Report of the Abia

STATE-WIDE RAPID HEALTH FACILITY ASSESSMENT

In Preparation for Elimination of Mother-to-Child Transmission of HIV

AUGUST 2013
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The Abia State-wide Rapid Health Facility Assessment was supported in part by the U.S. Agency for International Development (USAID). FHI 360 provided assistance to the Abia State Government to conduct this assessment. Financial assistance was provided by USAID under the terms of the Cooperative Agreement AID-620-A-00002, of the Strengthening Integrated Delivery of HIV/AIDS Services Project. This report does not necessarily reflect the views of FHI 360, USAID or the United States Government.
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Foreword

As one of the “12+1” states which jointly contribute nearly 70 percent of Nigeria’s mother to child transmission of HIV (MTCT) burden Abia State is one of the priority states for PMTCT services scale up drive by Government of Nigeria. The state with HIV prevalence of 7.1%, ranks the 8th in the country and 2nd in the South-East zone.

Abia State Government, in collaboration with FHI 360, and with financial support from the United States Agency for International Development (USAID), embarked on a state-wide rapid health facility assessment to identify facilities and the needed resources for PMTCT services scale up. This is an important milestone towards the elimination of mother-to-child transmission of HIV (MTCT) in the state.

A total of 651 public and private health facilities located in all 17 local government areas (LGAs) in the state were assessed. This report contains details of findings in the 5 domains assessed per facility namely: available services, infrastructure, enabling environment for ANC, community delivery options and community health support systems. The report will surely be of immense help in the development of a state-specific, costed PMTCT scale-up plan.

Also, with the identification of gaps and challenges in the functionality of health facilities and lessons learned the road to expanding PMTCT services is now open in Abia State

Dr. Okechukwu S Ogah

Honourable Commissioner for Health
Abia State
Acknowledgements

The Abia State Ministry of Health hereby thank all stakeholders whose commitment and hard work contributed to the successful production of this report. We are really indebted to the United States Agency for International Development for financial assistance and FHI 360 for technical assistance during this rapid assessment. Our special thanks go to them.

The hard work and commitment demonstrated by everyone who contributed to the development of the Rapid Health Facility Assessment Report for Abia State is acknowledged and appreciated.

Our gratitude goes to the staff of the Abia State Ministry of Health and the Hospitals Management Board who contributed immensely to making this exercise a success. We also acknowledge the commitments of the consultants and volunteers who participated in this assessment.

And for releasing staff in their various health departments, we cannot thank the Ministry of Local Government enough. We also appreciate the PHC Coordinators and LGA staff who utilized their in-depth knowledge of the terrain in making the accomplishment of the task a lot easier.

Thank you all,

Chief Franklin Enyinnaya Orji

Director of Public Health/Disease Control
Abia State Ministry of Health
Acronyms

ARV  Anti-retroviral
CHEW  Community Health Extension Worker
CHO  Community Health Officer
DOTS  Directly Observed Therapy, Short-course
DPRS  Director Planning Research and Statistics
eMTCT  Elimination of Mother-to-Child Transmission of HIV
FHI 360  Family Health International
GPS  Global Positioning System
HR  Human Resource
IP  Implementing Partner
KII  Key Informant Interview
LACA  Local Government Agency for Control of HIV/AIDS
LGA  Local Government Area
MDG  Millennium Development Goal
MTCT  Mother-to-Child Transmission of HIV
MSS  Midwifes Services Scheme
OPD  Outpatient Department
PHC  Primary Health Care/Centre
PEPFAR  President’s Emergency Plan for AIDS Relief
PMTCT  Prevention of Mother-to-Child Transmission of HIV
R-HFA  Rapid Health Facility Assessment
SACA  State Control Agency for Control of AIDS
SAPC  State AIDS Programme Coordinator
SASCP  State AIDS and STI Control Programme
SMOH  State Ministry of Health
SURE-P  Subsidy Reinvestment and Empowerment Program
TBA  Traditional Birth Attendant
USAID  United States Agency for International Development
VDG  Village Development Committee
Executive Summary

Abia State in Nigeria’s South Eastern geopolitical zone is an important state to target for eliminating mother-to-child transmission of HIV in Nigeria. The HIV prevalence in the state has shown an upward trend from surveillance reports and now stands at 7.3% which is higher than the regional and national average. It is one of the 12+1 states accounting for 70% the national burden of mother-to-child transmission of HIV (MTCT). The Government of Nigeria is committed to eradicating MTCT by 2015. To achieve this objective, PMTCT service coverage and access is being scaled up in these priority states.

This state wide facility assessment was conducted to identify health facilities which provide antenatal care (ANC) but not antiretrovirals (ARVs) for the prevention of mother-to-child transmission (PMTCT). It aimed to document human health resource, service provision and utilization indices in order to engage these facilities in scale up efforts to boost PMTCT coverage and access. Health workers in all eligible facilities across the mix of public/private ownership and primary/secondary/tertiary levels of patient care were surveyed using qualitative and quantitative methods. In total, 651 eligible facilities were identified and surveyed. Geospatial coordinates of these facilities were collected and are mapped to show site spread and aid decisions to maximize PMTCT coverage.

Wide gaps in current PMTCT coverage were seen; only five LGAs had PMTCT sites on record at the time of this survey. Human resource (HR) deficiencies were observed for all cadres of staff necessary for optimal delivery of PMTCT and maternal and child health (MCH) services with only 44 facilities meeting national minimum human resource complements for PMTCT service provision. Some facilities also lacked necessary infrastructure for PMTCT. Health workers report that deliveries occur outside the health facility, in maternity homes and with TBAs. Reasons adduced for this included cultural beliefs, logistic problems with efficient health service delivery, health care costs and poor staff attitudes.

To improve PMTCT access and coverage, a broad based range of interventions incorporating health systems strengthening, health demand creation and community engagement must be undertaken. Mechanisms to engage traditional birth attendants (TBAs) which increase HIV testing and counseling (HTC), ANC and PMTCT use should also be explored.
SECTION 1

Background

Abia State is located in southeastern Nigeria; its capital is Umuahia. The state became a political entity in 1991 when it was formed out of Imo State; subsequently in 1996 four local governments were transferred to the newly created Ebonyi State. The state has 17 Local Government Areas (LGAs) namely: Aba North, Aba South, Ukwa East and West, Ugwunagbo, Obingwa, Osisioma, Isiala Ngwa North and South, Umuahia North and South, Ikwuano, Bende, Isuikwuato, Ohafia, Nnewichi, Arochukwu. The state shares common boundaries to the north with Ebonyi State; to the south and southwest with Rivers State; and to the east and southeast with Cross River and Akwa Ibom States, respectively. To the west is Imo State, and to the northwest is Anambra State. It covers an area of about 5,243 km² which is approximately 5.8% of the total land area of Nigeria. The topography is mainly flat and low lying, with existing highlands averaging 150m above sea level in elevation.

National projections from the 2006 census estimate a current population of 3,394,524 with a slight majority of females in most LGAs. The main ethnic group is Igbo. Abia State has two principal urban centres – the administrative capital of Umuahia and the commercial centre of Aba. The mainstays of the economy are crude oil production and agriculture. These account for 39% and 27% of the State's Gross Domestic Product (GDP), respectively. The main crops produced are yams, maize, potatoes, rice, cashews, plantains, and cassava.

The prevalence of HIV in Abia State has shown a steady increase since the onset of community surveillance using Antenatal Sentinel Surveys in 1999. At that time the state HIV prevalence was 3.0%, almost half the national average of 5.4%. However while the national prevalence has reduced fairly consistently to the current 2010 estimate of 4.1%, the Abia State prevalence has risen steadily and now stands at 7.3%. This is above the South Eastern regional average (3%) and Abia is second only to Anambra (8.7%) in the region.

The major route of HIV transmission, like for the rest of Nigeria, is heterosexual intercourse. The main drivers of the epidemic include multiple concurrent sexual partners, low perception of risk and knowledge levels, stigma and discrimination and superstitious beliefs about HIV/AIDS.
2.1 MTCT PROFILE FOR ABIA STATE

Abia is one of 12+1 states which contribute to over 70% of maternally acquired HIV infections in Nigeria. These states are the current focus of Nigeria’s elimination of mother-to-child transmission (eMTCT) efforts. Based on projected population figures, Abia is estimated to have 12,377 pregnant women living with HIV. With a third of maternal infections resulting in paediatric transmission without PMTCT interventions, over 4,000 children are at risk of prenatal HIV infection in the state.

To understand the relative burden of maternal HIV and provision of PMTCT service in the various LGAs, a profile of the situation was conducted. This profile ranks the LGAs according to maternal HIV burden (based on number of affected women) and PMTCT service coverage gap (proportion of ANC facilities which do not provide PMTCT) with higher ranks indicating higher burden/larger coverage gaps. The individual and summed ranks are shown below in Table 1. Abia South, Umuahia North and South LGAs have the highest maternal HIV population burden. Ikwuano, Ukwa East, Ugwunagbo, and Umuahia South LGAs had no PMTCT centres and consequently a service coverage gap of 100%. Combining both indices Umuahia South, Ikwuano and Obingwa the most affected LGAs.
Table 1: LGA ranking of MTCT burden and PMTCT coverage in Abia state

<table>
<thead>
<tr>
<th>LGAS</th>
<th>MTCT BURDEN</th>
<th>PMTCT SERVICE COVERAGE GAP</th>
<th>RANK SUM [RANK 1 + RANK 2]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIV prevalence</td>
<td>Estimated number of HIV+ pregnant women</td>
<td>Rank 1 (number of HIV+ pregnant women)</td>
</tr>
<tr>
<td>Aba North</td>
<td>7.0%</td>
<td>446</td>
<td>5</td>
</tr>
<tr>
<td>Aba South</td>
<td>7.0%</td>
<td>1785</td>
<td>17</td>
</tr>
<tr>
<td>Arochukwu</td>
<td>7.3%</td>
<td>737</td>
<td>11</td>
</tr>
<tr>
<td>Bende</td>
<td>7.3%</td>
<td>839</td>
<td>13</td>
</tr>
<tr>
<td>Ikwuano</td>
<td>7.3%</td>
<td>600</td>
<td>8</td>
</tr>
<tr>
<td>Isiala Ngwa North</td>
<td>1.3%</td>
<td>119</td>
<td>1</td>
</tr>
<tr>
<td>Isiala Ngwa South</td>
<td>7.3%</td>
<td>595</td>
<td>7</td>
</tr>
<tr>
<td>Isuikwuato</td>
<td>7.3%</td>
<td>504</td>
<td>6</td>
</tr>
<tr>
<td>Obingwa</td>
<td>7.3%</td>
<td>792</td>
<td>12</td>
</tr>
<tr>
<td>Ohafia</td>
<td>4.7%</td>
<td>690</td>
<td>9</td>
</tr>
<tr>
<td>Osisioma</td>
<td>7.3%</td>
<td>961</td>
<td>14</td>
</tr>
<tr>
<td>Ugwunagbo</td>
<td>7.3%</td>
<td>372</td>
<td>3</td>
</tr>
<tr>
<td>Ukwa East</td>
<td>7.3%</td>
<td>253</td>
<td>2</td>
</tr>
<tr>
<td>Ukwa West</td>
<td>7.3%</td>
<td>380</td>
<td>4</td>
</tr>
<tr>
<td>Umuahia North</td>
<td>12.0%</td>
<td>1597</td>
<td>16</td>
</tr>
<tr>
<td>Umuahia South</td>
<td>12.0%</td>
<td>995</td>
<td>15</td>
</tr>
<tr>
<td>Nneoichi</td>
<td>7.3%</td>
<td>710</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7.30%</strong></td>
<td><strong>12,377</strong></td>
<td><strong>790</strong></td>
</tr>
</tbody>
</table>
Response to the HIV Epidemic

As part of the government’s response to the HIV epidemic, the Abia State HIV/AIDS/STI Control Programme (SASCP) was created as a division under the Directorate of the State Public Health Department located at Umuahia. While the overall management of HIV and AIDS programmes within the State is coordinated by the State Agency for Control of AIDS (SACA), the SASCP on the other hand, coordinates the health sector HIV and AIDS response. It also monitors the sector’s (HIV/AIDS) programmes and collaborates with key partners and other stakeholders in HIV and AIDS programming and management.

Also, international donors such as the United States Government and the Global Fund through their implementing partners have invested technical and financial resources in the HIV programming in the state. Some of the program areas funded in Abia State by the international donors include (HTC), provision of ARVs, laboratory equipment and capacity building for government and health facility staff.

However PMTCT coverage has been low. Consequently, Abia is one of the 12+1 states that contribute 70% to the national PMTCT burden. In line with the focus of the Government of Nigeria on accelerating PMTCT coverage in these 12+1 states, the Abia state government with the support of the implementing partners has embarked on a drive to scale up PMTCT services. This drive involves a state-wide rapid health facility assessment, the findings from which will be used to develop a state-specific, costed PMTCT scale-up plan.

Assessment Goal and Objectives

4.1 GOAL

The goal of this assessment is to contribute to Abia state efforts to eliminate mother-to-child transmission of HIV by 2015.

4.2 OBJECTIVES

1. To quickly identify health facilities in Abia State that meet a minimum set of criteria for provision of PMTCT services;

2. To document the HR, infrastructure, enabling environment, services available and their utilization in assessed health facilities (12 months preceding the assessment);

3. To explore provider perspectives on barriers to uptake of PMTCT services; and

4. To map the physical location of health facilities using global positioning system (GPS) coordinates.
This cross-sectional survey utilized mixed (quantitative and qualitative) methods. The assessment took place in all 17 Local Government Areas of the state.

5.1 SAMPLING/SITE SELECTION

The sampling frame was a total listing of the 1100 health facilities in the state. The inclusion criterion was all facilities with ANC services as these could in principle provide PMTCT services if equipped with the proper technical and human expertise. Excluded from the assessment were 58 facilities that were already providing PMTCT services (ARVs for PMTCT or had plans to commence this service in 2013). A total of 651 facilities which provided antenatal care but had no implementing partner support for PMTCT services (ARVs) were assessed in this exercise. A breakdown of facilities depicting sampled institutions is shown below (Figure 2).

Figure 2: Sampling for state-wide rapid health facility assessment
5.2 DATA COLLECTION

The Abia State Rapid Health Facility Assessment (R-HFA) tool included both quantitative and qualitative elements. The quantitative aspect used a semi-structured questionnaire to collect information from the facility head or officer about facility and service characteristics. Geospatial location of the facilities was ascertained as well facility ownership and current scope of PMTCT related services. The review covered seven domains which included: facility health linkages, health human resource complement, client flow, scope of services provided, community support systems, current infrastructure and future prospects for expansion.

The qualitative section was a key informant interview of the same officer to explore community birth site options, perceived reasons for preferred choice, factors influencing facility patronage and the extent of community participation in service delivery.

5.3 ASSESSMENT PROCEDURE

The Abia State Ministry of Health and the Abia State Agency for the Control of AIDS led this assessment exercise with technical support from FHI 360 with funding from USAID. Following an orientation exercise, multidisciplinary teams (comprising staff from State Ministry of Health, SACA, Hospitals Management Board, Primary Health Care Management Board and FHI 360) were mobilized to visit health facilities. GPS devices were used to obtain location coordinates for facilities. Key informant interviews were conducted with the heads of facilities and where available, heads of laboratory and pharmacy units.

5.4 CHALLENGES

It was difficult to accurately identify all health centres in the state. Two rounds of data collection were therefore conducted. The supplemental/second assessment was required to reach facilities which were eligible but not identified or located in the first round.
A total of 651 facilities were found to provide antenatal care but did not receive support from an implementing partner to provide ARVs for PMTCT. The sections below present data from these facilities which constitute the majority of facilities with potential for PMTCT scale-up in Abia State.

6.1 CHARACTERISTICS OF FACILITIES

In Table 2 below, the distribution of the assessed facilities with respect to ownership and level of service delivery is presented. Over 80% of the facilities (541) were primary level while the remaining were secondary facilities. Similarly, about two-thirds of the facilities were publicly owned (426) while the rest were private facilities.

<table>
<thead>
<tr>
<th>OWNERSHIP</th>
<th>FACILITY TYPE</th>
<th>PRIMARY LEVEL</th>
<th>SECONDARY LEVEL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith-based</td>
<td>6</td>
<td>7</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Private for profit</td>
<td>115</td>
<td>98</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td>Sub-total (private)</td>
<td>121</td>
<td>105</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal government</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>State government</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>LGA</td>
<td>418</td>
<td>1</td>
<td>419</td>
<td></td>
</tr>
<tr>
<td>Sub-total (public)</td>
<td>420</td>
<td>5</td>
<td>425</td>
<td></td>
</tr>
<tr>
<td>Overall total</td>
<td>541</td>
<td>110</td>
<td>651</td>
<td></td>
</tr>
</tbody>
</table>

6.2 HUMAN RESOURCES AND SERVICE UTILIZATION

Human resources and service utilization disaggregation according to facility level is presented in Table 3. The secondary facilities on the average have a higher number of health workers – across all categories- compared with the primary facilities. Of all the health worker categories, the records officer and pharmacy technicians/pharmacists are the fewest per facility. The average number of outpatient department (OPD) and ANC attendees as well as deliveries in the last 12 months also revealed a much higher utilization of secondary facilities compared to the primary level health services in the state. Notably, the average number of deliveries is almost half
the number of new ANC attendees. This should however not be interpreted to mean only half of registered mothers deliver in a health facilities due to fact that 1) registration and delivery may be separated by up to 9 months but the R-HFA data was collected for the same reference period; 2) unregistered mothers may deliver in a facility; and 3) pregnancies may terminate in other end points besides delivery of an infant. The foregoing notwithstanding, the finding might suggest a significant proportion of deliveries occur outside the formal health system.

Table 4 presents HR resources and facility utilization now disaggregated according to facility level. The results show that the average, private facilities have a higher number of every category of health worker. Also, the private facilities have OPD and ANC utilization figures which are about 5 to 8 times than seen in public facilities. This highlights the importance of proper private health sector engagement in reaching the target population of pregnant women.

Table 3: Human resources and service utilization disaggregated by level of facility – primary/secondary

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>Item</th>
<th>541 PRIMARY FACILITIES</th>
<th>110 SECONDARY FACILITIES</th>
<th>651 TOTAL FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item</td>
<td>Average</td>
<td>Proportion of facilities reporting zero</td>
<td>Proportion of facilities reporting at least one</td>
</tr>
<tr>
<td>HUMAN RESOURCES</td>
<td>Doctors</td>
<td>0.2</td>
<td>83.2%</td>
<td>16.8%</td>
</tr>
<tr>
<td></td>
<td>Registered nurse/midwife</td>
<td>1.1</td>
<td>47.5%</td>
<td>52.5%</td>
</tr>
<tr>
<td></td>
<td>Other trained health workers (Community Nurses, CHOs, CHEWs)</td>
<td>2.4</td>
<td>12.8%</td>
<td>87.2%</td>
</tr>
<tr>
<td></td>
<td>Record officers</td>
<td>0.2</td>
<td>86.1%</td>
<td>13.9%</td>
</tr>
<tr>
<td></td>
<td>Laboratory technician/scientists</td>
<td>0.3</td>
<td>78.6%</td>
<td>21.4%</td>
</tr>
<tr>
<td></td>
<td>Pharmacy technician/pharmacists</td>
<td>0.1</td>
<td>90.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td>SERVICE UTILIZATION</td>
<td>OPD attendance in the last 12 months</td>
<td>291</td>
<td>4.3%</td>
<td>95.7%</td>
</tr>
<tr>
<td></td>
<td>ANC first attendees recorded in the last 12 months</td>
<td>80</td>
<td>5.2%</td>
<td>94.8%</td>
</tr>
<tr>
<td></td>
<td>Deliveries taken in the last 12 months</td>
<td>46</td>
<td>14.6%</td>
<td>85.4%</td>
</tr>
</tbody>
</table>
Table 4: Human resources and service utilization disaggregated by ownership of facility

<table>
<thead>
<tr>
<th>Domain</th>
<th>Item</th>
<th>541 Primary Facilities</th>
<th>110 Secondary Facilities</th>
<th>651 Total Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Proportion of facilities reporting zero</td>
<td>Proportion of facilities reporting at least one</td>
<td>Proportion of facilities reporting zero</td>
</tr>
<tr>
<td>Human resources</td>
<td>Doctors</td>
<td>0.1</td>
<td>96.9%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Registered nurse/midwife</td>
<td>0.9</td>
<td>53.4%</td>
<td>46.6%</td>
</tr>
<tr>
<td></td>
<td>Other trained health workers (Community Nurses, CHOs, CHEWs)</td>
<td>2.1</td>
<td>10.8%</td>
<td>87.2%</td>
</tr>
<tr>
<td></td>
<td>Record officers</td>
<td>0.2</td>
<td>89.4%</td>
<td>10.6%</td>
</tr>
<tr>
<td></td>
<td>Laboratory technician/scientists</td>
<td>0.2</td>
<td>86.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td></td>
<td>Pharmacy technician/pharmacists</td>
<td>0.1</td>
<td>92.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Service utilization</td>
<td>OPD attendance in the last 12 months</td>
<td>186</td>
<td>4.2%</td>
<td>95.8%</td>
</tr>
<tr>
<td></td>
<td>ANC first attendees recorded in the last 12 months</td>
<td>50</td>
<td>5.2%</td>
<td>94.8%</td>
</tr>
<tr>
<td></td>
<td>Deliveries taken in the last 12 months</td>
<td>22</td>
<td>17.2%</td>
<td>82.8%</td>
</tr>
</tbody>
</table>
6.3 DOMAIN-BY-DOMAIN SUMMARY

Table 5 summarizes findings from each domain of the assessment. The domains assessed are services available, infrastructure, enabling environment for ANC, community delivery options and community health support systems. Findings are disaggregated by level of facility and type of ownership.

Basic clinical services were available in most of the facilities with the percentage of facilities providing assessed facilities generally exceeding 70%. The notable exceptions to this general rule were HTC and TB services. HTC services were available in less than half of facilities surveyed. Where available, HTC services are a good platform on which to build PMTCT services. TB services were the least frequently available service (obtainable in less than a fifth of the facilities). As expected the range of services provided is wider in secondary level facilities.

Infrastructure assessment focused on availability of space for critical functions related to ANC and PMTCT care components. About 70% and 90% of facilities had spaces which could be utilized for Adherence and Confidential Counselling respectively. Less than 15% of facilities had the necessary infrastructure to use for phlebotomy or drug dispensing services. The previous trend is observed with secondary health facilities having richer infrastructure allowances than primary health centers.

The ‘enabling environment’ domain assessed facility access to support for ANC such as Millennium Development Goal (MDG) funds for MCH services, presence of midwives supported by the Midwives Service Scheme (MSS) or Subsidy Reinvestment Program (SURE-P), and provision of subsidized ANC services to the community and conduct of regular community outreaches. Community outreach was the most frequently observed activity in this domain. Over 60% of facilities engaged in community outreach although only 8% of secondary facilities participated. Few facilities (14%) provide free/subsidized ANC in the state, less than a quarter had access to MDG support for MCH and less than 10% had access to midwife staffing support programs.

A majority of respondents’ opined women utilized birthing facilities outside the formal health care system. The most popular option in the view of respondents were maternity homes or traditional birth attendants (TBAs). More respondents in primary health facilities were aware of existing community support systems such as ward and village development committees, community development and community based organizations. This reflects a closer integration into the community at the primary health level compared to secondary. Nonetheless only about half of facilities reported the existence of ward or village development committees.

Domain findings are disaggregated by facility ownership (public/private) and presented in Table 6. The majority of public facilities are primary health facilities, while private facilities encompass both primary and secondary level institutions as previously seen in Table 2. The results are therefore similar to those shown above in Table 5.

The range of services provided was similar in most respects across public and private facilities except for a few important exceptions. Private facilities were twice as likely to have HTC or TB treatment services compared with public owned health centres. Less than 70% and 20% of assessed private facilities had HTC or TB treatment services, respectively. More public facilities however conducted provided immunisation and child clinic follow up services.

Public facilities generally fared better on items related to enabling environment and awareness of community support systems.
### Facility Type

<table>
<thead>
<tr>
<th>Service Availability</th>
<th>Primary level n = 541</th>
<th>Secondary level n = 110</th>
<th>Total n = 651</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Exam (including weight, assessing GA, blood pressure)</td>
<td>534 (98.7%)</td>
<td>109 (99.1%)</td>
<td>643 (98.8%)</td>
</tr>
<tr>
<td>Laboratory services (onsite or by referral): Hb, Urinalysis</td>
<td>379 (70.1%)</td>
<td>104 (94.5%)</td>
<td>483 (74.2%)</td>
</tr>
<tr>
<td>Dispensing of haematinics and IPTp</td>
<td>507 (93.7%)</td>
<td>96 (87.3%)</td>
<td>610 (93.7%)</td>
</tr>
<tr>
<td>Labour and delivery services (with 24 hour shifts)</td>
<td>502 (92.8%)</td>
<td>108 (98.2%)</td>
<td>610 (93.7%)</td>
</tr>
<tr>
<td>Referrals for emergency obstetric and new-born care</td>
<td>520 (96.1%)</td>
<td>98 (89.1%)</td>
<td>618 (94.9%)</td>
</tr>
<tr>
<td>Family Planning services (condoms, hormonal contraceptives)</td>
<td>413 (76.3%)</td>
<td>83 (75.5%)</td>
<td>496 (76.2%)</td>
</tr>
<tr>
<td>Immunization services</td>
<td>479 (88.5%)</td>
<td>59 (53.6%)</td>
<td>538 (82.6%)</td>
</tr>
<tr>
<td>Child follow up clinics</td>
<td>491 (90.8%)</td>
<td>88 (80.0%)</td>
<td>579 (88.9%)</td>
</tr>
<tr>
<td>TB services (specify which - e.g. DOTS, microscopy)</td>
<td>55 (10.2%)</td>
<td>27 (24.5%)</td>
<td>82 (12.6%)</td>
</tr>
<tr>
<td>HTC</td>
<td>216 (39.9%)</td>
<td>85 (77.3%)</td>
<td>301 (46.2%)</td>
</tr>
</tbody>
</table>

### Identified Structure

<table>
<thead>
<tr>
<th>Identified Structure (can space be identified for the following?)</th>
<th>Primary level n = 541</th>
<th>Secondary level n = 110</th>
<th>Total n = 651</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Room</td>
<td>349 (64.5%)</td>
<td>99 (90.0%)</td>
<td>448 (68.8%)</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>33 (6.1%)</td>
<td>40 (36.4%)</td>
<td>73 (11.2%)</td>
</tr>
<tr>
<td>ANC Space</td>
<td>87 (16.1%)</td>
<td>53 (48.2%)</td>
<td>140 (21.5%)</td>
</tr>
<tr>
<td>ANC Room</td>
<td>487 (90.0%)</td>
<td>93 (84.5%)</td>
<td>580 (89.1%)</td>
</tr>
<tr>
<td>Space for Confidential Counselling</td>
<td>425 (78.6%)</td>
<td>93 (84.5%)</td>
<td>518 (79.6%)</td>
</tr>
<tr>
<td>Maternity Room</td>
<td>507 (93.7%)</td>
<td>103 (93.6%)</td>
<td>610 (93.7%)</td>
</tr>
<tr>
<td>Pharmacy Store</td>
<td>386 (71.3%)</td>
<td>83 (75.5%)</td>
<td>469 (72.0%)</td>
</tr>
<tr>
<td>Pharmacy Dispensary</td>
<td>50 (9.2%)</td>
<td>36 (32.7%)</td>
<td>86 (13.2%)</td>
</tr>
<tr>
<td>HIV Adherence Counselling</td>
<td>388 (71.7%)</td>
<td>83 (75.5%)</td>
<td>471 (72.4%)</td>
</tr>
<tr>
<td>Medical Records</td>
<td>321 (59.3%)</td>
<td>84 (76.4%)</td>
<td>405 (62.2%)</td>
</tr>
<tr>
<td>DOTS Clinic</td>
<td>5 (0.9%)</td>
<td>7 (6.4%)</td>
<td>12 (1.8%)</td>
</tr>
<tr>
<td>DOTS waiting area</td>
<td>5 (0.9%)</td>
<td>6 (5.5%)</td>
<td>11 (1.7%)</td>
</tr>
</tbody>
</table>

### Enabling Environment

<table>
<thead>
<tr>
<th>Enabling Environment</th>
<th>Primary level n = 541</th>
<th>Secondary level n = 110</th>
<th>Total n = 651</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDG Support for MCH services</td>
<td>132 (24.4%)</td>
<td>3 (2.7%)</td>
<td>135 (20.7%)</td>
</tr>
<tr>
<td>Free ANC Services</td>
<td>88 (16.3%)</td>
<td>3 (2.7%)</td>
<td>91 (14.0%)</td>
</tr>
<tr>
<td>Regular Monthly Community Outreaches</td>
<td>397 (73.4%)</td>
<td>9 (8.2%)</td>
<td>406 (62.4%)</td>
</tr>
<tr>
<td>MSS Midwives</td>
<td>44 (8.1%)</td>
<td>5 (4.5%)</td>
<td>49 (7.5%)</td>
</tr>
<tr>
<td>SURE-P Midwives</td>
<td>38 (7.0%)</td>
<td>2 (1.8%)</td>
<td>40 (6.1%)</td>
</tr>
</tbody>
</table>

### Table 5: Domain-by-domain summary disaggregated by level of facility
Table 5: Domain-by-domain summary disaggregated by level of facility (continued)

<table>
<thead>
<tr>
<th>DELIVERY SITES</th>
<th>Primary level</th>
<th>Secondary level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other than health facilities where women deliver in this community</td>
<td>470 (86.9%)</td>
<td>82 (14.5%)</td>
<td>552 (84.8%)</td>
</tr>
<tr>
<td>Other Places - Church</td>
<td>39 (7.2%)</td>
<td>10 (9.1%)</td>
<td>49 (7.5%)</td>
</tr>
<tr>
<td>Other Places - Mosque</td>
<td>3 (0.6%)</td>
<td>2 (1.8%)</td>
<td>5 (0.8%)</td>
</tr>
<tr>
<td>Other Places – TBA/Maternity home</td>
<td>88 (16.3%)</td>
<td>26 (23.6%)</td>
<td>114 (17.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNITY SYSTEMS</th>
<th>Primary level</th>
<th>Secondary level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward development committee</td>
<td>372 (68.8%)</td>
<td>14 (12.7%)</td>
<td>386 (59.3%)</td>
</tr>
<tr>
<td>Village development committee</td>
<td>326 (60.3%)</td>
<td>8 (7.3%)</td>
<td>334 (51.3%)</td>
</tr>
<tr>
<td>Community development association</td>
<td>321 (59.3%)</td>
<td>21 (19.1%)</td>
<td>342 (52.5%)</td>
</tr>
<tr>
<td>Community-based organization</td>
<td>172 (31.8%)</td>
<td>7 (6.4%)</td>
<td>179 (27.5%)</td>
</tr>
</tbody>
</table>

Table 6: Domain-by-domain summary disaggregated by facility ownership

<table>
<thead>
<tr>
<th>FACILITY TYPE</th>
<th>Primary level n = 425</th>
<th>Secondary level n = 226</th>
<th>Total n = 651</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Exam (including weight, assessing GA, blood pressure)</td>
<td>419 (98.6%)</td>
<td>224 (99.1%)</td>
<td>643 (98.8%)</td>
</tr>
<tr>
<td>Laboratory services (onsite or by referral): Hb, Urinalysis</td>
<td>292 (68.7%)</td>
<td>191 (84.5%)</td>
<td>483 (74.2%)</td>
</tr>
<tr>
<td>Dispensing of haematinics and IPTp</td>
<td>392 (92.2%)</td>
<td>211 (93.4%)</td>
<td>603 (92.6%)</td>
</tr>
<tr>
<td>Labour and delivery services (with 24 hour shifts)</td>
<td>387 (91.1%)</td>
<td>223 (98.7%)</td>
<td>610 (93.7%)</td>
</tr>
<tr>
<td>Referrals for emergency obstetric and new-born care</td>
<td>413 (97.2%)</td>
<td>205 (90.7%)</td>
<td>618 (94.9%)</td>
</tr>
<tr>
<td>Family Planning services (condoms, hormonal contraceptives)</td>
<td>332 (78.1%)</td>
<td>164 (72.6%)</td>
<td>496 (76.2%)</td>
</tr>
<tr>
<td>Immunization services</td>
<td>416 (97.9%)</td>
<td>122 (54.0%)</td>
<td>538 (82.6%)</td>
</tr>
<tr>
<td>Child follow up clinics</td>
<td>403 (94.8%)</td>
<td>176 (77.9%)</td>
<td>579 (88.9%)</td>
</tr>
<tr>
<td>TB services (specify which - e.g. DOTS, microscopy)</td>
<td>40 (9.4%)</td>
<td>42 (18.6%)</td>
<td>82 (12.6%)</td>
</tr>
<tr>
<td>HTC</td>
<td>143 (33.6%)</td>
<td>185 (69.0%)</td>
<td>301 (46.2%)</td>
</tr>
<tr>
<td>Lab Room</td>
<td>277 (65.2%)</td>
<td>171 (75.7%)</td>
<td>448 (68.8%)</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>16 (3.8%)</td>
<td>57 (25.2%)</td>
<td>73 (11.2%)</td>
</tr>
<tr>
<td>ANC Space</td>
<td>38 (8.9%)</td>
<td>102 (45.1%)</td>
<td>140 (21.5%)</td>
</tr>
<tr>
<td>ANC Room</td>
<td>402 (94.6%)</td>
<td>178 (78.8%)</td>
<td>580 (89.1%)</td>
</tr>
<tr>
<td>Space for Confidential Counselling</td>
<td>359 (84.5%)</td>
<td>159 (70.4%)</td>
<td>518 (79.6%)</td>
</tr>
<tr>
<td>Maternity Room</td>
<td>401 (94.4%)</td>
<td>209 (92.5%)</td>
<td>610 (93.7%)</td>
</tr>
<tr>
<td>Pharmacy Store</td>
<td>315 (74.1%)</td>
<td>154 (68.1%)</td>
<td>469 (72.0%)</td>
</tr>
<tr>
<td>Pharmacy Dispensary</td>
<td>22 (5.2%)</td>
<td>64 (28.3%)</td>
<td>86 (13.2%)</td>
</tr>
<tr>
<td>HTC Adherence Counselling</td>
<td>334 (78.6%)</td>
<td>137 (60.6%)</td>
<td>471 (72.4%)</td>
</tr>
<tr>
<td>Medical Records</td>
<td>265 (62.4%)</td>
<td>140 (61.9%)</td>
<td>405 (62.2%)</td>
</tr>
<tr>
<td>DOTS Clinic</td>
<td>2 (0.5%)</td>
<td>10 (4.4%)</td>
<td>12 (1.8%)</td>
</tr>
<tr>
<td>DOTS waiting area</td>
<td>2 (0.5%)</td>
<td>9 (4.0%)</td>
<td>11 (1.7%)</td>
</tr>
</tbody>
</table>
6.4 QUALITATIVE FINDINGS

Health workers were interviewed as part of the assessment process. The findings represent health worker perspectives and give an insight into issues that determine demand for health facility-based PMTCT services.

6.5.1 Most women prefer to deliver with TBAs, private clinics and churches

In the key informant interviews (KII) conducted with health workers in Abia State, indicated that many women prefer the services of TBAs and churches during deliveries even though these women usually attend ANC at the health facilities. Some of the reasons provided for this observation include a firm traditional belief in the abilities of the TBA, perceived cost of services at the health facilities, the long distance to the facilities and unavailability of staff especially at night. Table 7 below captures all of these themes as well as the verbatim quotes from respondents supporting these themes.
Table 7: Women prefer to patronize traditional birth attendants (TBAs), private clinics and churches

<table>
<thead>
<tr>
<th>THEMES</th>
<th>QUOTES</th>
</tr>
</thead>
</table>
| Women prefer to patronize traditional birth attendants (TBAs), private clinics and churches | “You see all these women? You won't see them here during delivery at all. They will all want to deliver at home.”
|                                                                        | “They prefer to come here (facility), some of them go to their churches to deliver.”                                                   |
| Why women prefer to deliver with TBAs                                | “Even though they come back here with bleeding and complete weakness, yet they will believe that it was for a different reason.”    |
|                                                                        | "They believe TBAs charge lower than PHCs.”                                                                                         |
|                                                                        | “The staff here does not work at night.”                                                                                             |
|                                                                        | “When they go to TBAs, often times there are complications and they had to run to us. It is safer for them to come here and deliver their babies to avoid such complications.” |
| Reasons for poor patronage of the health facilities                  | “Clients stopped coming because the staff are not always on ground.”                                                               |
|                                                                        | “This clinic was supposed to be sited here, but because of the present Counselor, he took it to his own community which is out of the community.” |
|                                                                        | “Look at where we are staying. It’s too small. We need a bigger space.”                                                            |
|                                                                        | “We don’t have enough staff and most times women come in the night and do not meet anyone.”                                         |
|                                                                        | “This place is far from the village. We even find it difficult coming to work because of the distance.”                              |
6.5.2 Some health facilities are well patronized

Perceived reasons why some facilities were well patronized included a good relationship with the community including the Village Development Committee (VCD) as well as security in the neighbourhood. These themes with verbatim quotes are summarized in Table 8 below.

Table 8: Reasons why some health facilities are well patronized

<table>
<thead>
<tr>
<th>THEMES</th>
<th>QUOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons for good patronage of health facility</td>
<td>“We don’t have any problem with anybody, we are all safe and free among ourselves in this community.”</td>
</tr>
<tr>
<td>Role of village/ward development committee</td>
<td>“The VDC has been very helpful. They always invite us for meetings to give health talks, they encourage the community to patronize us and they donate materials sometimes.”</td>
</tr>
<tr>
<td></td>
<td>“We always go to the people to talk to them and to encourage them on the importance of carrying out their deliveries here.”</td>
</tr>
<tr>
<td></td>
<td>“Some of the equipment are donated by the community.”</td>
</tr>
</tbody>
</table>

6.5.3 Perceived need of the facility in order to improve service quality

Health workers interviewed were of the opinion that better staffing of facilities, improved capacity building for staff as well as provision of better structures and social amenities will go a long way to improve service quality in the state (see Table 9).

Table 9: Respondents’ suggestions on improving service quality

<table>
<thead>
<tr>
<th>THEMES</th>
<th>QUOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved staffing</td>
<td>“The government should bring more qualified staff and supply drugs regularly to the facilities.”</td>
</tr>
<tr>
<td></td>
<td>“We need doctors in our facility.”</td>
</tr>
<tr>
<td>Capacity building</td>
<td>“We need to go for more training”</td>
</tr>
<tr>
<td></td>
<td>“We need more hands to assist us to work better.”</td>
</tr>
<tr>
<td>Provision of better structures</td>
<td>“We need the government to get us a better space to house the clinic.”</td>
</tr>
<tr>
<td></td>
<td>We want government to help construct better facilities that are closer to the people (village).”</td>
</tr>
<tr>
<td></td>
<td>“We need the government to get us better houses to live and work in.”</td>
</tr>
</tbody>
</table>
6.5 SCENARIOS FOR ELIGIBILITY FOR PMTCT SERVICES

To plan scale up of PMTCT services, a decision is to be made on the number of facilities meeting important eligibility criteria. Table 1 shows the number of assessed facilities which met these criteria when applying different cut-offs. The criteria relate specifically to basic health manpower requirements for PMTCT. Percentages are calculated based on all 651 facilities assessed.

National standards for PMTCT stipulate centres must have at least one doctor, a nurse, two other clinical health staff in addition to one each of a pharmacy, laboratory and record officer. Only 44 of the 651 facilities met this standard. This number falls well short of that required to saturate Abia State with PMTCT services. Considering staff who can provide clinical care to include nurses and trained community health workers such as Community Health Officers (CHOs) and Community Health Extension Workers (CHEWs), 259 facilities have at least 4 such clinical care providers out of which 113 are public and 146 private corresponding to almost 40% of surveyed health facilities.

Table 10: Scenarios using different cut-offs – HR related

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>CUT-OFF</th>
<th>OWNERSHIP</th>
<th>NUMBER OF FACILITIES ELIGIBLE</th>
<th>% OF TOTAL (N=651) FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have ANC but no PMTCT</td>
<td></td>
<td>Public</td>
<td>425</td>
<td>65.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>226</td>
<td>34.7</td>
</tr>
<tr>
<td>Availability of Doctors</td>
<td>At least 1</td>
<td>Public</td>
<td>13</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>183</td>
<td>28.1</td>
</tr>
<tr>
<td>Availability of Nurses/Midwives</td>
<td>At least 4</td>
<td>Public</td>
<td>26</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>50</td>
<td>7.7</td>
</tr>
<tr>
<td>Staff who can give clinical care</td>
<td>At least 4</td>
<td>Public</td>
<td>113</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>146</td>
<td>22.4</td>
</tr>
<tr>
<td>Minimum HR complement 1</td>
<td>At least 4 clinical care, 1 pharmacy, 1 lab, 1 records</td>
<td>Public</td>
<td>8</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>37</td>
<td>5.7</td>
</tr>
<tr>
<td>Minimum HR complement 2</td>
<td>At least 1 doctor, 4 nursing care, 1 pharmacy, 1 lab, 1 records</td>
<td>Public</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>36</td>
<td>5.5</td>
</tr>
<tr>
<td>Minimum HR complement 3 (National standard for PMTCT)</td>
<td>1 doctor, 1 nurse, 2 other health workers, 1 pharmacy, 1 lab, 1 records</td>
<td>Public</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>39</td>
<td>6.0</td>
</tr>
<tr>
<td>ANC attendance</td>
<td>Above state average</td>
<td>Public</td>
<td>21</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private</td>
<td>74</td>
<td>11.4</td>
</tr>
</tbody>
</table>
Geospatial representation of facilities

The maps below show the location of sites currently providing PMTCT services, assessed facilities, facilities meeting state-defined criteria for PMTCT service provision and the PMTCT landscape if facilities meeting state-defined criteria are added to existing sites providing PMTCT services.

Figure 3: Map showing currently existing PMTCT (ARVs) services

Legend

- Health facility
- Coverage 2013

- **0 - 24%**
- **25 - 49%**
- **50 - 74%**
- **75 - 100%**
- LGA Boundaries
Figure 4: Map showing spread of assessed facilities (with ANC but no PMTCT)
Figure 5: Map showing spread of facilities meeting national HR criteria for PMTCT services
Figure 6: Map showing facilities meeting state-defined HR criteria for PMTCT services
Figure 7: Map showing 2014 coverage scenario with current PMTCT sites and scale-up to those meeting national HR criteria
Figure 8: Map showing 2014 coverage scenario with current PMTCT sites + scale-up to sites meeting state-defined HR criteria
Figure 9: Map showing coverage scenario with current PMTCT sites + sites earmarked for scale-up towards eMTCT
The findings of this assessment provide crucial information for effective scale up of PMTCT services in Abia state. PMTCT service coverage in the state is poor with wide coverage gaps. There are human and infrastructural gaps which currently limit HTC and would potentially threaten successful PMTCT scale up in the state. The state is experiencing dual challenges of poor health facility utilisation and preference for births outside the health system should be addressed.

Private health facilities and the informal health sector play an important role in the delivery of MCH services.

A comprehensive PMTCT plan based on collaborative efforts between the Government of Abia, donor organisations, implementing partners, civil society and other health system stakeholders should be developed to aid the achievement eMTCT in the state.

Facilities must be supported to provide ANC and delivery services to the population. This should include short and long term measures to address the human resource gaps identified for PMTCT and the wider MCH service provision.

The state PMTCT plan must engage communities and important health service providers such as TBAs to expand access to HTC. Demand creation and other strategies are necessary to encourage facility delivery. These will be necessary to ensure optimal utilisation of scale-up services for eMTCT.
Appendix

Appendix 1: Human resources and service utilization disaggregated by level of facility

<table>
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<tr>
<th>DOMAIN</th>
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## Appendix 2: Human resources and service utilization disaggregated by facility ownership

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## Appendix 3: Human Resource Gap for Doctors by LGAs

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Appendix 4: Coverage gap for Nurses by LGA

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Appendix 5: Coverage Gap Community Workers in assessed facilities by LGAs (Trained Health Workers – CHOs, CHEWs etc.)

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Appendix 8: Coverage Gap Pharmacy Staff in assessed facilities by LGAs

<table>
<thead>
<tr>
<th>S/N</th>
<th>LGAS</th>
<th>PUBLIC (N = 425)</th>
<th>PRIVATE (N = 226)</th>
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<tbody>
<tr>
<td></td>
<td>Total no of facilities</td>
<td>Facilities with at least one Lab worker</td>
<td>Number of Lab workers needed to meet national standard</td>
</tr>
<tr>
<td>1</td>
<td>Aba North</td>
<td>7</td>
<td>6</td>
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<tr>
<td>2</td>
<td>Aba South</td>
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<td>3</td>
<td>Arochukwu</td>
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<td>4</td>
<td>Bende</td>
<td>48</td>
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<tr>
<td>5</td>
<td>Ikwuano</td>
<td>31</td>
<td>0</td>
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<td>6</td>
<td>Isiala-Ngwa North</td>
<td>27</td>
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<tr>
<td>7</td>
<td>Isiala-Ngwa South</td>
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<td>8</td>
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<td>9</td>
<td>Obi Ngwa</td>
<td>30</td>
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<tr>
<td>10</td>
<td>Ohafia</td>
<td>27</td>
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</tr>
<tr>
<td>11</td>
<td>Osisioma Ngwa</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Ugwunagbo</td>
<td>22</td>
<td>4</td>
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<tr>
<td>13</td>
<td>Ukwa East</td>
<td>16</td>
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<tr>
<td>14</td>
<td>Ukwá West</td>
<td>11</td>
<td>1</td>
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<td>15</td>
<td>Umuahia North</td>
<td>26</td>
<td>2</td>
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<tr>
<td>16</td>
<td>Umuahia South</td>
<td>26</td>
<td>3</td>
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<td>17</td>
<td>Umu-Nneochi</td>
<td>29</td>
<td>1</td>
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<td></td>
<td>Total</td>
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### Appendix 9: Staff requirements for all assessed facilities below national standard

<table>
<thead>
<tr>
<th>S/N</th>
<th>HEALTH WORKER CADRE</th>
<th>NUMBER NEEDED TO MEET NATIONAL STANDARD IN PUBLIC FACILITIES</th>
<th>NUMBER NEEDED TO MEET NATIONAL STANDARD IN PRIVATE FACILITIES</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Doctors</td>
<td>412</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>Nurses</td>
<td>227</td>
<td>48</td>
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<tr>
<td>3</td>
<td>Trained Health Workers – CHO, CHEW etc.</td>
<td>412</td>
<td>52</td>
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<tr>
<td>4</td>
<td>Record Officers</td>
<td>380</td>
<td>48</td>
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<tr>
<td>5</td>
<td>Lab. Scientist/ technicians</td>
<td>369</td>
<td>84</td>
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<tr>
<td>6</td>
<td>Pharmacist/pharmacy technicians</td>
<td>395</td>
<td>166</td>
</tr>
</tbody>
</table>
Appendix 10: List of contributors

**ABIA STATE GOVERNMENT**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Christy Nwogwugwu</td>
<td></td>
</tr>
<tr>
<td>Dr. Rock Hemuka</td>
<td></td>
</tr>
<tr>
<td>Chief Franklin Orji</td>
<td></td>
</tr>
<tr>
<td>Rev. P C Nwabuko</td>
<td></td>
</tr>
<tr>
<td>C C Eke</td>
<td></td>
</tr>
<tr>
<td>Charity Agwu</td>
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<tr>
<td>Chijioke Udeogu</td>
<td></td>
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<tr>
<td>Chisom Ogbasugo</td>
<td></td>
</tr>
<tr>
<td>Dr Azubuike Ikonne</td>
<td></td>
</tr>
<tr>
<td>Dr Mrs Egwuemwe</td>
<td></td>
</tr>
<tr>
<td>Dr Nwodondo</td>
<td></td>
</tr>
<tr>
<td>Dr Odoemetam</td>
<td></td>
</tr>
<tr>
<td>Dr Okey Okorofor</td>
<td></td>
</tr>
<tr>
<td>Dr Okorie Onoka</td>
<td></td>
</tr>
<tr>
<td>Dr Omende Kelechi</td>
<td></td>
</tr>
<tr>
<td>Dr Orikara</td>
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<tr>
<td>Dr Ugochukwu</td>
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<tr>
<td>Dr Ukoha</td>
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</tr>
<tr>
<td>Elder Emenike Ibe</td>
<td></td>
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<tr>
<td>I C Egwuogu</td>
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<td>Ihuoma Odoemena</td>
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<tr>
<td>Jerry Imaga</td>
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<tr>
<td>Mr Chiedebere Nwogwugwu</td>
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<tr>
<td>Mr Solomon Offor</td>
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<tr>
<td>Mrs Ada Nwuche</td>
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<tr>
<td>Mrs Akunna</td>
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<tr>
<td>Mrs Augustina Nwachukwu</td>
<td></td>
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<tr>
<td>Mrs Elizabeth Adiele</td>
<td></td>
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<tr>
<td>Mrs May Madukwe</td>
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<tr>
<td>Mrs Ngozi Chiege</td>
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<td>Mrs Nnenna Okorocha</td>
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<td>Ngozi Eke</td>
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<td>Nkechi Anuriegbe</td>
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**FHI 360**

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<tr>
<td>Phyllis Jones-Changa</td>
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<tr>
<td>Dr Kwasi Torpey</td>
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<td>Dr Robert Chiegil</td>
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<td>Dr Hadiza Khamofu</td>
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<td>Dr Edward Kola Olaadele</td>
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<td>Dr Mariya Saleh</td>
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<td>Dr Uche Ralph-Opara</td>
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<td>Dr Maurice Ekanem</td>
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<td>Simpson Tumwikirize</td>
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<tr>
<td>Dr Justina Ifeorah</td>
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<td>Samsu Gombwer Olamide Agbaje</td>
<td>Williams Ojo</td>
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<tr>
<td>Dr Tunde Olaiya</td>
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<tr>
<td>Mrs Okache Adama</td>
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</tr>
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<td>Dr Herbert Onuoha</td>
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<tr>
<td>Joseph Okoegwale</td>
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<td>Tony IduDr Olujide</td>
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<td>Angela Uche Eze</td>
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<tr>
<td>Garba Walong</td>
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<tr>
<td>Dr Layi Jaiyeola</td>
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<tr>
<td>Dr Akin Fasanmi</td>
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</tr>
<tr>
<td>Ugoh Emmanuel Ikechukwu</td>
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<td>Mahmud Khaled</td>
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<td>Chris Obaminuru</td>
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<tr>
<td>Yoila S. Raymond</td>
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<td>Evelyn Ngige</td>
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<td>Aisha Yusuf</td>
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<td>Rebecca Dirks</td>
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<td>Jill Vitick</td>
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**CONSULTANTS**

<table>
<thead>
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<th>Name</th>
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<tbody>
<tr>
<td>Dr Oluwafemi Popoola</td>
<td></td>
</tr>
<tr>
<td>Dr Oluwaseun Akinwemi</td>
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</table>
Glossary

**Acquired Immune Deficiency Syndrome (AIDS)** – This is a disease of the human immune system caused by HIV infection.

**Antiretroviral drugs (ARVs)** – Drugs used to treat HIV/AIDS.

**Epidemic** – The occurrence of a disease or health-related event above what is normally expected for the location and the period.

**Human Immunodeficiency Virus (HIV)** – The virus that causes AIDS.

**Key Informant Interview (KII)** – A qualitative research method in which individuals that are knowledgeable about an issue of interest are interviewed in order to obtain pertinent information.

**Primary Health Care (PHC)** – This is defined as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination".

**Prevalence** – The proportion of a population found to have a condition. It is arrived at by comparing the number of people found to have the condition with the total number of people studied, and is usually expressed as a fraction, as a percentage or as the number of cases per 10,000 or 100,000 people.

**Sexually Transmitted Infections** – These are illnesses that have a significant probability of transmission between humans by means of sexual behaviour e.g. gonorrhoea, syphilis etc.