Report of the Kano

# STATE-WIDE RAPID HEALTH FACILITY ASSESSMENT

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

June 2013

GOVERMENT OF KANO
NIGERIA

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# Foreword

Pregnant women living with HIV are at high risk of transmitting HIV to their infants and without any interventions, between 25% and 45% of infants may become infected through Mother to Child Transmission (MTCT). Nearly every minute, a baby is born with HIV, a child dies of AIDS every two minutes and one of every five maternal deaths in Africa is HIV-related. As a mode of transmission, MTCT accounts for well over 90% of new infections among infants and young children. The overall risk of MTCT can be reduced to as low as 2% by a package of evidence-based Prevention of Mother to Child Transmission interventions.

At a High Level Meeting on AIDS in New York in 2011, the World Leaders including President Good Luck Jonathan committed to a global action plan that will make significant strides towards eliminating new HIV infections among children by 2015 and keeping HIV infected mothers alive. However, worldwide, only 20 % of pregnant women that need ARVs for PMTCT have access to the services leaving a gap of 80 %. Twenty Two (22) countries that account for 90% of that gap are the priority countries targeted in the global plan. Nigeria is a leading priority country as it bears 30 % of that 90 % gap. Nigeria as a country identified priority states that account for over 70% of its gap – called 12+1 states. Nigeria must scale up PMTCT particularly in 12+1 states to meet the global and national PMTCT goals.

Kano State is among the priority states based on the state's the huge population and high fertility rate. The state has a total of 1,346 Health Facilities (HF) comprising 2 tertiary, 34 secondary, 1066 Primary and 244 private Health Facilities across the 44 Local Government Areas (LGAs). It is worth noting that only 101 HFs across 25 LGAs provide PMTCT services. This is grossly inadequate and in addition, there is inequity in service provision - 30 out of 34 SHF (majority urban), 65 out of 1066 PHCs (majority rural) and 6 private HFs provide PMTCT services. This infers that most rural pregnant women do not have access to PMTCT leaving a huge gap. Consequently, the state must rapidly accelerate the provision of quality PMTCT services across the 44 LGAs.

In order to plan effective scale up, the SMoH, SACA, SPHCMB and HMB led by the State Implementation Team with technical/Logistics support by the Lead PEPFAR implementing partners fhi360 and IHVN conducted a Statewide Rapid Health Facility Assessment (RHFA) of all HFs.in Kano State irrespective of ownership or level of care. The gateway to PMTCT is antenatal care, thus, only facilities providing ANC but no PMTCT qualify for assessment

The assessment sought to measure the current state of readiness of the eligible facilities to initiate PMTCT by meeting the minimum criteria to provide ARVs for PMTCT. Parameters assessed include the Human Resource, infrastructure, enabling environment, available services and utilization, service needs and feasibility for expansion. The assessment also sought to explore provider and client's perspectives on barriers to uptake of ANC and PMTCT services. The physical location of health facilities using global positioning system (GPS) coordinates ware also mapped. The result of the RHFA is a veritable tool that will guide us to plan effective scale up of PMTCT to attain elimination of MTCT in Kano State.


Dr. Abubakar Labaran Yusuf

*Honorable Commissioner for Health*
*Kano State*

# Acknowledgements

Kano State Agency for the Control of AIDS must start by commending His Excellency the Executive Governor of Kano State Engineer Rabi'u Musa Kwankwaso for institutionalizing and strengthening Primary Health and HIV care by establishing Kano State Agency for the Control of AIDS (KSACA) and the Primary Healthcare Management Board (PHCMB) to facilitate effective implementation and coordination of HIV services, quality health service at the primary level and ultimately improve the socioeconomic wellbeing of the people.

The leadership and supportive role of the Honorable Commissioner of Health Dr. Abubakar Labaran Yusuf in steering the affairs of the health sector in general and HIV/AIDS services in particular especially the moral support for the statewide facility assessment is highly acknowledged. We sincerely appreciate him for the opportunity given to KSACA to lead the assessment process.

We appreciate the support from our lead HIV USG implementing partners - Institute of Human Virology, Nigeria (IHVN) and Family Health International (FHI 360) and their donor agencies for the purposeful collaboration and for providing technical and financial support for this giant exercise.

We extend our sincere appreciation to the staff and management of PHCMB, Kano State Hospitals Management Board (HMB) and State Ministry of Health for the roles they played in making the assessment exercises a success. Specifically, we acknowledge the MCH and M&E LGA focal persons from the PHCMB, staff from HMB, KSACA, SMoH and other individuals from IHVN and FHI 360 who participated as assessors in the exercise for their efforts.

We also want to acknowledge the contributions and support of the FHI 360 and IHVN Kano office teams led by Dr. Saifuddin Mora, the FHI 360 State Manager and Dr. John Kwari, IHVN Regional Manager respectively. Suwaiba Ibrahim, PMTCT Senior Program Officer, IHVN needs special mention for the role she played throughout the assessment exercise. The coordinating effort by Dr. Seun Asala of FHI 360 Abuja Head Office who worked tirelessly throughout the period of the exercise to ensure the successful conduct and careful compilation of results is acknowledged.

The inputs made by the Executive Secretaries and Directors from HMB and PHCMB and the directors from SMoH and KSACA who despite their tight schedules spared sometime to come to Abuja for the validation of this document are commended and appreciated.

We are indebted to express our gratitude for the commitment, organisation and active participation of the IHVN and FHI 360 country teams at the statewide assessment validation meeting. Special commendation is given to the team of consultants for the professionalism exhibited in the analysis of the assessment reports.

Finally, we sincerely appreciate all persons including the staff of KSACA that have contributed in any way to the success of this giant exercise of statewide facility assessment for PMTCT scale-up across 44 LGAs – together we shall eliminate mother-to-child transmission of HIV in Kano State.

Dr. Sa'adatu Sa'idu

*Director General, KSACA*

# Acronyms

| | |
|---|---|
| **AIDS** | Acquired Immunodeficiency Syndrome |
| **ANC** | Antenatal Care |
| **ARV** | Antiretroviral |
| **CHEW** | Community Health Extension Worker |
| **CSO** | Civil Society Organisation |
| **DOTS** | Directly Observed Therapy Short course |
| **eMTCT** | Elimination of Mother-to-Child Transmission of HIV |
| **FBO** | Faith Based Organisation |
| **FHI 360** | Family Health International |
| **FSW** | Female Sex Worker |
| **GA** | Gestational Age |
| **HIV** | Human Immunodeficiency Virus |
| **HR** | Human Resources |
| **HTC** | HIV Testing and Counselling |
| **IP** | Implementing Partner |
| **IPTp** | Intermittent Preventive Therapy for Malaria in Pregnancy |
| **JCHEW** | Junior Community Health Extension Worker |
| **LACA** | Local Government Agency for the Control of HIV/AIDS |
| **LGA** | Local Government Area |
| **M&E** | Monitoring and Evaluation |
| **MCH** | Maternal and Child Health |
| **MTCT** | Mother-to-Child Transmission of HIV |
| **NGO** | Non-Governmental Organisation |
| **NPC** | National Population Commission |
| **OPD** | Outpatient Department |
| **PEPFAR** | President's Emergency Plan for AIDS Relief |
| **PHC** | Primary Health Centre |
| **PLHIV** | People Living with HIV/AIDS |
| **PMTCT** | Prevention of Mother-to-Child Transmission of HIV |
| **SACA** | State Agency for the Control of HIV/AIDS |
| **SASCP** | State AIDS and STI Control Program |
| **SMOH** | State Ministry of Health |
| **SURE-P** | Subsidy Re-investment and Empowerment Program |
| **TB** | Tuberculosis |
| **TBA** | Traditional Birth Attendant |
| **USAID** | United States Agency for International Development |
| **VDC** | Village Development Committee |
| **WDC** | Ward Development Committee |

# Executive Summary

Kano State in Nigeria's geopolitical North West is the economic and commercial nerve center of the region. It is the country's most populated state. Despite a relatively low HIV prevalence of 3.4%, a large population size and high fertility rate make Kano State one of the 12+1 states accounting for 70% of the national burden of mother-to-child transmission of HIV (MTCT).

The Government of Nigeria has committed to eliminating MTCT by 2015. In pursuit of this goal, prevention of mother-to-child transmission (PMTCT) service coverage and access are being scaled up in these 12+1 priority states. This state-wide rapid health facility assessment was conducted to identify health facilities which provide antenatal care (ANC) but not antiretrovirals (ARVs) for PMTCT. It aimed to document health human resource, service provision and utilizationutilization indices with the aim of engaging these facilities in scale-up efforts to boost PMTCT coverage and access.

All eligible facilities across the mix of public/private ownership and primary/secondary/tertiary levels of healthcare were surveyed using qualitative and quantitative methods. In total, 499 eligible facilities were identified and surveyed. Geospatial coordinates of these facilities were collected and are mapped to show site spread and aid decisions to maximise PMTCT coverage.

Almost half of the visited facilities did not conduct ANC and several ANC facilities had no records of deliveries taking place. Serious human health resource gaps were observed for all cadres of staff necessary for optimal delivery of PMTCT and MCH services with only 22 (4.4%) of assessed facilities meeting national minimum human resource complements for PMTCT service provision. Some facilities also lacked necessary infrastructure for PMTCT. Health workers reported a significant percentage of deliveries occur outside the health facility, in homes and with traditional birth attendants (TBAs). Reasons for this included cultural beliefs, logistic problems with 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 TBAs which increase HIV testing and counselling (HTC), ANC and PMTCT use should also be explored.

SECTION

# 1 Background

Kano State is one of the preeminent Northern states in Nigeria. It was created by the military government of General Yakubu Gowon in 1967. It had a population of 9,410,288 based on the official 2006 National Population and Housing Census, which makes it the most populous state in the country. Growth is estimated at 3.1% per annum. Projected figures for 2012 were: a total population of 11,215,688; of which 2,467,451 (22%) are women of child-bearing age (15-49 years old) and children under five years and below one year of age were 2,175,458 and 453,092, respectively. The annual total number of pregnant women (5% of the total) in the state translates to about 560,784. The population is mainly Muslim; Christians and followers of other non-Muslim religions form a small part of the population.

Kano State is made up of forty-four local government areas (LGAs). The state's capital is located in Kano Metropolis within the semi-arid Sudan savannah zone. The metropolis has expanded over the years to become the third largest conurbation in Nigeria with a population of about three million. It is made up of eight LGAs: Municipal, Gwale, Dala, Tarauni, Nassarawa, Fagge, Ungogo and Kumbotso. The city is the commercial and business capital of Northern Nigeria and hosts an international airport.

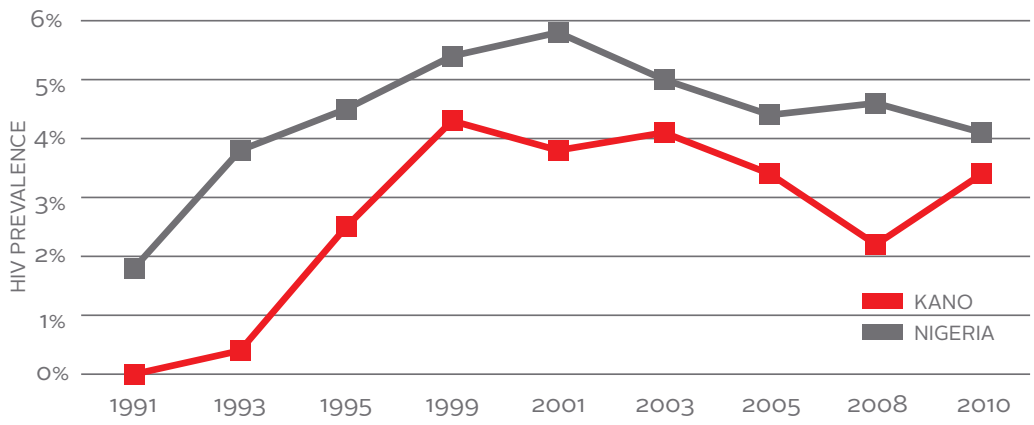
Agriculture is one of the mainstays of the Kano economy and it is famed for groundnut production and export. It is the most irrigated state in the country with more than three million hectares of cultivable land.

SECTION

# 2 Kano State HIV Profile

The state HIV prevalence as documented in the National HIV Sentinel Survey has varied, with successive peaks and troughs. From zero prevalence in 1991, peaks of 4.3% and 4.1% were recorded in 1999 and 2003, with the lowest record, 2.2% in 2008. The 2010 ANC survey documented a 3.4% HIV prevalence. The 2007 Integrated Biological and Behavioural Surveillance Survey (IBBSS) described high risk groups as having prevalence rates of the following: 49.1% among brothel-based female sex workers (FSWs), 44.1% among non-brothel-based FSW, 11.7% among men who have sex with men (MSM), 10.1% among injection drug users (IDUs), 4.4% among police, 3.7% among armed forces and 1.4% among transport workers.

## Figure 1: Trend of State HIV Prevalence among Pregnant Women Compared to the National 1991 - 2010




SOURCE: FEDERAL MOH TECHNICAL REPORT 2010 NATIONAL HIV SERO-PREVALENCE SENTINEL SURVEY

### 2.1 MTCT PROFILE FOR KANO STATE

Though the HIV prevalence in Kano is lower than the national average, the high population and high fertility rate in the state make it one of the 12 + 1 states that contribute 70% of Nigeria's MTCT burden. These 12 + 1 states have been included as phase 1 of Nigeria's elimination of mother-to-child transmission (eMTCT) efforts.

The number of HIV infected pregnant women is estimated at 19,067 (based on a state HIV prevalence of 3.4% and estimated population of 560,784 pregnant women). Approximately one-third of these HIV affected pregnancies will result in transmission of HIV to the baby without effective PMTCT interventions. These potential 6,355 paediatric infections are the main focus of the Kano eMTCT strategy which aims to prevent such all such vertical transmission by 2015. Table 1 shows a profile of MTCT burden and PMTCT coverage in Kano LGAs.

Maternal HIV burden and PMTCT service coverage for each LGA was determined using state HIV prevalence, LGA population, number of facilities providing ANC and PMTCT services. The LGA rank score on each domain (maternal HIV burden and PMTCT coverage) was summed to derive a composite measure of LGA prioritization for scale-up. Higher rank scores indicate larger burden/ lower coverage and high priority for scale-up. The LGAs with highest maternal HIV burden are Nasarawa, Dala, Kano Municipal, Ungogo and Gwale. However, PMTCT service coverage gaps were widest in Makoda, Bunkure, Garko, Warawa and Garum Mallam LGAs; all of which have no facilities providing PMTCT services. Bichi, Makoda, Rogo, Sumaila and Dawakin Kudu LGAs are the most vulnerable based on the composite rank index (in decreasing rank order) and are the highest priority for scale-up efforts (See Table 1).

## Table 1: LGA ranking of MTCT burden and PMTCT coverage in Kano State

| LGAS | MTCT BURDEN | | | PMTCT SERVICE COVERAGE GAP | | | RANK SUM [RANK 1 + RANK 2] |
|---|---|---|---|---|---|---|---|
| | HIV prevalence | Estimated number of HIV+ pregnant women | Rank 1 (number of HIV+ pregnant women) | Number of sites with ANC services | Proportion without PMTCT services | Rank 2 (service gap) | |
| AJINGI | 3.4% | 350 | 17 | 4 | 75% | 15 | 32 |
| ALBASU | 3.4% | 381 | 20 | 12 | 83% | 20 | 40 |
| BAGWAI | 3.4% | 328 | 15 | 10 | 90% | 28 | 43 |
| BEBEJI | 3.4% | 389 | 22 | 11 | 73% | 14 | 36 |
| BICHI | 3.4% | 564 | 37 | 19 | 95% | 37 | 74 |
| BUNKURE | 3.4% | 354 | 18 | 5 | 100% | 44 | 62 |
| DALA | 3.4% | 849 | 43 | 18 | 83% | 20 | 63 |
| DAMBATTA | 3.4% | 427 | 26 | 11 | 82% | 18 | 44 |
| DAWAKIN KUDU | 3.4% | 457 | 31 | 17 | 94% | 34 | 65 |
| DAWAKIN TOFA | 3.4% | 499 | 34 | 22 | 91% | 30 | 64 |
| DOGUWA | 3.4% | 306 | 12 | 12 | 92% | 32 | 44 |
| FAGGE | 3.4% | 406 | 23 | 31 | 81% | 17 | 40 |
| GABASAWA | 3.4% | 428 | 27 | 14 | 86% | 23 | 50 |
| GARKO | 3.4% | 328 | 15 | 15 | 100% | 44 | 59 |
| GARUM MALLAM | 3.4% | 241 | 4 | 9 | 100% | 44 | 48 |
| GAYA | 3.4% | 421 | 25 | 24 | 88% | 27 | 52 |
| GEZAWA | 3.4% | 573 | 38 | 17 | 82% | 18 | 56 |
| GWALE | 3.4% | 726 | 40 | 12 | 50% | 4 | 44 |
| GWARZO | 3.4% | 372 | 19 | 17 | 94% | 34 | 53 |
| KABO | 3.4% | 311 | 13 | 13 | 85% | 22 | 35 |
| KANO MUNICIPAL | 3.4% | 753 | 42 | 20 | 50% | 4 | 46 |
| KARAYE | 3.4% | 292 | 10 | 5 | 60% | 6 | 16 |
| KIBIYA | 3.4% | 281 | 7 | 9 | 44% | 2 | 9 |
| KIRU | 3.4% | 542 | 36 | 11 | 64% | 10 | 46 |
| KUMBOTSO | 3.4% | 597 | 39 | 21 | 86% | 23 | 62 |
| KUNCHI | 3.4% | 223 | 3 | 12 | 92% | 31 | 34 |
| KURA | 3.4% | 290 | 9 | 25 | 96% | 39 | 48 |
| MADOBI | 3.4% | 279 | 6 | 15 | 60% | 6 | 12 |
| MAKODA | 3.4% | 446 | 29 | 14 | 100% | 44 | 73 |
| MINJIBIR | 3.4% | 445 | 28 | 3 | 33% | 1 | 29 |
| NASARAWA | 3.4% | 1,210 | 44 | 39 | 72% | 13 | 57 |
| RANO | 3.4% | 301 | 11 | 7 | 86% | 23 | 34 |
| RIMIN GADO | 3.4% | 210 | 2 | 5 | 60% | 6 | 8 |

Table 1: LGA ranking of MTCT burden and PMTCT coverage in Kano State *cont'd*

| LGAS | MTCT BURDEN | | | PMTCT SERVICE COVERAGE GAP | | | RANK SUM [RANK 1 + RANK 2] |
|---|---|---|---|---|---|---|---|
| | HIV prevalence | Estimated number of HIV+ pregnant women | Rank 1 (number of HIV+ pregnant women) | Number of sites with ANC services | Proportion without PMTCT services | Rank 2 (service gap) | |
| ROGO | 3.4% | 462 | 32 | 20 | 95% | 37 | 69 |
| SHANONO | 3.4% | 282 | 8 | 10 | 90% | 28 | 36 |
| SUMAILA | 3.4% | 508 | 35 | 16 | 94% | 34 | 69 |
| TAKAI | 3.4% | 411 | 24 | 13 | 92% | 33 | 57 |
| TARAUNI | 3.4% | 450 | 30 | 25 | 68% | 12 | 42 |
| TOFA | 3.4% | 200 | 1 | 18 | 67% | 11 | 12 |
| TSANYAWA | 3.4% | 320 | 14 | 5 | 60% | 6 | 20 |
| TUDUN WADA | 3.4% | 464 | 33 | 4 | 75% | 15 | 48 |
| UNGOGO | 3.4% | 742 | 41 | 21 | 86% | 23 | 64 |
| WARAWA | 3.4% | 267 | 5 | 16 | 100% | 44 | 49 |
| WUDIL | 3.4% | 383 | 21 | 11 | 45% | 3 | 24 |
| **Total** | **3.4%** | **19,067** | | **638** | | | |

SECTION 3

# Response to the HIV Epidemic

Kano State has been at the fore front in the fight against HIV/AIDS since the onset of the epidemic in the country. The State has instituted programmes and structures to facilitate the prevention and control of HIV as well as mitigate the socio-economic consequences on infected and affected individuals in the State.

In 1988, following a directive by the Federal Ministry of Health, the Kano State Ministry of Health (SMoH) established the State HIV/AIDS/STIs Control Program unit (SASCP) which mainly focused on the health sector responses (HSR) to HIV and other sexually transmitted infections (STIs).

In 2001, the State government under His Excellency Engr. Rabi'u Musa Kwankwaso established a broader multi-sectoral Kano State Action Committee on AIDS (KSACA) under the SMoH to coordinate multisectoral responses as requested by the presidency.

HIV programs in the state until recently have been largely donor driven. Between 1988 and 2003, activities conducted by the SMoH in collaboration with partners mainly focused on community sensitization/mobilization on HIV/AIDS, HIV counseling and testing, stigma reduction and advocacy to community gatekeepers and policy makers.

Commencement of HIV treatment services (ART) in public facilities in the state began in 2003 as a pilot at Aminu Kano Teaching Hospital with funding from US Government's Centers for Disease Control and Prevention (CDC) and implemented through the Institute of Human Virology, Nigeria.

In 2004, USAID through the Family Health International (FHI)-managed Global HIV/AIDS Initiative, Nigeria (GHAIN) project came to partner with government for HIV treatment in secondary health facilities. Since then, the state had witnessed an influx of other USG funded partners as well as Global Fund (GF) sub-recipients.

The state's health systems including HIV programs have continued to flourish under the administration of His Excellency, Engineer Rabi'u Musa Kwankwaso. The State AIDS/STI Control Program/Kano State Action Committee on AIDS recorded an appreciable increase in the number of sites activated and/or upgraded as well as in the number of individuals reached with HIV services.

LGAs providing HIV/AIDS services in the state have continued to increase over the years, this includes HTC, PMTCT and comprehensive ART facilities. This is mainly due to stronger collaboration and better coordination of donor programs by SASCP/KSACA as well as improved human resources for health in the health facilities. As part of long term measures to address the critical human resource needs, the state government has established additional Schools of Nursing, Midwifery and Health Technology while the State University of Technology established a faculty of Medicine. In addition, the Kano State free MCH service is strengthened and aims to increase uptake of PMTCT services in the states. In June 2012, His Excellency, Engineer Rabi'u Musa Kwankwaso signed into law the bill establishing Kano State Agency for the Control of AIDS. In addition, the government also established the State Primary Health Care Management Board (SPHCMB). These agencies will in no small measure facilitate the provision of HIV/AIDS and other primary health care services in the state.

As part of efforts to ensure ownership and sustainability of the HIV program, the state government has approved N68,880,400.00 as per the KSACA work plan to conduct planned activities.

The SPHCMB is also taking steps to improve the human resource for health in the primary health centers (PHCs) while KSACA has taken lead in HIV service delivery, putting in place relevant technical working groups (TWGs) and structures to facilitate the implementation, coordination, monitoring and evaluation of HIV services in all sectors including donor funded projects.

The Kano State HIV/AIDS Implementation Team (KSIT) under the leadership of KSACA was inaugurated by the Hon. Commissioner of Health in March 2012 and leads the implementation and routine management, monitoring and supervision of donor supported activities.

SECTION

# 4 Assessment Goal and Objectives

### 4.1 GOAL

The goal of this assessment is to derive a baseline profile of antenatal care services and thereby plan effective scale up of services to attain elimination of mother-to-child transmission of HIV in Kano State.

### 4.2 OBJECTIVES

1. Assess health facilities in Kano State and document those which meet minimum criteria to provide ARVs for PMTCT
2. To document the HR, infrastructure, enabling environment, services available and their utilization in assessed health facilities for the 12 months preceding the assessment
3. To explore provider perspectives on barriers to uptake of PMTCT services
4. To map the physical location of health facilities using global positioning system (GPS) coordinates

SECTION

# 5 Assessment Design

The assessment was a survey utilizing mixed (quantitative and qualitative) methods. A survey tool was used to collect quantitative data and guided key informant interviews provided qualitative data.

### 5.1 SAMPLING/SITE SELECTION

This assessment covered all listed public and private health facilities in Kano State which met defined criteria. A list of facilities was obtained from the Department of Planning, Research and Statistics (DPRS), State Ministry of Health. All facilities with antenatal services were included; excluded were facilities with current IP support providing ARVs for PMTCT or those with plans for PMTCT services in 2013 (supported through Global Fund or PEPFAR). In total, 101 facilities that had no support for PMTCT ARV provision were assessed as shown on the next page (Figure 2).

Box 1: Site selection

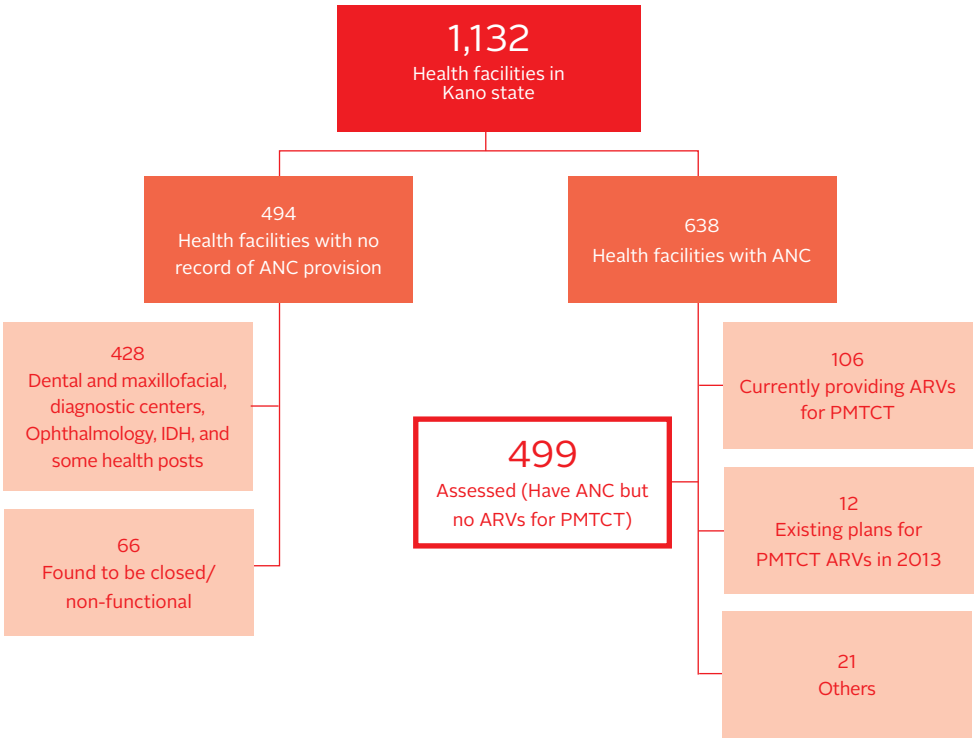
**Site Inclusion Criterion**

- Providing ANC

**Site Exclusion Criteria**

- Specialist hospitals such as neuropsychiatry, dental and maxillofacial hospitals.
- Facilities already providing ARVs for PMTCT or planned for 2013 (PEPFAR/Global Fund)

Figure 2: Location of assessed health facilities within the Kano State health system




## 5.2 STUDY TOOL

The Kano State 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. There were seven domains which covered PMTCT programmatic components for scale-up: 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 component of the survey consisted of key informant interviews with health workers 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 Kano State Ministry of Health led this assessment exercise with technical support from FHI 360 with funding from USAID. Following an orientation exercise, eight multidisciplinary teams (comprising staff from State Ministry of Health, SACA, 8 LGA Health Departments and FHI 360) were mobilised to visit every health facility identified. GPS devices were used to obtain location co-ordinates for facilities. Key informant interviews were conducted with the heads of facilities and where available, heads of laboratory and pharmacy units.

## 5.4 CHALLENGES

Some facilities were located in hard to reach communities but this was addressed by using vehicles with off-road capacity and two-wheelers in some instances.

SECTION

# 6 Findings

A total of 499 health facilities provided ANC services but not ARVs for PMTCT. These were subsequently assessed in full. It is important to note that the findings of this survey - especially the quantitative estimates and coverage gaps - are specific to the 499 facilities included in this assessment and may not represent the situation of all health facilities in the state. Systematic differences may exist between large facilities which were the early PMTCT/ART sites and the smaller units assessed at the time of this study.

## 6.1 FACILITY OWNERSHIP AND HEALTH CARE LEVEL

As show in Table 2, facilities were characterised based on the range of services provided, level of care (primary/secondary), and ownership of the institution (public/private). The majority of facilities were at the primary level, managed by the Primary Health Care Management Board (PHCMB). The Hospitals Management Board (HMB) owned nine of the assessed secondary facilities. However the majority of these, 49, operated as private-for-profit institutions.

Table 2: Characteristics of facilities with ANC and no IP support for ARVs in PMTCT

| OWNERSHIP | FACILITY TYPE | | TOTAL |
|---|---|---|---|
| | PRIMARY LEVEL | SECONDARY LEVEL | |
| **Private** | | | |
| Private for profit | 5 | 49 | 54 |
| Faith Based | 3 | 0 | 3 |
| **Sub-total (private)** | **8** | **49** | **57** |
| **Public** | | | |
| Federal government | 0 | 1 | 1 |
| HMB | 0 | 9 | 9 |
| PHCMB | 432 | 0 | 432 |
| **Sub-total (public)** | **432** | **10** | **442** |
| **Overall total** | **440** | **59** | **499** |

## 6.2 HUMAN RESOURCES AND SERVICE UTILIZATION

The human resource for health complement in each facility and service utilization data for the preceding 12 months were assessed. This data is presented disaggregated by facility level in Table 3. Human resource shortages were measured by the average number of each cadre of staff per facility and the proportion of facilities without any worker in the assessed cadre. Cadres assessed were considered in categories necessary for PMTCT service provision as per national guidance - doctors, nurses/midwives, trained community health workers, laboratory (laboratory scientist or technician), medical records and pharmacy staff (pharmacists or pharmacy technicians).

The results show fewer staff and large coverage gaps in primary compared to secondary health facilities. Pharmacy staff and doctors were the least frequently observed staff cadre, only 16% of facilities reported either of these. Conversely, trained community health workers were the most ubiquitous and were reported in about 80% of institutions surveyed.

A larger proportion of facilities had no record of deliveries in the preceding year: about 80% of primary level and 78% of secondary level facilities. The large numbers of facilities with ANC but no records of deliveries may be suggestive of poor record-keeping practices, logistic challenges in accessing health facilities and/or a preference for deliveries outside the formal health system.

Table 4 shows earlier presented human resources and service utilization now disaggregated by facility ownership (public/private). The findings here are similar to those in Table 3, as the majority of public facilities are primary level sites while most secondary level sites are managed by private institutions. Public facilities had less than one health worker in each assessed cadre, on average, except for trained community health workers. The lowest averages were observed for doctors and pharmacy staff, 0.2 and 0.3, respectively. Private institutions on the other hand had more than one staff per facility for doctors, nurses/midwives, community workers and pharmacy staff. The only cadre with higher averages in public centers were trained community workers.

## Table 3: Human resources and service utilization disaggregated by facility level

| DOMAIN | Item | 440 PRIMARY FACILITIES | | | 59 SECONDARY FACILITIES | | | TOTAL 499 FACILITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one |
| HUMAN RESOURCES | Doctors | 0.2 | 88.0% | 12.0% | 1.3 | 47.5% | 52.5% | 0.4 | 83.2% | 16.8% |
| | Registered nurse/midwife | 0.6 | 83.0% | 17.0% | 2.2 | 49.2% | 50.8% | 0.7 | 79.0% | 21.0% |
| | Other trained health workers (Community Nurses, CHOs, CHEWs) | 2.2 | 17.7% | 82.3% | 2.4 | 35.6% | 64.4% | 2.3 | 19.8% | 80.2% |
| | Record officers | 0.3 | 77.0% | 23.0% | 0.9 | 47.5% | 52.5% | 0.4 | 73.5% | 26.5% |
| | Laboratory technician/ scientists | 0.4 | 78.6% | 21.4% | 0.9 | 55.9% | 44.1% | 0.5 | 76.0% | 24.0% |
| | Pharmacy technician/ pharmacists | 0.2 | 88.6% | 11.4% | 1.9 | 44.1% | 55.9% | 0.4 | 83.4% | 16.6% |
| SERVICE UTILIZATION | OPD attendance in the last 12 months | 3125 | 2.5% | 97.5% | 3272 | 22.0% | 78.0% | 3142 | 4.8% | 95.2% |
| | ANC first attendees recorded in the last 12 months | 909 | 3.6% | 96.4% | 1158 | 23.7% | 76.3% | 938 | 6.0% | 94.0% |
| | Deliveries taken in the last 12 months | 54 | 80.9% | 19.1% | 295 | 22.0% | 78.0% | 82 | 73.9% | 26.1% |

## Table 4: Human resources and service utilization disaggregated by ownership of facility

| DOMAIN | Item | 442 PUBLIC FACILITIES | | | 57 PRIVATE FACILITIES | | | TOTAL 499 FACILITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one | Average | Proportion of facilities reporting zero | Proportion of facilities reporting at least one |
| HUMAN RESOURCES | Number of doctors | 0.2 | 87.6% | 12.4% | 1.3 | 49.1% | 50.9% | 0.4 | 83.2% | 16.8% |
| | Number of registered nurse/midwife | 0.7 | 82.6% | 17.4% | 1.5 | 50.9% | 49.1% | 0.7 | 79.0% | 21.0% |
| | Number of other trained health workers (community nurses, CHOs, CHEWs) | 2.3 | 17.9% | 82.1% | 1.9 | 35.1% | 64.9% | 2.3 | 19.8% | 80.2% |
| | Number of records officers | 0.3 | 76.0% | 24.0% | 0.7 | 54.4% | 45.6% | 0.4 | 73.5% | 26.5% |
| | Number of lab technician/ scientists | 0.4 | 78.3% | 21.7% | 0.7 | 57.9% | 42.1% | 0.5 | 76.0% | 24.0% |
| | Number of pharmacy technician/ pharmacists | 0.3 | 86.9% | 13.1% | 1.1 | 56.1% | 43.9% | 0.4 | 83.4% | 16.6% |
| SERVICE UTILIZATION | Number attended OPD in the last 12 months | 3419 | 2.5% | 97.5% | 958 | 22.8% | 77.2% | 3142 | 4.8% | 95.2% |
| | ANC first attendees recorded in the last 12 months | 1034 | 3.8% | 96.2% | 181 | 22.8% | 77.2% | 938 | 6.0% | 94.0% |
| | Deliveries taken in the last 12 months | 87 | 80.8% | 19.2% | 47 | 21.1% | 78.9% | 82 | 73.9% | 26.1% |

## 6.3 SUMMARIES OF OTHER DOMAINS

This assessment explored domains related to infrastructure, service delivery, community linkages among others. Findings related to MCH services provided in each facility are reported below disaggregated by facility level.

It is worthy of note that all facilities did not report providing the full complement of physical examinations recommended in pregnancy such as assessment of gestational age, weight and blood pressure despite the basic and inexpensive nature of these activities. About half the surveyed centers provided family planning (FP) devices or syndrome management for STIs. Only 15% of all facilities, 11% of primary and 48% of secondary, provided HIV testing and counseling.

The infrastructure assessment component recorded if the facility had dedicated spaces for important ANC services or locations in the facility which could be converted to this purpose. Infrastructure was better in secondary facilities. A larger percentage of secondary health facilities compared to primary had resources for laboratory work (73% vs. 26%), confidential counseling (68% vs. 37%) and adherence counseling (70% vs. 29%). Only 30 – 40% of facilities had rooms which could be used for confidential or adherence counseling. Less than one-fifth of ANC sites had tuberculosis treatment or waiting areas as shown in Table 5 below.

### Table 5: Summary of domain responses disaggregated by facility level (1)

| | | FACILITY TYPE | | | | | |
|---|---|---|---|---|---|---|---|
| | | Primary level n = 440 | | Secondary level n = 59 | | Total n = 499 | |
| SERVICE AVAILABILITY | Physical exam (including weight, assessing GA, blood pressure) | 394 | 89.5% | 57 | 96.6% | 451 | 90.4% |
| | Laboratory services (onsite or by referral): Hb, urinalysis | 133 | 30.2% | 48 | 81.4% | 181 | 36.3% |
| | Dispensing of haematinics and IPTp | 357 | 81.1% | 58 | 98.3% | 415 | 83.2% |
| | Labour and delivery services (with 24 hour shifts) | 86 | 19.5% | 58 | 98.3% | 144 | 28.9% |
| | Referrals for emergency obstetric and newborn care | 332 | 75.5% | 55 | 93.2% | 387 | 77.6% |
| | Family planning services (condoms, hormonal contraceptives) | 231 | 52.5% | 51 | 86.4% | 282 | 56.5% |
| | Immunization services | 425 | 96.6% | 40 | 67.8% | 465 | 93.2% |
| | Integrated Management of Childhood Illnesses | 384 | 87.3% | 45 | 76.3% | 429 | 86.0% |
| | Child follow up clinics | 309 | 70.2% | 49 | 83.1% | 358 | 71.7% |
| | TB services (e.g. DOTS, microscopy) | 106 | 24.1% | 31 | 52.5% | 137 | 27.5% |
| | Syndromic tTreatment of STIs | 209 | 47.5% | 50 | 84.7% | 259 | 51.9% |
| | Treatment of minor ailments | 388 | 88.2% | 56 | 94.9% | 444 | 89.0% |
| | HIV testing and counseling | 48 | 10.9% | 28 | 47.5% | 76 | 15.2% |

## Table 5: Summary of domain responses disaggregated by facility level (1) *(continued)*

| | | FACILITY TYPE | | | | | |
|---|---|---|---|---|---|---|---|
| | | Primary level n = 440 | | Secondary level n = 59 | | Total n = 499 | |
| IDENTIFIED STRUCTURE (CAN SPACE BE IDENTIFIED FOR THE FOLLOWING?) | OPD consulting room | 412 | 93.6% | 57 | 96.6% | 469 | 94.0% |
| | Lab room | 114 | 25.9% | 43 | 72.9% | 157 | 31.5% |
| | Phlebotomy | 72 | 16.4% | 21 | 35.6% | 93 | 18.6% |
| | ANC space | 396 | 90.0% | 52 | 88.1% | 448 | 89.8% |
| | ANC room | 342 | 77.7% | 47 | 79.7% | 389 | 78.0% |
| | Space that can be used for confidential counseling | 164 | 37.3% | 40 | 67.8% | 204 | 40.9% |
| | Maternity delivery room | 139 | 31.6% | 57 | 96.6% | 196 | 39.3% |
| | Pharmacy, sStore | 203 | 46.1% | 44 | 74.6% | 247 | 49.5% |
| | Pharmacy, dispensary | 184 | 41.8% | 47 | 79.7% | 231 | 46.3% |
| | Space for adherence counseling | 127 | 28.9% | 41 | 69.5% | 168 | 33.7% |
| | DOTS clinic | 72 | 16.4% | 21 | 35.6% | 93 | 18.6% |
| | DOTS waiting area | 59 | 13.4% | 21 | 35.6% | 80 | 16.0% |
| | Medical records/M&E | 119 | 27.0% | 38 | 64.4% | 157 | 31.5% |
| | TB microscopy | 44 | 10.0% | 19 | 32.2% | 63 | 12.6% |
| | Postnatal ward | 116 | 26.4% | 48 | 81.4% | 164 | 32.9% |
| | Space for future infrastructure development | 183 | 41.6% | 39 | 66.1% | 222 | 44.5% |

The enabling environment for MCH domain considered if facilities had support to provide maternal health services, conduct outreach or subsidise ANC components. Community systems domain explored the presence of support mechanisms such as ward or village development committees. Community birthing places domain explored provider perspectives on places outside the health systems where women choose to have their babies. Findings are presented disaggregated by facility level.

Millennium Development Goal (MDG) support for ANC includes free or subsidised care and incentive payments to mothers whose children adhere to pre-specified instructions or outcomes. The Midwives Service Scheme (MSS) and Subsidy Reinvestment and Empowerment Project (SURE-P)

provide mechanisms whereby trained nurse midwives are mobilized and supported to provide services in communities as well as an incentive structure to increase ANC uptake. Only 13% of facilities had MDG related support, 11% and 7% MSS midwives or SURE-P support, respectively.

Primary health facilities were more likely to undertake regular community outreach activities, provide free ANC component services and report awareness of community support mechanisms such as ward, village or community development associations. These results suggest that primary level facilities are more connected and supported by their host communities.

Over three quarters of respondents expressed that other places outside the health system were preferred birthing options in their communities; these included churches and maternity homes. The most frequently cited location for delivery was with traditional birth attendants (TBAs) or at home.

## Table 6: Summary of domain responses disaggregated by facility level (2)

| | | FACILITY TYPE | | | | | |
|---|---|---|---|---|---|---|---|
| | | Primary level n = 440 | | Secondary level n = 59 | | Total n = 499 | |
| ENABLING ENVIRONMENT | MDG Support for MCH services | 61 | 13.9% | 3 | 5.1% | 64 | 12.8% |
| | Free components of ANC Services | 392 | 89.1% | 7 | 11.9% | 399 | 80.0% |
| | Regular monthly community outreach | 298 | 67.7% | 8 | 13.6% | 306 | 61.3% |
| | MSS midwives | 48 | 10.9% | 8 | 13.6% | 56 | 11.2% |
| | SURE-P midwives | 30 | 6.8% | 5 | 8.5% | 35 | 7.0% |
| COMMUNITY BIRTHING PLACES | Other than health facilities where women deliver in this community | 344 | 78.2% | 33 | 55.9% | 377 | 75.6% |
| | Other places – TBA/at home | 330 | 75.0% | 26 | 44.1% | 356 | 71.3% |
| | Other places – churches | 5 | 1.1% | 2 | 3.4% | 7 | 1.4% |
| | Other places – maternity home of trained midwife | 37 | 8.4% | 4 | 6.8% | 41 | 8.2% |
| COMMUNITY SYSTEMS | Ward development committee | 391 | 88.9% | 19 | 32.2% | 410 | 82.2% |
| | Village development committee | 390 | 88.6% | 15 | 25.4% | 405 | 81.2% |
| | Community development association | 304 | 69.1% | 15 | 25.4% | 319 | 63.9% |
| | Community-based organization | 180 | 40.9% | 10 | 16.9% | 190 | 38.1% |

Table 7 includes domain responses disaggregated by facility ownership. The trend is that a higher proportion of private facilities provided assessed service components compared to public centers with exceptions being immunization services and integrated management of childhood illness. Similarly all infrastructure elements assessed were either similar across public and private facilities or available in a higher proportion at private facilities.

It is however important to note that only about 15% and 30% of facilities currently conduct HTC and 24 hour delivery services, respectively. About one-third of facilities had space for HIV treatment adherence, confidential counseling or laboratories while only 45% had spaces which could be utilized for future infrastructural development – these results highlight potential challenges to implementing PMTCT services at the sites.

## Table 7: Summary of domain responses disaggregated by facility ownership (1)

| | | FACILITY TYPE | | | | | |
|---|---|---|---|---|---|---|---|
| | | Public n = 442 | | Private n = 57 | | Total n = 499 | |
| SERVICE AVAILABILITY | Physical exam (including weight, assessing GA, blood pressure) | 395 | 89.4% | 56 | 98.2% | 451 | 90.4% |
| | Laboratory services (onsite or by referral): Hb, urinalysis | 137 | 31.0% | 44 | 77.2% | 181 | 36.3% |
| | Dispensing of haematinics and IPTp | 358 | 81.0% | 57 | 100.0% | 415 | 83.2% |
| | Labour and delivery services (with 24 hour shifts) | 88 | 19.9% | 56 | 98.2% | 144 | 28.9% |
| | Referrals for emergency obstetric and new-born care | 332 | 75.1% | 55 | 96.5% | 387 | 77.6% |
| | Family planning services (condoms, hormonal contraceptives) | 232 | 52.5% | 50 | 87.7% | 282 | 56.5% |
| | Immunization services | 429 | 97.1% | 36 | 63.2% | 465 | 93.2% |
| | Integrated Management of Childhood Illnesses | 386 | 87.3% | 43 | 75.4% | 429 | 86.0% |
| | Child follow up clinics | 312 | 70.6% | 46 | 80.7% | 358 | 71.7% |
| | TB services (specify which - e.g. DOTS, microscopy) | 108 | 24.4% | 29 | 50.9% | 137 | 27.5% |
| | Syndromic treatment of STIs | 211 | 47.7% | 48 | 84.2% | 259 | 51.9% |
| | Treatment of minor ailments | 390 | 88.2% | 54 | 94.7% | 444 | 89.0% |
| | HIV testing and counselling | 51 | 11.5% | 25 | 43.9% | 76 | 15.2% |

## Table 7: Summary of domain responses disaggregated by facility ownership (1) *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IDENTIFIED STRUCTURE (CAN SPACE BE IDENTIFIED FOR THE FOLLOWING?) | OPD consulting room | 413 | 93.4% | 56 | 98.2% | 469 | 94.0% |
| | Lab room | 117 | 26.5% | 40 | 70.2% | 157 | 31.5% |
| | Phlebotomy | 74 | 16.7% | 19 | 33.3% | 93 | 18.6% |
| | ANC space | 398 | 90.0% | 50 | 87.7% | 448 | 89.8% |
| | ANC room | 346 | 78.3% | 43 | 75.4% | 389 | 78.0% |
| | Space that can be used for confidential counseling | 168 | 38.0% | 36 | 63.2% | 204 | 40.9% |
| | Maternity delivery room | 141 | 31.9% | 55 | 96.5% | 196 | 39.3% |
| | Pharmacy, store | 207 | 46.8% | 40 | 70.2% | 247 | 49.5% |
| | Pharmacy, dispensary | 186 | 42.1% | 45 | 78.9% | 231 | 46.3% |
| | Space for adherence counseling | 128 | 29.0% | 40 | 70.2% | 168 | 33.7% |
| | DOTS clinic | 74 | 16.7% | 19 | 33.3% | 93 | 18.6% |
| | DOTS waiting area | 61 | 13.8% | 19 | 33.3% | 80 | 16.0% |
| | Medical records/M&E | 123 | 27.8% | 34 | 59.6% | 157 | 31.5% |
| | TB microscopy | 47 | 10.6% | 16 | 28.1% | 63 | 12.6% |
| | Postnatal ward | 119 | 26.9% | 45 | 78.9% | 164 | 32.9% |
| | Space for future infrastructure development | 184 | 41.6% | 38 | 66.7% | 222 | 44.5% |

Table 8 summarizes responses related to an enabling environment for MCH activities, awareness of community systems and health workers' opinions on community birthing preferences. Responses are presented by facility ownership. Private health facilities had practically no experience or access to ANC enabling factors such as MDG support, presence of MSS midwives or SURE-P support with only three3 or fewer sites reporting each of these factors.

## Table 8 Summary of domain responses disaggregated by facility ownership (2)

| | | FACILITY TYPE | | | | | |
|---|---|---|---|---|---|---|---|
| | | Public n = 442 | | Private n = 57 | | Total n = 499 | |
| ENABLING ENVIRONMENT | MDG Support for MCH services | 63 | 14.3% | 1 | 1.8% | 64 | 12.8% |
| | Free ANC Services | 397 | 89.8% | 2 | 3.5% | 399 | 80.0% |
| | Regular Monthly Community Outreaches | 303 | 68.6% | 3 | 5.3% | 306 | 61.3% |
| | MSS midwives | 53 | 12.0% | 3 | 5.3% | 56 | 11.2% |
| | SURE-P midwives | 33 | 7.5% | 2 | 3.5% | 35 | 7.0% |
| COMMUNITY BIRTHING PLACES | Other than health facilities where women deliver in this community | 342 | 77.4% | 35 | 61.4% | 377 | 75.6% |
| | Other Places – Churches | 5 | 1.1% | 2 | 3.5% | 7 | 1.4% |
| | Other Places – TBA | 327 | 74.0% | 29 | 50.9% | 356 | 71.3% |
| | Other Places – Maternity home of trained midwife | 36 | 8.1% | 5 | 8.8% | 41 | 8.2% |
| COMMUNITY SYSTEMS *(ARE THE FOLLOWING AVAILABLE?)* | Ward development committee | 397 | 89.8% | 13 | 22.8% | 410 | 82.2% |
| | Village development committee | 395 | 89.4% | 10 | 17.5% | 405 | 81.2% |
| | Community development association | 309 | 69.9% | 10 | 17.5% | 319 | 63.9% |
| | Community-based organization | 184 | 41.6% | 6 | 10.5% | 190 | 38.1% |

## 6.4 QUALITATIVE DATA FINDINGS

### 6.4.1 Many women prefer to deliver with TBAs and at home

Key informant interviews were conducted with health care providers. These interviews explored preferred delivery options apart from health facilities, factors influencing choice of birthing site and reasons for good or poor facility utilization. Home and TBA deliveries were reported as preferred options in most Kano state communities. Women who delivered at home believed this to be a sign of bravery and therefore enhance their social standing. Most of these home deliveries are thought to be conducted by TBAs. The presence of male health practitioners as opposed to females in health facilities and logistic challenges related to round the clock staffing were some identified deterrents to facility delivery. See Table 9 below for identified themes and response quotes.

Table 9: Some women prefer to patronize Traditional Birth Attendants (TBAs)

| THEMES | QUOTES |
|---|---|
| **Women prefer to deliver at home and with TBAs** | "It has to do with lack of awareness on the part of the community member."<br><br>"Most times it is being influenced by the man who wants his wish to be obeyed."<br><br>"The TBAs live among them and can always be reached anytime labour starts." |
| **Women choose not to deliver at health facilities** | "They prefer to deliver at home because we don't do delivery here."<br><br>"Poor state of the facility."<br><br>"Lack of twenty four hour coverage."<br><br>"Lack of female trained staff. In this place people are very sensitive about that."<br><br>"They believe those that give birth at home are brave and they don't want to be exposed to male doctors." |
| **Cost is an important consideration when deciding birth option** | "It is cheaper and there is lack of awareness."<br><br>"No money for transport. How will the woman come here, it is not free."<br><br>"A lot of people in this community are poor and illiterate. It will be good if government makes services free."<br><br>"Some rich ones can take their family to private hospital. But how many people can do that?" |

### 6.4.2 Why some health facilities are well patronised

Respondents reported that some facilities were well patronized. Reasons provided for this included ease of access to the facility, quality of service, friendly attitudes of health staff and free/subsidized nature of the services.

## Table 10: Reasons why some health facilities are well patronized

| THEMES | QUOTES |
|---|---|
| **Ease of access and quality of care affect utilization** | "We get consultants from the teaching hospital coming here. The people are very happy with us. They think we are doing well"<br><br>"Our hospital is very easy to access. Anybody can come at any time of the day or night." |
| **Attitude of the health care providers** | 'The facility staff are willing to help the people."<br><br>"I have trained the staff here to treat the people properly. They are very nice to them so they keep coming back"<br><br>"We give them good attention when they come here. Nobody rushes them, they are fully attended to." |
| **Free and subsidized services encourage patient attendance** | "We give them free net and drugs. It encourages them that we care about them."<br><br>"Everybody likes free things you know. Free service is a very good incentive." |

## 6.5 SCENARIOS FOR ELIGIBILITY FOR PMTCT SERVICES

Facility performance, according to human resource and utilization criteria, were examined singly and in combination, disaggregated for public and private facilities (see Table 10). Percentages were derived based on the total number of facilities assessed, which accounts for any differences from reporting of similar criteria in the preceding tables or appendix. The sum of percentages contributed by public and private facilities in this table gives the state total. Each row presents the number of facilities that will be eligible for PMTCT scale-up if that criteria were applied. Only 22 facilities were eligible for scale-up based on national minimum human resource guidance for provision of PMTCT services.

### Table 11: Human resource related cut offs

| CRITERIA | CUT-OFF | OWNERSHIP | NO. OF FACILITIES ELIGIBLE | % OF TOTAL (N = 499) FACILITIES |
|---|---|---|---|---|
| Have ANC but no IP | | Public | 442 | 88.6 |
| | | Private | 57 | 11.4 |
| Availability of doctors | At least 1 | Public | 55 | 11.0 |
| | | Private | 29 | 5.8 |
| Availability of nurses/midwives | At least 4 | Public | 15 | 3.0 |
| | | Private | 10 | 2.0 |
| Other trained staff – CHEWs, JCHEWs | At least 4 | Public | 75 | 15.0 |
| | | Private | 10 | 2.0 |
| Clinical care staff (nurses, CHOs, CHEWs, JCHEWs) | At least 4 | Public | 85 | 17.0 |
| | | Private | 22 | 4.4 |
| ANC attendance in the last 12 months | Equal or above state mean - 938 | Public | 100 | 17.0 |
| | | Private | 1 | 0.2 |
| Deliveries taken in the last 12 months | At least 1 | Public | 85 | 17.0 |
| | | Private | 45 | 9.0 |
| National PMTCT HR complement | 1 doctor, 1 nurse/midwife, 2 community workers, 1 pharmacy, 1 lab, 1 records | Public | 11 | 2.2 |
| | | Private | 11 | 2.2 |
| Minimum HR complement 1 | At least 4 clinical care, 1 pharmacy, 1 lab, 1 records | Public | 26 | 5.2 |
| | | Private | 14 | 2.8 |
| Minimum HR complement 2 | At least 1 doctor, 4 clinical, 1 pharmacy, 1 lab, 1 records | Public | 13 | 2.0 |
| | | Private | 6 | 0.6 |
| Composite criterion | At least 4 clinical care, 1 pharmacy, 1 lab, 1 records, above average ANC attendance, at least 1 delivery | Public | 18 | 3.6 |
| | | Private | 0 | 0.0 |

SECTION

# 7 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 changes in PMTCT landscape for different scale-up scenarios.

Figure 3: Map showing currently existing PMTCT services

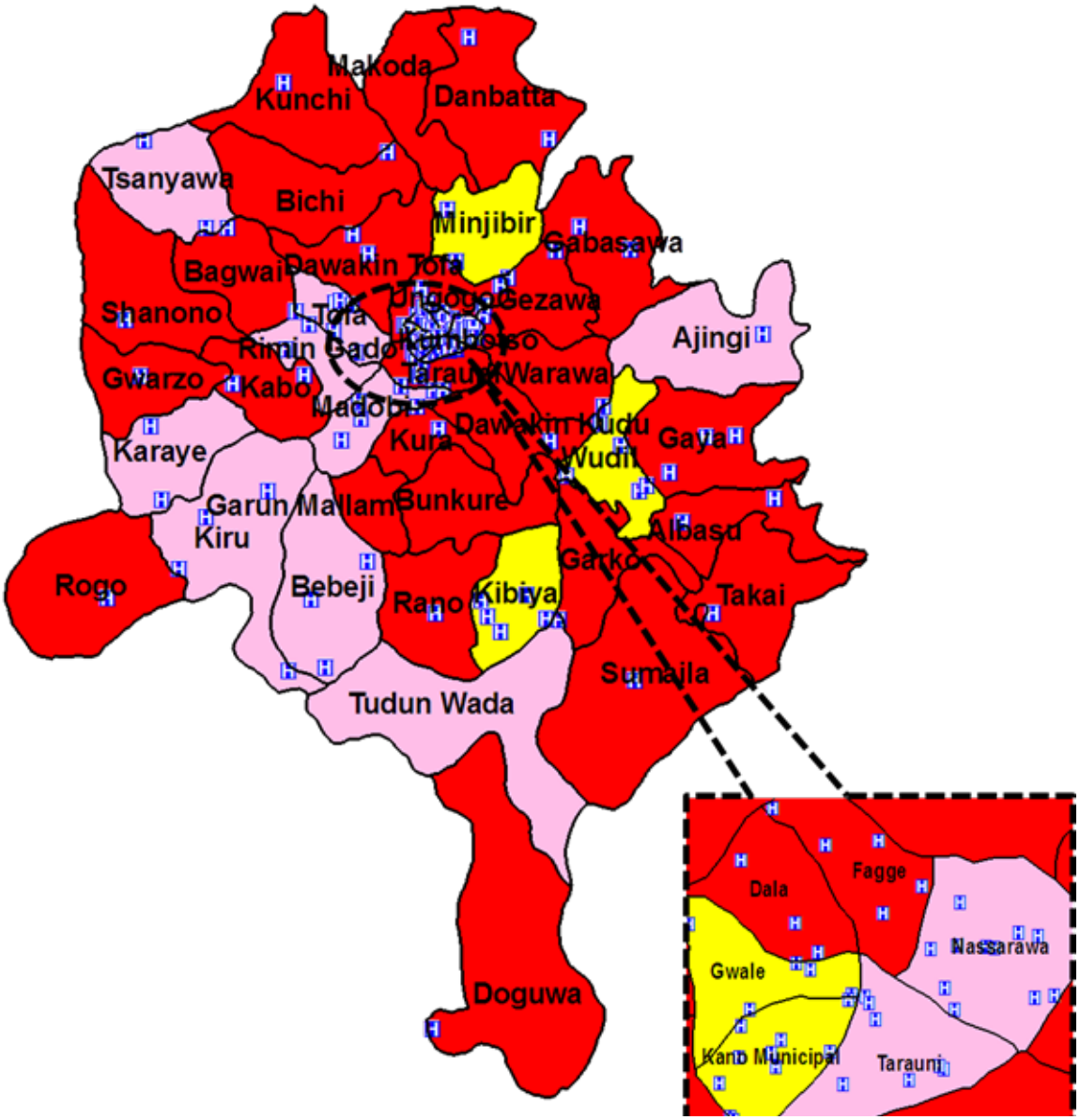


Figure 4: Map showing spread of assessed facilities (with ANC but no PMTCT)

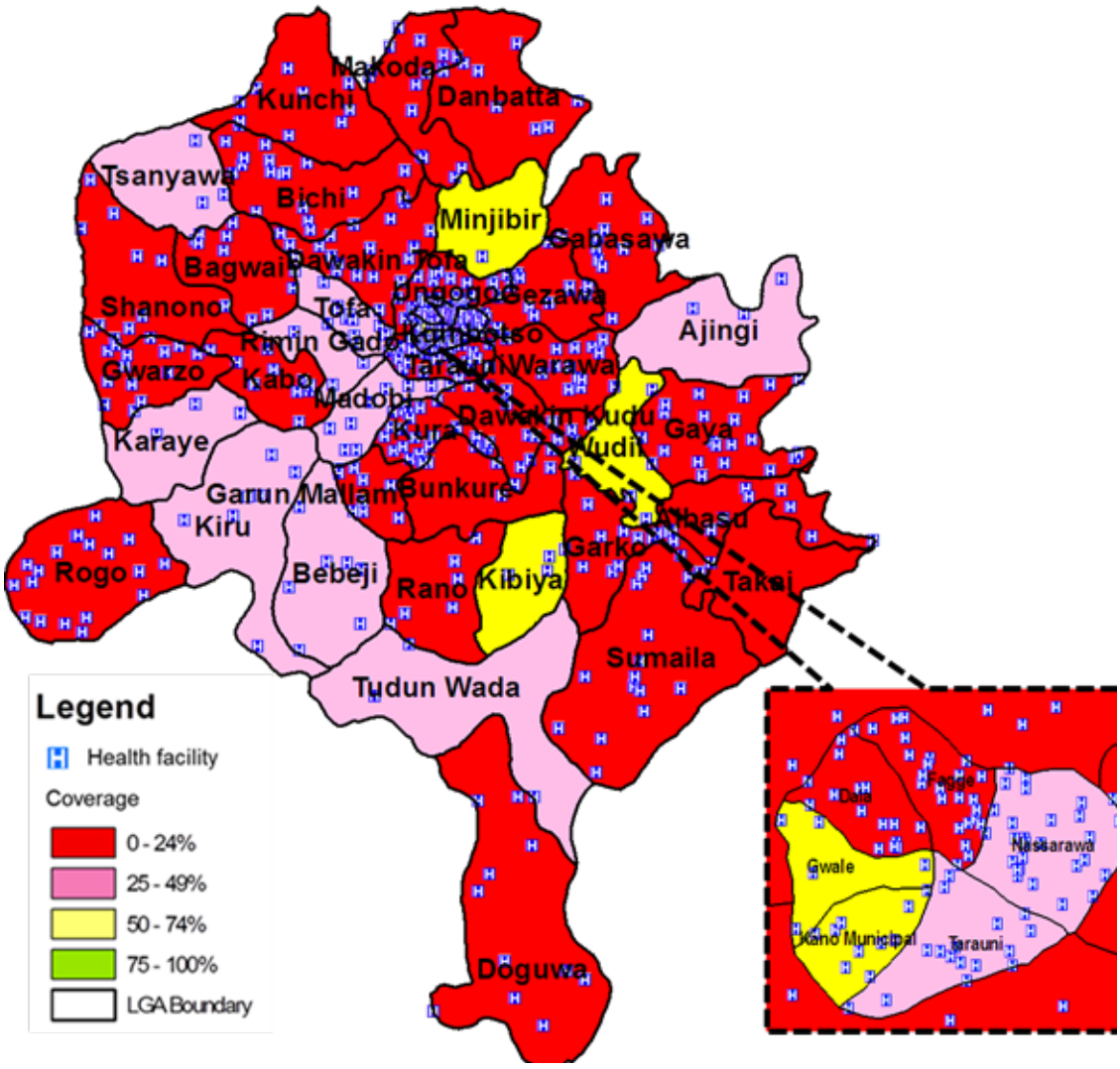


Figure 5: Map showing spread of facilities which met national HR criteria for PMTCT services

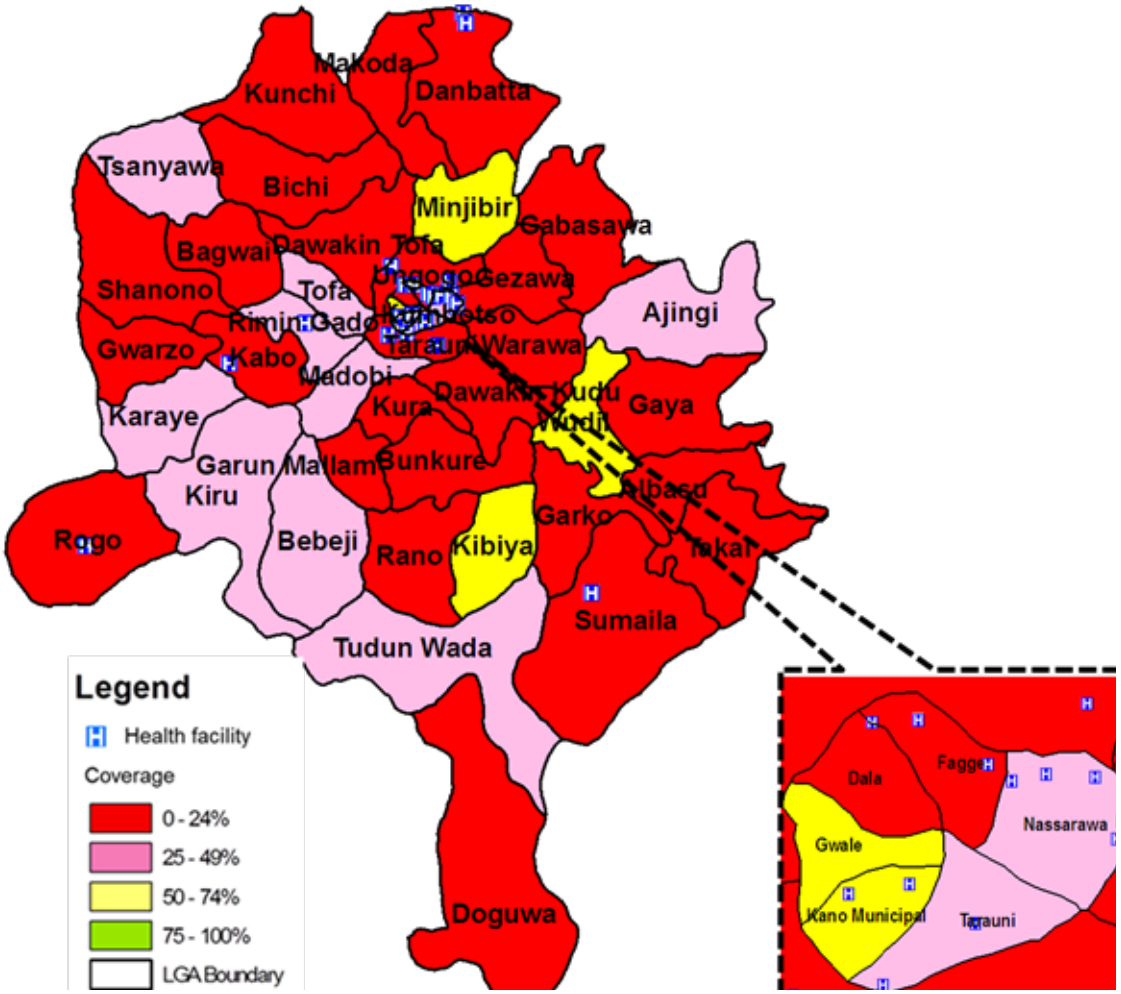


Figure 6: Map showing facilities which met state-defined HR criteria for PMTCT services

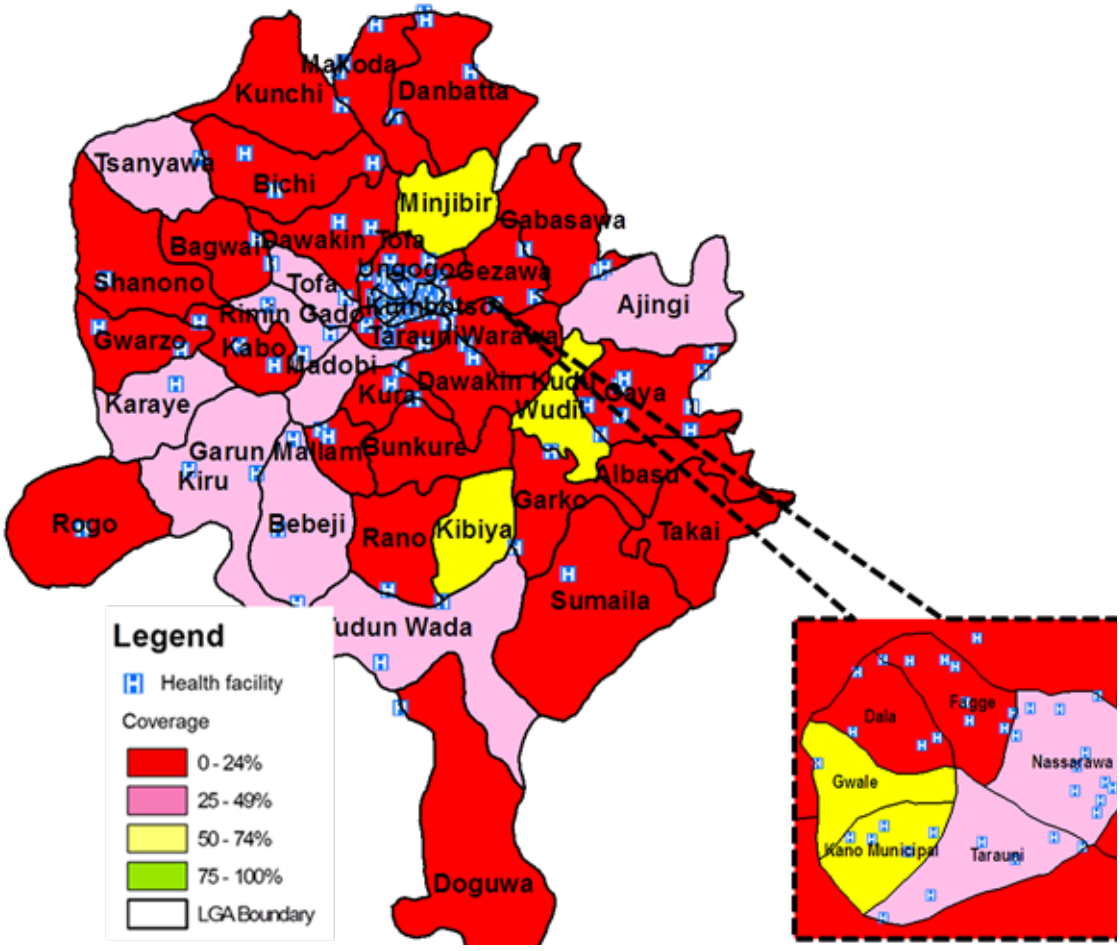


Figure 7: Map showing end of 2014 coverage scenario with current PMTCT sites and scale-up limited to health facilities meeting national HR criteria

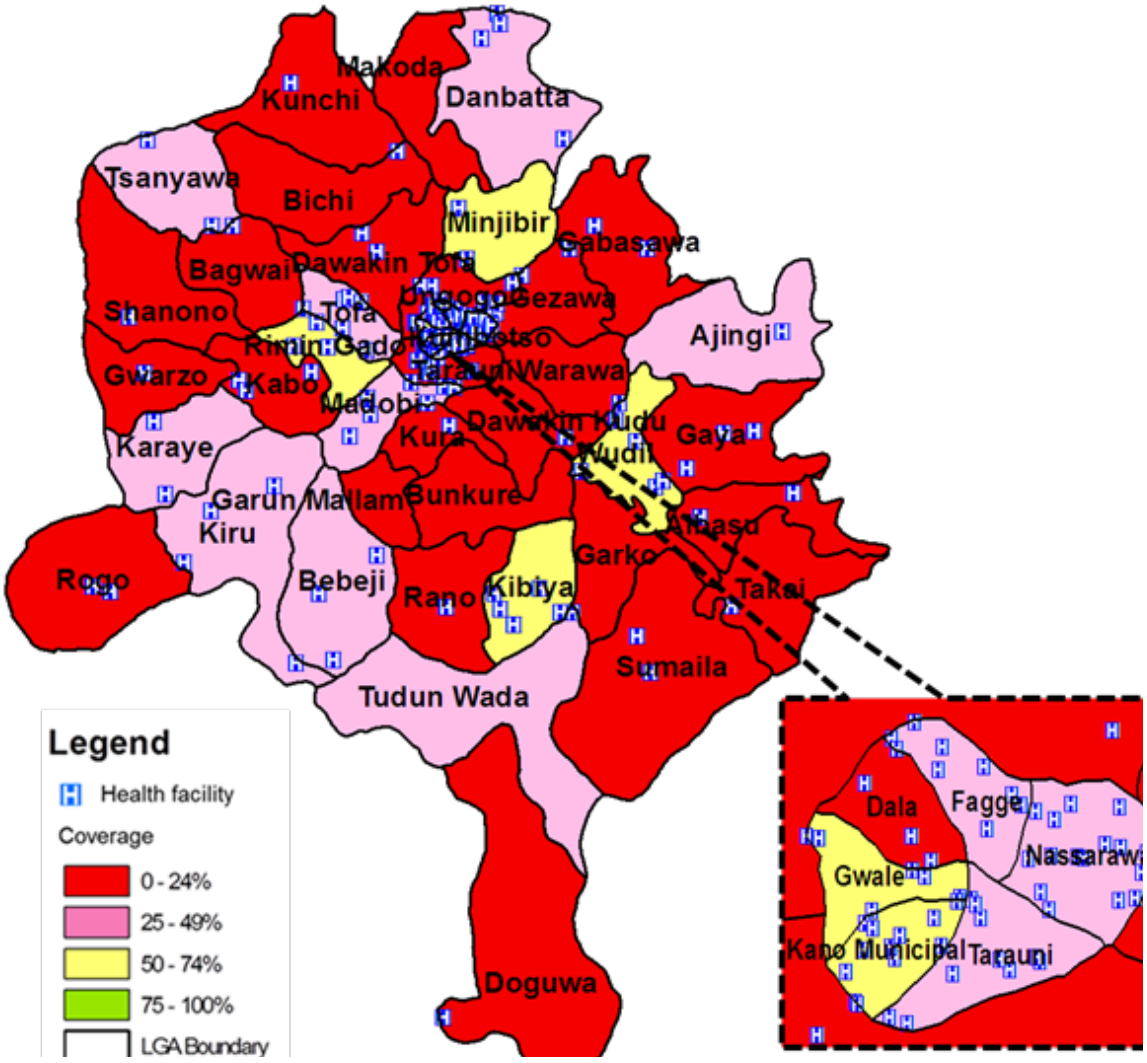


Figure 8: Map showing end of 2014 coverage scenario with current PMTCT sites and scale-up limited to health facilities meeting state HR criteria

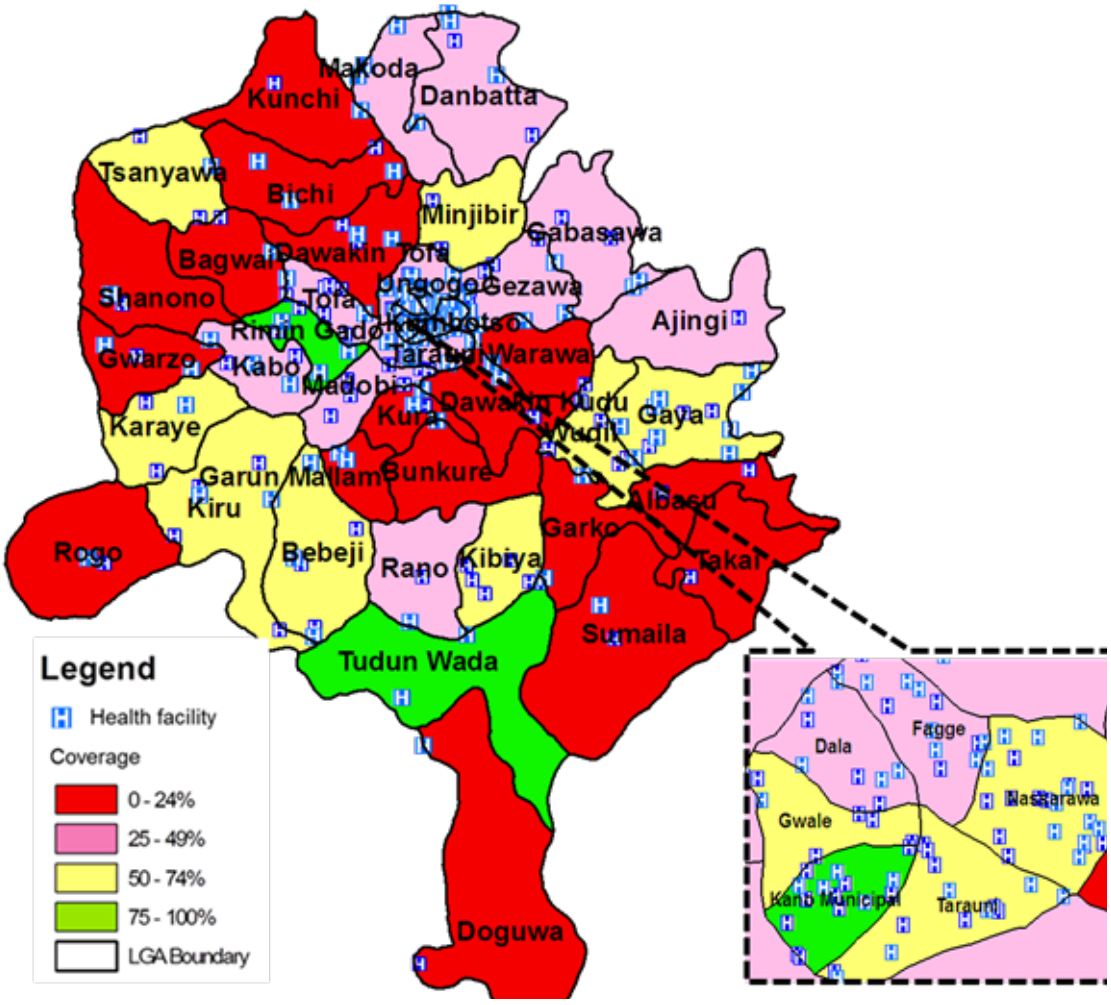
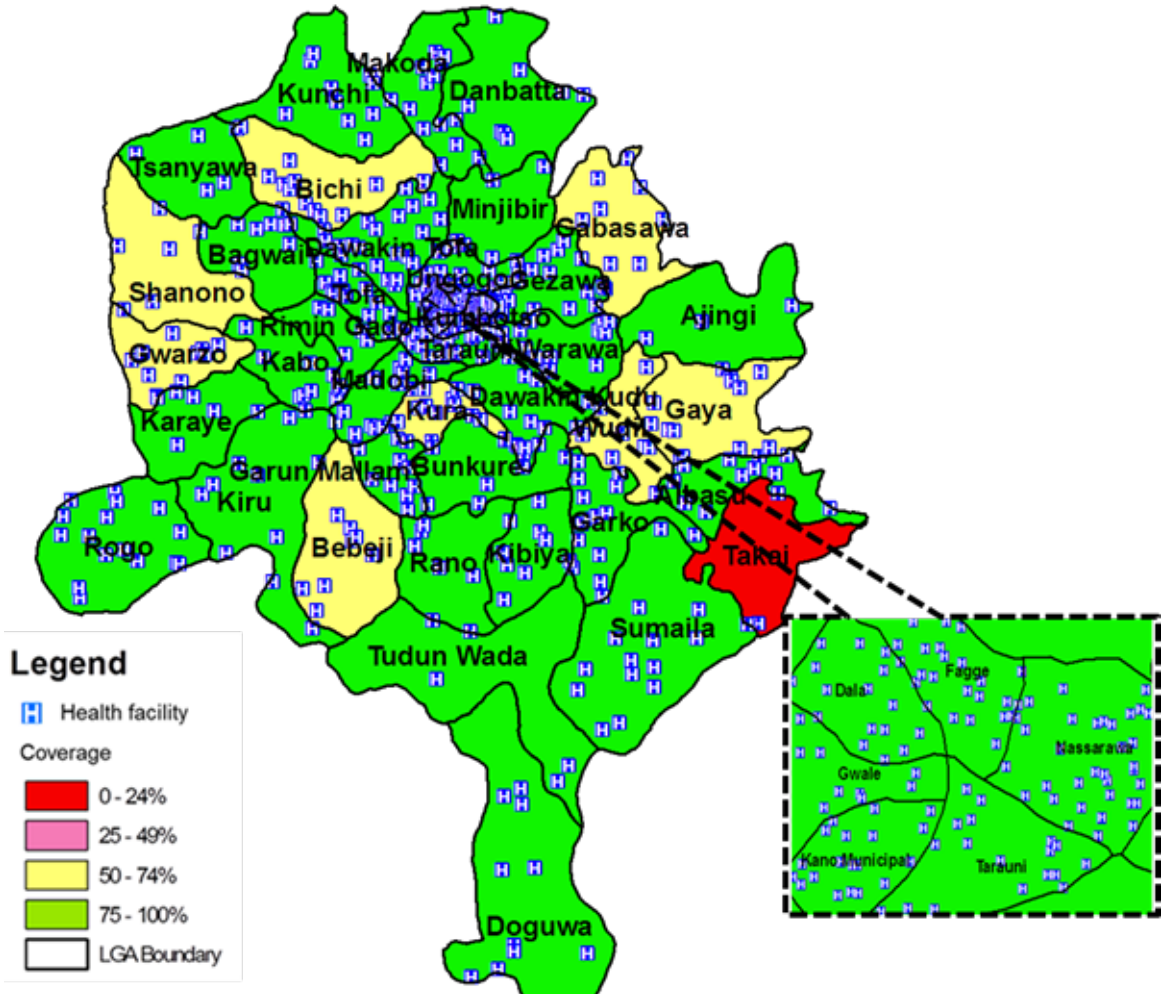


Figure 9: Map showing end of 2014 coverage scenario with current PMTCT sites and health facilities earmarked for scale-up towards eMTCT



SECTION

# 8 Conclusion

This assessment provides important information to aid PMTCT scale-up in Kano State. The proportion of visited facilities providing ANC is low at about 50%. Infrastructure and service gaps such as space constraints, limited facilities for counseling, laboratory testing and family planning were documented for assessed facilities. the assessment found significant human resource gaps which may limit the number of facilities selected for PMTCT scale-up.

The high rate of attrition from the health system between ANC attendance and facility delivery, coupled with several health facilities not conducting deliveries, are important findings. Though this assessment did not set out to examine causal factors, it is important to address this key finding.

SECTION

# 9 Recommendations

A comprehensive PMTCT plan with collaboration between the Government of Kano, donor organizations, implementing partners, civil society and other health system stakeholders is required to achieve 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 PMTCT services. Demand creation and other strategies are necessary to encourage facility delivery. These will be necessary to ensure optimal utilization of scale-up services for eMTCT.

# Appendix

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

| DOMAIN | ITEM | 440 PRIMARY FACILITIES | | | | | 59 SECONDARY FACILITIES | | | | | 499 FACILITIES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Median | Average | Max | Total | Min | Median | Average | Max | Total | Min | Median | Average | Max | Total |
| HUMAN RESOURCES | Number of doctors | 0 | 0.2 | 0 | 10 | 104 | 1.0 | 1.3 | 0 | 10 | 78 | 0 | 0.4 | 0 | 10 | 182 |
| | Number of registered nurse/midwife | 0 | 0.6 | 0 | 34 | 250 | 1.0 | 2.2 | 0 | 34 | 132 | 0 | 0.8 | 0 | 34 | 382 |
| | Number of other trained health workers (Community Nurses, CHOs, CHEWs) | 1 | 2.2 | 0 | 24 | 980 | 1.0 | 2.4 | 0 | 16 | 143 | 1.0 | 2.2 | 0 | 24 | 1123 |
| | Number of records officers | 0 | 0.3 | 0 | 7 | 131 | 1.0 | 0.9 | 0 | 7 | 55 | 0 | 0.4 | 0 | 7 | 186 |
| | Number of lab technician/ scientists | 0 | 0.4 | 0 | 6 | 159 | 0.0 | 0.9 | 0 | 6 | 53 | 0 | 0.4 | 0 | 6 | 212 |
| | Number of pharmacy technician/ pharmacists | 0 | 0.1 | 0 | 3 | 63 | 1.0 | 1.4 | 0 | 18 | 84 | 0 | 0.3 | 0 | 18 | 147 |
| SERVICE UTILIZATION | Number attended OPD in the last 12 months | 1740 | 3125 | 0 | 82313 | 1372089 | 489 | 3273 | 0 | 46845 | 189806 | 1680 | 3142 | 0 | 82313 | 1561895 |
| | ANC first attendees recorded in the last 12 months | 384 | 910 | 0 | 61222 | 399379 | 63 | 1158 | 0 | 18900 | 67197 | 352 | 938 | 0 | 61222 | 466576 |
| | Deliveries taken in the last 12 months | 0 | 55 | 0 | 3990 | 23780 | 33 | 296 | 0 | 4039 | 17150 | 0 | 83 | 0 | 4039 | 40930 |

## Appendix 2: Human resources and service utilization disaggregated by facility ownership

| DOMAIN | ITEM | 442 PUBLIC FACILITIES | | | | | 57 PRIVATE FACILITIES | | | | | 499 FACILITIES | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Median | Average | Max | Total | Min | Median | Average | Max | Total | Min | Median | Average | Max | Total |
| HUMAN RESOURCES | Number of doctors | 0 | 0.3 | 0 | 10 | 108 | 1 | 1.3 | 0 | 10 | 74 | 0 | 0.4 | 0 | 10 | 182 |
| | Number of registered nurse/midwife | 0 | 0.7 | 0 | 34 | 295 | 0 | 1.5 | 0 | 7 | 87 | 0 | 0.8 | 0 | 34 | 382 |
| | Number of other trained health workers (Community Nurses, CHOs, CHEWs) | 1 | 2.3 | 0 | 24 | 1014 | 1.0 | 1.9 | 0 | 16 | 109 | 1.0 | 2.2 | 0 | 24 | 1123 |
| | Number of records officers | 0 | 0.3 | 0 | 7 | 144 | 0 | 0.8 | 0 | 3 | 42 | 0 | 0.4 | 0 | 7 | 186 |
| | Number of lab technician/ scientists | 0 | 0.4 | 0 | 6 | 171 | 0 | 0.7 | 0 | 4 | 41 | 0 | 0.4 | 0 | 6 | 212 |
| | Number of pharmacy technician/ pharmacists | 0 | 0.3 | 0 | 18 | 112 | 0 | 0.6 | 0 | 4 | 35 | 0 | 0.3 | 0 | 18 | 147 |
| SERVICE UTILIZATION | Number attended OPD in the last 12 months | 465 | 3420 | 0 | 82313 | 1508197 | 465 | 958 | 0 | 7817 | 53698 | 1680 | 3142 | 0 | 82313 | 1561895 |
| | ANC first attendees recorded in the last 12 months | 395 | 1035 | 0 | 61222 | 4563200 | 59 | 181 | 0 | 2631 | 10144 | 352 | 938 | 0 | 61222 | 466576 |
| | Deliveries taken in the last 12 months | 0 | 87 | 0 | 4039 | 38260 | 29 | 48 | 0 | 420 | 2670 | 0 | 83 | 0 | 4039 | 40930 |

## Appendix 3: Human Resource Gap for Doctors in Kano State by LGAs in assessed facilities

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least one doctor | Number of doctors needed to meet national standard | Total no of facilities | Facilities with at least one doctor | Number of doctors needed to meet national standard |
| 1 | Ajinji | 3 | 0 | 3 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 0 | 10 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 1 | 8 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 1 | 7 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 2 | 15 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 0 | 5 | N/A | N/A | N/A |
| 7 | Dala | 14 | 2 | 12 | 1 | 0 | 1 |
| 8 | Dambatta | 9 | 2 | 7 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 0 | 15 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 2 | 18 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 0 | 10 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 4 | 6 | 15 | 8 | 7 |
| 13 | Gabasawa | 11 | 0 | 11 | N/A | N/A | N/A |
| 14 | Garko | 14 | 3 | 11 | 1 | 0 | 1 |
| 15 | Garun Mallam | 9 | 1 | 8 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 5 | 15 | 1 | 1 | 0 |
| 17 | Gezawa | 14 | 0 | 14 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 1 | 4 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 2 | 14 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 0 | 11 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 2 | 4 | 4 | 2 | 2 |
| 22 | Karaye | 3 | 1 | 2 | N/A | N/A | N/A |

## Appendix 3: Human Resource Gap for Doctors in Kano State by LGAs in assessed facilities *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 1 | 2 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 0 | 5 | 2 | 2 | 0 |
| 25 | Kumbotso | 12 | 2 | 10 | 6 | 2 | 4 |
| 26 | Kunchi | 10 | 1 | 9 | N/A | N/A | N/A |
| 27 | Kura | 22 | 0 | 22 | 2 | 1 | 1 |
| 28 | Madobi | 9 | 1 | 8 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 4 | 10 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 1 | 0 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 5 | 10 | 13 | 8 | 5 |
| 32 | Rano | 6 | 0 | 6 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 2 | 1 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 3 | 17 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 0 | 8 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 1 | 14 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 1 | 6 | 9 | 5 | 4 |
| 38 | Tofa | 11 | 0 | 11 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 0 | 2 | 1 | 0 | 1 |
| 40 | Tundun Wada | 3 | 1 | 2 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 3 | 15 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 1 | 14 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 0 | 4 | N/A | N/A | N/A |
| **Total** | | **442** | **56** | **386** | **57** | **29** | **28** |

## Appendix 4: Coverage gap for nurses by LGA

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least one nurse | Number of nurses needed to meet national standard | Total no of facilities | Facilities with at least one nurse | Number of nurses needed to meet national standard |
| 1 | Ajinji | 3 | 0 | 3 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 0 | 10 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 1 | 8 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 2 | 6 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 2 | 15 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 0 | 5 | N/A | N/A | N/A |
| 7 | Dala | 14 | 0 | 14 | 1 | 0 | 1 |
| 8 | Dambatta | 9 | 3 | 6 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 0 | 15 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 5 | 15 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 0 | 10 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 3 | 7 | 15 | 7 | 8 |
| 13 | Gabasawa | 11 | 4 | 7 | N/A | N/A | N/A |
| 14 | Garko | 14 | 1 | 13 | 1 | 0 | 1 |
| 15 | Garun Mallam | 9 | 2 | 7 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 5 | 15 | 1 | 0 | 1 |
| 17 | Gezawa | 14 | 3 | 11 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 0 | 5 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 4 | 12 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 1 | 10 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 3 | 3 | 4 | 3 | 1 |
| 22 | Karaye | 3 | 2 | 1 | N/A | N/A | N/A |

## Appendix 4: Coverage gap for nurses by LGA *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 1 | 2 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 0 | 5 | 2 | 2 | 0 |
| 25 | Kumbotso | 12 | 1 | 11 | 6 | 1 | 5 |
| 26 | Kunchi | 10 | 2 | 8 | N/A | N/A | N/A |
| 27 | Kura | 22 | 0 | 22 | 2 | 1 | 1 |
| 28 | Madobi | 9 | 1 | 8 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 5 | 9 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 0 | 1 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 5 | 10 | 13 | 9 | 4 |
| 32 | Rano | 6 | 1 | 5 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 0 | 3 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 0 | 20 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 0 | 8 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 3 | 12 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 2 | 5 | 9 | 5 | 4 |
| 38 | Tofa | 11 | 1 | 10 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 1 | 1 | 1 | 0 | 1 |
| 40 | Tundun Wada | 3 | 1 | 2 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 5 | 13 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 4 | 11 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 0 | 4 | N/A | N/A | N/A |
| **Total** | | **442** | **74** | **368** | **57** | **28** | **29** |

## Appendix 5: Coverage gap of community workers in assessed facilities by LGAs (trained health workers – CHOs, CHEWs etc.)

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least two community health staff | Number of community workers needed to meet national standard | Total no of facilities | Facilities with at least two community health staff | Number of community workers needed to meet national standard |
| 1 | Ajinji | 3 | 1 | 2 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 4 | 6 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 3 | 10 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 3 | 9 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 9 | 11 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 3 | 5 | N/A | N/A | N/A |
| 7 | Dala | 14 | 9 | 5 | 1 | 0 | 2 |
| 8 | Dambatta | 9 | 4 | 5 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 8 | 8 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 6 | 20 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 3 | 10 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 5 | 7 | 15 | 4 | 18 |
| 13 | Gabasawa | 11 | 4 | 9 | N/A | N/A | N/A |
| 14 | Garko | 14 | 6 | 9 | 1 | 1 | 0 |
| 15 | Garun Mallam | 9 | 6 | 4 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 12 | 11 | 1 | 1 | 0 |
| 17 | Gezawa | 14 | 5 | 13 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 3 | 2 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 6 | 12 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 4 | 9 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 5 | 2 | 4 | 1 | 6 |
| 22 | Karaye | 3 | 1 | 3 | N/A | N/A | N/A |

## Appendix 5: Coverage gap of community workers in assessed facilities by LGAs (trained health workers – CHOs, CHEWs etc.) *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 0 | 4 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 3 | 2 | 2 | 1 | 1 |
| 25 | Kumbotso | 12 | 9 | 3 | 6 | 2 | 6 |
| 26 | Kunchi | 10 | 4 | 8 | N/A | N/A | N/A |
| 27 | Kura | 22 | 13 | 15 | 2 | 2 | 0 |
| 28 | Madobi | 9 | 1 | 11 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 6 | 11 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 0 | 1 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 9 | 7 | 13 | 7 | 10 |
| 32 | Rano | 6 | 2 | 5 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 3 | 0 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 8 | 15 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 1 | 9 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 4 | 12 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 5 | 3 | 9 | 4 | 8 |
| 38 | Tofa | 11 | 3 | 14 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 1 | 2 | 1 | 0 | 1 |
| 40 | Tundun Wada | 3 | 3 | 0 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 13 | 8 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 5 | 14 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 1 | 5 | N/A | N/A | N/A |
| **Total** | | **442** | **204** | **321** | **57** | **23** | **54** |

## Appendix 6: Human resource gap in Kano State assessed facilities by LGAs (records officers)

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least one record officer | Number of record officers needed to meet national standard | Total no of facilities | Facilities with at least one record officer | Number of record officers needed to meet national standard |
| 1 | Ajinji | 3 | 1 | 2 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 0 | 10 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 1 | 8 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 4 | 4 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 5 | 12 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 0 | 5 | N/A | N/A | N/A |
| 7 | Dala | 14 | 1 | 13 | 1 | 0 | 1 |
| 8 | Dambatta | 9 | 3 | 6 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 1 | 14 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 1 | 19 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 3 | 7 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 4 | 6 | 15 | 6 | 9 |
| 13 | Gabasawa | 11 | 2 | 9 | N/A | N/A | N/A |
| 14 | Garko | 14 | 0 | 14 | 1 | 0 | 1 |
| 15 | Garun Mallam | 9 | 1 | 8 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 8 | 12 | 1 | 0 | 1 |
| 17 | Gezawa | 14 | 2 | 12 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 4 | 1 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 3 | 13 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 3 | 8 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 3 | 3 | 4 | 2 | 2 |
| 22 | Karaye | 3 | 1 | 2 | N/A | N/A | N/A |

## Appendix 6: Human resource gap in Kano State assessed facilities by LGAs (records officers) *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 1 | 2 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 2 | 3 | 2 | 1 | 1 |
| 25 | Kumbotso | 12 | 2 | 10 | 6 | 2 | 4 |
| 26 | Kunchi | 10 | 2 | 8 | N/A | N/A | N/A |
| 27 | Kura | 22 | 2 | 20 | 2 | 1 | 1 |
| 28 | Madobi | 9 | 1 | 8 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 4 | 10 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 1 | 0 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 6 | 9 | 13 | 8 | 5 |
| 32 | Rano | 6 | 2 | 4 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 2 | 1 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 12 | 8 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 0 | 8 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 2 | 13 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 3 | 4 | 9 | 6 | 3 |
| 38 | Tofa | 11 | 3 | 8 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 0 | 2 | 1 | 0 | 1 |
| 40 | Tundun Wada | 3 | 1 | 2 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 5 | 13 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 4 | 11 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 0 | 4 | N/A | N/A | N/A |
| **Total** | | **442** | **106** | **336** | **57** | **26** | **31** |

## Appendix 7: Human resource gap (laboratory staff) in Kano State assessed facilities by LGAs

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least one laboratory worker | Number of laboratory workers needed to meet national standard | Total no of facilities | Facilities with at least one laboratory worker | Number of laboratory workers needed to meet national standard |
| 1 | Ajinji | 3 | 1 | 2 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 0 | 10 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 0 | 9 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 2 | 6 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 3 | 14 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 1 | 4 | N/A | N/A | N/A |
| 7 | Dala | 14 | 3 | 11 | 1 | 0 | 1 |
| 8 | Dambatta | 9 | 3 | 6 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 0 | 15 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 5 | 15 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 2 | 8 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 3 | 7 | 15 | 5 | 10 |
| 13 | Gabasawa | 11 | 2 | 9 | N/A | N/A | N/A |
| 14 | Garko | 14 | 1 | 13 | 1 | 0 | 1 |
| 15 | Garun Mallam | 9 | 4 | 5 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 7 | 13 | 1 | 1 | 0 |
| 17 | Gezawa | 14 | 2 | 12 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 3 | 2 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 3 | 13 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 2 | 9 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 1 | 5 | 4 | 1 | 3 |
| 22 | Karaye | 3 | 1 | 2 | N/A | N/A | N/A |

## Appendix 7: Human resource gap (laboratory staff) in Kano State assessed facilities by LGAs *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 0 | 3 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 1 | 4 | 2 | 2 | 0 |
| 25 | Kumbotso | 12 | 4 | 8 | 6 | 0 | 6 |
| 26 | Kunchi | 10 | 2 | 8 | N/A | N/A | N/A |
| 27 | Kura | 22 | 1 | 21 | 2 | 1 | 1 |
| 28 | Madobi | 9 | 2 | 7 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 5 | 9 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 0 | 1 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 5 | 10 | 13 | 10 | 3 |
| 32 | Rano | 6 | 2 | 4 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 3 | 0 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 4 | 16 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 0 | 8 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 2 | 13 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 1 | 6 | 9 | 3 | 6 |
| 38 | Tofa | 11 | 2 | 9 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 0 | 2 | 1 | 1 | 0 |
| 40 | Tundun Wada | 3 | 2 | 1 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 7 | 11 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 3 | 12 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 1 | 3 | N/A | N/A | N/A |
| **Total** | | **442** | **96** | **346** | **57** | **24** | **33** |

## Appendix 8: Human resource gap (pharmacy staff) in Kano State assessed facilities by LGAs

| S/N | LGAS | PUBLIC (N=442) | | | PRIVATE (N=57) | | |
|---|---|---|---|---|---|---|---|
| | | Total no of facilities | Facilities with at least one laboratory worker | Number of laboratory workers needed to meet national standard | Total no of facilities | Facilities with at least one laboratory worker | Number of laboratory workers needed to meet national standard |
| 1 | Ajinji | 3 | 0 | 3 | N/A | N/A | N/A |
| 2 | Albasu | 10 | 0 | 10 | N/A | N/A | N/A |
| 3 | Bagwai | 9 | 0 | 9 | N/A | N/A | N/A |
| 4 | Bebeji | 8 | 1 | 7 | N/A | N/A | N/A |
| 5 | Bichi | 17 | 1 | 16 | N/A | N/A | N/A |
| 6 | Bunkure | 5 | 1 | 4 | N/A | N/A | N/A |
| 7 | Dala | 14 | 3 | 11 | 1 | 0 | 1 |
| 8 | Dambatta | 9 | 3 | 6 | N/A | N/A | N/A |
| 9 | Dawakin Kudu | 15 | 1 | 14 | N/A | N/A | N/A |
| 10 | Dawakin Tofa | 20 | 1 | 19 | N/A | N/A | N/A |
| 11 | Doguwa | 10 | 1 | 9 | 1 | 0 | 1 |
| 12 | Fagge | 10 | 2 | 8 | 15 | 6 | 9 |
| 13 | Gabasawa | 11 | 0 | 11 | N/A | N/A | N/A |
| 14 | Garko | 14 | 1 | 13 | 1 | 0 | 1 |
| 15 | Garun Mallam | 9 | 2 | 7 | N/A | N/A | N/A |
| 16 | Gaya | 20 | 0 | 20 | 1 | 1 | 0 |
| 17 | Gezawa | 14 | 2 | 12 | N/A | N/A | N/A |
| 18 | Gwale | 5 | 2 | 3 | N/A | N/A | N/A |
| 19 | Gwarzo | 16 | 1 | 15 | N/A | N/A | N/A |
| 20 | Kabo | 11 | 1 | 10 | N/A | N/A | N/A |
| 21 | Kano Municipal | 6 | 1 | 5 | 4 | 3 | 1 |
| 22 | Karaye | 3 | 0 | 3 | N/A | N/A | N/A |

## Appendix 8: Human resource gap (pharmacy staff) in Kano State assessed facilities by LGAs *(continued)*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | Kibiya | 3 | 1 | 2 | N/A | N/A | N/A |
| 24 | Kiru | 5 | 0 | 5 | 2 | 0 | 2 |
| 25 | Kumbotso | 12 | 4 | 8 | 6 | 4 | 2 |
| 26 | Kunchi | 10 | 1 | 9 | N/A | N/A | N/A |
| 27 | Kura | 22 | 0 | 22 | 2 | 1 | 1 |
| 28 | Madobi | 9 | 0 | 9 | N/A | N/A | N/A |
| 29 | Makoda | 14 | 4 | 10 | N/A | N/A | N/A |
| 30 | Minjibir | 1 | 0 | 1 | N/A | N/A | N/A |
| 31 | Nasarawa | 15 | 7 | 8 | 13 | 5 | 8 |
| 32 | Rano | 6 | 1 | 5 | N/A | N/A | N/A |
| 33 | Rimi Gado | 3 | 1 | 2 | N/A | N/A | N/A |
| 34 | Rogo | 20 | 1 | 19 | N/A | N/A | N/A |
| 35 | Shanono | 8 | 0 | 8 | N/A | N/A | N/A |
| 36 | Sumaila | 15 | 3 | 12 | N/A | N/A | N/A |
| 37 | Tarauni | 7 | 3 | 4 | 9 | 5 | 4 |
| 38 | Tofa | 11 | 1 | 10 | 1 | 0 | 1 |
| 39 | Tsanyawa | 2 | 0 | 2 | 1 | 0 | 1 |
| 40 | Tundun Wada | 3 | 1 | 2 | N/A | N/A | N/A |
| 41 | Ungogo | 18 | 6 | 12 | N/A | N/A | N/A |
| 42 | Warawa | 15 | 0 | 15 | N/A | N/A | N/A |
| 43 | Wudli | 4 | 0 | 4 | N/A | N/A | N/A |
| **Total** | | **442** | **58** | **384** | **57** | **25** | **32** |

## Appendix 9: Staff requirement in facilities selected for PMTCT scale-up (with 4 clinical staff) but below national standard

| S/N | HEALTH WORKER CADRE | NUMBER NEEDED TO MEET NATIONAL STANDARD IN PUBLIC FACILITIES | NUMBER NEEDED TO MEET NATIONAL STANDARD IN PRIVATE FACILITIES |
|---|---|---|---|
| 1 | Doctors | 54 | 6 |
| 2 | Nurses | 41 | 4 |
| 3 | Trained Health Workers – CHOs, CHEWs etc. | 6 | 10 |
| 4 | Record Officers | 45 | 7 |
| 5 | Lab. Scientist/ technicians | 37 | 5 |
| 6 | Pharmacist/pharmacy technicians | 66 | 12 |

## Appendix 10: Staff requirement in all state ANC facilities below national standard

| S/N | HEALTH WORKER CADRE | NUMBER NEEDED TO MEET NATIONAL STANDARD IN PUBLIC FACILITIES | NUMBER NEEDED TO MEET NATIONAL STANDARD IN PRIVATE FACILITIES |
|---|---|---|---|
| 1 | Doctors | 386 | 28 |
| 2 | Nurses | 368 | 29 |
| 3 | Trained Health Workers – CHOs, CHEWs etc. | 321 | 54 |
| 4 | Record Officers | 336 | 31 |
| 5 | Lab. Scientist/ technicians | 346 | 33 |
| 6 | Pharmacist/pharmacy technicians | 384 | 32 |

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# 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.

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