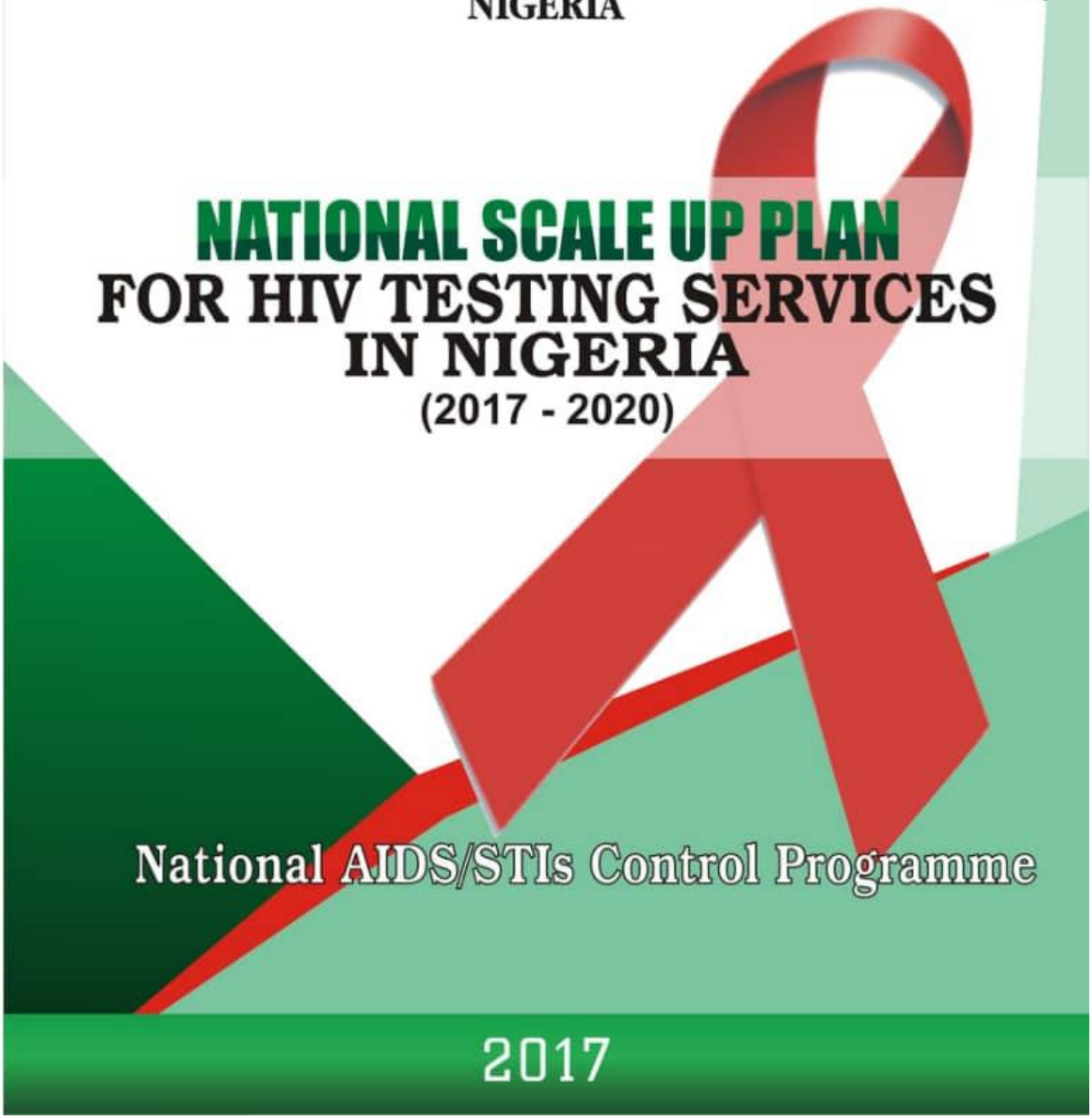
FEDERAL MINISTRY OF HEALTH
NIGERIA

NATIONAL SCALE UP PLAN FOR HIV TESTING SERVICES IN NIGERIA

(2017 - 2020)



National AIDS/STIs Control Programme

2017

FOREWORD

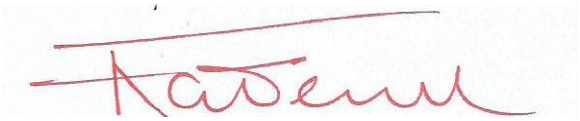
Nigeria contributes significantly to the global HIV/AIDS burden with an estimated 3.4 million people living with HIV. The Federal Ministry of Health (FMOH) has adopted and implemented polices and strategies aimed at addressing the high prevalence of HIV in Nigeria. These efforts have led to the reduction in the HIV prevalence amongst women attending antenatal clinic in the country from 4.1% in 2010 to 3.0% in 2014. These efforts no doubt, were in collaboration with Development Partners, Non-Governmental Organizations (NGOs), Faith Based Organizations (FBOs) and private Organizations.

The FMOH supports the UNAIDS 90-90-90 target and the Vision 2030 to end AIDS by 2030. Available data shows that 44% of individuals living with HIV/AIDS know their status, in order to reach the UN 90–90–90 goals it is critical that HIV Testing Services be strategically expanded to diagnose as many people with HIV as early as possible. To this end FMOH has taken urgent steps towards creating the required favorable and conducive environment for the delivery of and access to high-quality HIV Testing Services by Nigerians. This scale up plan focuses on effective evidence based strategies which are being introduced to facilitate the process of scaling up HTS.

I am delighted to present to you the first edition of the National scale up plan for HIV Testing Services in Nigeria 2017-2020, which outlines the strategic visions and goals we have identified to provide the roadmap toward achieving the UNAIDS global 90- 90- 90 HIV targets.

The successful implementation of this HTS Scale up pan requires the combined effort of Governments at all levels, the Development Partners, Implementing Partners, Civil Society Organizations and the Private sector.

I therefore encourage all stakeholders to strengthen their commitment to the implementation of the National HTS Scale up plan as part of the greater effort to address Nigeria's HIV and AIDS epidemic.



Professor Isaac F. Adewole, FAS, FSPSP, FRCOG, DSc. (Hons)
Honourable Minister of Health

ACKNOWLEDGMENTS

On behalf of the Federal Ministry of Health (FMOH), I would like to express our sincere gratitude to the members of the National Task Team on HIV Testing Services (HTS) and all stakeholders who participated in the review of the National Scale up Plan on HIV Testing Services. We would like to acknowledge all the persons and organizations who contributed their time, energy, and technical expertise to the development of these guidelines.

In particular, we appreciate Heartland Alliance International and Clinton Health Access Initiative (CHAI), for providing financial support for the finalization and costing of the Scale Up Plan, respectively.

We also appreciate the support of the World Health Organization and the efforts of the consultant, Dr Ali Onoja during the early stage of the review process.

We sincerely thank all those who contributed to the successful development of this document.

Dr Evelyn Ngige
CSG I/Head Department of Public Health

EXECUTIVE SUMMARY

In view of the global initiative to accelerate universal access to HIV prevention, treatment, care and support services for people living with HIV and AIDS, HIV Testing Services (HTS) which is the entry point for the HIV continuum of care has become increasingly available in Nigeria with over 8,308 health facilities providing HTS. Despite this increased availability of HTS, low level of awareness, low uptake of the services, poor infrastructure and inadequate human resources have remained key challenges to the provision of HTS.

The Federal Ministry of health has embarked on a deliberate effort to scale up HIV Testing Services and strengthen its quality at all health facilities and service delivery points. The National HTS scale up plan reflects the commitment of the FMOH to put in place a well-articulated strategy that holistically addresses existing gaps in the provision of high-quality HTS.

The HTS scale up Plan aims to expand coverage of HIV Testing Services through implementation of strategic approaches; increase the human resource capacity for the provision of HTS; Strengthen the logistics system to ensure regular and consistent supplies for HTS and above all ensure quality assurance in the provision of HTS at all levels.

This scale up plan provides a framework for all HTS modalities that should be implemented in the country. It clearly outlines the role of all stakeholders, priority populations and specific strategies to be used in facilitating the national efforts to scale up the HTS programme.

Presented in this document is a costed Scale up plan (2017-2020) for HIV Testing Services in Nigeria. The Scale up plan is designed to facilitate access towards achieving the UNAIDS 90-90- 90 goal by 2020.

Dr. Sunday Aboje
National Coordinator
HIV/AIDS Division

EDITORIAL TEAM

Dr. Sunday Aboje	National Coordinator, NASCP/ FMOH
Dr. Chukwuma Anyaike	Head Prevention, NASCP/ FMOH
Dr. Ali Onoja	African Health Project
Jamila Ibrahim Yahaya	Society for Women and AIDS in Africa Nigeria/Consultant
Gerald E. Teleh	Consultant
Akani Yetunde	University of Port Harcourt Teaching Hospital
NCR Nwanerih	Consultant
Dr. Jerry Gwamna	CDC
Dr. Chidozie Meribe	CDC
Bunmi Amoo	APIN Public Health Initiatives
Cartier Simon	FHI360
Kristina L. Grabbe	Jhpiego/MCSP
Oniyire Adetiloye	Jhpiego/MCSP
Mrs. Ima John-Dada	NASCP/FMOH
Mrs. Tina John-Okoro	NASCP/ FMOH

LIST OF CONTRIBUTORS

FEDERAL MINISTRY OF HEALTH (FMOH)

Dr. Evelyn Ngige	Director Public Health, FMOH
Dr. Sunday Aboje	National Coordinator, NASCP/ FMOH
Dr. Chukwuma Anyaike	Head Prevention, NASCP/ FMOH
Mrs.Ima John-Dada	NASCP/FMOH
Mrs. Tina John-Okoro	NASCP/ FMOH
Dr. Peter Nwaokenaya	NASCP/ FMOH
Jummai Agabus	NASCP/ FMOH
Samviri D. Paschalia	NASCP/ FMOH
Mohammed Usman	NASCP/ FMOH
Ifeanyi Okpoko	NASCP/ FMOH
Envuladu Onve	NASCP/ FMOH
Bosah Edwina	NASCP/ FMOH
Ojabo Blessing	NASCP/ FMOH
Aiki Sabina Denis	NASCP/ FMOH
Omoighe Samson	NASCP/ FMOH
Pham.Atu Uzoma	NASCP/ FMOH
Isichei Patience Ada	NASCP/ FMOH
Okorie Uche	NASCP/ FMOH
Paul Esther	NASCP/ FMOH
Umoru O. Emma	Office of the Honourable Minister of State for Health/FMOH
Kingsley Odiabara	National Blood Transfusion Service/ FMOH

NATIONAL AGENCY FOR THE CONTROL OF AIDS (NACA)

Dr.Yewande Olaifa
Dr.Oladele Tolu

NATIONAL TASK TEAM ON HTS & HTS TRAINERS

Prof. Charles Uwakwe	National Examinations Council
Dr. Ali Onoja	African Health Project
Jamila Ibrahim Yahaya	Society for Women and AIDS in Africa Nigeria/Consultant
Gerald E. Teleh	Consultant
Dr. Chika Ndiokwelu	University of Calabar
Ndueso Robson Akpan	Hospitals Management Board, Akwa Ibom State
Onikoyi Faosat	Consultant
Akani Yetunde	University of Port Harcourt Teaching Hospital
NCR Nwanerih	Consultant
Itodo Grace	Federal Medical Centre, Lokoja
Jenrola Olanrewaju	SMOH, Lagos.

Aneke Herbert	SMOH, Enugu
Dr.Margaret Armon	Consultant
Dr.Effiong Asuquo	University of Uyo
Bukar M. Brah	SMOH, Yobe
Oguh Daniel Nnaoma	Dept. of Haematology and Blood Transfusion, CMUL/LUTH
Agwu Vivien	State Ministry of Health (SMOH), Imo

DONORS, IMPLEMENTING PARTNERS & CIVIL SOCIETY

Dr. Jerry Gwamna	CDC
Dr. Chidozie Meribe	CDC
Victor Adamu	CDC
Israel Audu	CDC
Angela Agweye	DOD
Amobi Andrew Onovo	USAID
Elizabeth Duile	AHF
Amina Iyaji	AHF
Bunmi Amoo	APIN Public Health Initiatives
Obbie Ofili	CHAI
Jibrin Kama	CHAI
Namita Bansal	CHAI
Peter Akeredolu	CIHP
Amadi Amaka Linda	ECEWS
Peter Michael	FGHiN
Uju Eze	FHI360
Cartier Simon	FHI360
Dr. Godwin Emmanuel	HAI
Dr. Rogers Abang	HAI
Dr. Ishaya Madaki	IHVN
Ngozi Ajaero	IHVN
Dr. Oniyire Adetiloye	Jhpiego/MCSP
Dr. Oluwatobi Adebayo Yohanna	Jhpiego/MCSP
Kristina Grabbe	Jhpiego/MCSP
Enobong Ndekhedehe	Jhpiego/MCSP
Scott Adamu	SFH
Ayoka-Ikechukwu Rita	SFH
Halima Momodu	SFH
Emeka Chima	SFH
Rev. Jonathan Emenikeh	CiSHAN
Ibrahim Abdulkadir	NEPWHAN

ACRONYMS

AGYW	-	Adolescent girls and young women
AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal care
ART	-	Antiretroviral therapy
ARV	-	Antiretroviral drugs
BBFSW	-	Brothel-based female sex worker
BCC	-	Behaviour change communication
CDC	-	U.S. Centers for Diseases Control and Prevention
CHTC	-	Couples HIV testing and counselling
CITC	-	Client initiated HIV testing and counselling
CSO	-	Civil society organizations
DHIS	-	District Health Information System
ELISA	-	Enzyme Linked Immunosorbent Assay
EQA	-	External quality assurance
FBO	-	Faith based organization
FCT	-	Federal Capital Territory
FGN	-	Federal Government of Nigeria
FMOH	-	Federal Ministry of Health
FP	-	Family planning
FSW	-	Female sex worker
GBV	-	Gender based violence
HTS	-	HIV testing services
HIV	-	Human Immunodeficiency Virus
HIVST	-	HIV self-testing
IBBSS	-	Integrated Behavioural and Biologic Surveillance Survey
IEC	-	Information education and communication
IPV	-	Intimate Partner Violence
KP	-	Key populations
LACA	-	Local Action Committee on AIDS
LGA	-	Local Government Area
LTFU	-	Loss to follow up
M&E	-	Monitoring and evaluation
MNCH	-	Maternal Neonatal and Child Health
MSM	-	Men who have sex with men
NACA	-	National Agency for the Control of AIDS
NAFDAC	-	National Agency for Food and Drug Administration and Control
NASCP	-	National AIDS and STIs Control Programme
NARHS	-	National Reproductive and Health Survey
NBBFSW	-	Non brothel-based female sex worker
NBTS	-	National Blood Transfusion Service
NGO	-	Non-governmental organization

NPHCDA	-	National Primary Health Care Development Agency
NPI	-	National Programme on Immunization
OI	-	Opportunistic infection
OVC	-	Orphans and vulnerable children
PCR	-	Polymerase Chain Reaction
PEPFAR	-	President's Emergency Plan for AIDS Relief
PHC	-	Primary health care
PITC	-	Provider initiated HIV testing and counselling
PLHIV	-	People living with HIV
PMTCT	-	Prevention of mother to child transmission
PNS	-	Partner notification services
PWD	-	People with disabilities
PWID	-	Persons who inject drugs
QA	-	Quality assurance
QI	-	Quality improvement
RDT	-	Rapid diagnostic test
SACA	-	State Action Committee on AIDS
SDP	-	Service delivery point
SMOH	-	State Ministry of Health
SNT	-	Social network testing
SOP	-	Standard operating procedure
STI	-	Sexually transmitted infections
TB	-	Tuberculosis
TG	-	Transgender (persons)
UN	-	United Nations
VCT	-	Voluntary counselling and testing
WHO	-	World Health Organization

LIST OF FIGURES

LIST OF TABLES

TABLE OF CONTENTS

CHAPTER 1: BACKGROUND

With a population of more than 186 million (Spectrum, 2016) and annual growth rate of 2.7% (World Bank, 2015), Nigeria is the largest country in the African continent and accounts for more than 47% of the population in the West African sub-region. Nigeria has over 350 linguistic groups spread across 36 states and the Federal Capital Territory (FCT). States are divided into 774 Local Government Areas (LGAs) and are grouped into six geo-political zones, which differ in size, population, ecology, language, culture, settlement patterns, social development, economic opportunities and historical background.

While the major source of revenue in the country is oil, subsistence agriculture is the major occupation. Nigeria has a Gross Domestic Product of over $487 billion, making it a key economic player on the African continent. In spite of its potential, the country is ranked among the 20 poorest nations in the world. Approximately 53.7% of Nigeria's population lives below the poverty line earning below $1.90/day (World Bank, 2017).

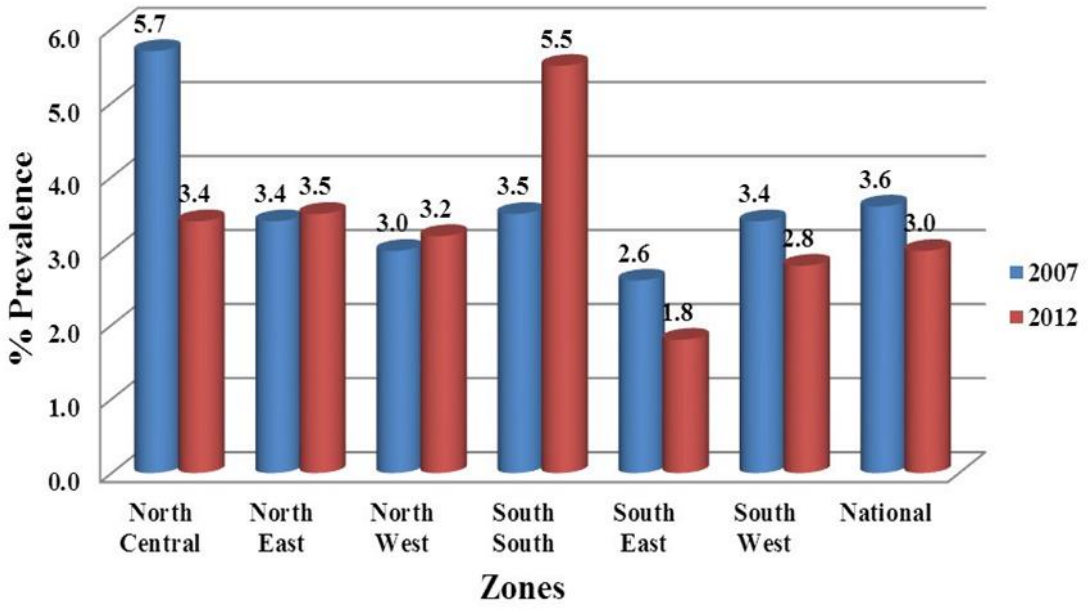
Health care services in Nigeria are organized along three tiers of government – Federal, State and the Local Governments. Local Government authorities are responsible for the primary level of health care, the State Government is responsible for the secondary level of heath care and provision of technical guidance to LGAs, and the Federal Government is responsible for the tertiary level of health care, in addition to policy formulation and technical guidance to the State level. Additionally, the private sector, NGOs and local communities also provide considerable services at all levels of health care. It is estimated that the private sector accounts for over 50% of health care delivery in the country. Several reports have indicated that access to health care varies tremendously by socioeconomic status, level of education, employment and geographic location.

Epidemiology of HIV/AIDS in Nigeria

AIDS was first reported in Nigeria in 1986. HIV prevalence among antenatal care (ANC) clients was 1.8% in 1991 and rose steadily until it peaked at 5.8% in 2001, then declining over time to 3.0% in 2014. Among the general population, national HIV prevalence seems to be stabilizing around 3%, but it is much higher among certain sex and age groups, and among key populations (KP). Some parts of the country are worse affected than others, but no state or community is unaffected.

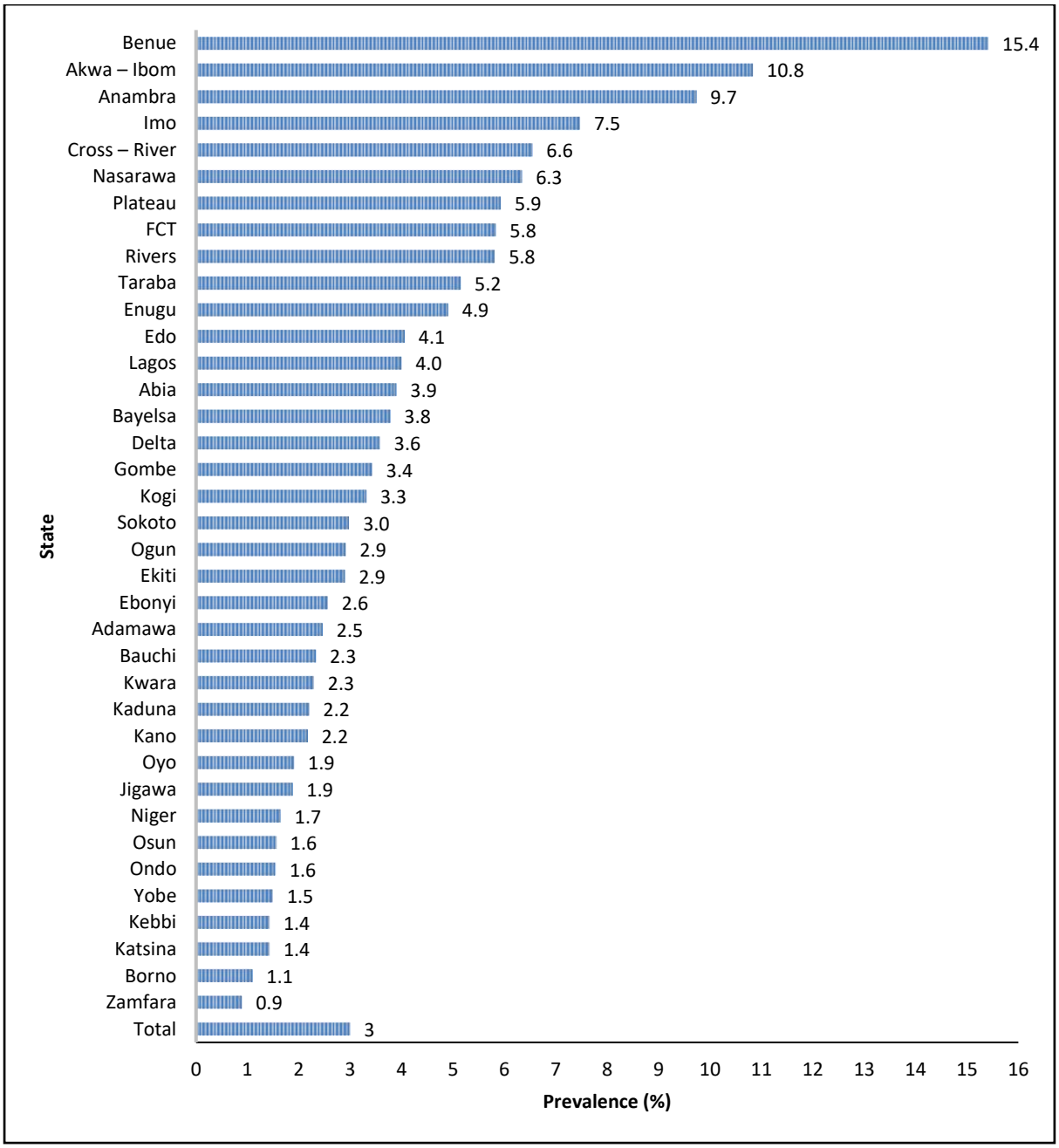
The 2012 National HIV/AIDS and Reproductive Health Survey (NARHS) suggests that the South-South geopolitical zone has the highest HIV prevalence (5.5%) while the South-East Zone has the lowest (1.8%). A comparison of the 2007 and 2012 HIV prevalence data (Figure 2) shows a decrease in HIV prevalence in three geopolitical zones (North Central, South East and South West), while an increase in prevalence was observed in three other zones (North East, North West and South South).

Figure 1: National and Zonal HIV Prevalence in Nigeria (NARHS, 2012)



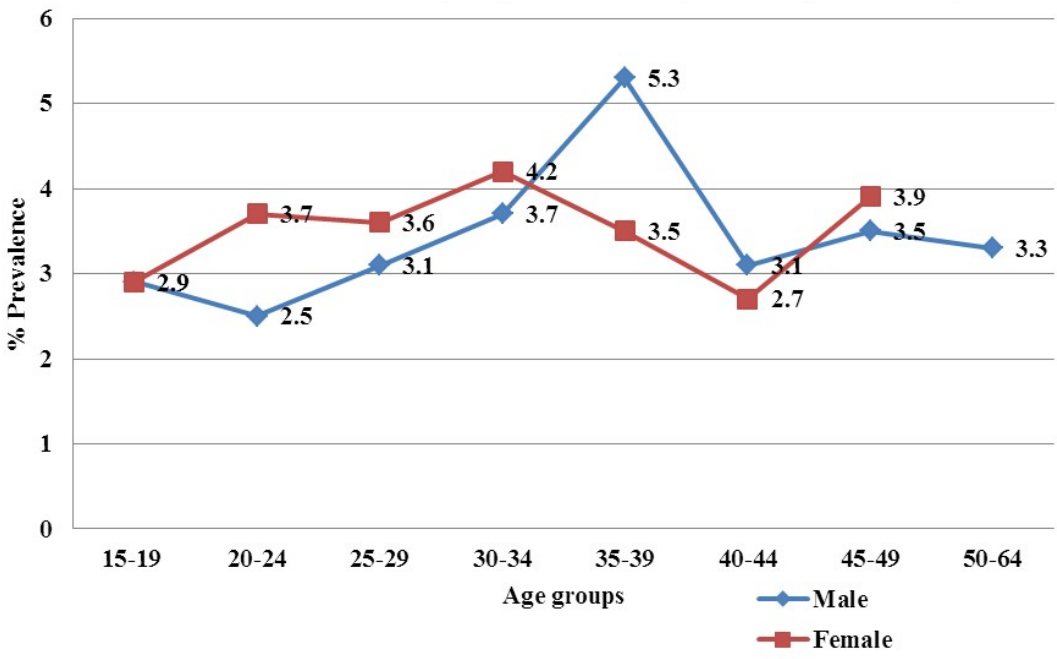
The HIV sentinel survey (HSS, 2014) shows that Benue State (North-Central) has the highest state HIV prevalence at 15.4%, followed by Akwa Ibom State (South-South) with a prevalence of 10.8% and Anambra State (South-East) with a prevalence of 9.7%. Zamfara State has the lowest HIV prevalence at 0.9% (Figure 3).

Figure 2: HIV Prevalence in Nigeria by State (HSS, 2014)



According to the NARHS 2012, HIV prevalence is highest among persons 35-39 years (4.4%), while persons 15-19 and 40-44 have the lowest HIV prevalence (2.9%). Figure 3 shows HIV prevalence in Nigeria by age and sex, revealing a high HIV prevalence among men 35-39 years (5.9%), and higher HIV prevalence among females compared to males in almost every other age category (Figure 3).

Figure 3: HIV Prevalence in Nigeria by Age and Sex (NARHS, 2012)



Across the country, urban HIV prevalence was found to be higher than rural prevalence in all zones. The widest gap in HIV prevalence between urban and rural areas was found in the South-South (6.3% vs 3.4%, respectively) while the smallest gap was found in North West (2.0% vs 1.0%, respectively) (HSS, 2014). HIV prevalence was highest among persons with primary and secondary education and lowest among p without education. Approximately 227,518 new infections occurred in 2014, and 174,253 AIDS deaths were recorded by the end of this same year (GARPR, 2015). Although AIDS case reporting has been characterized by under-recognition, under-reporting, and delayed reporting, the number of reported cases has been on the rise, especially since 1996. Sex workers and their clients and men who have sex with men (MSM) constitute an important reservoir of HIV infection for transmission to the general population, through sexual networking.

HIV prevalence among female sex workers (FSW) in Nigeria has remained high and on the rise, from 17.5% in 1991, to 22.5% in 1993, to 35.6% in 1995. The 2014 Integrated Behavioural and Biological Surveillance Survey (IBBSS) stratified FSWs into brothel-based FSW (BBFSW) and non-brothel based FSW (NBBFSW). Brothel-based FSW had a higher estimated HIV prevalence of 19.4%, in comparison to NBBFSW, who had an estimated prevalence of 8.6% (IBBSS 2014). This can be partly explained due to evidence that brothel-based sex workers have higher rates of partner change and, though they may use condoms with non-regular clients, they may not do so consistently with regular clients and boyfriends.

National HTS Policies and Guidelines

Nigeria has adopted the UNAIDS 90-90-90 targets by 2020, which call for 90% of all people living with HIV (PLHIV) to know their status, 90% of those who know their status to be on antiretroviral therapy (ART), and 90% of those on ART to have achieve viral suppression by

2020, in order to end AIDS. The first 90 – diagnosis of HIV – is essential to the second 90 – initiation of ART among people with HIV – and the ultimate outcome of the third 90 – viral load suppression among people on ART, which improves client outcomes and prevents HIV-transmission.

As outlined in the National HIV/AIDS Policy 2009, HTS is a central element of Nigeria's efforts to end the AIDS epidemic. Nigeria is committed to the establishment, strengthening, and continued scale-up of HTS that will provide universal access to quality, affordable and accessible HTS, with strong linkages to care, treatment, and prevention services.

- The Government shall promote the adoption of socially acceptable and ethically correct programmes that facilitate the early diagnosis of HIV/AIDS in all public and private health institutions.
- The promotion of HTS shall be intensified among the general population as well as to key populations that have high vulnerability to HIV.
- All HIV services shall strictly observe confidentiality, include pre-test information and post-test counselling, and be carried out with the informed consent of the client.
- Both client-initiated and provider-initiated HTS will be offered in Nigeria.
- HTS will be made accessible to KP including FSWs, persons who inject drugs (PWID) and MSM.
- Provider-initiated HIV testing will be routinely integrated into primary health care services and shall be available at PHCs and in secondary and tertiary facilities, but will not be mandatory.
- HTS shall be part of routine services for all pregnant women attending antenatal clinics, STI patients, and patients who have or are suspected to have tuberculosis.
- Risk reduction counselling as part of HTS shall be client-centred and based on their HIV test results, integrating with family planning counselling and referrals as needed.
- HIV-positive clients should be given information about the importance of early treatment, treatment adherence, prevention of mother-to-child transmission (PMTCT), viral suppression, and support for disclosure and partner notification.
- HIV-negative individuals should be given information about prevention options and re-testing tailored to their specific risk and needs.
- Voluntary HIV testing shall be universally available and accessible.
- Voluntary HIV testing shall be routinely offered to all couples applying for marriage licenses but will not be mandatory, and refusal shall not be a reason for denying a marriage license.
- All centres providing HTS shall be certified by the Government according to FMOH guidelines and protocols, and shall use only the prescribed national protocols for HIV testing.
- All new HIV screening tests and reagents for use in Nigeria shall be certified and licensed by the National Agency for Food and Drug Administration and Control (NAFDAC) in collaboration with FMOH and the National Agency for the Control of AIDS (NACA), and continual monitoring of the products shall be maintained when they are in use.

- Subsequent lots/batches of approved reagents shall undergo periodic quality assurance tests before they are marketed.

HTS Situation Analysis

Nigeria is ranked as the second country (after South Africa) with the highest number of PLHIV in the world. By the end of 2014, there were an estimated 3.4 million people living with HIV (PLHIV) in Nigeria (GARPR 2015), but only 34% of those have been tested and know their HIV status (UNAIDS 2017). Many people do not access HTS due to:

- Lack of access to service delivery points
- Lack of knowledge about treatment availability and access
- Not accessing health facilities (particularly men)
- Worries about confidentiality
- Fear of notifying partners or family members
- Inaccurate risk perceptions
- Concerns about stigma
- Ignorance
- Lack of knowledge of the benefits of knowing one's status

Treatment is now widely available for PLHIV, but more education needs to be done about the availability and importance of early treatment, both for the client's own health and for preventing onward HIV transmission. Some PLHIV may not be open about their HIV status for fear of stigma or negative outcomes, but providers should support patients to disclose their status and notify their partner(s) so that these partners can provide support for the client's ART adherence and also get tested to know their own status.

In Nigeria, HTS is more readily available in urban areas and health facilities, particularly ANC clinics. According to the FMOH HIV/AIDS 2015 Annual Report, there are currently about 8,308 sites providing HTS in different parts of the country but they are not evenly distributed. Though access to HTS has improved over the years, more resources are needed to increase the amount of trained personnel, improve HTS infrastructure, and engage private sector health services (National Annual National Health Sector HIV and AIDS Report 2015). More efforts are needed to provide ongoing capacity building and mentorship for HTS providers, including supportive supervision, quality assurance (QA) and quality improvement (QI) mechanisms, and strengthening monitoring and evaluation (M&E) systems.

Guidelines for HTS underscore the importance of community involvement and the need for coordination at the local and state levels. The guidelines also state that a national system for collecting and analysing data has been developed by the FMOH and should be used at all HTS sites including public and private health facilities, community-based organizations (CBOs), non-governmental organizations (NGOs), and PLHIV organisations. However, more efforts are needed to disseminate and reinforce these guidelines to ensure compliance with reporting requirements.

Rapid HIV test kits are not cold chain dependent, and are managed through a logistics management information system (LMIS) for supply chain management (SCM). Shorfalls in the SCM system may result in the use of unregulated HIV test kits of varying degrees of quality, highlighting the need for strengthening these systems and enforcing the need for regulation.

HTS Achievements

Testing for HIV commenced in Nigeria in 1987. Although initial testing was concentrated on ensuring safety of blood for transfusion, it later spread to promoting and encouraging people to know their HIV status for PMTCT and to the general population to reduce HIV risk behaviour and promote access into treatment, care and support services. In order to strengthen services, government constituted the national task team on HIV Counselling and Testing (NTT-HCT) in 2004. The acronym HCT was changed to HTS in 2015 in line with WHO consolidated guidelines. The task team was charged with the responsibility of advising government on policy formulation; reviewing national training manuals, protocols, guidelines and tools for HTS; advising and assisting government to develop scale-up plans for HTS to ensure equitable access; supporting FMOH to coordinate HTS delivery; and advising minimum standards for HTS. National guidelines have been reviewed by government in collaboration with other stakeholders implementing HTS and are used as a basis for setting minimum standards for service delivery in the country. Other achievements include:

- The former President (Chief Olusegun Obasanjo) publicly tested for HIV in 2006 to demonstrate political will.
- Periodic review of the national training curriculum
- Harmonization of the HTS tools
- Training and retraining of service providers on HTS
- Establishment of training centres for HTS
- More services being provided and supported by faith-based organizations (FBOs), CBOs, NGOs, and donors
- Standalone sites and outreach services available in the community, including drop-in centres to reach key populations
- Increasing awareness by branding HTS sites as “Heart to Heart” to generate interest in people knowing their status
- Services beyond the traditional Voluntary Counselling and Testing (VCT)
- Adoption of couples HIV testing and counselling (CHTC)
- Integration into other services (TB, ANC, STI, family planning clinics)
- Routine HIV testing in health facilities through provider initiated HIV testing and counselling (PITC)
- Adoption of HTS as recommended by the WHO consolidated guidelines (July 2015)
- Introduction of partner notification services (PNS), HIV self-testing (HIVST), and recency testing in updated National HTS Guidelines (2018)

HTS Challenges

Although significant achievements have been made in HTS in recent years, there are still several challenges that need to be addressed. These include:

- Weak coordination mechanism for HTS in the country
- Inadequate number of sites providing HTS
- Uneven distribution of available sites
- Limited space in health facilities dedicated for HTS
- Inadequate number of trained service providers on HTS to meet the need
- Resistance to use non-laboratory personnel as counsellor-testers
- Lack of dedicated staff in HTS sites
- Non-adherence to selection criteria for those to be trained as HTS providers
- Weak implementation of PITC and integration of HTS into other services
- Insufficient education about the importance of disclosure and partner notification/testing
- Shortages or stock outs of test kits
- Weak mechanism for distribution of HTS commodities
- Weak quality assurance system in the country for both counselling and testing
- Payment of fees for HTS in centres that are not supported by donor agencies
- Funding for programme implementation

CHAPTER 2: RATIONALE AND TARGETS

According to the NARHS 2012 report, an estimated 23.5% of males and 29.2% females have ever tested for HIV. Within this group, 68% of males and 63% of females who underwent HIV testing actually received their results to know their HIV status. Out of the estimated 3.4 million people living with HIV only about 34% know their HIV status (UNAIDS, 2017). HTS is a central aspect of the government's operational plan to address HIV, and is the entry point to HIV care, treatment, and prevention services such as ART and PMTCT. For people to benefit from these initiatives, existing HTS must be rapidly expanded and its scale-up promoted. It is necessary to put in more effort to increase uptake of HTS in order to achieve the first '90' and, subsequently, the 90-90-90 target. The scale-up of HTS will ensure:

- Equitable distribution and increased access to services. Even though more people live in rural areas, existing services are concentrated in urban areas and in health facilities, which are not accessible to majority of the population
- Use of different approaches and new models to target various groups
- Increased access to PMTCT through HTS, and better management during pregnancy, labour/delivery and breastfeeding
- Identification and enrolment of more eligible PLHIV for ART
- Referral to other prevention, care and support services
- Strengthened coordination mechanism at national and state levels
- Adherence to national guidelines and standards for high quality service delivery

Gap Analysis

Analysis of need, demand, priority target groups, barriers and HTS availability for Nigeria's large population indicate that some of the most pressing needs include:

- ***Human Resources*** **-** One of the major challenges confronting the provision of HTS particularly at the primary and secondary levels of health care is that of inadequate numbers and capacity of ***manpower to provide decentralized services***. Existing data of available manpower does not categorize them by service provision experience; however, deductions can be made based on the number of people trained so far to provide HTS at different levels.
- ***Demand*** for HTS has relatively improved with about 80% of those who have never had a test expressing a desire to have HIV test (NARHS, 2012) compared with 72% reported in 2007 and 43% reported in 2005. The need to ensure sustained demand and ***uptake*** of HTS among the population groups most at risk for HIV cannot be overemphasized.

Goal of HTS Scale Up Plan

The goal of the HTS Scale Up Plan is to provide HTS access for 80,118,406 Nigerians and link 2,483,671 HIV positive Nigerians to care between 2017 to 2020, in line with the UNAIDS 90-90-90 targets.

Objectives of the HTS Scale Up Plan

1. To expand coverage of HIV testing services in line with the 90-90-90 goal through implementation of strategic approaches.
2. To increase the human resource capacity towards the provision of HIV testing services.
3. To strengthen forecasting, quantification, procurement and distribution of test kits to guarantee regular and consistent supplies for HIV testing services.
4. To ensure quality assurance and quality control in the provision of HIV testing services at all levels.

Scale Up of HTS Sites

The FMOH estimates that there should be at least 5 functional HTS sites in each of the 774 LGAs in the country. These will be in addition to the existing 8,308 HTS sites that currently exist at different levels of health care delivery, including those being operated by FBOs, CBOs, and NGOs, both standalone and other mobile/outreach services (FMOH, 2015). There is no doubt that this is an ambitious desire that will entail the commitment of substantial financial and human resources by all levels, but that this will allow people who do not currently access HTS to be within closer reach of knowing their HIV status.

In the establishment of the new sites, cognisance will be taken of existing services in different states where partners are already supporting service delivery so that sites are not duplicated or over flooded in a particular state. During the scale-up process and in order to reach the desired target of government and partners, set-up of services will be phased over the period of two years with urgent attention to States/LGAs where little or no services exist.

Assumptions

The goal of providing HTS to 80,118,406 million Nigerians is calculated based on the following assumptions:

- The net new positive client to be reached is based on an adjustment factor (marked up) of 15% rate of loss to follow-up (LTFU). This means that an additional 15% was added to the net new needed to be on treatment.
- That there will be 90% linkage rate of all newly diagnosed positive HIV cases. The number to be reached may increase with less than 90% linkage rate.

National Scale Up Targets

Table 1: National Cumulative Scale Up Target (2017-2020)

Indicator	Number
Number of PLHIV in Nigeria (GARPR 2015)	3,400,000
Number need for 81% TX Coverage (Second '90')	2,754,000
Number Current on ART (GARPR 2015)	853,992

Unmet need for ARVs (Net New needed to be on treatment)	1,900,008
*Factor in 15% LTFU (New on TX)	2,235,304
**Assuming 90% Linkage Success Rate to TX*	2,483,671
***Assuming a national prevalence of 3.1% (GARPR 2015)	80,118,406

Table 2: Annual Scale Up Targets (2017-2020)

Required No. By Year	**2017**	**2018**	**2019**	**2020**
No. people to receive HTS	11,025,000	17,325,000	23,625,000	29,925,000
No. Functional HTS Sites	1575	2475	3375	4275
No. New Sites to be Established	900	900	900	900
No. Trained HTS Providers	3150	4950	6750	8550
No. Master Trainers	350	550	750	950

CHAPTER 3: KEY CONSIDERATIONS FOR SCALE UP

The Federal Ministry of Health considers scaling up HTS as vital in view of its significance for HIV prevention, access to treatment, and care and support services for PLHIV. Scaling up services will therefore require not only reaching the right populations with a strategic mix of HTS approaches, but also ensuring that specific priority areas are addressed, namely:

- Mapping of available HTS in the country
- Advocacy and stakeholder mobilization
- Needs assessment for new sites
- Integration of HTS into other services within health facilities
- Infrastructure improvement during scale-up
- Capacity-building and training
- Supply and management of commodities
- Linking up HTS scale-up to care and support services
- Community mobilization
- Management and coordination
- Quality assurance for both counselling and testing
- Funding
- Monitoring and evaluation

Experience has shown that each of these programme areas need careful consideration and planning before services are established and opened to receive clients. This will be in accordance with the following guiding principles of the strategy:

- Build on and strengthen existing structures and programs, including priority investments to local governments;
- Pursue provision of the highest quality HTS in accordance with national guidelines and policies;
- Ensure comprehensive service provision, including prevention, treatment, care and support components;
- Support a rapid, targeted, and sustainable response through innovative ‘learning by doing’, including HIV testing by non-laboratory personnel;
- Ground the initiative in community involvement and ensure it is community-based;
- Strengthen ownership and commitment by the States/LGAs and sites;
- Reflect community values through the use of formative, evaluative and operational research;
- Enhance sustainability through resource mobilization from state resources, public-private partnerships, donor contributions, and private sector support;
- Facilitate active participation by PLHIV in design and implementation;
- Foster community participation through empowerment and access to services;
- Ensure equitable access for women, men and children;
- Ensuring effective linkage and referral mechanisms to treatment and other care and support services;

- Address cross-cutting issues such as youth, gender, and stigma in the design, implementation, and M&E.

Mapping of Available HTS in the Country

There is inadequate information on the number, location, types and quality of services being provided by existing HTS sites around the country. It is also not clear the type of linkages that exist between these sites and other care and support services. It is necessary that as scale-up is being planned, conscious effort is made to identify and map all services provided by government, NGOs, FBOs, CBOs, and the private sector as well as ascertain how functional they are and their linkages with other support services. This will guarantee that states where there is currently a dearth of services are considered and efforts made to ensure services are accessible and available there. A rapid approach to obtaining more information will be collecting and collating data from states and donor agencies that are supporting HTS in the different states in the country. Other information to be obtained will include number of trained counsellors and testers, duration of training and curriculum used and challenges being encountered in the process of service delivery. The availability of a document/directory listing locations of various HTS sites within the country and other support services within the sites is an important step and will provide guidance as services are scaled up. The directory will be updated periodically and will also be used for referral/linkage purposes to other sites which may be more accessible to individuals.

Advocacy and Stakeholder Mobilization

Advocacy is necessary for creating and maintaining motivation and enlisting support of different partners (States/LGAs and facilities) for satisfactory quality in service delivery. It will also entail mobilization of political and financial support from government and donor partners to ensure sustainability, equity, accessibility and acceptance of the programme as well as being used as a catalyst for interventions to reduce stigma and discrimination. The commitment and involvement of people who have influence and decision-making capacity such as traditional rulers will ensure their support for the programme rather than being a hindrance to its implementation and success. Experience has shown that endorsement, active involvement and leadership by such people is vital for implementing successful HTS. These key players will be identified during the scale-up process and be provided with strategic information and other stakeholders mobilized both at government and implementation levels.

Needs Assessment for New Sites

The importance of assessment for the sites where HTS will be provided cannot be over-emphasized. Assessment will be required to determine:

- Current and required infrastructure and supplies
- Site readiness
- HIV testing algorithm in use
- Availability of test kits
- Staffing and training needs

- Availability of protocols, standard operating procedures (SOPs), job aids and guidelines on counselling and testing
- Medical records systems
- Informed consent
- Confidentiality
- Referral networks and linkages
- Administrative commitment and policy to programme
- Staff support and supervision

The assessment will provide information that will guide decision-making on the required resources for each site. Existing tools in the country for HTS site assessment can be adopted and modified for this purpose. Engagement and involvement of staff of each site during the assessment and the entire process will ensure better understanding and ownership of the programme. Site assessment will be undertaken on an on-going basis, as more sites need to become operational in the scale-up process.

Efforts will be made to assess facilities in all LGAs in each State before a decision is reached on the ones to be selected for service delivery. Geographical spread will be a key consideration and duplication of efforts will be avoided such that new services will not be established in LGAs/States where there are no identified gaps in HTS delivery. The selection of sites should be done in collaboration with the states, LGAs and Civil society networks.

Integration of HTS into Other Services

In view of the relationship between HIV and some infections like TB and STIs, efforts will be made during the scale-up to ensure that HTS is integrated into such services in order to offer clients the opportunity of knowing their HIV status and for better management of their disease conditions. HTS will also be integrated into MNCH, ANC, family planning, TB, STI, and immunization clinics offered as part of routine care. Efforts would be made to ensure that the rights of people are respected and the decision to test or not be tested made voluntary and based on the understanding of accurate, objective and relevant information.

It is recommended that HTS should be integrated into health services in institutions of higher learning. This should be preceded by advocacy, mobilization and capacity building for the authorities and management, staff and students of these institutions. In addition, HTS should be integrated into all uniform service formations.

Infrastructure Improvement during Scale Up

Nigeria has a vast network of health care facilities at different levels of service delivery, which will be harnessed to achieve the Scale Up Plan. Available data shows that over 20,000 health facilities exist in the country with potential for providing care and support services including HTS.

By the end of 2015, there were about 8,308 HTS sites around the country which are not evenly distributed. There is also inadequate information about the scope and quality of service being provided in each of the sites and whether or not they are fully functional.

Findings from the mapping would be able to provide additional information to address this gap. Most of these sites are located in public health facilities where space and staffing pose a major challenge. These would be considered as scale-up is planned. Additionally, efforts will be made to ensure that new services are not established in areas already being supported by partners. In some instances, during the scale-up, due to the poor state of maintenance, there may be need for complete renovation/modification or new construction to ensure that adequate space are available for counselling and testing (side laboratory for testing where necessary, e.g. ANC clinic). Provision of necessary resources such as equipment, test kits and consumables, registers, protocols, reporting and consent forms, referral directory, etc. will also be required for effective running of the sites in line with the recommended minimum standards in the national guidelines for HTS.

Advantage would be taken of the numerous facilities in the country particularly at primary health care level which are closest to the grassroots as well as the private sector and efforts made to support and improve sites operated by other groups such as FBOs, NGOs etc. to ensure that a wider spectrum of the target groups is reached with services.

Capacity Building of Service Providers

One of the challenges confronting HTS delivery in Nigeria is the inadequate number of skilled personnel and capacity to meet the growing demand of service provision. Currently HTS delivery is marred by redeployment and attrition of trained personnel. It is essential that as part of scaling up of HTS, skilled personnel should be available to consistently provide high quality service that meets the needs of the communities they serve.

Capacity building should also be seen as an essential and ongoing component of service delivery. The type of training and capacity-building offered will vary with the setting, the level of service delivery, the model of service being offered, and the target population. Capacity-building of personnel will go beyond training and the attainment of skills to include on-going supervision and mentoring, organizational systems strengthening, supporting linkages and networks. Training and capacity building will be provided for different categories of staff involved in HTS delivery, some of whom include:

- Nurses
- Social workers
- Staff of FBOs/CBOs/NGOs
- Laboratory personnel
- M&E officers
- Record clerks
- PLHIV support groups
- Community volunteers/Lay counsellor-testers

The capacity of the coordinating unit of FMOH at all levels needs to be strengthened to ensure adequate managerial and supervisory skills. Clear definition of roles and responsibilities is required to support the scale up process. The team at all levels should be

dedicated and committed officers with technical expertise to work closely with other units related to HTS such as PMTCT, ARV, laboratory services and M & E.

Training Package

The content, appropriateness and delivery of training for different service providers will vary, depending on the service delivery approach used. For whichever cadre, the trainings should be conducted in accordance with the National HTS training curriculum and guidelines. Available training tools include:

- National Training manual (Trainers and Trainees manual)
- National guidelines
- National HTS protocol
- National Job-aids

FMOH should work closely with the coordinating unit of HTS at all levels to ensure that training standards are adhered to and relevant documentation of personnel trained is forwarded to FMOH to form part of the national database. To ensure quality of HTS, a quarterly review meeting should be organized by the State HTS coordinating body for LGA HTS desk officers to discuss emerging issues, challenges and opportunities related to HTS.

Training Strategies

In line with the scale up plan, the need for capacity building cannot be over emphasized. Two training approaches will be utilized: training of trainers and the step-down training of care workers in both community and facility settings. Additional approaches will need to be adopted and/or incorporated into existing training strategies to improve HTS in the country. In line with the national guidelines, step down trainings will be conducted as the need arises.

NASCP has a database of master trainers which will be updated periodically and shared with HTS coordinating bodies and stakeholders at both national and state levels. These master trainers will be responsible for the step-down trainings at all levels. To ensure quality, the national HTS coordinating body will conduct periodic oversight supervisory visits at the state level. An evaluation of the quality of the training needs to be conducted and necessary recommendations addressed to ensure high quality training.

The national HTS coordinating body will be responsible for ensuring that counselling and testing is incorporated into pre-service training curriculum of relevant health care providers (physicians, nurses, social workers and other health-care staff) and other relevant institutions.

Quality Assurance

For sustenance of high quality HTS the following processes should be implemented:

- Refresher training for both master trainers and trainees
- Periodic meetings to share experiences and resolve concerns
- Regular supervision and mentoring
- Improving working environment

- Exchange programme

Linking HTS Scale Up to Other Care and Support Services

The delivery of HTS should be within the context of a comprehensive package which should include prevention, treatment, care and support interventions. This involves close linkages with other services within the health facility or community including support groups of PLHIV. This is essential for the purpose of follow-up and access to other services since the HTS centre cannot provide or meet all of the needs of PLHIV namely: medical, psychological, socioeconomic, human rights and legal needs.

Effective referral networks are necessary within the range of services at facility and community level in order to achieve continuity of care and treatment as the needs of the PLHIV will vary according to stage of their disease and circumstances. Efforts would be made to work with clients to identify their immediate referral needs so that appropriate referrals are made. Available options should be discussed to help the client choose the most suitable, in terms of distance, cost, client's culture, language, gender, sexual orientation, age and developmental level. It is also important to refer people to services which are functional and of good quality. FMOH/SMOH should ensure that a directory of available HTS is provided for facilities.

Referral forms and registers should be kept to track referral to other services and those referred to the HTS centre. Referral network meetings should be organized for staff from different sites to share experiences and track follow-up.

National HTS Communication Strategy

The HTS communication strategy will be part of the overall national communication strategy for HIV/AIDS in the country. Efforts should be made to harmonize and standardize all messages being produced by different partners and organizations offering or supporting HTS. This is particularly critical as more organizations commit funds into supporting HTS delivery in the country. Standardized materials can be reproduced for dissemination to sites offering services. The desk officer for HTS in NASCP and a member of the national HTS task team will be part of the national Behaviour Change Communication (BCC) steering committee to ensure that culturally sensitive and appropriate HTS messages are developed and produced.

Role of Stakeholders in HTS Scale Up

The scale-up will involve the collaboration of many partners and government at different levels. So far, a lot of support for HTS in the country has been provided by UN agencies, bilateral donors and international non-governmental organizations. There will therefore be need for a clear definition and identification of roles and responsibilities for all stakeholders to avoid duplication and conflict of interest. Some of the roles and responsibilities outlined below will be played by different stakeholders.

Table 3 below identifies the roles and responsibilities of different stakeholders in the HTS National Scale Up Plan:

Table 3: Roles and Responsibilities of HTS Stakeholders

Stakeholder	Roles and Responsibilities
1) FMOH	▪ Coordination of HTS in the country ▪ Policy formulation ▪ Development and dissemination of guidelines, protocols and training manuals ▪ Development of tools for quality assurance (counselling and testing) ▪ Advocacy and sensitization ▪ Resource mobilization ▪ Capacity building ▪ Forecasting, quantification, procurement and distribution of test kits ▪ Support identification and assessment of sites ▪ Upgrading/renovation of infrastructure ▪ Organize and facilitate periodic meeting of stakeholders to review services ▪ Quality assurance ▪ Planned supervision of sites to ensure conformity to standards ▪ Maintain and update directory of sites, trainers and service providers ▪ Monitoring and evaluation of HTS ▪ Compilation of reports from sites and preparation of annual report on HTS
2) NACA	▪ Coordination of overall activities ▪ Resource mobilization ▪ Advocacy and sensitization at all levels ▪ Support for capacity building and purchase of test kits
3) NPHCDA	▪ Address gaps in distribution of PHCs ▪ Coordination of HTS activities at PHC level ▪ Involvement in policy development ▪ Capacity building ▪ Dissemination of guidelines, protocols, and SOPs ▪ Dissemination of equipment and commodities at PHC level ▪ Planned supervision of sites to ensure conformity to standards ▪ Maintain and update directory of sites, trainers and service providers ▪ Monitoring and evaluation ▪ Compilation of reports from sites at LGA level

Stakeholder	Roles and Responsibilities
4) National HTS Task Team	▪ Advise the Honourable Minister of Health on all HTS issues ▪ Advise government on policy formulation on HTS ▪ Support the FMOH in the coordination of HTS delivery in the country ▪ Assist government in the review of national guidelines, training manuals and other documents on HTS ▪ Advise on minimum standards for HTS for all forms of HTS ▪ Advise and assist government to develop scale-up plans for HTS to ensure equitable access to HTS nationwide ▪ Support FMOH in the development and review of proposals and work plans for HTS ▪ Provide technical assistance to FMOH in the development of the national HTS monitoring and evaluation framework, in harmony with the Nigeria National Response and Information Management System (NNRIMS) and the National Health Management Information System (NHMIS) ▪ Advise government on statutory requirements for HTS counsellors in relation to professional structures, cadres, remunerations, accreditation mechanisms and development of standardized career curricula ▪ Network with other national task teams on the HIV and AIDS programme
5) State Government	▪ Coordination of services at the State level ▪ Advocacy and sensitization ▪ Resource mobilization ▪ Dissemination of national guidelines and other relevant documents ▪ Identification and assessment of sites for service delivery ▪ Capacity building ▪ Provision of trained personnel ▪ Upgrading/renovation of infrastructure ▪ Forecasting, quantification, procurement and distribution of test kits ▪ Direct supervision of HTS in the state ▪ Quality assurance ▪ Maintain and update directory of sites, trainers and service providers ▪ Planned supervision of sites to ensure conformity to standards ▪ Collection and collation of data ▪ Monitoring and evaluation
6) Donors and NGOs	▪ Advice and assist Governments on policy issues ▪ Technical assistance to government on policy matters ▪ Technical assistance for guidelines, protocol etc., review and development ▪ Technical assistance for capacity building and training

Stakeholder	Roles and Responsibilities
	▪ Funding support ▪ Programme support ▪ Provision of test kits, consumables and logistics, etc. ▪ Adherence to government approved test kits ▪ Support for upgrading/renovation of infrastructure ▪ Supervision and mentoring of HTS sites where they are supporting service delivery ▪ Monitoring and evaluation
7) Local Government	▪ Coordination of services at LGA level ▪ Advocacy and sensitization ▪ Resource mobilization ▪ Dissemination of national guidelines and other relevant documents ▪ Identification of sites for service delivery ▪ Identification of LGA with inadequate PHCs ▪ Capacity building ▪ Upgrading/renovation of infrastructure ▪ Forecasting, quantification, procurement and distribution of test kits ▪ Supervision of service delivery ▪ Planned supervision of sites to ensure conformity to standards ▪ Quality assurance ▪ Selection of personnel for training ▪ Maintain and update directory of sites, trainers and service providers ▪ Collection and collation of data Monitoring and evaluation
8) Implementing Sites	▪ Service delivery ▪ Adherence to national standards and guidelines ▪ Record keeping, collection and collation including timely submission of data ▪ Referral and linkages to and with other care and support services ▪ Support of service providers ▪ Formation of support groups ▪ Ensuring appropriate forecasting, quantification and reporting ▪ Early requests for supplies and materials to avoid stock outs and shortages ▪ Ensuring confidentiality of clients records ▪ Maintain and update directory of sites, trainers and service providers ▪ Monitoring and evaluation
9) FBOs/NGOs/ Private facilities	▪ Community mobilization and service promotion ▪ Service delivery ▪ Adherence to national standards in service delivery

Stakeholder	Roles and Responsibilities
	▪ Collection, collation and timely submission of data ▪ Advocacy and sensitization ▪ Facilitate establishment of support groups ▪ Maintain and update directory of sites, trainers and service providers ▪ Referral and linkages to/with other services ▪ Monitoring and evaluation ▪ Service provision
11) Service Providers	▪ Quality and effective service delivery ▪ Accurate and comprehensive information provision ▪ Ensuring confidentiality of clients and records ▪ Effective referral and linkages for clients to other care and support services ▪ Formation of support groups ▪ Proper record keeping
12) Laboratory Services	▪ Mentoring of non-laboratory service providers ▪ Technical support of laboratory and non-laboratory service providers ▪ Monitoring adherence to standards ▪ Proficiency test for laboratory and non-laboratory service providers ▪ Quality assurance of testing services
13) Communities	▪ Community mobilization of various groups and organizations ▪ Promotion of HTS and its benefits ▪ Promotion and protection of the rights of PLHIV and those affected by HIV/AIDS ▪ Provide assistance and encouragement to support groups ▪ Select eligible community members to serve as lay counsellors
14) PLHIV Support Groups	▪ Serve as HTS counsellors ▪ Serve as peer counsellors ▪ Referral and linkages to other care and support service delivery points ▪ Advocacy and community mobilization ▪ Treatment education ▪ Mentoring of new support groups ▪ Meaningful involvement in policy development, capacity building and implementation of services at all levels
15) Private Sector	▪ Support of government policy ▪ Funding of service delivery within their operational base as part of community social service ▪ Setting up of services for their staff or linkages with mobile services for them to know their status ▪ Capacity building for staff involved in HTS delivery

Funding

The scale-up of HTS will require input from all levels of government. As such, it will be necessary for all tiers of government to budget resources and play a role in the funding of different aspects of the programme. In order to ensure effective take off of services, it is essential that accurate cost estimates are made for all aspects of the programme. Adequate funding should be secured for planned services to avoid disruption or delay in commencement of services. Failure to predict realistic costs for requirements at sites can lead to inability to commence services or meet demand after the programme has started.

So far, most of the funding for HTS has been provided by donor agencies. However, this still does not meet the needs of the country, thus requiring that appropriation of more funds be made by government at all levels if the scale-up target is to be achieved.

CHAPTER 4: REACHING PRIORITY POPULATIONS

During the scale up of HTS, priority will be given to the reaching the highest risk and most underserved target groups. These include priority populations, key populations, and other special groups.

Priority Populations

- **Adolescents and young people:** This includes adolescents (10-19 years) and young people (15-24) who are both in school and out of school. The Federal Ministry of Education estimates that out of the 42 million adolescents and young people of school age, approximately 17.5 million are out of school. Out of school youth may be more vulnerable to HIV infection as they are more likely than their in school peers to have had sex, to have multiple non-marital partners, and to be less likely to use condoms. Adolescent girls and young women (AGYW) in particular may lack sufficient knowledge and skills to negotiate for safe sex, may be lured into transactional sex for economic reasons, and may have multiple older male partners. Adolescents and young people in tertiary institutions are also a priority and may have high risk behaviours. All young people who are at risk should feel free to access HTS in a judgment-free environment, from HTS providers who respect their needs and provide accurate information and referrals to them.
- **Infants and children:** HIV infection in infants and children occurs largely as a result of mother to child HIV transmission; despite efforts to scale up facility-based ANC and PMTCT services, more efforts are needed to expand early infant diagnosis for children who are exposed during pregnancy, and to continue testing until breastfeeding has ceased. Paediatric case finding is imperative, and every effort should be made to reach untested infants and children of HIV-positive mothers.
- **Pregnant women and breast-feeding mothers:** HTS should be offered as early as possible during a woman's pregnancy so that she can reduce the risk of HIV transmission to their infants and obtain the most benefit from HIV prevention, treatment, and care services. HIV testing should be offered as a routine standard of care during ANC services, and can also be offered to male partners to reduce the risk of transmission to the woman during her pregnancy. Pregnant women who initially tested HIV-negative should also be re-tested in the third trimester or during labour or shortly after delivery.
- **Men:** In Nigeria, fewer men have been tested for HIV (46%) than women (54%), and as a result, men are more likely to start ART later in their HIV infection (NASCP Annual Report, 2015). Male-friendly health services should be considered, including expanded hours on evenings and weekends, as well as community-based approaches such as workplaces, football clubs, and through their partners. This includes men who have sex with men.
- **Couples and Partners:** Couple and partner HTS are important and effective interventions for supporting disclosure, identifying discordant couples, reducing the risk of HIV transmission, and supporting ART adherence. In Nigeria there has been a decline in the number of couples tested for HIV from 123,069 in 2014 to 82,149 in

2015. In 2015 the rate of discordance among couples tested was 9.2% (NASCP Annual Report, 2015), indicating the need for prioritizing efforts to reach couples and partners of PLHIV who may not know they are at risk. As with all HTS, couples and partner HTS should be voluntary and both partners should consent to be tested and to learn their results together.

Key Populations

Key populations include FSW, MSM, and PWID, who have limited access to health care services, but experience high rates of HIV incidence and prevalence. These populations are particularly vulnerable to HIV infection given the stigma and discrimination they experience, and the criminalization of their behaviours. HTS for KP should be provided in a non-judgmental manner.

- **Female sex workers (FSW):** Early data has shown substantial increase in prevalence among this group in Nigeria: from 18% in 1991/92, to 23% in 1993/94, and 30% in 2007. The most recent data from the 2014 IBBSS reports that HIV prevalence for BBSW is 19.4%, and 8.6% for NBBSW, showing a slight decline from the 2007 estimates.
- **Men who have sex with men (MSM):** MSM are a largely unknown population, given the stigma and criminalization of this behaviour in Nigeria. The inability to be open about their risk behaviour leads to increased vulnerability to HIV infection, reluctance to access health services including HTS, delayed testing and treatment, and fear of stigmatization by health care providers. MSM may have multiple partners, and some may also be sex workers. Some MSM may also have female partners as well, which may put their partners at increased risk as well. The 2014 IBBSS shows that they have the highest prevalence of all KP groups at 22.9%.
- **Persons who inject drugs (PWID):** PWID are at high risk for HIV infection due to the likelihood of transmitting HIV when sharing needles for injecting drugs, as well as lowered inhibitions when using drugs. The 2014 IBBSS showed that they have a prevalence rate of 3.4% which is slightly higher than the national prevalence of 3%.

Other Special Populations

- **People with Disabilities (PWD)**: Persons with physical, visual, hearing, sensory, and mental impairment should be targeted with HTS because of their limited access to information, education, and other facilities.
- **Survivors of Sexual and Gender Based Violence (GBV)**: There is a strong link between sexual and gender based violence and risk of HIV infection; women and men who report a history of intimate partner violence (IPV) are more likely to report factors that increase their risk for HIV. Persons who report sexual violence should receive HTS as soon as possible, and have the opportunity to initiate post-exposure prophylaxis, if it is indicated. They should also be linked with survivor care services, where available.
- **Orphans and Vulnerable Children (OVC)**: OVC may be at risk for HIV, particularly if one or both parents died as a result of HIV, or if they are known to have

high-risk behaviours themselves. HTS providers should explain the benefits of HTS to caregivers of OVC, and they should make decisions together about testing children and disclosing the child's HIV status.

- **Persons who are incarcerated**: This includes prisoners and persons in juvenile and other correctional institutions. These persons may be at high risk due to sexual violence, unsafe sex, and other high-risk or illicit behaviours that can occur in prisons. HTS must not be mandatory for persons who are incarcerated, but should be offered as a package of care.
- **Migrants, refugees, and internally displaced persons:** These persons may have difficulty accessing health care services because of fear of stigma and discrimination, language differences, lack of transportation, and legal barriers. They should not be forced to be tested, but should have equal access to HTS and follow-up services.
- **Other vulnerable populations:** Other vulnerable populations might also be at high risk for HIV and may have difficulty accessing HTS. HTS should be made available to them and their partners, and they should be linked to appropriate services:
    - **Widows and widowers**
    - **Adults and children living on the streets**
    - **Uniformed service personnel and their families**
    - **People who abuse alcohol or other non-injectable drugs**
    - **Itinerant workers, including fisher folk, transport workers, herdsmen, and off-shore oil workers**
    - **Communities in junction or corridor towns**

CHAPTER 5: HTS APPROACHES

There are multiple approaches and models for the delivery of HTS in Nigeria, and scale up of these services should be strategic and varied. One particular approach or model may not fit all target groups and, as such, a variety may be required based on cultural factors and the needs of the specific group. It is also essential that cost-effectiveness, sustainability, affordability and convenience of the clients are considered in the planning of the model, approach, or strategy to be adopted in each setting. Regardless of the model, approach, or strategy that is used, all HTS must be delivered using a client-centred approach, guided by five core principles known as the "5 Cs", which are:

- **Consent:** persons receiving HTS must give informed consent for this service, either verbally or written
- **Confidentiality** must be maintained, meaning what is discussed by the client and the HTS provider should remain between the client and the provider
- **Counselling** should be client-centred, based on the client's level of knowledge and tailored to their situation and HIV test results
- **Correct** test results must always be provided to clients
- **Connections** to HIV treatment, care, and prevention services should be effectively made in a timely manner so clients benefit from the full spectrum of services available to them

HTS in Nigeria may be client-initiated, or provider-initiated; that is, clients can voluntarily seek HTS of their own accord, for example when they have a concern or a specific incident of risk (client-initiated), or they may be offered HIV testing by a health care provider as part of routine clinical services (provider-initiated). In both instances, effective linkages with HIV prevention, care, and treatment services should be made, based on the client's results. Both of these services may be health facility-based or community-based, and innovative approaches are emerging to expand the options available to clients (Figure 4).

Figure 4: HTS Delivery Approaches in Nigeria

Health Facility Based HTS

HIV testing services are provided in public health and private facilities. In health facilities, HTS is generally initiated by the health care provider, and is referred to as provider-initiated HTS (PITC). There are four main approaches to delivering HTS in health facilities:

- Integrated PITC as a routine service into multiple delivery points within a health facility (PITC): HTS should be integrated as part of routine health care at multiple service delivery points within a health facility.
- Through referral to a central HTS site or room after initiation by a healthcare provider in a medical ward or other department: If HTS is not available on the medical wards due to space or other constraints, providers can initiate HTS and refer clients to a central HTS point or laboratory at the facility where they will be tested and their results returned.
- At a co-located HIV testing site on the grounds of the health facility where clients may walk in voluntarily or be referred from other wards within the facility.
- In a private health facility by a private medical provider.

HIV testing services should be ***decentralized*** within health facilities, extending to service delivery points such as: immunization (adult and children), family planning, TB (DOTS) centres, STI clinics, wards, and emergency units, to support the early identification of clients with undiagnosed HIV infection and their linkage to prevention, treatment and care services. In particular, emphasis should be made on integrating HTS into all facility service delivery points for children, to improve ***paediatric intensified case finding***. This includes post-natal clinics, immunization (child), child welfare clinics, paediatric wards and emergency units.

Additionally, focus should be made on ***integrating HTS into maternal and new born health services***. To increase awareness, Maternal, Neonatal and Child Health (MNCH) week takes place twice in a year and is organized by National Primary Health Care Development Agency (NPHCDA) and FMOH. MNCH week is targeted at women, children and men during which several health-related programs are offered which include child welfare services, blood-glucose test, blood pressure measurement, health-talks and HTS. These services are provided at different locations within the communities. Prior to the week, advocacy will be paid to community stakeholders and a series of awareness creation activities will take place for women, children and men to be sensitized on the importance of these services including HTS.

Community Based HTS

Testing in communities is a complement to health facility testing, and should be targeted to persons at high risk for HIV infection who are not likely to access healthcare services. This includes key populations such as FSW, MSM, PWID, transgender persons (TG), and their social and sexual networks; priority populations such as men, adolescent girls and young women, and prisoners; partners of PLHIV; and OVC who have not previously been tested.

In order to reach the hard-to-reach populations, community-based HTS may wish to provide services outside of normal business hours (i.e. evenings and/or weekends). This approach has been shown to reach persons who do not normally come for services because of work or other daytime conflicts.

The primary approaches supported for community-based testing are:

- Stand-alone HTS sites that offer HTS and/or other healthcare services, such as STI screening and treatment, or other HIV prevention and care services.
- Targeted mobile and outreach testing, including campaigns, moonlight, schools, and workplaces. Mobile or outreach HTS uses community venues that do not typically offer HTS, and aim to reach hard-to-reach populations such as men, KP, and AGYW by providing HTS in community settings they may otherwise frequent. Under the Scale Up Plan, **moonlight testing** should target hotspots where KP are known to hang out. Hostpots will be mapped, and gatekeepers will be engaged. Likewise, **workplace testing** will include mapping of workplaces, and engagement of the owners of formal and informal businesses. Members of organizations will be sensitized on the benefits of HTS, and HTS will be provided in the workplaces.
- Targeted home-based testing provided using a door-to-door approach within a *specific* high-prevalence geographic area or community, or by targeting the homes/locations

where partners and family members of PLHIV live or frequent (with their consent). This can remove structural and logistical barriers to HTS and make clients feel comfortable.

- Drop in-centres or "one stop shops" to reach KP and their social/sexual peers with comprehensive HIV testing, prevention, treatment, care, and support services. These sites are typically located in communities around where KP live or work, and are established to be KP-friendly. Under the Scale Up Plan, **one stop shops** should be scaled up using both fixed and mobile sites aimed at reaching highest risk populations.

Innovative Strategies

HTS will have the most impact when persons with undiagnosed HIV infection are identified and linked with HIV prevention, treatment, care, and support services. In order to increase case finding, novel approaches such as partner notification services (PNS), couple's HIV testing and counselling (CHTC), social network testing (SNT), HIV self-testing (HIVST), and recency testing have been introduced.

- **Partner Notification Service (PNS):** Testing partners of PLHIV is a *standard of care* for HTS programmes in both health facility and community-based settings. PNS is a new approach that empowers HTS providers to take a more active role in assisting clients with disclosure, notification, and partner testing. PNS is sometimes referred to as index client testing, index case testing, or contact tracing. It is a voluntary process whereby trained providers ask PLHIV about their sexual or injecting drug use partners, and with the consent of the HIV-positive index client, notify these partners of their potential exposure and offer voluntary HTS. It also includes testing for biological children of HIV-positive mothers. Under the Scale Up Plan, health care workers receive capacity building for PNS to expand the options available to PLHIV for notifying and testing their partners and at-risk children.
- **Couples HIV Testing and Counselling (CHTC)**: CHTC has been provided in Nigeria since 2008, but it is important to emphasize the opportunities it presents in case finding and providing alternatives for supporting disclosure and partner testing. With CHTC, two or more persons who are in a relationship come together for HTS and learn their results together. This includes same-sex and heterosexual couples, and long-term or short-term couples. CHTC can increase disclosure, identify discordant couples, and support effective communication among partners.
- **Social Network Testing:** This is when HIV-positive and/or high-risk HIV-negative persons—particularly from KP—are enlisted as *recruiters* to identify individuals from their social, sexual, and drug using networks *(network associates)* for HTS. This is sometimes referred to as a *snowball* approach. This has been shown to be effective for reaching peer groups that maintain a tight circle and are not otherwise easy to reach. The approach may be used for KP, AGYW, men, and other high risk groups including uniformed service personnel, long distance drivers, and fisher men. Under the Scale Up Plan, key influencers will be identified amongst these groups and used to reach their peers. ***Snowballing incentives*** will be used to encourage them to bring their

peers. The incentives can include promotional materials or cash. Social centres such as cinemas, joints, bars, shopping malls, football viewing centres, recreational parks, and higher institutions will be the venue for this testing. Activities will include mapping of key influencers for target groups in the 36 states and the FCT, and sensitization on the SNT approach for key influencers. Each key influencer will be given incentives for linking up a peer for HTS. HTS points will be set up at centres as listed above.

- **HIV self-testing (HIVST)**: HIVST refers to a process in which a person collects his or her own specimen (oral fluid or blood) and then performs an HIV test and interprets the result, often in a private setting, either alone or with someone he or she trusts. A reactive (HIV-positive) HIVST result always requires further testing and confirmation from a trained provider. HIVST is acceptable to many users across different contexts and can, therefore, increase uptake and frequency of HTS, particularly among populations at high ongoing risk of HIV, or who are less likely to test using traditional HTS approaches.
- **Pharmacies and Patent Medicine Vendors:** A large percentage of the Nigerian population resides in informal settings and relies routinely on neighbourhood patent medicine vendors (PMV) for health information, medical consultations and drug treatment. This patronage is largely driven by their wide geographical dominance, relative affordability and ease of access. This is in contrast to the considerable financial, psychosocial and physical barriers that limit the utilization of both private and public health care services in Nigeria. Increasingly, pharmacists and PMVs are being engaged to provide HTS, as many people seek healthcare through these outlets. This may be done either by training pharmacists and PMVs as HTS providers, or by having an outside organization provide mobile or outreach HTS on-site. As HIV Self Testing expands in Nigeria, pharmacists and PMVs will have an important role to play in the distribution of self-tests, explaining and/or demonstrating how to use them, and ensuring consumers have accurate information about the meaning of results and where to access follow-up services. Under the Scale Up Plan, community health workers may be engaged to ***supervise the process to ensure availability of data and linkage*** of HIV-positive clients to facilities for further care, treatment, and other support services.
- **Recency testing:** Recency testing refers primarily to the type of test kit that is being used to perform HTS, which may indicate whether a person's HIV infection was recently acquired (i.e. in the last 6 months) or not recently acquired (i.e. more than 6 months ago). These tests may be particularly important for strategically targeting partner notification services to those partners most at risk.

Role of Private Sector

The private sector plays a key role in HTS provision, as many people seek healthcare through private sector services. Private sector healthcare providers should adhere to the policies and guidelines outlined in this document and in the National HTS Guidelines, to ensure high quality service delivery. Implementation may vary depending upon the type of service being

delivered and the structure and resources available. Just as with all HTS, linkage to HIV prevention, treatment, care, and support services should be ensured.

Demand Creation for HTS Scale Up

Targeted efforts will be made to increase demand for HTS under the Scale Up Plan. This will include:

- **Targeted and seasonal testing** will be employed to reach vulnerable groups, particularly long distance drivers, uniformed personnel, persons who are incarcerated, persons with disabilities, fisher folk, and herdsmen. Mapping will be conducted to identify sites and communities where these groups can be found. ***Mapping will be conducted by States and LGAs (15 per state)***. HTS will be integrated with other health services to maximize the health benefit to the populations.
- **National HIV Testing Week** will aim to create mass awareness and increase HTS uptake via campaigns and symposiums at the national and sub-national levels. This activity will be conducted ***twice a year and coordinated by the FMOH***. The activity will be targeted at the general population and will involve awareness creation through media rounds, road shows, dance, and drama presentations for road shows. On the given week, HTS will be provided alongside distribution of IEC materials and condoms to the general population. Media rounds in four national TV stations, national radio stations, one state TV station and two radio stations per state will be conducted to raise awareness on HTS.
- **Social Gatherings:** This will involve provision of HTS in social gatherings such as churches, mosques, community festivals, women meetings, men meetings, sport festivals, and youth meetings. Activities will include mapping and identification of communities where these activities are held, advocacy to employers and community heads, and provision of HTS at these places and locations.
- **Adolescent and youth-friendly services** targeting young people aged 10-24 years. HTS providers and health care workers will receive capacity building support to provide HTS to adolescents and young people that is stigma-free and responsive to their needs. HTS will be provided in higher institutions, in student union buildings, and in other places where student activities take place. Youth-friendly centres that provide HTS will be established in communities, to engage youth through recreational activities and health education. ***One youth-friendly centre per state will be set up and scaled up in subsequent years.***
- **Social Media Platforms:** Mass sensitization of the public using social media, mobile technologies and social networking in addition to pre-existing mass media platforms will be strengthened. Social media has been found to bridge communication among a range of users in various geographic and social contexts. Attention will however be paid to the role of anonymity and confidentiality in communication about HIV exposure, prevention and treatment. The strategy will be used to reach key populations, the general population, and adolescents and young people with HIV information through social media platforms where young people and other target groups can easily be reached such as Facebook, Twitter, Instagram, Telegram, and

We chat. We will explore the use of a Hotline, where persons can call in and get information on HIV and also where to get tested. PLHIV can also access this service to get information on treatment availability, benefits of treatment, viral suppression, disclosure, partner notification and testing, symptoms, and other issues. Persons will be trained on the use of social media to reach people and also on the hotline platform services. For the Hotline, an HTS centre will be built and equipped to accommodate this activity.

- **Integration of HTS into NBTS:** This strategy leverages on periodic blood donation drives, voluntary non-remunerated and replacement donation in the country to provide HTS. Identified HIV-positive clients are linked to prevention, treatment and care services while HIV negative clients can be recruited to voluntarily donate blood as per schedule.
- **Strengthen quality management systems:** As a way of strengthening quality management systems in HTS, a comprehensive Quality Improvement (QI) approach will be adopted to improve quality assurance process of HIV rapid testing.

CHAPTER 6: HIV TESTS

Types of Tests

HIV testing in Nigeria is mainly carried out using antibody and antigen tests that may be rapid diagnostic tests (RDTs), Enzyme-Linked Immunosorbent assays (ELISA) and Polymerase Chain Reactions (PCR). For adults and children above 18 months of age, HIV is typically diagnosed using RDTs. For children under 18 months of age, laboratory-based nucleic acid test (Lab-NAT) and point-of-care NAT (POC-NAT) tests are used to diagnose HIV infection. In some higher level facilities, ELISA and PCR tests are used.

Task Shifting for HIV Testing

HIV testing is generally conducted by professionally trained laboratory scientists, technicians and assistants. However, due to the number of people expected to be reached to properly scale up HTS, the country will adopt the use of trained non-laboratory ("lay") personnel to provide both HIV testing and counselling. This is in line with WHO task shifting and sharing policy and comprehensive guidelines on HTS. Lay providers will be trained to use RDTs for HTS, and trained personnel will provide services in public and private health facilities as well as in other organizations providing HTS. Non-laboratory personnel will be supervised, mentored and monitored by qualified laboratory scientists to ensure proficiency and reliability of test results.

Testing Algorithms

An essential requirement of all HIV testing is accuracy of the test results. For the purpose of the HTS scale-up, government recommends the use of non-cold chain dependent test kits. The types of test kits to be used at service delivery points should be those recommended and approved by government. Based on studies carried out in other countries and the outcome of the recently concluded rapid test kits evaluation in Nigeria (2007), serial testing algorithm has shown to be as sensitive and specific as parallel testing algorithm. Serial testing has also shown to be easier for use by non-laboratory personnel, much cheaper and cost-effective. The use of a serial testing algorithm is thus adopted for use in the HTS scale-up in the country, though a parallel testing strategy may be considered for verification re-testing or in areas of particularly high HIV prevalence.

New Diagnostic Tests

HIV tests used in Nigeria should be registered by the National Agency for Food and Drug Administration, and Control (NAFDAC). These tests are further evaluated and recommended as part of national algorithm by the National AIDS and STIs Control Programme (NASCP) of the Federal Ministry of Health (FMOH). The list of recommended rapid test kits for both professional use and self-testing, can be obtained from NASCP. As new tests such as HIV self-tests, recency tests, and dual rapid diagnostic tests for HIV and syphilis are introduced into Nigeria, they will follow the appropriate approval processes and be added to this list.

CHAPTER 7: LOGISTIC MANAGEMENT SYSTEM

The importance of efficient and effective logistics management system for a successful HTS delivery cannot be over-emphasized. Logistics is the process of sourcing, warehousing, distribution and rational use of supplies. Logistics in the context of HTS refers to the process of ensuring that commodities required for services are available and ready for use by all who need them in a sustainable and timely fashion. An effective system should be put in place to ensure their accessibility and effective use at service delivery sites. For HTS scale-up to be successful, there should be an effective logistics management system that takes into consideration:

- Effective quantification and forecasting of rapid diagnostic tests (RDTs) and other consumables
- Sourcing and procurement RDTs
- Warehousing, storage and distribution
- Logistics Management Information System (LMIS)

HIV test kit selection and testing protocol should conform to the prevailing national HIV testing algorithm.

HTS Commodities

The requirement for commodities for each site will depend on the service model being used and kind of referral mechanism available in that location. The basic requirements that should be available to all sites irrespective of the model will include:

- Test kits – the types and quantity will depend on the algorithm in use
- Commodities for universal precaution e.g. gloves, bleach, cleaning supplies, puncture-proof disposal containers for needles and sharps, waste disposal bags for blood contaminated materials
- Commodities for specimen collection e.g. lancet, gauze/cotton, needles, plaster
- LMIS tools e.g. Combined Report Requisition Issue and Receipt Form, return and transfer form, client intake form, consent form, tally cards (inventory control card), registers and monthly summary forms, etc.
- Data collection/M&E tools
- Tables, chairs, shelves, tents etc.
- Male and female condoms including penile and pelvic models

Test Kit Procurement and Distribution

All test kits will be procured by the national and state government which has been certified by NAFDAC in line with the agreed national algorithm in the standard operating procedure manual.

Issues of logistics and supplies will take into account several factors, namely:

- Source(s) of **funds** for the implementation of the logistics programme is vital to the success of HTS.
- **Scope of the programme** determines the logistics that need to be put in place.
- **Effective forecasting** using consumption data, service data, demographic data and programme target data. The forecasting will be based initially on estimated realistic utilization rates and later be based on consumption data. A logistics information system or data base should be developed and regularly updated through information generation from regular monitoring and evaluation activities.
- **Effective procurement –** Procurement of HIV test kits will be based on the national algorithm and from reputable sources preferably primary manufacturers with adequate guarantee on product quality. Condoms should be obtained through existing logistics systems.

Warehousing, Storage and Distribution

The existing storage/distribution channels for FMOH through the Central Medical Stores as well as the PHC (NPI/NPHCDA and zonal stores) should be explored. At national level, overall storage should be maintained at this point. In addition, storage facilities at state-level should also be utilized to ensure proximity to service delivery points. Where storage facilities are currently not operational the states with support from Federal government and donor partners can collaborate to facilitate infrastructural upgrade. The use of non-cold chain dependent kits will reduce the need for refrigeration but will need an environment of between 2^0 -30^0 centigrade both at the storage and transportation mode. Non-cold chain dependent kits should be transported to the service delivery point in a cold box and then stored at the required temperature on arrival at the facility. Storage facilities should ensure security by fitting burglary proofs to doors and windows. Records of stored commodities should also be maintained while a system of monitoring of the inventory level of commodities should be put in place to ensure that excess stock are moved around with a view to minimizing loss through expiration.

Other areas to consider include:

- **Quality assurance of commodities** – This will take into consideration the manufacturing and expiry date and lot/batch number of the test kits being used, and appropriate rotation in the warehouse to ensure the kits with the closest expiration date are used first.

- **Commodities re-supply –** Appropriate and up-to-date record of commodities used should be kept and the necessary inventory forms completed. Reports should include an order with quantities required per service delivery point. Reagent re-supply will be based on both consumption patterns and program targets for the different sites.
- **Inventory management system -** Appropriate and up-to-date records of commodities used should be maintained at the service delivery points. This will require introduction of inventory tools. The tools will facilitate capturing the following information at the point of service, minimum stock level, maximum stock level, test kit consumption data and the quantity to order. With the system in place it will ensure that no stock out is experienced. The monthly report is generated at each of the service delivery points and forwarded to the stores for evaluation and supply of the commodities. The inventory tools to be used for collection of consumption data stock on hand, losses/adjustments and order quantities include:
    - The HIV testing worksheet
    - Combined report-requisition issue and receipt form (CRRIRF)
    - The stock card/tally sheet

  There will be a standard ordering system with a maximum stock level of three months and minimum stock level of one month. Facilities will report once every month and receive supplies once every month and when necessary.

Distribution of test kits

The Federal and State Ministries of Health supporting HTS will supply test kits to service delivery points and will also maintain an emergency or buffer stock of rapid HIV test kits for distribution when needed.

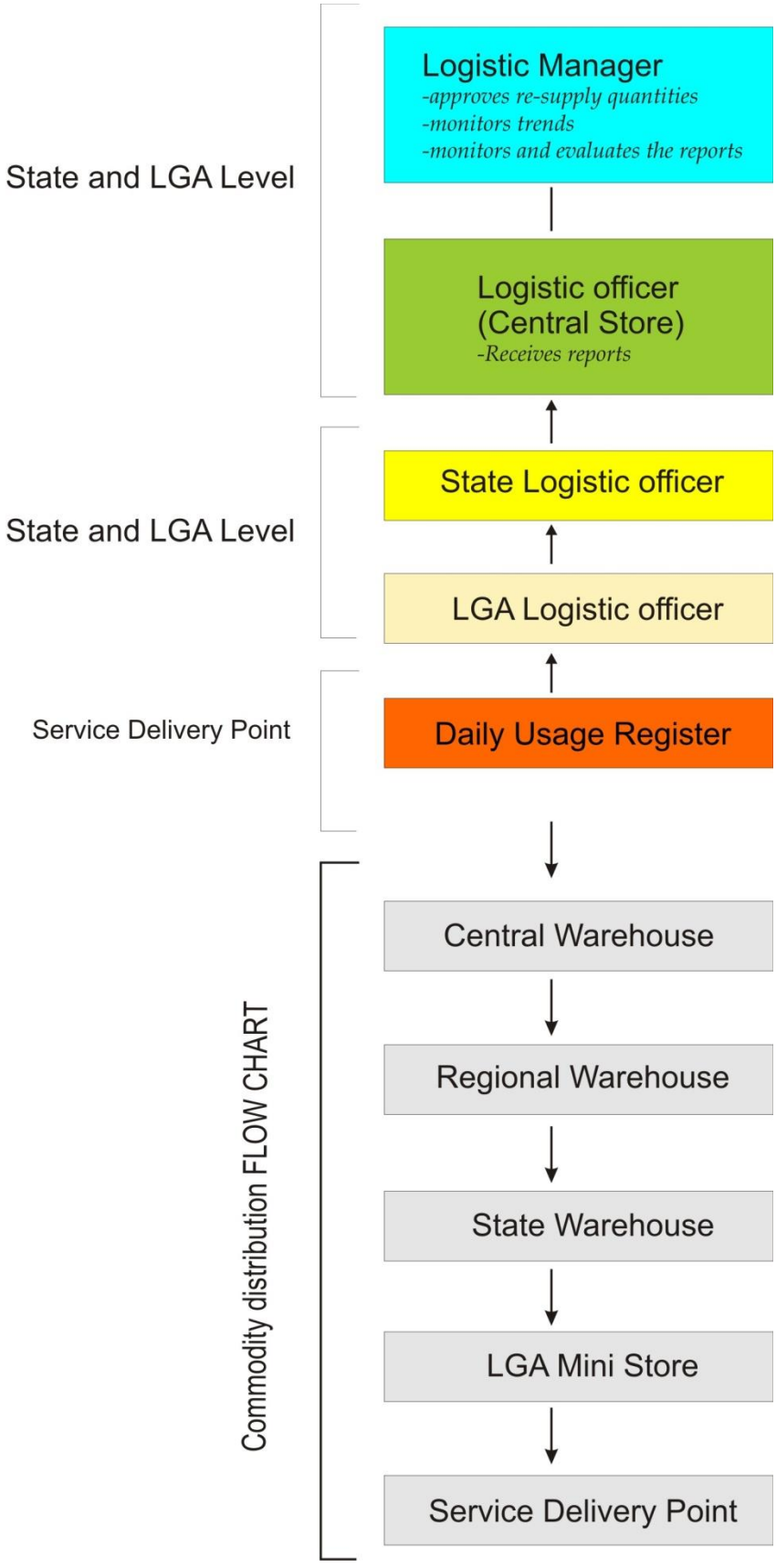
Stock Management of Tests Kits

It is recommended that HTS sites use thermometers to determine atmospheric temperature to ensure that kits are being stored appropriately. Most of the kits require a temperature of between 2 and 30 degrees centigrade as such if climatic conditions are beyond this, provision should be made for refrigeration. Every facility providing HTS will have a designated staff member in charge of ensuring that test kits are stored properly and used before their expiry date. An inventory system should be developed in accordance with national logistics guidelines to track usage and projection of needs. Storage facilities for test kits and other consumables should take into account special requirements of the test kits and capacities of the sites.

Recording and Reporting through the LMIS

An effective logistics system is supported by timely logistics data that will enable HTS managers to account for and ensure adequate supplies of HIV test kits (Figure 5, next page). Efforts should be made to ensure appropriate recording and timely reporting.

Figure 5: Logistic Information Flow Chart



CHAPTER 8: QUALITY ASSURANCE FOR HTS

Quality assurance (QA) is a part of quality management focused on providing confidence that quality requirements will be fulfilled (WHO, 2015). QA is critical to the provision of high quality HTS. It is a technique for monitoring and evaluating the quality of services provided at HTS sites based on set national standards, guidelines, policies and protocols. The goal is to ensure high quality service and to continuously improve the efficiency and reliability of services as well as improve on it by resolving inadequacies and concerns. It is therefore important as new services are set up in the scale-up process that efforts are intensified towards ensuring that the new and existing sites adhere to national standards for performance and in the training of personnel involved in service delivery. NASCP will play a key role in developing and providing the requisite tools for this purpose. Such frameworks and provisions apply not only to test accuracy but also to ensuring the quality of pre-test information and post-test counselling. This will assist in addressing issues related to staff competency, client satisfaction and adherence to HTS protocols.

QA for Pre-test Information and Post-test Counselling

Different approaches will be used for assessing and strengthening counselling and communication skills of HTS providers to ensure high-quality, and these will include:

- Training of site personnel
- Availability of job aids
- Availability of HTS protocols (SOPs)
- Availability of National Guidelines
- Privacy accorded to clients
- Counsellor self/peer assessment using the counsellor reflection form
- Client exit interviews to every 10^{th} client (10% of clients) to measure client satisfaction and improve quality of service delivery.
- Mentorship for newly trained counsellors
- Use of mystery clients
- Supportive supervision to resolve concerns and prevent burnout of counsellors
- External supervision and supportive monitoring through the use of standardized checklist by the LGAs, State and National Officers
- Training and re-training on HTS skills including stress management
- Refresher training on emerging priorities and new approaches to HTS

Laboratory QA

Ensuring the quality of HIV test results is of paramount importance. Laboratory QA is defined as planned and systematic activities to provide adequate confidence that requirements for quality will be met. It is therefore, important that each facility/organization performing HTS establishes and implements a QA programme to monitor and evaluate HTS throughout the total process.

QA for HIV Testing

Ensuring correct HIV test results is a priority and a crucial component of the 5Cs for HTS. Misdiagnosis of HIV must be prevented, and robust quality management systems should be established to deliver high-quality and accurate reporting of HIV status. Quality assurance (QA) is not a one-off activity or something that is undertaken by only one person. Rather, QA is an integral part of the ongoing roles and responsibilities of every staff member who is engaged in HTS. Testing providers and managers must continually monitor and evaluate their programme and improve the quality of services. To maintain a coherent, functioning quality management system that addresses national, zonal, state, local, facility and community concerns, all stakeholders must be involved at every level to monitor quality and make improvements.

QA Cycle for Quality Management

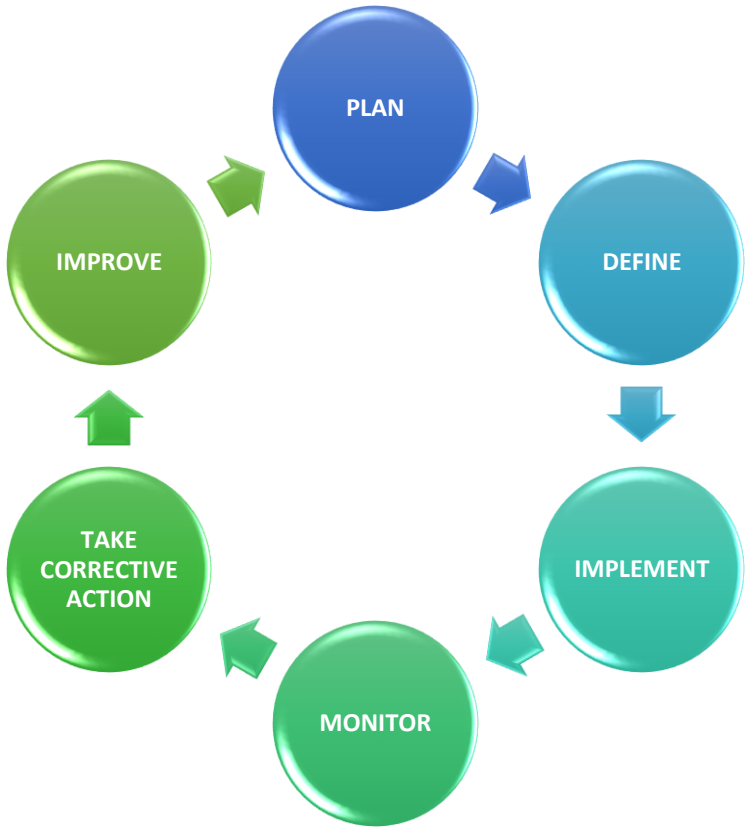
A quality management system requires a continuous cycle of quality assurance regardless of where HIV testing is carried out or the type of assays used (Figure 6).

Planning for QA focuses on engaging leadership, establishing a national QA coordination team, defining roles and responsibilities, reviewing and developing policies that include QA financing and staffing.

Implementing QA focuses on training of HIV counsellor – testers, their certification, site accreditation, supportive supervision, adequate quality/process control, documentation and record-keeping and ensuring a robust supply chain.

Monitoring involves evaluating quality through post-market validation and EQA, using data for decision-making, promoting improvements, undertaking advocacy and communication, as well as increasing country ownership.

Figure 6: Quality Assurance Cycle for Ensuring Accurate Results (WHO, 2015)



Strategies for QA

There are two main approaches that will be used for ensuring QA in HTS:

1. Adoption of the **systems approach** in laboratory QA – this ensures that all components of the laboratory services are seen as important parts of a system and for "this system to be quality assured, each of the components must be quality assured". This system monitors all parts of the testing system, detects and reduces errors, improves consistency between testing sites and helps curtail costs.
2. Adoption of the "**Hub and Spoke Model**" of HTS sites – this would ensure that testing sites at the PHC and other peripheral sites (spokes), are linked to state or secondary facility laboratory (the hub). The hub laboratories would provide monitoring, supervision, general laboratory testing oversight, and external quality assessment to the peripheral testing sites (spokes).

Adoption of EQA Processes

On-site evaluation – to be performed by the laboratory quality control officer of the hub laboratory using standard on-site evaluation tool.

Rechecking and re-testing – this would involve the testing of a minimum of 5-blinded samples (whole blood and serum), by the tester while the site supervisor watches, and a re-testing of the samples by the supervisor while the tester watches. The results are then compared and the supervisor provides immediate feedback.

Proficiency testing – this would involve the preparation of inactivated and well characterized serum samples and distribution to peripheral testing sites for testing. This procedure would occur at least twice a year.

Certification and re-certification – this would involve evaluation of would-be testers after training using written tests and practical hands-on tests.

Adoption of Internal Quality Control Measures – this would include stringent use of:

- Standard Operating Procedures (SOPs)
- Process improvement
- Supplies and inventory management
- Safety

The responsibility for ensuring the quality of testing should be seen as a continuum throughout each tier of the health system (Table 4). Users of HTS should also demand quality in the testing services provided to them, in both community-based and facility-based HTS.

Table 4: Roles and Responsibilities of HTS Staff

Level	Where	Counselling	Testing	Records	Supplies
Community	Outside of facilities (home-based, mobile, outreach)	Monitor own performance, conduct client exit interviews	Adhere to SOPs, Participate in EQA Schemes	Keep accurate testing records	Ensure sufficient test kits and supplies
1 Primary	Facility-based (stand-alone, clinical, laboratories)				
2 State	Clinical facilities, State laboratories	Monitor own performance Conduct client exit interviews Provide supportive supervision of counselling in levels 0, 1, 2 Suggest corrective actions	Adhere to SOPs Conduct QC Participate in EQA schemes Provide supportive supervision of testing processes in levels 0, 1, 2 Suggest corrective actions	Aggregate data (EQA schemes, NCs) on a monthly basis	Order test kits/supplies from national level Distribute QC specimens & EQA scheme panels
3 Zonal	Clinical facilities, Zonal laboratories				

Level	Where	Counselling	Testing	Records	Supplies
4 National	National Reference Laboratory	Validate national testing algorithms Perform lot verification testing for post-market surveillance Produce QC specimens and EQA scheme panels Evaluate data (EQA schemes, NCs) from all States /Zones on a monthly basis, suggest corrective actions Develop site SOPs and job aids Conduct training using standardized hands-on curriculum			
	Ministry of Health	Ensure testing sites' readiness for accreditation (laboratories, clinical facilities) or site registration (stand-alone sites, community programmes) Establish national HIV testing policy that includes QA Establish national QA coordination team Allocate resources for QA Procure, store and distribute test kits/supplies			
	Regulatory bodies	Set national regulatory standards for accreditation/certification of testing sites Respond to field safety notices arising from post-market validation			

CHAPTER 9: MONITORING, EVALUATION, AND RESEARCH DEVELOPMENT

Monitoring and Evaluation (M&E) is a critical program management tool for implementing any HIV/AIDS/STIs and TB program. It helps and supports other systems in learning about successes, failures and gaps. It also enables program manager determine if the program outputs and outcomes are meeting the set program goals and objectives. Where there are deficiencies, correctional measures can be taken to improve program performance.

Therefore, for the national scale up strategy for HTS in Nigeria, a strong M & E system should be maintained. This will focus on the use of both qualitative and quantitative monitoring and evaluation techniques to stimulate effective program management in the course of the scale up process. Feedback mechanisms to the program managers, policy makers, donors and partners will be designed to disseminate program performance and effectiveness over a period of time. M&E sub-strategies to be employed include:

- Routine tracking of HTS performance, commodities and other logistics using data capturing tools
- Internal and External QA of HIV Counselling
- Internal and External Quality Assurance of HIV Testing
- QA of the HTS delivery process and site-level program management and coordination
- Operations Research, Targeted and Public Health Evaluation
- Population and Geographic Coverage analysis using the District Health Information System II (DHIS II)
- Ensuring HTS Data Use and Dissemination at all levels
- Feedback system for Scale Up process Improvement

Tools

- Client Intake Form
- HTS Register
- HIV Laboratory Request and Results Form
- HTS Monthly Summary Form
- Referral Forms
- Referral Register
- Daily Worksheet
- Combined Report Issue Requisition and Reporting Form (CRIRRF)

Routine Tracking of HTS performance

Rapid scale up strategy for HTS has the potential to prevent new HIV infection and provide sustained assistance to individuals at risk of contracting HIV and even relief to infected individuals and affected families. The quest for rapid scale up of HIV and AIDS prevention, care, treatment and support will therefore require creative approaches and the realignment of

partnerships and M&E systems. It is therefore very important to routinely measure the performance of these systems along the continuum of care using output statistics.

In Nigeria, five (5) key strategic orientations must guide our rapid scale up of HTS at all levels:

1. Political commitment and leadership, partnerships, and community mobilization
2. Health Systems/Services strengthening, including the adaptation and application of appropriate documents and tools (*Training Modules, Guidelines, Data Collection, Protocols and Job aids*)
3. Effective and reliable supply of diagnostics kits & reagents and other commodities
4. Linkages with health promotion and prevention of STIs, TB, Hepatitis B and C, and other HIV coinfections within health services
5. Strategic Information and dissemination of lessons learnt

Routine data collection on HTS which includes STIs and clinical TB screening will be done by the use of latest version of the National HTS Tools attached to this document (see the Annexes). All the trained HTS providers will be trained on how to use these tools as an integral part of their formal HTS trainings while the site M&E focal person will also be trained to conduct regular internal data QA on the data collected and reported to the National database. However, to align partnerships for high quality data, LGAs and State Health sector M&E personnel will be trained to conduct routine external data QA on the service statistics.

Routine HTS Delivery and Program Monitoring Data Elements and Indicators

For effective program inputs/outputs measurement, here are some of the service delivery and program indicators:

Indicator
1. Number of people who tested HIV-negative and received their results
2. Number of people who tested HIV-positive, and received their results
3. Number of people who tested for HIV and received their results more than once within the present year (i.e. all re-testers)
4. Number of people testing HIV-positive that were identified as known HIV-positive during post-test counselling. (i.e. HIV-positive re-testers)
5. Number of couples counselled, tested, and received results together
6. Number of couples counselled, tested for HIV together, and received discordant results
7. Total number of index contacts tested for HIV and received their results **NOTE: *index contacts* may include children of PLHIV, sex partners of PLHIV, or social/sexual contacts of key populations
8. Total number of index contacts who tested HIV-positive **NOTE: *index contacts* may include children of PLHIV, sex partners of PLHIV, or social/sexual contacts of key populations

Indicator
9. Number of HTS clients clinically screened for TB
10. Number of HTS clients identified with presumptive TB
11. Number of HTS clients clinically screened for STI
12. Number of HTS clients screened for syphilis
13. Number of HTS clients tested for Hepatitis
14. Number of donated blood units screened for HIV, HBV, HCV, and syphilis, using ELISA

Database

As the HTS Scale Up Plan is implemented, it is expected that all the routine statistics from the various sites and service delivery points (SDPs) in the country will be transmitted along the appropriate levels in the data flow to the national database. Therefore, as part of the M&E activities for the scale up process, capacities of LGAs, States and National (FMOH/NASCP; NACA) leaders, policy makers and M&E personnel will be built to manage the databases at the various levels. The use of databases at the various levels will aid in performing a wide range of data analysis, which could deduce relevant information to aid HTS programming and planning.

Core indicators

The provision of HTS should lead to a number of outcomes that can be measured at national level in the general population. These portray the effect of HTS programming on the country as a whole. The national is also expected to report on a number of these indicators globally. These include:

1. Existence of updated national policies, strategy, and guidelines for HTS programmes
2. Percentage of LGAs with at least five health facilities providing HTS in-line with national guidelines
3. Number of service outlets providing HTS according to National guidelines
4. Number of personnel trained on HTS in accordance with national standards
5. Number of clients who received pre-test counselling, received their HIV test results and also received post-test counselling (disaggregated by age (1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+), sex, test result (positive or negative), service delivery, key population status.)
6. Percentage of individuals aged 15–49 years who in the last 12 months had an HIV test and received their test results
7. Percentage of high risk groups who received HIV Counselling and testing services and received their test results in the last 12 months

HTS Operational Research and Targeted Public Health Evaluation

Targeted operational research and public health evaluation can help provide more information about HTS delivery for programme improvement. It will therefore be important

to gain knowledge and improve services as the scale-up process is on. The needed insight will be obtained through several targeted operational research and public health evaluations which will be conducted periodically. Some of the areas to explore or questions to answer will include:

- Factors that affect HTS uptake by different populations, age groups, sex categories
- Factors affecting HTS uptake through the various service models (stand alone, integrated and mobile service delivery)
- Preferences for certain service delivery modalities, and why
- Uptake of partner notification services and strategies for reaching more partners of PLHIV
- Self-testing - number of people who self-test and self-refer; sub population who engage in self-testing; reasons for self-testing, demand for self-testing.
- Uptake of HTS among priority populations such as men and key populations and strategies for better reaching them
- Factors affecting return of clients for their test results
- Rate of discordant results amongst couples
- Correlation of STIs incidence to HIV positivity in various health facilities and geographic settings

The above and other issues need to be explored as the information obtained will guide implementation, service delivery, and quality.

Feedback Systems for the Scale Up Process Improvement

The importance of feedback to all levels of HIV programming including site level providers cannot be overemphasized as it will guide HTS programming and service delivery efforts. M&E allows for continuous feedback on the status of services and the progress made in order to increase knowledge of staff and guide them towards improvement of their services. Efforts should be made to highlight areas of low and increased uptake of services so that others can learn lessons from the success of the other sites and apply same in improving their own services. Lessons can also be used to guide efforts with specific target groups and the data obtained used to guide strategies that will increase acceptance of HTS.

Data dissemination sessions to key programme managers, policy makers, national HTS task team and other stakeholders will be held periodically to apply correctional design of the scale up activities.

CHAPTER 10: MANAGEMENT AND COORDINATION OF HTS SCALE-UP

The HTS programme and number of sites required in the country to provide access to all eligible Nigerians as conceived by government will involve the engagement and collaboration of many stakeholders. It would therefore require that an efficient and effective management and coordination mechanism is in place. This will require the participation and involvement of partners from all levels and organizations providing services. Additionally, there is need to strengthen existing coordination systems without creating parallel structures. In consideration of the levels of health care delivery that will be involved, geographical span and size of the population, coordination and management of HTS will present its challenges but efforts will be made to put systems in place to minimize these challenges by ensuring that each stakeholder plays its roles and responsibilities.

At National level: A team comprising staff with appropriate skills should be put in place to provide technical guidance, oversight and coordinate the services at all levels. The National Task Team on HTS is in place and its membership will be reviewed every four (4) years. The National level will among other roles and responsibilities provide policy direction, capacity building, coordination, fiscal control and implementation as appropriate.

At State level: for the implementation of programme and technical input, a dedicated HTS desk officer should be identified while a Task Team comprising SACA, LACA, State Ministry of Health, PLHIV, civil society and other collaborating partners involved in HIV and AIDS prevention, care and treatment activities in the state should be made functional where in existence or established where not yet in existence. The SACA in collaboration with SMOH should provide leadership for the process in each State.

At LGA level: The HTS Officer will coordinate services at this level and a team comprising SACA, heads of department of health, NPHCDA, Social Mobilization Officer, LACA, PLHIV, civil society, facilities/organizations providing services at this level and all relevant stakeholders. The LACA in collaboration with heads of department of Health provide leadership for the process in each State.

This team will build capacity to provide quality HTS at primary health care levels as well as foster links between the health sector and the community to create demand for and increase uptake of services and for follow-up care at community level. The team should provide support for LGA-level planning and the implementation of a referral network that links clinical services with community and support services across the continuum. Regular dialogue and meetings based on structures already in place and the proposed structures should be held to share experiences and resolve issues of interest to all relevant stakeholders.

Registration and Accreditation

The NASCP will initiate a registration process that would enable it to have an up-to-date register of all HTS sites in the country. Each of the sites will be expected to demonstrate compliance with the minimum standards that have been set in the guidelines after which they

will be issued with a unique site code. The NASCP in collaboration with the National Task Team on HTS conduct an annual review of the state of the facilities/sites and training institutions providing HTS and training using the tools developed by NASCP for this exercise. The purpose of the review will be to ascertain compliance with national standards in the execution of their services. The areas to be assessed will include: staffing levels, adherence to protocols, availability of test kits and consumables, availability of educational materials and condoms, availability and use of record keeping format and tools as well as general aspects of site operation. The review will also facilitate and stimulate quality improvement and give recognition to sites that are performing well. The task team after the review exercise will make necessary recommendations for sanction or accreditation. A certificate will be disbursed to the sites by NASCP through the SMOH.

CHAPTER 11: REFERENCES

1. Annual report on HIV/AIDS Health sector Response in Nigeria 2015
2. ENR. 2014. Enhancing Nigeria's Response to HIV & AIDS Programme 2009 – 2014: Final Report.
3. Federal Government of Nigeria (2009): National Policy on HIV & AIDS
4. Federal Ministry of Health (2003): National HIV & AIDS and Reproductive Health Survey
5. Federal Ministry of Health (2005): Technical Report, National HIV/Syphilis Sero-prevalence Sentinel Survey among pregnant women attending antenatal clinics in Nigeria
6. Federal Ministry of Health (2005): Scale-Up Plan on Prevention of mother-to-child transmission (PMTCT) of HIV in Nigeria
7. Federal Ministry of Health (2003): Scale-Up Plan for Antiretroviral therapy in Nigeria
8. Federal Ministry of Health (2005): National Health Sector Strategic Plan for HIV & AIDS
9. Federal Ministry of Health (2005): National situation analysis of the Health sector to HIV & AIDS in Nigeria
10. Federal Ministry of Health (2006): National Guidelines for HIV/AIDS Counselling and Testing
11. JSI/Deliver, PHR+ and Policy Project/Nigeria (2004): Rapid Assessment of HIV & AIDS Care in the Public and Private Sectors
12. Ministry of Health, Kenya (2004): Kenya National Strategy for VCT Scale-Up.
13. National Action Committee on AIDS (2005): Nigeria HIV/AIDS Country Report: Preview
14. National Agency for the Control of AIDS (NACA). 2015. GLOBAL AIDS RESPONSE: Country Progress Report
15. National Population Commission (2005): Demographic Health Survey
16. Nathan E, et al (2003): Quality assurance of HIV screening tests in Lagos Nigeria. Abstract No 125539. Paper presented at the 13th International conference on AIDS and STIs in Africa, Nairobi, Kenya
17. National Action Committee on AIDS (2005): HIV/AIDS National Strategic framework for Action 2005-2009
18. WHO/UNAIDS/GTZ/HIV/AIDS Alliance (2005): Scaling-Up HIV testing and counselling services, a toolkit for programme managers
19. WHO Geneva (1998, 73, 321-328): Weekly Epidemiological Record: The importance of simple/rapid assays in HIV Testing
20. WHO Consolidated guidelines on HTS (July 2015)