Toward Synergy and Collaboration to Expand the Supply of and Strengthen Primary Health Care in Nigeria’s Federal Context, with Special Reference to Ondo State

Chris Atim and Aarushi Bhatnagar
UNICO Studies Series 3

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All people aspire to receive quality, affordable health care. In recent years, this aspiration has spurred calls for universal health coverage (UHC) and has given birth to a global UHC movement. In 2005, this movement led the World Health Assembly to call on governments to “develop their health systems, so that all people have access to services and do not suffer financial hardship paying for them.” In December 2012, the movement prompted the United Nations General Assembly to call on governments to “urgently and significantly scale-up efforts to accelerate the transition towards universal access to affordable and quality healthcare services.” Today, some 30 middle-income countries are implementing programs that aim to advance the transition to UHC, and many other low- and middle-income countries are considering launching similar programs.

The World Bank supports the efforts of countries to share prosperity by transitioning toward UHC with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, successful implementation requires that many instruments and institutions be in place. While different paths can be taken to expand coverage, all paths involve implementation challenges. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Study Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the nuts and bolts of programs that have expanded coverage from the bottom up—programs that have started with the poor and vulnerable rather than those initiated in a trickle-down fashion. The protocol consists of nine modules with over 300 questions that are designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following: (a) manage the benefits package, (b) manage processes to include the poor and vulnerable, (c) nudge efficiency reforms to the provision of care, (d) address new challenges in primary care, and (e) tweak financing mechanisms to align the incentives of different stakeholders in the health sector. To date, the nuts and bolts protocol has been used for two purposes: to create a database comparing programs implemented in different countries, and to produce case studies of programs in 24 developing countries and one high-income “comparator,” the state of Massachusetts in the United States. The protocol and case studies are being published as part of the UNICO Studies Series, and a comparative analysis will be available in 2013.

We trust that the protocol, case studies, and technical papers will provide UHC implementers with an expanded toolbox, make a contribution to discussions about UHC implementation, and that they will inform the UHC movement as it continues to expand worldwide.

Daniel Cotlear
UNICO Studies Series Task Team Leader
The World Bank
Washington, DC
TABLE OF CONTENTS

Abbreviations ............................................................................................................................................... iv
Executive Summary ........................................................................................................................................ v
1. Introduction and Context ......................................................................................................................... 1
2. The Design of the Health Care Program (HCP) and its Interaction with the Rest of the Health System 2
3. Targeting, Identification, and Enrolment of Beneficiaries ..................................................................... 9
4. Management of Public Funds in the HCP .............................................................................................. 11
5. Management of the HCP’s Benefits Package ........................................................................................ 13
6. The Information Environment and Monitoring Mechanisms of the HCP ................................................ 15
7. Discussion of One Theme Specific to Nigeria ....................................................................................... 20
8. Pending Agenda ..................................................................................................................................... 22
Annex 1 General Health System Overview of Financing and Delivery ..................................................... 25
Annex 2 Brief Description of Primary Care and Key Supply-side Efforts ................................................... 32
Annex 3 Ondo State Health System ............................................................................................................ 35
Annex 4 Spider Web ................................................................................................................................... 36

FIGURES
Figure 1 Flow of Funds for the HCP in Ondo State ...................................................................................... 6
Figure 2A. MSS Facility-based Maternal Mortality ................................................................................... 18
Figure 2B. MSS Facility-based Neonatal Mortality ................................................................................... 19
Figure 2C. MSS Facility-based Maternal Health ....................................................................................... 19

TABLES
Table 1 FGN Health and HCP Budgets, 2010–12 ...................................................................................... 4
Table 2 Principal Actors and their Responsibilities in the NHIS-MDG-MCH Program ......................... 8
Table 3 Financing of HCP (NHIS-MDG-MCH) Expenditures in 2010a ................................................... 12
Table 4 Enrolment and Utilization Data for 2010–11 for HCP in Ondo State ........................................ 16
Table 5 MSS Core Indicators and Projected Outcome ........................................................................... 18
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
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<td>FGN</td>
<td>Federal Government of Nigeria</td>
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<td>HCP</td>
<td>Health Coverage for the Poor program</td>
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<td>HMO</td>
<td>Health Maintenance Organization</td>
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<td>LGA</td>
<td>Local Government Area</td>
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<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MHC</td>
<td>Model Health Centre</td>
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<td>MPHC</td>
<td>Model Primary Health Centers Creation and Upgrading</td>
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<td>MSS</td>
<td>Midwives Service Scheme</td>
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<td>NDHS</td>
<td>National Demographic and Health Survey</td>
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<td>NGN</td>
<td>Nigerian Naira</td>
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<td>NHIS</td>
<td>National Health Insurance Scheme</td>
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<td>NPHCDA</td>
<td>Nigeria Primary Health Care Development Agency</td>
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<td>NPI</td>
<td>National Program on Immunisation</td>
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<td>NSHDP</td>
<td>National Strategic Health Development Plan</td>
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<td>NSHPIC</td>
<td>Nigeria State Health Program Investment Credit</td>
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<td>OSSAP-MDG</td>
<td>Office of the Senior Special Assistant to the President on Millennium Development Goals</td>
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<td>PBF</td>
<td>Performance Based Financing</td>
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<td>PFMU</td>
<td>Public Financial Management Unit</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>SG</td>
<td>State Government</td>
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<td>SIP</td>
<td>system for identification of the poor</td>
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<td>SMoF</td>
<td>State Ministry of Finance</td>
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<tr>
<td>SPHCDA</td>
<td>State Primary Health Care Development Agency</td>
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<td>TB</td>
<td>Tuberculosis</td>
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Executive Summary

This study examines a case of relative success by the Federal Government of Nigeria (FGN) in expanding the supply of primary health care services and strengthening these services through collaboration and synergy with state governments, with special reference to the Health Coverage for the Poor (HCP) program in Ondo State. Realizing that the country was not likely to achieve certain priority national health goals related to the Millennium Development Goals (MDGs) by the established deadlines, the FGN initiated a number of initiatives to accelerate progress toward meeting those goals. The three components of the HCP discussed here were all designed to meet key health-related MDGs, especially those related to maternal and child health (MCH), by expanding the supply of primary health care services and strengthening them.

The FGN identified the weaknesses of primary health care, especially supply issues, as key obstacles hindering the improvement of the priority health outcomes sought. At the same time, the nature of Nigeria’s rather rigid federal system places severe limits on the ability of the FGN to cause meaningful change at the state and local government levels without the support and active collaboration of those tiers of government. It was therefore also necessary to incentivize those other tiers of government to align their interests with those of the FGN in order to jointly implement the federally designed programs. The innovation was in using the mechanism of requiring some counterpart state and local government funding of those programs to foster a sense of ownership by the lower tiers, or to at least give them a stake in the success of this important national enterprise.

Although not purposely designed as part of a mutually reinforcing and integrated set of interventions to achieve these objectives, each of the components of the HCP was designed to tackle a different aspect of the supply constraints identified as key bottlenecks in the improvement of MCH indicators. The supply-side constraints identified included inadequate facilities and poor infrastructure in some remote areas; lack of drugs, other supplies, and essential equipment at primary health care facilities; and a critical shortage of skilled personnel, especially trained midwives.

The National Health Insurance Scheme (NHIS)-MDG-MCH program was designed primarily to tackle the demand-side problem of the financial barriers to uptake of the priority MCH interventions. Its implementation modalities, however, also involve improving the supply of PHC services by requiring facilities to use revenues received from the program to buy drugs, other supplies, and equipment, and to carry out essential facility repair and improvement works. The Midwives Service Scheme program contributes to resolving the problem of the shortage of midwives in frontline PHC facilities, and the Model Primary Health Centers Creation and Upgrading (MPHC) program helps to increase the number of functional facilities and improve the state of some of those in disrepair.

The HCP appears to have been reasonably successful in the way the three federal government tiers have been able to collaborate around national health priorities of expanding the supply and strengthening primary health care in Ondo State, and in reaching significant numbers of beneficiaries in the target populations, although challenges remain. The NHIS-MDG-MCH program has provided much-needed funding and critical inputs to PHC facilities and was
estimated to be reaching about 1.5 million beneficiaries by 2011. The Midwives Service Scheme has provided over 2,000 extra midwives to serve in frontline PHC facilities in communities where the maternal health indicators have been very poor. The MPHC program has constructed and seeded 600 new PHC facilities in the hard-to-reach areas of over 80 percent of the local government areas of the country.

The remaining challenges include a weak information environment, especially for the NHIS-MDG-MCH program; the limited national reach of some of the programs (the NHIS-MDG-MCH program operates in only 12 of the 36 states so far); sustainability going forward due to the debt relief source for the funding of at least two key components of the HCP, which in principle will come to an end in 2015; weak monitoring and evaluation; and ensuring the quality of the services delivered.
1. Introduction and Context

This study examines an innovative example of the expansion of supply and the strengthening of primary health care to improve key health-related MDG indicators through synergy and collaboration between the federal Government of Nigeria (FGN) and state governments in an extreme federal context, and with particular reference to Ondo State. That is, the Nigerian Federal Constitution grants the federal government only very limited and indirect influence or control over the fiscal and financial affairs of state and local governments, such that “plans, budgets, accounts and procurements are not subject to federal control and scrutiny” (OPM 2011). Nor must the lower tiers account to the federal level for how funds transferred to them from the central level are used.

This apparently extreme federalism does not encourage coordination and collaboration to achieve common national goals. Rather, it seems that states and Local Government Areas (LGAs) have little incentive to do so, and that they generally appear to keep an arms-length and sometimes even have a tense relationship with the FGN, collaborating and coordinating only where necessary to promote their own specific interests. This severely limits the ability of the FGN to provide national leadership and coordination of nationwide programs to achieve overall national goals. In this context, it is innovative whenever the three levels of government are able to find common cause and to work together in harmony to achieve common national goals.

The Health Care Program (HCP) described and reviewed in this study represents one case where the federal and state governments managed to find synergies and to align their interests and incentives, in order to promote primary health care for many poor and vulnerable people, with special reference to Ondo State. The state of Ondo in South West Nigeria is chosen for this study because it best exemplifies how such collaboration and synergies came together to promote certain key health priorities in Nigeria. The real innovation of the federal government was in requiring that state and local governments provide some counterpart funding of the HCP as a way to ensure that they also had a stake in the program. The lessons from this experience might therefore serve as a model for other states that want to improve their Millennium Development Goal (MDG) indicators by leveraging federal and local government resources within a context of collaboration and synergy building.

The rest of case study is organized as follows. Section 2 describes the design of the HCP, including its interaction with the rest of the health system; section 3 discusses the targeting, identification, and enrolment system; section 4 examines the management of public funds within the HCP; section 5 analyzes the management of the benefits package; section 6 reviews the information environment and monitoring systems of the HCP; section 7 summarizes and analyzes the evidence on the key theme of the study, which is the extent to which the HCP is expanding access to, and strengthening, primary health care within the federal system; and section 8 looks at the pending agenda for action, drawing on the lessons learned and challenges for the HCP’s future. The annexes present the country and health system context; a general overview of health system financing and delivery; a brief description of primary care and key

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2 Of the 12 pilot states of one of the key components of the HCP, 12 (or two-thirds) of Ondo State’s LGAs are participating in the program, twice as many as in the other pilot states, thus offering a broader canvass for the study than any of the other pilot states.
supply-side efforts; and key data on Ondo State, including a description of the state’s health system.

2. The Design of the Health Care Program (HCP) and its Interaction with the Rest of the Health System

General Description and Brief History of the HCP

The HCP consists of three separate programs with broadly similar or mutually reinforcing objectives. They are the National Health Insurance Scheme-Millennium Development Goals-Maternal and Child Health (NHIS-MDG-MCH) program, the Midwives Service Scheme, and the Model Primary Health Centers Creation and Upgrading (MPHC), collectively described henceforth as the HCP. The three components of the HCP are implemented across a number of underserved states within the six geopolitical zones of the country, although for the purpose of this study, we will discuss their design and implementation with special reference to Ondo State. The following is a brief description of the three HCP components, including their history, health objectives sought by the federal government partners, and funding instruments.

- **National Health Insurance Scheme-Millennium Development Goals-Maternal and Child Health (NHIS-MDG-MCH) program**: The NHIS-MDG-MCH program was initiated in October 2008 to improve the worsening maternal and child health indicators in the country, and thereby to make better progress toward achieving MDGs 4 and 5, by significantly reducing the financial barriers to access to care for the vulnerable groups concerned. This scheme provides free primary health services to all registered pregnant women and children under 5 years of age, and secondary maternal services through capitation payments (at the primary level) and fee-for-service (at the secondary level) to accredited providers in selected LGAs of the country. The program does not involve means testing or special targeting, so it is available to all qualifying persons based on the defined demographic groups.

  The project involved an initial FGN outlay of about US$33 million for the first year, to cover six pilot states (one from each geopolitical zone of the country), and about US$26 million appropriated in the 2009 budget to cover six additional states. The project is running in 12 states in the country, but it covers only six LGAs in each state, with the exception of Ondo State, where it operates in 12 LGAs.3 Participating states were selected from each geopolitical zone of the country on the basis of their performance on MDG indicators (the worst performing two states from each zone were selected), and within each selected state, LGAs were chosen on a similar basis, that is, the worst performing six LGAs were retained.

- **Midwives Service Scheme (MSS)**: The Midwives Service Scheme was conceived and designed as a collaborative effort among the three tiers of government. It was set up by the FGN under the 2009 Appropriation Act, to be implemented by the National Primary Health

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3 In Ondo State, the NHIS-MDG-MCH project started in 2009 with accreditation of facilities and registration of enrollees, which were conducted between October 2009 and March 2010. Payment of the first capitation by the NHIS was made in April 2010, while Ondo State paid counterpart funds of US$472,973 in May 2010. The NHIS increased the number of LGAs covered in Ondo State to 12 (out of 18) in August 2010. Total capitation paid from April 2010 to March 2011 was US$3,056,752.
Care Development Agency (NPHCDA), to expedite achievement of MDGs 4 and 5. The initiative seeks to provide an emergency stopgap to the human resource shortage of skilled birth attendance in the primary health care system by recruiting and positioning midwives and essential equipment in existing primary health centers and selected general hospitals across the country. The scheme would identify a clear referral network, with each participating PHC facility assigned a General Hospital for referral of emergency cases.

Midwives are recruited from recent nursing school graduates and retired and unemployed midwives, and they are trained to offer emergency obstetric and neonatal care, including prenatal, natal, and postnatal services, and are given refresher training courses for additional skills in the management of common childhood illness.

The facilities selected for the MSS are linked in a two-way referral system through a cluster model in which four PHCs equipped to provide basic essential obstetric care are clustered around a general hospital with the capacity to provide comprehensive emergency obstetric care. Four midwives would also be deployed under the scheme to each participating PHC to ensure 24-hour availability of essential MCH services, including skilled birth attendance. Participating facilities were chosen from each of the six geopolitical zones on the basis of their maternal mortality indicators. The maternal mortality rate (MMR) data from the 2008 DHS were used to classify the geopolitical zones into three: very high MMR (North East and North West zones), high MMR (North Central and South South zones), and moderate MMR (South East and South West zones) (Abimbola et al. 2012). Ondo State is within the South West zone.

The MSS, through the NPHCDA implementing agency, also provides “mama kits” to all pregnant women for delivering in a health facility. Mama kits include all necessary materials a mother and baby require soon after birth, including towel, soap, sanitary napkins, baby clothing, sterilized gloves, new razor blades, baby wipes, baby soaps, cotton sheets, and cotton wools. Each mama kit costs about US$7.

The collaboration among the three tiers of government around the MSS and based on shared roles and responsibilities was formalized by signing a Memorandum of Understanding among the federal, state, and local governments. The scheme is financed at the federal level by the Office of the Senior Special Assistant to the President for MDGs (OSSAP-MDGs) while the state and local governments would provide additional resources from their respective budgets. For instance, in addition to their responsibilities for upgrading the selected general hospitals to the required standards and monitoring and supervising the program in their states, states would provide a top-up monthly remuneration to the midwives posted there in the amount of N20,000 per month, that is, on top of the N30,000 paid by the FGN through NPHCDA. The LGAs would also contribute an additional N10,000 to each midwife deployed in their area, and offer free, decent accommodation in the host communities (Abimbola et al. 2012).4

4 One US$ = approximately N155.
Table 1 shows the budget appropriation for 2010–12 for the NHIS-MDG-MCH and MSS programs. The data show that during the period, the MSS program consistently received an amount equivalent to around 1 percent of the total FGN health budget.

- **Model Primary Health Centers (MPHC) and Upgrading of Existing Primary Facilities.** The NPHCDA was mandated by the federal government in 2001 to construct a model primary health center in every LGA in the country. The key objective of the initiative, and the mandate of the NPHCDA in regard to this program, is to construct at least one model primary health center in hard-to-reach areas for every LGA in the country. The NPHCDA was responsible for the construction of these facilities and provisioning them with seed stock of drugs and equipment. However, the responsibility for hiring the staff and the subsequent functioning of these facilities rested with the state and local governments. In addition, the program has included, in many states, including Ondo, the rehabilitation and/or upgrading of existing primary facilities to provide essential MCH services.

The program is funded directly under the Federal Ministry of Health’s annual budget. About US$125 million have reportedly been spent for the construction of 600 model facilities across the country. In Ondo State, 39 health facilities have been constructed under this program since 2001.

These three components of the HCP were not jointly designed as a coordinated program by the government and do not necessarily work in conjunction with each other. For example, MSS midwives are not necessarily recruited and placed to meet the needs of the model PHCs or the needs of centers implementing the NHIS-MDG-MCH scheme, even though such facilities may be experiencing staff shortages that undermine their ability to achieve the MDGs sought by the government.

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Total Federal Health Budget (In naira)</th>
<th>NHIS-MDG-MCH (In naira)</th>
<th>Percent of Total Health Budget</th>
<th>MSS (In naira)</th>
<th>Percent of Total Health Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>164,914,939,155</td>
<td>99,000,000</td>
<td>0.1</td>
<td>1,800,000,000</td>
<td>1.1</td>
</tr>
<tr>
<td>2011</td>
<td>257,870,810,310</td>
<td>4,300,000,000</td>
<td>2</td>
<td>2,400,000,000</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>284,967,358,038</td>
<td>8,480,000,000</td>
<td>3</td>
<td>3,600,000,000</td>
<td>1</td>
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*Note:* For the MPHC component of the HCP, the FGN budgets do not distinguish between construction and rehabilitation of facilities under the model PHC program and other capital works in the states and LGAs. However, the NPHCDA does indicate that about US$125 million has been spent for the construction of the 600 model facilities across the country. In Ondo State, 39 health facilities have been constructed since 2001.

**HCP Flow of Funds (Ondo State)**

Figure 1 displays the flow of funds in the HCP for Ondo State. Debt relief grants available to the federal government are allocated by the Office of the Senior Special Assistant to the President-MDGs (OSSAP-MDGs), with the approval of the Nigerian Congress, to the NHIS for their MDG-MCH program, and to the NPHCDA for the MSS program. In addition, the Federal

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5 The Federal Ministry of Health annual budget makes no distinction between the construction of model PHC facilities in hard-to-reach LGAs and other, broader, ongoing construction and rehabilitation works of the FGN.
Ministry of Health budget includes an allocation to the NPHCDA for the MPHC program, since the program began in 2001 and before debt relief funds for the MDGs program became available. However, successive federal budgets since the MDG funds became available also show that some PHC facilities have been constructed or upgraded with MDG funds. Thus, the debt relief funds have also become a source of funding for this program.

The state’s counterpart funding (so far only made available for the NHIS-MDG-MCH) is also paid to the NHIS, and the NHIS then pays capitated amounts for PHC and a provision for fee-for-service payments for secondary care (pregnant women only) to three Health Maintenance Organizations (HMOs), each of which covers a specified geopolitical district of the state. The HMOs make capitation payments to the providers, and also cover fee-for-service charges arising from secondary care provided to pregnant women (mostly for complicated deliveries and caesarean sections). The state and LGAs also provide direct funding to PHC facilities.
Figure 1 Flow of Funds for the HCP in Ondo State

Legend for cash flows:
- **Budget Transfers from FGN, State and LGAs**
- **NHIS-MDG-MCH**
- **MSS**
- **Model /Upgraded PHC**
Accountability of HCP

The NHIS-MDG-MCH scheme is directly accountable to the OSSAP-MDGs, which is appointed by the president at the federal level. At the state level, the project is under the governor’s office through the Special Assistant on Health but, on paper, is directly accountable to the Permanent Secretary of the State Ministry of Health. The MSS is directly accountable to NPHCDA. At the federal level, the NPHCDA collaborates with the NHIS to monitor the project implementation of NHIS-MDG-MCH. NPHCDA is also responsible for financing and implementing the MSS project as well as the creation of model PHCs. However, once established these facilities are under the responsibility of LGAs, but true ownership of these model facilities by LGAs can be a problem, often compounded by lack of appropriate joint forward planning and adequate resources at the LGA level to ensure smooth operation after building.

The Federal Ministry of Health is not responsible for implementation or financing of the NHIS-MDG-MCH or MSS, although it funds the model PHC building and upgrade program. It does play a key role, however, as the agency responsible for the setting of policy and norms, including treatment protocols, at the federal level.

At the Ondo State level, the State Ministry of Health is a part of the State Implementation Committee, which is directly responsible for approving and verifying requisitions of the facilities, monitoring, and overall functioning of the project. Otherwise, the State Ministry of Health has little other influence over the HCP, which is run directly from the governor’s office. Table 2 shows the principal actors and their responsibilities in the design and implementation of the NHIS-MDG-MCH program.

MCH Commitment of Ondo State Government

In general, the Ondo State government is seen as strongly committed to MCH, and this is often explained as at least partly a reflection of the current governor’s leadership and background as a medical doctor who also used to be the state’s Commissioner for Health. Thus, even independently of the HCP described here, the state government is running a separate pilot MCH project in one LGA in the state, the Abiye Safe Motherhood project. This project has received a lot of praise for its design that looks at tackling the multiple obstacles to women taking up MCH services, including transportation, information, and timely communication. The state also runs a free MCH program at one public hospital in the capital.

This commitment to MCH is also demonstrated by the fact that the Ondo State Government is only one of three states in Nigeria—and apparently the first of these—to make transfers from the state to the federal level as counterpart payments for the operation of the NHIS-MDG-MCH project in their state. As a result of this demonstrated commitment to MCH, Ondo State was allowed by the NHIS to extend the NHIS-MDG-MCH scheme to 12 LGAs instead of the six that is the norm in the other pilot states.

For the MSS project too, as previously noted, the states and LGAs are also required to provide a counterpart contribution including paying a part of the remuneration of the recruited midwives. However, despite the clear commitment of the state government to MCH, there was no evidence
that the state has been making this part of their contribution to the MSS scheme, although, like other states, it seems very likely that Ondo State and LGAs do provide other contributions in the form of infrastructure, monitoring and supervision, and in-kind benefits for the midwives such as free accommodation.

### Table 2 Principal Actors and their Responsibilities in the NHIS-MDG-MCH Program

<table>
<thead>
<tr>
<th>Function</th>
<th>OSSAP-MDGs</th>
<th>NHIS</th>
<th>FMOH</th>
<th>State Governor</th>
<th>SMOH</th>
<th>Providers</th>
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<td>Funding</td>
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<td>Institutional oversight</td>
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<td>Determining benefits package</td>
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<td>Beneficiary enrolment</td>
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<td>Financial management</td>
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<td>Setting/revising capitation rates</td>
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<td>Claims processing</td>
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<td>Reimbursing providers</td>
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<tr>
<td>Decides how income from capitation may be used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach/marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Verifying service quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Monitoring utilization/recordkeeping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Requests regular reports on enrolments and utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Handles complaints/beneficiary satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Verification of utilization records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Note:** Red “X” means the role is mostly theoretical since there is no evidence that this responsibility is actually being carried out.

FMOH = Federal Ministry of Health, HMOs = Health Maintenance Organizations, NHIS = National Health Insurance Scheme, OSSAP-MDGs = Office of the Senior Special Assistant to the President on Millennium Development Goals, SIC = State Implementation Committee, SMOH = State Ministry of Health.
Spillover Effects of HCP

The NHIS-MDG-MCH project has enabled facilities to procure essential drugs and equipment, improving one of the most critical barriers of the existing health system. In addition, facilities have used the funds to renovate their infrastructure, thereby attracting more patronage from the community. It also tends to improve regulation of providers through the capitation and accreditation systems, and of HMOs through the capitation system. The NHIS, for instance, has rules on what capitated funds can and cannot be used for by providers, limiting autonomy but arguably increasing regulation and ensuring funds are spent on critical inputs.

Capitation payments to health facilities are likely to improve the working environment by ensuring availability of essential medicines, equipment, furniture for staff and patients, adequate repair work, and so forth. Thus, while the HCP does not necessarily directly incentivize health workers and managers by giving them monetary payments/performance bonuses, it provides for nonfinancial incentives in the form of better working conditions and utilization by clientele.

However, neither the design nor implementation of the scheme create competition among providers or among the HMOs, because there is little choice among providers in rural areas, and there are just three HMOs in Ondo State, each of which has exclusive responsibility for one of the state’s three geopolitically demarcated senatorial districts. The capitation system, therefore, has not led to any expected gains in efficiency in this case, since the HMOs do not compete for beneficiaries. Moreover, the HMOs appear to have little motivation to do community outreach to enroll more members, and there are no effective monitoring and verification systems in place to control quality and promote user satisfaction. Some of these observations may also be related to the fact that the system of fund transfers from the central level to the HMOs is based only on the number of enrollees and no other criteria, certainly not performance-related criteria.

Both the MSS and MPHC programs have also expanded the supply of critical health personnel (midwives made available by the MSS) and health facilities and services (built and provisioned by the MPHC) in remote and hard-to-reach communities, thus helping to alleviate the problem of access to essential health services that bedevil vulnerable people in those communities. To the extent that these improvements help to reduce the tendency to rely heavily on secondary and tertiary facilities in Nigeria due to the poor state of PHC services and facilities, these programs are promoting allocative efficiency in the sector.

3. Targeting, Identification, and Enrolment of Beneficiaries

Identification

The NHIS-MDG-MCH project targets all pregnant women and children under age 5 irrespective of other socioeconomic or demographic criteria. Similarly, services provided by midwives recruited through MSS and the model PHCs are for all irrespective of other socioeconomic or demographic criteria.

There is no system for identification of the poor (SIP) at a national level; however, Ondo State has initiated the creation of a statewide registry. Currently, the information is available for
50,000 people out of a population of 4 million. The state-sponsored Abiye Safe Motherhood Program, piloted in Ifedore LGA, uses a complete population-based listing to identify the beneficiaries.

Each enrolled person is given a personalized identification card, including name, date of birth, gender, address, and passport-size photograph, a copy of which is retained by the HMOs. Patients are required to carry the card as a form of identification while utilizing the services.

**Enrolment**

For the NHIS-MDG-MCH scheme, pregnant women have to be enrolled in the program, although eligibility is automatic. Infants are enrolled automatically at birth if born in a health facility or other assisted delivery system within the network of providers accredited by the HMOs. Women need to reenroll for all subsequent pregnancies. There are no enrolment fees.

In principle, the HMOs are directly responsible for enrolment of beneficiaries. However, based on interviews with providers in health facilities in Ondo State, it seems that the health facilities conduct the enrolment themselves and then pass the information on to the HMOs. Enrolment is apparently quite passive in the sense that a potential beneficiary is identified only when they present themselves at a health facility, where they are then registered and exempted from paying any fees.

Since each HMO covers a specific geopolitical area of the state (that is, a senatorial district), including accredited providers who have their catchment areas within those geopolitical areas, there is no incentive for HMOs to compete for clients, except potentially in senatorial district border areas where provider catchment zones may be less well defined. It may be reasonably supposed that HMOs would have an incentive to make efforts to enroll more people to maximize their income from capitation fees. The evidence, however, seems to show that HMOs are in fact content with a tacit arrangement where providers register the target population and send the lists to them. This may be defeating the purpose of the capitation system, which requires registration of all eligible beneficiaries even if they would not be using the services in the period concerned. That is, providers and HMOs are losing potential revenue when potential beneficiaries are not being registered. The real problem appears to be that HMOs are reluctant to undertake or invest in the extra costs of outreach to register beneficiaries, so any effort to address this issue must look closely at this incentive question.\(^6\)

**Targeting**

No special targeting is required because beneficiaries practically self-identify by their demographic categories or profile. There also appear to be no proactive community-based registration efforts by HMOs or providers.

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\(^6\) It is quite possible, too, that they are aware of the fixed budgets for the program, and hence may not be confident of being paid for all enrollees if they undertook any massive enrolment campaigns.
4. Management of Public Funds in the HCP

Roles of the Ministry of Finance and the Ministry of Health

At the federal level, the Federal Ministry of Finance is a powerful institution because it sets the macrofiscal framework by leading the development of a Medium Term Expenditure Framework and the budget process of all line ministries, and issues all the warrants and Authority to Incur Expenditures for budget implementation. Most of these functions do not seem to happen at the state level, thereby reducing the actual functions of the State Ministry of Finance (OPM 2011).

Both the Federal Ministry of Finance and the Federal Ministry of Health have little involvement in the HCP under discussion, however, principally because two of the three HCP components are run as priority vertical programs under the presidency itself, although the funds for these programs are included in the annual federal budgets and are voted on by Congress. Debt relief, which is the principal funding source for the NHIS-MDG-MCH program, is akin to an earmarked fund in this case in that it is the result of negotiations with donors with clearly specified uses for the funds, and not at the discretion of the Federal Ministry of Finance or Federal Ministry of Health, although there is usually some margin of flexibility for a country to allocate debt relief funds among different poverty-focused areas. The MSS, funded by the OSSAP-MDGs from debt relief, is also a vertical program ultimately under the presidency’s control, making it difficult for the Federal Ministry of Finance or the Federal Ministry of Health to influence. The model PHC/upgrade program is the only one funded directly by the Federal Ministry of Health, at least originally from non-MDG sources, but even this consists of the transfer of a portion of its budget approved by the Nigerian Congress to the NPHCDA parastatal to disburse and manage.

In addition, the Ministry of Health and the Ministry of Finance have relatively weak influence on fund allocation decisions for health in Ondo State (as indeed is generally the case in other Nigerian states) (OPM 2011). Expenditure on health is minimal and largely outside the control of the State Ministry of Health, for example, through Special Advisors in Ondo. Seven The State Ministry of Finance also appears to have little power on funds allocation, particularly compared to the Accountant General or the Federal Ministry of Finance with decisions at the federal level. The Offices of the Accountant-General, at both the federal and state levels, appear to perform the actual treasury functions of government, including accounting and internal audit. As noted in one review, “(t)he OAGs [Offices of the Accountant-General] are creations of the Finance Acts and are powerful, semiautonomous institutions under the general supervision of respective ministries of finance. In many states, the Ministry of Finance exists as a mere relic and it is difficult to understand what its actual functions currently consist of under an arrangement where both treasury and planning/budgetary functions are outside of its direct purview and control” (PEMFAR 2007).

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7 The locus of control may lie in different agencies in different states, for example, through the State Ministry of Local Government and Chieftaincy Affairs in Adamawa State (see OPM 2011).
Cost Controls in HCP Design

Budget controls at the macro or federal level are exercised through a fixed overall OSSAP-MDG budget made available to NHIS and NPHCDA for each of the MSS and NHIS-MDG-MCH programs, or the Federal Ministry of Health budget for the model PHC/upgrade (MPHC) program. For the MSS and MPHC programs, the annual budgets constitute the available envelope, while for the NHIS-MDG-MCH program, the overall envelope through 2015 has been fixed by two Congressional appropriation acts that provided the funding in two stages, plus the state counterpart contribution (see table 3).

Table 3 Financing of HCP (NHIS-MDG-MCH) Expenditures in 2010a

<table>
<thead>
<tr>
<th>Total Expenditures of HCP in 2010</th>
<th>Local Currency (naira)</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Funding, of which:</td>
<td>310 million</td>
<td>100</td>
</tr>
<tr>
<td>- Federal Government</td>
<td>240 million</td>
<td>77</td>
</tr>
<tr>
<td>- Subnational (state) Government</td>
<td>70 million</td>
<td>23</td>
</tr>
</tbody>
</table>

*Note:* Budgets for the MSS and MPHC programs in Ondo were unavailable at the time of the survey.
a. A further 180 million naira was made available for this program by the federal government in 2011.

On the other hand, and still at a macro level, where the demand has been found to be greater than what has been budgeted, this is managed at the state level. In Ondo’s case, a supplementary budget is usually submitted to the state assembly around July–September each year. Once the budget is approved and funds released, these are used to reimburse the providers.

At the micro (below the state) level, the payment modality used for the NHIS-MDG-MCH program also tends to facilitate strict cost or budget control, since it relies largely on fixed capitation payments to providers via HMOs in the state. The only element that is less subject to such controls is the fee-for-service payments for secondary services for pregnant women. However, because the number of pregnant women is much lower than the number of children (who do not enjoy secondary referral exemptions), and is even lower than those women who need referral-level care, that problem should not be unmanageable. In addition, it appears that the NHIS in practice tries to limit its exposure for potentially unbounded fee-for-service payments by paying HMOs an agreed capitated amount to cover secondary care fee-for-service payments for pregnant women registered with them. The HMOs then manage fee-for-service payments from the total capitated amount paid to them. HMOs receive, in addition, an administrative and overhead charge ranging between 10 to 15 percent for each enrollee.

Predictability of Financing

For reasons that are not entirely clear, the NHIS-MDG-MCH scheme did not provide capitation payments during April 2011–November 2011. During this period, and pending resolution of the problem, providers used their own reserve funds to procure drugs and other essential equipment or turned to the local government for additional resources. However, toward the end of 2011, most facilities had run out of funds and were not able to provide patient care. At the time of this

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8 It seems, however, that whatever the reasons were lay at the OSSAP level and not the NHIS, suggesting political or budgetary process issues rather than operational issues.
9 It appears that the state at the time was unable to assist with supplementary funds.
survey, the facilities were just receiving payments for the preceding three months of December 2011, January 2012, and February 2012. Despite the disruption in payments, MCH is generally seen as a service that is backed by strong leadership in the state; therefore, there is a perception that its funding will be less variable, which in turn provides some level of confidence to providers and HMOs. Compared to the funding record of other state and national programs, and despite the disruption noted, this perception may be well founded, at least in this case.

The state government, however, has not provided its counterpart payments to the MSS scheme, which is a critical component of the HCP. This perhaps reflects the lack of coordination among different aspects of the HCP for a coherent and clear vision for improving MCH indicators in the country in general and Ondo State in particular.

5. Management of the HCP’s Benefits Package

The Benefits Package

As noted, the benefits package for the NHIS-MDG-MCH scheme is confined to pregnant women and children under 5 years of age. To the extent that the MSS and MPHC schemes also benefit pregnant women and their newborn babies, these schemes may also be considered as broadly targeting a population similar to the one targeted by the NHIS-MDG-MCH scheme. The description of the benefits package and its design and implementation issues may therefore be considered to be relevant for all three components of the HCP.

For pregnant women, the services covered include, at the primary level, treatment of locally endemic diseases, health education, and maternal health services. At the secondary level, it covers high-risk deliveries, emergency obstetric care, and other medical conditions associated with pregnancy. For children under 5 years of age, only services at the primary level, including treatment of locally endemic diseases, minor injuries, child health prevention strategies, and neonatal care, are covered.

Although the benefits package has not undergone modification since the start of the HCP, adjustments to population and geographical coverage have been made while keeping budgetary constraint in mind. From the start, fiscal and budgetary considerations were top concerns in the design of the schemes. For instance, in the first year (Phase 1, 2008), NHIS received a grant of 5 billion naira (about US$33 million) from OSSAP-MDGs (of which 750 million naira each—roughly US$5 million—was allocated to each of the six participating states and 500 million naira was reserved for administration). Phase 1 targeted 600,000 beneficiaries nationally (pregnant women and children combined) through 2015, equally divided among the six participating states. States were further limited to implementing the scheme in only three LGAs per state. This limitation was lifted in Phase 2, because it was soon discovered that it was proving difficult to find 100,000 beneficiaries within three LGAs in most of the states concerned, and the NHIS even argued that the pool of possible enrollees might be even smaller than the target within such a small number of LGAs.
Phase 2 legislation passed the Nigerian Congress in 2009 and allocated a further 4 billion naira (just over US$26 million) to the NHIS-MDG-MCH program through 2015, but under a different financing arrangement under which the disbursement amounts had to be reapproved annually. A requirement for state counterpart funding was also added to the new phase, while the number of implementing LGAs per state was raised to six. The counterpart funds were initially fixed as equal to 50 percent of the federal contribution, but later this was relaxed by federal officials due to the difficulty of getting state cooperation. Ondo State, however, promptly paid a counterpart contribution to the NHIS in 2010, and in recognition of its efforts was allowed to raise the number of participating LGAs to 12, which served as an incentive for other states. Ondo State was at the same time allowed to raise its target for beneficiaries to 300,000 for the 12 LGAs involved.

An important effect, if not a primary objective, of the requirement for counterpart state funding was the use of federal funding to leverage state appropriation and ownership of the schemes and to facilitate a more collaborative relationship among the three tiers of government toward strengthening MCH services, in particular, and primary health care, more generally. This is clear in Ondo State, where the state’s agencies involved in the HCP exhibit a much higher level of ownership of the HCP than in states where no such counterpart contribution has been made. The other two states that made a contribution similarly show a greater degree of ownership of the HCP.

A limitation of the benefits package imposed, not by the legislation, but by the program management for budgetary reasons, was the decision to exclude secondary care for children under 5 years of age. Although there are no copayments or caps per beneficiary or per family, one more operational-level cost control measure is the enforcement of a generic drug policy for payment purposes. Other operational cost control elements are that a pregnant woman does not remain eligible six weeks after delivery, although her child is automatically enrolled through 5 years of age, and the limitation of coverage to only 12 LGAs in Ondo State (and six LGAs in the other participating states).

Payment Systems and Program Spending

Each primary care provider is paid a 550 naira capitation fee (about US$3.50) per enrollee per month. These enrollees include pregnant women receiving prenatal care services or normal deliveries, and children under 5 years of age receiving all primary care services. For secondary care, providers are paid on a fee-for-service basis. For example, in the case of a high-risk delivery, the pregnant woman would be referred from a primary health care center to a general hospital. The provider at the hospital would send an invoice to the HMO for the service(s) rendered.

Each health facility has its own bank account where the capitation payments are deposited following approval from the State Implementation Committee. The facilities can use the funds as approved, although all transactions and payments are carried out using checks. Payments are not output based, and performance bonuses for staff are not allowed under the rules for utilization of capitation revenues.
For the MSS, the midwives are paid through a budget made available to the NPHCDA by the OSSAP-MDGs. While the states and LGAs are also expected to make a counterpart contribution to remunerations, this generally appears to be honored more in the breach, including in Ondo State.\textsuperscript{10} Although no figures were obtained for the total amount spent to date on this program, in terms of outputs, it was learned that by April 2010, NPHCDA had successfully deployed, oriented, and called up 2,488 midwives, and that 2,323 midwives have been retained in the 652 frontline facilities in rural areas. In Ondo State, in particular, 85 midwives have been deployed covering five LGAs.

For the MPHC program, it has already been noted that the NPHCDA is provided with a budget from Federal Ministry of Health annual allocations, and that the NPHCDA was responsible for the construction of the facilities and provision for seed stock of drugs and equipment. The responsibility for hiring the staff and subsequent functioning of these facilities, however, rested with the state and local governments. The NPHCDA has reported that about US$125 million have been spent to date for the construction of 600 model facilities across the country, including 39 in Ondo State, since 2001. The experience has shown, however, that the FGN’s assumption that the states and LGAs would take over and operate the facilities as intended in the design stage has not always been borne out, and many such model PHCs remain underequipped and understaffed. Perhaps keeping a facility equipped and functioning optimally is not as politically attractive as building a new one, although LGAs have much greater constraints on their budgets than the higher tiers of the federal government, and demand-side issues, especially high user charges, also deter utilization.\textsuperscript{11}

\section*{6. The Information Environment and Monitoring Mechanisms of the HCP}

\textbf{The NHIS-MDG-MCH Program}

Possibly one of the weakest elements in the HCP, certainly in the NHIS-MDG-MCH component, is the system of monitoring and recordkeeping concerning utilization.\textsuperscript{12} Under the NHIS-MDG-MCH scheme, each health facility is required to maintain records of utilization by enrollees, which it submits monthly to the HMO and the State Implementation Committee/State Ministry of Health. The state government also submits a report on enrolment and utilization of services of the NHIS-MDG-MCH program to the NHIS at the federal level, which then forwards the report to OSSAP-MDGs.

There is no verification system to confirm the validity of these data; that is, no visits are made in the community to trace clients recorded in the register to verify that they have actually utilized these services. The State Implementation Committee for NHIS visits the facilities on a monthly basis to check service utilization records and verify the payments requested by the facilities to procure, among other things, drugs, consumables, and equipment. HMOs separately visit the

\textsuperscript{10} This should not, however, obscure the significance of other, for example, in-kind, contributions that states and LGAs make to the MSS.

\textsuperscript{11} This is an area where closer coordination with the other components of the HCP, that is, the NHIS-MDG-MCH and the MSS programs, might have been useful to address the demand-side problems and short-term staffing needs, at least in terms of midwives.

\textsuperscript{12} This needs to be qualified somewhat since it applies strictly to the records kept at the state level; the survey resources did not permit investigation at the level of the HMOs in the three senatorial districts.
health facilities to verify both whether the disbursed payments have been used appropriately and what is recorded in the registers for enrolment and service provision.

Actual enrolment figures proved surprisingly difficult to obtain; what limited information that was available was scattered among different agencies, and no agency appeared to keep enrolment records covering the entire period since the start of the HCP.\textsuperscript{13} Enrolment and utilization data for this analysis were collected more or less fully only for 2011, but were only partially available for 2010, as shown in table 4.\textsuperscript{14} The difficulty of obtaining historical data on enrolments clearly indicates some weaknesses in the system of monitoring and/or transmission of data, and these weaknesses would appear to lie at both the State Ministry of Health and HMOs’ level.

<table>
<thead>
<tr>
<th>Service category</th>
<th>2011 (12 LGAs)</th>
<th>2010 (6 LGAs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utilization</td>
<td>% of Enrolled Utilizing the Service</td>
</tr>
<tr>
<td>Outpatient visits for pregnant women</td>
<td>35,296</td>
<td>26</td>
</tr>
<tr>
<td>Prenatal care</td>
<td>28,286</td>
<td>21</td>
</tr>
<tr>
<td>Normal deliveries</td>
<td>6,838</td>
<td>5</td>
</tr>
<tr>
<td>Outpatient visits for children under age 5</td>
<td>60,718</td>
<td>45</td>
</tr>
<tr>
<td>Admissions for children under age 5</td>
<td>2,515</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>133,653</td>
<td></td>
</tr>
<tr>
<td>Number using inpatient services</td>
<td>9,353</td>
<td>7</td>
</tr>
<tr>
<td>Number using outpatient services</td>
<td>124,300</td>
<td>93</td>
</tr>
</tbody>
</table>

Sources: 2010 data: NHIS; 2011 data: State Ministry of Health, Ondo State.
Note: Data obtained from NHIS for 2010 were not disaggregated by detailed service categories as were data for 2011.
n.a. = not available.

Moreover, the data actually collected by providers and HMOs seem to be quite limited in many other ways, as well. For example, they include demographic characteristics of beneficiaries and their health status at registration (pregnant and so forth), but not on facilities, their infrastructure and capabilities, or quality data (such as infection rates, readmission rates, and outcome information). Neither do data appear to be collected on provider output/volume information (except beneficiary utilization by provider), case mix, or other provider performance under the scheme; nor on utilization by beneficiaries or on grievances and their resolution (if any).

Based on interviews with key informants, verification procedures were not tied to disbursement of payments, so it is not clear what incentives there are for accurate reporting and other aspects.

\textsuperscript{13} An interview with the Managing Director of United HMO, which is responsible for the Central Senatorial District in Ondo State and which covers four LGAs, revealed that all enrolment information is forwarded to the NHIS and that, most surprisingly, the HMOs themselves do not maintain a record or copy of enrolment forms. Similarly, no utilization data are maintained by the HMO either at the state level or at the national headquarters.

\textsuperscript{14} Because of how the HCP operates, with providers registering qualifying patients who present themselves, utilization and enrolment are very closely related, such that unique users equal enrolment.
of data quality. All of this limits what could be learned about the performance of the HCP on many parameters.\textsuperscript{15} In particular, it means that it would be difficult to monitor or assess health outcomes related to the project, except through a separate, potentially expensive, impact evaluation study.

A baseline survey was conducted prior to the commencement of the project in Ondo State. The study was cross-sectional and descriptive in design and had the following components:\textsuperscript{16}:

- A community survey on the health status of all women in the reproductive 15-to-49 age group and of their children under 5 years of age regarding maternal and child health services utilization
- Assessment of maternal mortality using the indirect sisterhood method (interviewing respondents about the survival of all their adult sisters)
- A maternal and child health resources and services inventory of public health facilities in six of the 18 LGAs.

In order to assess the impact of the scheme, a follow-up survey was being planned for 2012.

In terms of publicly available information about the HCP, the Ondo State Government’s website is under construction, but the expected outcome would include an exhaustive database of all health-related information for all providers and clients. The NHIS has a website, but surprisingly it does not mention the MDG-MCH program among the eight programs that are listed on the site. Instead, there is a “children under five SHI program,” which is the closest to the HCP, but with no details about any of the programs listed. The NHIS-MDG published a progress report in June 2010; however, it is not available to the public.

**The MSS Program**

The information environment of the MSS program appears to have been better designed from the start and to make a better effort to track key progress indicators. In this case, too, implementation was preceded by a baseline survey of key maternal, newborn, and child health (MNCH) indicators to provide a framework for setting targets and for future evaluation. A nationwide survey of all the facilities and communities involved in the intervention was conducted, and table 5 shows the seven key indicators that the MSS was designed to be measured against over its projected five-year lifetime (until 2015). The baseline data show that the MSS target areas have worse indicators than the national averages, although the national averages come from the population-based DHS, which is not strictly comparable with the baseline survey. That said, the fact that the MSS areas seem to have worse indicators should not occasion surprise, however, since MSS sites were deliberately chosen, as noted, to target the worst-performing states in each zone.

\textsuperscript{15} Even with the limited information collected, the initial results of enrolment and utilization from the first six project states allowed the OSSAP-MDGs office to scale-up the project to six additional states, confident that the funding would be sufficient given the numbers of enrollees that were signed up in the first six states.

\textsuperscript{16} The survey data were not available during the research for this paper.
Table 5 MSS Core Indicators and Projected Outcome with Data Comparing 2008 National Demographic and Health Survey (NDHS) with MSS Facility Baseline Data

<table>
<thead>
<tr>
<th>MSS Core Indicators</th>
<th>2008 NDHS Data</th>
<th>MSS Baseline</th>
<th>5-Year Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCs with 24-h maternal health services</td>
<td>Not available</td>
<td>0%</td>
<td>Increase by 80%</td>
</tr>
<tr>
<td>Pregnant women with ≥4 ANC visits</td>
<td>45%</td>
<td>39%</td>
<td>Increase to 80%</td>
</tr>
<tr>
<td>Deliveries by skilled birth attendants</td>
<td>39%</td>
<td>12%</td>
<td>Increase to 72.6%</td>
</tr>
<tr>
<td>Maternal mortality ratio (MMR)</td>
<td>545 / 100,000</td>
<td>789 / 100,000</td>
<td>Reduce by 60%</td>
</tr>
<tr>
<td>Neonatal mortality ratio (NMR)</td>
<td>46 / 1,000</td>
<td>11 / 1,000</td>
<td>Reduce by 50%</td>
</tr>
<tr>
<td>Family planning (FP) attendance</td>
<td>10.5%</td>
<td>1.02%</td>
<td>Increase to 50%</td>
</tr>
<tr>
<td>Children immunized in infancy</td>
<td>19.2%</td>
<td>20%</td>
<td>Increase by 60%</td>
</tr>
</tbody>
</table>

Source: Abimbola et al. 2012

Probably due to better monitoring, data have been systematically collected about the key indicators targeted by the MSS from the start, thus permitting some preliminary assessment of its possible impacts. Figures 2a, 2b, and 2c present preliminary findings about selected key indicators tracked under the MSS program after one year, comparing the July to December 2009 data for the baseline year with the same period in 2010. These are not disaggregated by state to show what the findings for each state were, but Ondo State is in the South West zone. Thus, to see the approximate trends for that state, one should examine the findings for the South West zone.

The findings appear to show progress on facility-based maternal mortality (figure 2a) but not facility-based neonatal mortality (figure 2b) for the South West zone. In fact facility-based neonatal mortality increased dramatically in the South West zone the following year. Figure 2c provides some evidence (in the aggregate over all the zones) of positive changes in health-seeking behavior by pregnant women, as a number of output indicators such as prenatal care attendance, assisted deliveries, and family planning visits show significant increases.

Figure 2A. MSS Facility-based Maternal Mortality Ratios Comparing July–December 2009 with July–December 2010

These findings do not seem to come from a rigorous impact evaluation, but appear to be simply a before and after comparison of indicators from two different kinds of survey. Therefore, they must be treated with caution. In particular, it is not known what other related interventions were ongoing in the MSS facilities concerned or how potentially confounding factors were dealt with by the authors.
NPHCDA staff attribute the apparent worsening in some indicators in certain zones (such as the unexpected increase in facility-based neonatal mortality in the South West zone) to a likely increase in the proportion of high-risk deliveries in MSS PHC facilities. Since the baseline data (table 5) showed that MSS facilities were mostly located in areas where more women delivered at home rather than in a modern health facility, they argue that the additional deliveries after the MSS began were likely to be among women with high-risk pregnancies presenting too late for life-saving interventions (Abimbola et al. 2012).
7. Discussion of One Theme Specific to Nigeria

All components of the project focused on strengthening primary health services (more specifically, MCH) in a context where primary health care had been relatively disadvantaged in the way the federal division of responsibilities were shared. The tiers of government that have the most resources available to them, the federal and state levels, are responsible for tertiary and secondary care, respectively, while the tier with the least resources, the LGAs, has responsibility for PHC. The result, not surprisingly, is a relative abundance of secondary and tertiary institutions, and inadequate and poorly equipped and provisioned PHC services. This has naturally also skewed health-seeking behavior such that people who are sick have a tendency to go straight to a secondary or higher facility rather than to a PHC facility.

This HCP showed a model for collaboration among the three tiers of government under a program designed under the leadership and drive of the FGN in order to strengthen a critical component of the health system, that is, PHC, and in particular, MCH, that had hitherto not had a powerful and adequately resourced champion. The criteria for the selection of participating states included poor performance on MDG targets and services. The FGN led the process of developing Memorandums of Understandings among the three tiers of government, but learned very quickly during the first phase of the NHIS-MDG-MCH program that further incentives were required to make this collaboration work. Moreover, several aspects of the program, such as the provision for recurrent costs, especially for the MPHC component, and local incentives for midwives under the MSS program, could only work if there was appropriation by state and LGA actors. As was noted earlier, the design of the MSS program involved early harmonization of the agendas and approaches of the three tiers of government around a common priority, which was formalized in a signed Memorandum of Understanding among all three parties.

The legislative requirement for counterpart state funding in the second phase of NHIS-MDG-MCH program implementation was a way to use federal funds to leverage that collaboration in a manner similar to how the MSS was designed, and to incentivize lower-tier government entities to align their interests with those of the FGN to promote the key national objective of reducing maternal and child mortality. This requirement was intended to give the participating states and LGAs a stake in the HCP. In this way, the FGN helps to rebalance the health system toward a PHC focus and slightly away from its generally skewed character in favor of secondary and tertiary facilities.

Under the HCP, the FGN identified certain supply constraints as key bottlenecks in the improvement of MCH indicators. And although not designed as part of a mutually reinforcing set of interventions to achieve these objectives, each component was aimed at making a contribution to resolving those supply constraints of the Nigerian health system, including inadequate facilities and poor infrastructure in some remote areas; lack of drugs, other supplies, and essential equipment at primary health facilities; and a critical shortage of personnel, especially trained midwives.

The NHIS-MDG-MCH program was designed primarily as a demand-side intervention to help remove or reduce financial barriers to uptake of priority MCH services by vulnerable groups. Its implementation, however, also made it an instrument to help resolve supply-side problems by
requiring the health facilities to use the capitation funds received from the program to buy drugs, other supplies, and equipment, and to carry out essential facility repair and improvement works. The State Implementation Committee was the means to enforce this requirement, since it must preapprove applications from the facilities to use the revenue from their bank accounts in accordance with the agreed spending criteria. The MSS program contributes to resolving the problem of a shortage of midwives in frontline PHC facilities, and the MPHC program helps increase the number of functional facilities and improve the state of some of those in disrepair.

As measured by outputs, the three programs have broadly shown varying degrees of relative success in a difficult context. The NHIS-MDG-MCH appears to be doing its job of providing resources for critical inputs for PHC facilities, but results are limited to only 12 states nationally (although these are the ones with the worst MCH indicators in each geopolitical zone) and only six least-performing LGAs in each state except in Ondo State, where there are 12 LGAs (out of 18). Overall, 69 LGAs in 12 states are now participating in the scheme, and as of March 2011, 1.5 million women and children were registered beneficiaries (133,653 of these in Ondo State in 2011), or 140 percent coverage compared to an initial target of 1.1 million beneficiaries for both Phases 1 and 2. The MSS has broader coverage and has enabled over 2,000 extra midwives (85 of them in Ondo State) to be recruited for 652 frontline mostly PHC facilities, and the MPHC program has built 600 new PHC facilities (39 of them in Ondo), one per LGA, thus covering over 80 percent of the LGAs in the country.

There is also preliminary evidence that the MSS program seems to be leading to desired changes in health-seeking behavior by pregnant women. For instance, prenatal care attendance, assisted deliveries, and family planning visits have all increased in the year following the program’s start. It may also be contributing to the reversal of maternal mortality indicators for the geopolitical zone that includes Ondo State, although neonatal mortality appears to be moving in the opposite direction during the same period in that zone.
8. Pending Agenda

The pending agenda for the HCP examined in this paper are as follows.

1. **HCP Architecture:** Currently the three components of the HCP, although sharing common goals to reduce maternal and child mortality, are not designed to work together to achieve these common goals in a coordinated and synergistic fashion. The capital building and rehabilitation program could, for instance, have been linked to the NHIS-MDG-MCH program by focusing on facilities and LGAs chosen for the MCH pilots, and midwives recruited under the MSS scheme could have been placed as a priority in those facilities. That would make for an integrated program to reduce maternal and child mortality by creating the best conditions possible to do so, and then replicating the experience, once the pilots are shown to be a success and as resources allow, gradually across the priority parts of the country. Better coordination among the federal government levels would also help to strengthen the continuum of care within the HCP, which is currently deficient.

For Ondo State, it might also be helpful to better clarify the respective roles of the Governor’s Office (including that of the Special Assistant for Health), the State Ministry of Health, and the State Implementation Committee in the state-level HCP management.

2. **HCP Beneficiaries, Targeting, and Enrolment:** The only kind of targeting currently done, besides the demographic criteria of the beneficiaries, relates to the NHIS-MDG-MCH program, where it has already been noted that the beneficiaries are limited to some selected LGAs within 12 of 36 states (plus the capital territory). Also, by design, only six selected LGAs within a state (12 in Ondo), are chosen for the program. Moreover, coverage within the selected LGAs is likely further limited by lack of information and limited enrolment efforts by HMOs (enrolment currently takes place at facilities not in the communities).

The HCP first needs to tackle the deficiencies in current enrolment efforts by incentivizing HMOs to undertake information and enrolment campaigns or outreach in communities. This principally means looking at how the costs of outreach campaigns might be covered (perhaps shared between NHIS and the HMOs). Next, as the budget allows, the NHIS-MDG-MCH program needs to be extended to other LGAs within the states covered. Finally, that program needs to be extended to the whole country if MDG targets are to be achieved. The order of extension should continue to be based on need; hence, states with the worst MCH indicators should have the program before those with better indicators, and within those states, the least-performing LGAs in terms of MCH indicators should receive the program before the better performing LGAs. Ondo State could improve enrolment and beneficiary management when its population-based register is completed. The state government might also consider investing in efforts to extend the coverage of the HCP to other LGAs in the state.

3. **Public Financing for HCP:** The main constraint here appears to be the limitation on the program budget dictated by the availability of MDG-Debt Relief Grants, which in turn limits the scale of the program. There are two issues here. First, there is a need to find more resources for the expansion of the NHIS-MDG-MCH program to other LGAs and states. Second, for the HCP to be sustainable, and also to find the additional resources mentioned, alternate sources of
funding need to be identified, primarily from longer-term federal revenue sources. This may, therefore, be a good moment to start addressing how to transition the two components of the HCP entirely reliant on debt relief funds, from those MDG-Debt Relief Gains or Grants funds (which terminate in 2015, at least in principle) to a more permanent home as part of the Federal Ministry of Health annual budget, even if this has to be specifically ring-fenced to avoid the funds being reprogrammed for other uses. The proposed National Health Bill, which would allocate 2 percent of FGN revenue to primary health care, is already seen as an opportunity to ensure more permanent and reliable funding for the HCP, among other purposes.

There is currently a proposal by the Governor’s Office in Ondo State to allocate a percentage of the state budget to health, especially for MCH. If this proposal gets beyond the idea stage and becomes law, it would contribute to sustainable financing for MCH services, including the HCP in that state.

4. HCP Management of the Benefits Package: The benefits package of the NHIS-MDG-MCH program is currently limited by the noninclusion of secondary care in child health services covered. The first priority for extending the package should probably therefore be inclusion of this child benefit. In terms of strengthening PHC as a whole, the survey highlighted the weaknesses of existing programs, especially for TB control and treatment. There is also a need to strengthen incentives for institutional deliveries at the national level. The future agenda should therefore include:

- Reinforcing the national TB control program, for example, increasing the number of designated TB centers, and improving referrals between the primary and secondary level for TB cases
- Ensuring the presence of all required clinical protocols, especially for TB and diabetes, at treatment centers.

5. HCP Information Environment and Monitoring and Evaluation: The HCP information environment, especially for the NHIS-MDG-MCH program, was identified in the study as one of its weakest aspects. Moreover, there has been no evaluation of that program since it began (that is, of any components). Nor has there been a properly conducted costing study of the program to help assess its cost-effectiveness in practice and to see whether resources are being properly used. An evaluation of the program would therefore seem to be timely, including the costing mentioned, as a way to aid decision making about the future extension of the program. The MSS program, however, seems to have instituted better monitoring from the start and is tracking key indicators that could help to assess the program’s performance.

The Ondo State Government needs to mandate its agencies involved in the HCP, especially the NHIS-MDG-MCH one, to collect reliable and accurate data to help it in its decision making with respect to this program.

The public information aspects need to be strengthened, for example, by radio and TV advertisements and programs directed at mothers. Feedback mechanisms also need to be strengthened to allow user experience and views to be taken into account in any redesign, expansion, or improvements to the program. There is also a lack of proper verification of the
utilization data provided to HMOs by facilities. HMOs need to do a better job of cross-checking data collected from providers, and the records of the State Ministry of Health, NHIS, and other relevant parties should match the most complete and up-to-date information available from HMOs and providers.

However, if enrolments increased as a result of such strengthened marketing and communication efforts, then plans must be made for the required corresponding increases in and availability of the supply of health services to meet this increased demand. In Ondo State, the results-based financing pilots currently being implemented at health facilities offer an opportunity to match the supply of services to any increases in demand, if those pilots are successful and the Results Based Financing program is eventually integrated into the HCP.
Annex 1 General Health System Overview of Financing and Delivery

Country Context

Nigeria is a low-middle-income country with a total population of just over 160 million. It is divided into six geopolitical zones, 36 states, and one Federal Capital Territory. The states and Federal Capital Territory are further subdivided into 774 Local Government Areas (LGAs).

Although Nigeria is classified as a low-middle-income country according to its income per capita (it has a GDP per capita in current U.S. dollars of just above US$1,200), a great number of its development indicators, including GDP per capita, are well below the average in its class, as seen in table A1.1. Nearly all its health outcome indicators (life expectancy and infant, child, and maternal mortality rates) as well as population coverage statistics (contraceptive prevalence, skilled birth attendance, immunization, and access to improved water sources and sanitation) are worse than the average in the low-middle-income country class.

Table A1.1 General Development Indicators, Nigeria and Low-Middle-Income Country Class Averages

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Nigeria</th>
<th>Lower-Middle-Income Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economy:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita, PPP (constant 2005 international $)</td>
<td>2,135</td>
<td>3,169</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>1,242</td>
<td>1,676</td>
</tr>
<tr>
<td>GDP growth (annual %)</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Population and Health:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth, total (years)</td>
<td>51</td>
<td>66</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>81</td>
<td>48</td>
</tr>
<tr>
<td>Under-5 mortality rate (per 1,000 live births)</td>
<td>129</td>
<td>65</td>
</tr>
<tr>
<td>Maternal mortality ratio (per 100,000 live births)</td>
<td>630</td>
<td>260</td>
</tr>
<tr>
<td>Contraceptive prevalence (% of women ages 15–49)*</td>
<td>11–13</td>
<td>50</td>
</tr>
<tr>
<td>Births attended by skilled health staff (% of total)**</td>
<td>39</td>
<td>57</td>
</tr>
<tr>
<td>DPT3 immunization (% of children ages 12–23 months)</td>
<td>69</td>
<td>78</td>
</tr>
<tr>
<td>Improved sanitation facilities (% of population with access)</td>
<td>31</td>
<td>47</td>
</tr>
<tr>
<td>Improved water source (% of population with access)</td>
<td>58</td>
<td>87</td>
</tr>
<tr>
<td><strong>Infrastructure:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet users (per 100 people)</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td>Mobile cellular subscriptions (per 100 people)</td>
<td>55</td>
<td>70</td>
</tr>
<tr>
<td>Urbanicity (urban population as % of total)</td>
<td>49</td>
<td>38</td>
</tr>
</tbody>
</table>


Note: PPP = purchasing power parity.

Table A1.1 also shows that Nigeria performs better than its class as measured by certain infrastructure indicators. The number of Internet users per 100 people and the percentage of the population living in urban areas are higher than the low-middle-income country averages. The fact that nearly half the population lives in urban areas, the result largely of the creation of many states and LGAs over time with capitals fueled by centrally allocated oil revenues, means that many of the people who live in those towns and cities have better access in principle to the secondary and tertiary facilities that are prioritized in the spending plans of the federal and state governments in such urban areas, in addition to a dynamic private health sector operating mostly in those same urban centers. This prioritization of investments in higher-level facilities leads to
allocative inefficiencies and to large health inequalities, since the other half of the country living in rural areas enjoys much less access to such health care facilities and frequently has to make do with poorly equipped and poorly staffed PHC facilities, where they exist at all.

**The Public Health System**

According to the Federal Ministry of Health, the division of responsibilities among the different tiers of government places responsibility largely on the federal government for providing policy guidance, planning, and technical assistance, coordinating the implementation of the National Health Policy and establishing health management information systems. In addition, the federal government is responsible for disease surveillance, drug regulation, vaccine management, and training health professionals. As already noted, the FGN also runs tertiary hospitals including psychiatric and orthopedic hospitals across the country (FMOH and WHO 2002).

The State Ministries of Health and the State Hospital Management Boards are responsible for the management and operation of the secondary health facilities (general hospitals) and programs in the states. In some cases, they also operate tertiary hospitals and some primary health care facilities. The training of nurses, midwives, and health technicians, and the provision of technical assistance to local government health programs and facilities, are also the responsibility of the state authorities (FMOH and WHO 2002).

The 774 local governments oversee the operations of primary health care facilities within their geographic areas. This includes the provision of basic health services, community health hygiene, and sanitation.

**Human Resources for Health**

To calculate and make cross-country comparisons of the adequacy of health workers in different countries, the Joint Learning Initiative (JLI) developed a health worker density index (HRH index)\(^{18}\) in 2004 and then developed five country clusters for 186 nations based on human resources and health status\(^{19}\). They also calculated cluster weighted averages for each of the five country clusters. Nigeria, along with 36 other mostly African countries, was in the low-density (of health workers), high-mortality (LD-HM) cluster (JLI 2004).

Table A1.2 shows the distribution of health personnel and training schools in Nigeria in 2000. Even then, this indicated that the country’s human resource density index was above the cluster weighted average. Indeed, even more recent World Bank *World Development Indicator* data continue to show that the number of health workers in Nigeria is relatively high. What the data do not usually show, however, is that most health workers are located in the urban areas, and that

\(^{18}\) The Joint Learning Initiative defines the health worker density (HRH) index as “a composite index … (that) combines density of physicians, nurses, and midwives per 1,000 population, with the aim of reflecting, however imperfectly, the overall level of health workers in each country,” adding that, “as a significant number of missing values exist in the cases of dentist and pharmacist, these two professional groups are excluded from the HRH index” (JLI 2004).

\(^{19}\) The five clusters were (a) low-density-high-mortality (LD-HM); (b) low-density (LD); (c) moderate-density (MD); (d) high-density (HD); and (e) high-density-low-mortality (HDLM).
such “inequitable distribution with urban skeweness contributes to the urban-rural service gap and disparity in health outcomes” (Velenyi 2005).

Table A1.2 Distribution of Health Personnel and Medical, and Nursing Schools, 2000

<table>
<thead>
<tr>
<th>LD-HM</th>
<th>HRH Density</th>
<th>Schools</th>
<th>Physicians</th>
<th>Nurses &amp; Midwives</th>
<th>Dentists</th>
<th>Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Medical</td>
<td>Nurse</td>
<td>Number</td>
<td>Density</td>
<td>Number</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1.45</td>
<td>15</td>
<td>30,885</td>
<td>0.27</td>
<td>108,203</td>
<td>1.19d</td>
</tr>
<tr>
<td>CWA</td>
<td>0.77</td>
<td>7</td>
<td>22,692</td>
<td>0.22</td>
<td>34,177</td>
<td>0.55</td>
</tr>
</tbody>
</table>

*Source: Velenyi 2005.*

*Note: CWA= cluster weighted average, HRH index = health worker density index, LD-HM = low density-high mortality.*

Public-Private Mix

Nigeria has a heterogeneous health system with a mix of private and public providers. Figure A1.2 shows that public health facilities make up just over half of the source of health provision. In addition, there is a vigorous and thriving private for-profit sector, accounting for about a third of health provision, while nongovernmental organizations and mission facilities make up about 1 percent. The private sector probably plays a more significant role than these raw percentage figures would seem to indicate, since that sector is widely perceived as providing higher-quality care and, for the HCP studied, at least, forms a critical part of service provision. That provision is expressed through the private Health Maintenance Organizations (HMOs) that mediate the relationship between the NHIS and all providers and some private providers included in the accredited facilities for beneficiaries to choose from. The limitations of the private sector, however, include uneven quality across many for-profit institutions including pharmacies and their concentration in urban locations.

Overview of Health Financing

As has been stressed, responsibilities for health services are divided among the three tiers of government under Nigeria’s federal system. The federal government (FGN) finances public sector tertiary services, state governments finance public sector secondary hospital services, and local government areas (LGAs) support public sector primary health care (PHC) services. This mirrors the division of responsibilities in the education sector, as well. However, this division of responsibilities is only approximate in that other tiers of government can intervene in health provision at levels that are the primary responsibility of another tier, as, for example, when state governments frequently compete with the FGN to build tertiary hospitals, or when the FGN and states invest in PHC.

Primary health care is, however, generally considered to be a “concurrent area,” meaning that all three tiers finance PHC services and projects, although few states tend to see primary care as a high-priority area for their own funds, preferring to exercise control through their role as conduits for statutory federal funds going to the LGAs. The federal government has significant interventions at the PHC level through a number of vertical programs like the National Immunization Program (NIP) and parastatal agencies like the National Primary Health Care Development Agency (NPHCDA) and the National Health Insurance Scheme (NHIS), but appears to show less interest in secondary health facilities (general referral hospitals).
Despite being a concurrent area of investment for all tiers of government, the Nigerian federal structure, especially the revenue allocation system, relatively disadvantages PHC as a priority area of national investment. This is because, as a major oil producer, the Nigerian government derives most of its revenues from oil royalties paid into the federation account, but these revenues are shared among levels of government according to an allocation formula that apportions about half of funds to the federal level, a quarter of the funds to be shared among the 36 states, and a quarter of the funds to be distributed to the LGAs. Thus, the tier with the least share of the resources, the LGA, is also the one primarily responsible for PHC.

The politically most attractive area of investment, however, is tertiary care (especially construction of new tertiary facilities). Not surprisingly then, as figure A1.1 shows, more than three-quarters of federal health investments tend to go to tertiary hospitals (University Teaching Hospitals and Federal Medical Centers in states), while parastatals, which include the federal agencies intervening in primary care, account for only 14 percent of federal health expenditures. Only 6 percent of total federal health spending goes through the Federal Ministry of Health.

If this paints a picture of politically opportunistic investments rather than of a clear PHC-oriented national strategy, it is not far from the reality of what appears to be a general lack of close coordination and collaboration among the tiers of government. It may also explain why the interventions of higher (especially the federal) tiers of government, which have more resources available than the lower tiers, in lower-level health provision, tend to be done through vertical programs that are not necessarily always properly coordinated with the tiers of government that have primary responsibility for those levels. The consequences of this situation are poor coordination and integration among levels of care, and hence suboptimal functioning of referral systems and continuity of care.

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**Figure A1.1 Breakdown of Federal Government Spending on Health**

![Percent of Total Federal Health Spend](image)

Source: 2003–2005 NHA.

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Indeed, even some of the states are known to establish and run tertiary hospitals.
Sources and Flows of Health Funding

National Health Accounts data for 2003–05 show households as the predominant source of health care funding by far, accounting for some two-thirds of spending (see figure A1.2, which shows the flow of funds for health in the Nigerian federal system from the National Health Accounts 2003–05 exercise). Most of that household expenditure was out-of-pocket spending, since pooling mechanisms were and still are little developed, with insurance coverage mostly limited to formal sector employees, such as federal and private sector employees under the National Health Insurance Scheme (NHIS). The three tiers of government together account for just a little over a quarter of all health spending. It follows that a key feature of health funding in Nigeria is its inefficiency due to high reliance on out-of-pocket spending for most of that funding.

Figure A1.3 shows health expenditure trends for the decade 2001–10. The most salient feature of the figure is that it shows little change from the National Health Accounts data of 2003–05 with respect to household share of total health expenditure. Indeed, Figure A1.3 shows that total health expenditure grew by about 8 percent during the decade, and that the highest growth came from general government expenditure on health, which grew by 13 percent. Out-of-pocket expenditure fell only slightly, by less than 2 percent of the growth of total health expenditure, during that period.
Figure A1.2 Flow of Funds for Health in Nigeria’s Federal System

Source: Drawn based on information from National Health Accounts, 2005.
Note: Federal, state and local governments receive funds from the Federation Account. State governments also use their own tax revenues.
FMOH = Federal Ministry of Health, HMBs = Hospitals Management Board, NGO = nongovernment organization.
Figure A1.3 Health Financing Indicators

Sources: World Bank 2011.
Note: GGH = general government expenditure on health, OOP = out-of-pocket, THE = total health expenditure.
Annex 2 Brief Description of Primary Care and Key Supply-side Efforts

Infrastructure and Supply Issues

Evidence seems to point to the fact that, apart from the rural areas, and especially the remote and hard-to-reach areas, the presence of health infrastructure may not be the most critical supply problem facing the country compared to other supply issues such as availability of drugs, functioning equipment, qualified staff, and other problems. Table A2.1 presents data reported by the World Bank in the 2005 Nigeria Country Status Report regarding infrastructure across the country. The private sector is particularly active in primary health care (PHC) and general (secondary) hospitals, which are located mostly in urban centers. Those urban centers also appear to be favored locations for government health infrastructure investments.

Table A2.1 Numbers of Health Facilities of all Levels, 2005

<table>
<thead>
<tr>
<th>Facility Type and Level</th>
<th>Public</th>
<th>Private</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Health Care</td>
<td>13,000</td>
<td>7,000</td>
<td>21,000</td>
</tr>
<tr>
<td><strong>Secondary Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary or General Hospitals</td>
<td>855</td>
<td>2147</td>
<td>3,002</td>
</tr>
<tr>
<td><strong>Tertiary Level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Hospitals</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Psychiatric Hospitals</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Orthopedic Hospitals</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Federal Medical Centers / General Tertiary Hospitals</td>
<td>27</td>
<td>1</td>
<td>28</td>
</tr>
</tbody>
</table>


The information on infrastructure from 2005 is, however, likely to be incomplete and out-of-date. For example, the National Primary Health Care Development Agency (NPHCDA) has constructed 600 Model Primary Health Centers in the country, many of them since the above data were collected. Similarly, more private secondary and tertiary hospitals have been established in the time since the last National Health Accounts in 2005. Indeed, there is a general impression that politically attractive tertiary and secondary hospitals have been overemphasized in federal and state funding decisions to the relative disadvantage of functioning primary health care facilities. For example, missions to three states in the context of the World Bank’s Results-based Financing project for those states showed that for PHC services, frequently the problem is not the lack of facilities but their poor functional states and high user fees, which deter the poor from obtaining timely access to needed care.\(^\text{21}\)

Supply problems are particularly acute with respect to the availability of drugs and other supplies, and functioning equipment such as blood banks and water supply facilities. Critical staff such as trained midwives are also in severely short supply, especially in frontline rural PHC

facilities. The apparent assumption of the federal government that once a facility has been built and transferred to local control (with initial supply of operational inputs), the LGAs would continue to ensure their operation as envisaged is frequently not realized, because LGAs often face resource constraints and may have other priorities. Consequently, many PHC facilities, including newly built facilities under the model clinic building program, remain underutilized, sometimes with a workload of fewer than 10 patients per day. The HCP described here is at least in part a response to this situation.

**Staffing and Coordination among the Different Levels**

There are wide variations across different states in the type of providers found at the three levels of the public health system and coordination among them. However, in general, medical doctors are found mostly at the tertiary and secondary levels, with specialist doctors available only at the tertiary level. Nurses, midwives, pharmacists, and laboratory technicians are also positioned at the tertiary and secondary levels. At the primary level, nurses, midwives, community health officers, and community health extension workers (both junior and senior) are recruited. In addition, pharmacy and laboratory assistants are also available at comprehensive primary health centers.

Coordination, particularly referrals, among the three levels of service delivery is weak. Primary health facilities are not equipped with referral forms or a functional ambulance or vehicle that can carry patients. Some secondary facilities have a functional ambulance. There are no feedback mechanisms among the different facilities to follow up on referred patients. However, facilities under the Midwives Service Scheme (MSS), covering 652 PHC facilities across the country (with a greater number in the poorer north), have adopted a cluster model to build an effective two-way referral system between primary and secondary facilities. In this model, four primary health centers are clustered around one general hospital in a local government. For example, in Ondo State, 85 midwives have been deployed in 20 clusters covering five LGAs.

Secondary facilities (at the state level) play a dominant role in MCH provision wherever people have access to them. This is because they have more qualified staff (including the only doctors), and generally better facilities and access to other resources, as well as an absence of any restrictions on self-referral to secondary facilities. In addition, for Ondo State, in particular, the state government has been able to implement policies of free MCH care at the secondary level, while it does not exercise control over LGA PHC policies (except through the NHIS-MDG program). There is generally no effective coordination between the provision of PHC services through state secondary facilities and LGA PHC facilities, with management arrangements being largely separate despite the overlap in services provided.

PHC facilities are managed through the LGA PHC Departments and the PHC Department of the Ministry of Local Government, with human resources issues for technical and trained staff being

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23 The MSS is an MDG-backed project, led by NPHCDA, which seeks to mobilize midwives, including those newly qualified by the Nigerian Schools of Midwifery; unemployed midwives; and retired but able midwives for deployment to health facilities in rural communities to undertake one year of community service.
managed through the Local Government Service Commission. Secondary facilities are managed through the Hospitals Management Board (depending on how far management and financial autonomy have been granted to hospitals). The State Ministry of Health lacks effective management control over either of these systems. There is a bias in the supply of resources from the state to the secondary facilities, including, for example, aspirations to establish teaching hospitals at the state level.

**PHC Performance Issues**

A 2011 study found that responsibilities for PHC were diffuse and overlapping (OPM 2011). The study, though carried out in three states (including Ondo State, the site of the UNICO case study), presents a reasonable picture of how the federal system works in the rest of the country, as well. The study found that each of the three levels of government has some role in PHC service provision, financing, human and other resources, and supervision. While some progress toward establishing a State Primary Health Care Development Agency (SPHCDA) had been made in each of the three case study states, in none of them had this led to a clarification or rationalization of the roles of different organizations in the system or to the establishment of more coordinated management arrangements. However, while the LGA level, in principle, enjoys a high degree of autonomy in all aspects of PHC service provision, in practice, control over the release of budgeted funds, and human resources functions for trained staff, are concentrated at the state level.

There is also no focus on results in the PHC system (OPM 2011). Measures of the outputs of the PHC system are collected (in particular, information on the numbers of patients treated, number of prenatal consultations provided, and information on vaccination), but are not used for management purposes, and the allocation of resources is not related to either outputs produced or any measure of results achieved. The only element of resource allocation that relates to the level of utilization of facilities is capitation payment and fees for service under the NHIS.
Annex 3 Ondo State Health System

Selected Key Demographic and Health Infrastructure Statistics of Ondo State

- State population: 3,441,024 (as of 2006); 3,760,100 (projected 2009)
- Rural-urban mix: 61 percent of the state’s population are rural dwellers and 39 percent reside in urban areas.
- Total number of modern medical and health institutions in the state as at 2010: 791, of which:
  - Public sector = 502 (21 hospitals, 19 Comprehensive Health Centers, 443 Basic Health Centers, 19 others)
  - Private for profit = 284
  - Mission = 5
- Doctor/patient ratio in the state = 1:14,000.

Figure A3.1 Ondo State Health System
Annex 4 Spider Web

I. Outcomes comparisons:
Nigeria and Lower Middle Income Countries

Note on interpretation:
In this plot ‘higher’ is ‘worse’ – since these indicators are positive measures of mortality / morbidity. Life expectancy is converted to be an inverse measure.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes outcome comparisons with the average lower middle income country (LMIC).

II. Inputs comparisons
Nigeria and Lower Middle Income Countries

Note on interpretation:
This plot shows indicators which measure spending on health or the number of health workers per population.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes inputs comparisons with the average lower middle income country (LMIC).
III. Coverage comparisons
Nigeria and Lower Middle Income Countries

Note on interpretation:
In this plot ‘higher’ is ‘better’ – since these indicators are positive measures. In this case, all are percent of the population receiving or having access to a certain health related service.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes coverage comparisons with the average lower middle income country (LMIC).

<table>
<thead>
<tr>
<th>Country Data</th>
<th>Nigeria</th>
<th>LMIC</th>
<th>% Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI per cap. (2000 USD)</td>
<td>315.4</td>
<td>591.4</td>
<td>-45.4%</td>
</tr>
<tr>
<td>DPT</td>
<td>79.6</td>
<td>78.7</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Prenatal</td>
<td>54.7</td>
<td>78.1</td>
<td>-26.4%</td>
</tr>
<tr>
<td>Contraceptive</td>
<td>58.1</td>
<td>50.1</td>
<td>-17.8%</td>
</tr>
<tr>
<td>Skilled birth</td>
<td>38.9</td>
<td>56.9</td>
<td>-31.6%</td>
</tr>
<tr>
<td>Sanitation</td>
<td>31.0</td>
<td>47.0</td>
<td>-34.0%</td>
</tr>
<tr>
<td>TB success</td>
<td>85.0</td>
<td>88.0</td>
<td>-3.5%</td>
</tr>
</tbody>
</table>

DPT immunization: % of children aged 12-23 months with DPT immunization (2010). Prenatal services: % of pregnant women receiving prenatal care (latest available year). Contraceptive prevalence: % of women ages 15-49 using contraception (latest available year). Skilled birth attendance: % of all births attended by skilled health staff (latest available year). Improved sanitation: % of population with access to improved sanitation facilities (2010). TB treatment success: Tuberculosis treatment success rate (% of registered cases). All data from World Bank’s World Development Indicators.

IV. Infrastructure comparisons
Nigeria and Lower Middle Income Countries

Note on interpretation:
In this plot ‘higher’ is “better” – since these indicators are positive measures of provision of certain good / service, and a measure of urban development.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes infrastructure comparisons with the average lower middle income country (LMIC).

<table>
<thead>
<tr>
<th>Country Data</th>
<th>Nigeria</th>
<th>LMIC</th>
<th>% Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI per cap. (2000 USD)</td>
<td>575.5</td>
<td>592.4</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Paved roads</td>
<td>15.0</td>
<td>49.5</td>
<td>-93.7%</td>
</tr>
<tr>
<td>Mobile phones</td>
<td>58.6</td>
<td>79.3</td>
<td>-26.3%</td>
</tr>
<tr>
<td>Internet</td>
<td>18.4</td>
<td>16.0</td>
<td>-14.4%</td>
</tr>
<tr>
<td>Water</td>
<td>58.0</td>
<td>87.3</td>
<td>-33.6%</td>
</tr>
</tbody>
</table>

Paved roads: % of total roads paved (most recent). Internet users: users per 100 people (2010, with some estimates from prior years). Mobile phone users: mobile cellular subscriptions per 100 people (2010). Access to improved water: % of population with access to improved water source (2010). All data from World Bank’s World Development Indicators.
V. Demography comparisons
Nigeria and Lower Middle Income Countries

Note on interpretation:
Indicators here measure births per woman, the extent of rurality, and the number of dependents.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes demographic indicators comparisons with the average lower middle income country (LMIC).

<table>
<thead>
<tr>
<th>Country Data</th>
<th>Nigeria</th>
<th>LMIC</th>
<th>% Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI (per capita USD)</td>
<td>145.5</td>
<td>593.4</td>
<td>-75.5</td>
</tr>
<tr>
<td>TFR</td>
<td>5.4</td>
<td>2.9</td>
<td>-43.7</td>
</tr>
<tr>
<td>Dependency (Total)</td>
<td>85.9</td>
<td>58.8</td>
<td>46.1</td>
</tr>
<tr>
<td>Youth share</td>
<td>92.7</td>
<td>86.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Rural pop.</td>
<td>50.2</td>
<td>66.6</td>
<td>-13.2</td>
</tr>
</tbody>
</table>

TFR: total fertility rate (births per woman), 2009. Dependency ratio: % of working-age population (2010) aged less than 15 or more than 64. Youth dependency: % of working-age population (2010) aged less than 15. Rurality: % of total population in rural areas (2010). All data from World Bank’s World Development Indicators.

VI. Inequality comparisons
Nigeria and Lower Middle Income Countries

Note on interpretation:
In this plot ‘higher’ is ‘inequal’ and indicators here measure inequalities in selected health outcomes by taking the ratio of prevalence between Q1 and Q5.

The values on the radar plot have been standardized with respect to the average lower middle income country value.

The table below summarizes inequality indicators comparisons with the average lower middle income country (LMIC).

<table>
<thead>
<tr>
<th>Country Data</th>
<th>Nigeria</th>
<th>LMIC</th>
<th>% Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI (per capita USD)</td>
<td>145.5</td>
<td>593.4</td>
<td>-75.5</td>
</tr>
<tr>
<td>IMR Q1/Q5</td>
<td>1.7</td>
<td>2.0</td>
<td>-43.3</td>
</tr>
<tr>
<td>U5MR Q1/Q5</td>
<td>2.5</td>
<td>2.6</td>
<td>-3.7</td>
</tr>
<tr>
<td>Stunting Q1/Q5</td>
<td>2.4</td>
<td>2.7</td>
<td>-10.5</td>
</tr>
<tr>
<td>ARI Q1/Q5</td>
<td>3.0</td>
<td>1.5</td>
<td>-50.0</td>
</tr>
<tr>
<td>Diarrhea Q1/Q5</td>
<td>3.0</td>
<td>1.5</td>
<td>-50.0</td>
</tr>
</tbody>
</table>

All indicators measure the ratio of prevalence between the poorest (in Q1) and the richest (in Q5) quintile. The data (latest data available) are taken from HNPstats (http://data.worldbank.org/data-catalog/HNPquintile).


The World Bank supports the efforts of countries to share prosperity by transitioning toward universal health coverage (UHC) with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, the quality of the instruments and institutions countries establish to implement UHC are essential to its success. Countries will face a variety of challenges during the implementation phase as they strive to expand health coverage. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Studies Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the nuts and bolts of 27 programs in 25 countries that have expanded coverage from the bottom up, starting with the poor and vulnerable. The protocol consists of 300 questions designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following:

- Manage the benefits package
- Manage processes to include the poor and vulnerable
- Nudge efficiency reforms to the provision of care
- Address new challenges in primary care
- Tweak financing mechanisms to align the incentives of different stakeholders in the health sector

The UNICO Studies Series aims to provide UHC implementers with an expanded toolbox. The protocol, case studies and technical papers are being published as part of the Series. A comparative analysis of the case studies will be available in 2013.