

ADDRESSING SUSTAINABLE FINANCING TO PROCURE PCV AND DELIVER ROUTINE IMMUNIZATION IN NIGERIA

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INTRODUCTION

- Nigeria has the highest burden of pneumococcal disease in Africa and plans to introduce Pneumococcal Conjugate Vaccine (PCV) in 2013.
- Financial sustainability is a concern and a pre-condition for GAVI support.
- We aimed to identify:
 - financial barriers to vaccine introduction and routine immunization (RI) delivery, focusing on adequacy and reach of funds
 - potential high-impact solutions to improve immunization coverage

METHODS

- Obtained immunization financing data from government documents
- Obtained coverage rates from DHS 2008 and NICS 2010 surveys
- Conducted interviews May-June 2011 in 8 states representing the 6 geopolitical zones and various levels of immunization performance (Table 1)
 - Interviewed 126 key informants (politicians, health officials, health workers, community leaders) at federal, state and local government levels.
 - Conducted 11 Focus Group Discussions with fathers, mothers and community leaders
 - Asked about barriers in 6 key supply-side domains: **financing, logistics and cold chain, HMIS, governance, human resources and service delivery**; and about solutions
- Reviewed the literature to identify potential interventions to address barriers
- Ranked interventions by feasibility and impact based on expert advice and in-house analysis

TABLE 1: Background characteristics of selected states

Routine immunization performance*	State	Population in millions (2008)	No of LGAs [#]	% of women with no schooling (DHS 2008)	DPT3 coverage (%)	
					2008 ¹	2010 ²
Persistently low (<50% in both surveys)	Kano	10	44	65.7	8	26
	Taraba	2.4	16	46.9	20	16
Persistently high (>70% in both surveys)	FCT	1.7	6	15.4	76	87
	Osun	3.7	30	12.8	86	86
Large improvement (>=40% rise)	Zamfara	3.5	14	87.9	9	64
	Bayelsa	1.8	8	10.4	28	73
No to moderate improvement (<40% rise)	Gombe	2.5	11	64.6	28	65
	Ebonyi	2.3	13	25	60	89

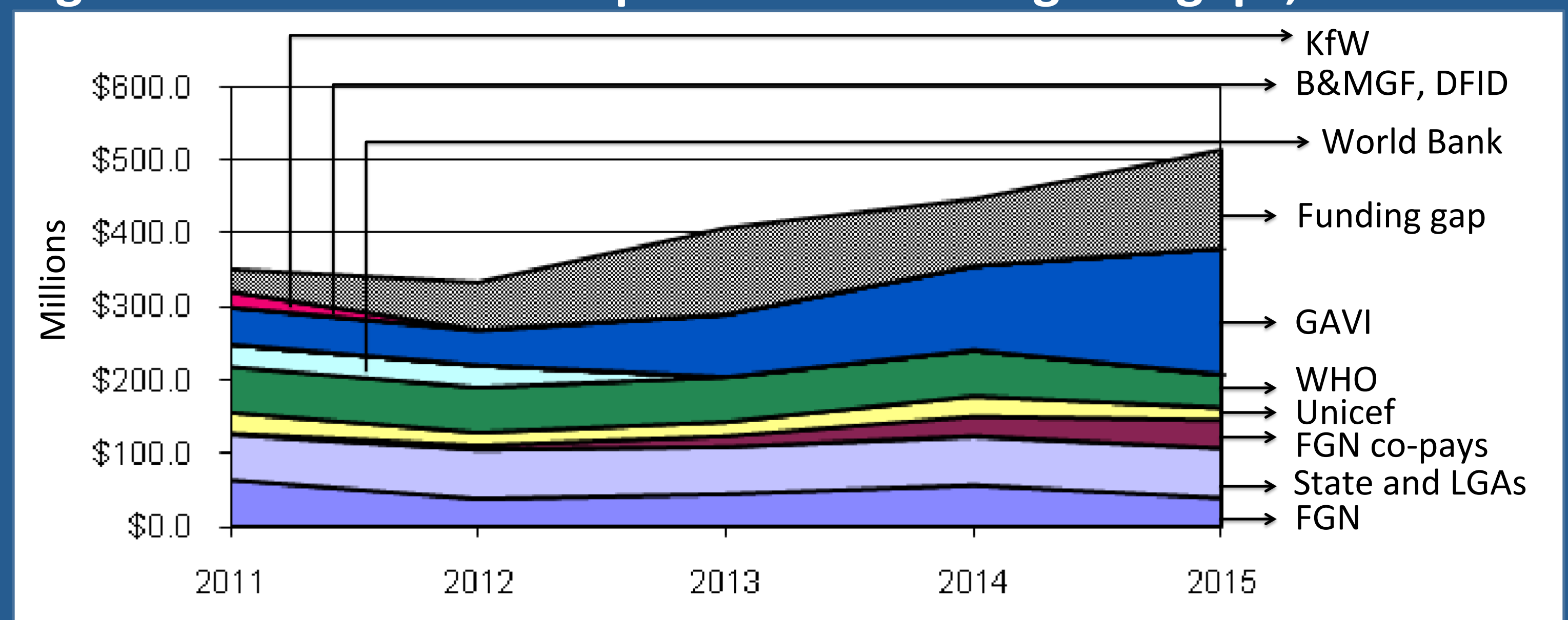
*Based on comparing DPT3 coverage in 2008 to 2010; # Local Government Area (LGA)

RESULTS

Adequacy of financing at national level

- Federal government of Nigeria (FGN) pays 100% for traditional and HepB vaccines;
- FGN co-pays more than required for newer GAVI vaccines (e.g. 45 vs. 30 cents/dose for PCV).
- Government (federal, states and LGAs) bears ~75% of routine immunization costs; development partners cover remaining costs.
- Estimated funding gap is 21% of total immunization program costs for 2011-2015 (Figure 1), with phased introduction of pentavalent in 2012 and PCV in 2013³
- Funding deficit increases from 9% in 2011 to 26% in 2015
- Deficit driven largely by campaign costs (polio, measles, meningitis, maternal and neonatal tetanus elimination) in first 3 years and then by vaccine costs in last 2 years.

Figure 1. Future secure + probable financing and gaps, 2011-2015



Financial barriers to vaccine procurement and program delivery

- Stock-outs** frequently results from delayed release of funds for national vaccine purchase
- In 2011, **DTP stock-out resulted from RI funds being reprogrammed** to measles vaccine campaign
- Nigeria alone makes up 10-14% of the global DTP demand** since most countries have switched to pentavalent or other DTP-containing formulations⁴
- Volatility in vaccine demand from Nigeria has implications on global supply of DTP and on other countries**

Immunization financing at subnational levels

- Despite having RI budget lines, fund release by states and LGAs not guaranteed but depends on political leader's commitment to RI
- Funding for program delivery is inconsistent across states and LGAs
- Inadequate RI funding reported in 4/8 (50%) of states and delayed or not released in 7/8 (86%)
- Funding was perceived as a main barrier in 6/8 states (not so in 1 persistently low coverage and 1 large improvement state)
- Sustainability of donor-funded projects identified as a major problem

TABLE 2: Barriers and opportunities for RI financing by state

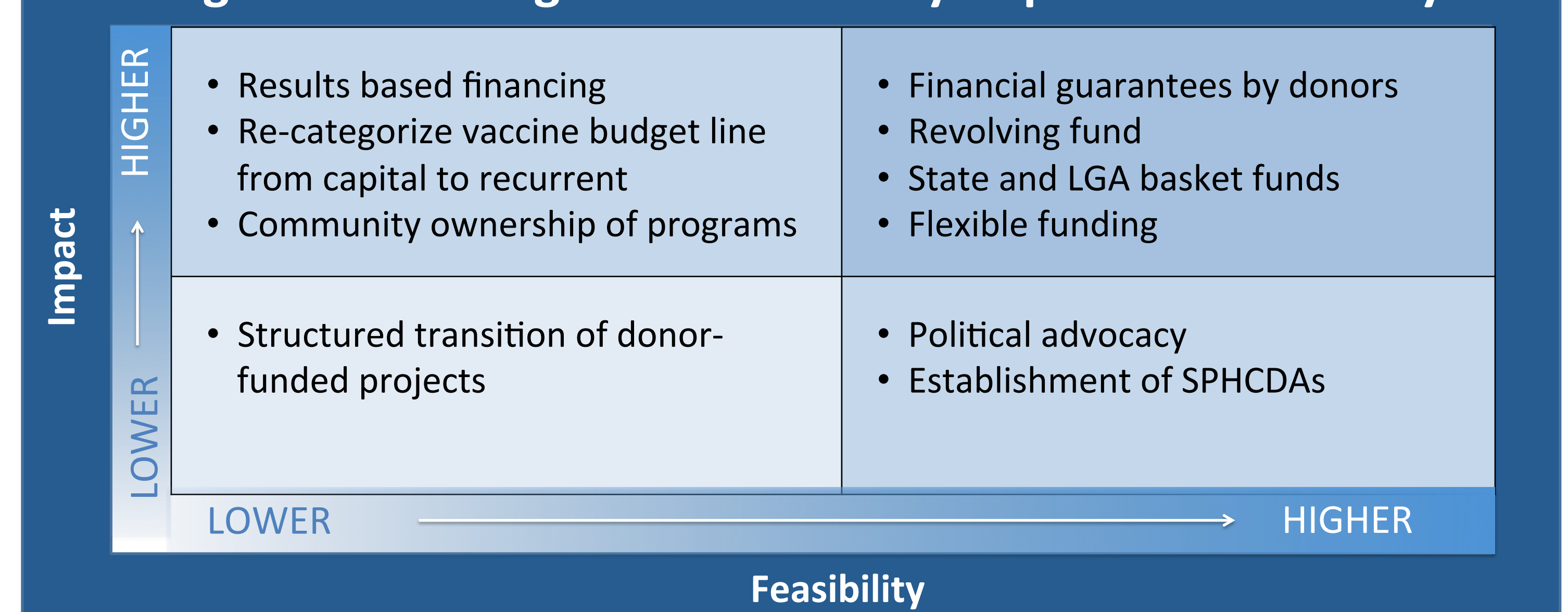
State	Main funding barriers		Main strength or opportunity
	Inadequate amount	Delayed release	
Kano	No	Yes	Flexible cash support to LGAs by EU's SRIK project
Taraba	Yes	Yes	STCI funding, and support from development partners*
FCT	Yes	Yes	GAVI ISS support for logistics
Osun	Yes	Yes	Support from development partners
Zamfara	No	No	Basket fund with pooled state and LGA resources
Bayelsa	Yes	Yes	Funding for supplemental immunization campaigns
Gombe	Yes	Yes	Support from development partners
Ebonyi	Yes	Yes	Support from development partners

STCI – State Technical Committee on Immunization manages pooled funds from state & LGA govts. Development partners mentioned: UNICEF, GAVI, WHO.

Interventions

- Interventions were drawn from respondent suggestions, literature review, and expert feedback.
- Interventions include strategies to guarantee predictable and flexible financing:
 - State-level **basket funds** pools from the state and LGAs, to give program managers easy access to funds for operational expenses
 - Re-categorizing budget line** for vaccine procurement **from capital to recurrent**; this will smooth annual flows since recurrent funding is maintained even when budget release for a fiscal year is delayed.
 - Financial guarantees** from donors or **revolving funds** to smooth funds flow when budget releases are delayed
 - Provision of **flexible funding** from donors to improve cash flow and program delivery at the service provider level and peripheral supply points
 - Results-Based Financing (RBF) or similar **“challenge” grants rewarding high performance**. Appropriate targets for RBF in Nigeria may include LGA chairmen, or state governors. A Bill & Melinda Gates Foundation challenge grant program for polio eradication already targets state governors
 - Build **transition plans** for donor-funded projects with gradual increase of government funding through life of project to avoid service interruption when donor funding ends
- Interventions are segmented below based on potential impact and feasibility (Figure 2). Actual impacts may vary by state or LGA.

Figure 2: Ranking interventions by Impact vs. Feasibility



CONCLUSION

- Nigeria's domestic commitment to immunization financing is growing
- However, introducing new vaccines such as PCV, will raise national budgets in the medium to long term.
- With current funding gaps and poor implementation of existing budgets, innovative strategies are needed to increase the fiscal space and optimize budgetary provisions.
- Improving the timely release of budgeted funds, creating a revolving fund or providing financial guarantee are simple fixes to improve predictability of financing and reduce stock outs
- Indicators of financial sustainability should emphasize timely budget release as well as presence of an immunization budget line item.

REFERENCES

- Demographic and Health Survey (DHS), 2008
- National Immunization Coverage Survey (NICS), 2010
- Country multi-year plan 2011-2015, Ministry of Health, National Primary Health Care Development Agency
- Team analysis using data from Vaccine Information Management Systems, accessed from: <http://www.jhsph.edu/ivac/vims.html> and data from Unicef Supply Division, accessed from http://www.unicef.org/supply/files/Table_of_total_Doses_of_Vaccines_bought_1996-2010.pdf