



Nigerian National Routine Immunization Strategic Plan(2013-2015)



1-0 Foreword

The purpose of this strategic plan for routine immunization needs to be understood clearly. The Agency's mandate is to provide vaccines and technical support for effective implementation of Primary Health Care by the States and Local Governments. However to effectively perform this function of which immunization is but an important component, the government of Nigeria through the NPHCDA procures and distribute potent vaccines to all states and LGAs annually that covers the population of their infants.

The journey in immunization so far has been ups and downs from the peaks of the 90s Universal Childhood Immunization (UCI) period to the present era of Global Polio Eradication Initiative. Astonishingly, routine immunization which underpins any meaningful sustainable achievement in disease eradication, elimination or control efforts is paid little attention. The quest to further accelerate our pace to achieve the Millennium Development Goals (MDGs) 4 and 5 is also of great concern. Consequently, a careful and purposeful attention to routine immunization seems to be our answer.

The 2013 – 2015 Routine Immunization strategic framework is developed to express Nigeria's goals, objectives, and strategies to effectively meet the goals of 2011–2015 National Strategic Health Development Plan. This document is planned to elaborate on the routine immunization component of Comprehensive EPI Multi-year Plan for 2011-2015 (cMYP) which is aligned to the National Strategic Health development Plan [2]. It builds on the outcome of the Retreat for Developing Strategic Framework for Routine Immunization held in Lafia, in Nasarawa State; 14-16 February 2013. The document took into consideration the National Immunization Policy and "Saving of One Million Lives (SOML) Initiative" and other various directives and recommendations emanated from high level forums and meetings debated on the recent setbacks and the challenges facing the implementation of RI in the country.

Therefore what this strategic plan hopes to achieve within the period left of the present country multi- year plan which ends in 2015, is to lay out clearly the road map towards attaining the ideals of optimal routine vaccination of all children in accordance with all global and regional goals. The national target of 80% has been elusive for some time now. Huge numbers of un-immunized children have accumulated posing a threat to the health of the majority with outbreak of diseases especially those of epidemic potential. Children require additional protection against pneumonia and diarrhea which are killing them. More lives need to be saved to ensure that the millennium goals are achieved by 2015. Considerable investments are required for the expansion of cold chain, logistics and surveillance network for measles and childhood bacterial meningitis. Demand must also be created on a sustainable basis that will lead to permanent uptake of services by the communities. Our data must reflect accurately the situation for meaningful programmatic progress to be monitored.

Integration of services amongst parallel programs must also be encouraged through creating appropriate synergies and coordination mechanisms. These and more are well articulated in the plan.

Let me conclude by appreciating our partners who have supported this process through. It has not been easy but with this support, we have once more embarked on the series of journeys necessary to making Nigerians healthy. This is what the agency and government stands for and we remain committed to entrenching an accountability framework that will ensure that everyone delivers his or her part.

Thank you.

Dr Ado JimadaGana Muhammad

Executive Director and Chief Executive Officer

1.1 Acknowledgement

Special appreciation goes to Dr. Ado J. G. Mohammed, the Executive Director of the National Primary Health Care Development Agency for leadership role and support in developing this Routine Immunization Strategic Framework that span over 2013 – 2015. This singular action of the Executive Director will go a long way to bring all the ambitious objectives of Routine Immunization together in a document that will drive implementation strategies in Routine Immunization.

I also appreciate the efforts and contributions of Dr. E. A. Abanida, Director, Disease Control and Immunization in making sure that the production of this document came to reality.

I appreciate the administrative and logistic supports received from head and staff of the Routine Immunization unit to make the production of this strategic document possible.

Special thanks to all staff of the Agency for their onerous participation and support during the preparatory stages of producing the Routine Immunization Strategic Framework.

I would also like to thank the partners, particularly members of the Routine Immunization Working Group (UNICEF, WHO, CHAI, PRRINN/MNCH, CDC, SGN, BMGF,NPHCDA) and other organizations who gave their time and demonstrated the same dedication and willingness to share, experience, make suggestions, work in partnership during series of meetings and the retreat.

1.3 Acronyms

Table of Contents

1.1 Acknowledgement	3
1.3 Acronyms.....	4
1.4 Executive summary	6
2.0 Introduction and background	7
2.3 Expanded Program on Immunization:.....	7
3.0 Situational Analysis of Routine Immunization:.....	8
2.2 Major Causes of Poor RI Performance	8
4.0 Strategic framework	15
4.1 Goals.....	15
4.2 Strategic Objectives.....	15
4.4 Strategies.....	17
4.4.2 Accountability Framework.....	17
6.0 Monitoring and Evaluation.....	21
6.1 The Monitoring and Evaluation process.....	22
7.0 Logical Framework and Budgeting/costing.....	30
8.0 References.....	32
9.0 Annexes	34
9.1 WHO supervision model	34
9.2 Accountability Framework Schematic.....	36
9.3 Sanctions and Rewards	36

1.4 Executive summary

2.0 Introduction and background

2.1 Socio-demography:

The Country operates a federation comprising of 36 states and a Federal Capital Territory (FCT) Abuja; within these states are 774 LGAs with 9,565 wards. Nigeria shares most of the social and economic problems associated with developing countries. 36 states and FCT are grouped into six geo-political zones, the South-South, the South-East, the South-West, the North-East, the North-West and the North-Central zones.

The population of Nigeria is estimated at 169, 019, 328 in 2012. Given that the country has a fertility rate of 5.7 and an annual population growth rate of 3.2 per 1000 population, the birth cohort of 6,760,773 infants with 5,915,676 surviving in 2012 is expected to reach 6,760,773 by 2015. Only 30% of all births are currently registered [1, 4]. The percentage of the population living below the national poverty line has reached an estimated 54.4% [1] in contrast to the growth seen in the economy evidenced from the gross domestic product (GDP) growth during the last 3 years attained annual average growth rate of 8.2% in May 2011.

The total annual health expenditure of the health sector accounts for 5.6 % of GDP and about 4.4% of total government spending [2]. Household out-of-pocket expenditure as a proportion of total health expenditure averaged 64.5% between 1998 and 2002, which is very high. It is estimated that on average healthcare consumes more than half of total household expenditure in about 4% of cases and over a quarter in 12% [3].

2.2 Health Care System:

The health care system in Nigeria consists of both public and private sectors. The Public health care system is tiered to reflect the three levels of government, Federal (tertiary health care), the State (secondary health care and the Local Government Areas (LGAs - Primary Health Care). Although the quality of health services, coverage and accessibility still present major challenges, the overall impact of basic improvements to health services is demonstrated in a drop in the infant mortality rate (IMR) from 240 deaths per 1000 in 1990 to 75 deaths per 1000 in 2010 and in the under 5 mortality rate (MR) from 213 deaths per 1000 in 1990 to 143 deaths per 1000 in 2010. While both mortality rates are declining, Nigeria still falls short in attaining the fourth Millennium Development Goal to reduce mortality among children <5 years of age to 64/1000 by 2015 [4]. With our present trajectory, we would hardly go below 100/1000 live births by 2015. 40 percent of the causes of death in under five age group are vaccine preventable (Figure 1b)

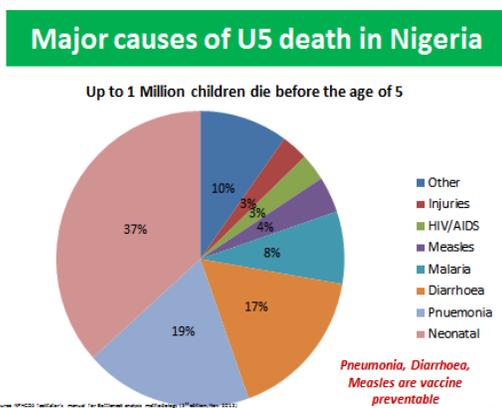


Figure 1a&b: Trends in child mortality and major causes: Source: NSHDP

In May 2010, the Federal Ministry of Health produced the National Strategic Health Development Plan (NSHDP) 2010 - 2015, an overarching reference health development document that holds all actors accountable for achieving the goals and targets as contained in its Results Framework. The document identified eight priority areas to improve the performance of the health sector through a holistic approach at federal, state and LGA levels. The eight priority areas were: leadership and governance, service delivery, human resources for health, health financing, health information system, community participation and ownership, partnerships for health and research for health [4]. In line with this plan, the country multi-year plan was revised in 2010 to align them. This routine immunization strategic plan is an elaboration of the strategies and activities as captured in the mother plans and other additional activities that will enable the nation to accelerate progress in many of the indicators we are lagging behind.

2.3 Expanded Program on Immunization:

The Nigerian Expanded Programme on Immunization (EPI) was initiated in 1979. Some progress was made with the Universal Child Immunization in the 1980s, followed by a significant decline in the 1990s. In an effort to enhance the effectiveness of the programme and to meet the global challenges of immunization, the EPI was restructured and was renamed National Programme on Immunization (NPI) in 1997. Following the Federal Government Health Sector Reform, NPI was merged with the National Primary Health Care Development Agency (NPHCDA) in May 2007. The mandate of the NPHCDA is to protect children from vaccine preventable diseases through the provision of vaccines, devices and technical to the subnational levels.

An Interagency Coordination Committee (ICC) for Immunization was constituted in July 2004. The ICC is the forum for regular information sharing and networking amongst major stakeholders to ensure synergy and complementarity. The Honorable Minister of Health chairs while NPHCDA is the secretariat. Members include the Honorable Minister of State, the Federal Ministry of Health, and representatives from NPHCDA and development partners. The ICC convenes 4 times a year.

Overall, the progress achieved in immunization services was short lived with the 80% coverage for all antigens recorded during the Universal Childhood Immunizations (UCI) days (1986-1990s). Since this feat was achieved, performance of EPI has stagnated with interludes of declines and improvements. Expectations have remained high to achieve Polio eradication, reach every ward, deliver more vaccines to more people using innovative technology in an integrated fashion, and own the program especially at the subnational levels in line with principles enshrined in the global vaccine action plan. Consequently many target have remained un-met(coverage, elimination goals, eradication goals).

The Government of Nigeria and partners have persevered to making sure the program is strengthened. Immunization Plus Days were introduced to ensure Polio is eradicated and routine immunization is strengthened. Country Multi-year plans (cMYP) came on board in 2009 to guide better planning. Trainings for service providers and mid-level management (MLM) training were carried out albeit inconclusive. National immunization policy has been revised, cold chain expanded and new vaccines introduced. Furthermore the need to put the programme on the front burner of the socio-political agenda of government necessitated the convening of the national vaccine summit in April 2012 and the recent launching of the saving a million lives project which will inject savings from the petroleum subsidy removal into the programme.

3.0 Situational Analysis of Routine Immunization:

3.1 Routine Immunization Performance:

Routine Immunization coverage the last decade ranged from 27% to 114% with a drop in DPT3 from 74% in 2010 to 52% in 2012 (Figure 2). Findings from several reviews and studies refer to a wide range of issues hampering the proper implementation of the RI programme including weak governance, inadequate funding, vaccine stock-out, lack of vaccine bundling, distribution challenges, non-maintenance of CCE, and poor staff performance at state and local government levels[5].

Figure 2: Cumulative RI coverage for all antigens, 2005-2012 Source: NPHCDA 2013

Reference the figure 2 above, the performance for polio vaccinations have been improving even though we remain endemic among 3 other countries in the world (Nigeria, Pakistan and Afghanistan). In 2012, Nigeria reported 122 cases of wild poliovirus (WPV), representing 95% of the total reported cases in Africa and 54.5% of the cases reported globally. There are clear indications with the rising OPV status of non-polio AFP cases from greater than 3 doses at 78% in 2011, 80% in 2012 and 81% by 2013 (that the effect of the ongoing program for polio eradication is increasing coverage with OPV but not with other vaccines. As at March 20th, 2013, nine cases of wild polio virus have been reported. In order to ensure and sustain the interruption of transmission of WPV, RI services must be enhanced and strengthened at all levels with high political commitment.

Coverage variability is observed between zones, with South-West and South-East having consistently higher RI performance from the 2 surveys (NDHS&NICS) while the North-West and North-East have been persistently least performing. This disparity clearly reflects on the reported RI administrative coverage overtime.

Figure 3: Immunization coverage rates by surveys Source: NPHCDA 2013

In 2012, 3 states (Nasarawa, Ebonyi and Imo) achieved >80% DPT3 administrative coverage, 18 states had between 50-79.9% while remaining 15 states had coverage below 50% (Lagos, FCT and eight northern states). A recent baseline assessment by CDC in 7 LGAs in 6 northern states showed that DPT3 coverage at the LGA level for outreach settlements (those >5 km from a health facility) is as low as 3% [7].

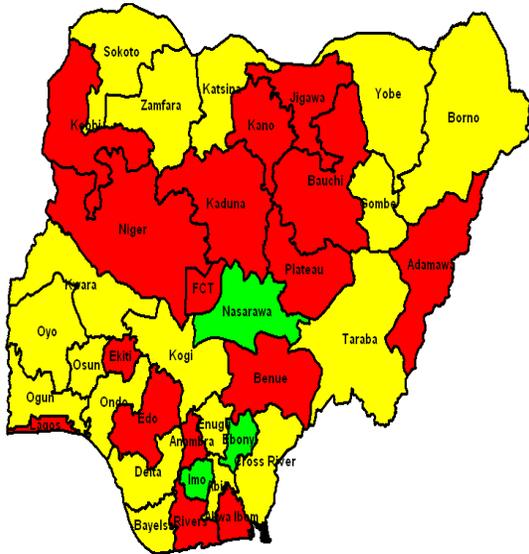


Figure 4: Distribution of immunization coverage by states - Source RI and logistics feedback Jan 2013

WHO reported that, in 2011, 22.4 million children globally were not completely vaccinated at 12 months of age and remained at risk for vaccine-preventable morbidity and mortality. More than half of all those children lived in 3 countries: India (32%), Nigeria (14%), and Indonesia (7%) [6]. The recent drop in coverage in Nigeria from 69% in 2010 to 52% in 2012 has left more than 3.25 million children at the age of 12 months un-immunized (figure 5 below), adding to already existing huge pool of susceptible under-fives, which at any point of time may fuel the occurrence and spread of vaccine-preventable diseases outbreaks in the country. (Figure 3) NDHS in 2008 stated that the poor in Nigeria have more than twice the under-5 MR compared to the rich (219/1000 LB in the lowest wealth quantile versus 87/1000 LB in highest wealth quantile) This calls for the need to have a very strong program for routine immunization in order to reduce infant and child mortality rates [8].

Figure 5: Number of unimmunized children, December 2011 and 2012, by zone - Source: NPHCDA 2013

2.2 Major Causes of Poor RI Performance

2.2.1 Poor coverage

There are many causes identified for failing to reach children for immunization. Among these is the failure of health facilities to carry out all planned fixed and outreach sessions. The RI program report of 2012 shows that 80% of the nationally planned fixed and 74% of outreach sessions were implemented [9]. This figure widely varies between states and LGAs. The Baseline assessment done by CDC in November 2011 across Katsina, Bauchi, Niger, Kaduna, Kano, Jigawa, Sokoto and Zamfara reported that out of 311 HFs in the 7 LGAs included in the assessment, 246 (79%) provided RI services and 186 (52%) conducted outreach immunization sessions. The main reasons for cancellation of

sessions were health worker occupancy with other HF activities (including immunization plus days [IPDs]), stock outs of vaccine at facility level, lack of bundling, unplanned distribution of vaccine at states & LGAs to lower levels, and insufficient funding for outreach logistics..

The majority of HFs in densely populated and urban areas do not hold daily immunization sessions (instead they follow the government's 1,2,3 strategy- RI Lafia Retreat¹) and do not open a multi-dose vial until they have an adequate presence of eligible children in the HF. These practices prevent many mothers attending the HFs with their eligible children from getting their children vaccinated. The outcome of such immunization practices contributed to low coverage reported in reports Lagos and FCT for 2012 for example where coverage was less than below 50%. The Nigerian Vaccine Wastage Study reported that at the LGA level only 59% of health workers knew that a vial should be opened for any eligible infant as stated in the national policy. The same study pointed out that only 12% of facility staff knew that unvaccinated children up to 2 years of age are eligible for routine vaccination [14].

There are many missed opportunities for vaccinating newborns due to non-integration of routine immunization services with other maternal and child health and other clinical services. NDHS 2008 reported that 35% of pregnant mothers delivered at health facilities [8]. There are no vaccination units in the HFs where many mothers deliver and they are discharged without their newborns being vaccinated. The mothers are requested to vaccinate their newborns in other HFs providing immunization services.

In many states, the sizeable private sector in the country has been weakly engaged to provide immunization services. In already engaged private health facilities, challenges to effective provision of immunization services by this sector include poor distribution of vaccines by the LGAs, poor cold chain status and lack of supervision monitoring immunization sessions. These issues need to be resolved to ensure quality of immunization services. To achieve the National immunization target, there is a great need to broaden this important engagement by increasing the number of MoUs signed with the private sector. .

2.2.2. Funding and accountability

Funding for RI constitutes a major issue across all levels. Nigeria is one of few in Africa countries that bear the cost of its traditional RI vaccines as opposed to donor-funded. At the national level, the timely release of adequate funding to UNICEF for vaccine procurement is very crucial to avoid any delay in the vaccine supply chain. During the past decade there was a chronic shortage of vaccines in

1

¹ The "1-2-3 strategy" is defined as one fixed session per week at each health facility, two outreach sessions per month at each health facility, and three supervisory visits per month in each LGA

Nigeria, mainly due to late release of funds. Funding for vaccine procurement in 2012/2013 has improved.

The major constraint for vaccine availability at service delivery points is poor funding for vaccine distribution, especially from States to LGAs and Health facilities. Other challenges include, bundling and transportation of vaccines with other devices (syringes & safety boxes) and conduct of outreach sessions at the health facility state and LGA levels which grossly affect the service delivery. A recent Vaccine Audit Report of December 2012 pointed out that 16 out of the 21 (79%) states studied indicated unavailability of funds for vaccine distribution. The issue of unavailable funds for vaccine distribution and transport is most prominent at LGAs where only 35% of LGAs had funds for vaccine collection resulting in an unreliable supply of vaccines and devices to service delivery points [10]. The challenges of states and LGAs not providing adequate funding for logistics and service delivery clearly demonstrates weak commitment of government to RI activities, a lack of accountability mechanisms and performance reporting [5]. In view of this, a Round Table (RT) meeting was held in Abuja during November 28– 29, 2012, which was jointly convened by NPHCDA, the Federal Ministry of Health, JHU Bloomberg's School of Public Health's International Vaccine Access Center (IVAC), and HEFRON. The RT initiated dialogue on the utility of an accountability framework for RI in Nigeria and recommended its urgent development and implementation [13].

2.2.3. Supply chain and logistics

The delivery of immunization services is widely affected with supply bottlenecks due to funding and logistical problems. During 2012, vaccine supply (particularly for DPT, tetanus toxoid and yellow fever) was inconsistent due to reduced or limited global production.

Vaccine stock-out, bundling vaccines, and cold chain equipment failures compounded with unavailability of regular transport and finance were identified as barriers for delivery of immunization services. The vaccine audit report identified poor record keeping, poor vaccine stock management practices, and poor distribution practices at the LGA level as some of the limitations for routine immunization performance.. Distribution plans and consumption patterns are not used to distribute vaccine resulting in excessive vaccines in some areas and inadequacy in others. These barriers have been frequently cited by many reports and RI assessments. An Effective Vaccine Management (EVM) assessment reported **137 of 20 (6337%) states and 458 of 53 (8515%) LGAs** do not have vehicles for vaccine distribution and outreach sessions, making hard-to-reach target populations even more difficult to reach[11]. Resolving these supply issues will make vaccines available to larger population and improve the uptake of immunization and consequently coverage. [7,5,10]. From June 2012 to date compared to June 2011 – May 2012 the vaccine supply adequacy at the national level has much improved with BCG supplied at 118% of the target population, OPV at 131%, DPT at 161%, Penta at 106%, HepB at 78%; Measles at 137%; Yellow Fever at 145% and TT at 75%.

The 2012 cold chain assessment reports indicates that 43% of cold chain equipment (CCE) at LGA and HF levels are faulty resulting in reduced storage capacity. The baseline RI assessment reported that 72% of the HFs in the 7 LGAs did not have a functioning refrigerator. These health facilities store their vaccines at the LGA (63%), at the ward (12%), in vaccine carriers (24%) and other locations such as a nearby HF or home of in-charge (5%). These practices may affect delivery of potent vaccines to beneficiaries [7,11]. These results and other findings from different studies flag the necessity of critical urgent interventions. This underscores the need for an urgent repair of broken down CCE and to implement a training plan that has been developed for maintenance of CCE especially solar refrigerators. It further underscores the need for a maintenance policy for cold chain equipment on a long run to sustain the capacity required for vaccine storage. The NPHCDA plans to carry out phased procurement and installation of a minimum of 4,000 solar refrigerators to comply with a policy of one solar refrigerator per ward by 2015. NPHCDA's efforts to repair the faulty cold chain equipment have so far resulted in repair of 48% of broken refrigerators at all levels.

The Nigerian Vaccine Wastage study in 2010 showed inadequate knowledge of health workers on the national immunization policy at LGA and HF levels on the application of multi-dose vial policy (MDVP) as only 38% of health workers at HF level knew how to apply it correctly. The inappropriate application of MDVP resulted in turning away many mothers (30%) when they brought infants for vaccination at HFs in the 2 years prior to the study. Half of these mothers reported that their infants received never receiving the vaccination [14]. Over a third (35%) of HFs reported that wasted vaccines are due to cold chain failures [14]. Only 6 of 19 (32%) states monitored vaccine wastage [10]. This may be due to the fact that missing or incomplete HF records are preventing the calculation of real wastage [14].

2.2.4. Human resource

Inadequate human resources constitute another challenge for the RI program. The system is suffering from inadequate staffing, rapid turnover and limited training and capacity at the HF level. Eighty percent of HFs where immunization services are provided has one health worker who is overwhelmed with other PHC & SIAs activities. The health workers give more attention to IPDs than RI due to the financial incentives provided for IPDs. Supportive supervision is rarely carried out from national and state to LGA level [5]. The study on vaccine wastage reported that only 6% of facilities received a supervisory visit in the previous 3 months [14]. Poor attitude and accountability have been identified all through the program, particularly at state and LGA levels [5].

2.2.5 Demand creation

Nigeria has some serious RI demand challenges particularly in the northern states which have 64% of the total population. In 2012, eight (42%) of the 19 northern states had immunization coverage below 50% for DPT3. The population demand for immunization in these states is very low. Some of the reasons for this low coverage include ignorance of the potential benefits, cultural and religious inhibitions as well as fear of side effects. Lack of demand is also related to poor attitude of healthcare

providers, lack of motivation and poor interpersonal communications (IPC) skills. The Landscape Analysis of RI in Nigeria (LARIN) identified low or nonexistent community engagement as one of the numerous barriers for service delivery [5]. NPHCDA cited poor community involvement in planning and implementation of RI services, minimal strategic involvement of allies in communication related activities and the lack of funding for sustained interventions as additional barriers for community demand for RI [12]. The NPHCDA has been making efforts to address these issues through implementing Volunteer Community Mobilizer (VCM), Maternal, Newborn and Child Health Weeks (MNCHW), developing information Education and Communication (IEC) materials and IPC skills training for 4,500 PHC service providers. However, more efforts are needed to improve demand for immunization. Better understanding of immunization benefits and enhanced relationships especially trust between health workers and communities are critical for increasing immunization coverage.

2.2.6 Data quality

In the area of RI data management, it has been noted that Health Workers (HWs) are not properly trained in the use of data tools, analysis of data and using data for action. High attrition rate of HWs also contributed to this as trained HWs are frequently transferred to other sections where the skills acquired would not be useful. The Health Facilities (HFs) frequently experience data tool stock outs due to lack of financing and distribution gaps. In addition there is also lack of regular feedback from the state to the LGA and from the National to state level, Regular feedback on data from the LGA to Health facility level is also not existent. However there is no appreciation on the use of data by the facility and LGA staff.

One of the most important challenge is the ownership of RI data. Presently, RI data at the national level is compiled by partners agency (WHO) using the DVD MT tool that generates RI coverage's from all Health Facilities offering RI nd. There is no system for tracking defaulters in most health facility's catchment areas. Nigeria usually conducts one national Data Quality Self Assessment (DQS) in the 1st quarter of every year.

Table 1 below shows the DQS findings in the last five years. What is obvious is that the correction factor (CF) of reported RI data had improved in the last 5 years as demonstrated by a gradual increase from CF of 0.743 in 2007 to a CF of 0.95 in 2011. The correction factor of 0.966 in 2011 means that reported coverage for all antigens was approximately 97% correct. However there is still a need to further improve RI data quality, completeness and the use of data for action especially at the health facility levels. This is to improve reporting on coverage and assist decision makers for better planning of routine immunization.

Table 1: Nigeria DQS Corrected Administration Coverage 2007-2010

Antigens	2007	2008	2009	2010	2011					
	Admc ov.	DQS (cf74.3)	Adm cov.	DQS (cf 79.4)	Adm cov.	DQS (cf90.6)	Admc ov.	DQS (cf 88.2)	Admc ov.	DQS(cf 96.6)
BCG	56%	41.6%	78%	61.9%	75%	68%	76%	67%	63%	60%
DPT3	70%	52.0%	71%	57.1%	79%	71%	74%	65%	59%	57%
OPV3	62%	46.1%	63%	50%	70%	63%	69%	60%	72%	69%
Measles	82%	60.9%	86%	68.2%	90%	81%	85%	75%	90%	86%
Yellow Fever	53%	39.4%	63%	50%	69%	62%	78%	68%	70%	67%
TT2+	50%	37.2%	47%	37.3%	47%	43%	45%	39%	46%	44%
Heb3	53%	39.4%	63%	65%	72%	65%	66%	58%	55%	53%

Figure 6: Comparing DQS Coverage with WUENIC best estimates

Overall, coverage levels from the data quality self-assessment compares well with best estimates from WHO and Unicef. The trends have been on the decline since 2009. (See Figure 2)

NPHCDA introduced Pentavalent vaccine (Penta) in 14 states including FCT in 2012 with the support of GAVI. The phase 2 of the Penta introduction involved seven additional states. A work plan was also developed for the introduction of pneumococcal conjugate vaccine (PCV) during 2013 including the data tools, training needs, and production of information, education and communication (IEC) materials. The resources expected with the introduction of new vaccines will assist to revitalize RI, strengthen the cold chain and improve data management.

3.0 Lessons learnt

3.1 Achieving and Keeping Coverage High – Sustainability

The performance of Routine Immunization in Nigeria over time has varied significantly with DPT3 coverage reaching the highest coverage of >80% between 1988-1990, followed by a coverage drop to <25% in the nineties and a fluctuated performance decline of 74%, 59% and 54% for 2010, 2011 and 2012 respectively.

More worrisome was the increasing trend in the number of un-immunized children in which over 3 million were not reached with DPT3 as at the end of 2012. In spite of some positive milestones: new vaccine introduction, secured vaccine supplies improved data quality and improved data quality., There is still a decline in RI performance and this is giving great concern.

The lessons learnt from our RI systems indicate that the reasons are varied and range from poor ownership, funding, capacity building, management and service delivery which could be addressed with an accountability instrument that governs implementation of the program by all stakeholders. Therefore implementing Reaching Every Ward (REW) Community linkage, New vaccines introduction, Services delivery, Vaccines security and cold chain, Human capacity development, Data monitoring, reporting and use of data for action, Partnership & coordination and timely funding mechanism will assist in building solid RI system which will enhance the quality of service delivery at lower level.

3.2 REW and MLM Trainings

An important milestone for RI delivery in Nigeria was the adoption of the Reaching Every District (RED) strategic document produced by WHO in 2003 and implemented as the Reaching Every Ward (REW) strategy in Nigeria 2004. Thus REW which is client-centered focuses on the Ward as the operational level. The Nigeria REW strategy was aimed at providing regular, effective, quality and sustainable routine immunization in every political ward so as to improve coverage and guarantee equitable access to Immunization for every target age group. Since REW introduction, its achievements needs to be sustained and carried forward. These are:-

- Conduct of REW introductory trainings in all States +FCT in 2006 and 2007 (number trained is)
- Standardized coordinated REW training that was carried out in 2008 (to re-enforce previous training) from the National down to HF levels (number trained
- Adoption of 1,2,3 as a minimum package to achieving REW objectives which has been misinterpreted to mean adhering strictly to vaccinating only once a week and undertaking 2 outreaches in a month by a health facility.

In addition, to REW training, NPHCDA and partners successfully organized National and zonal level trainings on Mid-level Managers (MLM) training in 2008 and 2009 respectively. Unfortunately these trainings could not be extended to every State and LGA manager that is critical to RI improvement.

Additionally, the National RI programme was not able to evaluate the contributions and or impact of MLM on service provision as planned.

The MLM trainings stopped only at the level of the State Immunization Officers due to fund constraint, whereas the most important lower level managers (LIOs, LGA DPHC and CCOs) at the LGA levels were not covered. Therefore deepening the training to these lower cadres could have further boosted and possible sustain coverage achieved.

However, the MLM and REW trainings as well as REW implementation are believed to have contributed to the increasing trend of DPT3 coverage of 70% in 2008 to 74% in 2010 observed. Some of the observations include the fact that REW made HFs to have better Micro-plan that details catchment areas, target population, schedule and strategy of vaccination (Fixed Post (FP) or Outreach (OR) to be carried out). On the other hand, LGAs and most HFs strictly adhered to 1,2,3 strategy more as a rigid prescription rather than a flexible minimum package with resultant poor coverage in catchment areas that require more sessions. Again many health facilities have seen their infrastructure improve especially in hard to reach and underserved communities. 1449 Ward/Village Development Committees (W/DVC) are functional for the 1000 MSS and the 449 GAVI renovated health facilities.

3.3 Vaccine Security and Cold Chain logistics:

Security of supplies is at the heart of building lasting trust with the communities which is the foundation basis for routine immunization. With increased advocacy and sensitization, Government releases of funds for vaccines and commodities had increasingly become more regular and timely such that from 2012 funds are now on first charge of Government capital expenditure and released as a lump sum. Nonetheless, sufficient buffer quantities of both vaccines and devices must be kept in order to avoid the minimal effect of global supplies situations resulting in stock outs. The present practice of 25% buffer for vaccines and 50% buffer for devices needs to be perfected and religiously adhered to.

RI also continues to enjoy additional investment cold chain equipment from Government and partners to underscore the need to keep the vaccines potent at all times more so that the new vaccines are much more expensive than the traditional ones and wastages must be minimized. Based on the effective vaccine management assessment improvement plan, the cold chain gap remains huge at LGA and HF levels where it constitutes the greatest barrier to the rapid introduction of new vaccines. The 2012 cold chain assessment covering 20 states showed only 1199 (23%) of total wards (5199) have a solar refrigerator in at least one HF as against the national policy of having at least 1 HF with solar for all wards. Extrapolating this to cover the entire 9,565 wards (with an average assumption of 35% of wards having functional solar), the country will still require over 6,000 pieces of solar equipment to achieve this National policy. Due to lack of Planned Preventive Maintenance (PPM) policy in place, we witness rapid break down of cold chain equipments. The lesson here is that even if we supply all that

we need, we must put in place a mechanism to maintain them to optimize the value of the investments.

The current PUSH-PULL system of vaccines and commodities distribution had left gaps in supply adequacy especially at HF levels (expected to PULL from LGAs) with adequacy reaching as low as 30%. Availability of operational funding from lower level government has not been sufficient, timely and regular. It is a basic ingredient to collect and distribute vaccines to fixed and outreach sites, run and maintain generators or equipment and mobilize communities.

3.4 Operational funding

In recent past, pooled funds from state and local governments has also been established and made available for vaccine logistics. Basket funding arrangement currently practiced in Zamfara State since 2009 had impacted positively by raising coverage for example from 9% DPT3 coverage in 2008 to a 64% in 2010, and reduction in the wild polio cases. The mechanism was successful and unique in that it provided funds to finance crucial recurrent PHC activities, through a transparent disbursement mechanism. The activities supported by the fund include routine immunization, supplemental immunization, maternal health, supervision, routine data collection and community mobilization activities. The strong point of the Zamfara basket fund arrangement that 70% of the fund comes from the LGA, while state and partners contribute the remaining 30% balance. This brings about sustainability. In terms of supervision, however, Government role in Zamfara has been sub-optimal.

3.5 Quality Data

Accurate, reliable and timely data used well is paramount to managing the immunization program. Married to quality surveillance, poor performing areas are easily identified and targeted. The introduction of data quality self-assessment (DQS) since 2008 had provided an important platform that has continually improved the quality (precision) of our reported administrative data for RI. This has resulted in an improvement in the quality of data in terms of completeness, quality and timeliness. The correction factor improved from 74% in 2007 to 96% for 2011 administrative data.

The other aspects of the monitoring system such as archiving, recording practices, use of data for action, defining accurately the population and tracking the indicators regularly are still lagging behind. These are areas that if improved could lend credence to the quality of our numerator and denominators which have far reaching implication for planning (forecasting vaccines, distribution, session plans, storage space etc) and improving the performance of the immunization system. Another sad point of the DQS arrangement is poor buy-in from states, that are expected to replicate 1-2 times internal DQS a year as an important tool to monitor and take corrective measures on the quality of the data as well as those of the monitoring system. Only States like Zamfara had institutionalized DQS.

3.6 New Vaccine Introduction

The potential for new vaccines introduction to re-engineer the immunization system lies in the fact the introduction often brings with out of necessity new data tools, trainings, cold chain expansion and IEC materials. Other benefits include surveillance strengthening. Since the vaccines will protect the children from pneumonia, meningitis and diarrhea the burden from these conditions would reduce and the health sytem would be better off and achievement of the MDGs could be accelerated. This is the context for the introduction of new vaccines (penta-valent and pneumococcal conjugate) in Nigeria. Again with increased awareness and mobilization on the values of new vaccines, caregivers interest in immunization would be re-awakenedas observed with reported higher immunization coverage in new vaccines States(3 months PIE data).

It is therefore painful to note that incorrect recording of the DPT doses a child has received in Pentaphase 1 states led to the loss of a third of the DPT3 doses in the first three months of the introduction(June –August 2012). The conduct of training on new vaccines suffered from poor supervision at the lower levels and targeting of only 2 HWs/Facility, leaving behind cohorts of HWs not trained. Coupled with this, was the high attrition of health workforce which dwarfed the numbers available to provide services at the facilities. Pre-screening of trainees and expanding the training to all providers is a necessary good practice to be carried forward henceforth.

3.7 LafiaRetreat Conclusions

In LafiaNasarawa state, from the 13th – 15th of February 2013,NPHCDA, Partners and all other stakeholdersconcerned about the poor state of affairs in routine immunizationgathered to review the program and brainstorm on the way forward. This interaction brought to light many problems facing the immunization as already elaborated upon in the situation analysis. Furthermore, a better understanding of the back story underpinning the issues was clearly elucidated. The meeting went further to identify key priorities for the next 3 years and the manner in which specific solutions are to be applied. It is therefore important that consideration is given to this in the development of this strategic plan as they espouse the fundamentals behind the principles and strategies enshrined in this document. These conclusions were as itemized below:

1. It is a national priority that RI is Revitalized, so that every child receive all vaccinations at the right age
2. Increase access to immunization to reduce the number of un-immunized children. A child should be immunized at any given opportunity
3. Adapt current policies and practices example 1, 2,3 strategies as the minimum standard
4. Explore innovative approaches that may include participation of private sector, CSO, TBA, PPMVs e.tc.
5. To enhance co-ordination and synergy of stake holders at every level. Government should be on the “driver seat” while partners are to support RI activities.
6. Improve community, Traditional and Religious leaders participation in RI activities.

7. Encourage regular supportive supervision, training and joint quarterly monitoring in an effort to revitalize RI
8. Every effort must be put in place to address poor vaccine security especially at LGA and Health Facility level
9. To ensure vaccine security, we need to improve and expand cold chain infrastructure
10. Forecasting should be based on(validated catchment population) timely procurement, storage and distribution. There is need for a good monitoring system of adequacy Bundled Vaccines at LGA and health facility levels
11. There should be improvement on Data management especially at LGA and health facility.
12. The convergence of PEI and RI is highly Recommended so that resources available for polio should be used to strengthen RI
13. Accountability Framework must inform our actions at every level. Reporting of progress made on achievements of accountability and actions taken is made quarterly. Incentives should include Awards and Recognition to best performing LGAs, Also National and State Recognition of Individuals and organizations(from private sector, Traditional/Religious leaders, CSOs) that significant contribution to RI and Polio Eradication
14. There should be dissemination meeting with the states for adequate buy-in by all.
15. In order to achieve the above the following were prioritized
 - i. Improve logistics
 - ii. reduce unimmunized children
 - iii. improve data quality
 - iv. support introduction of new vaccines
 - v. create demand for services
 - vi. link with Polio eradication initiative

4.0 Strategic framework

The Nigerian National Routine Immunization Strategic Framework (NNRIS) will be guided by the principles and immunization targets set in the NSHDP. It is further linked to the Nigeria EPI comprehensive Multi-year plan (cYMP) 2011-2015 which is aimed at reducing morbidities and mortalities related to vaccine preventable diseases. The NNRIS framework is focused on Routine Immunization, with emphasis on increasing immunization access and utilization while reducing the number of unimmunized children, efficient logistics and supplies management, adequate engagement of stakeholders with holding each other accountable through an accountability framework that clearly delineates roles and responsibilities and performance monitoring with sanctions. These interventions are integrated within overall improvement of PHC system which and thus appropriately linked to the polio eradication initiative.

4.1 Goals

The overarching goal of this strategic plan is to reduce morbidity and mortality from diseases scheduled for protection by vaccination in Nigeria specifically measles, polio, diphtheria, tetanus, pertussis, pneumococcal disease, Hib disease, hepatitis B, yellow fever.

4.2 Strategic Objectives

4.2.1 To accelerate the achievement of 87% sustained national coverage of infants with all scheduled routine antigens by 2015(51% to 87%DPT3)

- a. To guarantee safe bundled vaccines for all immunizations in which the wastes are safely disposed off.*
- b. To reduce successively the numbers of unimmunized infants between 35% and 50% annually compared to the previous year.*
- c. To create demand for routine immunization beyond behavioural change communication to social transformations and change from XX% in 2013 to 80% by 2015*

4.2.2 To improve the quality of reported data and all other components of the routine immunization monitoring system in the context of an effective HMIS

4.2.3 To entrench an accountability framework for routine immunization that is implemented by all stake holders

4.2.4 To support the roll out of penta-valent vaccines to all states in 2013 and complete the phased introduction of pneumococcal vaccine (PCV) by 2015.

4.2.5 To link with Polio eradication initiative and other interventions in an integrated manner that strengthens the overall PHC system

4.3 Implementation Principles

The following principles will be adopted in the implementation of the RI strategic framework and plan:

4.3.1 Ownership

Efforts will be made to ensure ownership of the immunization programme by Governments at all levels, Immunization partners as well as the local community from conception through planning, implementation, monitoring and evaluations. Community ownership would be encouraged as much as possible, Ward/Village development committees (W/VDCs) be empowered to get involved in all the stages of the programme. Rising from the retreat a necessary step envisaged for ownership was conceived. The plan will be laid before states and LGAs on zonal basis for their buy-in. Also, CSOs involvement is paramount and they have been an integral part of the conception apart from their articulated roles in accountability

4.3.2 Sustainability

Greater emphasis will be placed on sustainable sources of funding and to Health System Strengthening as a way of achieving sustainability. Community participation will be actively encouraged and promoted. The strategy should be self-sustaining in the long run once implementation partners take exit.

4.3.3 Accountability

A new accountability mechanism for RI will be developed to ensure that all stakeholders have clearly understood their expected roles and responsibilities in the system, and have fully bought in to the national strategy. All stakeholders should be ready and willing to undertake their responsibilities, while at the same time accepting the consequences of their measured actions. This consequence could be in form of reward or punishment) which every stakeholder must agree and monitor jointly.. Efforts will be made to give the mechanism wide publicity, acceptance, and full implementation.

4.3.4 Integration

The immunization programme will be delivered in alignment with other Primary Health Care interventions, from planning through implementation to monitoring and evaluation. The immunization system will work towards the vision of PHCUOR in it's action and activities.

4.3.5 Equity

In delivering Immunization services, equity to access and utilization will be the fundamental guiding principle and across all communities Gender, Socio-economic, cultural as well other social determinant should not constitute barrier to those in need. This strategic framework will therefore have special considerations for communities that are hard to reach, poor and sparsely populated.

4.3.6 Efficiency

While calling for greater investments in immunization, the strategy will ensure that funds for RI are provided appropriately, and raised and spent equitably, transparently and responsibly. Also, the strategy will ensure efficient allocation of human resources, funds, and materials.

4.3.7 Transparency

A core guiding principle will be transparency at every level of implementation. This will help ensure the highest possible standards, and as such, will help to ensure that RI coverage increases.

4.4 Strategies

In the revitalization of Routine Immunization in Nigeria the following core strategies will be implemented towards attainment of the above stated goal and objectives:

1. Intensification of REW Implementation
2. Entrenchment of an Accountability Framework

Through these two approaches, the strategic objectives listed above will be achieved. Intensification of REW will particularly address strategic objective 1 and an accountability framework will guarantee that all actors play their part and take their responsibilities very seriously to ensure quality immunization services, assure ownership, effect a robust supply chain logistics management and obtain reliable data to guide better planning and monitor performance. The immunization system by itself cannot operate in isolation of the health system. In order to further improve efficiency and reduce wastage of scarce resources, services will be delivered in an integrated fashion that supports a well functional health system.

4.4.1 REW

The five main components are taken into consideration here. In all these components, integration of services is the order meaning that the platform provided by immunization is also used to manage and deliver essential health services such as maternal and child health services. REW has been introduced but its implementation has been superficial. This plan provides for its intensification.

Components

- i. Planning and management of resources (human, material and financial)
- ii. Reaching the target populations
- iii. Linking services with communities
- iv. Supportive supervision (regular on site teaching, feedback and follow up with staff)
- v. Monitoring for action (self-monitoring feedback and tools)

4.4.2 Accountability Framework

There are a lot of issues are bedeviling routine immunization and cut across all components. Underlying these and often complicating the problems are governance issues related to general

management, funding, responsibilities and attitudes. In order to untangle this and move the program forward, all stakeholders are agreed that an accountability framework if implemented will address them. Again and again, many fora and plans have emphasized this.

The framework would allow for goal directed expenditure, result-based performance monitoring, re-defined roles and responsibilities, synergistic alignment of resources, transparent reporting and data management, as well as mutual consensus on pre-determined consequences for falling short of articulated targets. Annexed to this document is the framework which has a comprehensive mapping of the immunization system processes taking vaccines from the manufacturer to the mother and child.

The resultant accountability matrix illustrates cross-cutting system components - planning, forecasting and procurement, logistics, cold chain management, demand creation, service delivery, and data management - viewed through the lens of who is responsible for governance, human resources, and implementation at the federal, state and LGA levels. This exercise revealed lines of responsibilities that are often blurred, however, the framework provides clarity on overlaps and identifies responsible parties where gaps exist. The task now is to implement the framework and get all children vaccinated.

5.0 Key Activities

5.1 To accelerate the achievement of 87% sustained national coverage of infants with all scheduled routine antigens by 2015 (from 51% to 87%DPT3)

5.1.1 To guarantee safe bundled vaccines for all immunizations in which the wastes are safely disposed off.

a. Improve vaccine security and logistics

Nigeria's current vaccine forecasting process applies a top down approach that is based on census projected target population estimates. Tracking of vaccine utilization and wastage at PHC level is weak and thus prevents accurate planning that is based on real vaccine stock. Sometimes due to global vaccine production shortage, the actual forecasted vaccines procurement is not met and results in scarcity. These factors result in imbalances between demand and supply of vaccines with vaccine stock-outs in some states and excess in others.

UNICEF procures vaccines (on behalf of GoN), the Government (through the NPHCDA) procures injection devices (syringes) and is also responsible for their distribution up to Zonal levels. Syringes are not bundled with vaccines, and thus syringe stock-outs are common. In 2012, only 65% of the needed syringes were supplied to health facilities. The inability to pre-position the needed commodities at the right quantities results in poor bundling that affect smooth service delivery.

The immunization supply chain system, which is a PUSH-PULL system, does not allow for effective vaccines distribution, resulting in stock-outs at lower levels in spite of sufficiency of these vaccines at higher levels of the chain. To address these supply chain issues, NPHCDA and Partners will undertake the following activities:

b. Create a system to build up precise bundled vaccine forecasts based on a bottom-up approach

To ensure that the country provides accurate vaccine needs that will cater for the target population, we need to procure right quantities of vaccines to meet these needs. Going by the current forecasting that is based on assumed population targets carried out at National level, the country - witness periodic stock outs of vaccines that interrupts the immunization services leading to accumulation of large number un-immunized. Additionally, evidence of RI coverage above 100% as reported insome areas clearly points to under estimation of target populations.. The new approach is to build up forecast by bottom up approach with our HFs as starting points:

Each PHC estimates need based on utilization/wastage and reasonable assumptions. These are aggregated and rolled up to LGAs, states, zones and national for planning. Additional 25% rolling buffer stock is then added to make the national requirement for procurement. Mid-year will be the appropriate period for this process (to be extrapolated for the entire year and measured in

subsequent months) and will require careful planning and capacity building to achieve this

c. Build robust logistics data management system to enable real time access of vaccine and devices stock and utilization data

To address the challenge of vaccine utilization data that is always delayed and less precise enough to highlight areas of problem, we need to provide a faster and more efficient means of information sharing from the HF up to the National level, with feedback as appropriate. For example, an automated two-way real-time data reporting system would be established for the nation's cold chain system. Computer and internet connectivity should therefore be available at zonal, state and LGA levels, while HFs can use rapid SMS to feed in the LGA level information. Efforts should be made to make the stock management tool (SMT) more user friendly and robust. A drop box system is in place where vaccine utilization and stock management data from states and National levels are shared. The state SMT stocks are derived from the vaccine and devices issued to LGAs. The challenge is in developing a system that will monitor the stock at the LGA and HFs level in near real time.

Conduct of capacity building (National to LGA levels) of CCOs on forecasting, vaccine/devices data management. To improve vaccine security, Nigeria needs to improve the capacity of service providers and Immunization managers on logistics and supply chain management. Special focus will be on the new bottom-up forecasting, real time data management, vaccine management etc.

Review forecasting SOPs and develop visual job aid tools for frontline staff. To increase forecasting accuracy, there will be need to review the forecasting SOPs and develop simple visual job aid tools for frontline workers.

Establish a robust procurement system for injection devices by Government that will ensure availability of 50% rolling buffer stock at all times. This will ensure a 100% bundling of all our RI vaccines for a minimum period of six months that it takes to order and clear syringes from the ports. Government should as a matter of deliberate policy ensure that procurement process for all injection devices are done in good time to ensure continuous availability of injection devices at all levels. All vaccines for distribution to LGAs and by extension the HFs are to be done fully bundled.

d. Improve and maintain adequate cold chain infrastructure

The following activities would be pursued:

i. *New technology for CCE management*

The country currently uses the Inventory Replacement and Planning Tools (IRPT) to capture all cold chain equipment in the country. It is an Excel based software that analysed available capacity and 5yrs replacement plan and an annual cost of

maintaining an equipment. It also gives the exact year the equipment should be replaced. The Cold Chain Equipment Manager (CCEM) is a new development that could be employed to improve the cold chain management system while taking advantage of its specific output for better management.

ii. *Establishment of a Planned Preventive Maintenance system*

A planned preventive maintenance policy (PPMP) needs to be put in place to guide on the usage and maintenance of cold chain equipment in the country. This policy in itself would not improve the system if funds for spares, repairs and capacity building of technicians are not in place. Availability of this fund in itself would reduce the down time of equipment by over 50% in spite of the non-availability of the PPMP. The 2010 EVM report and 2011 Cold Chain assessment in 17 States have highlighted this challenge as they reported “lack of PPMP as a major issue with cold chain equipment” in which 32% and 41% respectively of assessed equipment were found to be non-functional. In the 2012 Cold chain assessment report, Kebbi state, for example, was the only state (out of the 20) that has at least one solar/ward in compliance of NIP guide, but out of the 224 solar refrigerators only 71 (32%) were found to be functional. This highlights the seriousness of the issue. Planned Preventive Maintenance is cheaper than replacement after complete breakdown, and is thus a more efficient use of cold chain resources. To increase PPMP, a national guideline for cold chain equipment PPMP will be developed. In this guide, States would be required to create a new cadre of Cold Chain Technician (CCT) under the CCO, while capacity building on Cold Chain preventive maintenance and repairs will be outlined and training to be undertaken

iii. *Expand use of solar fridges*

To address the issue of power supply, solar fridges could be used to act as stand-alone storage units, or alternatively as buffer units to handle storage when power supply has been cut to electric fridges in Health Centers or facilities. The Danish Solar Chill project, backed by UNICEF, WHO, PATH, and other partners is developing a low-cost solar cooler that will cost 50% less than currently available solar coolers. The solar chill and indeed all battery-less solar refrigerator for our region though do not have capacity for freezing ice packs for outreach services; research has shown that frozen ice packs damage liquid vaccines and only chilled packs are now advisable. They could be very useful in large population and urban areas. Therefore, the continuous provision of spares and the expansion of battery type solar refrigerators to specific areas may no longer be required. Solar coolers are not the only alternative to standard refrigeration. Kerosene coolers are widely used, but due to fuel consumption, environmental impact, safety risks, and unpleasant odors, solar coolers present an attractive alternative that is affordable and environmentally friendly.

iv. *Enforced usage of PQS equipment and replacement of non PQS compliant equipment*

At health facility levels, storage capacity is a significant constraint, and facilities fill the gap in storage capacity with non-PQS equipment; this can lead to vaccines being stored at incorrect temperatures and shorter lifespans for the machines. The NPHCDA needs to educate with other stake holders on the advantages of acquiring PQS equipment for vaccine storage. The current practice were every level buy any refrigerator for vaccine storage is not healthy for the system and result in wastage of resources as most non PQS equipment are not durable.

v. *Transport contracts*

Transportation for vaccine supplies presents a challenge in remotely-located HC facilities. Distance from LGA cold stores and road accessibility lead to irregular collection of vaccines for RI days and delayed clinic start times, which impact the number of children served. Concurrently, there is an issue around transportation for health workers who have to conduct RI outreach sessions in remote areas.

An appropriate means of transporting vaccines, devices and personnel need to be developed by states, LGAs & HFs and adapted to each local environment. The other option is to engage the PPP (NURTW, Riders for Health, etc) in the distribution of vaccine but the challenges of personnel logistics for outreach services would still remain to be addressed.

e. Enhance injection safety practices and good waste management

Safe injection practices require that both the provider and the recipients are not harmed in the process while at the same time wastes generated is not dangerous to other people and the environment. WHO estimates that 50% of the over 12 billion injections administered annually around the globe are unsafe. The revised National Immunization Policy² clearly outline the importance of Injection safety, Bundling of vaccines, use of AD-syringes, safety boxes and safe waste management were the clear Government policy direction as contained in the policy. Provision of incinerators by states and local governments would enhance ability to dispose of waste properly and partnership with owners of incinerators could reduce the costs associated with running one.

f. Smoothing fund disbursement

Federal budget cycles and processes often lead to funds being available later in the financial year, which can impact vaccine provision in Q1 and Q2. Risks associated with disbursement delays include vaccine stock-outs at health facilities, unsustainable communication interventions, and disposal of vaccines due to suspension of power supply. A smoother or more regular disbursement of funds at specific points each quarter might help in smoothing vaccine provision, logistics,

	<p>functional cold chain, regular communication interventions throughout the year. Some of the strategies to achieve this include:</p> <ul style="list-style-type: none"> • Negotiations with Ministry of Finance about disbursement process • Greater transparency and coordination between funding government bodies <p>Establishment of internal “revolving fund” that allows states and LGAs to borrow against delayed disbursements</p>
<p>5.1.2 To reduce successively the numbers of unimmunized infants between 35% and 50% annually compared to the previous year.</p>	<p>a. <u>Number and frequency of immunization sessions</u></p> <p>i. <i>Improve micro planning process that is community linked:</i></p> <p>Micro plans are the foundation for quality RI and SIAs including Polio campaigns. The current traditional micro-plans used for the RI have gaps in terms of settlements and populations enumerated. Settlements especially at the borders are most times missed resulting in programme failure to reaching all children. To improve access therefore, all HFs are to have a micro-plan that clearly identifies its catchment areas and together with the communities design appropriate timelines and strategies for service delivery. To borrow from the PEI experiment, detailed micro-plans with micro-census and walk-through are to be carried out by all HFs in all LGAs to properly identify and clearly capture the target communities. For States in the North that have GIS-based maps, this should be further utilized maximally by the affected LGAs in drawing up HF based Micro-plans. Once the exercise is completed, we will then be able to locate and identify areas not covered and the LGAs/States will then design appropriate mobile services linked to HFs.</p> <p>ii. <i>Increasing the frequency of vaccinations at fixed centers:</i></p> <p>The current practice in most states is the application of the 1,2,3 strategy to conduct minimum of one fixed immunization session per week, two outreach services per month and three supportive supervisory visits per month (from the LGA to lower level). This is in line with the adapted REW strategy. Unfortunately, in most States/LGAs/HFs Immunization plans, the 1,2,3 is applied as a rigid prescribed strategy with little or no attention paid to “at-least” the pre-conditions of 1,2,3 strategy and without due consideration of the demands for communities receiving services and available resources of the HFs. In-line with immunization practice in most countries in the sub-Sahara Africa, there is a need to review 1,2,3 strategy and increase fixed vaccination sessions especially in highly populated areas such as urban centres. There are already lessons learnt in some states in Nigeria which have increased vaccination sessions such as Nasarawa State where daily vaccinations are conducted in most PHC centres, resulting in high immunization coverage (80% in 2012) in the state. The strategy will encourage urban health facilities to offer fixed post immunization sessions as frequently as needed. In other areas, it is recommended that immunization sessions should be adjusted based on micro-planning taking into account validated catchment</p>

population of the various PHC centres.

iii. Increasing the number of fixed centers:

Based on the micro-plan carried out above, it is necessary to determine the need for additional fixed immunization centers taking into account extra resources required. There is need for advocacy at state and LGA levels for allocation of additional resources including recruitment of staff in areas that are targeted for establishment of fixed centers.

iv. Increasing the number of outreach sessions:

Outreach and mobile immunization services are critical strategies to reaching populations that are under-served, hard to reach and scattered. The way outreach sessions are planned and conducted follows the same rigid implementation (as it applies to fixed) of just 2 outreaches per month in most HFs in accordance with the 1,2,3 framework. Instead, all HFs (within the limit of their resources) and peculiarity of their target communities should plan for an appropriate number of outreach sessions per month based on the need of their catchment area. Where the catchment area is wide and dispersed and beyond the capacity of the HF, the LGA and by extension the State, should provide additional resources per month to ensure that the gaps are filled and the communities served with mobile teams. All these will be based on a comprehensive micro-plan review process. Communities targeted for outreach and or mobile services should be actively involved in the planning and implementation of these services.

b. Target populations in LGA's with low coverage:

It is estimated that 15-20 million children under-five are unimmunized given the low immunization coverage observed over the past 5 years. In 2012, it was estimated that a total of 3.2 million children of the 2012 cohort were not fully vaccinated. In order to address this challenge, it is proposed that the MNCH weeks should be strengthened as well as Local Immunization Days (LIDs) and Market day vaccinations to deliver catch-up immunization with focus on LGAs with low coverage. Quantitative analysis of local immunization by HFs will provide accurate information of the areas with high proportion of un-immunized where this special focus will be provided. In addition, Immunization Plus Days catch-up campaigns should be planned with special focus on measles and polio.

c. improve and strengthen supportive supervision

Supportive supervision is often a consistent missing link in efficient implementation of public health programs in Nigeria. Supportive supervision has an independent role and might be a significant contributor for overall immunization program strengthening. Evidence from several programmes in Nigeria showed that effective supportive supervision can improve immunization coverage, and also can serve as an efficient tool to strengthen the local health system to deliver other services. It is imperative that as a country, Nigeria starts

	<p>strengthening supportive supervision at all levels. Evaluation mechanism will be put in place to ensure that feedback is received on Support Supervision and in order to ensure that lessons learnt help in providing improvement. In the sense of value for money, it is necessary to integrate Supportive supervision on RI with other services especially MNCH and Nutrition.</p> <p>This strategy seeks to review the current mechanism for supportive supervision and integrate RI with other components of Primary Health Care in order to strengthen service delivery by taking into consideration all the principles earlier explained. Efforts at carrying out supportive supervision will be reviewed along the lines suggested by WHO model shown in annex -----</p> <p>When HFs are properly supervised , there will be quality improvement practices that will strengthen demand for vaccines. By supportive supervision, emphasis is on the improvement of the skills of the staff to ensure provision of quality services.</p> <p>It therefore requires an assessment of the performance of the EPI and the staff assigned to it, and provision of feedback and necessary remedy, inclusive of on the job training. At the moment both the National, States and LGAs do conduct supportive supervision, but this needs to be strengthened and regularized using standardized checklists and outlined mechanism for feedback and follow-up. Each Supervision team will be expected to carry out a debriefing to facility staff at the end of each visit. We minimally prescribe that national must undertake supportive supervision once every 2 months, the States once a month and the LGAs three times a month</p> <p>d. <u>Integrated Training:</u></p> <p>The activity will focus on human capacity building and system strengthening to deliver routine immunization and new vaccine delivery integrated with other PHC services. Appropriate and relevant training materials focusing on routine immunization and new vaccines will be developed and trainings implemented. - In-service/On-the-job training will be conducted for health care workers to build skill and capacity on the delivery of new vaccines. Health Educators will be trained as mobilizers. Trained staff will be used as facilitators to cascade training to other health workers in their own facility or nearby facility to hasten the introduction of new vaccines in the National staff will provide ongoing supportive supervision.</p>
<p><i>5.1.3 To create demand for routine immunization beyond behavioural change communication to social transformations and change</i></p>	<p>a. <u>Increase and sustain community awareness of RI:</u></p> <p>We have identified the following bottlenecks in the area of communication and social mobilization (demand side barriers):</p> <ul style="list-style-type: none"> • Demand-Supply mismatch • Poor attitudes, behaviours and skills of health workers (remove affect demand) • Poor community involvement in planning and implementation of RI services

- Social and cultural barriers to access
- Minimal strategic allies' involvement in communication-related activities
- Lack of funding for sustained communication interventions

The following activities have been identified as key activities in curtailing these bottlenecks:

- i. An inclusive assessment and analysis of the communication environment
 - ii. Development of an integrated communication for development plan which is need-based
 - iii. Training (health workers, CSOs, community leaders, religious leaders, media, etc.)
 - iv. prioritization of interventions
 - v. partnerships with CSOs
 - vi. monitoring systems
 - vii. media engagement
 - viii. advocacy for a sustained communications RI funding
 - ix. A series of trainings on attitude, behaviours and skills, communication for development and community engagement principles, processes and platforms for health workers and other service providers, community institutions and volunteers, civil society, etc.
 - x. Involvement of the community in the planning process through conducting of community settlement harmonization meetings
 - xi. Reconciling and update settlement list with the available official list from WFP/HFs
 - xii. Training of community leaders on RI so that these community and religious leaders can serve at as advocates for RI
 - xiii. Branding of RI in local languages. Creation of a clear RI local message
 - xiv. Partnerships with other sectors in Government (MDAs), the private sector, development community, academic institutions, the mass media, on promoting RI
 - xv. Intensification of communication in prioritised high risk areas.
- b. Community uptake improvement.

A major component of RI is to increase demand for the services and boost uptake. Experience over the years have shown that only a systematic, planned, evidence-based and inclusive communication intervention that privileges local contexts and content are effective and engender sustainable desired behaviours. This invariably takes into consideration the continuum, from top to bottom, and everything in between, especially the coordination function at the top and the ownership machinery at the base.

Through engagement of various participant groups and institutions at community level, including WDCs, Volunteer Community Mobilizers, the National Orientation Agency, the National Youth Service Corps personnel, the Faith Based Associations, TBAs/PPMVs, women groups, CBOs, NGOs, CSOs, state Ministries of Information centers, etc, and other community actors, deepening knowledge on the value of

	<p>immunization and empowering households and communities to demand for these services would be intensified.</p> <p>Activities will incorporate the basic principles of high-quality social mobilization programming. For community uptake, a participatory approach that the primary importance of immunization as a right for the child as well as a life-saving service, will be promoted. The importance of going beyond conventional Behaviour Change Communication toward the more expansive notion of Social Transformations and Change will be pursued. The thinking is that, for a large country context and for the recurrent bottlenecks, leaderships at community level should take the lead in organizing the mobilization process, riding on positive social norms and stimulating required changes and facilitating group discussion, decision-taking and action (including community-led sanctions).</p> <p>Interventions will be designed to also address the social-cultural barriers to new vaccines. The emphasis would be to recognize existing community structures in all components of the communication intervention. The National Primary Health Care Development Agency (NPHCDA) will be responsible for overall coordination, including the step-down approaches at the state, local government and community levels.</p>
--	---

<p><i>5.2 To improve the quality of reported data and all other components of the routine immunization monitoring system in the context of an effective HMIS</i></p>	
<p><i>5.2.1 Accurate and timely data (numerator quality)</i></p>	<p>Accuracy of generated data is important for the improvement of vaccine coverage. Developing an accurate, readily available and comprehensive data management process will bring about quality and realizable coverage with realistic target population. The strategic focus is therefore on the quality of the numerator and the timely manner in which it becomes available for use. For example, in 2011, DPT3 coverage rates dropped nationally to 47% due mostly to the DPT stock outs that year. The presence of timely and accurate stock data would have provided an early warning signal to prompt a response to the stock –out crisis thus preventing the low coverage.</p> <p>Data on commodities, vaccine utilization, coverage performances, cold chain status etc. will prevent/reduce wastages, leakages, encourage efficiency and accountability. An effective data management process will enable one to quickly identify areas of strength and draw on lessons learnt from best practices for the development of immunization system. To develop an accurate, reliable, timely and complete, data management process, which allows for feedback and evidence based decision-making, the following</p>

key activities will be carried out:

a. Advocacy to gain commitment to fund data tools by the state and local governments.

Insufficiency of data tools has historically been a major hindrance to proper data management. This is particularly problematic for new vaccines introduction, noting that vaccines cannot be introduced in the absence of data tools. Recent spot checks carried out in 7 of the Penta phase 2 introducing states showed that x% of these states were yet to receive data tools. This deficiency is due to funding inadequacies, whilst the federal government via the NPHCDA funds the production of seed stock the remaining tools are to be funded by the states and LGAs, who have historically not fulfilled this commitment. Thus, it is imperative that an advocacy campaign for commitment to fund the reproduction of data tools by the state and local governments is launched. This may involve involve:

- The reproduction of advocacy tools for this purpose
- Launching of advocacy tools at the state and then the LGA levels
- Creation of document specifying the conditions of funding, timing of funding, etc.
- Signing of documents by the state governors and commissioners of health
- Rolling out data tools funding strategy by states and LGA's

b. Training and supportive supervision of data management staff

There is the need for training of staff in data management. We would however suggest that instead of the conventional training process used in a majority of government trainings, which involves the training of trainers (ToT) that is cascading from the Federal to the facility level, we would instead suggest that the training begins at the facility level. This is because it is believed that the capacity gap is highest at this level and using the cascaded method often leads to the facility level being untrained.

c. Harmonization of data tools

Currently the following tools are being used for data recording at the Facility level

- TT register
- Child health/Immunization card
- Facility tally sheets
- Facility summary sheet (Daily/Session & Monthly)
- Child immunization register
- Vaccine ledger
- NHMIS summary tool

Likewise at the state level, there are the DVD_MT, NHMIS, and SM_T. Some of these tools register very similar data and for this reason create a cumbersome process. It is suggested that these data tools are reviewed and harmonized so as to create 2-3 data recording sheets which are less cumbersome and more comprehensive reducing the

burden of data collection on the health workers and encouraging them to record data.

d. Creation of a data bank at the NPHCDA

It is believed that the problem of ownership at the National level, evident in the fact that currently RI data is housed by partners with NPHCDA having limited access to this data, calls for the development of a data bank which will be hosted and controlled by NPHCDA. In the short-term this data bank will pull data from current data sources but the plan is that in the long term, this will change such that the data bank becomes Nigeria's sole source of data that integrates data from a range of stakeholders. This databank will be built on a software platform which is live (real-time) and readily available.

i. Immediate / short-term framework

- As the central clearing-house for routine immunization data, the PHC databank should begin routinely acquiring and updating data from all *current* data sources in Nigeria (including RI, MSS focal Officers and other agencies) and formats used:
- HMIS: Federal Ministry of Health NHMIS, data in DHIS2.0
- Routine Immunization: WHO, data in DVD-MT (Microsoft excel)
- Supplement Immunization Activities: WHO, data in DVD-MT (Microsoft excel)
- AFP Surveillance: WHO, data in DVD-MT (Microsoft excel)
- Vaccine supply and stock management: UNICEF, in SMT (Microsoft excel)
- Integrated Disease and Response Surveillance Data: WHO/FMOH in Epi-Info & Health Mapper Software
- Survey Data: WHO support (Out sourced)

These will be stored on a central databank server (for NPHCDA) and accessed routinely by PHC data officers. While the actual format of data in these sources may vary, with frequent use, the PHC data officers will become familiar and efficient at managing data from these sources.

A key aspect of this process will be working with partner agencies (FMOH, WHO, UNICEF) to ensure data sharing, and a process for acquiring updated databases in a timely manner. While this immediate/short-term framework will work within the current immunization data collection system, the process of acquiring data from partners, storing centrally at NPHCDA, and used by PHC data officers will begin the process of establishment of a central storage databank at NPHCDA, improve data use and create a sense of country ownership of immunization data.

ii. *Intermediate / Long-term framework*

The eventual goal of the PHC databank is to develop an integrated data system, for routine collection and flow of immunization data (in addition to all PHC data), on a single data platform, using the chosen application soft wares in compliance with FMOH, WHO/UNICEF. These will enhance data sharing at any point among Stakeholders.

Data will be transferred in standardized digital format, so analysis and reporting can be done at the LGA, State and National levels. This will occur through two routes:

- Where HMIS-FMOH has their web-based system fully functional at the LGA level
 - Paper copies of new HMIS-FMOH tools will transfer data from HFs to LGA on a monthly basis and will be imputed into the HMIS-FMOH web system
 - In these LGAs data will be transferred to the PHC databank server immediately upon entry
 - Other partners can request access to the data at this time
- Where HMIS-FMOH does not have their web-based system fully functional
 - The current monthly State meetings will be extended one or two days to include electronic capture of all PHC data at the HF level.
 - State technical officers without proper data skills will be dependent on the monthly meeting, at which the paper copies will be entered electronically. The data can then be transferred to the Zonal Data Manager who will then transfer to the PHC databank and HMIS-FMOH.

e. Improvement and continuation of the data quality surveys

Nigeria DQS (adapted from WHO DQS protocol) have been used as the means of evaluating the accuracy of RI administrative data as well as the quality of monitoring systems. Since its introduction in 2008, the quality of Nigeria's RI coverage data has improved over time. In 2008, for example Nigeria obtained a correction factor of 74% for 2007 administrative data while in 2012, the country obtained 96% correction factor for 2011 data. Despite this however in some cases there are still some errors with data. Examples include incongruence of reported data with commodities availability and surveillance data. It also includes issues of data bias and poor quality of the monitoring system, especially as it relates to core output analysis and evidence for use of data for action.

In moving forward, the country will continue to conduct the annual DQS. Specifically States/LGAs will be encouraged to conduct bi-annual internal DQS (prior to the National one) as an important tool to improve RI coverage data and monitoring system. Beyond this, subsequent National DQS would aim to implement all recommendations from the DQS in a systematic manner through regular follow ups.

f. Clear identification and institutionalization of dedicated personnel for data

Currently exists several variations in the data reporting system, while some states and LGAs have a clearly assigned data management personnel specifically focused on data reporting, in other areas data reporting is conducted by the LCCO, SCCO etc. There should be harmonization of the data management process, such that there are clearly assigned M&E/HMIS personnel who are trained and skilled at data collection and analysis. If there are personnel dedicated to data reporting, this will reduce the scope of errors.

g. Institutionalization of a performance management system

One of the problems identified in the data management process is the failure to use data in decision-making. For this reason it is suggested that a performance management system that includes a clear data reporting format by the use of dashboards and feedback mechanism through performance dialogues is put in place. Specifically, this system will involve:

The creation of performance management dashboards for each level of government. This dashboard will include the key output and process metrics most relevant to the national, state, LGA's and facility health care professionals.

The strengthening of existing RI monthly meetings in states and LGAs to institutionalize performance dialogues based on the agreed dashboard indicators. These performance dialogues will provide an opportunity to discuss strengths, weakness and potential strategies to mitigate weaknesses and further develop strengths. Additionally a clear feedback method will be identified such that decisions made during the performance dialogues are fed back into the RI strategy. This will ensure that strategies and activities are evidence based.

5.3 To entrench an accountability framework for routine immunization that is implemented by all stake holders

Another major problem faced by RI is one of weak governance and poor management. For this reason the development of an accountability framework will be key to increasing the coverage rates in Nigeria. The accountability framework will contain:

- A list of all relevant activities that are necessary for the delivery of Routine immunization in Nigeria
- A list of those responsible for each activity will be identified
- There will be a combination of personal accountability and organizational accountability
- We will also ensure that accountability is not solely focused on government health bodies, but that we also include accountability for partner organizations, civil society and the community
- A dashboard of Key performance metrics to measure success on selected quantifiable out comes and processes this dashboard will be developed with the support of all stakeholders
- Sanctions and incentives will be included.

From the overall Accountability Framework, individual customized dashboards will be developed for each set of stakeholders (e.g. federal and state governments, development partners). Some sample outcomes that could be tracked within the Accountability Frameworks include:

- i. % increase toward the national routine immunization coverage goal of >90%
- ii. % increase toward the sub-national immunization coverage goal of all LGAs >80%
- iii. Percentage increase in domestic investment in immunization at the national level
- iv. Reduction in stock-outs at National and State level Cold Stores
- v. Increase in functioning and appropriately powered cold chain storage capacity at the national, state level and LGA levels, as needed to accommodate all existing and new to be introduced vaccines
- vi. Successful introduction of new vaccines (e.g. pentavalent, pneumococcal vaccines), as measured by degree of uptake in the states scheduled to begin using those vaccines
- vii. Development and implementation of state/LGA/ward level RI outreach plans
- viii.** Successful implementation of other interventions to improve immunization

The overall Accountability Frameworks and the individual customized dashboards will build upon existing monitoring and evaluation (M&E) of staff and systems at the NPHCDA and state levels, and additional data will only be collected if necessary. If current NPHCDA and state data collection and M&E systems are not sufficient, options to further develop this capacity will be explored

5.4 To support the roll out of penta-valent vaccines to all states in 2013 and complete the phased introduction of pneumococcal vaccine (PCV) by 2015.

5.4.1 Successful roll out of approved new vaccines

In 2011, Nigeria received approval from GAVI to introduce Pentavalent and PCV vaccines in a phased manner. Pentavalent vaccine was introduced in 14 states in the first phase (June 2012), An additional 7 states introduced in the second Phase (February 2013). The remaining 16 states will introduce in the third Phase (June 2013). The phased introduction of PCV will start from the last quarter of 2013 and scale-up to all 36 states (plus the FCT) by the end of 2015.

The introduction of new vaccines (Pentavalent and PCV) is estimated to increase the cost of fully immunizing a child in Nigeria from \$44.50 to \$79.70. This requires a high-level political commitment and coordinated donor support. The strategy calls for improved funding for immunization activity at the Federal, State and Local level. Importantly state government would be supported to take increasing responsibility for providing operational budgets for new vaccine introduction processes like training, data tools, IEC materials and repairs of infrastructure/equipment. Minimal benchmark levels will be used to determine eligibility in the subsequent phases. The support from the federal government and international donors and Partners to improve funding will be dependent on meeting these standards.

The NPHCDA will continue to use work plans for monitoring and ensuring implementation of new vaccine introduction. The work-plan will highlight time bound activities, indicators with baseline values and milestones/targets as recommended. The work plan will be designed with the buy-in of stakeholders at the National, State, Zonal and State stakeholders to facilitate the smooth introduction and implementation of the new vaccine.

Training will be redesigned ensuring that trainees are pre-assessed to ensure suitability for training. Database of all trainees will be kept and newer methods such as the use of training DVDs will be explored and studied. The training step down process and regular update workshops will no longer be the normal cascade types of ToTs but rather will use set of core trainers to directly step down training from cluster to cluster. Job aids will be made available to HCWs to increase their compliance with the national standards for the new vaccines.

Assessment will be done to determine the readiness of cold chain to introduce new vaccines in Nigeria. Where necessary cold chain will be expanded and repaired for storage of new vaccine. The evidence of adequate cold storage capacity for the

	<p>group of states /LGAs will be documented and updated with a focus on lower levels and timelines for cold chain maintenance.</p> <p>Collaboration will be sought with partners working in the field of immunization for proper accountability. In-depth capacity building and trainings will be carried out to state level technical staff and the health care workers involved in direct service delivery. Opportunities to leverage resources through Public-Private Partnership will be encouraged.</p>
<p>5.4.2 <i>Develop proposals for Rotavirus and HPV introduction</i></p>	<p>a. <u>Sentinel surveillance for IBD and Rota</u></p> <p>Various surveillance networks for rotavirus and invasive bacterial disease have been established in the past several years and these are now being transition into WHO funding and coordination. It is anticipated that surveillance networks will be enhanced further. These networks will provide information for disease burden estimation, support-evidence based decision making on vaccine introduction, monitoring circulation of specific serotypes/genotypes and changes in serotype/genotype distribution and antimicrobial susceptibility, and evaluation of vaccine impact after vaccine introduction. The various surveillance activities will be linked more closely to federal ministry of health and sustained as part of integrated national and regional surveillance networks under the coordination of WHO Regional Offices. These networks will be more easily able to share standard operating procedures for the following key activities:</p> <ul style="list-style-type: none"> • collecting clinical and epidemiological data and specimens, • establishing well-functioning laboratories with adequate quality assurance systems; and • timely collection, synthesis and reporting of data. <p>WHO (Country offices, Regional offices and Headquarters) and Ministry of Health/NPHCDA at the National level will be responsible for surveillance data management, coordination, sharing, and feedback, based on the objectives and standards set for new vaccines surveillance in this document. Data standardization will improve data comparability, interpretation and aggregation at the National, Regional and Global levels. These data will also demonstrate the value of surveillance investments, and advocate for continuous funding support for surveillance activities globally. Further standardization of surveillance procedures and data management will be needed particularly case-definitions and standard operating procedures.</p> <p>Surveillance data standardization has been recommended by WHO and partners as a major activity in the New and Underutilized Vaccine Implementation (NUVI) Plan of Action. It has also been recommended as a priority activity by all actors. A "layered approach" to the surveillance network structure has been proposed by WHO for sentinel based surveillance for new vaccines. This applies to rotavirus and invasive bacterial disease (IBD) surveillance and has received consensus from immunization partners.</p>

Currently, there are 5 New Vaccine Surveillance sites in Nigeria, The 2 older ones are at Institute of Child Health (ICH), University of Nigeria Teaching Hospital (UNTH), Enugu and Lagos University Teaching Hospital, Lagos, while the 3 newer sites are at University of Ilorin Teaching Hospital (UIH), Ilorin, AbubakarTafawaBalewa University Teaching Hospital (ATBUTH), Bauchi and University of Benin Teaching Hospital (UBTH), Benin.

The new sites commenced Paediatric Bacterial Meningitis (PBM) Surveillance following the WHO AFRO/FMOH Technical mission to Nigeria in May/June 2012. Although these 5 sites are involved in PBM surveillance, only the Enugu & University of Ilorin Teaching Hospital sites that have integrated Rotavirus/PBM surveillance in the country.

At the first layer, “core” site will focus on conducting country-level surveillance for rotavirus diarrhea and meningitis. These sites will require technical expertise to identify suspect cases and laboratory capacity to perform a minimum of diagnostic tests for case confirmation. Surveillance for other invasive bacterial diseases will not be part of the Core activities.

At the second layer, selected higher functioning sites will perform invasive bacterial disease surveillance. These “added” sites will, in addition to performing rotavirus and meningitis surveillance, collect blood cultures which will allow the identification of other invasive bacterial disease including bacteremic pneumonia, sepsis, and other bacteremia. Information provided by these sites will complement data generated by the “core” sites.

At the third layer at least one site per region or sub-region will also perform “enhanced” Surveillance for rotavirus and IBD. This will include the collection of population-based surveillance data. Although hospital-based disease rates and case fatality ratios can be applied to national data to generate national disease burden figures, high quality incidence rates derived from population-based denominators can provide additional and useful information, especially for evaluating vaccine impact and safety.FMoH (NPHCDA) & WHO hope to expand surveillance sites to Six other states and zones of the country for effective data generation and informed decision making.

5.5 To link with Polio eradication initiative and other interventions in an integrated manner that strengthens the overall PHC system

a. Linkage with PEI

In 2006, a broad-based committee of the NPI and partners studied the issue of integrating immunization with other childhood survival intervention in Nigeria. The recommendation from this committee informed the decision to integrate other routine vaccines, vitamin A and other nutritional supplementation: LLIN and intermittent preventive treatment of malaria in pregnancy and deworming in polio eradication campaign. These additional interventions make up the plus in polio intervention strategy. Its aim is to accelerate routine immunization coverage and deliver relevant intervention to meet the felt health needs of the people.

In line with the Global Immunization Vision Strategy (GIVS), which focuses on program integration as its third strategic objective, resources from other interventions will be

leveraged to generate more resources, promote uptake and enhance the utilization of routine immunizations services.

The integrated approach is justifiable in terms of cost effectiveness in delivering routine immunization through a concerted and universal approach, which will establish linkages between polio eradication initiative, and routine immunization thus eliminating fragmentation in immunization services. The strategy will seek for avenues to deliver polio eradication activities in ways that will strengthen routine immunization and strengthen the health infrastructure. The world and subsequently FGoN have declared polio as a public health emergency. Within the framework of the PEI emergency plan, Polio HR LGAs are targeted for Intensification of RI activities. Thus, Polio eradication initiative will continue serve as an entry point for the provision sustainable routine immunization services.

Proper planning and coordination is required during polio campaigns for integration to work well. Presently, integration has being on-going with fixed posts designated as service points around which H2H teams are expected to mobilize household for service. Unfortunately, improper coordination, weak mobilization and weak data management are observed. Many of these Fixed Posts are not supplied with adequate RI antigens (due to stock outs) and the H2H teams do not conduct the expected mobilization of caregivers to take their under 1 children to the FP. Worse still is poor data entry and immunization without cards and even beyond the target groups. This further reduces vaccine availability. The practice of engaging a health worker in IPDs outside his fixed site catchment area further worsen the data management of the RI services provided. Solutions provided in this plan include:

- Selection of HFs and outreach posts clearly i(for areas reached traditionally by outreach and mobile strategy) and use of only health workers from the facilities to serve at IPDs fixed posts.
- Training and orientation for IPDs H2H teams should prioritize the in-house mobilization of caregivers to access RI antigens at FPs (providing the direction to FPs, encouraging visits with vaccination card etc), while at the same time deliver key important RI messages to mothers/caregivers.
- Data entry for all RI antigens should be carried out in strict compliance with the established protocol
- Sensitization/Training and using community gatekeepers (Traditional and Religious leaders) as strong advocates for RI.
- Technical surge engaged in PEI should devote substantially 50% of their programme time for routine immunization through management agreement amongst partners
- Polio material and fund resources will be leveraged to ensure micro-plans (GIS & Walk-through), coldchain equipment and mobilization is made available for RI

uptake.

b. Planning and coordination:

The Planning mechanism will also initiate coordination to ensure the adequate coverage of priority population and geographic area: to avoid duplication or non – beneficial overlap thereby ensuring the adequate use of resources. The framework will seek to strengthen the stakeholder and key institutional engagement at the Federal, State, Local and Community levels to provide technical assistance, operational leadership for Routine immunization and equitable distribution of partners, resources and programs in the country based on prioritization and needs. The integration of Polio initiative with routine immunization will be implemented using a phased approach. Areas with high priority need on routine immunization and polio will be targeted, with clearly defined objectives and targets. In this light, the country could be divided into three sub populations which will require different implementation strategies

- High risk Polio LGAs of the North – Polio focus
- Non Polio risk LGAs of the North – REW focus
- Polio free states of the South – REW strengthening with Private Providers expansion

c. PHC reviews (PRS and UNICEF to please provide the input here)

d. Advocacy

This integration will call for increased awareness, advocacy and political commitment at the high levels. Central to the approach will be to engage key stakeholders on the need to pay more attention to routine immunization. Therefore advocacy will be done to political leaders as in Governors; Ministers of Health, Education, Women Affairs, Information; relevant legislative Committees, Commissioners of Health, Local Governments and chieftaincy affairs, Information, Education, Women Affairs; Traditional and Religious Leaders, the media and Civil Society Organizations. The purpose is for them to:

- Pay greater attention to RI
- Allocate budget lines for RI
- Promulgate policies on child immunization rights and to encourage RI services and behavior
- Demonstrate the importance of RI
- Place Routine Immunization on the front burner of the socio-political agenda

e. HRH capacity

The 2011 Landscape Analysis for Routine Immunization (LARI) study by [IVAC](#) identified six key Human Resources Barriers to improving RI coverage rates. The barriers are:

- Poor Performance Management
- Staff shortages
- Inefficient staff allocation of staff time
- Culture of monetization of tasks
- Poor attitude, work ethic and motivation
- Capacity gaps

Strong HRH for Immunization remains one of the main issues in moving immunization forward in Nigeria. Recruitment of appropriate staff at all levels; retaining them, keeping them motivated and giving them appropriate training and equipment to carry out assigned tasks remains the basic pre-requisite for effective immunization service delivery. All these activities need to be constantly reviewed to meet prevailing circumstances and challenges. Hence the need to have a good HRH policy which underpins a strategic plan for HRH system. Healthcare is on concurrent list in Nigeria's constitution, and LGAs and States are expected to provide HRH, while the National Government (via the NPHCDA) is expected to provide technical support and resources for capacity building. This strategic document will focus on the following:

- Defining the objectives of the plan
- Conducting a situation analysis to determine the type, number and distribution of HRH for Immunization service provision at State and LGA levels
- Use the findings to fine-tune the policy document which becomes a strong advocacy tool to reach policy makers at those levels to increase number and quality of HRH. The main strategic interventions will be included in the plan as listed below.
- NPHCDA (through the training working group) to conduct rapid training needs assessment for two levels (mid-managers and service providers).
- Use the adapted MLM modules to cascade the training to some States and all LGAs (depending on needs), while using the revised basic guide to re-train frontline (old and new) health workers in a cascaded manner
- The NPHCDA to mobilize adequate resource (Government and Partners) to carry out the phased trainings over the 3 year period

As a strategy (and moving away from the current practice) the TWG is to identify, train and select pool of EPI core trainers from the academic and similar institutions, private sector based on the existing criteria for the purpose of training lower levels. Here the feasibility of outsourcing of all our trainings will be tested. Trainings will be harmonized in such a manner to prevent multiple frequencies of trainings (that could be done together) thereby improving efficiency in cost and time spent

Trainings will also prioritize and integrate the private sector involved in RI service delivery. RI focal persons from private providers are the ultimate target.

NPHCDA should also liaise with regulatory bodies (eg CHPBN, NMDC, PCN) to update

training curriculum of in-service institution in which Immunization will be prioritized. All health workers, including those in the private sector, shall be exposed to the principles of injection safety.

Provision shall be made for in-service training of currently existing health workers:

Formal training curricula for physicians, pharmacists, nurses and other categories of health professionals should be revised to include appropriate instruction and materials on injection safety

Government shall ensure continuous training in relevant areas for health workers specifically partnering with their regulatory agencies in continuous mandatory education (CME) activities

Financing the strategic plan requires that it should be costed

After costing there must be an institutional framework to implement the plan and also a documentation of the M and E within the plan.

f. Training (Capacity building)

PHC health care workers will be trained on the main component of Routine Immunization such as supply/logistics, surveillance, supervision, IPC skills/communication/social mobilization, and monitoring. Trainings will also be conducted for community volunteers on social mobilization and communication processes.

PHC health care workers and community volunteers will be trained to systematically integrate and harmonize routine immunization (services and message) with polio eradication (services and message), state-level media activities focusing on polio will also be closely linked to community level routine immunization activities. Intensive efforts will be made at the national, state and local levels to inform and educate the public on the importance of routine immunization and integration with polio eradication initiatives.

g. Basket fund

In some states there is a funding gap between federal provision and state/LGA need, which is sometimes bridged by donors, but at other times leads to funding gaps that impact on operations at ground-level. A remedy to this could be a state basket fund that pools funds for disbursement to LGAs, while receiving regular contributions from the federal government. In 2009, Zamfara state piloted such a fund in partnership with PRRINN-MCH, with strict controls in place, including:

- Multiple signatures required before release
- Joint accounts with signatories maintained by LGAs
- Compliance monitored by state technical teams
- Information on fund disbursement available in the public domain

Through establishment of the basket fund, and strong monitoring and control, Zamfara achieved immunization coverage of 61% in 2011. This achievement was attributed to the basket fund pilot because there were no state-wide interventions taking place concurrently. A WHO and DFID review recommended this intervention to other states in Nigeria, and today in Zamfara the fund is fully operational and an integral part of state policy.

h. Innovations

Quite often the poorest are missed not because the facilities are far from them, but because search for livelihood prevents them from accessing the needed preventive services. Poverty rates have considerably reduced and many poor families are hovering from one market to the other in search of basic daily livelihood. The infants of such parents abound unvaccinated. This strategy intends to use the market place where these families go daily to earn a living to target them for vaccinations. In association with market leaders, markets will be mapped and sessions fixed in them on market days. This way, when mobilized, time to seek vaccinations will no longer be a barrier to the immunization of the infants of the poor.

i. Market day vaccinations

ii. Private providers of RI (DrKabir to provide a write up on this please)

6.0 Monitoring and Evaluation

It is critical that identified activities, outputs and outcomes are monitored. The results of this M&E process will then be fed into the accountability framework promoting accountability. This section of the document will serve to:

- a) Outline the monitoring and evaluation process
- b) Determine the key outcome performance indicators :Output and activity indicators will be outlined in the appendix of this document

6.1 The Monitoring and Evaluation process

The monitoring and evaluation process will be composed of 6 major components

- a) Development of the Log frame outlining key objectives/ outcomes, outputs and activities for the year
 - The Log frame development is the first step in the performance management process
 - This will involve determination of key objectives/ outcomes, outputs and activities
 - This process will be kick started by the head of RI and then each working group chair will be responsible for their portion of the log frame. All will be collated by the head of RI
- b) Determination of Key performance indicators : These should include outcome , output and activity indicators
 - Once the Log frame has been completed, Key performance metric will be set for all outcomes, outputs and activities
 - Metrics should be measurable, specific and relevant to what is being measured
 - The head of M&E at the NPHCDA supported by the head of RI NPHCDA should kick – start this process
- c) Setting of baselines and targets for all indicators
 - Following the determination of metrics baselines should be determined and targets set.
 - Baselines should be the value form the last month of the precious year
 - Targets should be ambitious but should take into consideration the baseline
 - Once again this should be kick-started by the head of M&E at the NPHCDA supported by the head of RI NPHCDA

d) Development of tracking sheet and dashboard

- Once metrics, baselines and targets have been determined, the M& E group will create data tracking sheets and dashboards which will: Have spaces for data to be filled, clearly state who will be responsible for collecting data, clearly define data etc.

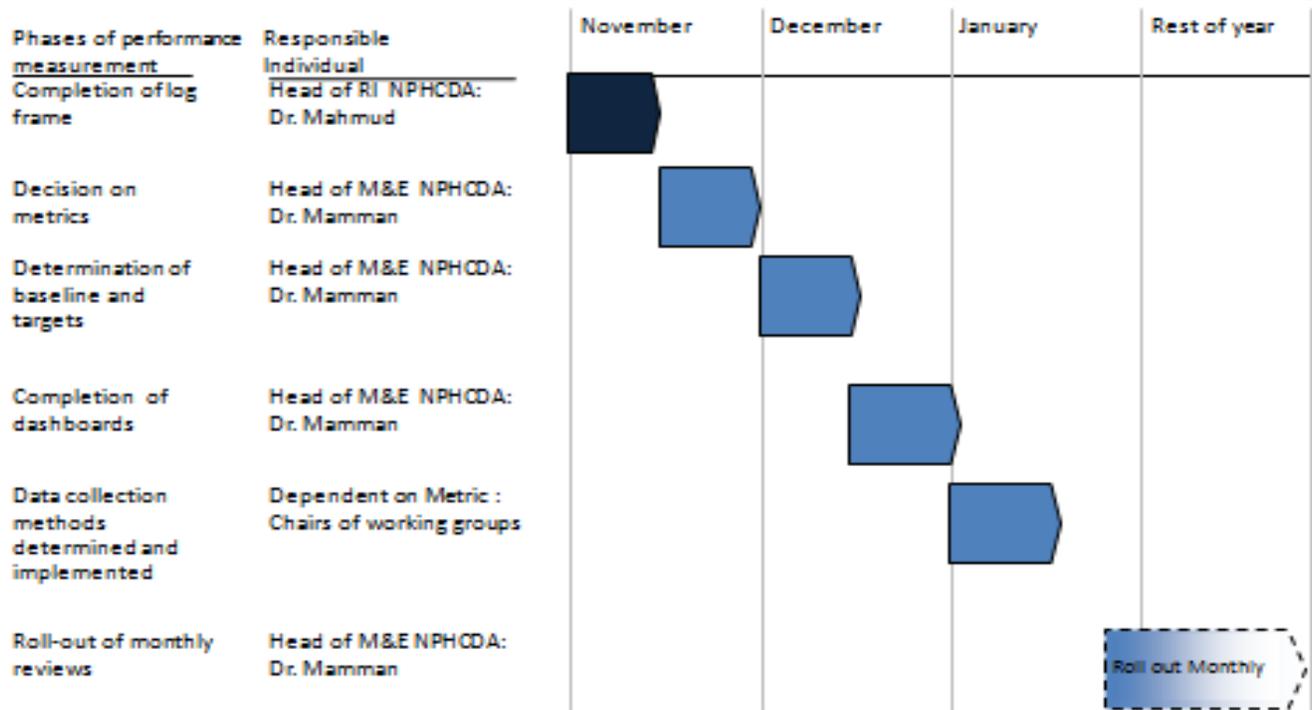
e) Determination and implementation of data collection

- Individuals identified as responsible for data should ensure that data is collected continuously
- The Head of M& E should work with the M&E team should check that data is being collected on a fortnightly basis

f) Conduction of monthly performance reviews.

- Performance dialogues to discuss tracked metrics should be institutionalised
- These dialogues will be an opportunity to discuss the indicators that have seen improvements and those that have worsened
- Clear action items should be identified during the meeting and deadlines to accomplish these set

The M&E working group should kick-start the performance management process in November of the prior year



6.2 Key Performance Indicators

Based on the Log frame as highlighted in section X of the document, we have identified the following outcome indicators

Outcome	Indicator	Baseline	Frequency of Collection	Source
Overall	Number of unimmunized	3,250,896(DPT3 and Penta 3)	Monthly	DVD_MT
Increased access to RI services	Vaccine coverage rates	52% (DPT)	Monthly	DVD_MT
	Drop-out rates	12%(DPT)	Monthly	DVD_MT
Improve vaccine security and logistics	% of states reporting vaccine and devices stock out	3%(DPT)	Monthly	DVD_MT
	National average Vaccine wastage rates	12%(PENTA)	Monthly	DVD_MT
Introduction of new vaccines	Penta Coverage	TBD	Monthly	DVD_MT
	PCV coverage	0%	Monthly	DVD_MT
To improve reporting or data management	Proportion of health facilities reporting more than 80% of their data	93%	Monthly	DVD_MT
	Proportion of health facilities that report on timely basis	TBD	Monthly	DVD_MT
Improved partnership and coordination	TBD	TBD	TBD	DVD_MT
Improved HRH Capacity	Proportion of health workers with good knowledge of RI Proportion of health workers that have received at least one training	TBD	Quarterly	DVD_MT
Improved governance and accountability	TBD	TBD	TBD	DVD_MT
Ensure adequate financing for RI especially at state and LGA levels	Proportion of HF's /LGA's /States reporting insufficiency of funds	TBD	Monthly	DVD_MT

Output metrics:

Output	Output Metrics
Increased and sustained community awareness	Proportion of sample community with good

	knowledge of RI
	Proportion of planned HE classes that occur
Improved and sustain community demand for RI	Proportion of target population that turn up to receive vaccines
Increased frequency of fixed Post (priority to dense population) and outreach vaccination services (priority too hard to reach areas)	Percentage change in the Number of outreach sessions that occurs
	Percentage change in the number of planned fixed session that occurs
Increased number of fixed centers	Percentage change in the number of fixed centers
Increased frequency of mobile immunization service	Percentage change in the average frequency of mobile immunization services
Targeted catch-up immunization in LGAs with low coverage	Percentage change in immunization coverage in chosen LGA's
Improved supportive supervision mechanism	Proportion of facilities that have received supportive supervision
	Proportion of identified action items in previous month supportive visits that have been implemented
	Proportion of supportive supervisions with clear action items identified post visit
Introduce new technology for CCE management	TBD
Creation and implementation of maintenance contracts	Maintenance contract created
	% Of zonal cold stores that are broken down
Expanded use of new technologies	TBD
Enforced usage of PQS	TBD
Building a bottom-up forecasting system	TBD
Assess vaccine transportation options	Transportation assessment document completed
Building of a real time vaccine management tool	Real time vaccine management tool completed
Establishment an efficient vaccine and commodity supply systems	% of states (plus FCT) with no vaccine or other commodity stock out
Establishment a robust procurement system for devices	% supply adequacy rate
Conducting capacity building (National to LGA levels) of CCOs on forecasting, vaccine and data management	Proportion of CCO's that have been trained
	Proportion of CCO's that have received supportive supervisory visits following training
NVI is effectively coordinated at the national level	% of states (plus FCT) with no vaccine stock out of new vaccine
	TBD
State/LGA officers and key influencers sensitized	Proportion so LGA/ State officers that have gone through sensitization meetings
Phase 3 pre-introduction readiness assessment conducted	Reediness assessment conducted
Phase 3 states are trained and have necessary	Proportion of phase 3 states with necessary

materials and vaccines for pentavalent introduction by November 2013	material
	Proportion of phase three states with data tools and other necessary materials for vaccine introduction
Post-introduction evaluation conducted	Post-introduction evaluation conducted
Phase 1 pre-introduction readiness assessment conducted	Readiness assessment conducted
Phase 1 states are trained and have necessary materials and vaccines for PCV introduction by Q4 2013	Proportion of phase 1 states with necessary material
Post introduction evaluation conducted	Proportion of phase one states with data tools and other necessary materials for vaccine introduction
New vaccine introduction plan, post 2013, developed	Post-introduction evaluation conducted
	Performance management system developed and shared
Institutionalization of a performance management system	% of states (plus FCT) conducting monthly review meetings
Harmonization of data tools	data tools harmonized
Creation of a data bank at the NPHCDA	Data bank created
Advocacy to gain commitment to fund non-seed data tools by the state and local governments.	Advocacy completed
Training and supportive supervision of data management staff	Proportion of CCO's that have been trained
	Proportion of CCO's that have received supportive supervisory visits following training
Clear identification and institutionalization of a clear line of data reporting	Proportion of states that have instituted all data reporting guidelines
Improvement and continuation of the data quality surveys	Number of data quality surveys conducted
	Proportion of suggested reviews to the DQS identified in prior DQS that is implemented into present DQS
Operationalization of the Global Immunization Vision Strategy	Proportion of activities identified in the GIV strategy that has been implemented
Greater government commitment for program integration	TBD
Engagement of stakeholders on the need to prioritize RI along with polio eradication initiatives	Stakeholder engagement meeting conducted
Capacity building of staff to systematically integrate and harmonize routine immunization	Proportion of HW's that have been trained in coordination
Coordination to avoid duplication or overlap	TBD
Messaging to emphasize integration of interventions	TBD

Increased number and quality of HRH	Proportion increase in the number of HRH
Conducting of staff training	Proportion of CCO's that have been trained
Conducting of staff training	Proportion of CCO's that have received supportive supervisory visits following training
Increased and improved supportive supervision	Proportion increase in the total number of supportive supervisory visits
Development and implementation of an accountability framework	Accountability framework completed
Smoothing disbursement	% of budgeted donor partner RI funds released in a timely manner.
Creation of a basket fund	Basket fund created

[Copy of CORE INDICATORS FOR ACCOUNTABILITY IN RI. FINAL 03.2013.NE.xlsx](#)

7.0 Logical Framework and Budgeting/costing

Highlighted areas are gaps to be completed by individuals and groups concerned

[Revised log frame.xlsx](#)

8.0 References

(DrHashim of CDC to please tidy up this aspect)

[1] National Planning Commission – Nigeria Website

<http://www.npc.gov.ng/vault/Macro-Economic/Key%20%20Macroeconomic%20Indicators.pdf>

- [2] World Bank - 2011. From <http://databank.worldbank.org/ddp/home.do?Step=3&id=4>
- [3] WHO Country Cooperation Strategy for Nigeria - 2008-2013
- [4] National Strategic Health Development Plan (NSHDP) - 2010-2015
- [5] Landscape Analysis of Routine Immunization in Nigeria: Identifying barriers and Prioritizing Intervention.-2012
- [6] Weekly Epidemiological Record, NO. 44, 2 November, 2012.
- [7] Baseline Assessment in 7 LGAs in 6 States, CDC – November 2012
- [8] National Demographic Health Survey – Nigeria 2008
- [9] NPHCDA, Presentation Lafiya Retreat Feb. 14-16, 2013
- [10] Vaccine Audit Report November 2012
- [11] Nigeria EVM assessment report Dec. 2010 - June. 2011.
- [12] Dr Nnenna N Ihebuzor; Director Community Health Services. Presentation Lafia Retreat Feb. 14-16, 2013
- [13] Round Table on Accountability Framework for Routine Immunization in Nigeria. Report of Proceedings. Christiana **EkaeteLaniyan**, Consultant Facilitator, Executive Director SPOLAN Consulting, Nigeria Ltd.
- [14] The Nigerian Vaccine Wastage Study Report – 21 November 2011 (WHO-UNICEF-CDC).
- [15] Nigeria Polio Eradication Emergency Plan (2012).
- [16] Saving one million lives by 2015
- Landscape Analysis of Routine Immunization in Nigeria (LARI), International Vaccine Access Center, 2012
- http://www.path.org/publications/files/TS_update_ccem.pdf
- Partnership for Reviving Routine Immunization in Northern Nigeria; Maternal, Newborn and Child Health Initiative, 2012
- <http://www.solarchill.org/vaccines.html>
- <http://www.prrinn-mnch.org/documents/BasketFund.pdf>
- https://extranet.who.int/aim_elearning/index_en.html

9.0 Annexes

9.1 WHO supervision model

9.2 *Accountability Framework Schematic*

ACCOUNTABILITY FRAMEWORK SCHEMATIC

9.3 Sanctions and Rewards

Staff Sanctions Matrix					
	Method	Process / Definition	Monitoring team	Guidelines and tools	Enforcement
Redirection for Individual staff members	Step 1 - Written warning	If activities assigned are not carried out and/or targets not achieved in the first reporting cycle, a written warning will be given	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: LIO, WDCs and direct supervisor	Standardized template for the written warning will be developed	National: Enforced by the ED and the M&E working group State: Commissioner of Health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC
	Step 2 - Docked wages	If activities assigned are not carried out and/or targets not achieved by the 2nd consecutive reporting cycle, a designated deduction is made from cited individual's monthly pay commensurate with the lapses	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor	The same standard for the calculation of wages to be docked should be applied for all affected staff	National: Enforced by the ED and the M&E working group State: Commissioner of Health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of

		identified.	Facility: LIOs, WDCs and direct supervisor		PHC
	Step 3 - Demotion	If activities assigned are not carried out and/or targets not achieved by the 3rd consecutive reporting cycle, the cited individual will receive a demotion from current position	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: LIO, WDCs and direct supervisor	Individual can only be demoted by one level Individual will be allowed to appeal case before the demotion is put into place	National: Enforced by the ED and the M&E working group State: Commissioner of Health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC
	Step 4 - Termination	In cases in where the performance target continues in a downward trend due to consistent lapses in assigned activities, observed in a fourth consecutive reporting cycle , the cited staff member will be terminated	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: LIO, WDCs and direct supervisor	The threshold performance level warranting termination should be set by direct supervisor and clearly communicated to subordinate staff at or before step 2 of the disciplinary process.	National: Enforced by the ED and the M&E working group State: Commissioner of Health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC
Appeal Process: Cited individuals will have 10 business days for					

the release date of the Process Indicator & Performance report, to provide additional evidence and/or documentation to rebut the citation. The monitoring units can, after due consideration, uphold or rescind citation as appropriate.

Organizational Sanctions - Public Reporting

	Method	Process / Definition	Monitoring team	Guidelines and tools	Enforcement
Sanctions	Step 1 - Reprimand at the ICC/ State and LG RI Meetings	Federal, State and LG MDAs as well as Donor Partners failing to meet targets for the first time in a reporting cycle, will get an official reprimand by the ICC which will be captured in the	National : Selected CSOs & ICC State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor	NA	National: Minister of health, Partners, CSO's State: Governor, Health Commissioners, Partners CSO's Local: Local government chairman, CSO'S

		minutes.	Facility: LIO, WDCs and direct supervisor		Facility : Director of PHC and CSO's
Sanctions	Step 2 - Performance Improvement Plan demanded by ICC/State and LG RI Meetings	Federal, State and LG MDAs as well as Donor Partners failing to meet targets for the second consecutive time in a reporting cycle, will be required to draft and submit an organizational Performance Improvement Plan for ICC approval and monitored implementation	National : Selected CSOs & ICC State: state level CSOs Local Government: CBOs, LG level CSOs Facility: WDCs	NA	National: Minister of health, ED, Partners and CSO's State: Commissioner of health, CSO's Local: Local government chairman, CSO'S Facility : Director of PHC and CSO's
Sanctions	Step 3 - Naming and Shaming in the Media	Federal, State and LG MDAs as well as Donor Partners failing to meet targets for the third consecutive time in a reporting cycle, will have their poor performance shared with print and electronic media houses for onward dissemination to the general public	National : Selected CSOs & ICC State: state level CSOs Local Government: CBOs, LG level CSOs Facility: WDCs	The correspondence will name both individuals and departments responsible for failure to achieve targets The enforcement team will be responsible for sending out document to the appropriate media outlet	National: Minister of health, ED, chosen CSO's State: Commissioner of health, CSO's Local: Local government chairman, CSO'S Facility : Director of PHC and CSO's

**The organizational
Sanctions apply to
the core indicators
only.**

Staff Reward Matrix

Method	Process / Definition	Monitoring team	Guidelines and tools	Enforcement
Verbal encouragement	If target is achieved in first reporting cycle verbal encouragement should be given	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: Direct of PHC and direct supervisor	Verbal encouragement or praise must be documented	National: Enforced by the ED and the M&E working group State: Commissioner of health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC
Written acknowledgement of efforts	If target is achieved and maintained for 3 consecutive reporting cycles then written acknowledgements should be given	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: Direct of PHC and direct supervisor	Letters of commendation should be framed or laminated before presentation	National: Enforced by the ED and the M&E working group State: Commissioner of health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC
Naming and faming	If target is exceeded a report will be sent out to the media highlighting the wins and individuals responsible for ensuring that these	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor	The correspondence will name both individuals and departments responsible for success The enforcement team will be responsible for sending out document to the	National: Enforced by the ED and the M&E working group State: Commissioner of health via direct supervisor Local: Local government chairman via direct supervisor

	wins were accomplished	Facility: Direct of PHC and direct supervisor	necessary media personnel	Facility : Director of PHC
Promotion	If target is exceeded by a specified percentage the individual will be fast tracked for a promotion which will include a pay rise	National :M& E working group, Direct supervisor State: M& E personnel where available and direct supervisor Local Government: Local government chairman and Direct supervisor Facility: Direct of PHC and direct supervisor	The standard for qualifying for fast-tracked promotion should be pre-determined and applied fairly to all eligible staff	National: Enforced by the ED and the M&E working group State: Commissioner of health via direct supervisor Local: Local government chairman via direct supervisor Facility : Director of PHC

9.4 Indicators

(Excel file attached) [Copy of CORE INDICATORS FOR ACCOUNTABILITY IN RI. FINAL 03.2013.NE.xlsx](#)