



March 2013

FEDERAL MINISTRY OF HEALTH
DEPARTMENT OF PUBLIC HEALTH

Guidelines for Community Tuberculosis Care In Nigeria

NATIONAL TUBERCULOSIS AND LEPROSY CONTROL PROGRAMME



USAID
FROM THE AMERICAN PEOPLE



fhi360
THE SCIENCE OF IMPROVING LIVES

CONTRIBUTORS

Dr. J.O. Obasanya
*National Coordinator, National TB and
Leprosy Control Program (NTBLCP)*

Dr. N. Chukwurah
Deputy Director, NTBLCP

Dr. S. Ogiri
WHO NPO-TB North- Central Zone

Dr. S. Labaran
ACSM Focal person, NTBLCP, FMOH

Dr. A. O. Awe
NPO – TB, WHO

Dr. A. F. Omoniyi
WHO NPO TB/HIV

Dr. M. Gidado
KNCV/TBCARE I

Dr. V. Obot
STBLCO, Akwa Ibom

Dr. N. Chukwueme
M&E Focal person, NTBLCP

Dr. B. Muyiwa
Director Prog, SPETBN

Mr. H. Morakinyo
CBTS Specialist, IHV/AR

Mr. C. Wuraola
M&E Manager, HAF

Mr. I. Alobu
STBLCO, Ebonyi

Mrs. R. Kusimo
Program Officer, ARFH

Mrs. R. Osho
Environmental Health officer, NTBLCP

Dr. M. Jose
NPO-TB, South–South zone, WHO

Dr. V. Babawale
NTBLCP

Dr. M. Odo
Associate Director – FHI 360

Dr. T. Idaboh
Technical Officer – FHI 360

Dr. E. Nkombe
Technical Officer – FHI360

Dr. B. Olusola-Faley
Technical Officer – FHI360

Dr. S. Olanrewaju
Senior Technical Officer - FHI 360

Dr. E. Oyama
WHO

Dr. E. Onu
MGIC

Mr. A. John
MGIC

Dr O. J. Kuye
NTBLCP

Mr. T. Nwosu
TEEPAC

Mr. A. Dalhatu
*National TB and Leprosy Training Centre
(NTBLTC)*

Dr. A. U. Namadi
Medical Adviser, NLR

Dr. Z. Mohammed
NTBLTC, Zaria

Dr. R. Agbaje
Institute of Human Virology Nigeria (IHVN)

Dr. S. Dutt
IHVN

Mr. S. Gurumdi
IHVN

TABLE OF CONTENTS

| | |
|---------------------------------------------------------------------------|-----------|
| CONTRIBUTORS | 1 |
| TABLE OF CONTENTS | 2 |
| ACRONYMS | 4 |
| ACKNOWLEDGEMENT | 5 |
| PREFACE | 6 |
| 1. INTRODUCTION | 7 |
| 1.1. Background | 7 |
| 1.2. Tuberculosis Burden in Nigeria | 7 |
| 1.3. The National Tuberculosis and Leprosy Control Programme | 7 |
| 2. ENGAGING COMMUNITIES FOR TB SERVICES | 9 |
| 2.1. Guiding Principles | 9 |
| 2.2. Objectives of CTBC | 9 |
| 2.3. Partnership for Community TB Care | 9 |
| 2.4. Coordination of Community TB Care | 12 |
| 3. IMPLEMENTATION OF COMMUNITY TB CARE | 13 |
| 3.1. Diagnostic approach for drug susceptible TB | 13 |
| 3.2. Diagnostic approaches for DR TB | 14 |
| 3.3. Management of Drug Susceptible TB | 15 |
| 3.5. Management and Monitoring of Drug Resistant TB | 16 |
| 3.6. Community Approach for TB Infection Control | 16 |
| 3.7. Role of CBOs/CSOs/CVs | 16 |
| 4. DEMAND CREATION | 17 |
| 4.1. Use of Community Channels | 17 |
| 4.1.1. Community Gatekeepers/ Traditional Rulers/ Religious Leaders | 17 |
| 4.1.2. Heads of Community Associations / Groups | 17 |
| 4.1.3. Leadership of PLHIV Support Groups | 17 |
| 4.1.4. Media / Local Communication Channels | 18 |
| 4.1.5. Health Care Centres | 18 |
| 4.2. The Role of Communities in TB Programme Sustainability | 18 |

| | |
|----------------------------------------------------------|-----------|
| 5. SUPERVISION | 19 |
| 6. MONITORING AND EVALUATION | 20 |
| 6.1. Monitoring of Patients during Treatment..... | 20 |
| 6.2 Recording and Reporting | 20 |
| 6.3. CTBC Monitoring Tools and Responsibilities | 21 |
| 6.4. Indicators for Monitoring CTBC | 21 |
| 6.5. Routine Monitoring of CTBC activities..... | 22 |
| 6.5.1. State Review meetings..... | 22 |
| 6.5.2. Quarterly Review meetings of CVs..... | 22 |
| 6.6. Evaluation of CTBC..... | 22 |
| 7. CONCLUSION | 23 |
| ANNEX: STANDARD OPERATING PROCEDURES (SOPS) | 24 |
| REFERENCES..... | 36 |

ACRONYMS

| | |
|----------------|--------------------------------------------------------|
| ACSM | Advocacy, Communication and Social Mobilization |
| AFB | Acid Fast Bacilli |
| AIDS | Acquired Immunodeficiency Syndrome |
| BCC | Behavioural Change Communication |
| BCG | Bacille Calmette-Guerin |
| CBOs | Community-Based Organisations |
| CDC | Community Development Committee |
| CHW | Community Health Worker |
| CP | Continuation Phase |
| CSOs | Civil Society Organisations |
| CTBC | Community TB Care |
| CV | Community Volunteer |
| DOT | Direct Observation of Treatment |
| DOTS | Directly Observed Treatment Short course |
| DST | Drug susceptibility testing |
| FCT | Federal Capital Territory |
| FMOH | Federal Ministry of Health |
| GHCWs | General Healthcare Workers |
| GFATM | Global Funds to fight AIDS, Tuberculosis and Malaria |
| HIV | Human Immunodeficiency Virus |
| HPE | Health Promotion and Education |
| IC | Infection Control |
| IEC | Information, Education and Communication |
| IP | Implementing Partner |
| LGA | Local Government Area |
| LGTBLCP | Local Government TB and Leprosy Control Programme |
| MDR-TB | Multidrug-Resistant Tuberculosis |
| MGIC | Maryland Global Initiative Corporation |
| NGO | Non-Governmental Organisation |
| NPI | National Programme on Immunisation |
| NTBLCP | National Tuberculosis and Leprosy Control Programme |
| NTBLTC | National Tuberculosis and Leprosy Training Centre |
| PHC | Primary Health Care |
| PLHIV | Persons Living with HIV/AIDS |
| PTB | Pulmonary Tuberculosis |
| PMDT | Programmatic Management of Drug-resistant Tuberculosis |
| SAPC | State AIDS Program Co-ordinator |
| STBLCO | State TB and Leprosy Control Officer |
| STBLCP | State TB and Leprosy Control Programme |
| TB | Tuberculosis |
| TBLS | Tuberculosis and Leprosy Supervisor |
| TOT | Training of Trainers |
| TS | Treatment Supporters |
| TSR | Treatment Success Rate |
| WHO | World Health Organization |

ACKNOWLEDGEMENT

The Guidelines for Community Tuberculosis Care in Nigeria was developed by the National Tuberculosis and Leprosy Control Programme (NTBLCP) in collaboration with all development Partners. It harmonizes previous documents in Community TB Care to include strategic approaches to managing both drug susceptible and resistant Tuberculosis in the community. It also provides guidance on ACSM related activities at the state and community level.

We would like to acknowledge in particular, the technical support of WHO, TBCARE I, FHI 360, IHVN and the National DR-TB committee in this process. Special thanks to FHI360 for the editing and printing of this document which were financed through support from the United States Agency for International Development (USAID)

Dr. Joshua Obasanya

National Coordinator, NTBLCP

PREFACE

The scale of tuberculosis burden in Nigeria is such that TB care and control require concerted efforts beyond the confines of health facilities to other relevant institutions including communities. This is particularly relevant in the context of an era of drug-resistant tuberculosis and high TB/HIV co-infection rate as currently is the situation in the country. In line with the National Strategic Health Development Plan Framework, community participation and ownership in health is one of the eight priority areas to improve the Nigerian health system. This is core to the sustainability of the health system in the country.

National efforts at promoting community participation in health are not new to the Nigerian health system. This is exemplified by the introduction of Primary Health Care in 1986 following the 1978 Alma-Ata declaration. Among others, the declaration identified community participation as a key principle of Primary Health Care and central to the attainment of the 'Health for All' goal. Community participation in health involves processes that lead to individuals, families and communities who share common interests, being involved and taking greater control over their health. This includes taking actions aimed at preventing diseases and having the capacity to know what to do as well as to seek for health care in the event of ill health. The Alma-Ata declaration was very unequivocal in the central role of individuals and communities in health delivery: "The people have the right and duty to participate individually and collectively in the planning and implementation of their health care". In this sense, community participation in health is therefore considered an issue of social justice as individuals and families have the right to participate in decisions affecting their health.

This document provides a framework for the engagement of individuals, communities, Community-Based Organisations, Ward Development Committees and other bodies in tuberculosis care and control. It provides guidelines for strengthening linkages between the community and health services delivery points through creation of demand for TB services, monitoring of TB patients on treatment and tuberculosis infection control, in a manner that promotes sustainability of TB service delivery and community ownership of TB control interventions.

I implore all stakeholders to use this guideline to adequately harness the potentials of TB care and control in the community.

Prof. Onyebuchi C. Chukwu
Honourable Minister of Health

May, 2013.

1. INTRODUCTION

1.1. Background

With an estimated population of 160 million people (projected from the 2006 census), Nigeria is the most populous country in Africa with a landmass of 923,768 km², which is composed of about 350 ethnic groups, with diverse languages and religious faiths.

The three main ethnic groups are the Hausa (North), Igbo (South-East), and Yoruba (South-West). The official language is English. Over 60% of the population reside in the rural communities and are mainly agrarians. Rural-urban migration is a common phenomenon, leading to overloading of existing infrastructure, including health services, in the urban areas.

Nigeria's government has three tiers: federal, state, and local government area (LGA). The country is composed of 36 states and the Federal Capital Territory (FCT). Each state has between six and 44 LGAs (referred to, as area councils in some cases), with a total of 774 LGAs in the country. The federal government is headed by an elected President, with a bicameral National Assembly (House of Representatives and Senate) as the legislative arm. The states are governed by elected governors and each has a State House of Assembly. The LGAs are governed by elected chairpersons and each has an LGA Legislative Council.

The federal structure as outlined in the Nigerian Constitution provides for some level of administrative as well as financial autonomy at the state and LGA level. The country's revenues are generated centrally and shared among the three tiers of government on a monthly basis. However, states and LGAs also generate local revenues. Each tier of government prepares its own annual plan and budget for execution based on need.

For socio-political reasons, the states are grouped into six geopolitical zones: North-East, North-West, North-Central, South-West, South-East, and South-South. These zones differ in terms of geographical size, ecologic characteristics, language and culture, settlement patterns, economic opportunities, and historical factors. However, the zones do not have any administrative function. The responsibility for health care cuts across the three tiers of government.

1.2. Tuberculosis Burden in Nigeria

Nigeria ranks tenth among the 22 high tuberculosis (TB) burden countries in the world and the fourth highest in Africa, with over 190,000 estimated cases of all forms of tuberculosis annually. The country has an estimated incidence of 118 per 100,000 population per year of all forms of TB and prevalence of 171 per 100,000 population (*WHO Global TB Report 2012*).

With a 50% case detection rate (CDR) for all forms of TB in 2012, Nigeria falls short of the 70% CDR target. However, in 2012 Nigeria achieved a treatment success rate (TSR) of 85.5% (among new smear positive cases registered in the preceding year) which surpasses the target of 85%. The 2012 TSR considerably improved upon the 79% TSR achieved in 2002. Data from National Tuberculosis and Leprosy Control Programme (NTBLCP) revealed that case notification rate for all forms of TB has also increased from less than 25 per 100,000 population in 2004 to 59 per 100,000 population in 2012. In absolute numbers, all forms of TB cases notified have also increased from 31,164 in 2002 to 97,799 in 2012.

1.3. The National Tuberculosis and Leprosy Control Programme

The National Tuberculosis and Leprosy Control Programme (NTBLCP) is the body responsible for coordinating TB, leprosy, and Buruli ulcer control activities throughout Nigeria. The program operates under the Federal Ministry of Health (FMOH) Department of Public Health. The goal of the NTBLCP is to significantly reduce the burden, socio-economic impact, and transmission of TB in Nigeria. The overall objectives of the NTBLCP are:

1. To reduce TB prevalence to a level at which the disease no longer constitutes a public health problem in the country.
2. To prevent and reduce the impairments associated with leprosy, as well as provide appropriate rehabilitation for persons affected by leprosy.

The NTBLCP's strategy to control TB in Nigeria is in line with the new Stop TB strategy recommended by the WHO. It has the following elements:

1. Pursue high-quality DOTS expansion and enhancement through
 - Political commitment with increased and sustained financing;
 - Case detection through quality-assured bacteriology;
 - Standardized treatment, with supervision and patient support;
 - Effective drug supply and management system; and
 - M&E system and impact measurement.
2. Address TB/HIV, MDR-TB, and the needs of poor and vulnerable populations.
3. Contribute to health system strengthening.
4. Involve all care providers.
5. Engage people with TB and affected communities.
6. Enable and promote research.

Community Tuberculosis Care (CTBC), which is a patient centered approach, creates an operational partnership between the DOTS facility and the community. Following the adoption of the Stop TB strategy in 2006, CTBC was introduced as one of the components in enhancing TB control. It focuses on empowering the communities and the patients affected by TB.

The NTBLCP structure corresponds to the three levels of government: federal, state, and LGA. The national level, referred to as the NTBLCP Central Unit, is responsible for facilitating policy development on TB control, as well as tertiary care, resource mobilization, program evaluation, human resource development, and technical support to state programs.

At the state level, the NTBLCP is under the Director of the Department of Disease Control; the day-to-day program implementation and supervision are carried out by state TB and leprosy control officer(s), supported by state TB and leprosy supervisors. State TB and leprosy programs coordinate TB and leprosy activities in their respective states, and provide secondary care and technical assistance to LGAs.

The LGA is the operational level of the NTBLCP, which is based on the primary health care (PHC) system. At this level, TB and leprosy control activities are the responsibility of local government TB and leprosy supervisors. PHC workers carry out TB and leprosy activities in close collaboration with their respective communities. In fact, the LGA is the basic management unit of the NTBLCP at all health facilities where TB and leprosy activities are carried out and coordinated.

In addition, there is an existing TB network which operates along the three levels of government with a board of trustees. There is the National Steering Committee (NSC), composed of 12 members in line with the Nigerian Zonal systems; the Zonal Steering Committee (ZSC) in each geo-political zone is comprised of two NSC members as well as the State Focal Persons from the zone, who presides over state affairs. At the state level, each State Chapter is headed by an elected five-member State Steering Committee (SSC) similar to the NSC. At the LGA level there are community based organizations (CBOs) and civil society organizations (CSOs) who work in collaboration with community volunteers (CVs) in creating awareness in the communities, thereby increasing case detection.

2. ENGAGING COMMUNITIES FOR TB SERVICES

Community engagement is a process of working collaboratively with and through groups of people affiliated by geographic proximity, special interests, or similar situations to address issues affecting the wellbeing of those people. In order to reach the unreached and to find and detect TB patients and manage TB patients efficiently, a wider range of stakeholders already involved in community-based activities needs to be engaged.

The strengths of nongovernmental organizations (NGOs), other CSOs active in health care and other development interventions at the community level include their reach, spread and their ability to engage marginalized or remote groups. These organizations have a comparative advantage because of their understanding of the local context and terrain. Greater collaboration between NGOs and other CSOs and local and national governments could greatly enhance development outcomes. A more decentralized approach that formally recognizes the critical role of NGOs and other CSOs as partners addressing gaps through support to community-based actions will expand TB prevention, diagnosis, treatment, and care activities.

2.1. Guiding Principles

In engaging communities in TB care, the following are key guiding principles:

- **Community participation:** This entails that the community is involved in the planning, implementation, and evaluation of TB control activities in the community.
- **Operational partnership:** This ensures that all stakeholders work in very close collaboration, building on one another's strengths, while strengthening each other's weaknesses to maximize the potential for TB control at the community.
- **Subsidiarity:** This allows the TB control programme at all levels to enable communities build on their latent potential to control TB in the community.
- **Solidarity:** This is the moral responsibility of community members to identify and share in the challenges and problems of the TB patient, while recognizing and defending the dignity and right to life of one another. Solidarity reduces stigma and discriminations, which violate human dignity.

- **Ownership:** CTBC is built on the belief that the community should be seen and see itself as an integral part of the programme. In this way, the programme will enjoy the support of community members and ultimately lead to sustainability
- **Sustainability:** Together with quality service delivery, this is the hallmark of an effective CTBC Program.

2.2. Objectives of CTBC

Based on the 2010-2015 National Strategic Plans for TB control, the specific objectives of CTBC are:

- I. To establish community TB care (CTBC) activities in at least five LGAs per state by end of 2015; and
- II. To empower communities and TB patients to identify and refer TB suspects for early diagnosis and treatment.

2.3. Partnership for Community TB Care

For proper implementation of CTBC activities there must be a functioning partnership between the health system and the communities. To achieve this, engagement of all key players or stakeholders is important. Stakeholders involved in the implementation of CTBC in Nigeria include any person or organization that is motivated and has the capacity to be part of the successful implementation of the programme.

Stakeholders and their responsibilities for supporting implementation of community TB care are summarized in the table below.

| STAKEHOLDER | ROLES AND RESPONSIBILITIES |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| State TB Control Officer | <p>Oversee the proper coordination of Community TB Care</p> <p>Identify LGA for CTBC activities based on criteria set out in the SOP</p> <p>Collaborate with CSOs to identify, select, and train relevant CBOs and CVs</p> <p>Ensure that CTBC data are reported to the NTBLCP and feedback is given across levels</p> <p>Follow up and ensure that all implementing partners adhere to the national CTBC guidelines through monitoring visits, meetings, etc.</p> |
| Local Government TB Supervisor | <p>Identify communities and advise CBOs appropriately to carry out mobilization, sensitization, and awareness programs</p> <p>Provide technical support and supervision for social mobilization activities of CBOs</p> <p>Support the community volunteer/ treatment supporter (TS) in defaulter / contact tracing</p> <p>Provide training support and supervision for the general health worker (GHW), CV, and TS</p> <p>Facilitate in quarterly review meetings for CVs, CBOs, GHWs and TB Network</p> <p>Work with all patients from the LGA to identify which facility each patient will be linked to for post hospitalization treatment for DR-TB</p> |
| General Healthcare Worker/DOT Provider | <p>Facilitate the diagnosis of TB</p> <p>Work in collaboration with the patient to identify an acceptable TS</p> <p>Provide health education to both patients and CV/TS</p> <p>Be custodian of all TB drugs for patients in the community</p> <p>Assist the CV/TS in the provision of health promotion to the community</p> <p>Update records of drug intake using completed treatment support cards by the CV/TS</p> <p>Supervise CV/TS</p> <p>Support CV/TS in defaulter tracking and contact tracing</p> <p>Maintain a database of the CV/TS working within the communities around each DOTS/Health facility</p> <p>Provide TS with treatment supporter's cards</p> <p>Be involved in implementing DR-TB community activities</p> |
| Community Volunteer (CV) | <p>Lead health promotion activities within the community with an emphasis on signs and symptoms of TB and inform community members where services are available and can be assessed</p> <p>Identify people who have been coughing for two weeks or more and provide referrals to DOT centres for sputum examination, diagnosis and follow-up</p> |

| | |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Mobilize the community to support TB activities |
| | Support activities for defaulter and contact tracing |
| | Provide other supportive activities for the enhancement of TB services, e.g. serve as treatment supporter |
| Treatment supporter | Ensure daily Directly Observed Treatment (DOT) throughout the duration of treatment |
| | Record patients' treatment on the patient treatment support card |
| | Recognize danger signs/side effects and refer patient to the Health facility/DOT centre |
| | Support patients by collecting drugs from health facilities every two weeks/month using the treatment support card |
| | Remind patients to return to health facility for follow up sputum examination |
| | Ensure proper storage of patients' TB drugs in the community |
| | Inform health workers of any interruptions of treatment |
| | Provide care and support to the patient, e.g. psychosocial support |
| Patient and family members | Provide as much information as possible to healthcare providers about present health, past illnesses, and allergies of the patient |
| | Provide information to healthcare providers about contacts with immediate family, friends and others who may be vulnerable to TB or who may have been infected |
| | Follow the prescribed and agreed treatment regimen and comply with the instructions to protect the patient's health and that of others |
| | Inform healthcare providers of any difficulties or problems in following treatment, or if any part of the treatment is not clearly understood |
| | Contribute to community well-being by encouraging others to seek medical advice if they exhibit symptoms of TB |
| | Show consideration for the rights of other patients and healthcare providers |
| | Share information and knowledge gained during treatment with others in the community |
| | Join in efforts to make the community free of TB |
| Community Based Organizations | Facilitate entrance of health programs and interventions into the community |
| | Lead community mobilization |

| | |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| | Facilitate the selection of volunteers through Community Development Committees (CDCs) |
| | Help lobby for government commitment to TB control |
| | Ensure accountability of local health services to the community |
| | Facilitate feedback to the communities |
| | Facilitate monthly meetings of CVs |
| | Participate in quarterly review meetings of CVs, CBOs, GHCWs and TBLS |
| | Supervise activities of the CVs |
| Community Pharmacist and Patent Medicine Vendors (PMV) | Educate their clients on symptoms and signs of TB |
| | Identify and refer TB suspects |
| | Serve as treatment supporters (TS) where applicable |
| TB Network (National and State) | Map all CSOs and CBOs working in TB at the community and LGA levels |
| | Identify, build capacity, and facilitate the registration of potential members |
| | Monitor and supervise activities of the CSOs and CBOs at the community level |
| | Coordinate the implementation of CTBC activities by CBOs and other member organizations |
| | Collaborate with other partners in implementing CTBC activities at the community level |
| International partners/ Development agencies | Mobilize resources for CTBC activities. |
| | Support NTBLCP in the development of CTBC guidelines and SOPs |
| | Implement CTBC in accordance with the national CTBC guideline |
| Media | Promote public understanding that TB is curable and treatment is available using appropriate methods |
| | Promote demand creation for available services through public awareness programs, World TB Day Activities, etc. |

2.4. Coordination of Community TB Care

For the effective management and coordination of CTBC activities, the NTBLCP should coordinate activities of CTBC through the National CTBC Steering Committee.

Members of the national committee comprise of NTBLCP, TB network reps and supporting partners.

3. IMPLEMENTATION OF COMMUNITY TB CARE

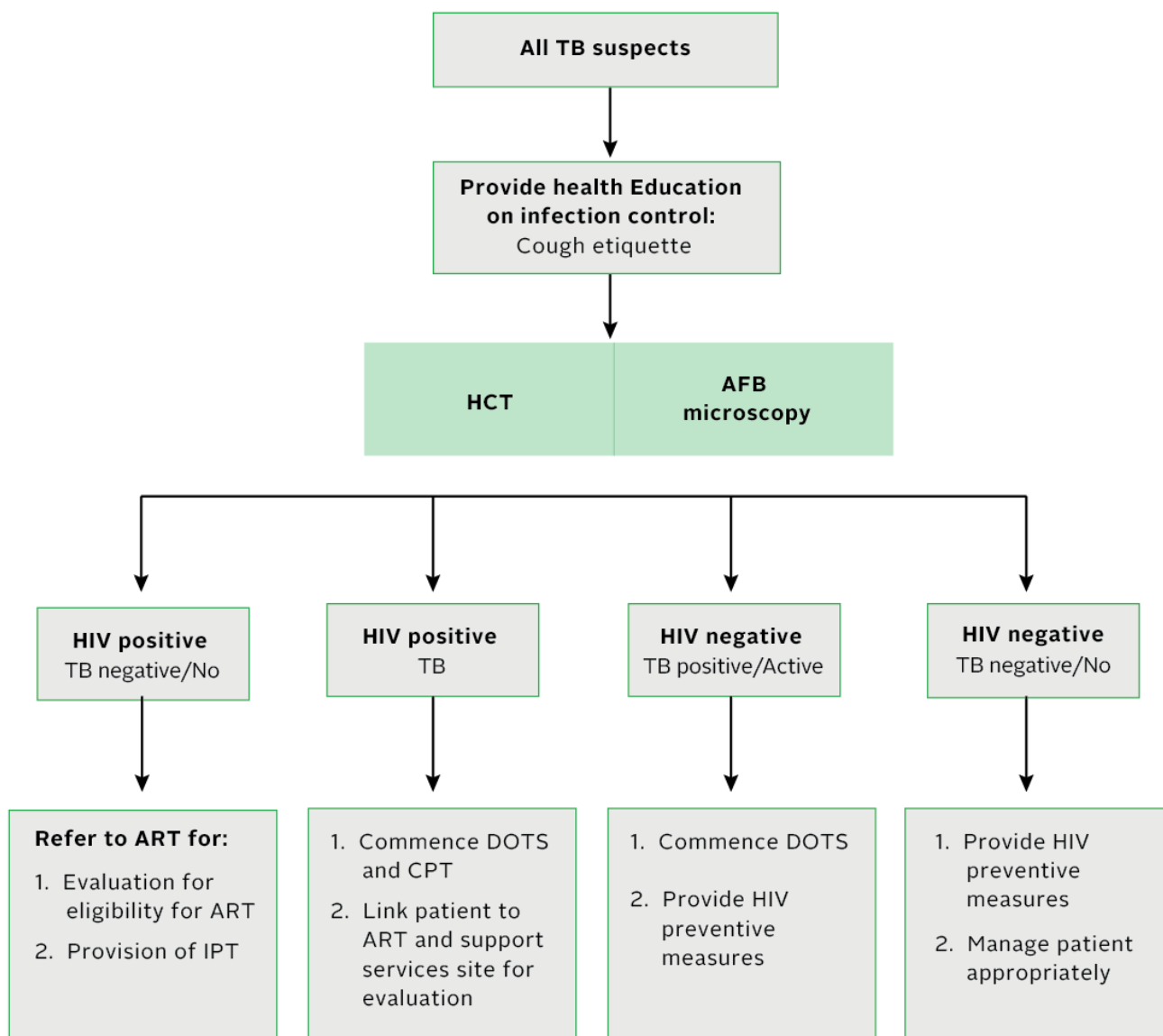
3.1. Diagnostic approach for drug susceptible TB

The main approach to diagnose TB is through identification of TB suspects within the communities, at health care facilities and HIV service points.

The TB suspect as defined by the NTBLCP TB manual is any patient with a history of cough for two weeks or more and any current history of cough among people

living with HIV (PLHIV). The approach emphasizes on the concept of “one patient, two possible diseases”.

Approaches for Management of TB Suspects

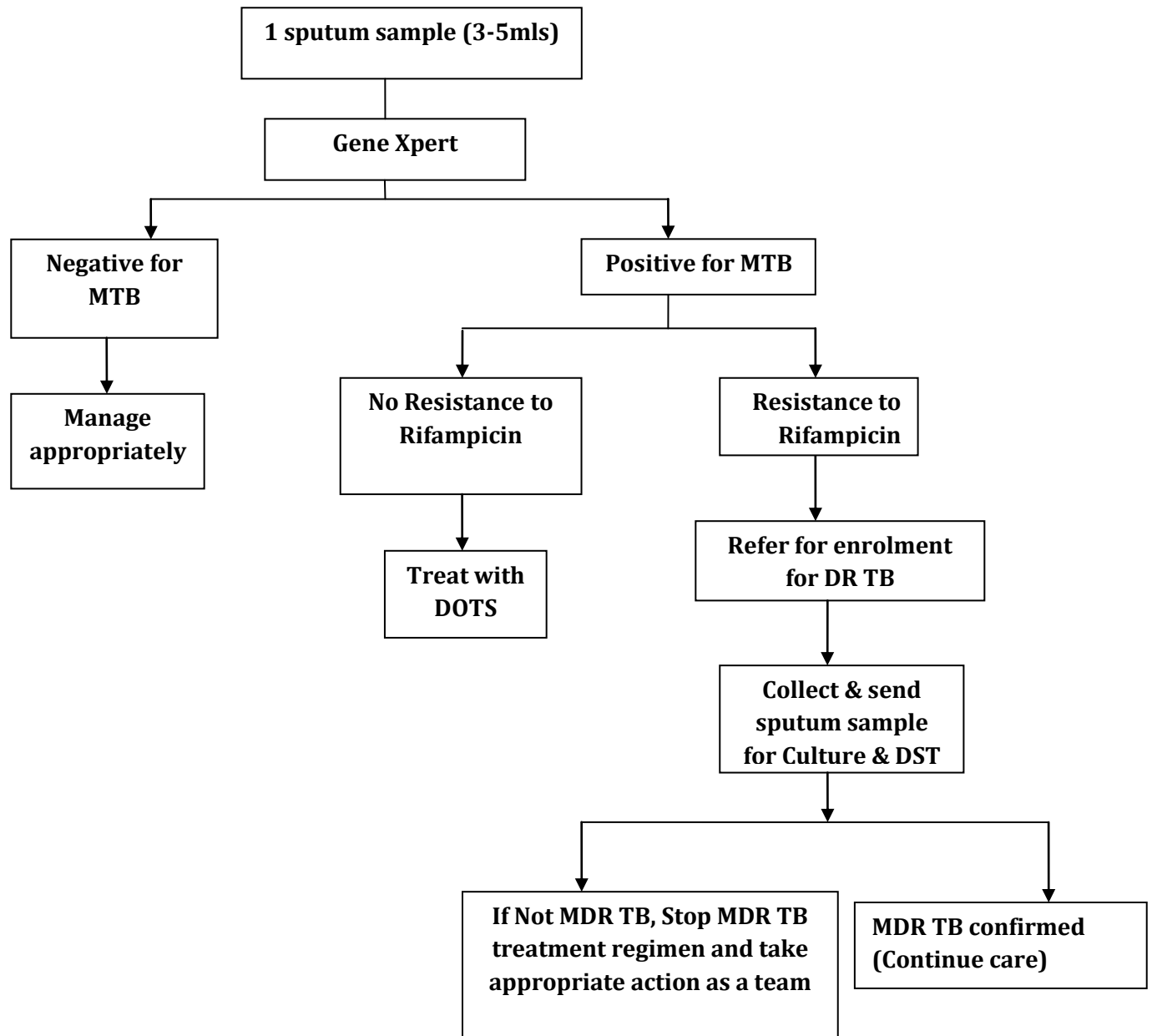


3.2. Diagnostic approaches for DR TB

Sputum samples are collected from drug resistant (DR) TB suspects by general healthcare workers (GHCWs) and sent to designated laboratories for diagnosis in

collaboration with Local Government TB and Leprosy Control Supervisors and State TB and Leprosy Control Officers (LG TBLS/STBLCO). Results are communicated back to the facility via the LG TBLS/STBLCO. The algorithm is as follows:

Diagnostic Algorithm for the GeneXpert MTB/Rif



3.3. Management of Drug Susceptible TB

The management of drug susceptible TB within the NTBLCP is six months; because a Rifampicin-containing regimen must be supervised, patients have the option of being treated in a health facility or in the community. If the community option is preferred by the patient, the healthcare worker/DOTS provider and the patient should work together to identify a suitable treatment supporter (TS) for the patient and the healthcare worker should refer to the SOPs for engagement of treatment supporters. The treatment supporter and the patient visit the facility every two weeks for refill of drugs and assessment of the patient's condition.

3.4. Monitoring of treatment

Monitoring of treatment is done by collection and examination of a sputum specimen at month two, five, and six of treatment. Drug resistant TB should be suspected in any patient who remains sputum smear positive at any point of treatment and should be investigated. Additionally, any patient who is seriously ill during treatment should be taken to the health facility.

Any patient who's' result remains sputum smear negative at month five and at the end of the treatment is said to be cured.

3.5. Management and Monitoring of Drug Resistant TB

The management strategy for drug resistant TB is a mixed-model, where patients are admitted at the MDR TB treatment center for at least three months. After three months in the facility, stable patients are discharged to DOTS centres within the community for continuation of care with support from the state Programmatic Management of Drug resistant TB (PMDT) team. In the "Community management model" of DR TB, patients will be enrolled for treatment at the field level in the DOTS clinics from the onset of their management. Complimentary lab and clinical support structures including a trained state team/consortium will be put in place.

Due to the toxicities of the medication, adverse drug reactions (ADRs) and serious illnesses may occur. This

situation must be reported to the DOTS provider who will complete the ADR form and inform the LG TBLS.

Sputum specimens should be collected monthly for acid fast bacilli (AFB) microscopy and every 2 months for culture and drug susceptibility testing (DST). The treatment supporter should ensure that patients go to the DOTS centre where the sputum specimen will be collected. The LG TBLS will transport the specimen to the nearest microscopy and culture laboratories respectively for testing.

3.6. Community Approach for TB Infection Control

The community approach for TB infection control is described by the following;

- Early identification of TB suspects and referrals for diagnosis
- Support to ensure that timely results are made available to patients for early commencement of treatment
- Support effective adherence for patients on treatment
- Ensure community awareness on cough etiquette and hygiene
- Provide patient/family education on ensuring adequate ventilation within the household
- Support tracing of household contacts of index cases with emphasis on DR TB cases

3.7. Role of CBOs/CSOs/CVs

To ensure the effective implementation of community TB care and infection control, the CVs working on the coordination and management of the CBOs shall perform the following task;

- Supervise treatment supporters
- Ensure defaulter tracking/tracing
- Support contact screening
- Support patients to return for follow up examinations
- Contribute to community awareness activities on importance of adherence to TB medication and treatment completion

4. DEMAND CREATION

The public health burden posed by tuberculosis cannot be overemphasized. In order to increase case detection and improve on treatment success in Nigeria, communities have a critical role to play in creating demand for available TB treatment services.

As part of creating demand, communities should be involved in identifying new TB cases, guiding community members to access appropriate care from facilities, and providing support to ensure that TB patients complete their care in a timely manner.

Within communities, several groups can play vital roles which can support the goal of generating demand, and improving TB case detection in Nigeria using the approaches outlined in the National Advocacy, Communication and Social Mobilization (ACSM) Guidelines.

In supporting demand creation, awareness-raising and education activities should focus on providing a core package of information to community members. Such activities should aim at educating communities on the following key areas:

- Basic facts and causes of TB
- Transmission of TB and TB prevention
- Common myths and misconceptions
- Signs and symptoms - How to suspect TB
- Treatment to cure TB
- Availability of free testing and treatment services
- Location of TB services and how they can be accessed
- Community roles in addressing stigma and discrimination of TB patients
- Community roles in adherence counseling support
- Linkages between TB/HIV and infection control
- Community roles in managing DR TB (treatment support, economic and psychosocial support); *this information would only be necessary for communities where DR TB is a problem.*

4.1. Use of Community Channels

A range of community channels have been identified as platforms through which accurate information can be disseminated to community members in order to facilitate uptake of services. These critical channels can

work in partnership with LG TBLS, CVs and healthcare workers. Their roles are described below.

4.1.1. Community Gatekeepers/ Traditional Rulers/ Religious Leaders

- Serve as entry points into the community and create spaces and platforms to sensitize and educate community members about TB. Such platforms include village square meetings, church/mosque sermons, community gatherings, etc.
- Promote the regular use of local communication channels (town announcements, community radio, print materials) to raise awareness of community mobilization events such as the World TB Day, World AIDS Day, New Yam Festivals, traditional meetings, and religious events
- Create space and support the LG TBLS in reaching out to unreached community members, particularly mobile populations, e.g. Fulani Herders
- Advocate to Local Government Chairmen and other critical policy makers for strengthening of existing health systems in the community

4.1.2. Heads of Community Associations / Groups

- Provide regular time slots within their regular association meetings (Ward Development Committees, market women, youth groups, artisans, road transport workers, Motorcycle Riders Association meetings) for health talks provided by LG TBLS, CVs or related health personnel, which incorporates the key areas on TB education and awareness
- Utilize interpersonal communication channels to raise awareness among association members of the need to support treatment adherence for TB patients

4.1.3. Leadership of PLHIV Support Groups

- Educate support group members on TB/HIV and infection control
- Engage members to support TB patients amongst them, and to adhere to treatment

- Participate and engage in routine public enlightenment events in partnership with religious groups and community associations to highlight the issues of TB/HIV

4.1.4. Media / Local Communication Channels

- Utilize existing traditional communication channels (town criers, community radio jingles, television / video clips, billboards, Information, Education and Communication (IEC) materials to promote TB control as a social responsibility
- Utilize innovative communication channels (mobile phones/SMS, social media, MP3, loud speakers)

4.1.5. Health Care Centres

- Utilize platforms such as regular antenatal health talks to educate pregnant women on basic facts on TB, the need for Bacille Calmette-Guerin (BCG) vaccination and how to mitigate the potential risks of exposure of newborns to TB infection
- Utilize the spaces offered by the health facilities (such as posters, IEC materials, waiting area TV programs) to educate visitors on basic facts on TB and where to access services

4.2. The Role of Communities in TB Programme Sustainability

Communities have a role to play in monitoring the quality of services and providing feedback to relevant authorities as well as ensuring the continuity and

uninterrupted access to TB services in order to protect public health.

Communities, by leveraging on the networks of existing groups, can do the following to promote TB programme sustainability in collaboration with the LG TBLS:

- Engage in the selection process for community volunteers and ensure the commitment and accountability of the selected volunteers
- Partner with trained CVs to organize mentorship/ peer-to-peer trainings in order to expand the capacity of community members in supporting TB care
- Integrate TB awareness programmes as a regular feature in community dialogues, town hall meetings, religious events, traditional gatherings, etc.
- Engage in monitoring TB services (using community associations such as Ward Development Committees) in providing feedback to LGAs and respective community leaders on gaps and challenges that need to be addressed
- Advocate to relevant policy makers for equitable allocation of resources and infrastructure to establish or strengthen TB service delivery at the community level
- Support the strengthening of delivery of TB services at the community level (e.g. provide enablers for CVs to function more effectively, like work with Road Transport Unions to transport CVs and provide conducive accommodation to house DOTS facilities)

5. SUPERVISION

The overall responsibility for supervision at the health facility and community level for CTBC lies with the LGA TBL Supervisor. However, supervision of CTBC should be incorporated into supervisory activities at other levels (national, zone, state and other partners).

To facilitate this, supervisory checklists should be updated to include CTBC. Supervision of CTBC activities by the LG TBLs should be consistent with the existing supervisory structures within the Primary Health Care (PHC) outreach system and the NTBLCP. This should include the utilization of other levels of supervision including CBOs and community health workers. The aim is to ensure that CTBC implementers have the relevant skills and knowledge to implement TB care at the community level.

In terms of supervision, the responsibilities of LG TBLs include:

1. Supervise the activities of CBOs and CVs including community mobilization
2. Supervise training activities for the CBOs, CVs and Treatment Supporters
3. Collate case findings and treatment outcomes (disaggregate data for patients on CTBC)
4. Supervise other supportive activities by CVs e.g. defaulter tracking/ contact tracing

Additionally, CBOs should:

1. Supervise the activities of CVs
2. Check for completeness and correctness of documentation of CV referral forms and CV TB register

Lastly, the overall output of community TB and DR TB care is better patient outcome;

- GHCWs should review patient treatment support card every 2 weeks
- Feedback should be provided at all levels and actions to be taken should be discussed with the supervisees
- State DR TB teams should supervise the LGA TBLs/health facilities managing the DR TB patients monthly.

6. MONITORING AND EVALUATION

6.1. Monitoring of Patients during Treatment

Monitoring and evaluation (M&E) activities will follow the national M&E system for Drug Susceptible and Drug Resistant TB Management.

The patient treatment support card used by TSs should also be inspected to ensure compliance to treatment and recorded by the GHCW into the patient's treatment card kept at the health facility.

For DR TB, facility staff will update the DR TB treatment cards daily in collaboration with the treatment supporter's card, while the LGA TBLS will update the DR TB Treatment Register weekly. Where possible, LGA TBLS should be given access to the national electronic patient-level data base, the E-TB Manager, to update patient records weekly. Where there is a challenge to accessing the E-TB Manager at the LGA level, the LGA TBLS will report to the state Programme Manager monthly. The State Programme Manager/State M&E officer should update the E-TB Manager with the patient information.

The NTBLCP M&E system starts from the health facility level to the Central Unit of the programme. Within the community, a suspect is referred by the CV to the health facility within the LGA (see below for steps of information flow). The health worker at the health facility has the primary responsibility of ensuring that all components of the various reporting forms are filled in accurately and completely.

BOX 1: INFORMATION FLOW

1. At the health facility, the GHCW completes the TB suspect information and documents source of referral on the sputum clinic register;
2. For patients already receiving DOTS through a TS, the TS records daily observed treatment on the patient's treatment support card;
3. At the LGA level, the LGA TBL Supervisor collects and compiles all health facility data into the LGA summary form for suspects, LGA central Register, and quarterly reporting formats;
4. At the State level, the TBL Control Officer collates all LGA TB data into the quarterly reporting formats;
5. At the Zonal level, data is collated quarterly by the Zonal NPOs and NTBLCP M&E officer on a Zonal basis.
6. At the National level, the NTBLCP Central Unit collates all State TBL data on quarterly basis.

6.2 Recording and Reporting

Services provided to the patient should be recorded accurately to ensure monitoring and evaluation of the program.

1. The CV should enter suspects' details into the referral form and CV register
2. The healthcare worker should indicate the source of referral in the clinic suspect register
3. The TS should tick the patient treatment support card on a daily basis throughout the duration of the treatment or during the period of engagement to provide DOT
4. The healthcare worker should tick as appropriate on the patient treatment card if DOT is provided by a healthcare worker or TS/CV and indicate that care is through CTBC in the remark column
5. Healthcare worker should update the patient's treatment card and appointment card using the patient treatment support card
6. LGA TBLS should collate disaggregated data of both suspects and patients under CTBC by indicating source of referral in the LGA summary form for suspects, and provision of DOTS by CV/TS in the LG Central Register
7. A record of suspects referred to the health facility by the CV should be kept by the health facility and collated quarterly by the LGTBLS

6.3. CTBC Monitoring Tools and Responsibilities

The NTBLCP have standardized recording and

reporting tools which capture CTBC activities (see Table 2 for details)

TABLE 1: CTBC RECORDING AND REPORTING TOOLS

| S/NO | M&E FORMAT | M&E FORMAT | M&E FORMAT | M&E FORMAT | M&E FORMAT |
|------|--------------------------------|-----------------------------------------------------------------|------------|------------|-----------------------|
| 1 | CV referral form | Records of suspects presenting with cough for two weeks or more | Community | CV | Daily / Based on need |
| 2. | CV TB register | Records of suspects referred to health facilities for TB care | Community | CV | Daily / Based on need |
| 3. | Patient Treatment Support Card | Patients treatment records and progress | Community | TS | Daily |
| 4. | DR TB Treatment Support Card | Patients treatment records and progress | Community | TS | Daily |

6.4. Indicators for Monitoring CTBC

| INDICATOR | DEFINITION | FORMULA | DATA SOURCE | REPORTING PERIOD | WHO AND WHERE TO COLLECT | PURPOSE |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------|-----------------------------------|-------------------------------------------------------------------------------|
| Proportion of TB suspects referred by CVs | The number of TB suspects identified and referred by community volunteers among registered TB suspects | # of TB suspects referred by CVs/Total # of TB suspects registered | Clinic suspect register Quarterly summary form for suspects at LGA/State | Quarterly | Facility, LGA, State and National | To assess contribution of CVs, linkage between the community and DOTS clinics |
| Proportion of TB patients managed by TS/CV | The number of TB patients receiving treatment through support of a TS/CV among all TB cases notified within a quarter | # of TB patients managed by TS/CVs/ Total # of TB patients registered in the quarter | TB Facility register, Quarterly case finding report | Quarterly | Facility, LGA, State and National | To assess contribution of community to patient management |
| LGA coverage of Community TB Care | Number of LGAs with CTBC services | # LGAs with CTBC services in a State | State/LGA programme reports | Annually | LGA, State and National | To monitor community involvement in DOTS implementation |
| Proportion of suspects referred by CVs that are diagnosed Smear Positive TB patients | Number of TB suspects referred by CVs who were confirmed smear positive with TB | Number of suspects referred by CVs and confirmed to be smear Positive TB/ Total number of suspects referred by CVs | Clinic suspect register | Quarterly | Facility | To assess contribution of CVs to case detection of smear positives |
| Treatment Success Rate of Patients managed by TS/CV | The proportion (%) of a cohort of registered TB patients managed by TS/CV who were successfully treated with DOTS | Number of TB patients managed by TS/CV cure + treatment completion /Total number of TB patients managed by TS/CV | Facility/LGA central register | Quarterly | Facility, LGA and State | To assess quality of case management provided by community |

6.5. Routine Monitoring of CTBC activities

CTBC activities should be routinely monitored through quarterly state review meetings and quarterly meetings of community volunteers.

6.5.1. State Review meetings

This meeting takes place on quarterly basis in all states of Nigeria. The participants of the meeting include the State TBL team members, all the LGA TBL supervisors, the State AIDS Program Co-coordinator (SAPC), CSO representatives, and members of supporting partners. The STBLCO should organize this meeting.

The objectives of the State Review meetings are:

- Utilize existing traditional communication channels (town criers, community radio jingles, television / video clips, billboards, IEC materials etc) to promote TB control as a social responsibility
- To review activities of the previous quarter,
- Data collation, validation, analysis and feedback
- To address operational problems and review of quarterly plans
- To provide an opportunity for training and retraining

6.5.2. Quarterly Review meetings of CVs

Community Volunteer meetings take place on quarterly basis at the LGA level. The

participants of the meeting include health facility staff, CVs, CBOs, LGA TBL supervisors, and supporting partners. The LG TBLs should organize this meeting.

The objectives of the quarterly CV meetings are:

- Utilize existing traditional communication channels (town criers, community radio jingles, television / video clips, billboards, IEC materials etc) to promote TB control as a social responsibility
- To review progress made in the implementation of activities for the previous quarter in relation to key performance indicators.
- Data collation, validation, analysis and feedback
- To address operational problems
- To provide an opportunity for training and retraining

6.6. Evaluation of CTBC

Evaluation of CTBC should be conducted within the formal context of programme evaluation for the TB programme. Existing avenues for evaluation of CTBC may be carried out during regular evaluations of the strategic plan, such as within annual, biennial, mid-term and end-term evaluations.

7. CONCLUSION

The sheer magnitude of the TB epidemic in Nigeria demands urgent and concerted actions. Such actions by the NTBLCP have led to the development of a Five Year Strategic Plan for TB Control (2010 – 2015) which adopted several innovative approaches to address TB, one of which is the community-based approach to TB care.

Subsequently, the NTBLCP has also mobilized resources from partners including the GFATM and USAID to operationalize this plan. Consequently the development of these CTBC guidelines for implementers in Nigeria is a further step to outline concrete actions to be taken in establishing Community TB Care.

These guidelines detail what actions must be taken to combat TB in Nigeria, and have been developed based on the particular Nigerian context. They also spell out the key roles and responsibilities of both the demand and supply sides of TB care with respect to empowering TB patients and communities in line with the Patients Charter and the International Standards of TB Care.

The operational and technical details involved in CTBC implementation are outlined and programmes have the benefit of utilizing the contributions of the communities and patients to work towards achieving early and improved case detection and treatment outcomes in accordance with the set targets for TB

control. While the Guidelines recognize the considerable overlap of the TB and HIV epidemic in Nigeria, they also outline the need for TB/HIV collaborative activities to be implemented at the community level. The roles the community volunteers can play in supporting management of MDR-TB patients at the community level are also identified.

It is envisioned that this document will enable programme implementers to specifically address the problem of TB in the community and thus contribute to achieving the overall objectives of the NTBLCP.

The ultimate goal is the achievement of the Millennium Development Goals and the elimination of TB as a public health problem in Nigeria.

ANNEX: STANDARD OPERATING PROCEDURES (SOPs)

In order to standardize the procedures performed in the programmatic management of Drug resistant Tuberculosis, standard operating procedures (SOPs) were developed to inform and guide all stakeholders. They include:

- I. SOP for Sputum Collection and Transportation for GeneXpert-MTB/RIF
- II. SOP for Sputum Sample Packaging and Transportation to Culture & DST Laboratory
- III. SOP for Patient Education at Diagnosis
- IV. SOP for Patient Referral for DR-TB Treatment
- V. SOP for Initiation of Treatment at the Community for the DOT provider/Health Officer
- VI. SOP for Enrolment of DR-TB Treatment
- VII. SOP for Sputum Collection for Culture and DST
- VIII. SOP for Continuation of Care
- IX. SOP for Patient Discharge
- X. SOP for Adverse Drug Reaction



Sputum Collection and Transportation for GeneXpert-MTB/RIF

All sputum samples for GeneXpert-MTB/RIF must be sent to designated GeneXpert-MTB/RIF laboratories in good condition.

| STEP | ACTION |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <ul style="list-style-type: none">Contact the TBL supervisor prior to collecting specimen for GeneXpert-MTB/RIF for transportation of the sputum sample.Ensure that the request form is correctly filled with all patient's information (identifiers) |
| 2. | <ul style="list-style-type: none">Clearly label the side of the sputum cup (not the lid) with patient's name, ID number and date of collection before giving out the cup to the patient |
| 3. | Instruct patient to: <ul style="list-style-type: none">Rinse mouth with clean waterTake 3-4 deep breaths, holding breath for 3-5 seconds after each inhalationCough after the last inhalation, emptying the sputum into the sputum cup, care taken not to contaminate the outside of the cup |
| 4. | <ul style="list-style-type: none">Collect one sputum specimen from the patient using the sputum cupSputum specimen should be produced in an open, well ventilated space not in the laboratory or offices.Ensure that the sputum cup screw cap is tightly closedWipe the outside of the cup with cotton wool soaked in tuberculocidal (Phenol, Lysol ,Bleach) disinfectant |
| 5. | <ul style="list-style-type: none">Inspect specimen for quality and volume - the recommended volume of sputum specimen is at least 3 to 5mLs |
| 6. | <ul style="list-style-type: none">Send collected specimen in a sputum collection box e.g. "coolers" to the GeneXpert-MTB/RIF laboratory alongside the completed sputum request form not more than two days after collection.Educate patient on cough etiquette and hygiene (TB Infection Control) |



Sputum Sample Packaging and Transportation to Culture & DST Laboratory

Diagnosis of MDR TB can only be established in a designated MDR TB laboratory; therefore sample should be transported to the labs in good condition away from sunlight while adhering to infection control procedures.

| STEP | ACTION |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <ul style="list-style-type: none">Place the falcon tubes containing the specimen in a vertical position in the sputum container and support with cotton wool, to avoid leakagesSeal the sputum containers by wrapping with absorbent paper |
| 2. | <ul style="list-style-type: none">Place collected specimen in sealable, biohazard bag (first layer) |
| 3. | <ul style="list-style-type: none">Place completed request form in outside pouch of biohazard bag |
| 4. | <ul style="list-style-type: none">Place the first layer in a larger secondary sealable biohazard bag (second layer) |
| 5. | <ul style="list-style-type: none">Place into a securely fastened cold box with ice packs (tertiary layer) at a temperature of 4° centigrade* |
| 6. | <ul style="list-style-type: none">Separate accompanying shipment/dispatch forms from the specimens to avoid potential contaminationEnsure the packaged specimen reaches the laboratory not more than three days after collection |

* Samples shipped to labs with capacity for Ogawa methods, e.g. UCH should use CPC (Cetylpyridinium chloride) to preserve the specimen



Patient Education at Diagnosis

| STEP | ACTION |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <p>Provide the following TB-related information to the DR-TB patient:</p> <ul style="list-style-type: none">• The result and the type of disease diagnosed• The cause of DR-TB and how it is transmitted• The disease is curable, provided the correct drugs are taken for 20 months without a break• Options for model of choice• Number and types of drugs to take• The need to bring symptomatic contacts for screening• The patient is no longer infectious if treatment is taken regularly• Duration and how the nature of the treatment will be at the hospital/clinic and at home• Though symptoms will disappear drugs must be taken as directed, if not the disease will come back in a worse form• How to collect drugs on work-free days, inaccessible times, etc.• Importance of family support to ensure strict compliance by the patient• Signs and symptoms of possible side effects of drugs and what to do (Examples: Skin rash, joint pains, yellow eyes, poor vision, imbalance, and red discoloration of urine. All these should be reported immediately)• Sputum examination and culture for DST every month during intensive phase; and every two months at continuation to determine the effect of the drugs taken• Encourage female patients to consider family planning• Discuss importance of a balanced diet |
| 2. | <p>Obtain feedback from patient at the end of the health talk</p> <ul style="list-style-type: none">• Check that patient recalls facts• Identify possible problems and deal with them appropriately |
| 3. | <p>Sensitize patient on the need to sign an informed consent before commencement of treatment</p> |
| 4. | <p>Agree with the patient and relative on the date of commencement of treatment or movement to the treatment centre where applicable</p> |

| STEP | ACTION |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. | <ul style="list-style-type: none"> Educate patient & relative on infection control measures- cough etiquette, good cross ventilation, proper household rearrangement, etc. Provide and demonstrate to patient & relative how to use surgical mask Counsel patient to use sputum mug and disposal by incineration |
| 6. | <ul style="list-style-type: none"> Provide patient/relatives the telephone number of the contact person at the treatment centre |
| 7. | <ul style="list-style-type: none"> Call treatment facility to notify that a patient has been referred Call patient/relatives to confirm arrival at treatment centre within 24 hours Confirm arrival of patient also from DR TB focal person at treatment facility Document patient arrival on appropriate records |



Patient Referral for DR TB Treatment

All confirmed DR TB patients should be referred for DR TB treatment, in a Community DOT Centre or DR TB Treatment Centre for initial commencement of care; alone or with a relative.

| Step | Action |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <ul style="list-style-type: none">• Guide patient and relatives on all available models of treatment for him/her to make a choice• Educate patient on the duration of DR TB treatment and the possible duration of stay at the treatment centre• Sensitize patient on the need to sign an informed consent before commencement of treatment• Agree with the patient and relative on the date of commencement of treatment or movement to the treatment centre where applicable |
| 2. | <ul style="list-style-type: none">• Confirm availability of bed space at the treatment centre of the patient choice• If bed space is unavailable at centre of choice, counsel patient on other available options |
| 3. | <ul style="list-style-type: none">• Complete DR TB referral form for the patient• Enclose the following investigation results & documents with the referral form as applicable: GeneXpert/MTB/RIF, culture & DST, AFB microscopy, recent chest X-ray, previous TB treatment card |
| 4. | <ul style="list-style-type: none">• Provide patient/relatives the telephone number of the contact person at the treatment centre |
| 5. | <ul style="list-style-type: none">• Call treatment facility to notify that a patient has been referred• Call patient/relatives phone number to confirm arrival at treatment centre within 24 hours• Confirm arrival of patient also from DR TB focal person at treatment facility• Document patients' arrival on appropriate records |



Initiation of Treatment at the Community for the DOT/Health Officer

Treatment should be initiated at the community level except in the following cases: pediatric DR-TB, critically ill DR-TB patient, pregnant women with DR-TB, or DR-TB with other critical medical conditions (diabetes, heart failure, renal failure, epilepsy, history of severe adverse drug reactions, etc.).

| STE | ACTION |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Provide health education and counseling to patient and relatives using the SOP for health education and counseling |
| 2. | Inform the State team about the patient |
| 3. | Support patient to identify a treatment supporter |
| 4. | Liaise with the LGTBLS to carry out contact tracing |
| 5. | Ensure that the patient signs the Consent form for treatment |
| 6. | The State team should organize and ensure baseline investigation on the patient (samples can be taken from the patient to the facility with the capacity to perform baseline investigation) |
| 7. | Initiate treatment with the support of the state team |
| 8. | Ensure daily DOT and update patient treatment record |
| 9. | Provide continuous education on cough etiquette and hygiene (infection control) |
| 10. | Monitor for Adverse Drug Reaction (ADR) based on ADR SOP and notify the state team if ADR occurs |
| 11. | Collect sputum for follow-up examination <ol style="list-style-type: none">Monthly for sputum AFB throughout the duration of treatmentMonthly for sputum culture during the intensive phaseEvery two months for sputum culture during the continuation phase |
| 12. | In the event of interruption of treatment for one day, take the following actions: <ol style="list-style-type: none">Call/visit the patientInform the treatment supporter and the LG TBLSIndicate in the treatment card 'A' (absent) for the missed day(s)Resolve the cause of absence including referral for very sick patient or severe adverse drug reaction, continue treatment by extending the treatment period for missed dose(s) |

*See manual on Clinical management of DR-TB



Enrolment of DR TB Patient for Treatment

MDR TB treatment is for a period of 20 months, with 8 months intensive phase and 12 months continuation phase.

The entire treatment period **MUST** be supervised daily (DOT).

| Steps | Actions |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <ul style="list-style-type: none">Review patient referral form and all enclosed documentsEducate patients/relatives on their expectations from the treatment centre (feeding, visiting times, contact screening, infection control, follow up investigations etc.)Educate patient on DR TB care (duration of treatment, range of duration of stay at treatment centre, infection control, side effects of drugs and adherence)Ask patient to sign written consent accepting care at the treatment centre |
| 2 | <ul style="list-style-type: none">Conduct base line investigations if not included with the referral form<ol style="list-style-type: none">Chest X-raySputum/culture/DSTHIV testing and counselingU&E, Cr, Liver function test, FBC/diffs, TFTs, FBSPregnancy testUrinalysisAudiometric analysis |
| 3 | <ul style="list-style-type: none">Assign drug regimen and dosage based on weight (see drug table below)Prepare and institute ART for HIV positive clients |
| 4 | <ul style="list-style-type: none">Open and complete an MDR TB treatment card, patient ID card (hand card), MDR TB register and update patient information on E-TB Manager |
| 5 | <ul style="list-style-type: none">Provide patient with items for infection control (surgical mask and sputum mug) |
| 6 | <ul style="list-style-type: none">Provide feedback and monthly updates to referring DR-TB State teams, NTBLCP and other partners using the e-mail group list |



Sputum Collection for Culture & DST

All sputum samples for culture and DST must be sent to designated MDR TB laboratories in good condition away from sunlight

Samples are collected from patients on enrolment and during follow up

| STEP | ACTION |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <ul style="list-style-type: none">For sample collection outside the DR-TB Treatment Centre, contact the TBL supervisor prior to collecting specimen for culture and DST for logistics.Ensure that the request form is correctly filled with all patient information (identifiers) |
| 2. | <ul style="list-style-type: none">Clearly label the sides of the falcon tubes not the lid with patient's name, ID number and date of collection before giving out to patients |
| 3. | <ul style="list-style-type: none">Instruct patient to: Rinse mouth with clean water, take 3-4 deep breaths, holding breath for 3-5 seconds after each inhalation, and cough after the last inhalation, emptying the sputum into the falcon tube, care taken not to contaminate the outside of the tube |
| 4 | <ul style="list-style-type: none">Collect two sputum specimens (spot and early morning) from each patient (on consecutive days) in sterile leak-proof (50ml) falcon tubesAll sputum specimens should be produced in an open and well ventilated space not in the laboratory or officesEnsure that the Falcon Tube screw cap is tightly fittedWipe the outside of the tube with cotton wool soaked in tuberculocidal disinfectant (Phenol, Lysol, bleach) |
| 5. | <ul style="list-style-type: none">Inspect specimen for quality and volume, the recommended volume of sputum specimen is 3-5mLs |
| 6. | <ul style="list-style-type: none">Store the specimen at 2-8°C and ship to reach the lab within three daysPackage collected specimen for transport to the culture and DST laboratory using SOP on specimen transportation |
| 7. | <ul style="list-style-type: none">Educate patient on cough etiquette and hygiene (TB Infection Control) |



SOP for Continuation of Care

The entire treatment period **MUST** be supervised daily (DOT).

| STEPS | ACTIONS |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | State Team links the patient up with the DOT Provider |
| 2. | DOT Provider gives relevant health education on infection control, cough etiquette, drug adherence, etc to the patient. |
| 3. | Patient and DOT Provider agree on the location for daily injections |
| 4. | DOT provider keeps drugs at the DOT facility |
| 5. | DOT Provider observes daily drug intake |
| 6. | DOT Provider ensures daily recording and reporting using relevant Recording & Reporting tools |
| 7. | TBL Supervisor presents findings on MDR TB cases during the state quarterly review meetings |
| 8. | DOT Provider ensures monthly collection of sputum for AFB throughout the duration of treatment and sputum collection for culture monthly in the intensive phase and every two months in the continuation phase.* |
| 9. | DOT Provider makes quarterly updates on drug utilization and requisitions |
| 10. | DOT Provider observes documents and reports any ADR using the Adverse Drug Reaction Form |
| 11. | DOT Provider conducts contact screening for all contacts of the patients - refer to pg. 56 of the MDR TB Guidelines |

- Refer to SOP on Initiation of Treatment at the Community for the DOT/Health Officer



SOP for Patient Discharge

The entire treatment period **MUST** be supervised daily (DOT).

| STEPS | ACTIONS |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | The MDR Treatment centre should notify the State Team formally, one month before the discharge of patient. |
| 2 | The state team and treatment centre should inform all relevant partners on the planned discharge of the patient. |
| 3 | The treatment centre should confirm and document the readiness of the State to continue care for the patient. |
| 4 | The treatment centre should complete a Discharge Form to the DOTS facility, updating them of the patients' clinical status and sputum results. A scanned copy should be sent to the Control Officer. While the hard copy is given to the patient. |
| 5 | Discharge counseling should be carried out for the patient for at least one week , including infection control, drug adherence, side effect management and reproductive health/family planning before discharge * There is need for a discharge counseling checklist . |
| 6 | Medication on discharge –The remaining drugs for patient on intensive phase and relevant Reporting & Recording tools should be packaged and sent to the State Team at least two weeks before the patient is discharged. Confirm receipt of the drugs. |



SOP for Adverse Drug Reaction

The entire treatment period **MUST** be supervised daily (DOT).

| STEPS | ACTIONS |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Routinely observe the patient for early signs and symptoms of an adverse drug reaction (abnormal behavior, mild skin rash, nausea, vomiting, dizziness, inability to sleep, cessation of menstruation, change in urine colour, jaundice, etc.) |
| 2. | Document signs and symptoms of ADR using the ADR Form |
| 3. | Report any ADR immediately to the State Team |
| 4. | In case of any signs of ADR refer patient immediately for examination by the Medical Officer |

REFERENCES

1. World Health Organization Expert Committee on Tuberculosis, 9th report. World Health Organization Technical Report Series No. 552, 1974.
2. World Health Organization. "Community TB Care in Africa Project". Report from meeting in Harare, Zimbabwe, 27-29 September 2000. World Health Organisation, Geneva, 2000.
3. World Health Organization, Guidelines for Implementing Community TB Care Programmes, September 2004.
4. World Health Organization, Expert Committee on Tuberculosis, 9th report. World Health Organization Technical Report Series No. 552, 1974.
5. World Health Organization: WHO 2011 Global TB Report.
6. National Tuberculosis and Leprosy Control Programme: 2011 Annual TB Statistical Report.
7. Nigeria National TBL Strategic Plan 2010-2015.
8. National TBL Workers Manual 5th edition.
9. WHO THE ENGAGE-TB Approach: Integrating community TB activities into the work of NGOs and other CSOs.