DELTA STATE

CONTRIBUTORY HEALTH COMMISSION

Baseline Assessment for Implementation of the Delta State Contributory Health Scheme.

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ACRONYMS

ACT	Artemisinin Combination Therapy
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARV	Anti-Retroviral
CCT	Conditional Cash Transfer
CSPro	Census Survey Professionals
DELTASEEDS	Delta State Economic Empowerment and Development Strategy
DOTS	Directly Observed Therapy Short course
DRF	Drug Revolving Fund
DSG	Delta State Government
EDP	Essential Drug Project
FMHCP	Free Maternal Health Care Programme
FMoH	Federal Ministry of Health
GSA	General Service Availability
GSR	General Service Readiness
HF	Health Facility
HFA	Health Facility Assessment
HIV	Human Immunodeficiency Virus
HMO	Health Maintenance Organization
HRH	Human Resource for Health
HSCL	Health Systems Consult Limited
HTC	HIV Testing and Counselling
LGA	Local Government Area
LLIN	Long Lasting Insecticidal Nets
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MSS	Midwives Service Scheme
NBS	National Bureau of Statistics
NDCs	Non Communicable Diseases
NDHS	National Demographic and Health Survey
NHIS	National Health Insurance Scheme
NPC	National Population Council
NPHCDA	National Primary Healthcare Development Agency
OD	Optimal Design
OOP	Out of Pocket
PHC	Primary Healthcare Centres
PMTCT	Prevention of Mother to Child Transmission of HIV/AIDS
PSM	Procurement and Supply Chain Management
RDT	Rapid Diagnostic Test
SACA	State Agency for the Control of HIV/AIDS
SARA	Service Availability and Readiness Assessment

ACRONYMS CONT'D

SASCP	State AIDS and Sexually Transmitted Infections Control Programme
SBA	Skilled Birth Attendance
SMoH	State Ministry of Health
SURE-P	Subsidy Reinvestment Programme
UHC	Universal Health Coverage
USAID	United States Agency for International Development
WHO	World Health Organization
WTP	Willingness to Pay

EXECUTIVE SUMMARY

Globally, Universal Health Coverage (UHC) is rapidly taking the centre stage. With commitments from global, national and sub-national leaders, adoption of UHC is seen as a pathway for achieving Sustainable Development Goals (SDGs). The primary goal of UHC is ensuring that all people obtain the necessary health services that they require without suffering any financial hardship in doing so. This is primarily achieved using pre-payment mechanisms such as health insurance. For any government to achieve UHC, it must recognise the critical role played by all the components of the health system in protecting the health of all citizens. To build a sustainable system for financing UHC, Delta State has established a Contributory Health Scheme to reduce out of pocket (OOP) spending on healthcare and prevent catastrophic health expenditure. This strategy will enable families to be healthier, productive and active contributors to economic wellbeing of their families, communities and the state.

In order to appropriately design and successfully implement the health insurance scheme in the state, Delta State Government engaged Health Systems Consult (HSCL) to conduct a baseline assessment (which included a household survey and Health Facility Assessment, HFA), to determine key contextual and health factors that are important which includes assessing the readiness of health facilities to deliver intended services as well as the availability of such services to be sure that the health care needs of the people will be met under the scheme. This is in line with the World Health Organization's (WHO) requirement for setting up a health insurance scheme towards achieving UHC which includes availability of a functional health system that meets priority health needs, affordability of the scheme by target beneficiaries, amongst others. The findings from the baseline assessment will inform steps to be taken in designing various aspects of the scheme, which include designing cost and benefit packages as well as operational guidelines.

The baseline household survey was conducted in all the 25 Local Government Areas (LGA) in the state. A representative sample size of 2,300 households was computed (using the Optimal Design Software Version 1.77) and distributed across the state using a probability proportional to size method based on LGA population and numbers of primary health care centres in each LGA. The numbers of households to be interviewed were allocated by enumeration area using systematic random sampling. All identified health facilities that were operational were assessed.

Data was collected by trained field workers using a pre-tested household questionnaire and adapted Service Availability and Readiness Assessment (SARA) tool for the HFA. The data collected during the household interviews include: household demographics (age, gender, level of education and employment status), wealth index, health seeking behaviour, access to and cost of health services, knowledge of health insurance, health insurance coverage levels, willingness to participate in and to pay for health insurance. For the HFA, an adapted SARA tool, was deployed to assess service availability and readiness in all health facilities across all the 25 LGAs. The aim was to identify service gaps and assess health facility readiness to provide quality-assured health services for enrolees of the contributory health scheme. The SARA methodology and tool was developed by WHO in collaboration with United States

Agency for International Development (USAID) and is usually adapted to specific country context, intended purpose and widely used to assess health system readiness to provide intended services[1]. The collected data was then entered into the Census and Survey Professionals(CSPro) platform by trained data entry clerks and exported to STATA for analyses and presentation of results. Microsoft Excel was used to generate charts and graphs.

Quality assurance procedures included recruitment of qualified personnel for data collection and entry, adequate training on survey tools and methodology, field supervision by team supervisors and study coordinators, data cleaning before entry, random comparison of data on the questionnaire and data entered on CSPro by statistician and monitoring of the entire process by qualified personnel. Challenges encountered include difficulty in accessing some of the communities due to security challenges and difficult terrain.

Findings from Household Survey

The results from the household survey show that majority (85.9%) of households have male heads. Level of education of household heads ranges from no formal education (9.7%) to higher educational qualifications (24.2%) with most (40.4%) surveyed household heads possessing a secondary school certificate as their highest educational qualification. Most (55.0%) household heads are self-employed with about 20.4% of household heads working in the private sector and only 13.8% of household heads working in the public sector. The average household in Delta State is made up of 5.7 members with majority (81%) of households having 6 members or less. Findings also show that about 95% of Deltans pay for health care via out of pocket and only about 2% have any form of health security (insurance or retainership). Though monthly income levels range from an average of N25,000 among households in the poorest quintile to about N45,000 among households in the richest quintile, 62% of Deltans are willing to pay for health insurance. The average monthly premium households are willing to pay is N789.20. In addition, while majority (78.8%) of Deltans seek facility based care when ill, only about 36.6% visit health facilities as their first point of call for treatment, with most (41.3%) visiting chemists and pharmacists usually without a prescription from a doctor. Majority of women (82.5%) seek antenatal care services when pregnant and about 75.1% of households had their last delivery in a health facility. Quality of care (43.2%), affordability (24.3%) and proximity to place of residence (15.3%) are the three major considerations for Delta households in deciding where to seek health care. Malaria accounts for the highest reason (about 72.1%) of hospital visits. Access to health facilities is also very high with about 81.4% of Deltans living within 30 minutes to a health facility.

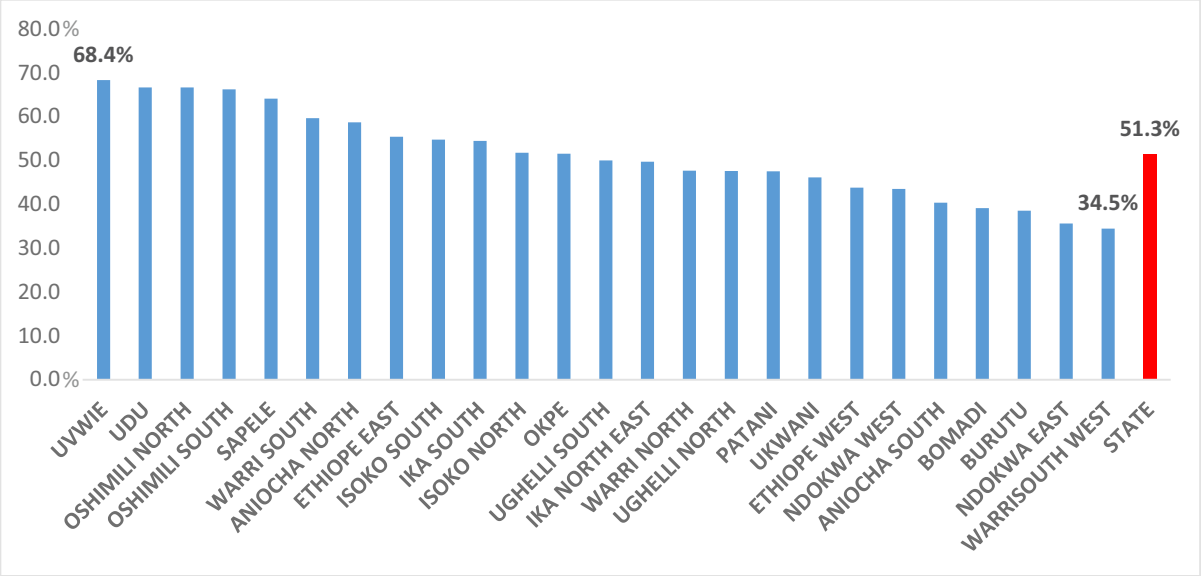
Findings from the Health Facility Assessment

For the HFA, a total of 595 health facilities were assessed. Of the assessed facilities, 70% are public owned, 27% are private-for-profit while the rest belong to missionaries and others. By level of care, 74% of all health facilities in the state are primary care level facilities while 23%

are secondary care facilities. In terms of location, 61% of the health facilities are located in rural areas while 39% are in urban areas.

Service Readiness signifies the overall capacity of health facilities to deliver general health services. In this assessment, General Service Readiness (GSR) is represented by an average score of five domains: basic amenities, waste disposal, diagnostic capacity, essential medicines and types of health services available. Out of all the five domains, waste disposal scored the lowest at 12.3% while basic health service capability is the highest with a score of 74.3%. Overall, GSR in Delta State is 51.3% but varies widely across the LGAs. Warri South-west has the least score while and Uvwie has the highest. The following chart shows the GSR variability across the LGAs.

Figure 1: General Service Readiness Score by LGAs in Delta State



General Service Availability (GSA) which is an aggregate of the domains of health workforce, facility density and service utilization, is quite low at 36%. The State health infrastructure availability aggregated at 58%; service utilization at 11% while the aggregate score for availability of core health professionals is 39%.

A sub analysis of the service availability domains further showed performance of the surveyed health facilities along the sub –domains. For facility density which is measured as number of functional health facilities per 10,000 population, the state has 1.12 per 10,000 population as against the WHO recommended value of 2 per 10,000 population giving them a score of 56%. In-patient bed density is measured as number of inpatient beds per 10,000 population. The state has approximately 12 beds per 10,000 population as against the WHO. recommended density of 25 per 10,000 population. This gave the state a score of 48% for this sub-domain. The survey results showed that the state has 7 maternity beds per 1,000 pregnant women as against the WHO recommended 10 maternity beds per 1000 pregnant women, giving the state a score of 71%. Core health workforce density is measured as the number of core health practitioners (including physicians, dentists, registered nurses and midwives) per 10,000

population. WHO recommends a core health workforce density of 23 per 10,000 population while the state has a health workforce density of approximately 9 per 10,000 population, a score of 39%. The density of specific cadres is also low. This critical shortage of health workers can impact negatively on the delivery of basic and specialist health care services.

For service utilization, out-patient and in-patient service utilization were assessed. Out-patient service utilization in health facilities is measured as number of outpatient visits per capita per year. The WHO estimates 5 outpatient visits per person per year. Delta has a state average of less than 1 (0.31) outpatient visit per person per year. This may suggest low outpatient service utilization. For in-patient service utilisation, it is measured as number of hospital discharges per 100 population per year, excluding deliveries. While WHO estimates 10 hospital discharges per 100 population per year as a proxy of availability and access to in-patient services, the state facilities for the year ended 2015 recorded about 2 hospital discharges per 100 population per year. Overall, health service utilization in Delta state is below the internationally estimated minimum. This picture might be a result of poor record keeping as reference data were sourced from the National HMIS database[2]. It is recommended that a data quality audit on this indicator be carried out to validate these findings.

Recommendations from the Household Survey

- While over 81% of surveyed households have at most 6 household members which is ideal for most health insurance schemes, about 20% have more than 6 members. Extra household members in households with more than 6 members should be considered for inclusion in the scheme so that no household member/individual is excluded from benefiting from contributory health scheme.
- The level of knowledge about health insurance is very low; only 36.1% of the population have a good knowledge of it. To improve this, a strong sensitisation and mobilisation plan should be developed to educate and mobilise the population - especially the uneducated and households within the poorest quintile - for the scheme. Information Education and Communication (IEC) and Behaviour Change Communication (BCC) strategies should be used to raise community awareness and increase knowledge of health insurance for enhanced acceptability and rapid scale-up. The organisational structure for the Delta State Contributory Health Commission should incorporate a strong communication/mobilisation team.
- Since, a large proportion of the people are employed in the private sector and also seek healthcare from that sector, the active participation of the private sector (formal and informal) in the scheme is quite important, and the mechanism for revenue collection from households who work within these sectors, especially in rural areas should be innovative to ensure success.

- Financial access to health services is poor with most people paying for health care out-of-pocket, which can lead the most-poor households to forgo some basic needs. However, most of the people were wil ling to pay for the contributory health scheme, hence, universal coverage with health insurance should be vigorously pursued and implemented in Delta state.
- Geographic access to health facility was high with about 80% of the population living within 30 minutes' walk to a health facility. However, more health facilities can be established to improve access amongst the remaining 20% of the population.
- To be self-sufficient, the scheme must enrol as many households as possible to ensure adequate risk and funds pooling. Pooling may be done at the LGA level or centrally to cross-subsidize.
- Households in the poorest wealth quintile may not be able to afford to enrol, hence the government should either subsidize or exempt this category of residents from payment. However, appropriate identification mechanisms must be put in place in order to correctly identify the poorest. In addition, the state contributory health scheme should ensure little or no co-payment so as not to discourage some poorer households from enrolling.

Recommendations from the HFA include:

- There is an urgent need to embark on state-wide HRH recruitment and retention strategies for core health professionals (doctor, nurses and midwives) as well as specialist (both medical and non-medical). A good way to do this is to develop a State Human Resources for Health Strategic Plan if none exists already. This plan should have a detailed contextual analysis of HRH needs in the state and should aim at ensuring adequate number and equitable distribution of skilled and well-motivated health workforce by focusing on improving recruitment, retention and performance of health workers.
- Alongside recruitment and deployment, the state should make additional investments to upgrade public facilities and create an enabling environment for growth of the private health sector as well leverage to ensure coverage in all communities/LGAs.
- There is a need for establishment of more health facilities. In doing this, equity in the distribution of health facilities should be sought and a role for the private sector should be established.
- The state needs to develop and operationalise a health care waste management plan for both public and private sector facilities. This should include training on health care waste management, provision of waste disposal materials and infrastructure.
- Bomadi, Burutu, Ndokwa East and Warri South-West LGAs deserve special attention to ensure that they have facilities that are ready and have available the right services to provide care for their residents.
- Delta state should leverage from the provisions of the National Health Act to develop standards for the different levels of care and for routine monitoring of quality of care in health facilities in the state.

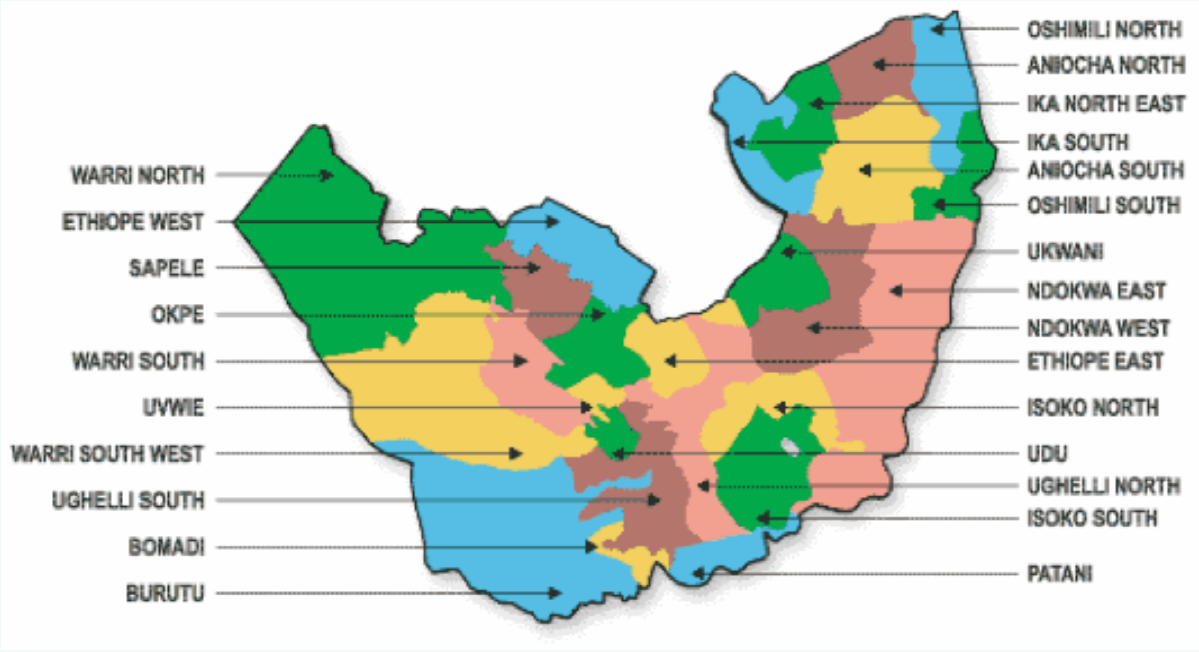
1 INTRODUCTION

1.1 Background

Delta State was created in 1991 from the former Bendel State. The state is located in the South-South Geo-Political region of Nigeria and has Asaba as its state capital while Warri is considered the economic nerve. It lies approximately between longitude 5°00 and 6°45'East and latitude 5°00 and 6°30' North of the equator. The state is bounded to the North and West by Edo state, the East by Anambra, Imo and Rivers states and to the south by The Bight of Benin which covers about 160km of the state's coastline. The state spans a total area of 18,050 square kilometres of which 60% is land, ranking 23rd out of the 36 states in the country in terms of land mass. It is a low lying state characterised by a wide coastal belt interlaced with rivulets and streams, with a high relative humidity, high annual average rainfall of 266.5mm and fluctuating average daily temperature which ranges from 30°C to 44°C in some parts of the state.

With a 2015 estimated population of 5.4 million, Delta has a population density of 229 people/Square-Km. The state is an ethnically diverse with 7 major tribes spread across twenty-five Local Government Areas (LGAs), in three senatorial zones -Delta South, Delta North and Delta Central. Most inhabitants of the state are Christians.

Figure 2:Delta State Map Showing the 25 LGAs



1.2 Economy

Delta state is an oil and gas producing state and consequently is of strategic importance to the Nigerian economy. The state accounts for about 4% of the country's gas reserves and a large percentage of its overall oil output. Besides its abundant oil and gas reserves, the state has other natural resources including industrial clay and lime stone lignite, which serves as a

raw material for the production of glassware, decorative artefacts and quarrying. Other economic activities in the state include agriculture, aquaculture, fishing and tourism.

1.3 Health Landscape

The Delta State Ministry of Health (SMoH) is responsible for the development and implementation of relevant policies/strategies targeted towards improving health outcomes in the state. The State has a Delta State Strategic Health Development Plan 2010 – 2015 which is now due for review. The plan provides the over-arching framework for achievement of the state's health sector objectives. The state also has several other sub-sector policies and strategies.

Delta State has a reported 513 public hospitals and 266 private hospitals, averaging 1 hospital for 7,000 populations. However, a facility assessment as part of this baseline survey revealed only 595 operational health facilities (excluding community pharmacies and patent medicine vendors). 70% of the hospitals assessed are owned by government while 30% are privately owned (for-profit and not-for-profit). 74% of assessed health facilities are primary care level facilities and 23% are secondary care level facilities. 61% of the health are in rural areas while 39% are in urban areas. In terms of disease burden in the state, Delta state has a HIV/AIDS prevalence rate of 4.1% which is slightly higher than the National prevalence rate of 3.2%.[3] Malaria prevalence among children aged 3 to 59 months is about 32.2% in the South-South region[4] which is the highest rate among all regions in the southern part of the country. Maternal and infant indices mirror the national picture of poor health indices among women and children.

1.3.1 Previous Health Schemes and Initiatives

In a bid to improve the health of its residents, the Delta State Government has in the past implemented a number of special programmes and initiatives including:

a. Child survival programmes

The Delta State government implemented some priority interventions to increase child survival rates and reduce child mortality. These interventions include: routine immunization and special campaigns for measles and polio, nutrition programmes and diagnosis and treatment of the common conditions such as diarrhoea, respiratory infections, malaria and helminthic infections. The government also launched the Free under-5 Healthcare Scheme in May 2010 to provide free diagnostic and treatment services to children under five years of age. In Primary Health Care Centres (PHCs), management of immunization, tuberculosis and a host of other common childhood illnesses is provided free of charge.

b. Maternal Health Programmes

The state launched the Free Maternal Health Care Programme (FMHCP) covering 54 hospitals in 2007, to promote safe motherhood and reduce maternal mortality.

Services provided under the FMHCP include family planning, antenatal care, emergency obstetric care, delivery (including caesarean sections) and postnatal care. Maternal and Child Health (MCH) services were delivered free of cost in all public PHCs.

c. Rural Healthcare Scheme

This scheme was set up in 2005 to provide free medical services to Deltans with priority given to rural dwellers who usually cannot afford to attend hospitals. A team made up of 48 medical professionals (obstetricians and gynaecologists, ophthalmologists, anaesthesiologists, public health and general practitioners) and an ad-hoc team of 10-15 additional medical personnel visited each community once every year, offering services such as laboratory testing, HIV screening, diagnosis and treatment of common illnesses, general as well as specialist care, including minor surgery. By 2011 the scheme was expanded to include immunization and dental care.

1.3.2 Health Insurance Landscape in Delta State

The goals of a well-functioning health system are to improve health outcomes; be responsive to people's legitimate health needs; and provide financial security against the costs of ill-health. Health financing being one of the building blocks of health systems, performs three major functions: collection of revenue/fund mobilization, pooling of funds and purchasing of health services. The overall aim of the three health financing functions is to ensure that adequate funds are available and allocated to provide quality, affordable and equitable health services that are accessible to the end users at all times. This underlies the concept of universal health coverage (UHC) which aims to ensure that all people obtain the health services they need without suffering financial hardship when paying for them. In Nigeria, about a quarter to a third of households suffer financial hardship annually while seeking health care and this sometimes leads to impoverishment of these households[5].

UHC has generated a lot of momentum in recent times and has become one of the key health—related foci of the Sustainable Development Goals (SDGs). With increasing commitment from international, national and sub-national actors to achieving UHC, available evidence suggests that the best way is through institutionalising prepayment schemes for cost recovery for health care and moving away from reliance on out of pocket payments (OOP).[6]

Health insurance in Delta State has been fraught with numerous challenges and many residents are without health insurance. Even though the National Health Insurance Scheme (NHIS) was adopted by the State years ago, it has been unable to extend coverage beyond those already covered by the NHIS.

1.3.3 The State Government's Commitment

To ensure easy access to healthcare by all residents of Delta State as well as reduce the financial burden caused by out of pocket spending on healthcare, the Delta State Governor Dr Ifeanyi Okowa, recently signed into law the Delta State Health Insurance Commission (DSHIC) bill. This development is in line with the Governor's SMART agenda which includes implementing relevant health policies and programs towards improving health outcomes in the state. The law makes health insurance mandatory for all residents of Delta State including those in the organised private sector, the public sector and the informal sector. To provide the relevant information to guide the implementation of the scheme and also a baseline for evaluating progress, the Delta State Government (DSTG) commissioned Health Systems Consult Limited (HSCL) to design and conduct a health facility and household baseline assessment. The objectives of the baseline assessment are to:

- Determine health seeking behaviour and geographical access to health services of Delta households;
- Determine household health care expenditure and willingness to pay for health insurance and
- Estimate the proportion of the population that are in the poor and poorest socio-economic groups, to guide decisions on subsidy and exemption budgeting.

2 APPROACH AND METHODOLOGY

2.1 Sample Determinations

A representative sample from the entire state population was selected for the Delta state household baseline assessment which offered an opportunity for analyses at several sub-levels. To ensure representativeness, the following certain steps were followed:

i. The total population of the state (2015 estimate) was obtained from the Nigerian National Population Council NPC's website
ii. The total number of households (HH) in the state was determined using the average 2013 National Demographic and Health Survey (NDHS) average household size of 4.6
iii. A representative household sample size was computed at 95% confidence interval using the Optimal Design, OD software Version (1.77).
iv. The determined sample size (number of households to be surveyed) was then allocated to the each of the 25 LGAs using Probability Proportional to Size (PPS) method based on total LGA population.

2.1.1 Stage one: Selection of LGAs

All twenty-five (25) LGAs in the state were sampled. This strategy was adopted to get a clear picture of the entire state.

2.1.2 Stage two: Selection of EAs

Selection of EAs formed the second stage of sampling. The frame of EAs demarcated by the National Population Commission (NPC) for the 2006 housing and population census was adopted. A line list of the EAs in each LGA was generated and served as an initial sampling frame for EA selection. EAs were then randomly selected within each LGA using the PPS technique with all LGAs having a minimum of four (4) and maximum of six (6) EAs. Within each of the selected EAs, a HH listing was drawn using standard HH listing procedures utilized by the National Bureau of Statistics (NBS).

2.1.3 Stage three: Selection of households

With sample size determined for each LGA, a structured and step wise approach was used in the selection of HHs for the study. Standard estimates used by the NBS for national scale HH surveys were adopted with 20 HHs shortlisted per EA.

The HH listings served as a sampling frame for selection of households for administration of questionnaires. Sampling intervals per EA were derived using the formula:

N/n where N = Population and n = Target Sample (17 HHs per EA)

The sample interval was then used to conduct a systematic selection of HHs from the HH list by the research teams. A total of 115 EAs across all 25 LGAs were sampled for the study and a total number of two thousand three hundred (2300) HHs randomly selected.

For each selected household, an interview with the household head (or their representative) was conducted. Each interview assessed household assets, health seeking behaviour, knowledge of health insurance, ability and willingness to pay for health insurance and some demographic variables. Interviews were conducted while ensuring the comfort and privacy of respondents.

The HFA was a state wide census involving all health facilities-public and private- across all levels of care. An initial list of all health facilities was obtained from the national directory of health facilities and verified with the state health facility list. From this a final list of health facilities was obtained. This list formed the sampling frame of health facilities that were assessed. A snowball technique was further employed to identify other health facilities not included in the initial list

2.2 Questionnaires

HSCL developed a structured questionnaire for the household survey, in consultation with the Delta state Governor's Health Insurance Team, to ensure all aspects of the survey were covered.

The household questionnaire was used to list all members of the selected households and interview the head of the household. It had the following broad sections:

i. Identification page for each household member
ii. Household demographics
iii. Health seeking behaviour
iv. Access to health services
v. Cost of health services
vi. Payment for health services
vii. Knowledge of health insurance and willingness to pay for it

The Health Facility Assessment (HFA) tool was developed and modified from the standard Service Availability and Readiness Assessment (SARA) questionnaire developed by the World Health Organization (WHO) in collaboration with Unites States Agency for International Development (USAID). The questionnaire was designed to assess service availability and readiness in all health facilities in the state with the aim of identifying service gaps and assessing health facility readiness to provide quality-assured health services for enrollees of the proposed contributory health scheme. Components of the modified tool include health facility distribution and density; health workforce, distribution and density; general service readiness in terms of basic amenities; waste disposal and infection control procedures; diagnostic capacity and availability of essential medicines. Availability and readiness of specific services offered by health facilities was also assessed.

2.3 Recruitment and Training of field staff

A pool of data collectors was created from the database of the National Bureau of Statistics (NBS) trained enumerators and SMoH. Selection of data collectors from the pool was based on the possession of a minimum of an Ordinary National Diploma (OND) certificate, ability to read, write and communicate in English and local languages, familiarity with the terrain and previous experience in field data collection.

Following the initial selection, a comprehensive 2-day training was organised for the data collectors according to standard survey training procedures, which included a classroom presentation using PowerPoint slides as a guide, role plays, group work and a reading assessment test. It also included modules on how to complete the survey questionnaires and a review of the field manual which provided guidance on field practices. Trainers were members of the HSCL core project team.

After the training, the final list of data collectors was selected based on their performance in the training. Data collectors were then divided into teams with each team having at least one member from the NBS with previous experience in data collection, one member from the SMoH with technical knowledge of the state healthcare system, one member who is familiar with the terrain and one who could communicate in the local language. The teams were distributed across the twenty-five LGAs

2.4 Field Work

Field work for the baseline assessment was carried out by 14 teams. Each team had a supervisor and 4-6 data collectors depending on the number of interviews they have to conduct. Supervisors were responsible for introducing the teams to the LGA, community leadership, and health facility in-charge, team coordination, review of quality of interviews and completed questionnaires. The HSCL core project team provided an additional layer of quality control by conducting daily random spot checks of interview teams, reviewing completed questionnaires and quick resolution of challenges.

Key challenges faced by the teams include security challenges due to communal clashes in some areas and difficulty in assessing some communities due to the terrain. To resolve this, data collection was extended in some LGAs. Data collection lasted for 2 weeks, except in those communities where an extension was needed due to challenges in gaining access.

2.5 Data Processing

On completion of data collection, completed questionnaires were reviewed by team supervisors and the HSCL project staff. All questionnaires were then transported to the HSCL head office in Abuja. In Abuja, questionnaires were further edited and entered – using the CSPro software – by trained data entry clerks. The statistician and HSCL core project team carried out random checks for inconsistencies and to ensure that information on the questionnaires were the same as information uploaded onto the software. This round of data verification provided a chance to check for errors caused by data entry and to improve data

quality. Final data cleaning was carried out by the statistician for all completely filled questionnaires.

2.6 Data Analyses

Data was analyzed using STATA 12 (STATA Corp LP) while charts were developed using Microsoft Excel 2010, for better presentation.

3 FINDINGS FROM THE HOUSEHOLD SURVEY

This section provides information on characteristics of interest from households that took part in the baseline assessment. A total of 2300 households with 11,139 household members were interviewed. There were several differences in the basic characteristics of the households, including variations in wealth quintile, health seeking behaviour, knowledge of health insurance, coverage and willingness to pay. Findings are presented in the sections below

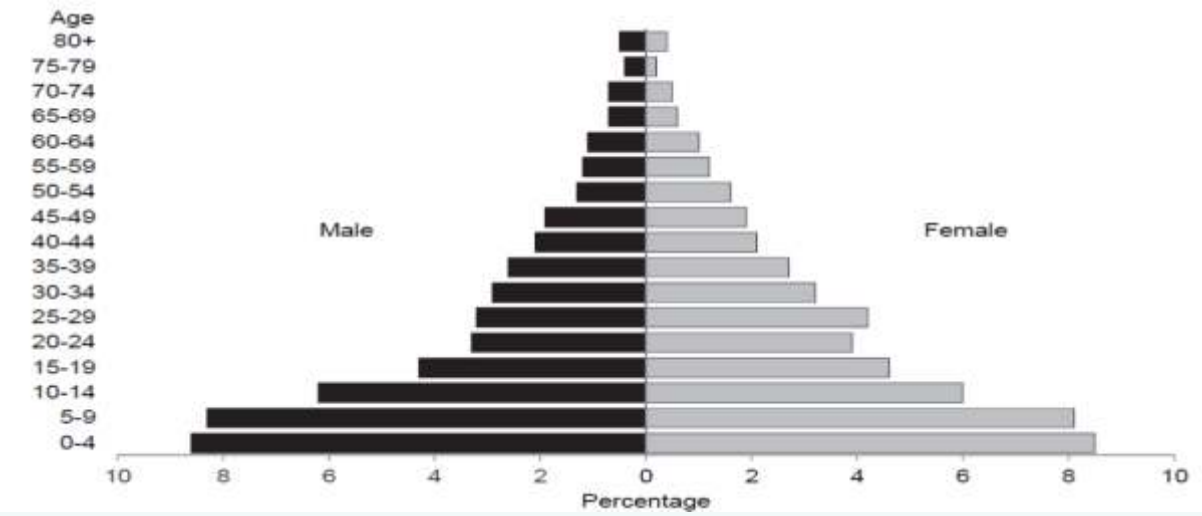
3.1 Household Demography

3.1.1 Households Leadership by Age and Sex

A large majority, 85.9% of sampled households, have male heads while only 14.1% have female heads. When compared with the National average of 18.1%[7] of households with female heads, Delta State is among the states with a lower proportion of households with female heads. The mean age of household heads is 47.9 years and ranged from 20 to 96 years. The mean age of female household heads is 49.1 years which is above the mean household head age for the entire sample population. Most households in the richest quintile (91%) have male heads and there are more (17.1%) households with female heads in the poorest quintile compared to other quintiles.

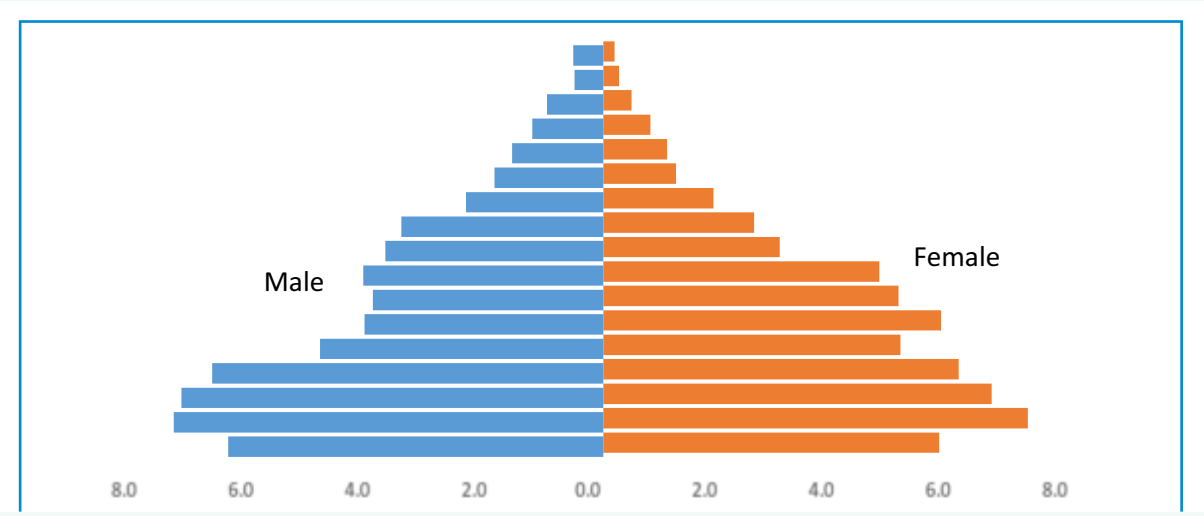
In terms of the gender and age distribution, the pattern observed in the Delta State population is similar to the National picture, resulting from high fertility rates and lower than average life expectancies[8]. The pyramid shows that the largest proportion of the population fall within the youngest age groups and population reduces with increase in age. For gender distribution, there were more males (51.2%) than females (48.8%).

Figure 3: National Population Pyramid NDHS 2013



[7] National Demographic Health Survey 2013. Federal Ministry of Health Abuja
[8] National Demographic Health Survey 2013. Federal Ministry of Health Abuja

Figure 4: Delta State Population Pyramid



Age structure of a population is an important factor to be considered when designing a health insurance scheme. Patterns of disease burden are influenced by age structure as chronic diseases are commoner in older age groups[9]. Management of chronic health conditions requires frequent hospital visits and lifelong treatments which could overburden insurance schemes. Although there is increase in the prevalence of chronic non-communicable diseases across sub-Saharan Africa[10], older people in this region form a small share of the population just as seen in the age structure in Delta State. This will be important to consider during the actuarial determination of risks and consequent costs of providing the prescribed benefit packages.

3.1.2 Household Size

From the study, the average household in Delta is made up of 5.7 members. This is higher than the national average of 4.6 from the 2013 NDHS. Under the National Health Insurance Scheme (NHIS), a family health insurance package covers two parents and four children (a maximum of six persons in the family package). From this survey, 55% of households have a household size of 4-6 members while 26% have less than 4 members, therefore majority of households in Delta (81%) will fit into the NHIS recommendation of maximum of 6 persons on a household health insurance plan.

[9]POLETTI, T., BALABANOVA, D., GHAZARYAN, O., KAMAL-YANNI, M., KOCHARYAN, H., ARAKELYAN, K. and HAKOBYAN, M., 2007. Options for scaling up community-based health insurance for rural communities in Armenia. London: Health Systems Development Programme, London School of Hygiene and Tropical Medicine, 1.

[10]The Lancet, 2012. - Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. The Lancet. 15 December, vol. 380, no. - 9859, pp. - 2095-2128.

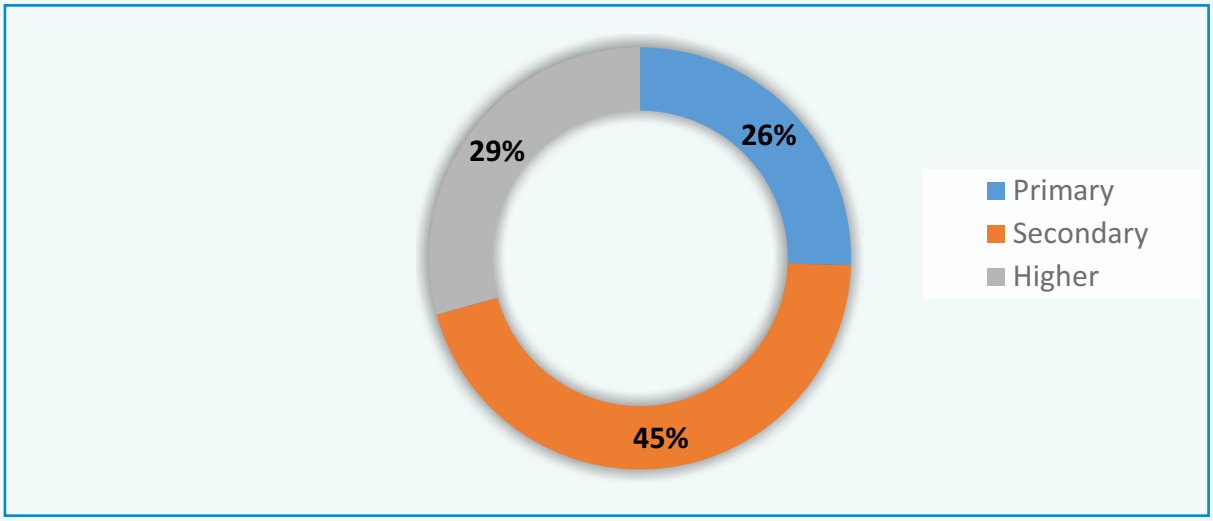
Table 1: Distribution of Households by size

Household Size	Frequency	%
1-3	601	**26**
4-6	1,254	**55**
7-10	409	**18**
11 above	34	**1**
Total	**2298**	**100**

3.1.3 Educational Attainment and Occupation of Household Heads

Figure 3 shows the distribution of all households by the education level of the head of household. Overall, majority (89%) of all household heads have some level of education. Of the household heads that have attained some level of education, 25.4% have primary education, 45% have secondary education and 29.1% have tertiary education. The remaining 9.7% of household heads have no formal education. This finding will be useful in informing the methods to be deployed for sensitisation and community mobilization for the health insurance scheme.

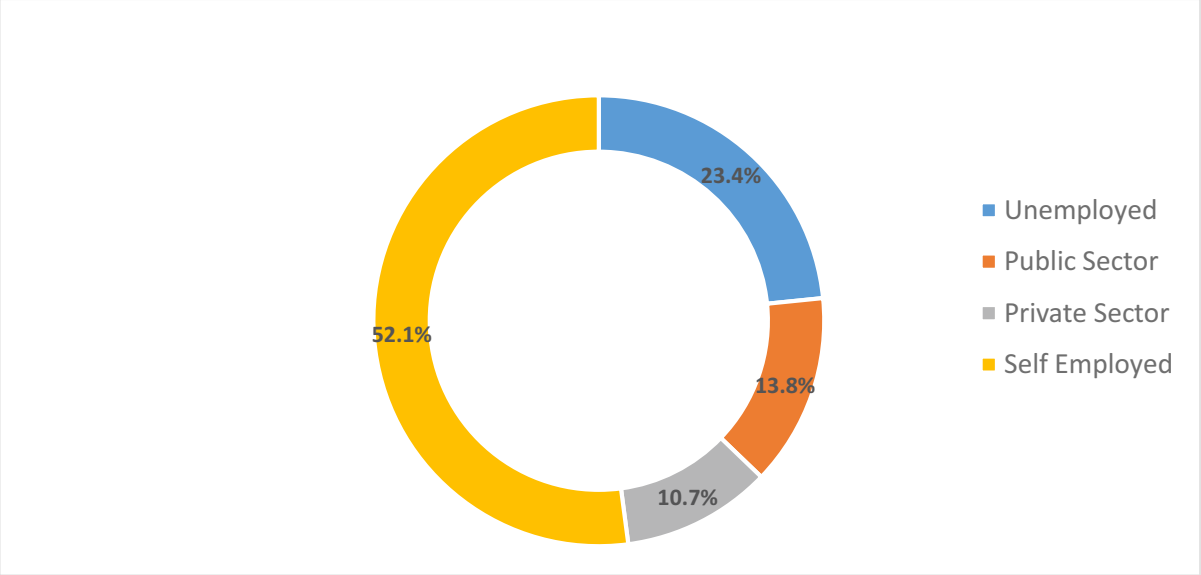
Figure 5: Educational Level of Household Heads



Occupation of household heads also varied significantly among different households surveyed. Majority of the household heads are either self-employed (52.1%), employed by the public sector (13.8%) or the private sector (10.7%). Revenue collection (premium) from the organised private sector and public sector (formal sector) for health insurance is relatively not problematic as deductions could be made at source, from salaries. However, collection of revenue from the informal sector such as the self-employed in this case can be very challenging. Unemployed household heads were represented by 23.4% of household

surveyed. This needs thorough consideration in developing the revenue collection plan for the scheme and considering a realistic timeframe for achieving full coverage.

Figure 6: Distribution of Household Heads by Occupation

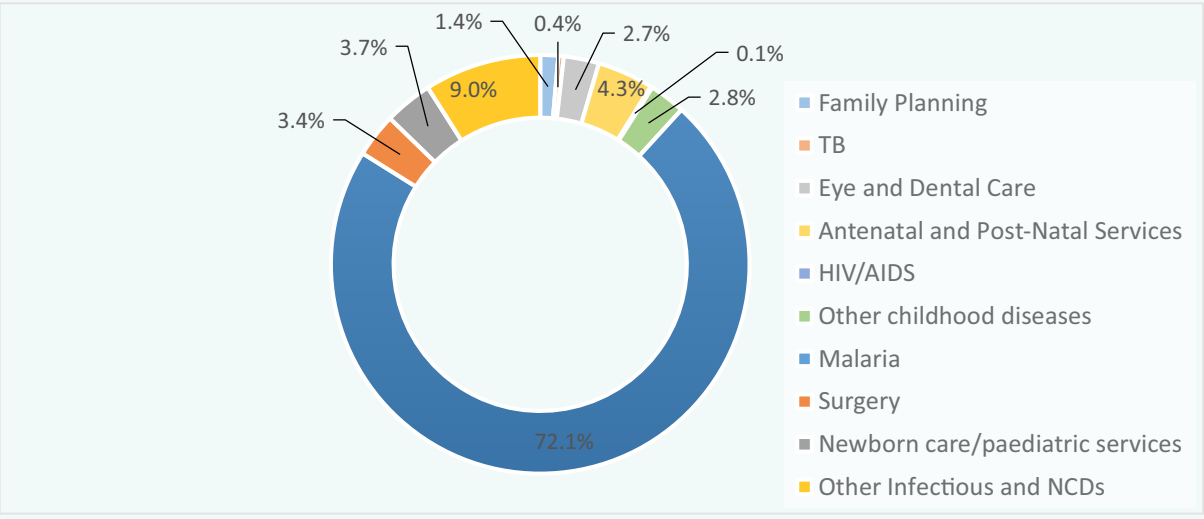


3.1.4 Reason for Last Hospital Visit

To get an insight into disease burden, the study assessed the reason for the last visit to a health facility, to determine which illnesses accounted for the highest consumption of health care resources.

Malaria is the leading cause of visits to the hospitals among household members (72.1%), followed by other infectious diseases and chronic health conditions (9.0%) and obstetric services (4.3%). It is important for Delta state to understand the burden of disease to ensure that the health insurances packages reflect high burden ailments. A more detailed burden of disease study or leveraging of the national burden of disease listing should be considered.

Figure 7: Reasons for last hospital visit among household members

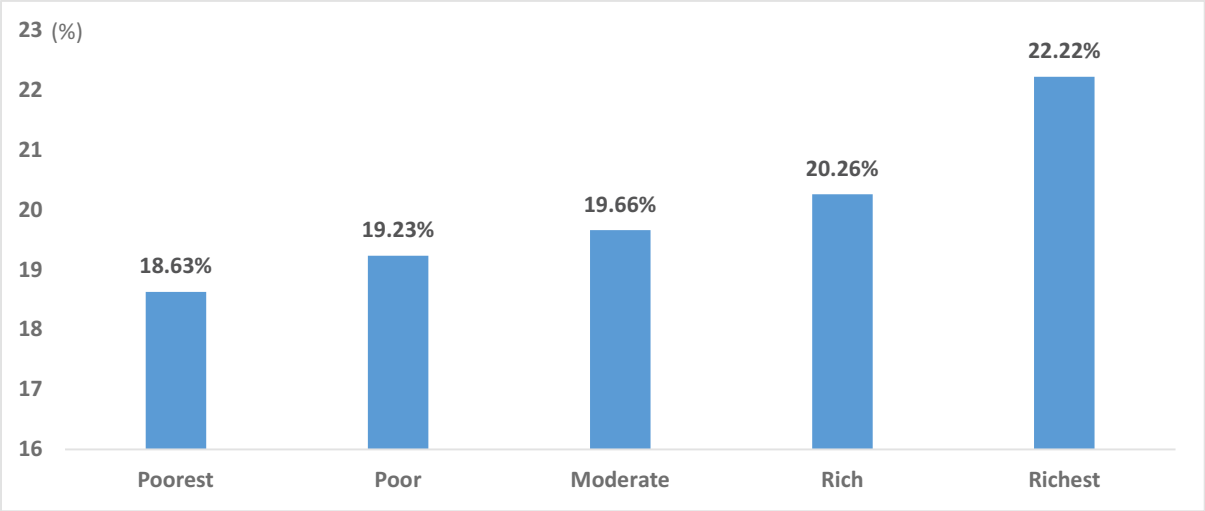


3.2 Wealth Index

Wealth index represents a proxy for the standard of living of a population and may also give an idea of the distribution of wealth. In this survey, wealth index was determined from data related to the households' socio-economic status such as ownership of consumer goods, housing characteristics and living conditions. To generate the index, each of these characteristics was assigned a weight and each household was assigned a score based on weights of each characteristic. Households were then assigned into quintiles (poorest, poor, moderate, rich and richest) based on the household's overall score.

The richest quintile has the highest proportion of households (22%) while the poorest quintile has the least proportion of households (19%). It is also worthy of note that about 62% of households fall within the moderate to richest quintiles. This might indicate that more households may be able to pay for health insurance. Subsidy may be targeted at the poorest quintile, but those in this group must be identified and validated to ensure that there is no "gaming" of the system.

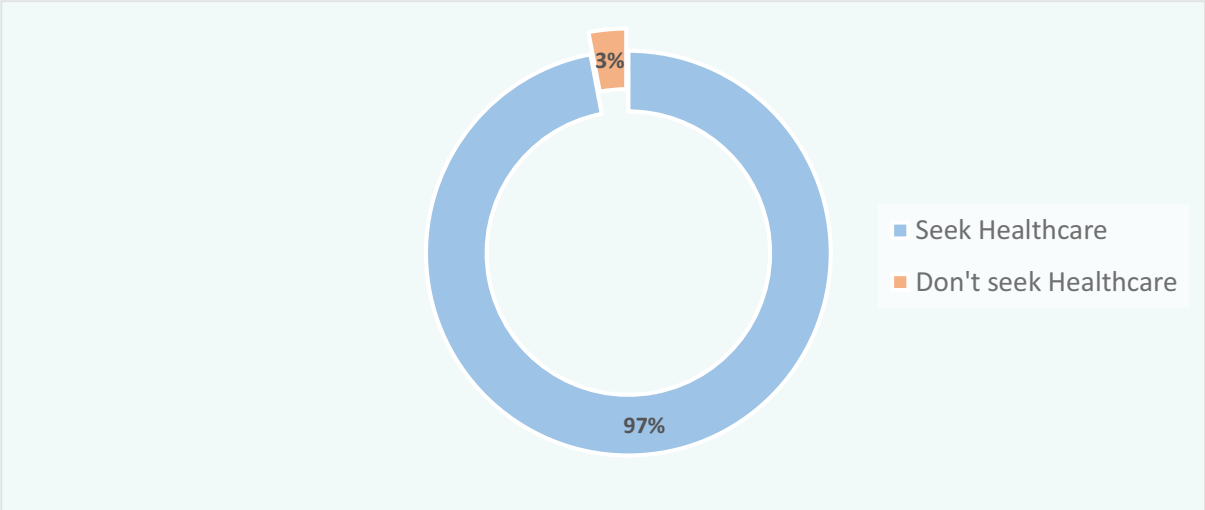
Figure 8: General Wealth Index of Surveyed Households



3.3 Health Seeking Behaviour

This section highlights how residents of Delta State engage with the available health services and the factors that influence choice of where to seek care. The study showed that most Deltans (97%) will visit a health care provider at some point during an illness, to seek care.

Figure 9: Percentage of households that will seek healthcare at one point or the other



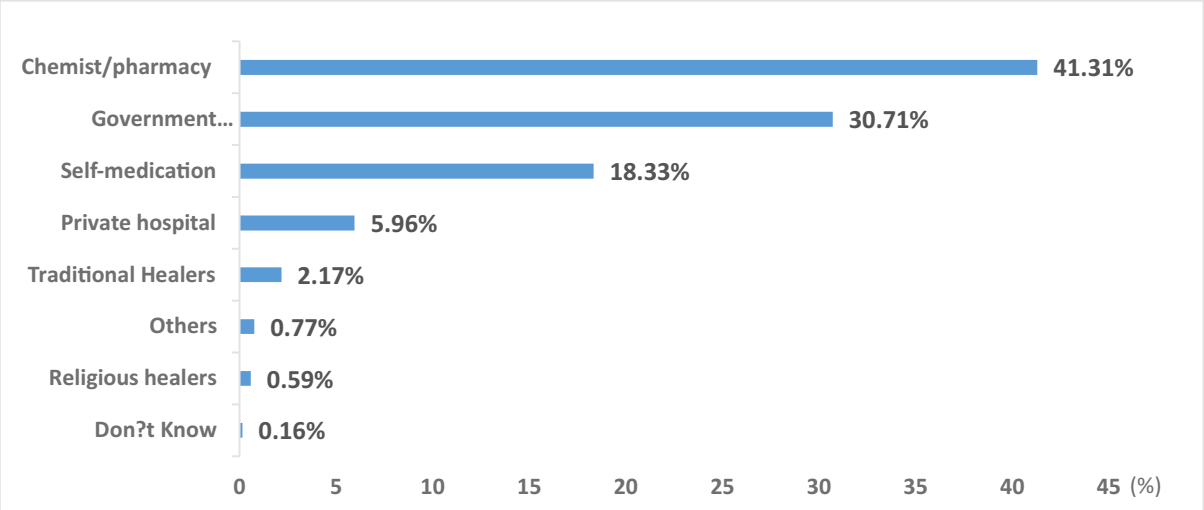
About 79% (76.8%-80.7% CI) of household seek facility-based healthcare services during health events. Facility-based health care providers are registered and licensed health practitioners and providers authorised to provide medical services (orthodox medical care) and they include those in government-owned facilities, private-for-profit and private-not-for-profit health facilities. Under the proposed health insurance scheme, only registered and licensed health facilities and providers will be used.

Table 2: Distribution of Respondents by Facility vs Non Facility-based Health Care

Type of Health Care	%	95% CI	Number
Non Facility-based Health Care	21.21	[19.3 - 23.2]	467
Facility-based Health Care	78.79	[76.8 - 80.7]	1,737
Total	**100**		**2,204**

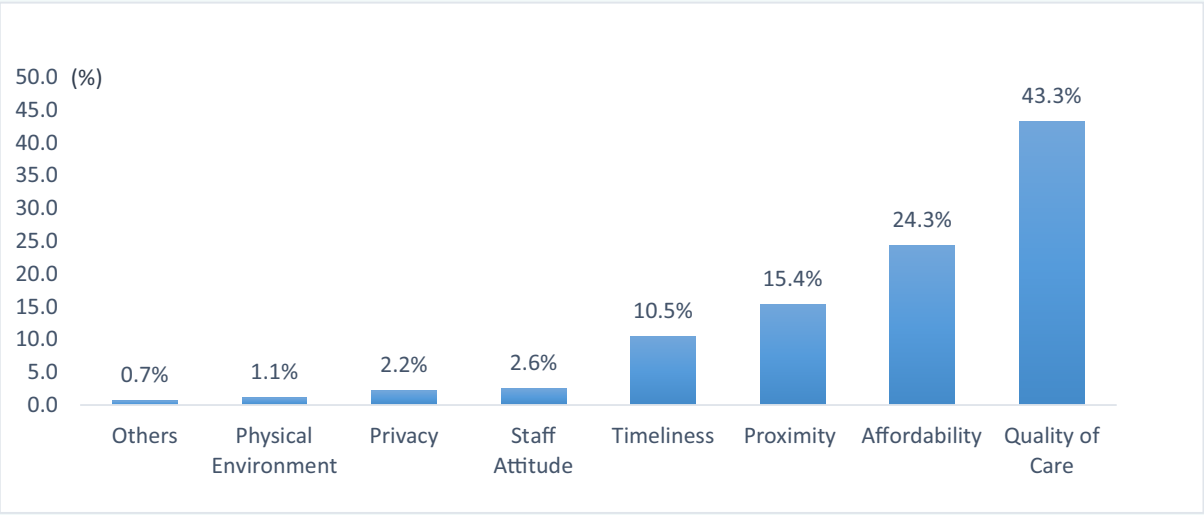
The first point of call for treatment during health events is an indicator of health seeking behaviour. Even though 79% of households seek health care from health facilities during health events as earlier mentioned, they do not necessarily do so as the first point of call. From this survey, only about 37% of Deltans visit a health facility as the first point of call during health events (Figure 1). A substantial proportion of the residents (63%) either self-medicate (18%) or first visit non-facility-based health care providers such as patent medicine vendors (41%) and others. This shows that a substantial proportion first seek care from non-facility-based service providers and later resort to health facilities. This behaviour may lead to higher morbidity and high cost of care since there will be more complications if appropriate care is not commenced early in the course of illness. A possible reason may be the perception that patronising non-facility-based health care providers may be cheaper especially when paying out of pocket. If that is the case, many more may begin to first seek care from health facilities when health insurance becomes available, if they are well sensitised.

Figure 10: First Point of Call for Health Care



Respondents were asked their main consideration for deciding where to seek healthcare services. From results obtained, quality of care received in health facilities is the main consideration (43%), followed by affordability of services (24%)

Figure 11: Distribution of Households by Main Consideration for Seeking Health Care



Other factors that affect health seeking behaviour include wealth index of surveyed households. There was a significant relationship between the health seeking behaviour and wealth index (p=0.000) and between health seeking behaviour and level of education of household head (p=0.000) with more households with educated and rich heads first seeking facility-based care compared to others.

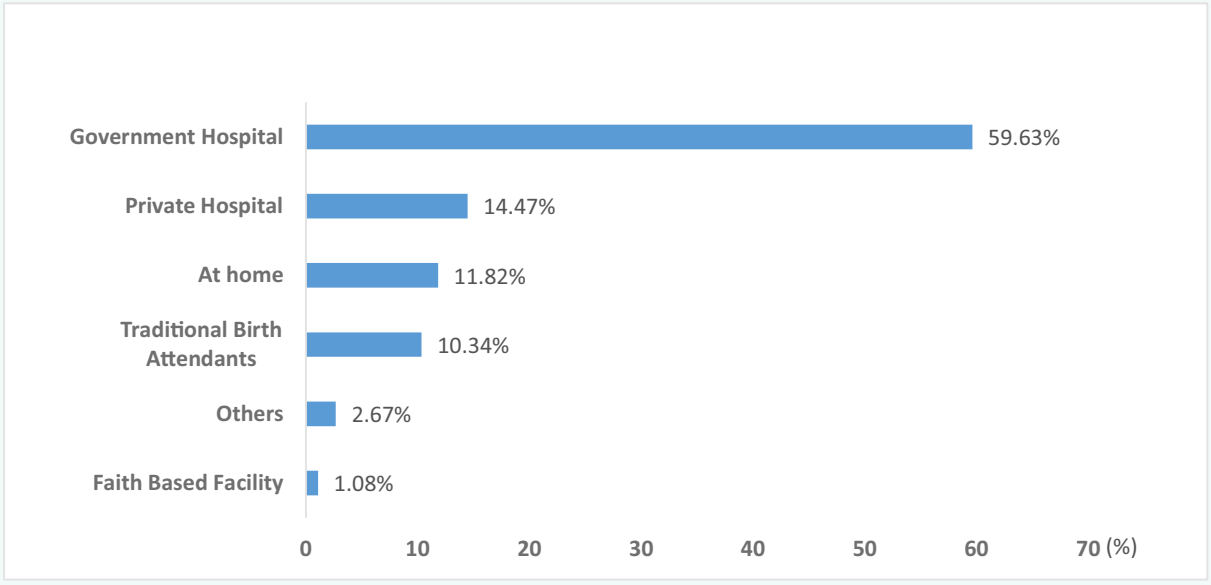
Table 3: Relationship between Health seeking behaviour and Level of Education of HH Head

Point of call for treatment	Level of Education								Total		n
	Primary		Secondary		Higher		Don't know				
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Self-medication	19.7	[16.3 - 23.5]	17.9	[15.1 - 21.0]	14.8	[11.8 - 18.4]	2.8	[0.4 - 19.4]	17.4	[15.6 - 19.3]	351
Chemist/pharmacy	39.9	[35.6 - 44.5]	46.5	[42.9 - 50.1]	36.3	[32.0 - 40.8]	27.7	[9.7 - 57.7]	41.7	[39.4 - 44.1]	861
Private hospital	2.6	[1.4 - 4.8]	4.6	[3.3 - 6.4]	12.2	[9.1 - 16.0]	24	[3.7 - 72.1]	6.4	[5.2 - 7.9]	111
Government Hospital	32.7	[28.5 - 37.1]	27.8	[24.7 - 31.2]	35.8	[31.5 - 40.3]	29.7	[6.5 - 71.8]	31.4	[29.2 - 33.7]	625
Traditional Healers	3.9	[2.4 - 6.4]	1.5	[0.8 - 2.7]	0.3	[0.1 - 1.1]	5.7	[1.2 - 22.9]	1.8	[1.2 - 2.6]	37
Religious healers	0.3	[0.1 - 1.1]	0.7	[0.3 - 1.6]	0.4	[0.1 - 2.5]	0		0.5	[0.3 - 1.0]	11
Others	0.9	[0.3 - 3.1]	0.9	[0.3 - 2.3]	0.3	[0.1 - 1.3]	0		0.7	[0.4 - 1.4]	10
Don't Know	0		0.1	[0.0 - 0.7]	0		10	[1.3 - 48.1]	0.1	[0.0 - 0.4]	2
Total	**100**		**100**		**100**		**100**		**100**		**2,008**
Chi2 = 209.5327											
P-level = 0.000											

3.3.1 Health seeking behaviour among pregnant women

For obstetric health events, 82.5% of women in the state seek antenatal services when pregnant and 80.1% seek post-natal services after delivery. The study further shows that majority of Deltans (about 75%) access care antenatal, delivery and post-natal services from healthcare facilities.

Figure 12: Household Distribution by Place of ANC Attendance and Delivery



While there was no statistical significance between the education level of head of household and ANC attendance (p=0.063), a significant relationship (p=0.00) was found between wealth index and ANC attendance.

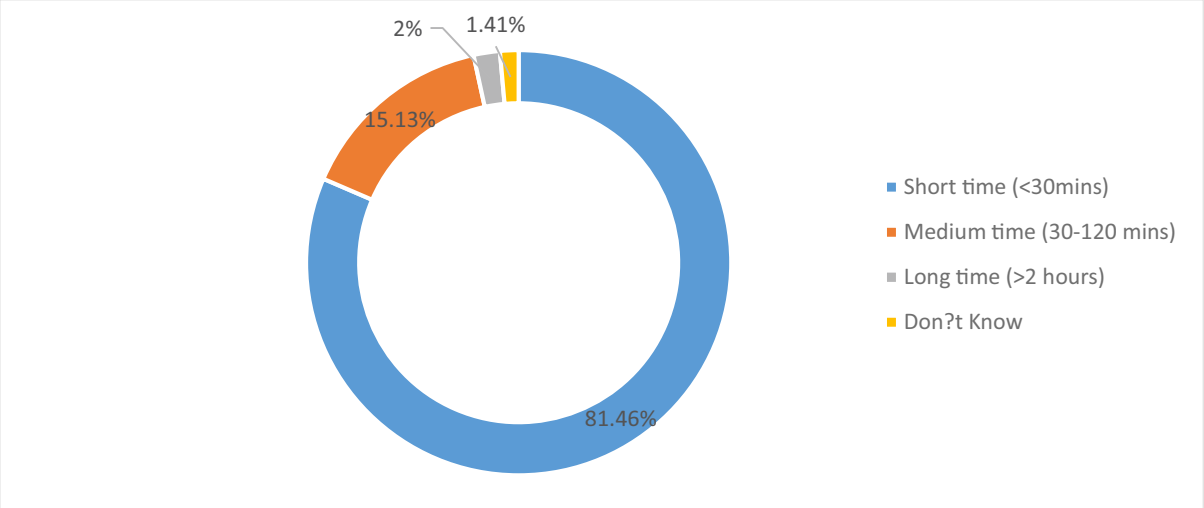
Table 4:Relationship between Wealth index and ANC attendance

Level of Education of HH head	Antenatal care services when pregnant				Total		n
	No		Yes				
	%	95% CI	%	95% CI	%	95% CI	
Primary	30.9	[24.3 - 38.5]	24.5	[22.4 - 26.7]	25.2	[23.1 - 27.3]	523
Secondary	40.5	[33.2 - 48.1]	46.1	[43.5 - 48.8]	45.5	[43.0 - 48.0]	846
Higher	27.1	[20.4 - 34.9]	29	[26.6 - 31.5]	28.8	[26.5 - 31.1]	498
Don't know	1.5	[0.8 - 3.1]	0.4	[0.2 - 1.2]	0.6	[0.3 - 1.2]	15
Total	**100**		**100**		**100**		**1,882**
Chi2 = 8.3582							
P-value = 0.063							

3.4 Access to Health Services

To achieve universal health coverage, there must be functional health facilities close enough to households to ensure that distance does not become a barrier. Physical barrier has been well documented to be a major cause of low uptake of health services in Sub-Saharan Africa especially in rural and poorer communities[11]. However, findings from the baseline assessment show that 81.5% of households in Delta State live within 30 minutes to the nearest health facility. This is an improvement from the national average of 67% [12].

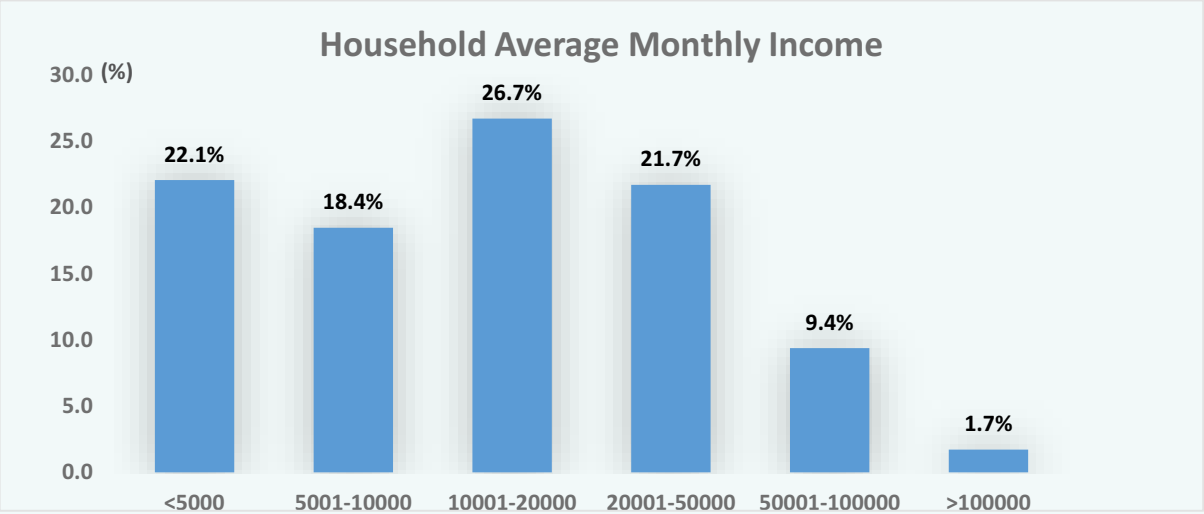
Figure 13: Distribution of Households by Distance to a Health Facility



3.5 Household Income

From the study, households in Delta state earn an average monthly income of N29,217. Generally, average monthly household income ranged from N1,000 -N800,000.

Figure 14: Household average Monthly Income Distribution

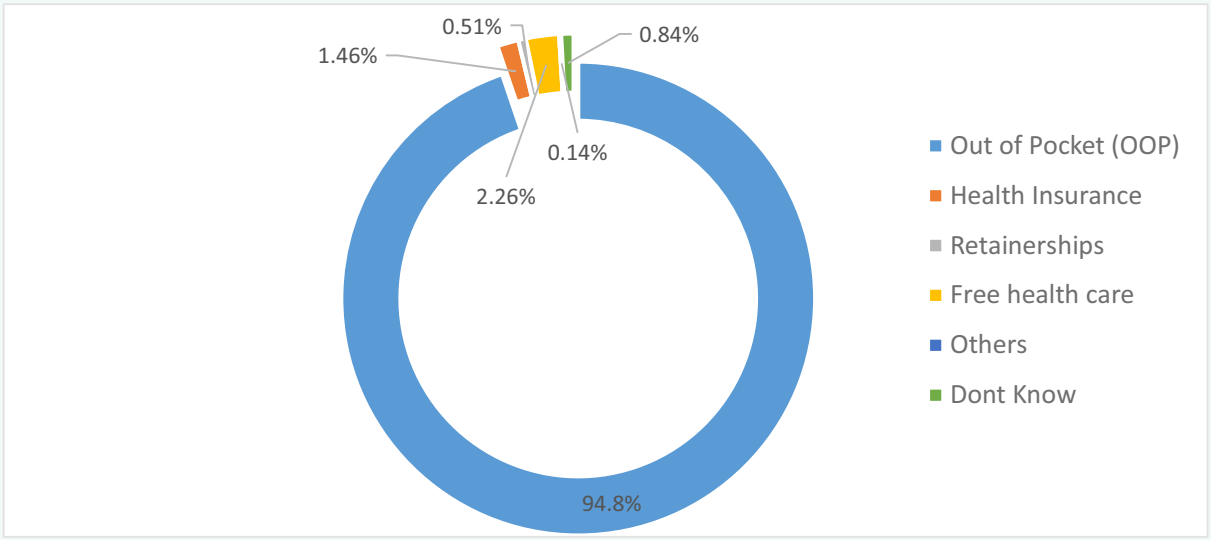


3.6 Health Expenditure

3.6.1 Out of Pocket Spending

The study shows that majority of households (95%) pay out of pocket for health care services. This is even higher than the much criticised national figure (68%)! This is a very inequitable way of health financing as the poor tend to bear more financial burden when paying out of pocket and are exposed to catastrophic health expenditure. This makes the case for scaling up health insurance to all Deltans much more imperative.

Figure 15: Distribution of Households by the Method of Payment of Health Care



The average monthly amount expenditure on healthcare by households is N4, 065 for the poorest quintile and N6, 356 for the richest quintile.

Table 5: Health Expenditure by Wealth Index

Mean (SD) and Median Expenditures on Healthcare					
Wealth Proxy	Mean	Median	Min	Max	N
Poorest	4,065	1,500	250	50,001	466
Poor	4,324	1,500	250	50,000	460
Moderate	4,480	2,000	210	70,000	460
Rich	5,632	2,500	250	60,000	461
Richest	6,356	3,000	250	90,000	451
Total	**4,970**	**2,000**	**210**	**90,000**	**2,298**

3.6.2 Health Insurance

Health insurance coverage is low across the 25 LGAs. Only about 1% have health insurance while another 0.5% have employer provided retainership which allows them to receive health care services free of charge in certain hospitals. The proposed state-wide health insurance initiative is therefore timely and has a huge potential to improve access to quality health care and subsequently improve health outcomes in the state.

Table 6: Distribution of Households with Health Insurance Coverage

Households	%	Household Members	%
Not Covered	98.62	Not Covered	98.65
Covered	1.38	Covered	1.35
Total	**100**	**Total**	**100**

Figure 16: Health Insurance Coverage Density by LGA

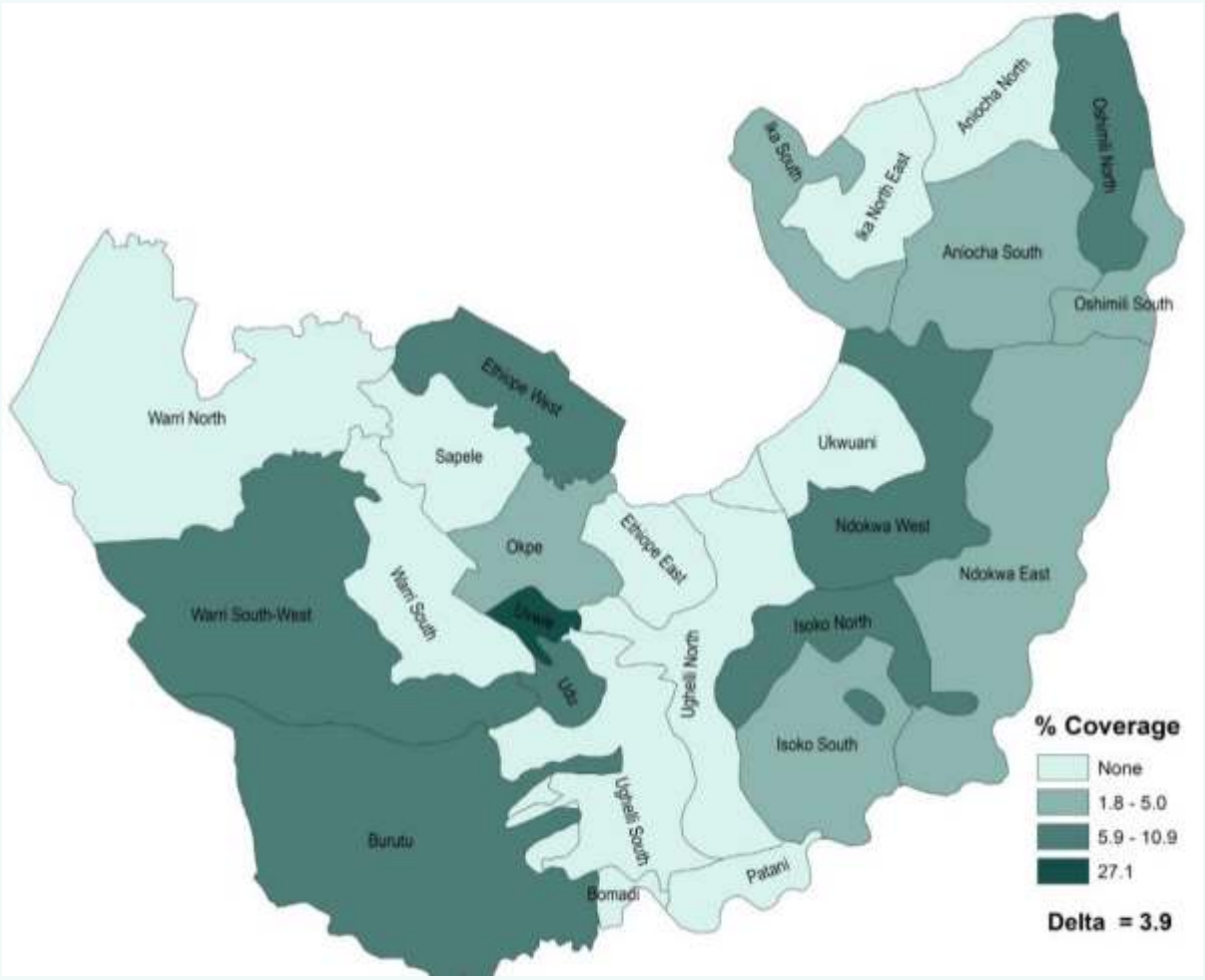


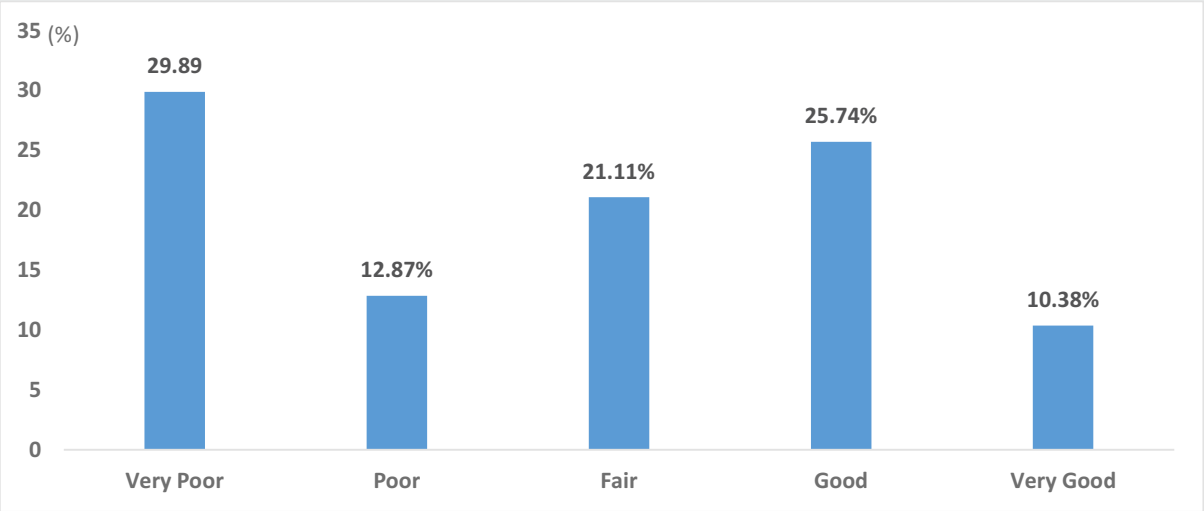
Figure 16 shows the health insurance coverage density level in Delta state. Uvwie, Warri South-West, Udu, Oshimili North and Ethiope LGAs have higher number of households with health insurance coverage. This might be due to the fact that these areas are mostly urban.

3.7 Knowledge of health insurance

Knowledge of health insurance plays a role in whether people will join a health insurance programme or not, especially when they are paying for it. Community knowledge about health insurance is therefore an important element in ensuring a critical mass of membership for the insurance scheme. Most households (64%) have weak knowledge, about 30% have very poor knowledge and 36% have good knowledge of health insurance. This finding shows

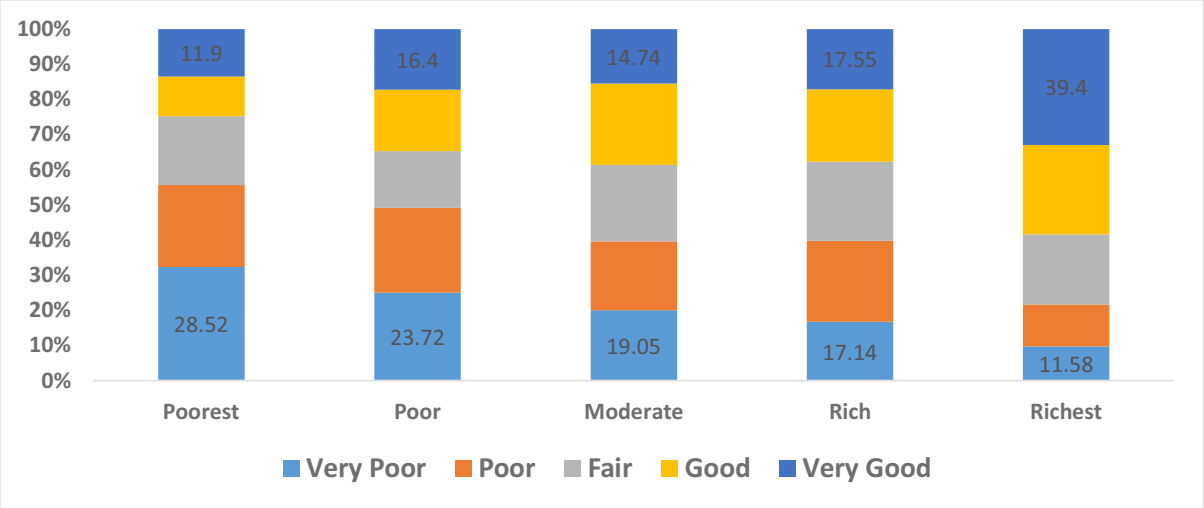
the need for extensive increased awareness creation about the benefits of health insurance and the Delta State Health Insurance Scheme.

Figure 17: Distribution of Households by Knowledge of Health Insurance



Across wealth quintiles, 28.5% of households in the poorest quintile have very poor knowledge of health insurance compared to only 11.5% of households in the richest quintile. This trend is reversed amongst households with very good knowledge of health insurance where 39.4% of households within the richest as against 11.9% of households in the poorest quintile have good knowledge of health insurance. This trend shows a non-statistical significant relationship between wealth index and household knowledge of health insurance. As would be expected, more attention should be given to poorer households and communities in the poorer catchment areas in awareness creation and active mobilisation.

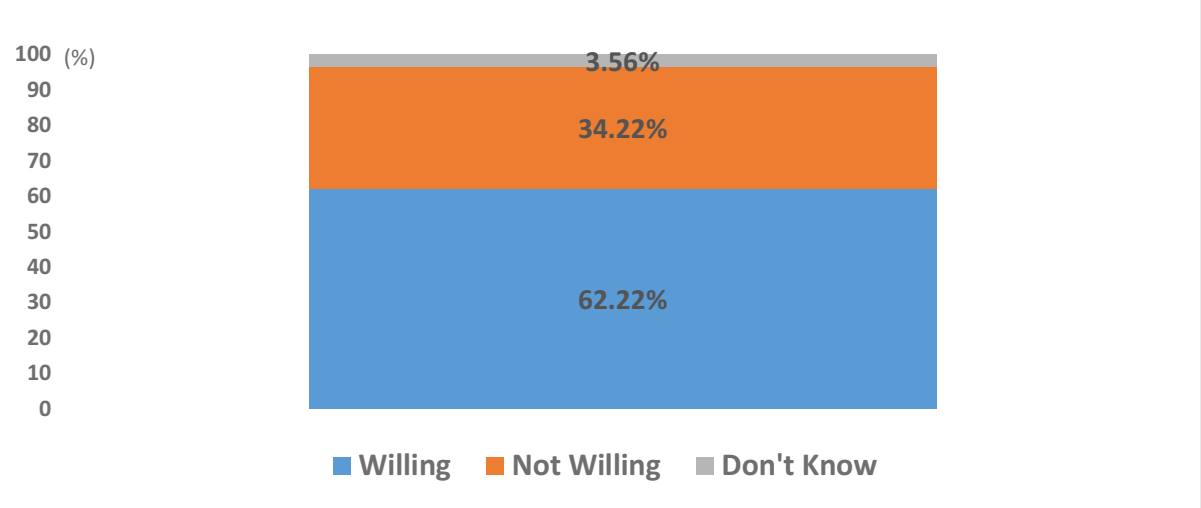
Figure 18: Knowledge of Health Insurance by Wealth Index



3.8 *Willingness to Pay for health Insurance*

Willingness to pay (WTP) for health insurance is the maximum amount an individual is willing to pay to obtain health insurance either at the household or individual level. With limited strength of evidence, studies of WTP for health insurance in Nigeria reported that a range of 60% to 90% are willing to pay for and join health insurance schemes[13,14]. This is supported by findings from this survey which shows that over 60% of households in Delta State are willing to pay for health insurance.

Figure 19: Households by Willingness to Enrol on the Proposed Contributory Health Scheme



WTP studies have found significant relationships between WTP and age, education, income, dependency ratio/ household size, knowledge of or perception about health insurance and ability to pay[15,16]. This study found a significant relationship between WTP and education level of household head (p= 0.002) and between household wealth status and WTP (P=0.00).

[13]ONWUJEKWE, O., ONOKA, C., UZOCHUKWU, B., OKOLI, C., OBIKEZE, E. and EZE, S., 2009. Is community-based health insurance an equitable strategy for paying for healthcare? Experiences from southeast Nigeria. Health Policy. September, vol. 92, no. 1, pp. 96-102.

[14]ODEYEMI, I.A.O. and NIXON, J., 2013. Assessing equity in health care through the national health insurance schemes of Nigeria and Ghana: a review-based comparative analysis. International Journal for Equity in Health. vol. 12, no. 1, pp. 9.

[15]NOOR AIZUDDIN et al. Factors influencing willingness to pay for healthcare. BMC Public Health 2012 12 (Suppl 2):A37

[16]OYEKALE, A.S. 2012. Factors influencing willingness to pay for National Health Insurance Scheme (NHIS) in Osun State, Nigeria. Ethno Med, 6(3): 167-172

Figure 20: Household WTP by Wealth Index

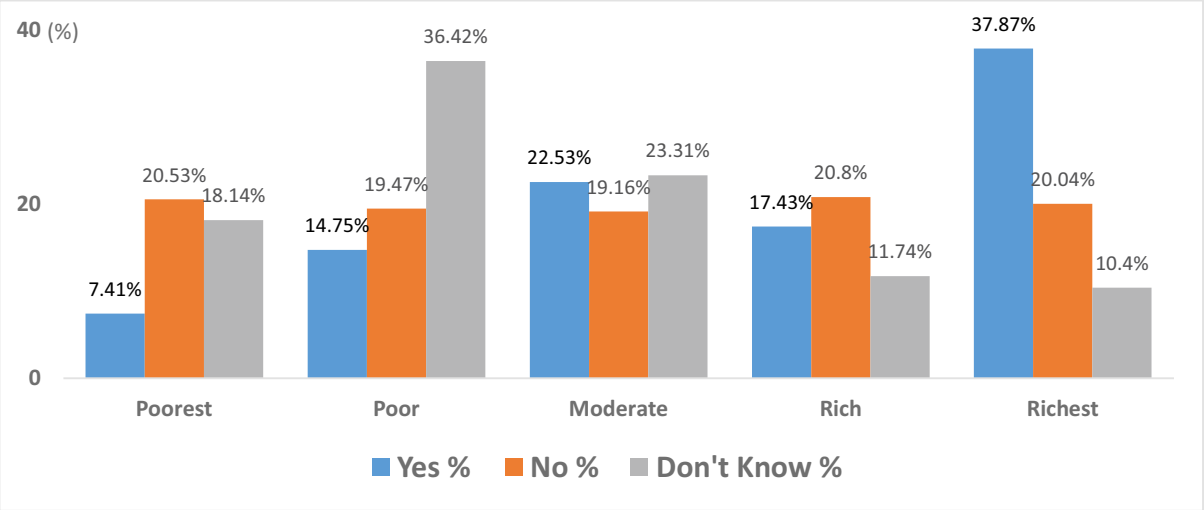
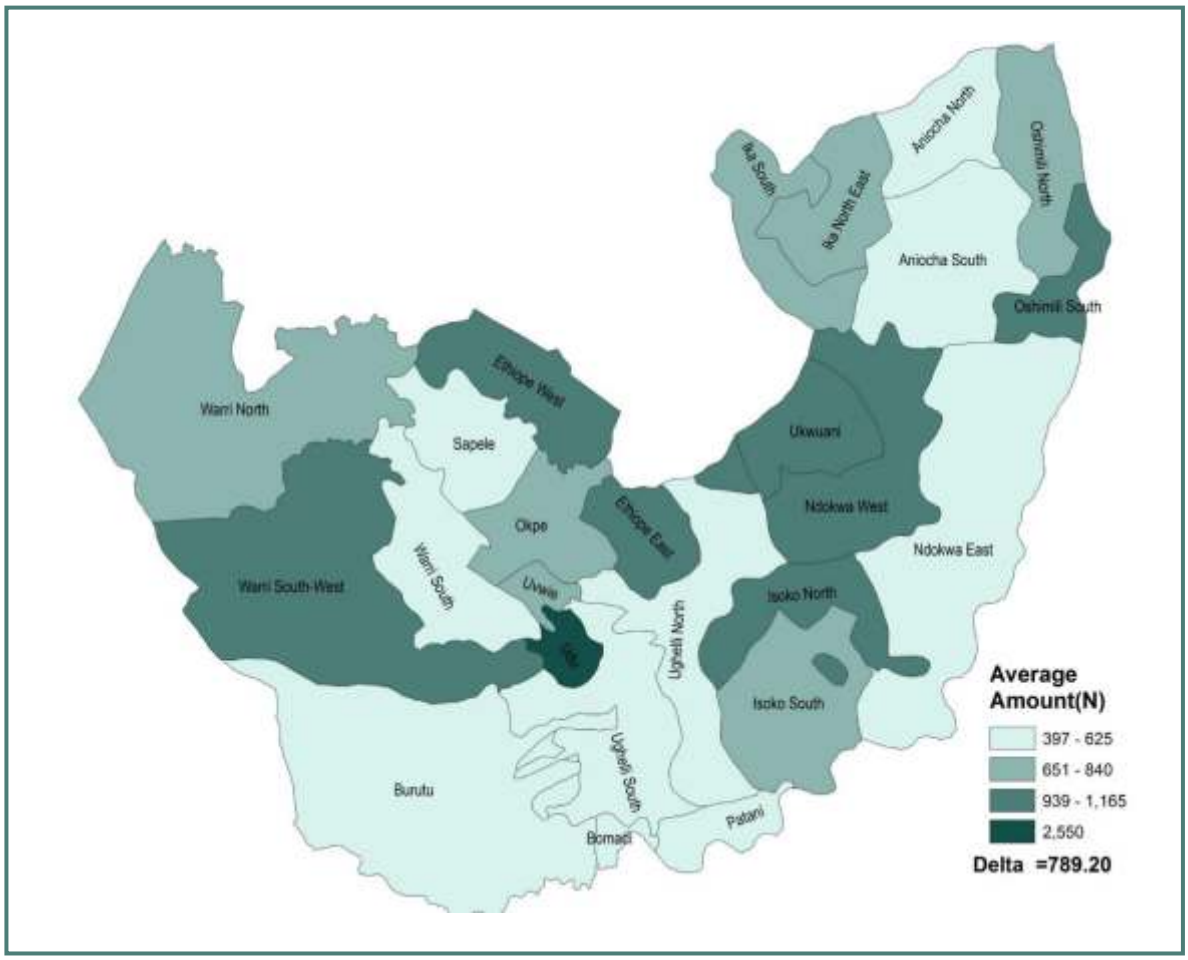


Table 7: Relationship between Education and willingness to pay

Level of Education HH attended	Willing to pay for a health insurance plan						Total		n
	Yes		No		Don't Know				
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Primary	21.8	[19.4 - 24.4]	32.4	[28.8 - 36.2]	28.7	[18.6 - 41.5]	25.4	[23.4 - 27.5]	559
Secondary	44.2	[41.2 - 47.3]	47.7	[43.7 - 51.8]	38.4	[27.1 - 51.1]	45.1	[42.7 - 47.5]	912
Higher	33.9	[31.0 - 37.0]	18.5	[15.6 - 21.9]	30.4	[20.0 - 43.4]	28.9	[26.7 - 31.2]	539
Don't know	0.1	[0.0 - 0.5]	1.3	[0.6 - 3.1]	2.5	[0.6 - 9.7]	0.6	[0.3 - 1.1]	16
Total	**100**		**100**		**100**		**100**		**2,026**
Chi2 = 74.0733									
P-value = 0.000									

From the study, the average maximum amount households are willing to pay for health insurance is N789.20 (CI: 725.30-853.20). The amounts households are willing to pay varied across LGAs as can be seen in the map below.

Figure 21: Average Maximum amounts households are willing to pay for health insurance


Aniocha North
Oshimili North
Ika South
Ika North East
Aniocha South
Oshimili South
Ethiope West
Warri North
Sapele
Ukwuani
Ndokwa West
Okpe
Ethiope East
Ndokwa East
Warri South-West
Warri South
Uvwie
Isoko North
Ughelli North
Isoko South
Burutu
Ughelli South
Patani
Bomadi
Average Amount(N)
397 - 625
651 - 840
939 - 1,165
2,550
Delta =789.20

4 FINDINGS FROM THE HEALTH FACILITY ASSESSMENT

4.1 Overview

A total of 595 health facilities were assessed. Of the assessed facilities, 70% are public owned, 27% are private-for-profit while the rest belong to missionaries and others. By level of care, 74% of all health facilities in the state are primary care level facilities, 23% are secondary care facilities. In terms of location, 61% of the health facilities are in rural areas while 39% are in urban areas.

4.2 General Service Readiness

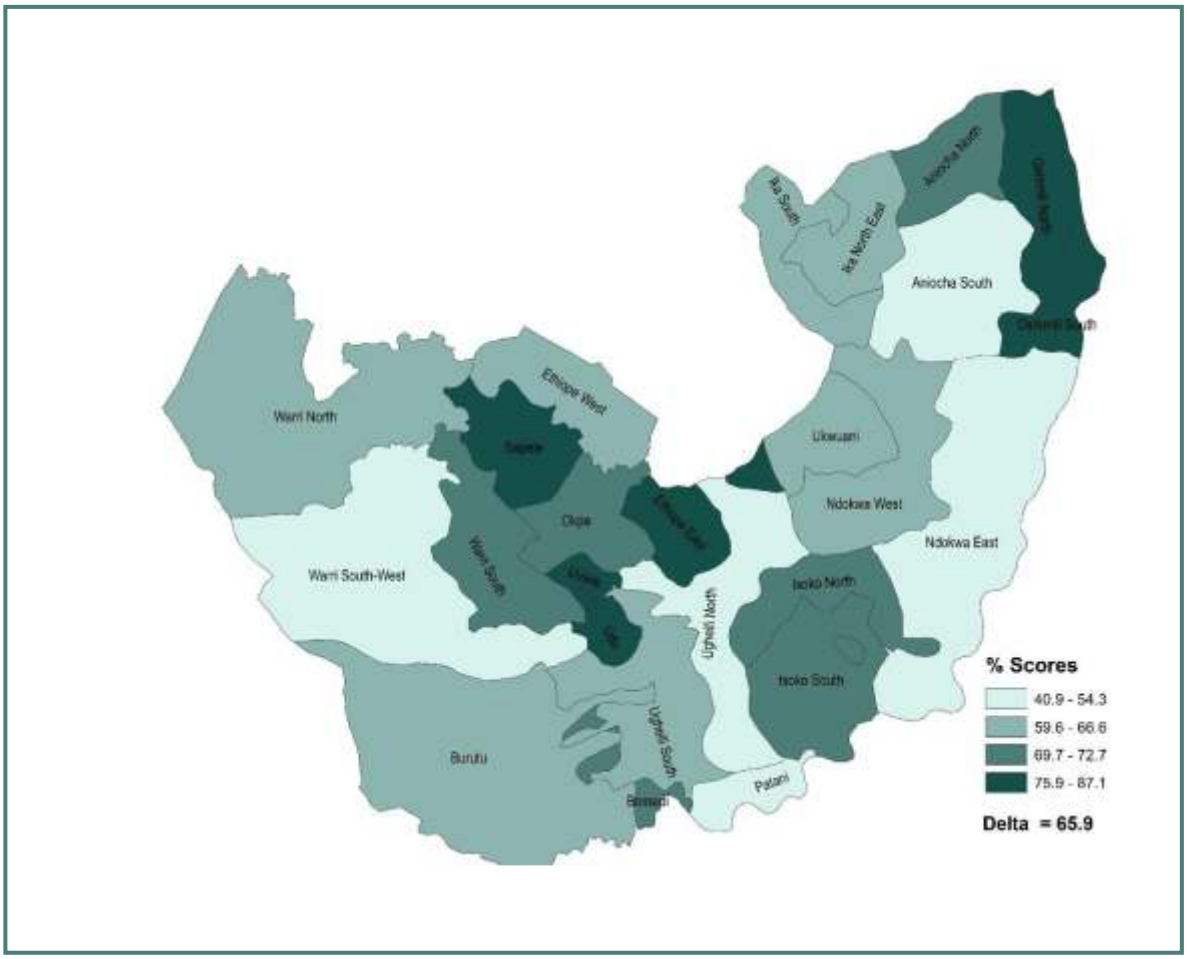
General service readiness signifies the overall capacity of health facilities to deliver general health services. In this assessment, general service readiness is described by a score using five general service readiness domains: basic amenities, waste disposal, diagnostic capacity, essential medicines and types of health services available. The capacity of each health facility for service delivery is measured across these domains. A score is generated per domain based on the number of domain elements present, then an overall general readiness score is calculated based on the mean of the five domains.

For this assessment, capacity of health facilities per domain is compared across the 25 LGAs per domain and also the overall general service readiness by LGA to show how ready the facilities in each LGA are to provide optimal health service under the anticipated contributory health scheme.

4.2.1 *Availability of Basic Amenities*

Basic hospital amenities refer to constant power supply (interruption of less than 2 hours a day), availability of portable water, sanitary facilities (water closet or improved pit latrine) and inpatient beds (at least 4 beds). Out of the 25 LGAs, Patani has the least score of facilities with the basic amenities necessary for the optimal delivery of health services. Overall, the state has an average score of 65.9% in this domain.

Figure22: LGA by Basic Amenities in the HF by LGA

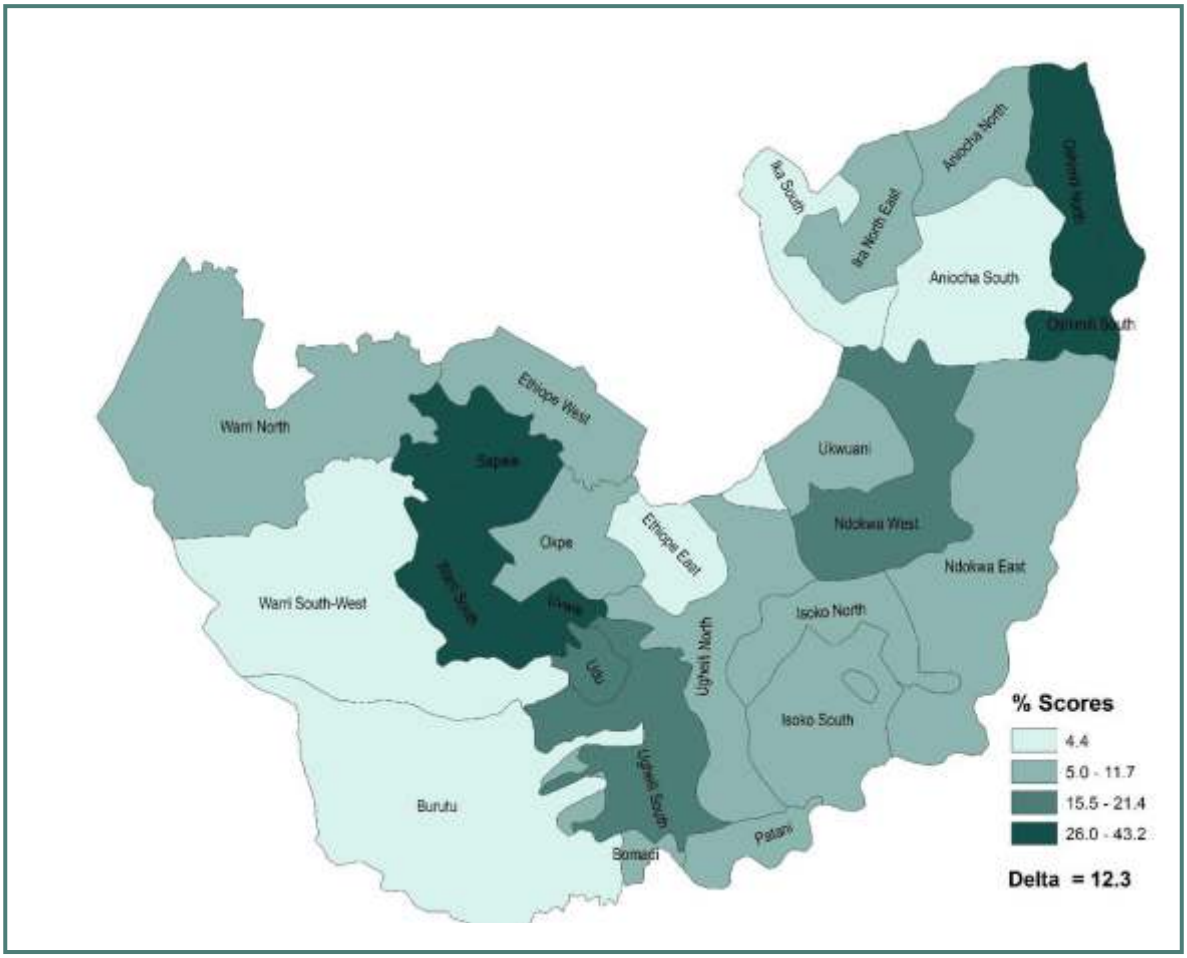


4.2.2 *Availability of Waste Disposal Systems and Infection Control*

Safe waste disposal is an essential part of hospital services management. Waste generated by health care activities includes used needles and syringes, soiled dressings, body parts, diagnostic samples, blood, chemicals, pharmaceuticals and medical devices. Poor management of health care waste potentially exposes health care personnel, patients and the community at large to infection and environmental pollution. It is essential that all medical waste materials are properly and safely treated and disposed[17]. Methods of waste disposal for sharps and infectious wastes in each health facility was assessed, options included incineration, open dump with or without burning and offsite removal with protected storage.

In this domain, all the LGAs are performing poorly. In fact, waste disposal facilities appear to be non-existent in some LGAs. The state average score is 12.3 %. The government will need to invest in waste disposal facilities in government-owned health facilities and create incentives for private health facilities to do the same.

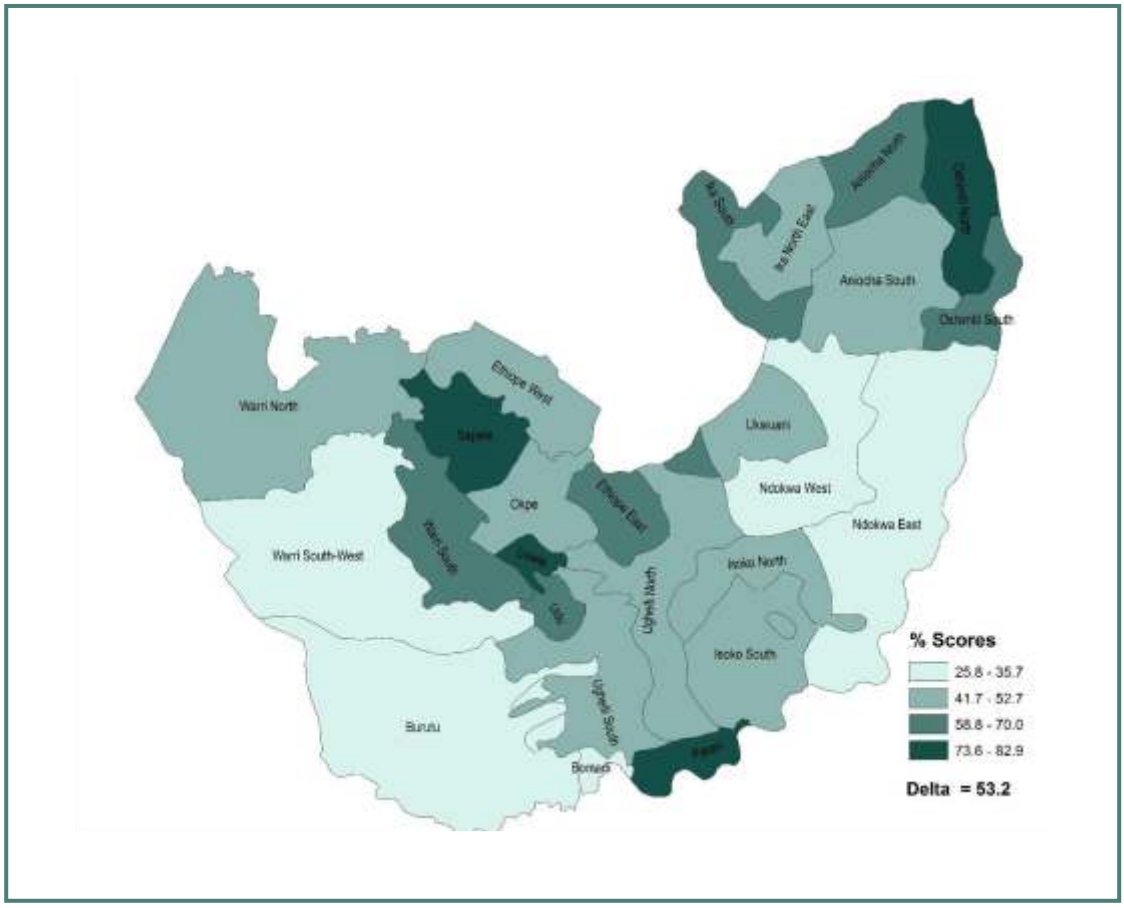
Figure23: LGA by Waste Disposal Systems/Infection Control in HF



4.2.3 *Availability of Diagnostic Resources/Equipment*

Common diagnostic services at the primary care level include but not limited to haemoglobin level determination (or packed cell volume determination), blood microscopy, malaria diagnostic testing, urine pregnancy test, dried blood spot for early infant diagnosis of HIV, urinalysis and HIV diagnostic testing. This assessment showed a wide variation in diagnostic capacity across the 25 LGAs, with a state average of 53.2%. Ndokwa East, Warri South West and Burutu have the poorest diagnostic capacity scoring less than 30%. However, most (60%) of LGAs have health facilities with some basic diagnostic capacity to deliver the intended health services.

Figure24: LGA by Diagnostic Infrastructure

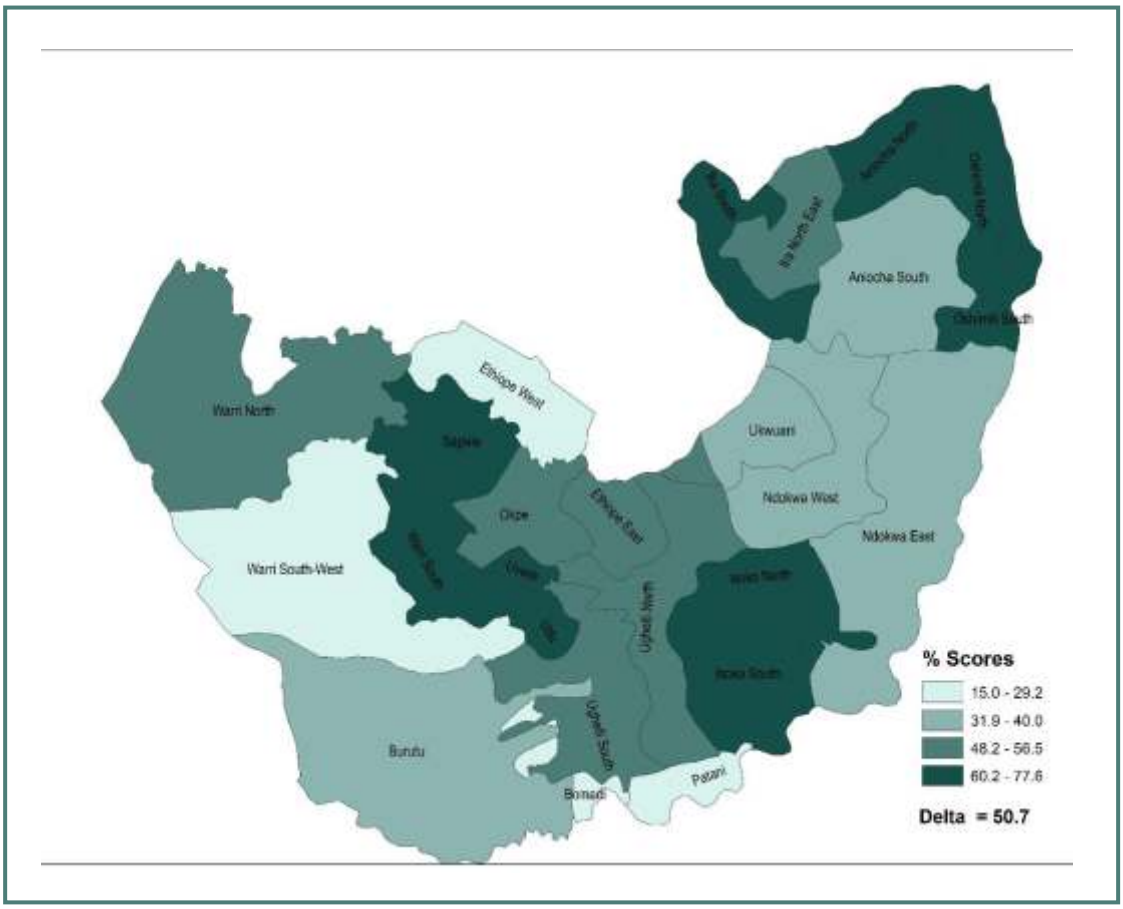


4.2.4 *Availability of Essential Medicines*

As defined by the WHO, essential medicines are pharmaceutical products that satisfy the priority health care needs of the population. They are selected with regards to public health relevance, efficacy, safety and comparative cost -effectiveness. Essential medicines should be available at all times in health facilities, of good quality and affordable, [18] as incessant stock outs of essential medicines are inimical to optimal health service delivery.

The availability of the following classes of essential medicines was assessed during the survey: oral rehydration salts, antimalarial, antibiotics, antiretrovirals, anti -hypertensives, anti-diabetic drugs, family planning commodities, TB medicines, vaccines, emergency drugs and commodities, IV fluids, epinephrine, hydrocortisone and oxytocics. In the State, there is 50.7% availability of essential medicines in the health facilities. Bomadi, Ethiope West, Patani, Warri South-West and Burutu are the poorest in this domain.

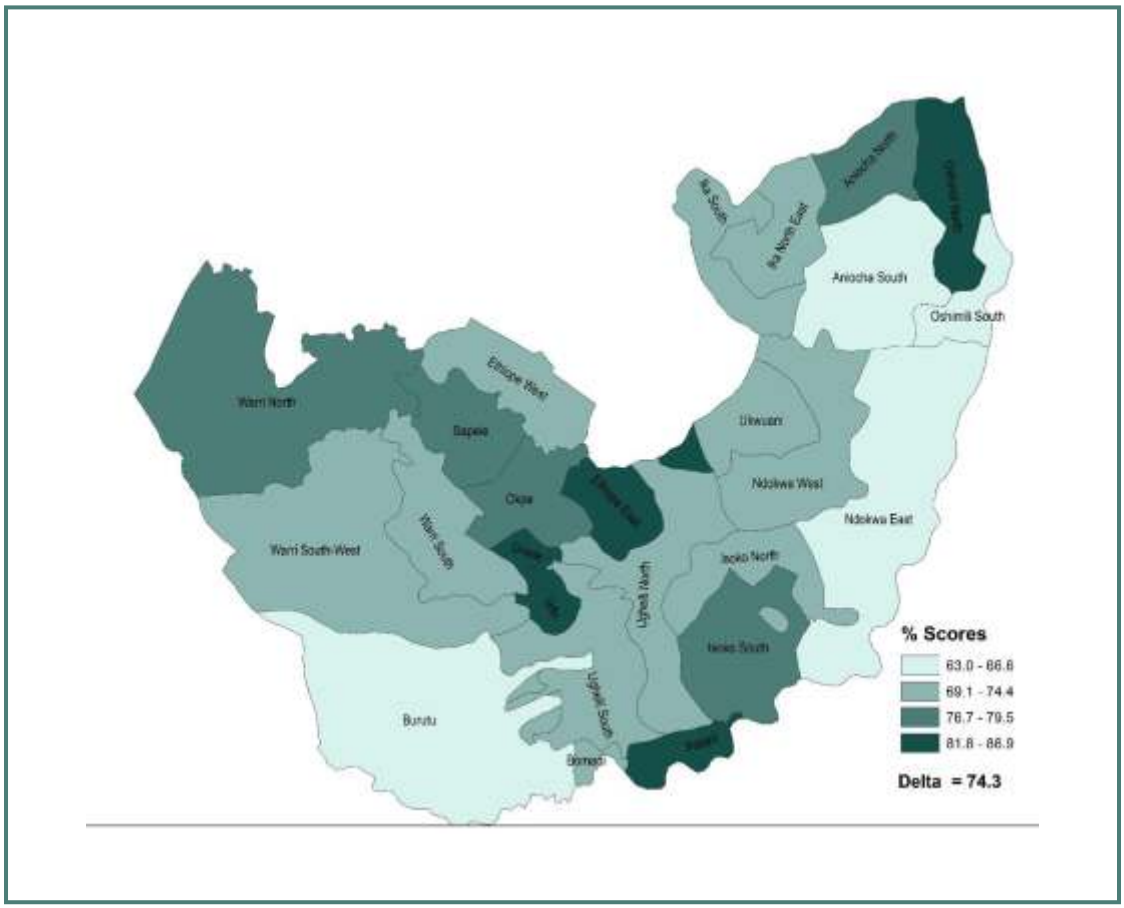
Figure25:LGA by Essential Medicines in HF



4.2.5 *Availability of General (basic) Health Services*

All the LGAs scored highly in this domain. This indicates that all the health facilities across the 25 LGAs provide most of the essential health services. A score of 74.4% for the state average is quite assuring.

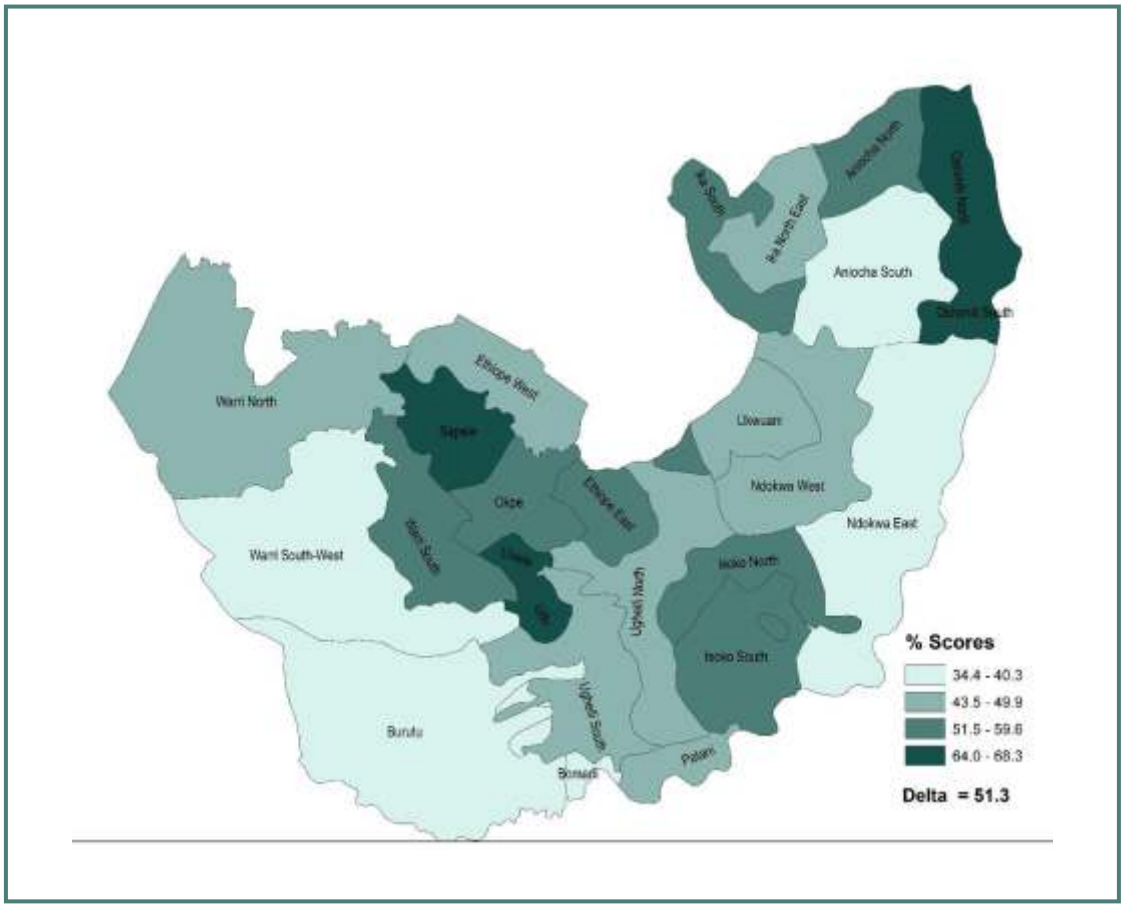
Figure26:LGA by Basic Health Services in HF



4.2.6 *General Service Readiness (GSR) Index*

GSR is an aggregate of all the five domains earlier discussed: basic amenities, waste disposal/infection control, diagnostic capability, availability of essential medicines and availability of basic health services. Bomadi, Burutu, Ndokwa East and Warri South West LGA need special intervention as they all score less than 40% in GSR. GSR for Delta state is 51.3%, which is an average of GSRs for all the LGAs.

Figure27: LGA by General Service Readiness



4.3 Service Availability

Service availability encompasses three components: health infrastructure, core health personnel, and service utilization[19]. General Service Availability (GSA) is an average of the indices for these three components. From the survey, the GSA for Delta State is 36%**.** This score is quite low and requires targeted interventions in critical areas like the health workforce to improve service availability.

Table 8: *Service Availability Indices in Delta State*

Indices	Score, % (Max=100)
Health Infrastructure	58
Health Workforce (core)	39
Service Utilization	11
General Service Availability	**36**

4.3.1 Health Infrastructure Analysis

Government owns 70% of the health facilities in Delta State. This is similar to the national scenario where government owns 62% of all the facilities in Nigeria. 70% of health facilities are primary health facilities and 81% of all facilities open for operations 24 hours a day.

Figure28: Health Facilities by Type

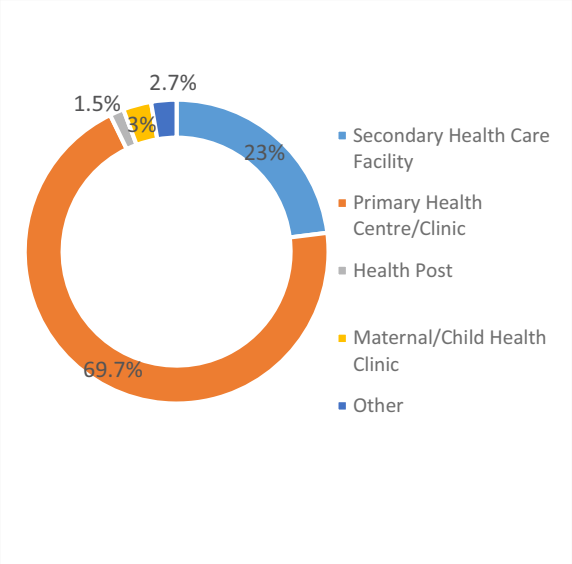


Figure29: Health Facilities by Ownership

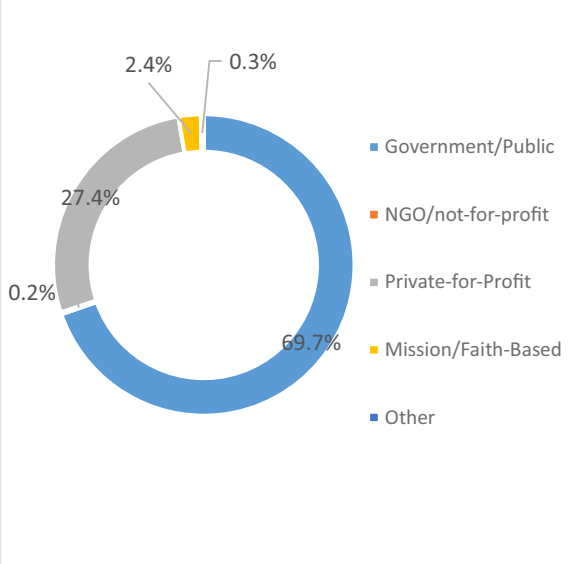


Figure31: Health Facilities by Residence

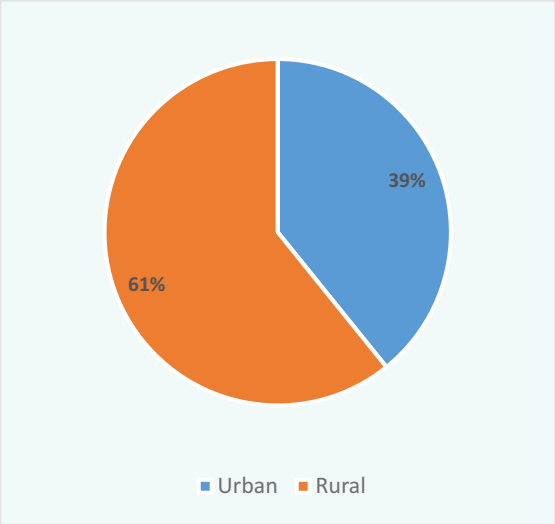
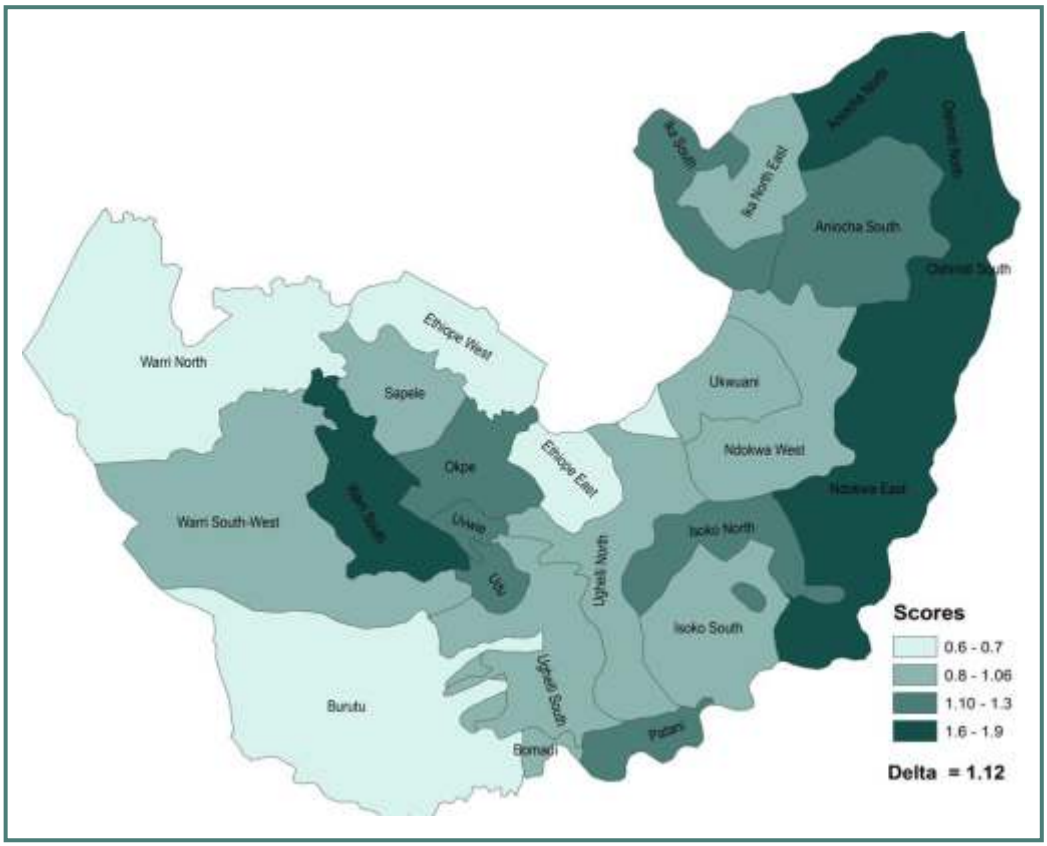


Figure30: Hours Opened per Day

4.3.2 *Health Facility Density*

The density of health facilities is an index of the availability of health care services in a defined population size usually per 10, 000-population. Average facility density in the Delta State is 1.12 per 10, 000-population with variation between LGAs. Ndokwa East has the highest facility at 1.97 while the lowest, 0.59 is at Ethiope West.

Figure32: Spatial Distribution of Health Facility Density by LGAs



Facility density may not be a perfect representation of geographic access to health care. Though facility density is an important indicator that measures the critical mass of health facilities available to a defined population, the distribution of such facilities in that defined population is even more important. Equity in facility distribution within and across LGAs to ensure that underserved areas are taken care of cannot be overemphasized. For example, more and smaller health facilities will be suitable for sparsely-populated areas unlike densely-populated areas where fewer but bigger facilities will be more suitable.

4.3.3 *Overall Health Infrastructure Density*

As seen in Table 9, facility density is 56% of expected. In-patient bed density is quite low at 47% of expected which may cause low service utilization of in-patient services. Maternity bed density is much better at 71% of expected.

***Table 9**: Health Infrastructure Density*

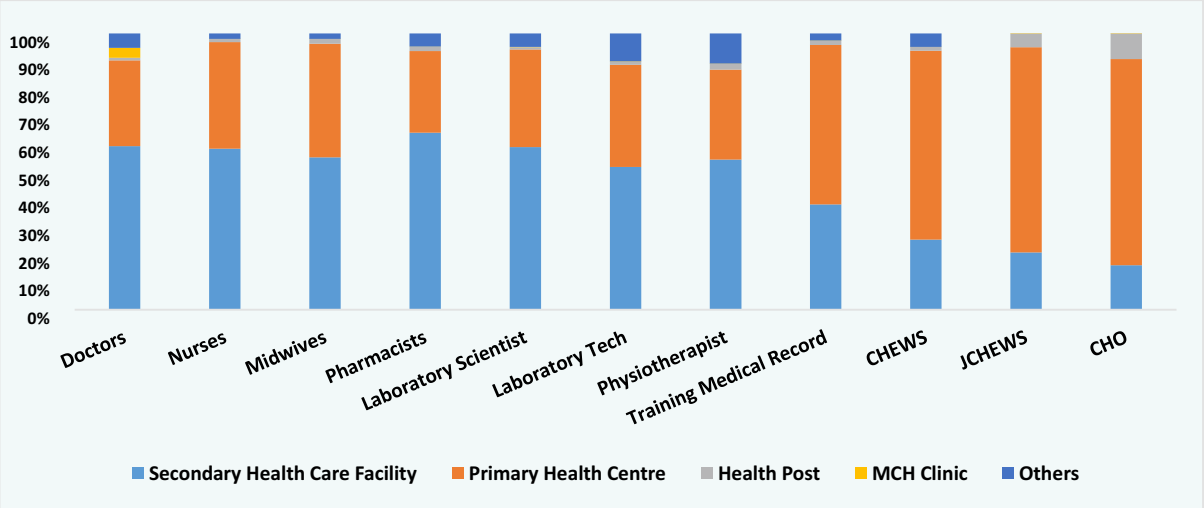
Health Infrastructure			
Domain	Indicator Value (per 10,000-population)	Target (per 10,000-population)	Score (%), Max=100
Facility Density	1.12	2	56
Inpatient Bed Density	11.85	25	47
Maternity Bed Density	7.08*	10*	71

**Per 1000 live births*

4.3.4 *Health Workforce Analysis*

Human resources for health (HRH) are the live wire of any well-functioning health systems. HRH includes all individuals who provide services with the primary objective of improving health. The right number of workers, with the right skills, in the right place, doing the right things, are required for optimal health service delivery[20]. Critical shortage of HRH mainly due to insufficient production and uneven distribution has been one of the major reasons for the ailing health system performance in Nigeria.[21,22,23] Survey findings showed that there are fewer skilled health workers (doctors, nurses, midwives, pharmacists and physiotherapists) at the primary health care level compared to other levels of care.

Figure33: Health Worker Distribution by Facility Type



[20] WHO 2006. World Health Report: Working together for health. 2006:1-237.

[21] Dolea C. Increasing access to health workers in remote and rural areas through improved retention. . 2009:1-30.

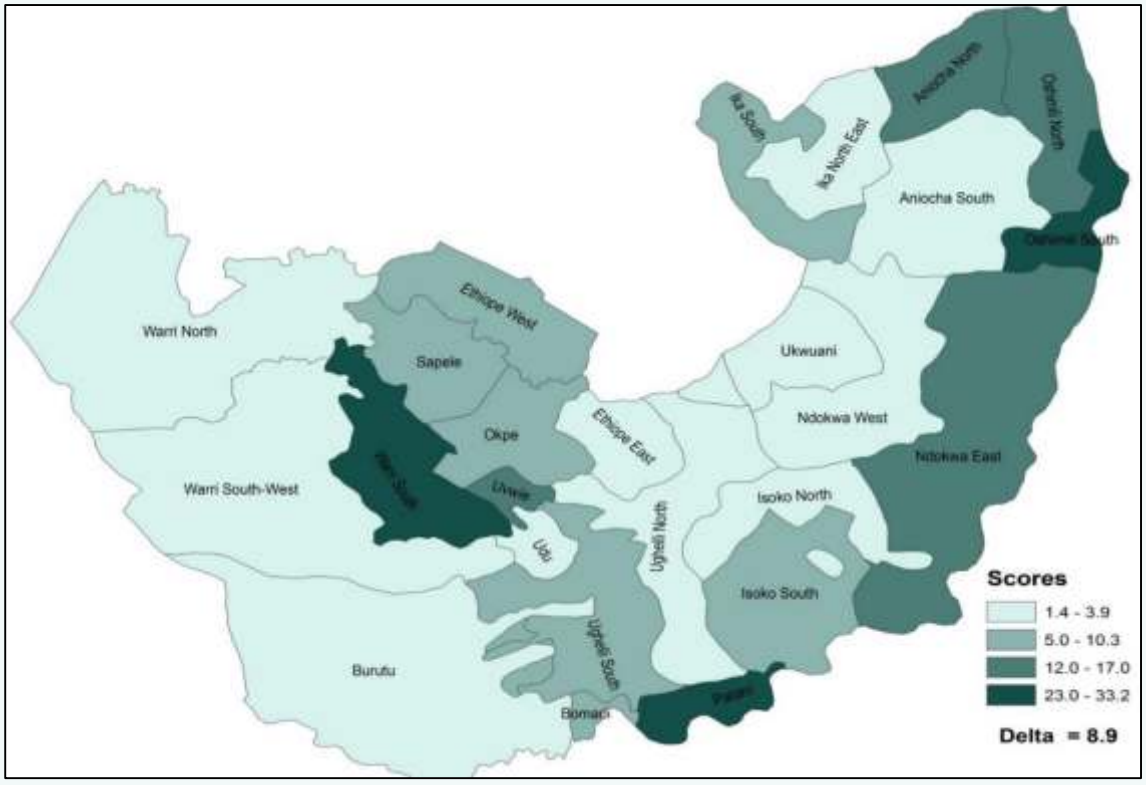
[22] Pacqué-Margolis S, Muntifering C, Ng C, Noronha S. Technical brief: Global health workforce crisis. . 2012.

[23] Nigeria: Human resources for health. http://www.who.int/workforcealliance/countries/nga/en/

4.3.5 *Health Workforce Density*

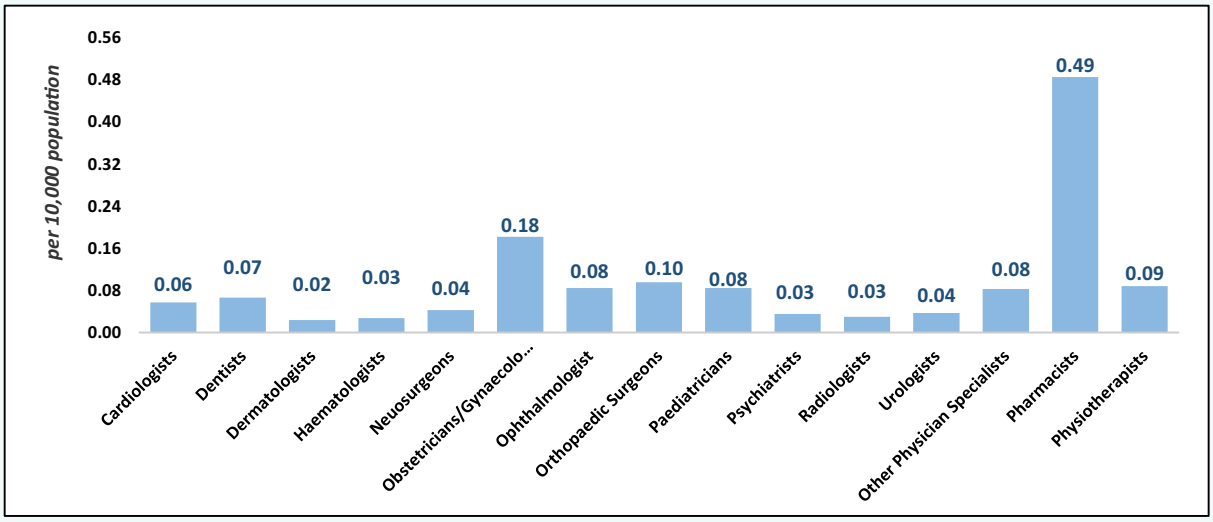
Health workforce density is the number of skilled health workers per 10, 000-population. In 2006, the WHO recommended a minimum of 23 skilled core health workers (doctors, nurses and midwives) per 10, 000-population to provide basic health care services at the primary care level[24]. While the national HRH density in Nigeria is 20/10,000 population[25], HRH density in Delta State is much lower at 9/10,000-population. Although, there is wide variation between LGAs, overall there is severe shortage of core health workforce in the Delta State. Warri South has the highest density at 33/10,000 population while Ndokwa West has the lowest with just 1/10,000 population.

Figure34:Spatial Distribution of Core Health Workforce by LGAs



For secondary care level, optimal care requires more specialized services rendered by a wide range of specialists including physicians, psychiatrists, surgeons, gynaecologists, paediatricians and other non-medical specialists such as pharmacists and physiotherapists. As it is, the number of specialists per 10,000 population in the State is very low (Figure 9) and this may impact negatively on the availability of secondary level care and the quality of su ch care when they are available.

Figure35: Density of Specialist Health Professionals per 10,000 population



4.3.6 Service Utilization

Out-patient and in-patient service utilization were assessed. Out-patient service utilization is measured as number of outpatient visits per capita per year. The WHO estimates 5 outpatient visits per person per year. However, the Delta has a state average of less than 1 (0.31) outpatient visit per person per year which is below the estimated average by the WHO. In-patient service utilization is measured as number of hospital discharges per 100 population per year excluding deliveries. While WHO estimates 10 hospital discharges per 100 population per year, health facilities in the state for the year ended 2015, recorded about 2 hospital discharges per 100 population per year. Overall, health service utilization in Delta state is below the internationally estimated average. This picture might be a result of poor record keeping as reference data were sourced from the National HMIS database. It is recommended that a data quality audit on this indicator be carried out to validate these findings.

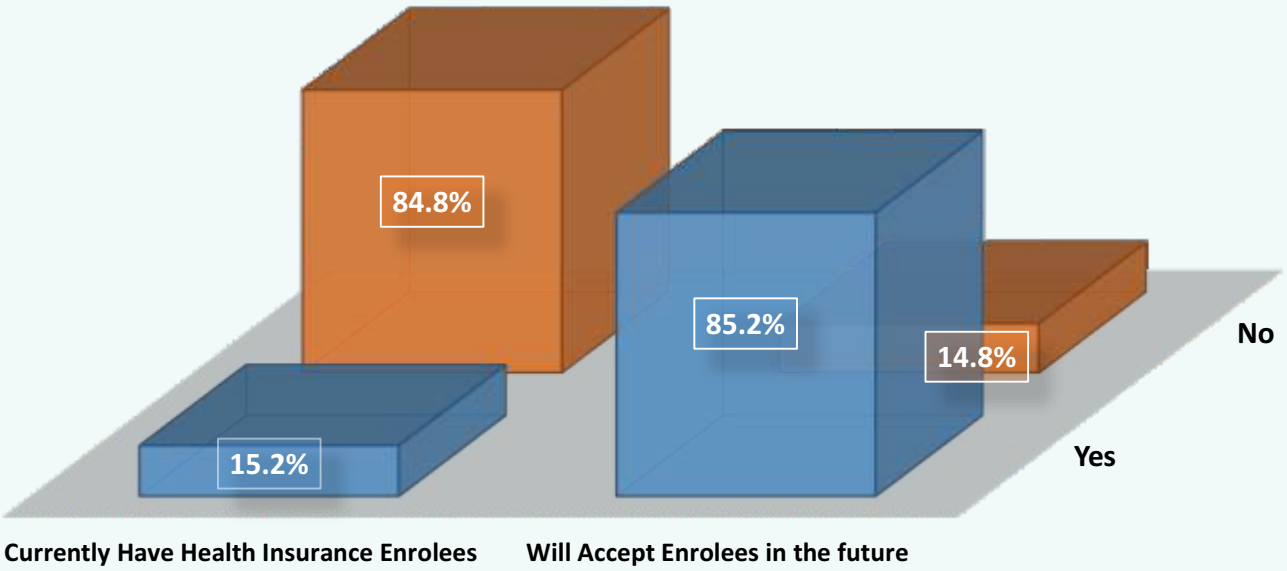
***Table 10**: Service Utilization in Delta State*

Service Utilization			
Domain	**Indicator Value**	**Target**	**Score (%), Max=100%**
Outpatient Service Utilization	0.31	5	6
Inpatient Service Utilization	1.55	10	16

4.4 Facilities with Health Insurance Clients

Due to the low health insurance coverage in the State, only 15.2% of facilities currently have health insurance enrollees. However, 84.8% of all facilities across the 25 LGAs are willing to accept health insurance clients in the future.

Figure36: Health Facilities by Health Insurance Clients



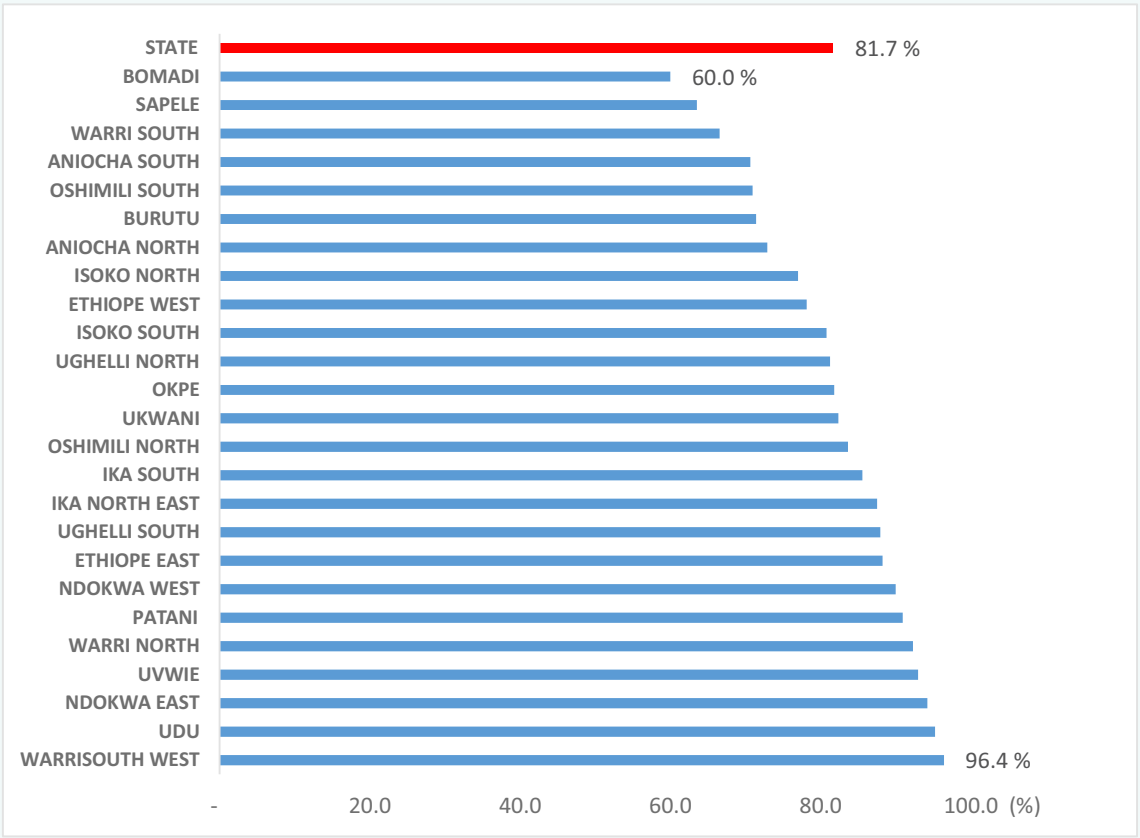
4.5 Service-Specific Availability and Readiness

4.5.1 Family Planning (FP) Services

Access to safe, voluntary family planning is a human right and an essential part of population health services. Availability of contraceptive services that are quality-assured and accessible, prevents unwanted pregnancies and its complications. FP avails households and family units opportunities for gender equality, women's empowerment and poverty alleviation [26].

As shown in the chart below, family planning services such as health education, counselling and provision of different types of contraceptive products are widely available in all the LGAs except in Bomadi LGA which has about 28% of service availability. With a state average of 80% availability for family planning services, health facilities in the state appear ready to provide contraceptive services for much wider population coverage if demand increases.

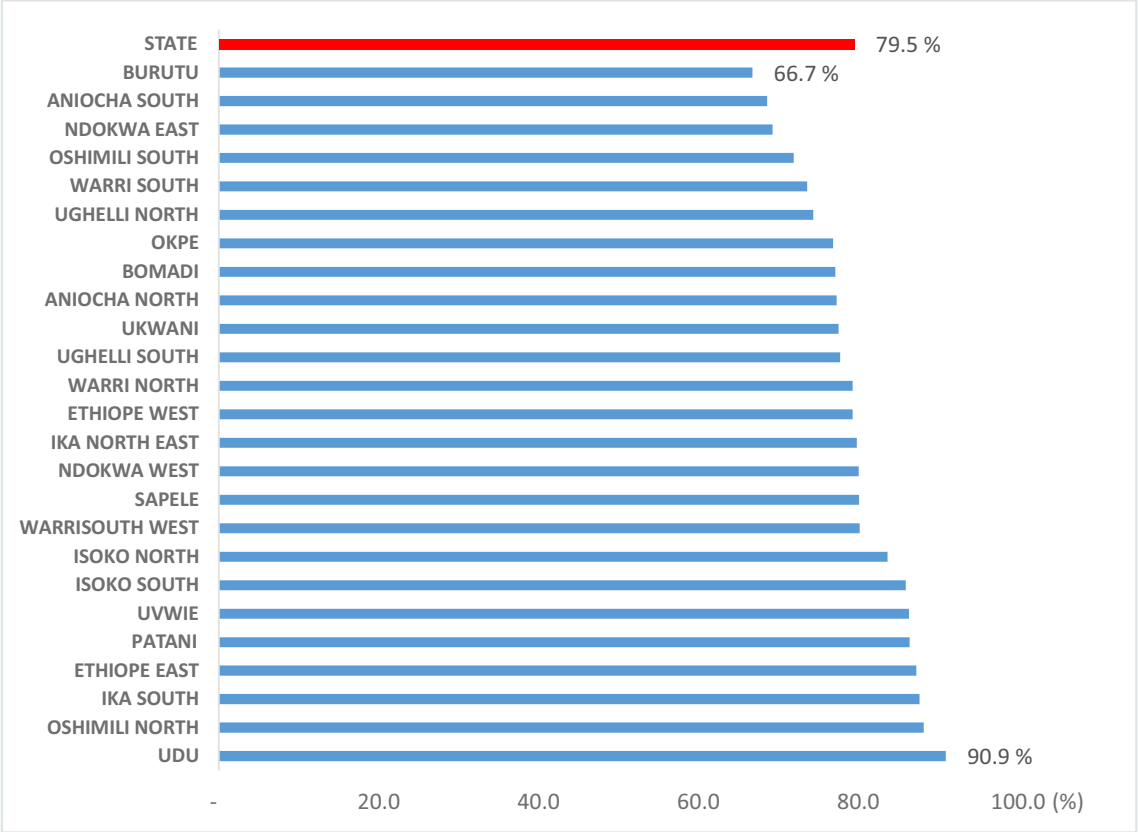
Figure37: LGA by Availability of Family Planning Services



4.5.2 *Maternal, Newborn and Child Health (MNCH)*

MNCH services including focused antenatal care (ANC), active management of labour, post-natal care, newborn care and integrated management of childhood illnesses amongst others, are essential services at all levels of care but especially at the primary care level. All the LGAs appear to have MNCH services readily available to all residents in the state. ANC service availability in the state is 86.6%, delivery (obstetrics) service is 70.4%, post-natal services is 82.2% and newborn child services is 78.5%. Overall state average for all MNCH services availability is 79.5%. This is indicative of availability of infrastructure and health workforce to deliver MNCH services.

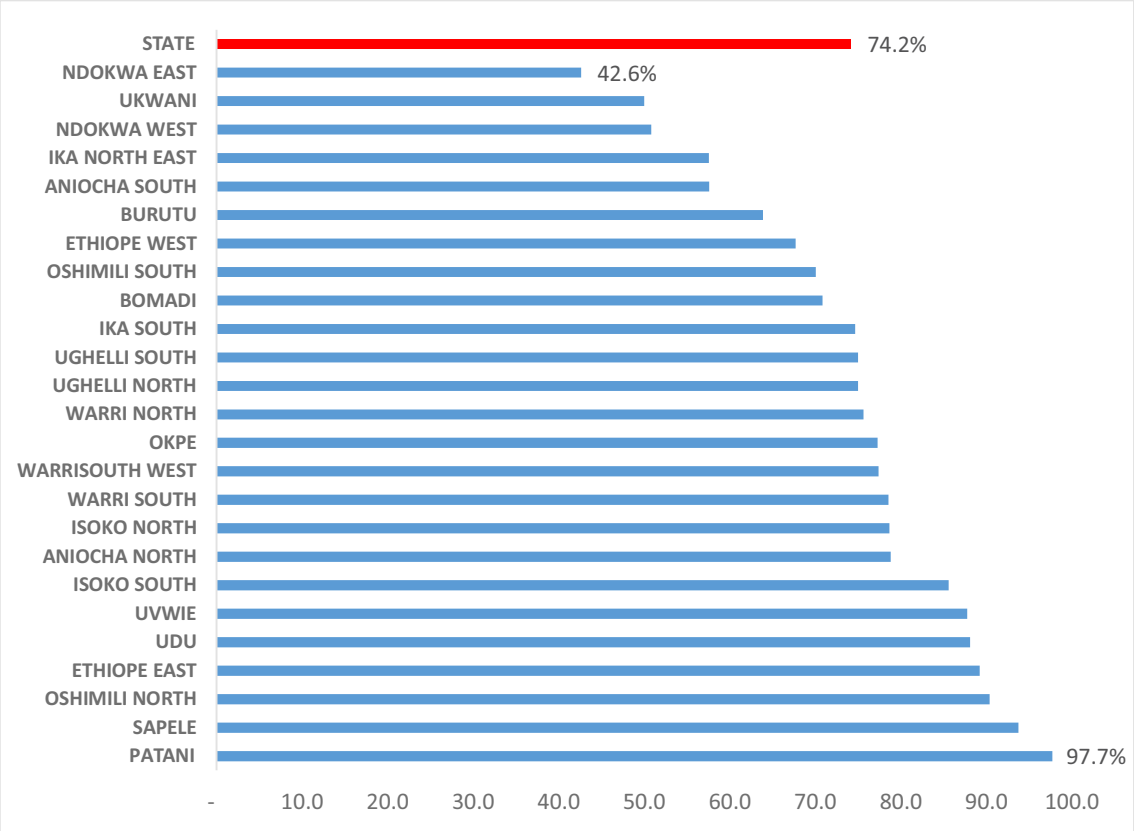
Figure38: *LGA by Availability of MNCH and Other Paediatric Services*



4.5.3 *Malaria prevention and treatment services*

Malaria is the commonest reason for out-patient visits in Delta State[27]. As such, health services for the management of malaria appear to be readily available. At 74.2% state average, most health facilities in the state provide services for the treatment of malaria. Ndokwa East, Ukwuani and Ndokwa West LGAs scored the lowest in this service type each below 51%.

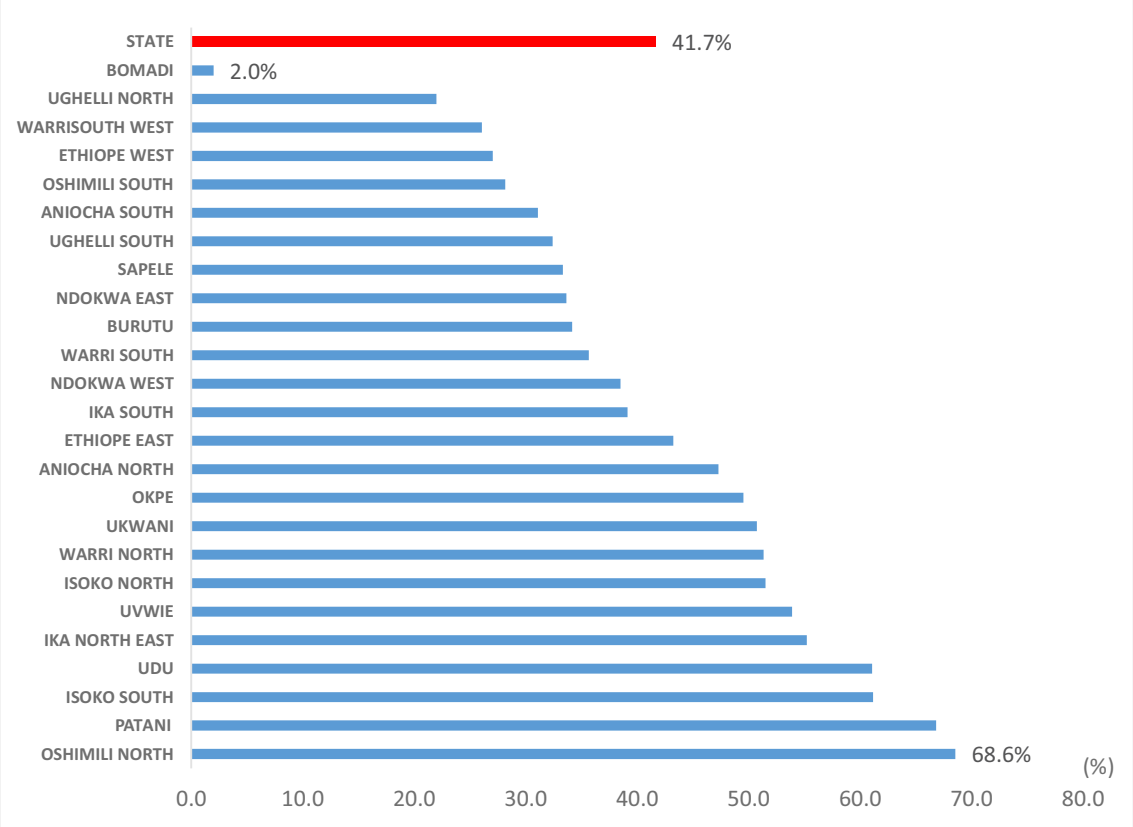
Figure39: *LGA by availability of services for the treatment of Malaria*



4.5.4 *HIV Services*

16 LGAs scored below 50% in the availability and readiness to provide HIV services. The state average is 42.8%. More efforts will be required to expand the coverage of HIV services although especially in Bomadi LGA where HIV services are not available in assessed facilities. Delta State has not been listed as part of the 12+1 high burden States for HIV in Nigeria.

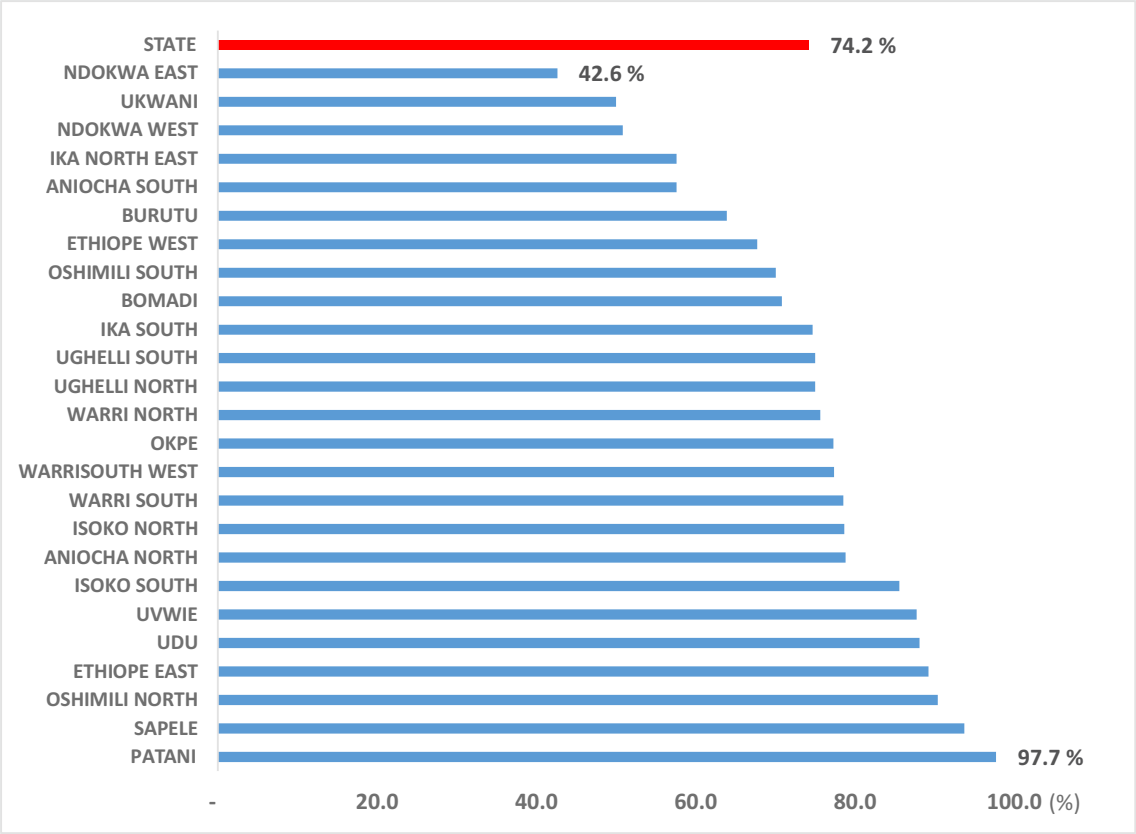
Figure40: LGA by Availability of HIV Services



4.5.5 *Other Infectious and Non-Communicable Diseases*

Services for the management of other infections and non-communicable diseases such as diabetes and hypertension are readily available in Delta State with a state average of 7 4.2%. However, two Ndokwa and Ukwuani LGAs again scored 50 and below%.

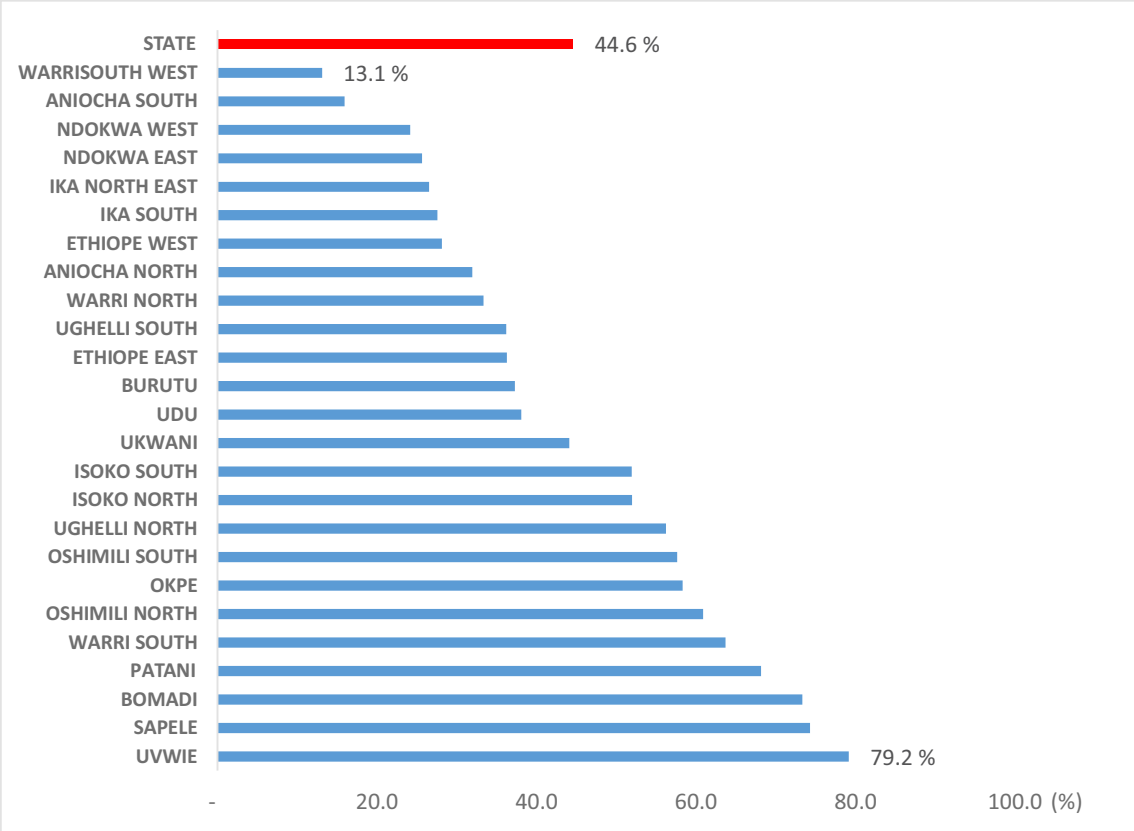
Figure41:LGA by Availability of Services for the Management of Other Infections & NCDs



4.5.6 *Surgical Services*

Surgical services are not adequately available with a state average of 44.6%. Only 11 LGAs scored above 50%.

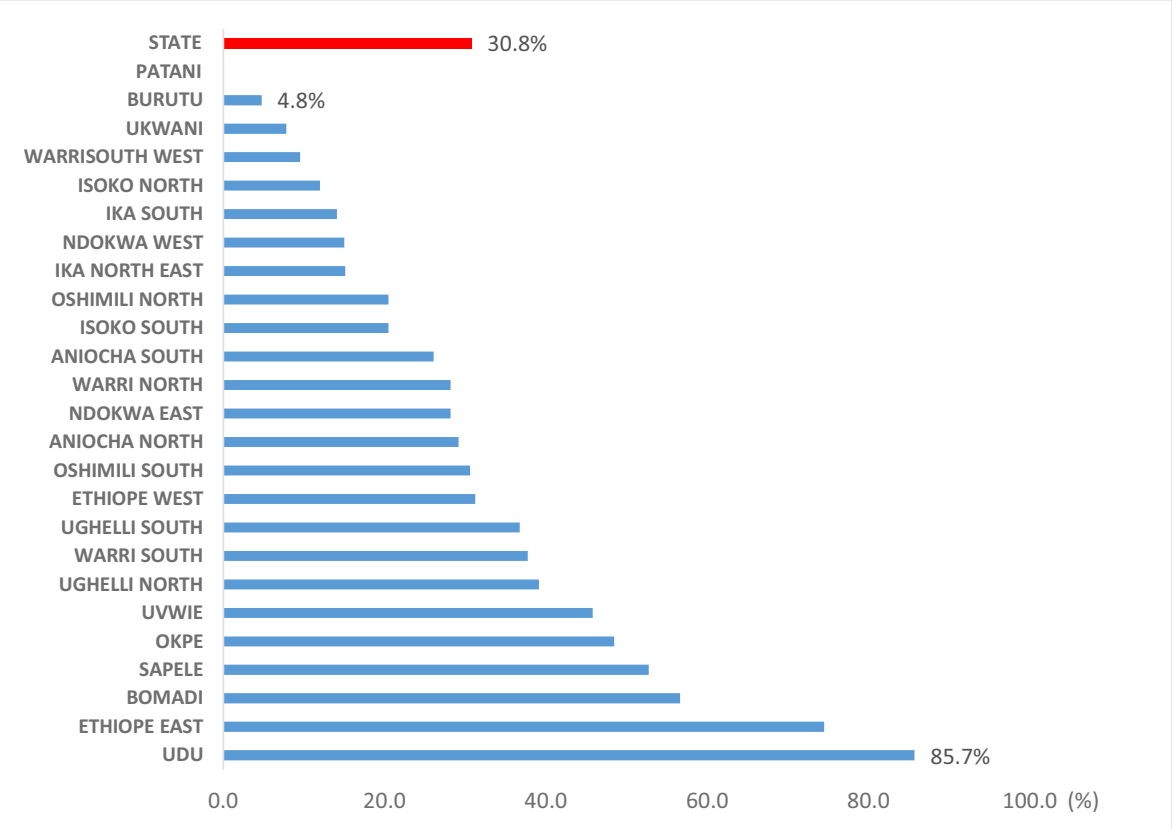
Figure42: LGA by Availability of Surgical Services



4.5.7 *Eye and Dental Care*

Eye and dental services are not readily available with a state average of 3 0.8%. Only Udu, Ethiope East Okpe, and Bomadi LGAs scored above 50% in this service domain.

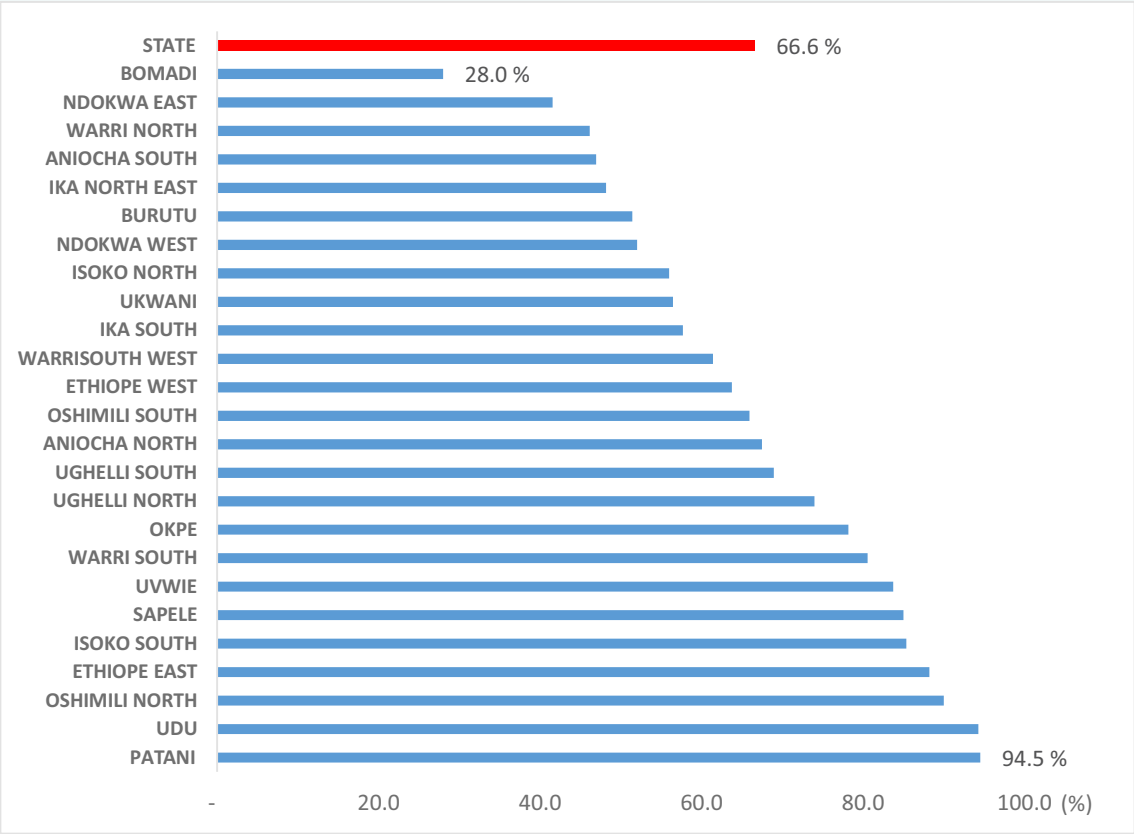
Figure43: LGA by Availability of Eye and Dental Care



4.5.8 *Emergency Care*

This is an immediate care given to preserve life and body functions in acute life-threatening conditions before more specialized care is sought. This service is quite available in all LGAs except in Bomadi LGA (Figure 23). The state average availability is 66.6%.

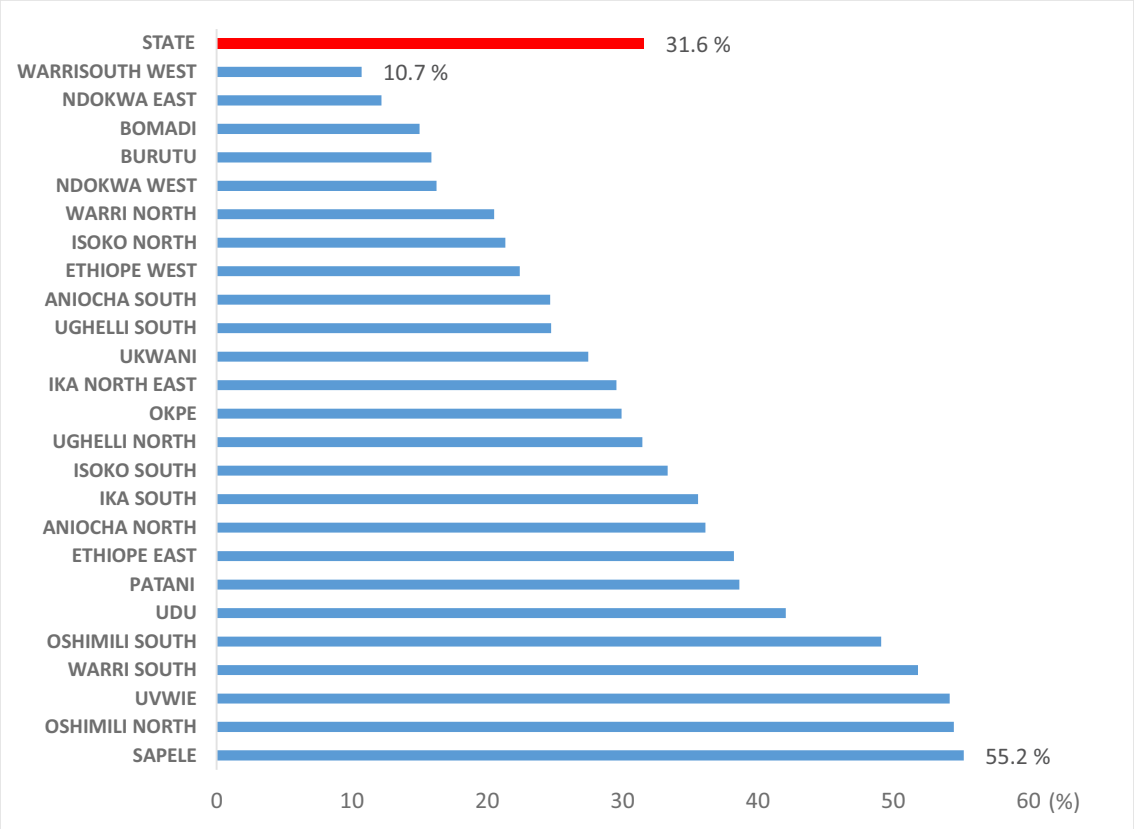
Figure44: LGA by Availability of Emergency Services



4.5.9 *Diagnostic Services*

Availability of diagnostic services is poor in the State at 31.6%, with only four LGAs barely scoring above 50%. Even though the assessment of infrastructure for basic diagnostic services revealed a fair availability of diagnostic facilities as mentioned earlier (54.6%), this has not translated into service availability probably due to manpower shortage.

Figure45: LGA by Availability of Diagnostic Services



Achieving a contributory health scheme by any government requires a concerted effort by all stakeholders including the intended beneficiaries, health care providers, government, development partners and employers, amongst others. This baseline assessment provides information that can guide the state in developing a fit-for-purpose implementation plan for rolling out contributory health scheme to all Deltans; developing strategies to strengthen the health system and targeting interventions appropriately. It further provides a baseline against which progress in health systems improvement and health insurance coverage and acceptance can be periodically measured. The assessment findings can serve as both a planning and accountability tool if properly utilised. The findings will also contribute to the scarce global knowledge on household health information in Nigeria.

Based on the findings, the following are recommended for consideration:

Recommendations for Household Survey

1. While over 81% of surveyed households have at most 6 household members which is ideal for most health insurance schemes, about 20% have more than 6 members. Extra household members in households with more than 6 members should be considered for inclusion in the scheme so that no household member/individual is excluded from benefiting from the contributory health scheme.
2. The level of knowledge about health insurance is very low; only 36.1% of the population have a good knowledge of it. To improve this, a strong sensitisation and mobilisation plan should be developed to educate and mobilise the population - especially the uneducated and households within the poorest quintile - for the scheme. Information Education and Communication (IEC) and Behaviour Change Communication (BCC) strategies should be used to raise community awareness and increase knowledge of health insurance for enhanced acceptability and rapid scale-up. The organisational structure for the Delta State Contributory Health Commission should incorporate a strong communication/mobilisation team.
3. Since, a large proportion of the people are employed in the private sector and also seek healthcare from that sector, the active participation of the private sector (formal and informal) in the scheme is quite important, and the mechanism for revenue collection from households who work within these sectors, especially in rural areas should be innovative to ensure success.
4. Financial access to health services is poor with most people paying for health care out-of-pocket, which can lead the most-poor households to forgo some basic needs. However, most of the people were willing to pay for the contributory health scheme, hence, universal coverage of the contributory health scheme should be vigorously pursued and implemented in Delta state.

5. Geographic access to health facility was high with about 80% of the population living within 30 minutes' walk to a health facility. However, more health facilities can be established to improve access amongst the remaining 20% of the population.
6. To be self-sufficient, the scheme must enrol as many households as possible to ensure adequate risk and funds pooling. Pooling may be done at the LGA level or centrally to cross-subsidize.
7. Households in the poorest wealth quintile may not be able to afford to enrol, hence the government should either subsidize or exempt this category of residents from payment. However, appropriate identification mechanisms must be put in place in order to correctly identify the poorest. In addition, the contributory health scheme should ensure little or no co-payment so as not to discourage some poorer households from enrolling.

Recommendations for Health Facility Assessment

1. There is an urgent need to embark on state-wide HRH recruitment and retention strategies for core health professionals (doctor, nurses and midwives) as well as specialist (both medical and non-medical). A good way to do this is to develop a State Human Resources for Health Strategic Plan if none exists already. This plan should have a detailed contextual analysis of HRH needs in the state and should aim at ensuring adequate number and equitable distribution of skilled and well-motivated health workforce by focusing on improving recruitment, retention and performance of health workers.
2. Alongside recruitment and deployment, the state should make additional investments to upgrade public facilities and create an enabling environment for growth of the private health sector as well leverage to ensure coverage in all communities/LGAs.
3. There is a need for establishment of more health facilities. In doing this, equity in the distribution of health facilities should be sought and a role for the private sector should be established.
4. The state needs to develop and operationalise a health care waste management plan for both public and private sector facilities. This should include training on health care waste management, provision of waste disposal materials and infrastructure.
5. Bomadi, Burutu, Ndokwa East and Warri South-West LGAs deserve special attention to ensure that they have facilities that are ready and have available the right services to provide care for their residents. They scored consistently low throughout this assessment.
6. Delta state should leverage from the provisions of the National Health Act to develop standards for the different levels of care and for routine monitoring of quality of care in health facilities in the state.

In conclusion, Delta State's contributory health scheme is timely and a step in the right direction. It has been demonstrated globally that improvements in health leads to improvement in productivity and GDP[28] so it is expected that health insurance in Delta will not only improve health but also increase employment, productivity and the state's overall economic growth.

Achieving the state's vision of 100% health insurance coverage in Delta will require careful planning, implementing smart strategies that bring in contributions from the large informal sector, broad stakeholder buy-in and participation, prudent and transparent management of funds to build trust.

Appendix 1: Summary of Indicators (Household Survey)

Sn	Verifiable Indicator	Indicator	Number	Percentage
1				
1	Household distribution by educational status of Head	**Education Level**	**n**	**%**
		None	222	9.7
		Primary	570	24.9
		Secondary	924	40.4
		Higher	553	24.2
		Don't Know	16	0.7
2	Household distribution by occupation of Head	**Employment Status**	**n**	**%**
		Unemployed	466	20.4
		Self-employed	1260	55.0
		Private sector employee	229	10.0
		Civil servant	317	13.8
		Don't know	17	0.7
3	Household distribution by average size	**Average Household size**	**n**	**%**
		1-3	601	26.2
		4-6	1254	54.6
		7-10	409	17.8
		≥ 11	34	1.5
4	Household distribution by gender of head	**Gender of Head**	**n**	**%**
		Female	328	14.3
		Male	1970	85.7
5	Household distribution by income	**Monthly Income**	**n**	**%**
		≤ 5000	507	22.1
		5001-10000	424	18.4
		10001-20000	613	26.7
		20001-50000	499	21.7
		50001-100000	215	9.4
		>100000	39	1.7
6	Proportion of household members disaggregated by reason for last hospital visit	**Reason for last hospital visit**	**n**	**%**
		Malaria	7750	71
		Other infectious and NCDs	985	9.5
		ANC and post-natal services	465	5
		Newborn and paediatric services	399	3.8

Sn	Verifiable Indicator	Indicator	Number	Percentage
		Surgery	364	3.4
		Other childhood diseases	300	3
		Eye and dental care	293	2.6
		Family planning	149	1.5
7	Proportion of household respondents disaggregated by first point of call in seeking care.	**Point of call for treatment**	**n**	**%**
		Self-Medication	409	18.3
		Patent medicine vendor	949	41.3
		Private Hospital	115	5.9
		Public Hospital	676	30.7
		Traditional Healers	48	2.2
		Religious healers	15	0.7
		Others	15	0.7
8	Distribution of household respondents by where women had their last delivery	**Place of last delivery**	**n**	**%**
		Home	225	11.8
		TBA	205	10.3
		Private facility	267	14.4
		Public facility	1169	59.6
		Faith based	21	1.1
		Others	51	2.7
9	Proportion of household respondents disaggregated by main consideration for choice of where to seek healthcare services	**Main Consideration in choosing where to seek care**	**n**	**%**
		Quality of care	960	43.2
		Timeliness	222	10.4
		Attitude of staff	58	2.6
		Privacy	48	2.2
		Physical Environment of facility	26	1.1
		Affordability	551	24.3
		Proximity	331	15.3
10	Proportion of households who live at least 30 minutes' walk from a health facility		1866	81.4
11	Proportion of households where pregnant women seek		1897	82.5

Sn	Verifiable Indicator	Indicator	Number	Percentage
	antenatal care services when pregnant			
12	Proportion of households disaggregated by how they pay for health expenditure.	**Payment Method**	**n**	**%**
		Out of pocket	2,053	94.8
		Health Insurance	32	1.5
		Retainership	11	0.5
		Free Health Care	55	2.3
		Others	21	1.0
13	Proportion of household members covered by a health insurance plan		144	1.4
14	Proportion of households covered by a retainership plan		41	0.5
15	Proportion of households willing to pay for health insurance		1336	62.2
16	Proportion of households with a good knowledge of health insurance		834	36.1

Appendix 2: Summary of Indicators, (Health Facility Assessment)

Sn	Domain	Indicator	Number (n)	Percentage (%)
1	Proportion of health facilities disaggregated by ownership	**Ownership**	**n**	**%**
		Public	415	69.7
		NGO/not-for-profit	1	0.2
		Private-for-Profit	163	27.4
		Mission/Faith-Based	14	2.4
		Other	2	0.3
2	Proportion of health facilities disaggregated by level of care	**Level of Care**	**n**	**%**
		Secondary Health Care Facility	137	23
		Primary Health Centre/Clinic	415	69.7

Sn	Domain	Indicator	Number (n)	Percentage (%)
		Health Post	9	1.5
		Maternal/Child Health Clinic	18	3
		Other	16	2.7
3	Proportion of health facilities disaggregated by location (rural/urban)	**Rural/Urban**	**n**	**%**
		Urban	232	39.2
		Rural	360	60.8
4	Proportion of health facilities disaggregated by number of hours open per day	**Open Hours**	**n**	**%**
		4 hours or less	7	1.2
		5 to 8 hours	34	5.7
		9 to 16 hours	68	11.4
		17 to 23 hours	6	1
		24 hours	480	80.7
5	Proportion of health workers disaggregated by profession	**Health Workers**	**n**	**%**
		Specialist Doctors	516	7.9
		Generalist Doctors	956	14.7
		Nurses	2442	37.5
		Midwives	1145	17.6
		Pharmacists	264	4.1
		Laboratory Scientist	252	3.9
		Laboratory Tech	249	3.8
		Physiotherapist	48	0.7
		Training Medical Record	365	5.6
		CHEWS	461	7.1
		JCHEWS	206	3.2
		CHO	120	1.8
6		**Specialist Doctors**	**n**	**%**

Sn	Domain	Indicator	Number (n)	Percentage (%)
	Proportion of doctors disaggregated by specialist areas	Cardiologists	31	6.7
		Dentists	36	7.8
		Dermatologists	13	2.8
		Haematologists	15	3.3
		Neurosurgeons	23	5.0
		Obstetricians and Gynaecologists	99	21.5
		Ophthalmologists	46	10.0
		Orthopaedic Surgeons	52	11.3
		Paediatricians	46	10.0
		Psychiatrists	19	4.1
		Radiologists	16	3.5
		Urologists	20	4.3
		Others	45	9.8
7	Proportion of health facilities with health insurance clients		88	15.2
8	Proportion of health facilities with retainership clients		110	19.9
9	Proportion of health facilities that are willing to accept health insurance clients in the future		482	85.2

Appendix 3: Number of Maternity Beds in LGAs

LGA	Number of maternity beds		Total
	Public	Private	
ANIOCHA NORTH	33	14	**47**
ANIOCHA SOUTH	36	1	**37**
BOMADI	10	4	**14**
BURUTU	38	8	**46**
ETHIOPE EAST	11	12	**23**
ETHIOPE WEST	32	6	**38**
IKA NORTH EAST	11	13	**24**
IKA SOUTH	50	7	**57**
ISOKO NORTH	35		**35**
ISOKO SOUTH	26	7	**33**
NDOKWA EAST	36	19	**55**
NDOKWA WEST	25		**25**
OKPE	29	3	**32**
OSHIMILLI NORTH	27	25	**52**
OSHIMILLI SOUTH	28	42	**70**
PATANI	60	3	**63**
SAPELE	13	30	**43**
UDU	39		**39**
UGHELLI NORTH	72	2	**74**
UGHELLI SOUTH	43	1	**44**
UKWUANI	120	7	**127**
UVWIE	19	42	**61**
WARRI NORTH	11	16	**27**
WARRI SOUTH	28	94	**122**
WARRI SOUTH WEST	21		**21**
Total	**853**	**356**	**1209**

Appendix 4: Number of In-patient Beds in LGAs

LGA	Number of in-patient beds		Total
	Public	Private	
ANIOCHA NORTH	297	51	**348**
ANIOCHA SOUTH	136	8	**144**
BOMADI	54	27	**81**
BURUTU	133	47	**180**
ETHIOPE EAST	93	156	**249**
ETHIOPE WEST	217	65	**282**
IKA NORTH EAST	111	58	**169**
IKA SOUTH	180	26	**206**
ISOKO NORTH	154		**154**
ISOKO SOUTH	229	71	**300**
NDOKWA EAST	267	132	**399**
NDOKWA WEST	167		**167**
OKPE	147	43	**190**
OSHIMILLI NORTH	151	171	**322**
OSHIMILLI SOUTH	128	304	**432**
PATANI	108	58	**166**
SAPELE	89	253	**342**
UDU	136		**136**
UGHELLI NORTH	262	27	**289**
UGHELLI SOUTH	274	27	**301**
UKWUANI	109	50	**159**
UVWIE	67	170	**237**
WARRI NORTH	100	77	**177**
WARRI SOUTH	121	817	**938**
WARRI SOUTH WEST	82		**82**
Total	**3812**	**2638**	**6450**

Appendix 5 Baseline Survey Household Questionnaire

DELTA STATE

BASELINE ASSESSMENT FOR THE IMPLEMENTATION OF A HEALTH INSURANCE PROGRAMME

HOUSEHOLD TOOL

FEBRUARY 2016

Delta State

Baseline Assessment-Health Insurance–Questionnaire

SECTION 1			
A. IDENTIFICATION			
LGA	_____	**Enumeration Area**	_____
EA Number	☐☐☐☐	**Household Number**	☐☐☐☐
ID Number	EA number followed by Household number	☐☐☐☐ ☐☐☐←	Enter this number at the top of each page

B. HOUSEHOLD VISIT				
B1	Household visit details	Visit 1	Visit 2	Visit 3
	0 = recipient not home 1 = recipient home and consented to interview 2 = recipient home but refused	☐	☐	☐
B2	Date of Interview	dd/mm/yy	_____/_____/_____	
Hi HHB3	Interviewer's Name		Code	☐☐☐☐
B4	Supervisor	Questionnaire checked after completion	☐	

C: INFORMED CONSENT			
HOUSEHOLD NUMBER ☐☐☐☐☐		INTERVIEWER CODE ☐☐	
Good day! My name is _____. We are here on behalf of Health Systems Consult Limited conducting a Baseline Household survey to assist the Delta State Government in knowing more about health services in the state. Your household was randomly selected to participate in this study. The Information you share with us may be used by the state government for planning service improvement or for conducting further studies of health services. Neither your name nor that of any other member of your household participating in this study will be included in the dataset or in any report without your consent. We are asking for your help to ensure that the information we collect is accurate. You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, which will improve the services you receive and the state's health system. If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information. At this point, do you have any questions about the study? Do I have your agreement to proceed? INTERVIEWER'S SIGNATURE INDICATING CONSENT OBTAINED _____ _____/_____/_____			
C1	May I begin the interview?	YES ..... 1 NO 2	
C2	INTERVIEW START TIME (use the 24 hour-clock system)	☐☐:☐☐	

SECTION 2: PEOPLE LIVING IN THE HOUSEHOLD					
Line No.	**Usual Household residents and visitors**	**Relationship to head of household**	**Sex**	**Age**	**Hospital Visit**
	Please give me the **names** of the persons who usually live in your	What is the relationship of (NAME) to	Is (NAME) male or female?	How old is (NAME)?	What were you treated for in your

	household, starting with the head of the household.	the head of the household?*			If less than 1 year write 0 in the box and give number of **months** in next column. **If don't know write 'NK'**		last visit to the hospital
Q01	Q02	Q03	Q04		Q05		Q06
			M	F			
1		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
2		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
3		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
4		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
5		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
6		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
7		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
8		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
9		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
10		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
11		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐
12		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐

13		☐☐	1	2	Years ☐☐	Months ☐☐	☐☐

IF YES, INTRODUCE EACH ONE IN THE TABLE

Codes for Q3: Relationship to household head

01=head 04=son/daughter in law 07=parent in law 10=adopted/foster/stepchild

02=wife/husband/partner 05=grandchild 08=brother/sister/in law 11=not related

03=son/daughter 06=parent 09=other relative 98=don't know

Codes for Q6: Last visit to the hospital

01= Family Planning 04=Antenatal and Post-Natal Services 07=Malaria 10= Other Infectious and NCDs

02= TB 05=HIV/AIDS 08= Surg ery

03= Eye and Dental Care 06=Other childhood diseases 09= Newborn care/paediatric services

SECTION 3: HOUSEHOLD CHARACTERISTICS (ASSETS AND INCOME)			
No	**Question**	**Categories**	**Skip**
We would like to ask some questions about the head of household, characteristics of the house and possessions of the household			
Q07	Who is responding to this questionnaire?	Line number of respondent ☐☐	
Q08	Has the head of the household ever attended school?	Yes 1 No 0 Don't know 9	**No⇨Q10**
Q09	What was the highest level of school the head of the household attended? (Primary, Secondary, Higher)	Primary 1 Secondary 2 Higher 3 Don't know 9	
Q10	Is the head of this household employed	Yes 1 No 0 Don't know 9	**No⇨Q12**
Q11	What is the main occupation of the head of this household	Self Employed 1 Private Sector Employee 2 Civil Servant 3 Don't Know 9	

SECTION 3: HOUSEHOLD CHARACTERISTICS (ASSETS AND INCOME)				
No	**Question**	**Categories**		**Skip**
Questions Q15 to Q24 refer to the characteristics of the household and household assets				
Q12	What is the main material of the roof?	Grass/Papyrus/Banana leaves	1	
		Thatch	2	
		Bamboo/Wood/Planks	3	
		Zinc/Iron/aluminium sheets	4	
		Tiles	5	
		Others (*specify*)_____	6	
Q13	What is the main material of the walls?	Reed/Grass	1	
		Mud	2	
		Bamboo/wooden walls	3	
		Plastered	4	
		Brick/Concrete finished walls	5	
		Others (*specify*)_____	6	
Q14	What is the main material of the floor?	Earth or sand	1	
		Clay	2	
		Wood, bamboo or palm	3	
		Vinyl or parquet	4	
		Tiles or cement	5	
		Others (*specify*)_____	6	
Q15	What is the main source of drinking water?			
		Surface water (stream, river, lake, pond, irrigation channel etc)	1	
		Rain water, gutter pipe	2	
		Protected well (public or private)	3	
		Public tube well or borehole	4	
		Public tap or standpipe	5	
		Piped into dwelling	6	
		Other, specify: _____	7	
Q16	What main type of toilet facility is available to the household?	No facility, bush or field	1	
		Shared pit latrine	2	
		Own pit latrine	3	
		Shared improved pit latrine	4	
		Own improved pit latrine	5	
		Shared flush toilet	6	
		Own flush toilet	7	

SECTION 3: HOUSEHOLD CHARACTERISTICS (ASSETS AND INCOME)			
No	**Question**	**Categories**	**Skip**
		Other, specify: _____ 8	
Q17	What is the main energy source for cooking?	Firewood 1 Charcoal 2 Kerosene 3 Gas 4 Electricity 5 Other, specify: _____ 6	
Q18	Does the household (any member) have any of the following ***>> multiple answers possible***	Yes / No Radio 1 0 Television 1 0 Refrigerator 1 0 Electric fan 1 0 Electric iron 1 0 Telephone (fix) 1 0 Mobile phone 1 0	
Q19	Does the household (any member) have any means of transport? ***>> multiple answers possible***	Yes / No Bicycle 1 0 Motorbike 1 0 Car or truck 1 0 Animal or animal cart 1 0 Canoe, boat or ship 1 0	
Q20	Number of livestock animals the household owns? ***>> write 000 if none*** ***>> do not read out list***	Chicken ☐☐☐ Ducks and turkeys ☐☐☐ Goats and sheep ☐☐☐ Camel ☐☐☐ Cows ☐☐☐ Donkeys ☐☐☐	

SECTION 3: HOUSEHOLD CHARACTERISTICS (ASSETS AND INCOME)				
No	**Question**	**Categories**		**Skip**
		Other _____	☐☐☐	
Q21	Does the household own land used for agriculture or farming?	Yes	1	**Yes⇨Q22** **No⇨Q23**
		No	0	
Q22	If yes, indicate approximate size in plots			
Q23	What is the household's average income per month?	**N**……..		☐

SECTION 4: HEALTH SEEKING BEHAVIOUR				
No	**Question**	**Categories**		**Skip**
We would like to ask some questions about health seeking behaviour of members of this household				
Q24	Whenever you are ill, do you attempt to treat your illness?	Yes	1	**No⇨Q29**
		No	0	
		Don't know	9	
Q25	How many days after the onset of symptoms do you commence treatment	The same Day	1	
		The next day	2	
		2 days later	3	
		3-7 days later	4	
		More than 7 days	5	
Q26	At what stage of your illness do you seek care?	Early stages/ onset of mild symptoms	1	
		Incidence of disease and its symptoms	2	
		Very severe stages of disease	3	
		Don't know	9	
Q27	Where is your first point of call for treatment	Self-medication	1	
		Chemist/pharmacy without a prescription but with consultation	2	
		Private hospital	3	

SECTION 4: HEALTH SEEKING BEHAVIOUR				
No	**Question**	**Categories**		**Skip**
		Government Hospital (PHCs, General and teaching hospitals	4	
		Traditional Healers	5	
		Religious healers (church/mosque)	6	
		Others, Specify_____	7	
		Don't Know	9	
Q28	What is the main consideration for deciding where to seek healthcare services	Quality of care	1	
		Timeliness	2	
		Attitude of staff	3	
		Privacy	4	
		Physical environment of the facility	5	
		Affordability	6	
		Proximity to your place of residence	7	
		Others (specify) _____	8	
		Don't Know	9	
For pregnant women and women of child bearing age				
Q29	Do you seek antenatal care services when pregnant	Yes	1	
		No	0	
		Don't know	9	
Q30	Do you attend post-natal after delivery including complete vaccination for new-borns	Yes	1	
		No	0	
		Don't know	9	
Q31	Where did you have your last delivery?	At home	1	***If 3, 4 and 5, ask Q 32***
		Traditional Birth Attendants	2	
		Private health facility	3	
		Public health facility	4	
		Faith based Facility	5	
		Others (specify), _____	6	
		Don't Know	9	
Q32	What is the name of the health facility where you had your last delivery			

SECTION 5: ACCESS TO AND COST OF HEALTH SERVICES				
No	**Question**	**Categories**		**Skip**
We would like to ask some questions about access to health services by members of this household				
Q33	How long does it take you to get to the nearest health facility?	Short time (<30mins)	1	
		Medium time (30 mins to 120 mins	2	
		Long time (>2 hours)	3	
		Don't remember	9	
Q34	Do you have to pay money to get to the nearest facility	Yes	1	***If 1, ask Q 35***
		No	0	
		Don't remember	9	
Q35	How much do you usually spend to get to the nearest health facility	₦.....		
Q36	What means of transport do you use to get to the facility	Foot	1	
		Bicycle	2	
		Car	3	
		Boat	4	
		Others (*specify*)_____	5	
Q37	Once you reach the health facility, how long does it take you to see a health care provider? (Doctor, Nurse CHEW)	Short time (<30mins)	1	
		Medium time (30 mins to 120 mins	2	
		Long time (>2 hours)	3	
		Don't remember	9	
Q38	How do you pay for health expenditure	Out of Pocket (OOP)	1	***If 2, ask Q 39-41***
		Health Insurance	2	
		Retainerships	3	
		Free health care	4	***If 3, ask Q 42-44***
		Others(*specify*)_____	5	
		Don't Know	9	
Q39	Which entity provides your health insurance	NHIS	1	
		HMOs	2	
		CBHIS	3	
		Others (specify) _____	4	
		Don't Know	9	
Q40	Are all members of your household covered by the health insurance plan?	Yes	1	
		No	2	
		Don't Know	3	

SECTION 5: ACCESS TO AND COST OF HEALTH SERVICES			
No	**Question**	**Categories**	**Skip**
Q41	If no, which members aren't covered? (***Insert line number***)	☐☐ ☐☐ ☐☐ ☐☐ ☐☐	
Q42	Which organization provides your retainership	_____ ___	
Q43	Are all members of your household covered by the retainership plan?	Yes 1 No 2 Don't Know 3	
Q44	If no, which members aren't covered? (***Insert line number***)	☐☐ ☐☐ ☐☐ ☐☐ ☐☐	
Q45	On the average, how much does your family spend on healthcare every month	N_____ _	

SECTION 6: HEALTH INSURANCE					
No	**Question**	**Categories**			**Skip**
We would like to ask some questions about health insurance					
Q46	Have you heard about health insurance	Yes		1	
		No		0	
		Don't remember		9	
I am going to ask you some questions to assess your knowledge level on health insurance. For each of the questions asked kindly respond yes or no					
		Yes	No	Don't Know	
Q47	Health insurance helps reduce out of pocket spending on healthcare	1	2	3	
Q48	Health insurance is only for the rich and public sector workers	1	2	3	
Q49	People in the informal and private sector cannot be covered by health insurance	1	2	3	
Q50	Health insurance covers all health problems	1	2	3	
Q51	Health insurance coverage leads to lower quality care	1	2	3	
Q52	Health insurance is the government's way of generating funds for itself	1	2	3	
Q53	Health insurance is a waste of money	1	2	3	
Q54	Are you willing to pay for a health insurance plan	Yes		1	***If 1 or 9, ask Q 56-62*** ***If 2, ask Q 55***
		No		2	
		Don't Know		9	
Q55	If no, why not	It's too expensive		1	
		We don't need it		2	
		I don't believe it works		3	
		Others(*specify)*		4	
		Don't know		9	

SECTION 6: HEALTH INSURANCE				
No	**Question**	**Categories**		**Skip**
Q56	Consider your current household size and expenditure; would you be willing to pay an average of N1, 500 per household member per month for Health Insurance?	Yes No Don't know	1 2 3	***No →Q61*** ***Dk →Q61***
Q57	If yes, consider a situation where there is marked improvement in the health care delivery to your satisfaction, would you be willing to pay an average of N1, 600 per HH member per month?	Yes No	1 2	***No →End***
Q58	If yes, consider a situation where inflation set in and cost of health services increases would you be willing to pay an average of N1, 700 per HH member per month?	Yes No	1 2	***No →End***
Q59	If yes, for the purpose of proper maintenance of health care infrastructures and sustainability of the improved health system, what is the maximum the respondent is willing to pay per HH member per month?	N_____		***→End***
Q60	If No, consider a situation where the provision of health services become cheaper, would you be willing to pay an average of N1, 400 per HH member per month?	Yes No	1 2	***Yes →End***
Q61	If No, consider a situation where there is additional subsidy to further reduce the cost and make health care affordable, would you be willing to pay an average of N1, 300 per HH member per month?	Yes No	1 2	***Yes →End***
Q62	If No, considering the importance of your health, what is the maximum amount you are willing to pay per HH member per month?	N_____		***→End***

INTERVIEW END TIME (use the 24 hour-clock system)	☐☐ ☐☐	Supervisor (Name & Signature) ……

Appendix 6: Health Facility Assessment Tool

BASELINE ASSESSMENT FOR THE IMPLEMENTATION OF A HEALTH INSURANCE PROGRAMME

HEALTH FACILITY TOOL

FEBRUARY 2016

1. IDENTIFICATION

INTERVIEWER VISITS				
001	Number of visits	Visit 1	Visit 2	Visit 3
002	Date of final visit			
003	Name of Interviewer			
004	Interviewers number			
FACILITY IDENTIFICATION				
005	Name of facility			
006	Facility number			
007	Physical Address of facility			
008	Town/LGA			

009	Type of facility*	TERTIARY FACILITY..... SECONDARY HEALTH CARE FACILITY..... PRIMARY HEALTH CENTRE/CLINIC ..... HEALTH POST ..... MATERNAL/CHILD HEALTH CLINIC ..... OTHER (SPECIFY) _____	1 2 3 4 5 96
010	Ownership	GOVERNMENT/PUBLIC ..... NGO/NOT-FOR-PROFIT ..... PRIVATE -FOR-PROFIT ..... MISSION/FAITH-BASED ..... OTHER (SPECIFY) _____	1 2 3 4 96
011	Registration Status	Registered..... Not Registered..... Don't Know.....	1 2 3
012	Accreditation Status	Is this facility accredited Yes..... No..... Don't Know.....	 1 2 3
013	Accrediting Body. If Yes		
014	Urban/Rural	URBAN..... RURAL	1 2
015	Outpatient only	YES ..... NO	1 2

2. **FACILITY LOCATION**

GEOGRAPHIC COORDINATES		
016	Waypoint name (Facility number)	☐☐☐☐☐☐
017	Altitude	Meters ☐☐☐☐
018	Latitude	N/S..... ☐ a DEGREES/DEC b ☐☐ . c ☐☐☐☐

019	Longitude	E/W…… ☐ a DEGREES/DEC b ☐☐☐ . c ☐☐☐☐

3. INFORMED CONSENT

FACILITY NUMBER ☐☐☐☐☐ INTERVIEWER ☐☐ CODE

FIND THE MANAGER, THE PERSON IN-CHARGE OF THE FACILITY, OR MOST SENIOR HEALTH WORKER RESPONSIBLE FOR OUTPATIENT SERVICES WHO IS PRESENT AT THE FACILITY. READ THE FOLLOWING GREETING:

Good day! My name is _____. We are here on behalf of Health Systems Consult Limited conducting a survey of health facilities to assist the Delta State Government in knowing more about health services in the state.

Your facility was selected to participate in this study. We will be asking you questions about various health services. Information about your facility may be used by the state government for planning service improvement or for conducting further studies of health services.

Neither your name nor that of any other health worker respondents participating in this study will be included in the dataset or in any report without your consent. We are asking for your help to ensure that the information we collect is accurate.

You may refuse to answer any question or choose to stop the interview at any time. However, we hope you will answer the questions, which will benefit the services you provide and the nation.

If there are questions for which someone else is the most appropriate person to provide the information, we would appreciate if you introduce us to that person to help us collect that information.

At this point, do you have any questions about the study? Do I have your agreement to proceed?

_____

INTERVIEWER'S SIGNATURE INDICATING CONSENT OBTAINED

020	May I begin the interview?	YES ……. 1 NO ……. 2
021	INTERVIEW START TIME (use the 24 hour-clock system)	☐☐ : ☐☐

SECTION 1: HUMAN RESOURCES			
1100	How many staff with each of the following qualifications are currently assigned to, employed by, or seconded to this facility? Please count each staff member only once, on the basis of the highest technical or professional qualification. *(For doctors, I would also like to know, of the total number, how many are part-time in this facility).*	ASSIGNED/ EMPLOYED/ SECONDED (FULL TIME)	PART TIME
1101	Generalist (non-specialist) medical doctors	☐☐☐	☐☐☐
1102	Specialist medical doctors	☐☐☐	☐☐☐
1102a	For specialist medical doctors, please indicate number in each speciality	Cardiologist ☐☐	☐☐ Cardiologist
		Dentist ☐☐	Dentist ☐☐
		Dermatologist ☐☐	☐☐ Dermatologist
		Haematologist /Oncologist ☐☐	Haematologist ☐☐ /Oncologist
		Neurosurgeon ☐☐	☐☐ Neurosurgeon
		Obstetrician /Gynaecologist ☐☐	Obstetrician ☐☐ /Gynaecologist
		☐☐ Ophthalmology	☐☐ Ophthalmology
		Orthopaedic Surgeon ☐☐	Orthopaedic Surgeon ☐☐
		Paediatrician ☐☐	☐☐ Paediatrician

		Psychiatrist	Psychiatrist
		Radiologist	Radiologist
		Urologist	Urologist
		Others	Others
1103	Nurses		
1104	Midwives		
1105	Pharmacists (Scientists and Technicians)		
1106	Laboratory Scientists		
1107	Laboratory technicians (medical and pathology)		
1108	Physiotherapists		
1109	Trained Medical Records Officers		
1110	Community health workers	CHEWS JCHEWS CHO	
1111	Others, Specify		

SECTION 2: INFRASTRUCTURE			
1. POWER SUPPLY			
2101	What is the facility's main source of electricity?	CENTRAL SUPPLY OF ELECTRICITY (e.g. national or community grid) .....1 GENERATOR (FUEL OR BATTERY OPERATED GENERATOR)..... 2 SOLAR SYSTEM .....3 OTHER _____ 96 (SPECIFY)	
2102	Other than the main or primary source, does the	NO SECONDARY SOURCE 0	

SECTION 2: INFRASTRUCTURE			
	facility have a functional secondary or backup source of electricity? IF YES: What is the secondary source of electricity?	CENTRAL SUPPLY OF ELECTRICITY (e.g. national or community grid)..... 1 GENERATOR (FUEL OR BATTERY OPERATED GENERATOR).....2 SOLAR SYSTEM ..... 3 OTHER _____ 96 (SPECIFY)	
2103	During the past 7 days, was electricity available at all times from the main or any backup source when the facility was open for services?	Always Available.....1 Often Available (interruptions <2 hrs).....2 Sometimes (prolonged interruptions>2 hrs.....3 Never Available.....4	
2. WATER SUPPLY			
2201	What is the *most commonly used* source of water for the facility *at this time*?	PIPED INTO FACILITY ..... 1 PIPED TO FACILITY GROUNDS..... 2 PUBLIC TAP/STANDPIPE ..... 3 TUBEWELL/BOREHOLE ..... 4 PROTECTED DUG WELL ..... 5 UNPROTECTED DUG WELL ..... 6 PROTECTED SPRING ..... 7 UNPROTECTED SPRING ..... 8 RAINWATER COLLECTION.....9 BOTTLED WATER .....10 CART W/SMALL TANK/DRUM .....11 TANKER TRUCK .....12 SURFACE WATER .....13 OTHERs _____96 (SPECIFY) DON'T KNOW .....98 NO WATER SOURCE 00	⇨ 2202 ⇨ 2202 ⇨ 2202 ⇨ 2202 ⇨ 2202 ⇨ 2202 ⇨ 2202 ⇨ 2202
2202	Is a water outlet from this source available within 500 meters of the facility?	YES ..... 1 NO 2	
3. TOILET FACILITY			

SECTION 2: INFRASTRUCTURE				
2301	Is there a toilet (latrine) in *functioning condition* that is available for general outpatient client use?	Yes.....1 No.....2		
2302	IF YES: What type of toilet? IF MULTIPLE TOILETS ARE AVAILABLE, CONSIDER THE MOST MODERN TYPE.	Flush Toilet..... 1 Ventilated Improved Pit Latrine (VIP)..... 2 Pit Latrine With Slab ..... 3 Pit Latrine Without Slab/Open Pit..... 4 Composting Toilet ..... 5 Bucket Toilet..... 6 HANGING TOILET/ HANGINGLATRINE ..... 7 NO FACILITIES/BUSH/FIELD 8		
4. WASTE MANAGEMENT PRACTICES				
2401	Waste management practices for sharp wastes such as needles or blades How does this facility finally dispose of sharp wastes	**BURN INCENERATOR** 2 Chamber industrial (800-1000+ °C...2 1chamber drum/brick.....3 **OPEN BURNING** Flat ground no protection.....4 Pit or protected ground.....5 **DUMP WITHOUT BURNING** Flat ground-no protection.....6 Covered pit or pit Latrine.....7 Open pit-no protection.....8 Protected ground or pit.....9 **REMOVE OFFSITE** Stored in a covered container.....10 Stored in protected environment.....11 Stored unprotected.....12 Others _____96 (Specify) Never has sharp waste.....95	⇨ 430 ⇨ 430 *(skip to 430 if 2 and 3)*	
2402	How does this facility finally dispose of medical wastes other than sharp boxes	**Same as for sharp items.....1** **BURN INCENERATOR** 2 Chamber industrial (800-1000+ °C...2 1chamber drum/brick.....3 **OPEN BURNING** Flat ground no protection.....4 Pit or protected ground.....5	⇨ 430 ⇨ 430 *skip to 430 if 2 and 3)*	

SECTION 2: INFRASTRUCTURE				
		DUMP WITHOUT BURNING Flat ground-no protection……6 Covered pit or pit Latrine……7 Open pit-no protection……8 Protected ground or pit……..9 **REMOVE OFFSITE** Stored in a covered container……10 Stored in other protected environment……11 Stored unprotected……12 Others _____96 (Specify) Never has medical waste……..95		
2403	Is the incinerator functional today?	YES …… 1 NO …… 2 DON'T KNOW …… 98		
5. ***BEDS***				
2501	How many overnight/inpatient and Observation beds in total does this facility have, both for adults and children (Excluding delivery beds/couches)?	# OF OVERNIGHT/ INPATIENT BEDS. . . .		
2502	How many delivery beds/couches does the facility have?	# OF DEDICATED delivery BEDS.		

SECTION 3: AVAILABLE SERVICES			
1. OPENING HOURS			
3101	On average, how many hours per day is this facility open?	4 HOURS OR LESS……	1
		5 TO 8 HOURS ……	2
		9 TO 16 HOURS ……	3
		17 TO 23 HOURS ……	4
		24 HOURS ……	5
3102	How many days in a week is this facility open?	EVERYDAY	1
		MOST DAYS (5-6 days)	2
		SOME DAYS (3-5 days)	3

SECTION 3: AVAILABLE SERVICES				
		Two days a week		4
		One day a week		5
2. *FAMILY PLANNING SERVICES*				
3201	Does this facility offer family planning services?	YES..... 1 NO 2		*(If no go to Q 3301)*
3202	Does this facility *provide* any of the following family planning services:	**YES**	**NO**	
3202a	Family planning education	1	2	
3202b	Family planning for couples	1	2	
3202c	Provision of contraceptives- Oral and Injectable	1	2	
3202d	Provision of condoms, (male and female) and Inter Uterine Contraceptive Devices IUCD	1	2	
3. *ANTENATAL CARE SERVICES*				
3301	Does this facility offer antenatal care (ANC) services?	YES..... 1 NO 2		*(If no go to Q 3401)*
3302	Do ANC providers provide any of the following services to pregnant women as part of routine ANC services?	YES	NO	
3302a	Iron and Folic Acid supplementation	1	2	
3302b	Routine drugs to cover the duration of pregnancy	1	2	
3302c	Intermittent preventive treatment in pregnancy (IPTp) for malaria	1	2	
3302d	Other essential nutrients for pregnant women *(Specify)*_____	1	2	
4. OBSTETRIC AND NEWBORN CARE				
3401	Does this facility provide the following Delivery and newborn care services?	Yes	No	*(If no go to Q 3501)*
3401a	Spontaneous Vaginal Delivery by skilled attendant including repair of birth injuries and episiotomy	1	2	
3401b	Routine administration of oxytocin injection immediately after birth to all	1	2	

SECTION 3: AVAILABLE SERVICES				
	women for the prevention of post-partum haemorrhage?			
3401c	Assisted vaginal delivery	1	2	
3401d	Caesarean section	1	2	
3401e	Newborn Care up to 6 weeks.(Cord care, Eye care, Management of simple neonatal infections)	1	2	
5. POST-NATAL SERVICES				
3501	Does this facility offer Post Natal services?	YES..... 1 NO 2		*(If no go to Q 3601)*
3502	Which of the following post-natal services are offered?	Yes	No	
3502a	Routine Immunization as defined by the NPHCDA	1	2	
3502b	Vitamin A. Supplements	1	2	
3502c	Growth monitoring	1	2	
6. PAEDIATRIC HEALTH SERVICES				
3601	Does this facility offer Paediatric Health services?	YES..... 1 NO 2		*(If no go to Q 3701)*
3602	Does this facility provide the following paediatric health Services?	**Yes**	**No**	
3602a	Nutritional advice and health education to caregivers	1	2	
3602b	Management of uncomplicated malnutrition in children	1	2	
3602c	Treatment of Helminthiasis	1	2	
3602d	Treatment of childhood anaemia not requiring blood transfusion	1	2	
3602e	Treatment of diarrheal diseases in children	1	2	
3602f	Treatment of other common childhood illnesses such as mumps, simple otitis media, pharyngitis, uncomplicated pneumonia etc	1	2	
7. HIV SERVICES				
3701	Does this facility provide HIV/AIDS Services	YES..... 1		*(If no go to Q 3801)*

SECTION 3: AVAILABLE SERVICES				
		NO 2		
3702	Which of the following HIV/AIDS Services does this facility provide?	**Yes**	**No**	
3702a	Does this facility offer services for the prevention of mother-to-child transmission of HIV (PMTCT)?	1	2	
3702b	Does this facility offer HCT services to the general population	1	2	
3702c	Does this facility offer HIV and AIDS antiretroviral prescription or antiretroviral treatment follow up services?	1	2	
3702d	Does this facility offer HIV/AIDS care and support services including treatment of opportunistic infections and provision of palliative care?	1	2	
8. *TUBERCULOSIS*				
3801	Does this facility offer diagnosis, treatment prescription, or treatment follow-up of tuberculosis?	YES ..... 1 NO 2		(*If no go to Q 3901)*
9. *OTHER INFECTIOUS AND NON-COMMUNICABLE DISEASES*				
3901	Does this facility treat/manage infectious and non-communicable diseases?	YES .... 1 NO 2		(*If no go to Q 31001)*
3902	Which of the following infectious or Non communicable diseases are managed/treated in this facility	**YES**	**NO**	
3902a	Respiratory Tract Infections	1	2	
3902b	Urinary Tract Infections	1	2	
3902c	Gastroenteritis	1	2	
3902d	Primary Ear, Nose and Throat infections	1	2	
3902e	Diarrheal Diseases	1	2	
3902f	Enteritis/Typhoid Fever	1	2	
3902g	Helminthiasis	1	2	
3902h	Skin Infections/infestations such as chicken pox and fungal diseases	1	2	

SECTION 3: AVAILABLE SERVICES				
3902i	High blood pressure screening and referral	1	2	
3902j	High blood pressure treatment and management	1	2	
3902k	Diabetes Mellitus screening	1	2	
3902l	Management of diabetes Mellitus	1	2	
10. *MALARIA*				
31001	Does this facility offer diagnosis or treatment of malaria?	Yes.....1 No.....2		*(If no go to Q 31101)*
31002	Which of the following methods are used at this facility for diagnosing malaria?	YES	NO	
31002a	Clinical symptoms	1	2	
31002b	Rapid diagnostic testing (RDT)	1	2	
31002c	Microscopy	1	2	
31003	DO you have malaria Rapid Diagnostic Test Kits (with valid expiration dates) in stock in this service site today?	1	2	
11. *SURGERY*				
31101	Does this facility provide surgical services?	Yes.....1 No.....2		*(If no go to Q 31201)*
31102	Please tell me if this facility provides the following surgical services	YES	NO	
31102a	Minor wound debridement	1	2	
31102b	Male infant Circumcision	1	2	
31102c	Evacuation of impacted faeces	1	2	
31102d	Correction of cases of simple poly dactyl	1	2	
31102e	Relief of urinary retention	1	2	
31102f	Minor surgical procedures: Incision and drainage, suturing of lacerations, minor burns and simple abrasions	1	2	
12. EYE AND DENTAL CARE				
31201	Does the facility provide eye care services/Treatment of primary eye conditions/dental care?	Yes.....1 No.....2		*(If no go to Q 31301)*

SECTION 3: AVAILABLE SERVICES				
31202	Which of the following eye care/dental services does this facility provide?	**YES**	NO	
31202a	Conjunctivitis	1	2	
31202b	Simple contusions or abrasions not affecting the cornea	1	2	
31202	Does the facility provide primary dental care services including education and oral hygiene?	1	2	
13. PRIMARY EMERGENCY CARE				
31301	Does this facility provide emergency services	Yes.....1 No.....2		(*If no go to Q 31401)*
31302	Which of the following emergency services are provided by this facility	YES	NO	
31302a	Establishing an IV line	1	2	
31302b	Management of convulsions and comas	1	2	
31302c	Control of bleeding	1	2	
31302d	Cardio-Pulmonary resuscitation	1	2	
31302e	Immobilization of fractures	1	2	
14. DIAGNOSTICS				
31401	Does this facility conduct any diagnostic testing including any rapid diagnostic testing?	YES.....1 NO 2		(*If no go to Q 4000)*
31402	Does this facility offer any of the following tests on-site?	YES	NO	
31402a	Haemoglobin testing	1	2	
31402b	Urine rapid tests for pregnancy	1	2	
31402c	Urinalysis	1	2	
31402d	Stool Microscopy	1	2	
31402e	Urine Microscopy	1	2	
31402f	Blood Microscopy	1	2	
31402g	HIV testing	1	2	
31402h	Dry Blood Spot (DBS) collection for HIV viral load or EID	1	2	
31403	Please tell me if the following imaging equipment items are available and functional today			

SECTION 3: AVAILABLE SERVICES					
	Equipment type	AVAILABLE AND FUNCTIONAL	AVAILABLE NOT FUNCTIONAL	AVAILABLE DON'T KNOW IF FUNCTIONING	NOT AVAILABLE
31403a	X-ray machine	1	2	3	4
31403b	Ultrasound equipment	1	2	3	4
31403c	CT scan	1	2	3	4
31403d	ECG	1	2	3	4

SECTION 4. HEALTH INSURANCE COVERAGE			
4000	What is the total number of patients that visited this facility last month		
4001	Is this facility currently providing services to health insurance enrolees?	Yes.....1 No.....2	*(If no, go to Q 4005)*
4002	If yes, who are the major health insurance providers in the state	NHIS..... HMOs CBHIS Others (Specify)_____	
4003	What is the number of patients that visited this facility last month were covered by health insurance		
4004	What was the total revenue generated from health insurance last month		
4005	Is this facility open to accepting health insurance enrolees in the future	Yes.....1 No.....2	
4006	Is this facility currently providing services to retainership enrolees?	Yes.....1 No.....2	*(If no, go to Q 4009)*
4007	What number of patients that visited this facility last month had a retainership		
4008	What was the total revenue generated from retainership last month?		
4009	What was the total revenue generated by this facility last month		

SECTION 5: MEDICINES AND COMMODITIES

5000	Does this facility stock medicines vaccines or contraceptive commodities?	**Yes**.....1 No.....2	*(If no go to Q6000)*

ASK TO BE SHOWN THE MAIN LOCATION IN THE FACILITY WHERE MEDICINES AND OTHER COMMODITIES ARE STORED. FIND THE PERSON MOST KNOWLEDGABLE ABOUT STORAGE AND MANAGEMENT OF MEDICINES AND SUPPLIES IN THE FACILITY INTRODUCE YOURSELF AND EXPLAIN THE PURPOSE OF THE SURVEY, THEN ASK THE FOLLOWING QUESTIONS.

5001	Are any of the following medicines available in the facility today? **CHECK TO SEE IF AT LEAST ONE OF EACH MEDICINE IS VALID (NOT EXPIRED)**	**OBSERVED AVAILABLE**		**NOT OBSERVED**		
		AT LEAST ONE VALID	AVAILABLE NON VALID	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE
5001a	Oral rehydration salts	1	2	3	4	5
5001b	Antibiotics	1	2	3	4	5
5001c	Antiretrovirals	1	2	3	4	5
5001d	Anti-Hypertensives	1	2	3	4	5
5001e	Anti-Diabetic drugs	1	2	3	4	5
5001f	Family planning commodities	1	2	3	4	5
5001g	Antimalarials	1	2	3	4	5
5001h	TB Medicines	1	2	3	4	5
50011	Vaccines	1	2	3	4	5
5001j	Emergency drugs and commodities, IV fluids, Epinephrine, Hydrocortisone, Oxytocin etc)	1	2	3	4	5

5002	What is (are) the main source(s) of your routine medicines and supplies? By this I mean who is the direct supplier to your facility?	**YES**	**NO**	**DON'T KNOW**
5002a	Central medical stores	1	2	3
5002b	Local warehouse	1	2	3
5002c	NGO	1	2	3

5002d	Donors	1	2	3
5002e	Private sources	1	2	3

Number	Question	Result	Skip
6000	INTERVIEW END TIME (use the 24 hour-clock system)	☐☐ ☐☐:	
6001	RESULT CODES (LAST VISIT):	COMPLETED…… 1 RESPONDENT NOT AVAILABLE …… 2 REFUSED…… ……3 PARTIALLY COMPLETED …… 4 Other _____96 (SPECIFY)	
	NAME OF SUPERVISOR: _____	DATE: _____	

Please obtain or write out a list of HMOs/CBHIS that have a contract with and use the facility, including NHIS

Sn	Operating HMOs

Date: _____

Name: _____

Session: _____

Key Points

Ideas to Consider

Action Plans

SMART AGENDA

- Strategic wealth creation initiatives and provision of Jobs for all
- Meaningful peace building platforms aimed at political/social stability
- Agricultural reforms and industrialisation
- **Relevant health and education policies**
- Transformed environment through massive urban renewal

HEALTH FOR ALL DELTANS

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