 2014 showed sepsis as the leading cause of neonatal death (31.5 percent).²³

Though usually benign or physiologic, neonatal jaundice can complicate prematurity and neonatal sepsis and result in mortality and morbidity. While most cases of neonatal jaundice are preventable, cases continue to occur regularly in Nigeria.

2.3 Stillbirths

Nigeria has a high stillbirth rate (42.9 per 1000 total births in 2015).²⁴ Over half of stillbirths occur in labour and childbirth (fresh stillbirths) and are mostly preventable through quality intrapartum care. Other stillbirths are primarily related to adverse maternal issues that cause intrauterine deaths at various periods earlier during pregnancy (macerated stillbirths).

Fresh stillbirths have a special link to neonatal death. Some are actually early neonatal deaths that have been wrongly classified as stillbirths. For this reason, WHO recommends that all fresh stillbirths should be subjected to neonatal resuscitation.²⁵ Additionally, in evaluating intervention programmes to reduce neonatal mortality, the numbers of stillbirths, notably fresh stillbirths, should always be taken into account along with neonatal deaths.

2.4 The Maternal and Newborn Health Continuum of Care

Universal coverage of essential maternal and newborn health (MNH) services could prevent over two thirds of newborn deaths in Nigeria, but coverage remains very low across the continuum of care for women's and children's health. **Figure 4** indicates the coverage of some of the practices showing low coverage rates and the lack of any significant improvement over the last 10 years (appendix 1).²⁶ Of special concern is the low and unchanged level of facility deliveries and skilled birth attendance.

In Nigeria, health services are rendered through both public and private sectors with primary healthcare being a foremost priority. However, the availability of services does not equate to quality of care, and there have been considerable challenges, including disruption of services. Even though the private sector plays an important role, it is poorly integrated within the country's health system. Other challenges include the distance to be covered to reach the facilities, especially in rural areas, the cost of services, the poor quality of care, inadequate implementation of the standard guidelines, and the attitudes of health workers.²⁷

The proportion of women not receiving any antenatal care (ANC) is high, especially in the northern zones. Only 38 percent of women across Nigeria deliver in a health facility, and a similar proportion are receiving a postnatal care (PNC) check in the two days after birth. Only a quarter of women report that they initiated breastfeeding within the first hour after birth. Exclusive breastfeeding rates are low and are showing no signs of improvement. Overall 55 percent of currently married women use a modern contraceptive method.

Inequities in coverage and quality of care at birth are extreme. Rural and less educated women are less likely than others to attend ANC, have assistance from a skilled health provider during delivery, and give birth in a health facility. Even where the majority of births take place in a facility and with a skilled attendant, the quality of care remains low and outcomes for mothers and babies are poor.



Figure 4. Coverage of select practices across the continuum of care that can influence neonatal outcomes

Source: Nigeria DHS 2013.

Prevention of infection during and after childbirth, while extremely important, is rarely documented or monitored. In view of the high occurrence of home births and the need to avoid infections, the FGON provides through the FMOH clean home delivery kits (Mama Kits). In addition, use of 4 percent chlorhexidine gel has been approved for cord care by the FMOH at the community as well as facility levels, and implementation is planned at scale. In 2013, 36 percent of families applied something to the umbilical cord at birth – most commonly oil or methylated spirits. Women with secondary education were more likely to apply something to the cord than less educated women.

The importance of documenting births and deaths is widely recognized. Civil registration systems provide the basis for individual legal identity and subsequent eligibility for state-proffered services. They also allow countries to identify their most pressing health issues. In Nigeria, although it is compulsory to register births and deaths, but compliance is limited; most newborn babies who die and almost all stillbirths have no death certificate. In March 2016, the National Council on Health reinforced the need to register all births appropriately. Recognition of the need for better death surveillance led to the implementation of national Maternal and Perinatal Death Surveillance and Response, described in more detail in the next section.

Infrastructure

Based on an FMoH survey carried out in December 2011, there are 34,173 health facilities across the 36 states and the Federal Capital Territory. Among these 30,098 (88 percent) are primary healthcare (PHC) facilities, 3,992 (12 percent) are secondary facilities, and 83 (< 1 percent) are tertiary facilities. More than 66 percent of the facilities are government owned.^{28,29}

There are significant infrastructure challenges, including inadequate quality of roads, lack of electricity and piped-in water, and insufficient medical equipment and supplies. These may contribute to the lack of their utilization and the low numbers of facility births. Geographic information system data on the facilities exist, but need standardization and harmonization. To help address the situation, the National Health Act has specified that 15 percent of the Basic Healthcare Provision Fund should be made available to help maintain the infrastructure.³⁰ This will be particularly important if facility births are to be promoted.

2.5 Country Policies, Strategies, and Programmes to Promote Newborn Health in Nigeria

Newborn health has always been linked to both maternal health and child health, but its visibility has remained low. With rising attention that high neonatal mortality was one of the major reasons for Nigeria not achieving MDG 4,³¹ the number of

policies, programmes, and activities to improve newborn survival either directly or through improving maternal health has increased. **Table I** lists key policies/strategies, programmes, and activities related to newborn health in the past decade. The first and second editions of the Nigeria Newborn Situation Analysis Report in 2009 and 2011 drew attention to the status of newborn health in the country and proposed various actions to improve newborn survival and health. ^{32,33}

Table 1. Policies/strategies, programmes and activities to promote newborn health: Milestones in the evolution of newborn health in the last decade

Initiatives	When	Purpose/Description		
Policies, Strategies, Guidelines, Plans				
Essential Equipment List	2005, Revision on-going 2016	To present a standard list of equipment needed for optimal delivery of service by each level of service delivery in Nigeria.		
Child Health Policy	2006, revision on-going	To provide framework for planning, management, delivery and supervision of services to address the critical problems affecting child care in the target group.		
Integrated Maternal, Newborn and Child Health (IMNCH) Strategy	2007, revision on-going	To provide policy direction and guidance to the different levels of government to formulate more in-depth operational/implementation plans for an integrated maternal, neonatal and child health (IMNCH) programme		
Ward Minimum Health care package (2007 – 2012)	2007	To provide a standard reference for the setting of priorities and development of plans for the provision of quality PHC with scarce resources. The WMHCP targets the grass root for the delivery of a minimum set of primary health care interventions needed to meet the basic health requirements of a majority of Nigerians, resulting in substantial reduction in morbidity and mortality and contributing significantly to achieving "Health for All" and the MDGs at a cost government and its Partners can afford. It outlines broad strategies to be utilized, main objectives to be achieved and a time frame for the establishment of the minimum package in wards across the country.		
Essential Newborn Care Course	Adopted 2008, Harmonized March 2016	To provide an ENCC package with a combination of documented evidences about Newborn health in Nigeria and global best practices to ensure provision of a full range of updated, evidence-based interventions and standards that will enable health care workers to give high quality care during childbirth and postnatal period considering the needs of the newborn baby. The ENCC package conveys the national recommended standards for use at all levels of health care delivery		
Communication for Behaviour and Social Change on MNCH	2009, revision on-going	To guide effective implementation of communication for behaviour and social change for IMNCH in the areas of health education, community engagement, advocacy and service improvement at the Federal, State, LGA and community levels		
Newborn health in the context of IMNCH (Situation Analysis Report)	2009	To provide a road map for all stakeholders delivering survival interventions for newborn health in the context of maternal and child health in this country.		

Initiatives	When	Purpose/Description
Policies, Strategies, Guideli	nes, Plans	
National Essential Medicine List	5 th revision 2010, 6 th 2016	To streamline the drugs deployed in the healthcare delivery system of the country by providing a reference standard for all levels of health care towards ensuring good drug supply management as all drugs to be procured by the public health facilities for the enhancement of quality of health care services.
National Strategic Health Development plan I (2010-2015)	2010	To serve as framework and guide to federal, state and LGAs in the selection of evidenced-based priority interventions that would contribute to achieving the desired health outcomes for Nigerians
Newborn health in the context of IMNCH 2 nd revision (Situation Analysis Report)	2011	To provide an updated account of the situation of Newborns in Nigeria.
Integrated Community Case Management	2013	
Newborn Bottleneck analysis	2013	To enable stakeholders review and analyse the Nigerian Health System bottlenecks and challenges that prevent the scale-up of high impact cost effective interventions for newborns, as well as identify potential innovative feasible solutions that will significantly make a difference in newborn health in Nigeria.
UN Commission on Live Saving Commodities: Country Implementation Plan	2013	To saving at least one million lives by 2015, the Government of Nigeria committed to equitably increasing access to, and utilization of, quality cost-effective basic health interventions including access to life-saving commodities for women and children. This implementation plan will significantly contribute to the Government of Nigeria's efforts of accelerating progress towards the achievement of the MDGs by 2015.
Minimum standard for Primary Health Centres in Nigeria	2014	To uniformly define for the various levels of fixed health facilities in Nigeria, the Minimum Standards for PHC structures (systems, staffing, equipment and service delivery) at Local Government level in order to improve access and quality of services. It is also intended as a vital tool for effective supervision, monitoring and evaluation and to aid effective planning, development and delivery of PHC services.
National Health Act	2014	To provide a framework for the regulation, development and management of a health system and sets standards for rendering health services in Nigeria.
National Task Shifting and Task Sharing Policy	2014	To promote rational redistribution of tasks among existing health workforce cadres and allow for moving specific tasks, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of the available health workers to improve access to services for the Nigerian people.
National Newborn Health Conference	2014	To put neonatal health in the front burner in National agenda, the Government of Nigeria organized a National Newborn Health Conference. The conference was convened in order to review progress of newborn survival and health programming over the past decade. It also served as platform to provide technical updates on evidence-based newborn health interventions across the continuum of care. It created opportunity for experience sharing both at national and state levels as well as dissemination of research finding.
		At the end of the conference the National "call to action" to ending preventable newborn deaths in Nigeria was launched.

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Initiatives	When	Purpose/Description		
Policies, Strategies, Guidelines, Plans				
National Guideline for "The Maternal and Perinatal Death Surveillance and Response"	Developed 2014, Adopted at NCH 2015	To eliminate preventable maternal and perinatal deaths by enhancing accountability for maternal and perinatal health through active surveillance and speedy response to Maternal and Perinatal deaths.		
National Health Policy	2016	To accommodate emerging trends and to attain Universal Health Coverage and other health-related Sustainable Development Goals, the FMOH revised the National Health Policy.		
National Strategy for Scale up of Chlorhexidine in Nigeria	2016	To lead national scale-up efforts and overcome key barriers in realizing widespread coverage of Chlorhexidine gel in Nigeria by integrating Chlorhexidine into existing health programmes and supporting the scale- up of other products for mothers and children in Nigeria.		
Programmes				
Midwives Service Scheme	2009	To address the human resource gap in the health system. Under the MSS, retired and newly qualified midwives provide services at PHC facilities in underserved communities across the country.		
Community Based Newborn Care	2011			
Saving One Million Lives (SOML)	2012, Program for Result 2015	To accelerate improvements in health outcomes for women, newborn and children by providing a framework with clear, ambitious targets to strengthen basic health services before 2015 and save one million women, newborn and children through comprehensive scale-up of effective interventions that are already being implemented in Nigeria		
Subsidy Reinvestment and Empowerment Programme MCH (Sure-P MCH)	2013	To improve health service delivery at PHC level by increasing and improving both the infrastructure and human resource needed. This component was designed to renovate health care facilities, supply equipment and medicines as well as increase the number of trained health workers able to provide care at these facilities. The demand creation component aimed to increase utilization of services through conditional cash transfer based on fulfilment of prescribed co-responsibility by pregnant women		
UN Commission on live Saving Commodities	2012–2015	To accelerate access to a set of 13+2 live saving commodities prioritized because they address the major killers of women and children.		
Helping 100k Babies Survive & Thrive initiative	2014	To improve education modules on helping babies breathe, essential care for small babies, and antenatal corticosteroids for preterm birth, a Global Development Alliance of partners are implementing efforts in 3 countries to save at least 100,000 newborn lives each year.		

Following the Child Health Strategy and the Roadmap for Accelerated Reduction of Maternal and Newborn Mortality, Nigeria has been guided by the IMNCH Strategy (2007),³⁴ revised in 2013.³⁵ This strategy incorporates select newborn health priorities including newborn resuscitation, thermal management, prevention and treatment of neonatal sepsis, jaundice, and tetanus, and extra care of low birth weight babies (appendix 2). The Saving One Million Lives (SOML) Initiative, launched in 2012, served as an organizing framework to accelerate improvements in health outcomes for women, newborns, and children.³⁶ To support implementation, the FGON initiated the SOML Programme for Results operation in 2016, with World Bank funding. This programme will reward federal and state governments based on their performance in increasing utilization of MNCH interventions, including those with impacts on newborn mortality.

Nigeria adopted the 13 UN lifesaving commodities with two more commodities added, Sulphadoxine pyrimethamine for intermittent preventive therapy for malaria and the intra-uterine contraceptive device.³⁷ The National Essential Medicine List now includes all 15 commodities, including neonatal commodities. The Essential Equipment List is still under review.

In 2013, the FMOH introduced 4 percent chlorhexidine gel (25g) for multiple applications on the umbilical stump at birth, replacing the former policy of leaving the cord clean and dry. The National Agency for Food and Drug Control has developed a manufacturing guide to accelerate production and registration of the product, and local manufacturers are now producing and distributing the gel across the country and beyond. The experience from the USAID Target States High Impact Project implementation in two states contributed to the adoption of the gel. Currently, many states are procuring the product, but distribution still remains a challenge. More work is needed to implement this intervention better, notably capacity building of health workers and community sensitization to increase demand. Consequently, a national scale up strategy and implementation plan has been developed to accelerate nationwide scaling up of chlorhexidine.

One of the major challenges has been the inadequacy of skilled human resources to provide quality care. The majority of healthcare workers are in urban areas in southern Nigeria; few work in northern Nigeria or in rural areas, hindering access to services where they are most needed. The Midwives Service Scheme³⁸ and the SURE-P MCH³⁹ have led to a considerable increase in human resources for MNH in rural health facilities. In addition, the government is also focused on task shifting. The National Task Shifting and Task Sharing Policy adopted in 2015 aims to increase access to care for pregnant women, especially in hard-to-reach areas.⁴⁰

The government and its partners have developed and adopted a number of newborn-related guidelines. The National Guidelines for Maternal and Perinatal Death Surveillance and Response (MPDSR) were adopted by the National Council on Health in 2016, expanding existing guidelines on maternal death surveillance to include perinatal outcomes as well. Lagos and Ogun states are currently implementing the MPDSR, while Ebonyi, Ondo, Katsina, Yobe, Zamfara, Delta, and Jigawa states are in varying levels of applying the maternal death review.⁴¹

Financing schemes

Nigeria's NHIS was established in 1999 to ensure financial access to healthcare for the general population, but it has been mostly urban-centred.⁴² The aim was to provide easy access to healthcare for all Nigerians at an affordable cost, and the scheme is associated with a variety of prepayment systems. In an effort to achieve universal health coverage, the NHIS adopted and funded the State-Supported Health Insurance Programme for equity health plans. The SSHIP aligns with the NHIS and aims to cover all Nigerians by 2025. The NHIS is meant to provide technical, financial, and information and communication technology support to SSHIP.⁴³

Several states have introduced free MNCH services. There are considerable differences in the nature and depth of implementation of the free MNCH services across states. For example, a community-based insurance scheme has been piloted in three states, with 110 communities currently benefiting from the scheme and another 100 in the process of rolling out the scheme.⁴⁴ However, the initial results indicate low enrolment rates and equity challenges. Another initiative, Performance-Based Financing, was implemented as a component of the Nigeria State Health Investment Plan project in the states of Adamawa, Nasarawa and Ondo states beginning in 2014.⁴⁵

Packages of care

Care for newborns is encapsulated across several packages of care endorsed by the FMOH (appendix 3). The *Essential Newborn Care Course*, a facility-based package was adopted in 2008 and harmonized with other packages to produce an integrated package between 2004 and 2016. This integrated package of newborn care focuses on skilled health workers. It includes immediate care at time of birth (including resuscitation for asphyxia), essential care for every baby (including prevention and pre-referral treatment of sepsis) and KMC for small babies. Nigeria, along with India and Ethiopia, is participating in the Helping 100,000 Babies Survive and Thrive initiative through the Survive and Thrive Global Development Alliance.⁴⁶

The Community Based Newborn Care package, supported by UNICEF, trains CHEWs in counselling and home-based newborn care and equips them with kits. CHEWs conduct regular home visits to pregnant women and mothers of under-five children to prevent diseases and to promote growth and development and appropriate homecare and care seeking.

The National Primary Healthcare Development Agency articulated a *Minimum Standards for PHC in Nigeria* in 2013, which is a priority set of health interventions to be provided at PHCs at all times and at little or no cost to clients. The six components in the package include child survival and maternal and newborn care. For newborn care, the interventions include clean delivery of pregnant women, cord and eye care, early breastfeeding (within 30 minutes), exclusive breastfeeding, and thermal management. It also consists of community-based care for deliveries, basic neonatal resuscitation, management of neonatal infections, and provision of referral and outreach services.

Research

Nigeria took part in the African Neonatal Sepsis Trial (AFRINEST) along with Kenya and the Democratic Republic of the Congo. The randomized controlled study tested simplified antibiotic management regimens for treating newborns with possible serious bacterial infection in situations where referral is not possible. The results showed that the simplified regimens could be as effective as the standard regimen of inpatient treatment with antibiotics.⁴⁷

3.0 BOTTLENECK ANALYSIS

In 2013, the FMOH, together with partners, conducted an analysis of bottlenecks hindering the implementation of newborn health programmes. Using the generic Every Newborn Bottleneck Analysis Tool in very interactive sessions, Nigerian newborn stakeholders reviewed and analysed all newborn interventions, including the nine critical newborn interventions along the seven building blocks of the health system. The meeting identified the major bottlenecks and challenges and made the following recommendations that will enable Nigeria to scale up newborn interventions. The identified bottlenecks were then prioritized as either: good, needs some improvements, needs major improvements or inadequate. For each high priority bottleneck, strategies or solutions were recommended. This process stimulated national dialogue to promote coordinated efforts to scale up evidenced-based interventions.

Figure 5 shows the overall results of the analysis by health system building block. Most categories show the need for major improvement, and preterm management was inadequate across all building blocks (detailed results available in appendix 4). The results of the bottleneck analysis have helped to shape the priority actions in the NiENAP.



Figure 5. Major bottlenecks identified for priority newborn interventions

4.0 NIGERIA EVERY NEWBORN ACTION PLAN

4.1 Vision, Goals, and Targets

Vision

A Nigeria in which there are no preventable deaths of newborns and stillbirths, where every pregnancy is wanted, every birth celebrated, and women, babies, and children survive, thrive, and reach their full potential.

Goals

I. End Preventable Newborn Deaths: Reduce neonatal mortality rate from 37 deaths per 1000 live births in 2013 to 15 deaths per 1000 live births by 2030 (figure 6).

2. End Preventable Stillbirths: Reduce the stillbirth rate from 42 per 1000 total births in 2013 to 27 still-births per 1000 total births by 2030 (**figure 7**).⁴⁸

The Targets

For Nigeria to achieve its neonatal mortality goal by 2030, it will be necessary to institute an accelerated plan of action at scale. The Lives Saved Tool, which uses country-specific health status and coverage levels to predict changes in mortality, was used to analyse the packages of interventions and the likelihood they could help the country achieve its targets given the facts on the ground.⁴⁹ The baseline data is taken from national household surveys and other sources where not available. Five-yearly targets were set for coverage of interventions to create a framework to assess Nigeria's progress towards the NiENAP goals of 2030 (table 2).



Source: Average annual rate reductions calculated using data from UN IGME neonatal mortality estimates. http://www.childmortality.org/.

Table 2. Five-yearly targets for progress towards NiENAP goals

Indicators	Baseline *	2020	2025	2030
Birth registration	30	50	75	90
Neonatal mortality rate	37	25	19	15
Stillbirth rate	42 [§]	35	33	27
Maternal mortality ratio	576	461	398	270
Skilled birth attendance	38	70	85	95
Facility deliveries	36	65	80	90
Early breastfeeding	33.2	65	85	95
Exclusive breastfeeding	17	50	75	95
Post-natal care baby	14	40	85	95
Newborn resuscitation	NA	65	85	95
KMC	NA	65	85	95
Chlorhexidine	< 5 percent [#]	52	85	95
Treatment of neonatal sepsis	NA	30	80	90

Sources: * DHS 2013, [§] calculated using the Lives Saved Tool and estimates published in Blencowe et al. (2016), [#] FMOH.





Figure 7. Ending preventable stillbirths

4.2 Guiding Principles

The NiENAP supports the global ENAP and is based on the same six guiding principles.

Country Leadership: Leadership for implementation of NiENAP at each level will be provided by the responsible authority – the FMOH at the federal level, state ministries of health at the state level, and local government health authorities and ward development committees at the ward and community levels.

Integration: While this action plan focuses on newborn health strategies, implementation packages, and activities targeting the newborn, it is not meant to be a vertical programme. All components will be integrated, not only with maternal health but also with other components along the reproductive, maternal, newborn, child and adolescent health and nutrition (RMNCAH+N) continuum.

Accountability: Accountability is the responsibility of all stakeholders and enables tracking resources and outcomes, ensuring efficiency, transparency, and quality of care and services. Strengthening accountability mechanisms is therefore crucial.

Equity: The emphasis will be on determining and implementing strategies that ensure all population groups are reached with high-impact interventions, especially the marginalized, vulnerable, and poorest population groups.

Human Rights: Every newborn has the right to life and survival and the highest quality of survival and development.

Innovation and Research: While a number of best practices are available to increase coverage with evidence-based interventions, more innovative approaches and research can help improve outcomes. Some practices include active involvement of all stakeholders, use of effective interventions, expansion to scale taking into account equity issues, and documentation to assess quality of care and outcomes.

4.3 The Intervention Package

Global evidence reviews and analyses have identified the packages of care that can save the most newborn lives with high coverage of care: (1) care during labour and at birth (which has the greatest impact on neonatal deaths), and (2) care of the small and sick (as well as of the healthy) baby.⁵⁰ A lifecycle approach, especially to meet the needs for family planning and quality antenatal care, could also lead to large reductions in deaths.

These packages, however, may not be practical or user friendly when planning interventions in this modular manner. In daily practice for newborn care, say at the time of birth, the first steps include provision of the essential newborn care required by all. Then based on a rapid assessment, steps such as resuscitation for a baby who is not breathing, extra care for the small or preterm baby, or care of the sick baby may be necessary.

For Nigeria, there is an urgent need to focus on acceleration of the implementation process for improving access to care around the time of birth as well as on improving quality of care given the minimal change in the proportion of facility deliveries and low coverage of key interventions, noted previously. Even if high-quality newborn care is provided to newborns born in facilities now, the set targets may not be met because many more newborns are being born at home and do not receive the necessary care. Community-based interventions, which currently are weak, also need to be strengthened. At the same time, merely promoting facility deliveries will not have the desired impact until the facilities are in a good state, with basic infrastructure, adequate, competent staff, and essential commodities on hand.^{51,52}

The intervention package that will be implemented within the RMNCAH+N framework takes a four-pronged approach:⁵³

- 1. Promotion of facility-based deliveries at scale addressing equity issues.
- 2. Strengthening of community-based interventions
- 3. Strengthening of facility readiness for providing quality care for the newborn.

4. Provision of quality care for the newborn with focus on labour, birth, and immediate care after birth during the first week of life.

The key elements of the components of the intervention package are noted below.

Promotion of facility based deliveries through effective SBCC strategies at the community level addressing equity issues and factors hindering facility births.

Strengthening of community-based interventions through home visits where required to promote healthy behaviours in the care of the newborn at home, early identification of problems and appropriate care seeking and referral.

Strengthening facility readiness by addressing the physical infrastructure and basic amenities such as safe water and electricity; ensuring adequate and competent staff/health workers are available, including midwives, nurses, and physicians; providing quality, respectful care; and ensuring that good quality and functional equipment is available and that medication and other necessary supplies are adequate.

Provision of quality care for the newborn with a focus on labour, birth, and immediate care after birth and during the first week of life. Includes the following:

- 1. **Basic resuscitation** for babies who do not breathe adequately at birth and for all fresh stillbirths at all facilities where births occur.
- 2. **Advanced resuscitation** at hospitals, with emphasis on optimal competence of skilled birth attendants and adequate supply of appropriately maintained commodities required for neonatal resuscitation.
- 3. Essential care for every baby at birth and continued postnatal care, particularly in the first week. These include hygienic practices, temperature maintenance, early skin-to-skin contact after birth, cord and eye care, early exclusive breastfeeding, early quality postnatal care, and promotion of identification of danger signs and appropriate care-seeking. For promotion of breastfeeding

besides intensive SBCC strategies, other elements are also essential, such as, but not limited to, adequate maternity leave, supportive places of work and enforcement of the International code of marketing of breast milk substitutes.⁵⁴

- 4. Essential care for the small (preterm/low birthweight) baby. In addition to elements of essential care for every baby, support for temperature maintenance, ideally through KMC is necessary. Extra support for feeding is required, especially the use of expressed breastmilk administered through cup/modified cup or gavage feeding. Besides care in the maternity (postnatal) wards for the larger preterm babies, special care units in secondary hospitals should provide care for the smaller and more immature babies. Intensive care is required in the larger tertiary hospitals.
- 5. Prevention of infection (as part of essential care for every baby). Neonatal infections may be underestimated, yet contribute to complications of prematurity, the most common cause of neonatal mortality. A recent evaluation of causes of death in Nigeria indicated that infections constitute the major cause.⁵⁵ The government is already planning to scale up the use of chlorhexidine gel for cord care. However, besides the conventional clean delivery practices and handwashing, extra care should be taken, particularly at facility level where groups of mothers and babies are together (delivery room, postnatal ward, and the special care baby unit). Breastfeeding and use of expressed breast milk in the prevention of infection needs to be promoted strongly, especially as the breastfeeding rate is a mere 17 percent.⁵⁶ Safe use of expressed breast milk is particularly important for preterm and sick babies who can be fed but are not able to suckle adequately. In addition, application of standard actions related to prevention of hospital infection is extremely important. It is essential to have hospital infection committees at facility level that can be linked to the quality control teams.
- 6. **Care of the sick baby, prioritizing infections.** Sick babies require additional support, which is

ideally provided at a facility level that is appropriately supported to care for such problems. The FMOH initially adopted the pre-referral treatment approach for management of sick young infants at PHC facilities. However, following the evidence from AFRINEST study and the demonstration of the feasibility of the new approach, the FMOH will adopt treatment of sick young infants with simplified antibiotic treatment at the PHC when referral is not feasible. It is critical that a strong strategy be in place to ensure appropriate monitoring and evaluation, especially in more remote areas. At the same time, applying quality control will be all the more difficult and challenging in these same areas.

7. **Management of jaundice.** While jaundice is not a major cause of mortality, addressing it early can often prevent serious complications of kernicterus that can lead to death or disability.

Some interventions that directly target the baby may have specific sites where they can be best implemented. Details indicating at which levels of the health system they can be implemented based on current policies of the FMOH are noted in **table 3**.

4.4 Strategic Objectives

The five strategic objectives adopted for NiENAP directly align with those of the global ENAP (**box I**). However, based on existing structure of the National Health Policy 2016–2021, there is the need for the

NiENAP to align itself to the plan's 10 priority areas to ensure that its priorities are taken up (**figure 6**).⁵⁷

This approach has two specific advantages. First, it is familiar to the key country stakeholders and programme implementers. Second, although NiENAP deals with newborn-related components, the plan will not be implemented as a vertical programme, but rather integrated, notably with maternal health and also with other relevant components of the RMNCAH+N strategy. It will be far easier to integrate chosen elements into the latter as all technical areas in the continuum of care activities are slotted into the same identified 10 priority areas of the Nigerian national health system.

BOX 1. Global ENAP Strategic Objectives

- 1: Strengthen and invest in care during labour, birth, and the first day and week of life.
- 2: Improve the quality of maternal and newborn care.
- 3: Reach every woman and every newborn to reduce inequities.
- 4: Harness the power of parents, families, and communities.
- 5: Count every newborn through measurement, programme tracking, and accountability.

No.	Intervention	Home/Community	PHCs	Secondary Hospitals	Tertiary Hospitals
1. Ba	asic essential care for	every baby			
(a)	Essential newborn care at birth to the end of the first week of life	Yes	Yes	Yes	Yes
2. Ba	asic neonatal resuscita	tion			
(a)	Basic neonatal resuscitation	No	Yes	Yes, and should also implement advanced NRP resuscitation	Yes, and should also implement advanced NRP resuscitation
3. Ca	are of the preterm and	low birth weight infants	5		
(a)	Care of the more mature/larger small baby (> 1,500g)	Yes, if baby does not have any danger signs	Yes, if baby does not have any danger signs	Yes	Yes
(b)	Care of the more immature/ smaller small baby (< 1,500g), including KMC	Initiate skin-to-skin contact and refer. Can do follow-up care	Initiate skin-to-skin contact and refer. Can do follow-up care after discharge from hospitals	Yes	Yes
(c)	Antenatal corticosteroids	No	No	Yes	Yes
4. M	anagement of sick new	borns, priority, neonata	I infections		
(a)	Prevention of infection	Yes	Yes	Yes, but needs to be carried out to a greater extent as high-risk babies spend longer periods in the facility with greater chances of hospital- acquired infection	Yes, but needs to be carried out to a greater extent as high-risk babies spend longer periods in the facility with greater chances of hospital- acquired infection
(b)	Treatment of minor infections	Take to health facility first before managing at home	Yes	Yes	Yes
(c)	Treatment of neonatal infections currently only managed with intramuscular antibiotics	No	Yes, pre-referral only to those who accept referral; for those who refuse referral, infant will be manage using the simplified antibiotic regimen	Yes	Yes
(d)	Treatment of sick babies requiring additional management	No	No	Yes	Yes

Table 3. Feasible interventions at various levels of the health system

Note. The focus is on interventions directly targeting the baby that will be integrated with key related maternal interventions and will be implemented within the RMNCH-AH framework.

4.5 Priority Activities within the 10 Key Areas of the Nigerian Health System

All federal and state governments and local government authorities (LGAs) will implement their activities under the National Health Policy 2016–2021 within the 10 priority areas of the health system (table 4).

4.5.1 Governance and Stewardship

For effective implementation of NiENAP, strong leadership and governance and good coordination between the FMOH, State Ministry of Health, and LGAs are essential. The Newborn Subcommittee of the Child Health Technical Working Group (responsible to the RMNCAH+N Core Technical Committee) at the FMOH will periodically review policies and guidelines to identify gaps and make recommendations to address them. They will also support the rollout of the NiENAP activities at the federal level. The Core Technical Committee on RMNCAH+N will assume a similar role at state level. The LGA PHC management committee and ward and community development committees will oversee implementation at LGA, ward, and community levels. The ward development committee will be responsible for coordination at the community level. While there is a focal person for newborn health at the federal level, this role has been added to the responsibilities of the reproductive health focal person at the state and LGA levels.

Table 4. Ten key areas of the health systems⁵⁸

- 1. Governance and Stewardship
- 2. Health Services
- 3. Health Finance
- 4. Human Resources for Health
- 5. Medicines, Vaccines, and other Health Technologies
- 6. Health Infrastructure

- 7. Health Information System (HIS)
- 8. Partnerships for Health
- 9. Health Research and Development
- 10. Health Promotion, Community Ownership, and Participation

Figure 8. Aligning the NiENAP priority areas with the global ENAP strategic objectives

Strategic objective 1: Strengthen and	Governance & stewardship
invest in care during labour, birth, and the first day and week of life	Health services
	Health finance
Strategic objective 2: Improve the quality of maternal and newborn care	Human Resources 4 Health
Strategic objective 3:	Medicines, vaccines & other tech
Reach every woman and every newborn to reduce inequities	Health infrastructure
Strategic objective 4:	Health information system
Harness the power of parents, families, and communities	Partnerships for health
Strategic objective 5: Count every	Health research & development
newborn through measurement, program tracking, and accountability	Health promotion, community ownership

Source: Federal Ministry of Health

Priority Activities

- Strengthen the Newborn Subcommittee and ensure appropriate representation from various organizations including from the professional bodies.
- Strengthen the capacity of reproductive health focal person at state and LGA levels to oversee planning and implementation of newborn health activities in their respective areas.
- Strengthen policies to implement at scale, addressing equity issues.
 - develop or update policies, strategies, standards, guidelines, and tools relevant to the
 - content of the intervention package for newborn care;
 - capacity building of the health workers;
 - required commodities including medication, supplies, and equipment essential to implement the intervention package;
 - quality of newborn care.

4.5.2 Health Services

This section addresses implementation of activities at the facility level and will strengthen the newborn care components of health facilities including basic emergency obstetric and newborn care and comprehensive emergency obstetric and newborn care centres, where besides support for normal deliveries, emergency procedures including Caesarean sections are carried out with a focus on quality of care.

Priority Actions

- Provide quality newborn care at birth with resuscitation for adverse intrapartum events, including birth asphyxia.
- Ensure all facilities have functional newborn baby care/resuscitation corners in delivery rooms.
- Accelerate nationwide implementation of the policy on the use of 4 percent chlorhexidine gel (25g) for cord care.
- Provide quality postnatal care with focus on the first week following the WHO guidelines for postnatal visits.¹
- Establish zonal KMC centres of excellence that can help to facilitate expansion to other facilities through capacity building and mentoring.

- Establish/strengthen special care baby units at secondary facilities and the more advanced neonatal intensive care units in select tertiary facilities.
- Strengthen referral mechanisms to ensure twoway referrals.
- Establish/strengthen communication strategies to promote healthy behaviours at service delivery points.

4.5.3 Health Financing

Just as it is essential to apply an accelerated programme to decrease neonatal mortality within the RMNCAH+N framework, it is critical to ensure that funding is adequate. A top priority step following the adoption of this action plan will be to cost it and plan the logistics of procuring funds through country investment and donor support.

Priority Actions

- Develop costing for the NiENAP.
- Identify funding gaps by matching the costed plan against available funds; then take innovative approaches to bridge the gaps.
- Allocate 15 percent of government annual budget to health – to meet the Abuja commitment as well as the commitment to the Global Strategy for Women's, Children's, and Adolescents' Health.
- Plan and implement a sound strategy to track expenditure, ensure prompt fund release, and strengthen accountability on health expenditure.
- Ensure free and equitable access to a comprehensive package of health services for all mothers, newborns, and children under five.
- Review and promote universal health insurance coverage and strengthen the NHIS and CBHIS.
- Implement results-based financing to encourage incentives and reward performance accordingly.
- Fast-track implementation of the National Health Act to increase government spending for health.

4.5.4 Human Resources for Health

At the facility level, equitable distribution and adequate numbers of competent skilled attendants including midwives, nurses, and physicians are essential. This requires increased recruitment of staff, with appropriate support through training, supervision, and mentoring to acquire and maintain their skills. Equally essential is retention of qualified staff.

At the community level, competent, appropriately trained and supported CHEWs are important for providing suitable social and behaviour change communication to promote adoption of healthy behaviours and facility deliveries and for conducting home visits.

In an attempt to address the human resource gap, a National Task Shifting and Task Sharing Policy has been developed. The policy focuses on increasing the functions of midwives and CHEWs at the facility and community levels, including provision of essential care for the newborn.² In line with the task shifting policy, the preservice curricula for JCHEWs, CHEWs and CHOs have been revised to reflect this and there is need for a similar exercise to be undertaken for midwives and doctors.

Priority Actions

- Improve competency of frontline skilled birth attendants through in-service training on a harmonized Essential Newborn Care course.
- Strengthen follow-up and supportive supervision and mentoring of trained skilled attendants.
- Strengthen preservice education of skilled birth attendants.
- Strengthen and expand training and supportive supervision of CHEWs to implement activities that promote healthy behaviours, including preventive care visits before and after delivery, facility births, and care-seeking for problems for mothers and babies; maintain records of CHEW activities and review and transmit data to the HIS as required.
- Advocate that all facilities providing care for childbirth have adequate, competent skilled health workers appropriate for the level of facility, e.g., at least four skilled birth attendants at every PHC facility (the minimum standard in Nigeria).
- Fast track implementation of national task shifting policy; at the same time promote careful monitoring of activities to ensure adequate quality of care.
- Develop strategies to engage private-sector providers to invest in the care of newborns, and apply evidence-based innovative technologies to improve outcomes.

• Provide incentives to health workers to work in remote or insecure areas.

4.5.5 Medicines, Vaccines, and Other Health Technologies

Most facilities, particularly in remote or insecure areas, do not have reliable supply chain systems for ensuring uninterrupted supplies of essential medicines and other health-related products for women, newborns, and children under five, especially those recommended by the UN Commission on Life-Saving Commodities. These factors, combined with staff shortages, staff attrition, poorly equipped facilities, and low remuneration, contribute to poor motivation of staff and low quality of care.

Priority Actions

- Disseminate essential medicines list and ensure state adoption.
- Strengthen and scale up the procurement and supply chain management of newborn care commodities, in collaboration with the Nigeria Supply Chain Integration Project.
- Strengthen local production of neonatal commodities, including manufacturing of active pharmaceutical ingredients.
- Build capacity for logistics management using the relevant LGA and state Logistics Management Coordination Units.
- Ensure maintenance of equipment and devices (including appropriate cleaning and disinfection of those that need to be reused) in order to avoid cross infection.

4.5.6 Health Infrastructure

Just as important as provision of quality care provided by competent skilled support and availability of essential commodities are physically sound health facility structures with safe water and reliable electricity. Thus, improving Nigeria's health infrastructure is paramount.

Priority Actions

• Carry out mapping of health facilities nationwide to plan and implement upgrading of infrastructure to meet minimum standards (water, electricity, walls, roof, waste and sewage disposal, functional equipment).

• Promote institutionalization of routine infrastructure maintenance.

4.5.7 Health Information System

Effective and efficient planning, monitoring, and evaluation of health services depend on reliable data. A well-functioning health information system should ensure the production, analysis, dissemination, and use of reliable and timely information on health status, the performance of the health system, and determinants of health. The information generated and managed through HIS is used by healthcare providers, programme managers, policy-makers and other key stakeholders to track health-system performance and make decisions affecting the health of populations.

HIS is composed of multiple systems, including health management information systems, logistics management information systems, human resource management information systems, surveillance systems, and vital and civil registration services.

The Nigeria Health Management Information System (NHMIS) was established with the goal of serving as an effective management tool for informed decision-making at all levels. The NHMIS is intended to provide information to assess the health status of the population, identify major health problems, and help set priorities at LGA, state, and national levels.

The NHMIS assists in monitoring progress toward goals and targets of health services, including those being put forth by NiENAP. Newborn health is captured to some extent within the NHMIS. Data currently captured includes

- facility births;
- total and live births;
- stillbirths (fresh and macerated);
- neonatal mortality;
- preterm and low birth weight births;
- early initiation of breastfeeding;
- postnatal visits;

- newborns initiated and discharged from KMC;
- select morbidities such as birth asphyxia, tetanus, sepsis, and jaundice.

While some data are currently captured in the systems, all systems should be reviewed to ensure that the data have been incorporated into the appropriate forms and registers, so that compilation and interpretation are easy across all levels of the health system. This review will need to be done through the National Subcommittee on Newborn Health along with the Department of Planning, Research and Statistics. Additional data may need to be incorporated as interventions are implemented at scale - piloting approaches for data capture may provide valuable lessons on the best way to capture the necessary information efficiently. The Department of Planning, Research and Statistics has been implementing approaches to improve both the completeness and the quality of data in NHMIS. These approaches should extend to data on newborn health.

Priority Actions

- Establish a monitoring and an accountability framework to ensure that every woman and newborn baby are counted at birth.
- Strengthen and scale up maternal and perinatal death surveillance and response, including notification of maternal, perinatal and late neonatal deaths preferably within 24 hours.
- Strengthen routine reporting of stillbirths disaggregated by fresh stillbirth and macerated.
- Accelerate planning and implementation of a community based health information systems.
- Develop strategies to engage the private sector in improving the collection and quality of birth and death registration systems.
- Accelerate implementation of the recommendations of Commission on Information and Accountability (COIA) framework at federal, state and local government levels.
- Strengthen the use of data to improve service delivery.
- Establish score cards/dashboards to increase accountability for implementing NiENAP.

4.5.8 Health Research and Development

While there is significant evidence relevant to newborn care, it is important to explore innovative methods for effective implementation of programmes, expansion to scale, and accelerating activities to help achieve targets and improve quality of care.

Nigeria was one of the three sites in the AFRINEST that tested simplified antibiotic management regimens for treating newborns with possible serious bacterial infection in situations where it is not feasible to access in-patient hospital care. Further research to understand operational issues in the potential programmatic application of this simplified antibiotic regime is underway. Research is also being carried out to support development and rollout of operational KMC guidelines.

Priority Actions

- Promote research and innovative methods to support quality care at scale and help to accelerate the achievement of the set targets for the newborn. This should be done through the Sub-Committee on Newborn Health, with inputs from stakeholders, implementing partners, and academic staff from teaching institutions.
- Evaluate strategies, including innovative approaches for
 - promotion of facility-based births;
 - improving quality of facility-based care of the newborn;
 - promotion of breastfeeding and feeding of preterm and low birthweight babies with focus on use of expressed breast milk;
 - scaling up basic newborn resuscitation at peripheral/lower levels;
 - offering community-based services to support the mother and the newborn.

4.5.9 Health Promotion, Community Ownership, and Participation

Community participation and ownership are critical for the success of the NiENAP. It is primarily responsible for the demand side for all programmes. Targeting the community has special significance for Nigeria, as

there is a high percentage of home deliveries. SBCC strategies are essential to improve home-based practices, facility-based deliveries, care-seeking behaviour for complications, and increased male involvement in the care of mothers and babies throughout the continuum of care. Besides such communication strategies, it is important to implement social mobilization activities to promote acceptance and active involvement of community members in the process. For this purpose, active involvement of community groups such as ward development committees, women's groups, civil society organizations, community leaders (especially males), and other influencing groups. Civil society organizations can contribute significantly to social mobilization, creating political will and policy design, as well as helping to hold facility health workers and government staff accountable.

Equally important is a close and sustained link between facilities and communities to foster mutual understanding and support, including promotion of visits for preventive care, facility births, follow-up postnatal care, and care-seeking for problems.

Priority Actions

- Mobilize communities through social mobilization of community groups noted above and other communication strategies using easy-to-understand tools available in local languages and media where feasible to promote healthy behaviours, including
 - preventive care visits for the mother and baby;
 - use of skilled care that primarily exists at the facility level (implying active promotion of facility births);
 - preventive postnatal visits for the mother and baby;
 - prompt care-seeking for problems in the mother and baby;
 - increased male involvement in the care of mothers and babies.
- Identify hard-to-reach, marginalized, and other vulnerable groups and develop and implement plans to reach them.
- Improve public oversight of and demand for quality newborn care within the MNH framework

through raising public awareness and increasing community involvement.

• Establish community emergency transport schemes to facilitate referral. Explore safe, innovative methods of transport.

4.5.10 Partnerships for Health

Partnerships for health exist at multiple levels. At the leadership/governance level, partners come together at a national level to develop policies, guidelines, and standards such as the Subcommittee on Newborn Health. Additionally, links can occur between implementing partners that can take place more peripherally based on the implementing sites. Partnerships can strengthen the impact with proper coordination, but at times they may present challenges. In general, however, the advantages outweigh the problems.

At the federal level, the coordinating body is the Newborn Sub-Committee, which is a subset of the National Child Health Technical Working Group. This committee reports to the existing Core Technical Committee of the Partnership for Reproductive and Maternal, Newborn, Child and Adolescent Health (PRMNCAH).

In the PRMNCAH, partners are cross sectorial and include religious/traditional rulers, community service

organizations, professional bodies, and line ministries. At state levels, the partners are the core technical committee for RMNCAH+N over newborn health activities and the ward development committees and community development committees at the ward and community levels.

NiENAP has been developed with support from a diverse, multi-stakeholder partnership, with representatives from a variety of partners, including the federal and state government, professional associations, multilateral and bilateral agencies, the private sector, and civil society organizations.

Priority Actions

- Verify that partnerships have the appropriate representation, strengthen the coordination mechanisms, and set clear and feasible goals to help achieve targets.
- Lead advocacy and resource mobilization efforts at all levels of government.
- Convene regular coordination meetings, monitor progress, and recommend adjustments in the implementation process.
- Support research and disseminate findings as well as advising government on newborn health based on research findings.

5.1 Oversight

Oversight and coordination of the NiENAP activities will carried out by the child health division of the FMOH working through the Subcommittee for Newborn Health of the Child Health Working Group.

5.2 Monitoring and Evaluation

This section is closely linked to the HIS and its priority activities noted above. Monitoring and evaluation of the NiENAP activities will be carried out using the national integrated supportive supervision tool.

5.2.1 Milestones for Monitoring Progress

NiENAP has set forth specific actions necessary to achieve significant mortality and coverage targets by 2030. It reflects the commitment of the FMOH to end preventable newborn deaths and stillbirths. Tracking progress toward achievement of this ambitious agenda will help to ensure progress and accountability. Thus, a set of preliminary national level milestones have been defined and steps taken to identify core indicators that should be tracked to ascertain progress.

Milestones help to establish a basis for monitoring progress in NiENAP implementation. They emerge from key priority actions defined in NiENAP, or they are precursors essential to the accomplishment of those actions. An initial pathway to impact has been defined at national level for the period 2016–2020 (table 5). Additional milestones may be determined in consensus by the National Subcommittee on Newborn Health.

In 2020, a comprehensive review of targets will be carried out, which will guide plans for the remaining

timeframe. Progress towards accomplishment of milestones and towards targets will be monitored by the National Subcommittee on Newborn Health on an annual/biannual basis.

Monitoring/tracking of the key milestones will help to determine if the rollout of NiENAP is proceeding according to the plan. This will not only help to determine the status of the activities within the country, but also – through sharing with the global ENAP tracking system – give an idea of the status at the global level. The major issues are summarized in **table 5**. The dates for achievement of the key milestones will also be determined by the National Subcommittee on Newborn Health.

5.2.2 Key Indicators for Monitoring

Indicators ought to capture uptake of NiENAP at subnational levels; progress in health systems strengthening; coverage of essential newborn-related interventions and practices; and stillbirths, mortality, and health outcomes. The final set of indicators to monitor NiENAP progress will be defined by the National Subcommittee on Newborn Health, along with data sources and the frequency of reporting required. Sources of data will include the many systems composing HIS, including, but not limited, to NHMIS, logistics management information systems, national household surveys (DHS, MICS, SMART), facility readiness assessments, and CVRS. The source of data for each indicator should take into account the existence and strengths of current systems along with plans for data quality improvement. Feasibility of data collection and reporting frequency should also be taken into account when finalizing the list of indicators, as well as relevance to the Nigerian context (appendix 5).

Table 5: NiENAP National milestones

Year	National Milestone
2016	Finalize and launch NiENAP
	 Newborn health integrated into the National Strategic Health Development Plan
2017	NHMIS revised to include additional data on related to newborns
	 NiENAP costed at federal level
	 Full set of indicators to monitor progress of NiENAP defined and approved by the National Subcommittee on Newborn Health
	 Dissemination of NiENAP to the states and local government authorities
	 MICS 2015/16 report finalized; includes section on newborn-related health
	 National operational guidelines on KMC finalized and disseminated to states
2018	 Accountability framework developed and operationalized at all levels of healthcare
	 Establish scorecards to increase accountability for implementing the NiENAP
	 DHS 2018 includes newborn health modules
2020	 Neonatal mortality rate: 25 neonatal deaths per 1000 live births
	 Stillbirths rate: 35 stillbirths per 1000 total births
	 Review of progress toward targets
	 Detail action plan for period 2021–2025
2021	 Next revision of NHMIS includes refinements on newborn-related data
2025	 Neonatal mortality rate: 19 neonatal deaths per 1000 live births
	 Stillbirths rate: 33 stillbirths per 1000 total births
	 Review of progress towards targets
	 Detail action plan for period 2026–2030

If fully implemented, the NiENAP could help Nigeria save the lives of hundreds of thousands of newborns and women and prevent many thousands of stillbirths. This potential can only be achieved through increasing coverage and quality of existing maternal and newborn health programmes and packages, strengthening the continuum of care, and honouring previous commitments to more funding, resources, and accountability. Nigeria's future depends on its newborns being able to survive, thrive, and transform society. Overall, the FMOH and partners are committed to a supportive partnership for innovation in healthcare delivery that ensures Nigeria can end preventable maternal and newborn deaths through scaling up evidence-based approaches that generate positive results for the health of families and communities.

Based on the opportunities and priority areas identified in NiENAP, all stakeholder groups must take action in order to achieve results (**box 2**). For NiENAP to succeed, it will need to be taken up at subnational levels, and in that process adapted to the diverse local contexts that comprise Nigeria.

BOX 2: Actions required by constituency groups

Governments and policy-makers at national, state and LGA levels

Policy plan: review national strategies, policies and guidelines for RMNCH in line with the goals, targets, principles and indicators defined in the *Every Newborn Action Plan*, including a clear focus on care around the time of birth; advocate to relevant stakeholders for improved policy implementation, rationalization of staff deployment based on equity at all levels, enforcement of implementation of the National Health Act and Task Shifting and Task Sharing Policy for Maternal and Newborn Healthcare.

Budgets: allocate and release in a timely manner sufficient financial resources for MNH at all levels, advocate for the inclusion of essential commodities as part of the free MNCH policy, include pregnancy care in the NHIS and SHIS, and ensure adequate investment to improve quality and equitable coverage of care.

Legislation: strengthen legislation on birth registration, maternal and perinatal and neonatal deaths notification, respectful maternity care, and the International Code of Marketing of Breast-Milk Substitutes.

Health workers: develop or integrate a costed strategy on human resources for health into RMNCH plans; update existing standard operating procedures, guidelines, job aids, monitoring and evaluation tools and training programmes to include management of preterm labour and training health workers; ensure the deployment and adequate motivation (welfare package, incentives for rural posting, periodic training, etc.) of health workers, particularly midwifery personnel, and community health extension workers.

Quality: adopt standards of quality and a core set of indicators for assessing the quality of maternal and newborn care at all levels of healthcare provision. Strengthen and extend
integrated supportive supervision to all levels, including private-sector providers and provide more resources to strengthen the referral system.

Commodities: include essential commodities for MNH in national essential medicines lists. Build capacity for quantification, procurement, reprocessing, storage, and distribution of commodities and equipment to ensure an uninterrupted supply at all levels of the health system.

Engage: strengthen coordinated integration of community interventions by engaging with communities, civil society representatives, professional associations, the private sector, and other stakeholders to harness the power of individuals, families, and communities to ensure access and quality coverage of essential maternal and newborn care.

Accountability: count every newborn by strengthening birth registration and vital statistics, maternal, perinatal, and neonatal death surveillance and response.

Development Partners

Policy: ensure that the post-2015 development framework includes specific targets in newborn mortality reduction and stillbirth reduction, in addition to maternal mortality reduction.

Technical assistance: provide technical assistance and support to government to review and update existing protocols, guidelines, job aids and monitoring and evaluation tools to include management of preterm labour and emergency obstetrics and newborn care; develop an appropriate procurement and forecasting system for essential newborn commodities; implement the National Health Act and Task Shifting and Task Sharing Policy for Maternal and Newborn Healthcare, and improve on planning, implementation, and accountability efforts.

Coordination: ensure coordinated support among partners and intensify efforts in the states contributing to the high rate of newborn deaths.

Quality: develop standards of quality and a core set of indicators for assessing the quality of maternal and newborn care including coverage of essential commodities at all levels of healthcare provision.

Investment: ensure that multilateral investment in MNH is continued in 2015 and sustained in the post-2015 development era.

Champions: engage champions for RMNCAH in order to provide coherent, coordinated, and evidence-based messages about newborn health.

Donors and Foundations

Funding: mobilize funds to fill gaps and support the implementation of costed, evidencebased, country-owned RMNCAH plans that include a focus on birth

Health worker training: support the training, recruitment, and deployment of health workers, including investing in midwifery personnel, nurses and community health extension workers who can deliver quality essential interventions focused on newborn health.

Commodities: support access to quality commodities by investing in innovative financing, creating incentives for producers and purchasers, supporting quality assurance and regulation, and research and development efforts to improve products.

Accountability: engage in country compacts and enhance accountability around financial flows.

Private business

Innovation: invest in developing and adapting devices and commodities to care for mothers and newborns around the time of birth; invest in social and behavioural change campaigns, including those that reach the poorest and most vulnerable.

Implement: scale up best practices and partner with the public sector to improve and expand health worker training and quality service delivery.

Nongovernmental organizations, communities and/or parent groups

Community health workers: support preventive care before and after the period around birth and referrals to basic and comprehensive facilities as appropriate.

Community leadership and accountability: Involve community leaders in the design and implementation of programmes to foster community leadership and accountability; remove barriers (in relation to, for instance, transport), hold health providers accountable for providing quality services and strengthen links between communities and facilities.

Champions: identify and support local champions, including parliamentarians, parent groups, professionals, community health workers and community leaders; engage and link champions for RMNCH and adolescent health in order to integrate coordinated and evidence-based messages about newborn health.

Demand: generate and sustain demand for services using community-owned actions (for instance, incentives such as conditional cash transfers, insurance, transport, social mobilization, savings credit schemes, and cooperatives) and structures such as Ward Development Committees, Village Development Committees, community media, town hall meetings, and other influencing groups for educating community members on newborn health.

Adolescents: give special attention to adolescent girls and implement approaches to help to prevent early and unintended pregnancies.

Seek care: use community structures in the design of community health projects, use families, communities, and community health workers, skilled birth attendants, and midwives in order to obtain essential maternal and newborn care that saves the lives of babies and women.

Quality and accountability: be a voice for change; demand quality, affordable, accessible services; report poor services through government and non-government mechanisms.

Academics and Research Institutions

Prioritize research needs: agree upon and disseminate a prioritized and coordinated research agenda for improving preterm and newborn health outcomes.

Invest in research: encourage increased budget allocations for research into innovative interventions.

Build research capacity: build capacity at research institutions, especially in low- and middle-income countries, and train professionals.

Disseminate findings: disseminate research findings and best practices.

Build partnerships: strengthen global networks of academic providers, researchers, and trainers.

Health Professionals

Essential interventions: prioritize essential interventions around the time of birth and care of small and sick newborns as part of an integrated package of RMNCH services.

Health workers: provide quality and respectful integrated services to babies and women through accelerated training, retention, and motivation approaches.

Commodities: work with local and national bodies to ensure consistent availability of commodities and supplies essential for key interventions around the period of birth.

Quality: monitor quality of care, including through use of maternal and perinatal death surveillance and response.

7.0 APPENDICES

APPENDIX 1: SUMMARY OF COVERAGE INDICATORS IN THE NIGERIA DHS 2013

Accessing care

The 2013 DHS reported women's perceptions and challenges to accessing medical care. A total of 53 percent of women reported having at least one problem in reaching the facility for care, 42 percent with getting the required money, 29 percent with the distance of the facility, 15 percent not wishing to go alone, and 11 percent needing to get permission to go. In addition, 17 percent indicated that they did not like the behaviour of the facility health workers.

Antenatal care

Key components related to maternal health, including antenatal care, can have an impact on the baby. Sixtyone percent of women of reproductive age received antenatal care from a skilled provider in 2013, only a slight increase from the 58 percent reported in 2008. A total of 51 percent completed four antenatal visits, while only 53 percent had their last baby protected against tetanus and 63 percent took iron supplements.

Care around the time of birth

Increasing the percentage of births delivered in health facilities is an important factor in reducing maternal and newborn deaths and stillbirths. Thirty-six percent of births were delivered at a health facility. Facility deliveries were more common with first births (48 percent), with the proportion decreasing steadily to 22 percent in multiparous women with six or more deliveries. A total of 23 percent delivered in publicsector facilities, while 13 percent utilized the private sector. Sixty-three percent of births took place at home, with rates particularly high among women younger than 20 years (74 percent), in rural women (77 percent), uneducated women (88 percent), those belonging to the lowest wealth quintile (93 percent), and in the north-west region (88 percent). There have been no significant changes in the last 10 years





Source: Nigeria DHS 2013.

with facility deliveries (figure 9). Inequities across the country in coverage and quality of care at birth are extreme. In general, the southeast zone, especially Abia, has better practices and achieves better coverage than the northern zone, especially north-eastern and north-western states.

Reasons given for not having facility deliveries included the baby being born suddenly, not feeling that facility delivery was necessary, the cost involved, and husband or family not wanting the woman to go to the facility. There is also evidence that women do not seek care at hospitals and clinics if there have been prior embarrassing experiences or if they are apprehensive of being humiliated by the health-care staff.³

Regarding the person assisting the woman and baby during delivery, skilled birth attendants were present in 38 percent of births, only a family member or a friend in 23 percent of births, and a traditional birth attendant in 22 percent of births. Thirteen percent of the births were unassisted. The proportion of deliveries attended by skilled birth attendants has remained stagnant. Only 2 percent of births were by Caesarean section, but this varies considerably by urban/rural and whether the birth took place in a private facility.

The key socioeconomic factors that influence use of skilled birth attendants are shown in **figure 10**, utilization being highest in the highest wealth quintile, among women with more than secondary education, in the southwest region, and in urban areas.

Prevention of infection during and after childbirth, while extremely important, is rarely documented or monitored. One practice reported on in the DHS is cord care. In 2013, 36 percent of families applied something to the cord at birth – most commonly oil or methylated spirits – with the proportion highest in the south-west zone. Women with secondary education were more likely to apply something to the cord than less educated women.

In view of the high occurrence home births and the need to avoid infections, the FMoH includes clean delivery kits (Mama Kits) in the distribution of reproductive health supplies. In addition, use of 4 percent chlorhexidine has been approved for cord care by the FMOH at the community as well as facility levels, and implementation is planned at scale.



Figure 10. Socioeconomic characteristics that influence access to skilled birth attendants

Source: Nigeria DHS 2013.

Weight/size of the baby

Birth weight is recorded for only 16 percent of babies; this figure is low due to the high proportion of home births. Based on maternal assessment of the baby's size, 11 percent of mothers noted that their babies were smaller than average; 4 percent reported that their babies were very small.

Breastfeeding

Early initiation of breastfeeding takes place among a little over 30 percent of births, a figure that has not significantly changed over the last 10 years, and only 17 percent of infants under six months are exclusively breastfed. The median duration of exclusive breastfeeding is 0.5 months and has remained unchanged since 2008. In view of the importance of breastmilk for the infant, this intervention requires considerable strengthening. However, to achieve the desired results, besides intensive social and behaviour change communication (SBCC) strategies, other elements are also essential, such as adequate maternity leave, supportive workplaces, and enforcement of the WHO International Code of Marketing of Breastmilk Substitutes.⁴

Postnatal care for small and sick newborns

In 2013, 14 percent of babies received postnatal care within two days of birth, in contrast to 40 percent

of mothers. The lower proportion of babies receiving care compared to mothers highlights that unless capacity building is provided related to the assessment and care for the baby, it is possible that in the postnatal period health workers will care for the mother to the exclusion of care for the baby. The provision of postnatal care is higher in facility deliveries (28 percent) than home births (6 percent). The care is provided by a skilled birth attendant for 12 percent of the babies, by community health extension workers (CHEWs) for 0.3 percent, and by traditional birth attendants for 1.7 percent.

Postnatal care, at least when delivered by skilled birth attendants, may be related to the stay of the mother in the facility after delivery. The majority of women with vaginal deliveries (41 percent) stay in the facility for one or two days, and 29 percent for around six hours. Among women who undergo Caesarean sections, 81 percent stay more than three days. It is more challenging to get the mother to return for postnatal care after discharge because of issues such as distance and financial and family constraints.

There are limited data on recently introduced newborn care practices such as newborn resuscitation, chlorhexidine for umbilical cord care, and kangaroo mother care (KMC).

APPENDIX 2

Packages of Care	Interventions
Before Conception	Family planning
	Nutrition promotion for adolescents
	Folic acid supplementation
	Prevention and management of human immunodeficiency virus (HIV)/Sexually transmitted infections
Antenatal Care	Focused antenatal care –
	Minimum of four antenatal care visitsAt least two doses of tetanus toxoid
	 Management of syphilis/sexually transmitted infections
	 Intermittent preventive therapy and long-lasting insecticide treated nets Prevention of mother-to-child transmission
	Birth preparedness
	Maternal nutrition
	Pre-eclampsia and eclampsia prevention and management
	Detection and treatment of bacteriuria
Childbirth	Skilled attendance at birth
	Emergency obstetric care
	Antibiotics for premature rupture of membranes
	Corticosteroids for preterm labour
	Detection and management of breech (caesarean section)
	Labour surveillance and early diagnosis of complications
	Clean delivery practices and chlorhexidine for cord care
Postnatal Care	Routine postnatal care for early identification of danger signs and referral
	Extra care for small babies or babies with other problems
Newborn Care	Newborn resuscitation
	Thermal care
	Early and exclusive breastfeeding
	Management and care for low birth weight babies including KMC
	Emergency newborn care for illness

Table A2. Newborn interventions included in the IMNCH strategy 2013⁶³

APPENDIX 3

Table A3. Training resource materials along the continuum of care that impact newborn health

Strategic Intervention Package	In-service Training Modules	Service Provider
Preconception	Family Planning	
Antenatal Care	Key Household Practices	Community Resource Persons Midwives/
	Focused Antenatal Care	Nurses
Care During Labour and Child Birth	Life Saving Skills	CHEWs
	Modified Life Saving Skills	Midwives/Nurses
	Expanded Life Saving Skills	Medical Doctors
	Essential Newborn Care Course	
	Modified Essential Newborn Care Course	
Essential Newborn Care	Essential Newborn Care	CHEWs
	Modified Essential Newborn Care	Nurse/Midwives, Doctors
Care of Healthy Newborn	Key Household Practices	Community Resource Persons

Note: The Comprehensive/Harmonized Training Module that covers care of the newborn is the Essential Newborn Care Course (March 2016)

APPENDIX 4. BOTTLENECK ANALYSIS

Table A4. Summary of health system bottlenecks and solutions to scale up newborn care

Summary of Key Rot	tlenecks by Health System Building Blocks	Strategies and Actions Needed to Address Identified
Summary of Key Bottlenecks by Health System Building Blocks Building Block Priority Bottlenecks		Challenges and Bottlenecks
Leadership and Governance	 No focal person or responsible person at state and LGAs levels 	 Develop and strengthen the capacity of reproductive health focal persons at state and LGA levels to take on newborn health
	 Birth registration policy exists but not enforced. 	 Increase advocacy for newborn health at all levels o government
		 National Population Commission and partners to strengthen birth registration and include provision of certificates
		 Include vital registration as part of the national conditional cash transfer programmes
Health Finance	 Very low coverage of health financing schemes No specific line item for tracking financial resources for maternal-newborn health at all levels 	 Global backing to support implementation of National Health Act to ensure adequate resources for implementation of MNH interventions at PHC level.³
		 High level advocacy to improve financial access to MNH services
		 Support MNH to establish budget line for maternal- newborn health
		 Appropriate legislative bodies to support MNH to track expenditure, to ensure prompt fund release and strengthen accountability on health expenditure
		 State government to expand community-based health insurance schemes
Health Workforce	 Inequitable distribution and poor retention of health workers when posted to remote and security 	 Produce and deploy skilled health workers and replicate the Midwives Service Scheme to cover mor PHCs
	challenged areasPoor remuneration of health workers	 Provide incentives for health workers working in remote and security challenged areas
Essential Medical Products and Technologies	 Coordination is not effective yet 	 Integrate all existing procurement systems
Health Service Delivery	Inadequate funding	• Funding for supervision should be made available a
	 Supervision not regular at sub- national level 	all levels
		 Ensure regular integrated supportive supervision (ISS) is conducted and ISS tools and resources for implementation are made available
		• Information from ISS to be linked with PHC reviews

Continues...

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NEWBORN CARE IN GENERAL

Summary of Key Bottlenecks by Health System Building Blocks		Strategies and Actions Needed to Address Identified
Building Block	Priority Bottlenecks	Challenges and Bottlenecks
Health Information Systems	 Ineffective engagement of the private sector Weak reporting mechanisms Socio-cultural issues prevent reporting of deaths Poor use of data for action Stillbirths and newborn deaths not counted 	 Incentive for private sector reporting Implementation of public-private partnership policy Increase supervision of private sector Homeless management information system tools to capture MNH indicators at community level Improve behaviour change communication strategies around making newborns count
Community Ownership and Participation	 Sub-optimal engagement of community structures (ward development committees, women's groups, community-based organizations etc.) 	 Establish sustainable system for engaging and strengthening existing community structures

Note: Bottleneck analysis was carried out in 2013; this table summarizes the key issues. Since then the National Health Act has been passed and the budget line for maternal, newborn, and child health has been established. Procurement systems have also been integrated. The National Health Bill was approved and signed into law in 2014.

APPENDIX 5: INDICATORS FOR CONSIDERATION FOR NIENAP

	INDICATOR
Global ENAP indicators	Impact 1. Maternal mortality ratio
	2. Stillbirth rate
	3. Neonatal mortality rate
	Coverage: Care for all mothers & newborns
	4. Skilled attendant at birth
	5. Exclusive breastfeeding for six months
	6. Early postnatal care for mothers and babies
	Coverage: Complications & extra care
	7. Antenatal corticosteroid use
	8. Newborn resuscitation
	9. KMC, feeding support
	10. Treatment of neonatal sepsis
Additional factors for	Preterm birth rates
consideration	Low birthweight rates
	Essential newborn care, including cord care
	Care seeking
	Quality of care
	Uptake of NiENAP at state and LGA level, including costed plans
	Determinants of newborn-related health
	Disaggregation to ascertain equity (by gender, urban/rural, wealth quintiles, other)

Source: Global ENAP indicators⁶⁴

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List of contributors

- Dr. (Mrs.) Adebimpe Adebiyi (Director, Family Health, FMOH, Abuja)
- 2. Dr. A. R. Adeniran (FMOH, Abuja)
- 3. Omoru A. E (FMOH, ABUJA)
- 4. Mrs Tinuola Taylor (FMOH, Abuja)
- 5. Osuntogun A.O (Mrs) (FMOH, ABUJA)
- 6. Okologo B. O. (FMOH, Abuja)
- 7. Bako-Aiyegbusi K. L. (Mrs) (FMOH, ABUJA)
- 8. Dr. Ovuoraye John. A. (FMOH, Abuja)
- 9. Bajomo Remi (FMOH, Abuja)
- 10. Dr. James Oluwafemi I. (FMOH, Abuja)
- II. Dipo Oginni (FMOH, Abuja)
- 12. Adekoya Victoria. A (FMOH, ABUJA)
- 13. Dr. Nnenna Ihebuzor (NPHCDA, ABUJA)
- 14. Dr. M.N. Sandah-Abubakar (NPHCDA)
- 15. Nasiru Ikharo (NHIS, ABUJA)
- 16. ljeoma Ohajuru (NMCN)
- 17. Dr.Tijjani Hussaini (SMOH, KANO)
- 18. Dr. Taiwo Johnson (SMOH, LAGOS)
- 19. Prof. Olowu A. O (PAN)
- 20. Prof. Ezeaka Chinyere (NISONM/LUTH)
- 21. Dr. Onalo Richard (NISOMN/UATH, Gwagwaladga)
- 22. Raphael Oruamabo (NISONM)
- 23. Dr. Ezeanosike Obum (NISONM/FETHA/Ebonyi)
- 24. Dr Esangbedo Dorothy (PAN)
- 25. Dr. Elizabeth Disu (PAN/LASUTH, LAGOS)
- 26. Prof. Brian Adinma (SOGON)
- 27. Dr. Akinde Joseph (SOGON)
- 28. Olufunke Kanjuni (NANNM Kogi State)
- 29. Dr. Suleiman B. M. (FMC KATSINA)
- 30. Prof. Adejuyigbe E.A (OAUTH, Ile- Ife)
- 31. Dr. Abdulkadir Isa (ABUTH, ZARIA)
- 32. Dr. Chukwuemeka Ezeama (NAUTH, Nnewi)
- 33. Dr. Mustapha Bello (UMTH Maiduguri)

- 34. Dr. Andrew Mbewe (WHO)
- 35. Dr. Joy Ufere (WHO)
- 36. Dr. Garba Safiyanu (UNICEF)
- 37. Daniel Salihu (UNICEF)
- 38. Josephine Okide (UNICEF)
- 39. Prof. E.O. Otolorin (MCSP/JHPIEGO)
- 40. Olutunde Oluyinka (MCSP/SCI)
- 41. Dr. Olayinka Umar-Farouk (MCSP)
- 42. Abimbola Williams (Save the Children Int.)
- 43. Oyinbo. O. Manuel (Save the Children Int)
- 44. Omale Lauretta (Save the Children Int)
- 45. Bimpe Akano (Save the Children Int)
- 46. Yetunde Oluyemi (Save the Children Int.)
- 47. Dr. Joseph Monehin (USAID)
- 48. Dr Getrude Odezugo (USAID)
- 49. Uzo Oskhene (CHAI)
- 50. Onwuasor Nneka (CHAI)
- 51. Dr.Titi Duro-Aina (PATHFINDER INTL.)
- 52. Dr. Amenze Eguavoen (PATHFINDER INTL,)
- 53. Chike Nwaogwu (HSDF/Abuja)
- 54. Richard Wennberg (University of Washington)
- 55. Dr Nkeiru Onuekwusi (Independent Consultant)
- 56. Mary Kinney (Save the Children, Washington DC)
- 57. Prof Indira Narayanan (Independent Consultant)

Secretariat

58. Oke Sulaimon Adeyemi (FMOH, ABUJA)

Editors

- Dr A. R Adeniran Dr James Oluwafemi I. Dr Abimbola Williams Mary Kinney Dr Olutunde Oluyinka
- Prof. Indira Narayana



Federal Ministry of Health

Federal Secretariat Complex, Phase III, Shehu Shagari Way, Abuja FCT Nigeria www.health.gov.ng

