Overview of Routine Immunization in Nigeria

Presented by;

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at the WAVA Workshop held at the Hawthorn Suites Abuja

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Outline

- Background
- Contexts (global and national)
- Historical perspectives
- Organization of Operations
  - Immunization Environment
  - Routine Immunization flow
  - National policy
  - Strategies
  - Operational structures
  - Government role
  - Partnerships
- Performance
- Opportunities and threats
- Challenges
- Roles of Stakeholders

Background:
Nigeria, one nation, 180 million+ people, 250 languages, many cultures

- **Governance**
- Federal system, 6 geopolitical zones, 37 states, including the Federal Capital Territory, 774 Local Government Areas
- **Demography and Health Indices**
- Large under five population, Large National birth cohort: 7m+, and surviving infants: 6m+; birth registration 30%; under-five mortality rate 157, infant mortality rate 75; 25, 413 HFs offering routine immunization
- **Others**
- Roads, unstable power, dense and rural populations, poor sanitation
- West Africa's transport and migration hub bordering four countries

Global Context

- Global Vaccines Action Plan (GVAP 2011 – 2020)
  - build on the success of the Global Immunization Vision and Strategy (GIVS 2006-2015)
  - To achieve the goals of the decade of vaccines
    - Ensure access to vaccines of assured quality to all eligible persons whoever they may be or wherever they live
    - Systems strengthening which ensures integration of sector-wide plans for human resources, financing and logistics

- Regional EPI goals of AFRO
  - Drawn from the Global goals

National Context

- Concurrency of Health in 1999 constitution (Political but no Fiscal federalism)
- Comprehensive Multi-Year Plan 2016 -2020
- Introduction of new vaccines and technologies
- Several studies, dialogues and workshops highlighting the issues of routine immunization

Historical perspective - Globally

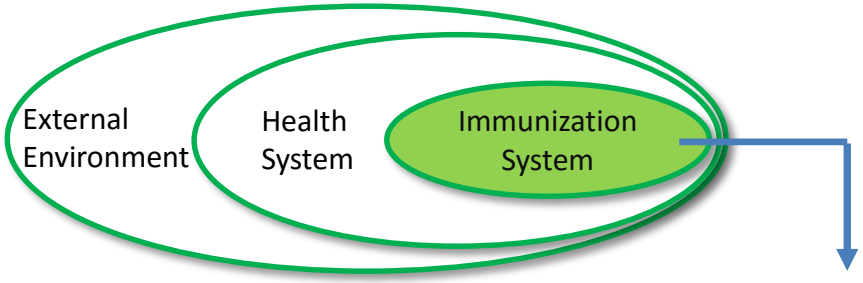
- **1974**: EPI established through a WHA resolution 27.57 targeting to build on the success of small pox eradication
- **1977**: Global policies for immunization to provide universal childhood immunization by 1990 (UCI)
- **1978**: Alma-Ata declaration
- **1988**: WHA resolution 41.28 –GPE by the year 2000
- **2002**: Reaching Every District (RED) strategy for African region launched
- **2005**: 58th WHA: GIVS 2006-2015
- **2010**: DoV collaboration 2011-2020

Historical perspective - Nigeria

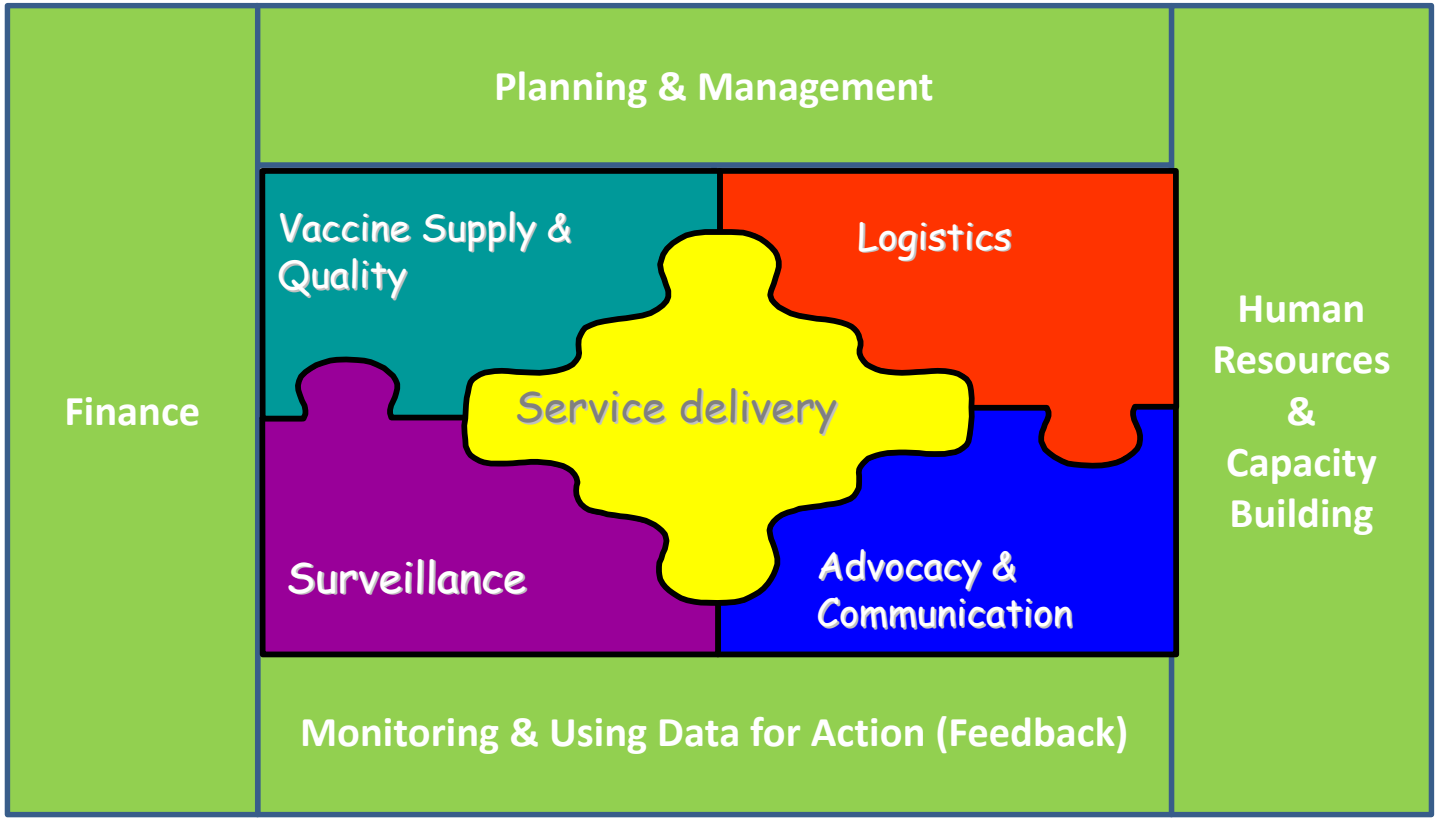
- **1979**: EPI established
- **1991** : UCI EPI targets achieved (coverage survey) but not sustained
- **1996**: PEI activities commenced in Nigeria
- **1997**: EPI restructuring to a parastatal NPI
- **2004**: Nigeria adopted the Regional Strategy of Reach Every District (RED) to Reaching Every Ward (REW)
- **2007**: Health sector reform merged NPI to NPHCDA
- **2008**: Intensification of REW approach and other strategies such as PIRI, LIDs, CHWs
- **2010** : National Strategic Health Development Plan (NSHDP) that includes Routine Immunization strengthening activities
- **2010**: Introduction of bivalent OPV for PEI campaign

The Immunization Environment

The Immunization System Environment

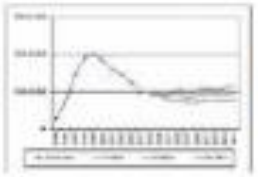


The Routine Immunization System



Flow of the RI system

1



Planning and forecasting
- Annual forecasting of national vaccine needs

2

Procurement
- Quarterly procurement of vaccines through UNICEF

3

Central cold store
- All vaccines arrive at central store located in Abuja

4

Zonal cold stores
- Vaccines should be 'pushed' to 6 zonal cold stores on a quarterly basis[1]

5

State cold stores
- Vaccines are 'pushed' to each state cold store on a quarterly basis[2]

6

LGA cold stores
- 776 LGAs receive vaccines for one month or less at a time[3]

7

Primary Health Centers
- Routine immunization services should be provided at ~26,000 PHCs across the country

8

Delivery to patients
- Administration of vaccines to children and adults

Responsibility:
Fed govt: 1-5
State govt: 6
LGA: 7 & 8

Slide courtesy of Solina Health

National Immunization Policy (revised 2009)

- **GoN policy is to provide potent vaccines free to all population at risk of VPDs**
- **Immunization is a collaborative venture between Government and Partners**
- **Many policy documents and standards are available (Injection safety, Multi-dose vial policy, standards of practice, BGSP, REW manual, cMYP, Training manual)**

National Targets

1. Improve and sustain routine immunization coverage of all antigens to 90% before the year 2020.
2. Interrupt Polio transmission by end of 2013 (Missed)
3. Eliminate maternal and neo-natal tetanus by the end of 2010 (Missed)
4. Eliminate Measles by 2020
5. Introduce new vaccines (Penta, PCV, Rota &HPV) before 2015 (Partly achieved)

Target Groups

1. Eligible children 0–11 months (Routine vaccines against killer diseases)
2. Eligible children 0-59 months (OPV vaccination for Polio Eradication)
3. Women of Reproductive Age 15–49 years (Td vaccination)
4. Other at-risk groups especially in out-break situations and those travelling to endemic areas.
5. International travellers (YF and CSM vaccinations)

Immunization schedule for children U 1year and WRA

Contact	Min. target age	Antigen	Dosage	Route of admin	site
1st	At birth (HepB must be given within 14 Days of life; OPV0 within 14 days of life	BCG	0.05 ml	intradermal	Rt upper arm
		HepB	0.5 ml	Intramuscular	Antero-lateral aspect of Left thigh
		OPV 0	2 drops (1 ml)	oral	Mouth
2nd	6 weeks	OPV1	2 drops (1 ml)	oral	Mouth
		Penta 1	0.5 ml	Intramuscular	Antero-lateral aspect of Left thigh
		PCV 1	0.5 ml	Intramuscular	Anterolateral aspect of right thigh
3rd	10 weeks	OPV 2	2 drops (1 ml)	oral	Mouth
		Penta 2	0.5 ml	Intramuscular	Antero-lateral aspect of Left thigh
		PCV 2	0.5 ml	Intramuscular	Anterolateral aspect of right thigh
4th	14 weeks	OPV3	2 drops (1 ml)	oral	Mouth
		Penta 3	0.5 ml	Intramuscular	Antero-lateral aspect of Left thigh
		PCV3	0.5 ml	Intramuscular	Anterolateral aspect of right thigh
		IPV	0.5 ml	Intramuscular	Anterolateral aspect of right thigh
5th	9 months	Measles, Yellow Fever	0.5 ml	subcutaneous	Left upper arm

Immunization schedule for Women of Reproductive Age

DOSES	WHEN TO GIVE	EXPECTED DURATION OF PROTECTION
Td 1	At first contact or as early as possible in pregnancy	None
Td 2	At least 4 weeks after Td 1	1-3 Years
Td 3	At least 6 months after Td 2 or during subsequent pregnancy within 3 years	5 years
Td 4	At least 1 year after Td 3 or during subsequent pregnancy	10 years
Td 5	At least 1 year after Td 4 or during subsequent pregnancy	All the child bearing years

Our Strategies in RI

- Vaccination approach
  - Fixed post, Outreach and mobile

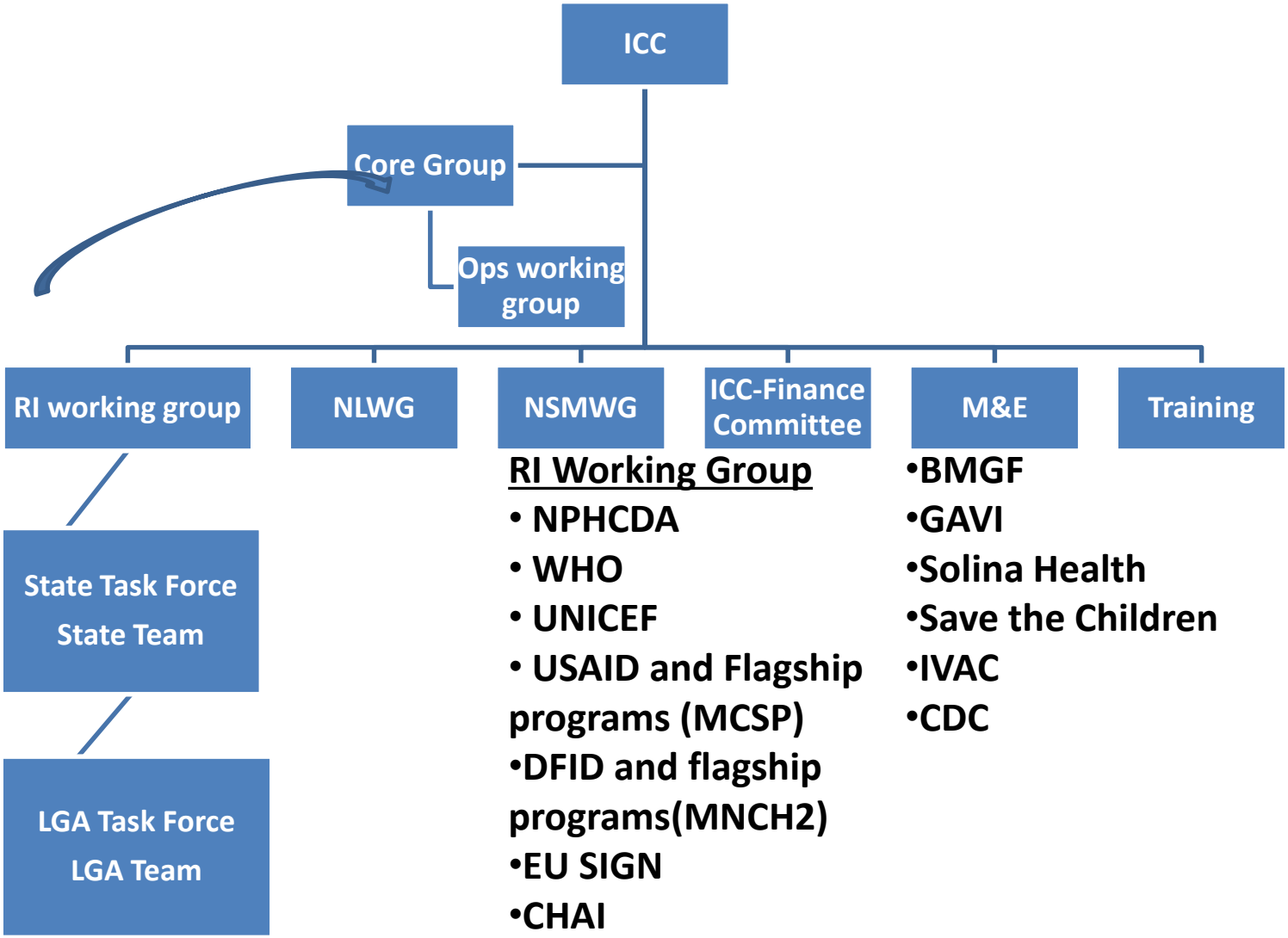
- Programmatic approach
  - Reaching Every Ward (five components)
    - Later being operationalized as 1, 4, 3 Strategy
  - Periodic intensification of Routine Immunization (Immunization Plus Days, Local Immunization Days, MNCH weeks)
  - Reducing Unimmunized Children (prioritizing and focussing on training, supervision and data on areas with highest numbers of susceptible population)
  - New Vaccine Introductions (Penta, IPV PCV,, MenA, Rota, HPV)
  - Accountability

Operational Structure

National level – NPHCDA & 6 Zones

State level – SMoH/P HCDA/B

LGA Level- MoLG/ Health Dept



RI Working Group

- **NPHCDA**
- **WHO**
- **UNICEF**
- **USAID and Flagship programs (MCSP)**
- **DFID and flagship programs(MNCH2)**
- **EU SIGN**
- **CHAI**
- **HERFON**

- **BMGF**
- **GAVI**
- **Solina Health**
- **Save the Children**
- **IVAC**
- **CDC**

Government Role

National level

- Policy formulation
- Provision of potent bundled vaccines
- Coordination
- Resource mobilization
- Monitoring ,Evaluation & Feedback
- Technical support to States/LGAs

State

- Resource mobilization (funding of activities)
- State level Coordination
- Monitoring ,Supervision and Feedback
- Infrastructure for PHC services

LGA

- Human Resource for health (HRH)
- Infrastructure for PHC services
- Service provision

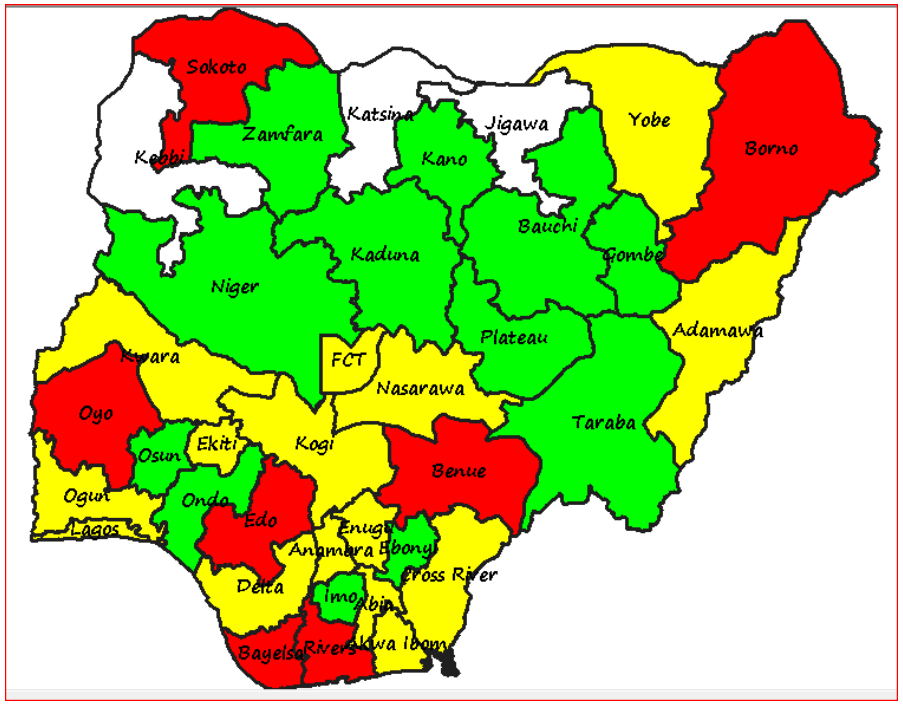
Funding for RI & the dynamics

- GoN funds RI vaccines & given FREE to all Nigerian children
- ALL vaccines budgeted funds are released directly to UNICEF from the CBN using an existing MOU with GoN
- In 2012: Total RI and New Vaccine fund = **N5.2Billion**
- **First charge on the capital expenditure**
- **Accountability framework project commenced**
- **Regularizing and stabilizing vaccine and devices stocks**

Current RI Performance as at JULY 2016 (Administrative Data)

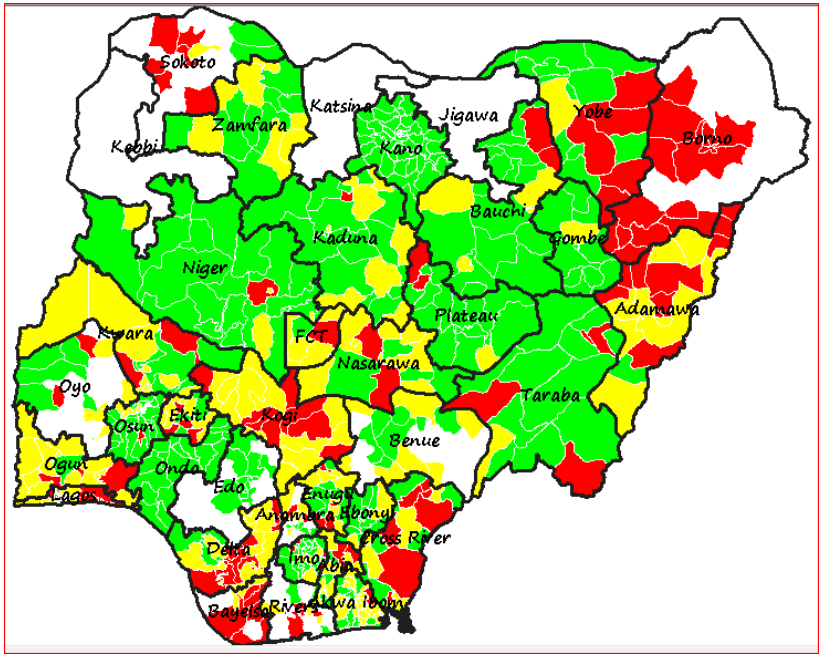
Proportion of community link conducted July 2016

Community link conducted by STATE



- 12 States (32%) conducted > 80% of the planned CL activities as at July 2016.
- 7 (19%) States conducted < 50% of planned CL activities.
- No CL report from Kebbi, Katsitna & Jigawa States

Community link conducted by LGA

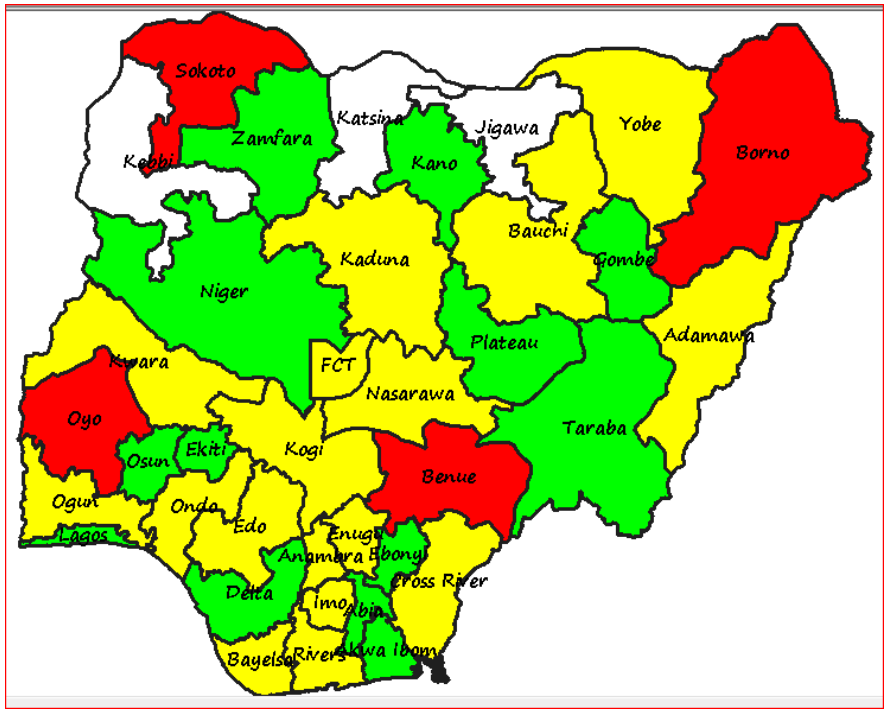


Key: Coverage

- < 50%
- 50 -79.99%
- Above 80 %
- No Report

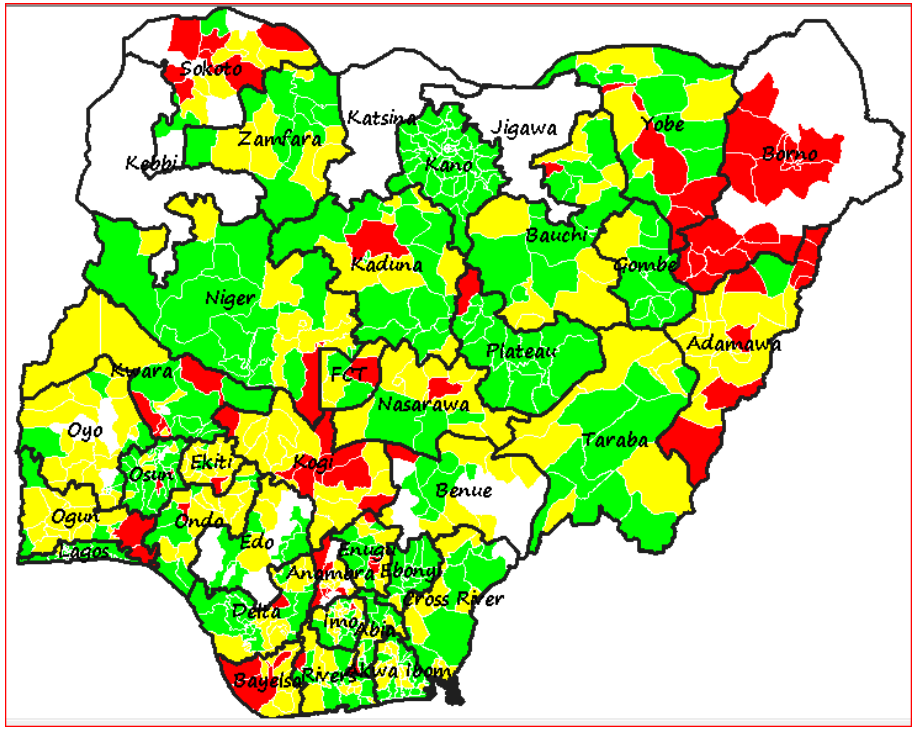
Proportion of Health Education sessions conducted July 2016

Health Education conducted by STATE



- 13 States (35%) conducted > 80% of the planned CL activities as at July 2016.
- 4 (11%) States conducted. < 50% of planned CL activities.
- No CL report from Kebbi, Katsina & Jigawa States

Health Education conducted by LGA



Key: Coverage

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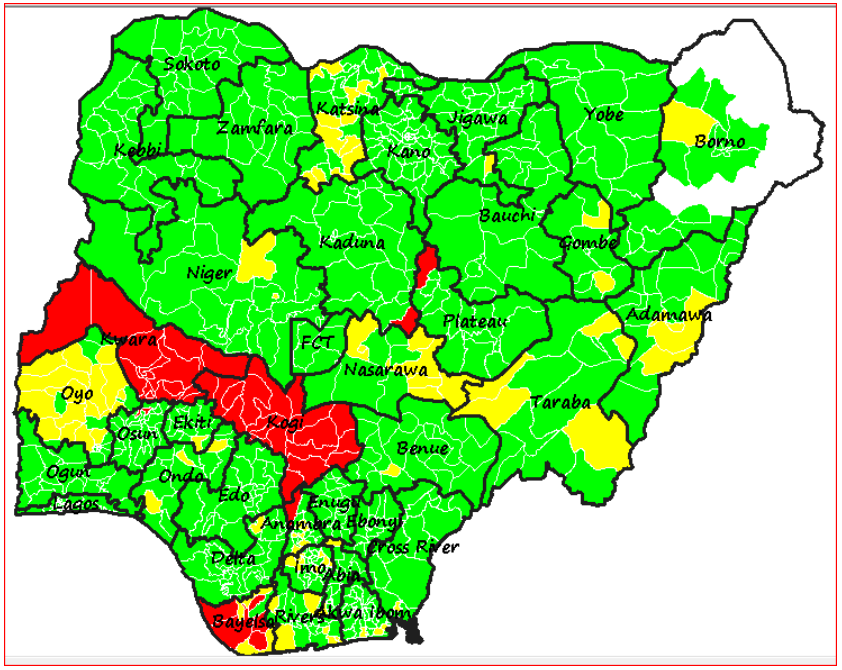
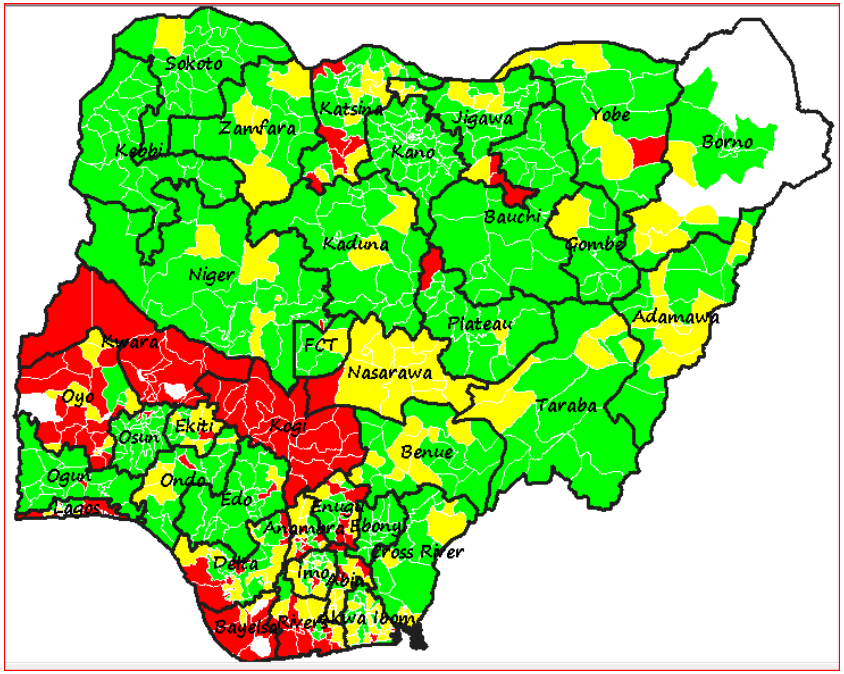
- 50 -79.99%
- Above 80 %
- No Report

Proportion of immunization sessions (fixed and outreach) conducted July 2016

Fixed Sessions conducted/Reported



Outreach Sessions conducted/Reported



Key: Coverage

- < 50%
- 50 -79.99%
- Above 80 %
- No Report

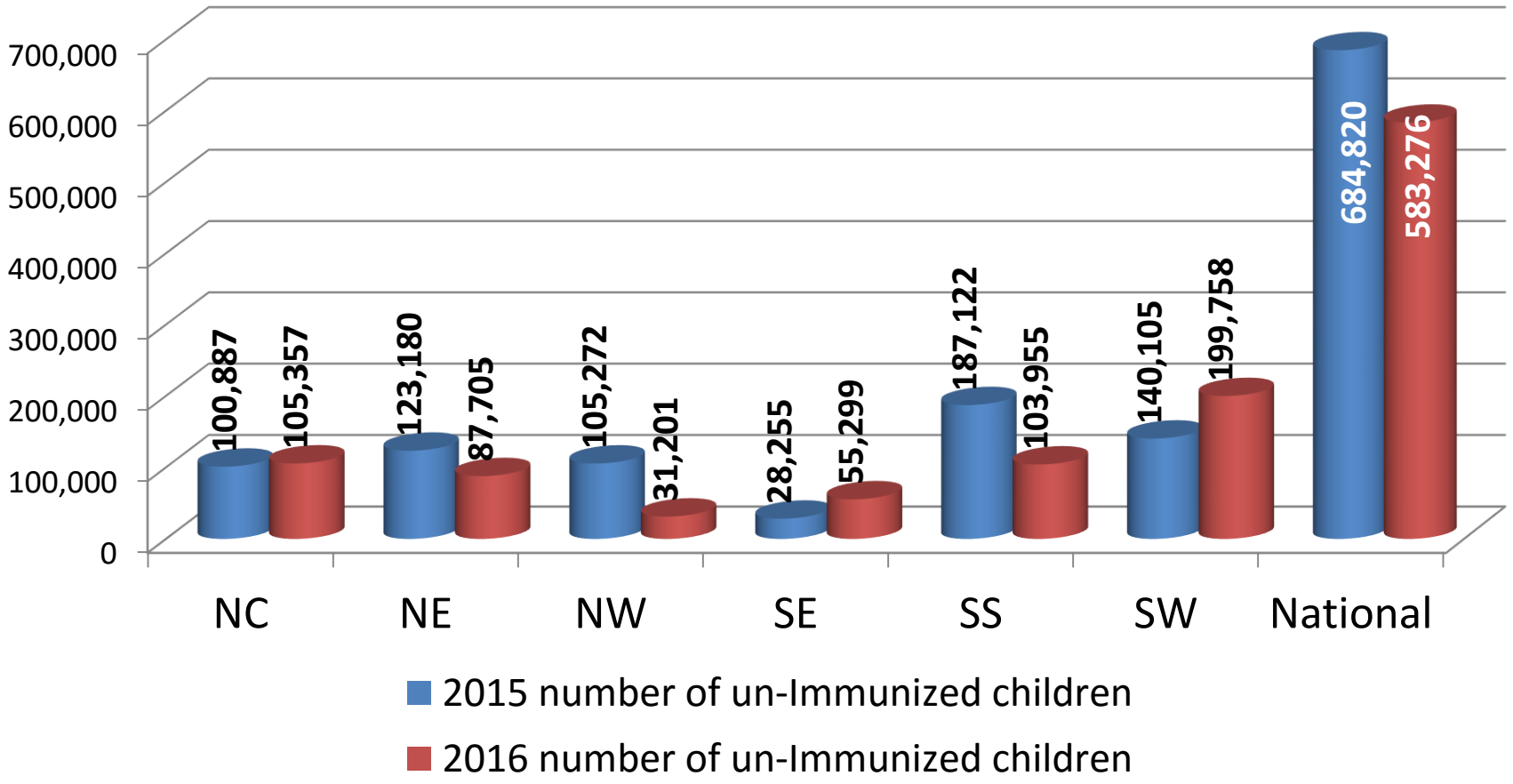
	Categorization of LGAs		
Sessions	**<50%**	**50 - 79.9%**	**>= 80%**
Fixed	**56**	**87**	**631**
Outreach	**134**	**177**	**463**

631 LGAs (82%) and 463 LGAs (60%) conducted > 80% of their planned Fixed & outreached sessions respectively in July 2016. The LGAs that conducted <50% of their planned fixed or/and outreach sessions are in Kwara, Kogi, Plateau, Kaduna, Bayelsa, Yobe, Jigawa, Katsina,Oyo, Ekiti, Lagos, Bayelsa, Rivers, Akwa Ibom, Enugu, Imo, Anambra Delta and Edo states.

Summary table of selected antigen coverage July 2016; States

State	Cummulative Session Coverage July 2016				Cumulative vaccination coverage - July 2016								
	Fixed Sessions	OutReach Sessions	Community Link	Health Education	BCG	OPV-3	Penta-3	Measles	YF	TT-2+	HepB-0	IPV	PCV-3
Abia	86%	62%	68%	78%	92%	99%	103%	82%	82%	36%	78%	92%	78%
Adamawa	89%	83%	48%	53%	93%	95%	96%	89%	88%	66%	36%	89%	93%
Akwa Ibom	92%	78%	72%	81%	113%	82%	87%	92%	92%	44%	39%	74%	
Anambra	83%	68%	45%	42%	118%	97%	102%	105%	102%	45%	61%	66%	96%
Bauchi	95%	97%	84%	75%	109%	128%	127%	141%	137%	79%	47%	118%	
Bayelsa	50%	22%	29%	52%	39%	42%	42%	42%	42%	18%	30%	26%	
Benue	94%	86%	49%	48%	94%	97%	93%	89%	88%	56%	63%	86%	58%
Borno	53%	46%	7%	7%	67%	72%	69%	69%	67%	43%	21%	64%	
Cross River	94%	82%	62%	72%	101%	108%	109%	97%	98%	47%	47%	68%	106%
Delta	95%	69%	60%	78%	94%	110%	110%	96%	95%	42%	55%	73%	
Ebonyi	98%	95%	83%	87%	114%	102%	102%	85%	96%	47%	53%	94%	95%
Edo	98%	91%	44%	51%	65%	65%	66%	64%	64%	24%	50%	54%	65%
Ekiti	92%	79%	61%	68%	64%	65%	67%	67%	67%	34%	46%	63%	
Enugu	100%	65%	67%	70%	81%	85%	87%	79%	78%	37%	56%	71%	
FCT	92%	88%	62%	72%	88%	92%	92%	93%	87%	39%	70%	94%	
Gombe	90%	87%	90%	91%	127%	140%	139%	128%	127%	89%	60%	135%	
Imo	86%	73%	82%	75%	98%	109%	108%	112%	110%	34%	70%	93%	101%
Jigawa	96%	82%	0%	0%	91%	111%	112%	99%	98%	85%	72%	92%	
Kaduna	94%	94%	80%	78%	137%	142%	143%	158%	146%	91%	97%	132%	138%
Kano	97%	98%	98%	91%	105%	112%	112%	104%	103%	82%	26%	112%	
Katsina	86%	75%	0%	0%	77%	91%	94%	117%	107%	78%	62%	86%	92%
Kebbi	98%	97%	0%	0%	71%	113%	114%	108%	106%	60%	40%	108%	
Kogi	33%	31%	53%	54%	38%	43%	39%	48%	47%	20%	27%	40%	35%
Kwara	33%	22%	73%	71%	94%	74%	80%	82%	82%	51%	72%	69%	
Lagos	93%	61%	60%	87%	88%	76%	76%	88%	76%	36%	73%	68%	
Nasarawa	78%	62%	66%	67%	138%	116%	110%	149%	141%	81%	91%	109%	
Niger	93%	85%	85%	83%	127%	115%	119%	131%	124%	73%	79%	105%	
Ogun	95%	94%	58%	64%	134%	109%	109%	114%	114%	75%	90%	91%	46%
Ondo	87%	82%	93%	72%	82%	86%	86%	82%	84%	55%	34%	84%	86%
Osun	100%	100%	84%	83%	111%	98%	99%	96%	96%	46%	90%	93%	93%
Oyo	79%	42%	30%	60%	69%	52%	62%	57%	59%	28%	50%	56%	
Plateau	97%	93%	85%	96%	96%	106%	105%	92%	89%	50%	68%	94%	101%
Rivers	87%	54%	25%	72%	120%	104%	102%	101%	104%	67%	74%	32%	78%
Sokoto	96%	96%	19%	31%	100%	113%	108%	105%	103%	63%	48%	103%	72%
Taraba	85%	84%	76%	80%	106%	119%	119%	126%	123%	66%	59%	111%	99%
Yobe	95%	88%	73%	70%	82%	113%	109%	126%	116%	72%	20%	86%	104%
Zamfara	97%	90%	81%	82%	78%	99%	101%	89%	89%	70%	75%	79%	
National	**87%**	**76%**	**57%**	**61%**	**96%**	**97%**	**97%**	**99%**	**96%**	**56%**	**58%**	**85%**	**80%**

Number of Un-Immunized children by zone
July 2016 versus 2015



Nationally 15% reduction in the number of number of un-immunized children in July 2016 compared to same period 2015.

Nigeria's Decentralized Health System

Government Tier	Responsibility
Federal	National policy, monitoring; Tertiary teaching facilities
State	Population Health in State; Referral State Hospitals
Local Government	Primary Health Care Facilities

- Inconsistent health services varying by State and local government
- Health Funding: Some States and LGAs simply do not contribute enough
- Generally, health services, uptake and indicators in southern States better than northern States

Supply side barriers

Weakness in the delivery of vaccines that is largely operational

- Inadequate Cold Chain (CC) infrastructure
- Weak Preventive Maintenance (PPM) system of CC systems leading to rapid and continuous break down
- Inadequate supportive supervision
- Weak monitoring and use of data for action
- Slow integration of Private providers in RI service delivery

Demand side barriers

Weakness in generating the community demand for vaccines

1. Poor community participation in planning and implementation of Immunization activities
2. Non-functional Ward Development Committee's (WDC)s in many areas
3. Health seeking behaviour focuses on curative interventions
4. Poor involvement & participation of CBOs/NGOs in Immunization activities
5. Sub-optimal community enlightenment, health education and promotion
6. Community fatigue with the campaigns (too many rounds)

System wide barriers

1. Inadequate financing mechanisms to support recurrent costs at LGA level
2. Dilapidated infrastructure including transport
3. Inadequately staffed health facilities
4. Poorly accessibility of services (Geographical and cultural barriers)
5. Competing health priorities especially Polio and epidemics
6. Labour unrest
7. Security challenges
8. Natural Disasters

Data Issues

- Data tools and bank
- Quality of Administrative data over the years
  - **Validation methods**: DQS/DQA; NICS; NDHS; WHO/UNICEF Best Estimates; UNICEF's MICS; WB; etc

Opportunities for RI - 1

- National Health Bill
- Systematic and sustained engagement of all stakeholders
  - Opinion leaders including professional groups (NMA, PAN, NANNM, AGMPN, etc), CSOs
  - Caregivers
  - Health workers
  - Policy makers (sub-national)
- Saving One Million Lives Initiative
- GIS mapping of Polio Eradication Initiative

Opportunities for RI - 2

- SURE-P MNCH program
  - Village Health Workers
  - Conditional cash transfers for immunization
- Private sector participation
  - PPHA (e.g Dangote/Gates Alliance in Kano, Sokoto,zamfara). Similar baskets for all states urgently desired
  - Private healthcare providers/NHIS
  - Vaccine distribution in collaboration with NURTW
- Accelerated Disease Control Intervention
  - Case based Measles surveillance as markers of where RI is underperforming

Maternal, Newborn and Child Health Week

Bi-annual event – May & November: Endorsed by NCH

One week every 6 months the Health System in Nigeria will work for MNCH

MNCHW is a simple one-off approach to delivering a combination of services that ensures universal coverage of high-impact,low-cost interventions through the health system (includes routine immunization)

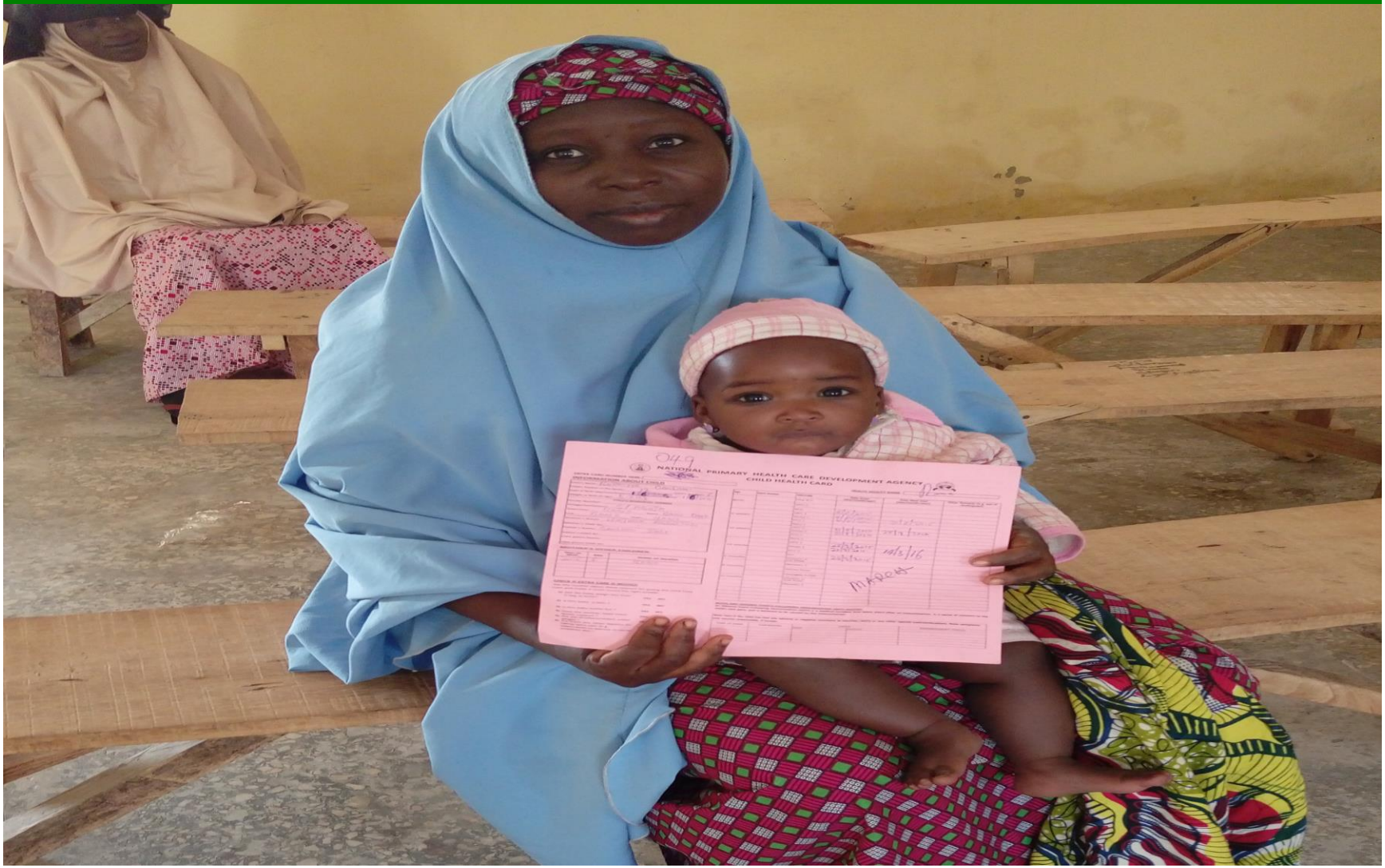
Suggested Roles of CSOs

- Advocacy
- Resource mobilization
- Awareness Creation
- Social mobilization
- Research
- Pressure Group

Conclusion

The time is now for a movement around routine immunization, hoping all of you are in agreement.

Thank you


NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY
CHILD HEALTH CARD