

# Saving Newborn Lives in Nigeria

## SITUATION ANALYSIS AND ACTION PLAN FOR NEWBORN HEALTH

*in the context of the Integrated Maternal, Newborn and Child Health Strategy*

### Executive Summary

The Federal Ministry of Health of Nigeria (FMOH) recently reviewed the situation of maternal, newborn and child health (MNCH) in Nigeria and developed an Integrated Maternal, Newborn and Child Health (IMNCH) Strategy to address gaps in care.<sup>3</sup> Roll-out of the IMNCH Strategy has begun at zonal, state and local government authority levels. The IMNCH strategy provides opportunities to integrate services and programmes, overcoming competing interests in the implementation of evidence-based interventions for MNCH. The IMNCH Strategy has helped to bring recognition of the massive burden of newborn deaths in Nigeria, but there is recognition that compared to maternal and child health, there is less consensus on the priority actions to reduce newborn deaths.

The main objective of this report is to provide a more comprehensive understanding of newborn survival and health in Nigeria, analyse the data of relevance by state and present concrete steps to accelerate action to save newborn lives in Nigeria in the context of the IMNCH strategy.



Jonathan Hubschman/Save the Children

### Saving Nigeria's Newborns: Key Findings and Recommendations

**1. Nigeria's newborns are dying in huge numbers** – 284,000 each year, 778 a day. There has been no measureable reduction in the average national neonatal mortality rate in the last decade. There is wide variation in mortality between states, between urban and rural areas and a huge difference for the poorest families who have more than twice the risk as the richest Nigerian families.

**2. Most of these young lives could be saved with existing interventions** – recent analyses suggest that up to 193,000, or 68 percent of these newborn deaths could be prevented if essential interventions possible through existing health packages reached all Nigerian women and newborns. Healthy home practices and community-based care, possible even in hard to access areas could save over 90,000 babies a year. Almost 23,000 babies die each year just from neonatal tetanus.

**3. The key interventions to save newborn lives are mostly possible through the existing health system but coverage is extremely low** – even much lower than most other African countries, for example for tetanus toxoid (51%), skilled attendance during childbirth (44%) and early breastfeeding (30%).

**4. The policies are mostly in place and the cost is affordable** – the key gap is connecting to action in each state and implementing services, and considering innovations to reach higher coverage and quality of care, e.g. delegation of newborn health tasks to extension workers and other cadres and new strategies to bridge care in the community and health facilities.

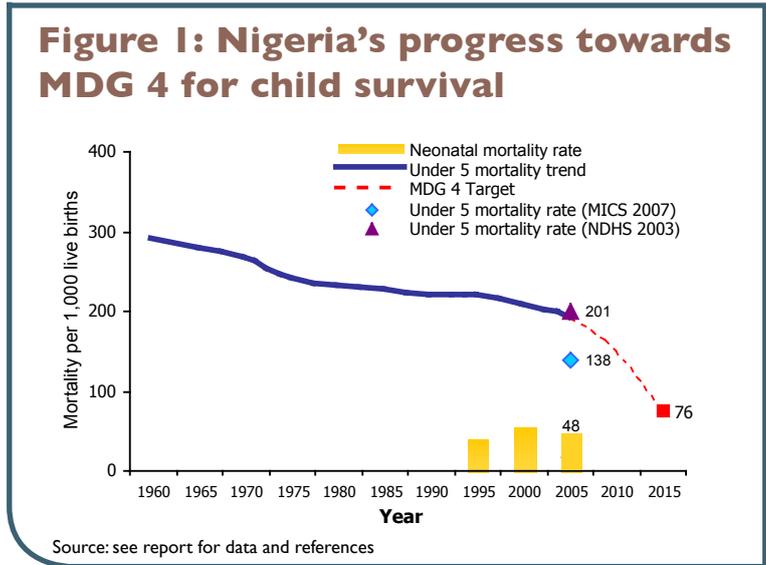
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Full report with references and detailed data sources available on [www.savethechildren.org/savenewborns](http://www.savethechildren.org/savenewborns)

## Nigeria's newborns

Nigeria has prioritised maternal survival as outlined by the fifth Millennium Development Goal (MDG) for maternal health. After several years of advocacy and action, the number of maternal deaths in Nigeria still ranks second highest in the world. The estimated national maternal mortality ratio (MMR) in Nigeria is 800 per 100,000 live births, resulting in 47,000 maternal deaths each year. For every woman who dies of maternal causes, at least six newborns die and a further four babies are stillborn.

Recent progress has been made towards reducing child mortality but Nigeria is currently off track for MDG 4 for child survival. Nigeria has achieved only an average of 1.2 percent reduction in under-five mortality per year since 1990 yet needs to achieve an annual reduction rate of 10 percent from now until 2015 to meet MDG 4 for child survival. Given that its population is the largest in Africa, Nigeria's failure to make inroads regarding the MDGs significantly influences Sub-Saharan Africa's achievement of these goals as a whole and contributes disproportionately to global childhood mortality. About 5.9 million babies are born every year in Nigeria, and over one million of these children die before the age of five years.

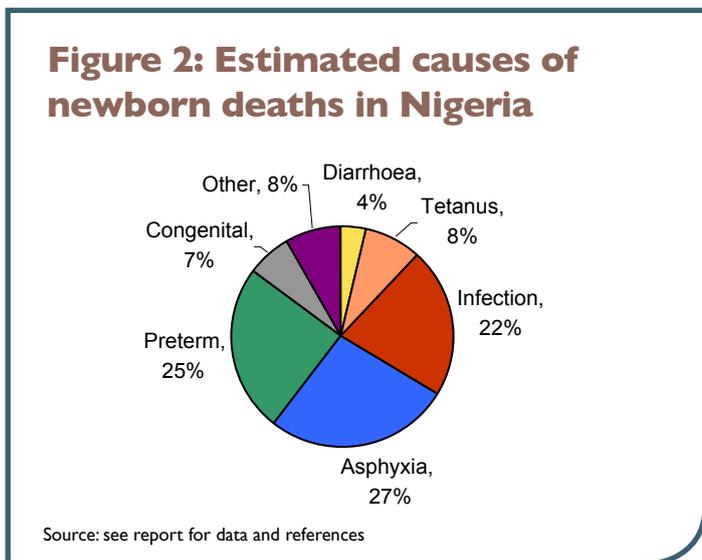
There has been no measureable progress made in reducing neonatal mortality in Nigeria over the past decade. Approximately one quarter (24 percent) of all under-five child deaths occur in the neonatal period, or the first month of life. In Nigeria alone, 284,000 newborns die every year – 778 deaths each day. Many of these deaths occur at home and are therefore unseen and uncounted in official statistics. The majority of newborn deaths occur within the first week of life, reflecting the inextricable link between newborn survival and the quality of maternal care.



- One in every four child deaths in Nigeria is a newborn (first month of life)
- Each year 284,000 Nigerian newborns die
- MDG 4 in Nigeria cannot be met without more attention to newborn survival

## Why do Nigerian newborns die?

Despite the grim statistics, most of these newborn deaths are preventable. Birth asphyxia (27 percent), complications of preterm birth (25 percent), severe infections (23 percent) and tetanus (8 percent) are the leading causes of death. Existing knowledge, technology and improving the quality and coverage of essential services can reduce neonatal mortality and save thousands of Nigerian newborn lives, without intensive care.



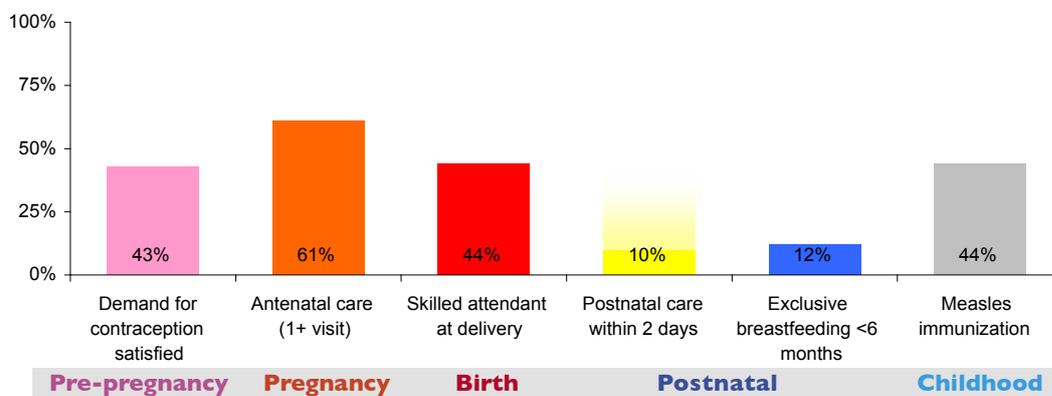
- Three causes of death (birth asphyxia, preterm birth complications and infections) account for three quarters of newborn deaths in Nigeria.
- Most of these deaths could be prevented by healthy practices and simple case management
- Each year almost 23,000 Nigerian newborns still die of tetanus which is eminently preventable with feasible, low cost immunisation of women.

## Status of newborn care in Nigeria

The state of Nigeria's newborns reflects the inadequacy and inaccessibility of the country's overall health services. WHO has ranked Nigeria's health system functioning 187th out of 191 countries. The FMOH articulated this concern in the IMNCH strategy and seeks to promote maternal, newborn and child health throughout the continuum of care. This continuum connects care before pregnancy, and throughout pregnancy, childbirth, postnatal and child health services.

In Nigeria, almost all key packages along the continuum of care have coverage of less than 50 percent, apart from one visit of antenatal care (Figure 3). Generally coverage is higher for outreach services such as antenatal care, than for skilled attendance or case management of childhood illness. Antenatal care coverage is not much below the average for Africa, but immunisation coverage is much lower. For example, across African countries the average DPT3 immunisation coverage is 72 percent, yet in Nigeria coverage is just 49 percent. Encouragingly, new household survey data are pointing to 10 percent increase in coverage of skill attendance between 2003 and 2007, though national averages hide wide variations between states, urban and rural populations and between the rich and the poor. For example, three states in Nigeria have skilled attendance coverage over 90 percent, yet there are seven states where less than 10 percent of women give birth with a skilled attendant present.

**Figure 3: Coverage along the continuum of care in Nigeria for maternal, newborn and child health**



Source: see report for data and references

### Before pregnancy

- The National Policy on Health and Development of Adolescents and Young People, provides supportive policy but limited progress has been achieved. This is reflected by low female secondary school attendance (33 percent); the fact that 15 percent of girls are married before age 15; a total fertility rate of 5.5 and very low usage of modern contraceptives (9 percent).
- There is an inadequate emphasis on adolescent nutrition. Furthermore, the implementation of adolescent female school-age immunisations such as tetanus toxoid (TT) is not routine.
- Many socio-cultural practices pose significant reproductive health challenges, particularly including female genital cutting, which has a prevalence rate as high as 57 percent in some areas of the country.

### During pregnancy

- Sixty-one percent of Nigerian women attend at least one antenatal care ANC visit with a skilled care provider, providing an opportunity to deliver key interventions for mother and baby. Rural and poor women are least likely to attend ANC and attendance varies greatly by state.
- The content of ANC visits does not reflect a focused ANC (FANC) package of interventions. Only 47 percent of mothers receive the recommended two or more doses of TT (TT2+) with figures as low as seven percent in Zamfara state. Just over half of women attending ANC are counselled on danger signs during pregnancy. Malaria prevention interventions are extremely rare during ANC, as just one percent of mothers receive Intermittent Preventive Treatment during pregnancy (IPTp) for malaria as a part of their antenatal visits. Only one percent of pregnant women sleep under an insecticide treated bed net (ITN).
- Overall, less than half of mothers make four or more ANC visits, and fewer make their first ANC visit during the first three months of pregnancy.

## During childbirth

- About 60 percent of births in Nigeria take place at home. The proportion of home births is as high as 89 percent in the North West and 82 percent in the North East zones of the country.
- About 44 percent of deliveries are with a skilled birth attendants— doctors, nurse/midwives or auxiliary midwives. Traditional Birth Attendants (TBA) attend 20 percent of births. Over 30 percent of women give birth with just a relative or no attendant present at all.
- Even for women who do give birth in a health facility, the quality of care is often low. The knowledge, availability and use of partographs is limited in health facilities. Basic requirements are often lacking such as a power supply, water, equipment and drugs. Although 24-hour service is available in most tertiary and secondary health facilities, very few primary health centres in the country offer round-the-clock services.
- While 33 percent of the nation's private facilities meet Emergency Obstetric Care (EmOC) standards, only 4 percent of public health facilities meet the criteria – most in wealthier, urban areas. Fewer than 2 percent of women nationally deliver by caesarean section, pointing to an unmet need for emergency services.
- Emergency care for newborns is even more lacking. Few health workers (10 percent of midwives) are trained in neonatal resuscitation, and fewer trained in the immediate care of premature babies. Care of premature or low birth weight babies is limited to the few tertiary and secondary health facilities that have incubators.

## Postnatal

- Very little data are available about the coverage and quality of routine postnatal care for mothers and newborns in Nigeria, but limited data show a lack of services.
- One quarter of women who give birth outside a health facility receive postnatal care within the first two days of birth, but the content and provider of this visit is unknown.
- Just 20 percent of mothers receive a vitamin A dose within two months of giving birth.
- Nigeria has one of the poorest exclusive breastfeeding rates in Africa. Only 32 percent of newborns are breastfed within one hour of birth; recent data show that the percentage of infants exclusively breastfed has decreased from 17 percent according to the 2003 Nigeria Demographic and Health Survey (NDHS) to 12 percent according to the 2007 Multiple Indicator Cluster Survey (MICS).
- The rate of children who are fully immunised by one year of age has dropped from 13 percent to 11 percent between 2003 and 2007.

## Case management for neonatal illness

- Since neonatal care is relatively new, survey data have not been routinely collected and information is lacking. The coverage of case management of childhood illness in Nigeria is low and data in other countries shows that fewer babies are brought out of the home for care.
- Neonatal sepsis case management is one of the highest impact interventions in any country and is achievable at primary or even at community level where access to the health system is problematic. Severe cases should be referred for facility care.
- Specialised neonatal care is required in all referral centres, but currently it is largely restricted to teaching hospitals in Nigeria. Improving facility level care of newborns in Nigeria is crucial and is an achievable goal.



Jonathan Hubschman/Save the Children

## Newborn health policies and programmes

Despite various revisions of Nigerian health policy, health sector reforms and numerous strategies and guidelines, Nigeria still fails to deliver adequate healthcare to most of its women and children. A major contributing factor is the autonomy of each level of the health system, leading to largely uncoordinated supervision and a lack of accountability and monitoring at each level.

To harmonise relevant policies and forge a way forward for MNCH, in 2007 the FMOH launched the IMNCH Strategy. The strategy intends to reorient the health system to ensure the delivery of essential interventions that provide a continuum of care for women, neonates and children. The challenge now is implementation. The new National Health Bill recently passed by the legislature aims to streamline responsibilities among the different levels of care and enhance health care funding, especially at the primary health care (PHC) level.

Inadequate funding at all levels hampers the performance of the Nigerian health care system. The current government budgetary allocation for health of 3.5 percent is still far below the target set in the Abuja Declaration of 2001. The bulk of health funding is borne by households through out-of-pocket payments for health care, which contributes up to 63 percent of total health expenditure. The high cost of care, particularly in the case of obstetric emergency, is one of the most important barriers to healthcare use in Nigeria. There is no national policy on free services for maternal and child care although some states are trying to provide free maternal, newborn and child health services.

The Nigerian health system is relatively rich in human resources compared to many other African countries with 2 healthcare professionals per 1000 population, close to the WHO benchmark of 2.5 per 1000. However large numbers of doctors, nurses and other qualified medical practitioners leave the country due to low remuneration, poor service conditions and minimal opportunities for staff development. Additionally, there is often an inequitable distribution of staff and the necessary skills mix to offer maternal, newborn and child health services. The existing cadre of Community Health Extension Workers (CHEWs) have limited responsibilities in community-based maternal and newborn health and innovative use of this cadre for MNCH is an important operations research agenda.

### KANO PROCESS

In parallel with this national Situation analysis, a state level process has been undertaken in Kano, highlighting one of Nigeria's 36 states where high rates of maternal, newborn and child mortality have caught the attention of state government. The response in Kano has been positive with conducive political will and a commitment of funds and the engagement of partners to introduce Safe Motherhood, Emergency Obstetric Care, the Prevention of Mother-to-Child Transmission (PMTCT) and Integrated Management of Childhood Illness (IMCI) as parallel programmes. The State is now in process of rolling out the IMNCH Strategy and this will link with the newborn health situation and planning process already underway.



The Kano State case study reports:

- Population coverage of outreach services is low, for example DPT3 immunisation is only 6%.
- State investment predominantly involves the tertiary and secondary levels of health services, rather than PHC
- Newborn health is considerably constrained by low coverage of ANC services (35%) and low availability of focused ANC services with evidence-based interventions, including blood pressure measurement, malaria prevention and PMTCT
- Inadequate knowledge and practice of birth preparedness
- Low use of skilled attendance at childbirth
- Very low availability and use of postnatal care services

For more details see the Kano State profile in Chapter 5 of this report.

Kano State case study report will be linked to the IMNCH planning in Kano State

# Healthy newborns will change Nigeria's future

		Evidence based interventions to save newborn lives	
Packages along the MNCH continuum of care	Before pregnancy	<ul style="list-style-type: none"> <li>• Education with equal opportunities for girls</li> <li>• Nutrition promotion especially girls and adolescents</li> <li>• Prevention of female genital mutilation</li> <li>• Prevention and management of HIV and sexually transmitted infections (STI)</li> <li>• Family planning</li> </ul>	
	During pregnancy	<ul style="list-style-type: none"> <li>• Focused ANC including               <ul style="list-style-type: none"> <li>– Tetanus toxoid immunisation</li> <li>– Screening and management of syphilis/STIs</li> <li>– Management of pre-eclampsia</li> <li>– Intermittent preventive treatment IPTp and Insecticide treated nets (ITN) for malaria</li> <li>– Prevention of mother-to-child transmission of HIV</li> </ul> </li> <li>• Birth and emergency preparedness at home</li> </ul>	
	Childbirth care	<ul style="list-style-type: none"> <li>• Skilled attendance at birth</li> <li>• Emergency obstetric care</li> <li>• Companion of the woman's choice at birth</li> <li>• Emergency loan and transport schemes</li> <li>• Where there is no skilled attendant, support for clean childbirth and essential newborn care (drying, warming, hygiene and exclusive breastfeeding)</li> </ul>	
	Postnatal care (PNC)	<ul style="list-style-type: none"> <li>• Routine PNC visits for mother and baby especially first two days after birth</li> <li>• Extra care for small babies or babies with other problems (e.g. mothers with HIV/AIDS)</li> <li>• Promotion of adequate nutrition for the mother</li> <li>• Family planning</li> </ul>	
	Case management of preterm babies and ill newborns (eg IMCI)	<ul style="list-style-type: none"> <li>• Management and care of small babies including Kangaroo Mother Care (KMC)</li> <li>• Emergency newborn care for illness especially sepsis at first level of the health system (eg IMCI)</li> <li>• Facility based care for newborns with serious illness including severe infections, neonatal encephalopathy, preterm birth complication, jaundice, and congenital abnormalities</li> </ul>	
	Cross-cutting programmes	Nutrition and breastfeeding promotion	<ul style="list-style-type: none"> <li>• Nutrition promotion especially in girls and adolescents, including folic acid</li> <li>• Maternal nutrition support during pregnancy and lactation</li> <li>• Early and exclusive breastfeeding for babies</li> </ul>
Prevention of mother-to-child transmission of HIV (PMTCT)		<ul style="list-style-type: none"> <li>• Preventing STI/HIV in girls and women and avoiding unintended pregnancy amongst women who are HIV infected</li> <li>• PMTCT of HIV through antiretroviral therapy and safer infant feeding practices</li> </ul>	
Malaria control		<ul style="list-style-type: none"> <li>• IPTp and ITN</li> </ul>	
Immunisation		<ul style="list-style-type: none"> <li>• Tetanus toxoid vaccination for pregnant women</li> <li>• Immunizations of infants with BCG, Polio and Hepatitis B</li> </ul>	

## Priority opportunities in Nigeria to save newborn lives

- Promote delay of first pregnancy until after 18 years and each pregnancy spaced at least 24 months after the last birth
  - Prevent and manage HIV and STIs especially among adolescent girls
  - Social mobilisation and legal support to address female genital mutilation
- Undertake tetanus toxoid campaigns especially in the Northern states to advance elimination of neonatal tetanus
  - Increase the coverage and quality of ANC ensuring women receive four visits and all the evidence based interventions that are part of focused ANC
  - Promote improved care of women in the home and look for opportunities to actively involve women and communities in analysing and solving problems such as high work load during pregnancy
- Increase coverage with skilled birth attendants and ensure that all skilled birth attendants are competent in essential newborn care and resuscitation
  - When scaling up emergency obstetric care, include essential newborn care and resuscitation
  - Promote birth and emergency preparedness at home and better linkages between home and facility (Emergency loan and transport schemes, etc)
- Develop a global consensus regarding a PNC package for mothers, newborns
  - Undertake operations research in Africa to test models to provide PNC including at community level in order to accelerate scaling up
- Adapt IMCI case management algorithms to address newborn illness and implement this at scale at primary healthcare level
  - If it is not possible to provide case management for neonatal illness at scale through existing service delivery (e.g. IMCI is low coverage) consider other mechanisms to bring care close to families (e.g. community based treatment of neonatal sepsis)
  - Ensure hospitals can provide care of preterm babies including KMC and support for feeding preterm babies
- Review and strengthen policy and programmes to support early and exclusive breastfeeding, adapting the Global Strategy for Infant and Young Child Feeding
  - Address anemia in pregnancy through iron and folate supplementation, hookworm treatment and malaria prevention
- Increase coverage of PMTCT and improve integration of PMTCT especially with antenatal and postnatal care
  - Use opportunities for strengthening HIV programmes to strengthen MNCH services (e.g. laboratory and supplies)
- Increase coverage of ITN and IPTp during pregnancy
  - Use opportunities for strengthening malaria programmes to strengthen MNCH services (e.g. laboratory, supplies and social mobilisation)
- Accelerate the elimination of maternal and neonatal tetanus
  - Use opportunities for strengthening immunisation programmes to strengthen MNCH services (e.g. social mobilisation, linked interventions, and monitoring)

## Recommended actions to strengthen MNCH services and save newborn lives

### Ensure leadership, appropriate funding and accountability

- Allocate 15 percent of government resources to health in order to meet the Abuja commitment.
- Review implementation of the National Health Insurance Scheme (NHIS) to identify gaps and scale-up services to offer community level insurance.
- Coordinate funding from development partners for effective MNCH delivery. Programs should be mapped in order to avoid duplication and to increase synergies.
- Strengthen the national working group for MNCH including professional associations, non-governmental organizations (NGOs), civil society and development partners.
- Consider appointing a national desk officer for newborn health in FMOH.

### Orient policies, guidelines and services to include newborn care

- Accelerate roll-out of the IMNCH strategy at state-level, including programme management, supply logistics and data tracking.
- Support development and implementation of newborn care standards, to be adapted and used at state level.
- Review current health policies to ensure that high impact neonatal interventions are included, especially around emergency obstetric care (adding essential newborn care and neonatal resuscitation) and IMCI (neonatal sepsis case management).
- Target early postnatal care through clear policy directives to reach women and their newborns at home or close to home in the crucial first days of life.
- The FMOH should institutionalise modalities for neonatal resuscitation training and Kangaroo Mother Care (KMC) and other key neonatal care interventions.

### Effectively plan and implement, including human resources, equipment and supplies

- Prioritise the implementation of the highest impact and most feasible interventions using a clear process. Priorities and phasing of implementation will differ by state and can be linked to the IMNCH planning process in each state (see Kano state planning process example).
- Review essential drugs and supplies lists and identify key bottlenecks in drugs and supplies logistics systems.
- Systematically increase the numbers and capacity of staff especially in underserved areas and consider more delegation of tasks. More training establishments, curriculum reviews and modalities to increase enrolment should be established.
- Strengthen processes for effective supervision at all levels of the health care system using standardised reporting formats. Interventions to strengthen human resources at all levels should be explored.
- Review the role of CHEWs in maternal and newborn health and build capacity.
- Develop behaviour change communication messages and use media effectively to discourage harmful practices, create awareness about newborn care and inform about danger signs.

### Track progress and use the data to improve programmes

- Implement a system to increase coverage of the birth and death registration policy.
- Ensure that all implementation plans include a core set of newborn care indicators.
- Involve development partners, agencies and professional associations in developing a monitoring and evaluation framework and indicator tools, data management and monitoring delivery on commitments.
- Review tools for routine auditing of maternal and neonatal deaths, and provide support for adaptation and use at LGA and state levels within the context of the IMNCH strategy.
- Conduct operational research on how to scale-up MNCH interventions along the continuum of care. Such research should also provide evidence for costing, strategic planning, capacity building and operations management.

**Accountable leadership at all levels of government and civil society is crucial for effective MNCH planning and action to reduce needless newborn deaths in Nigeria.**