AN OVERVIEW OF ESSENTIAL KNOWLEDGE FOR COMMUNITY AND PUBLIC HEALTH NURSES

Tuberculosis Nurse Case Management: Core Competencies
Disclaimer

The National Tuberculosis Nurse Coalition (NTNC), a section of the National Tuberculosis Controllers Association (NTCA), developed the document *Tuberculosis Nurse Case Management: Core Competencies* to guide nurses seeking proficiency in the specialty of tuberculosis (TB) case management. The competencies described here establish a framework for nurse case managers and should not replace nursing judgment. Furthermore, adherence to these core competencies will not ensure successful treatment for all patients or establish standards of nursing care. This manual is neither inclusive of all proper methods of care nor exclusive of interventions reasonably directed toward the same result or goal. The clinician, nurse case manager, and patient should mutually make decisions regarding interventions and plans of care. The social and clinical characteristics of individual patients should serve as the foundation for decision making.

*Tuberculosis Nurse Case Management: Core Competencies* should not serve as a basis for approving or denying financial coverage for TB care. These TB competencies were based on published literature and expert opinion, including opinions of the authors and contributors. Future studies and advancements in science will inform future updates to these core competencies.
Contents

Acknowledgements

Professional Context

Introduction

Domain 1: Assessment and Analytical Skills

Domain 2: Program Planning

Domain 3: Education and Communication

Domain 4: Cultural Humility

Domain 5: Community Engagement

Domain 6: Public Health Science Skills

Domain 7: Financial Planning and Management Skills

Domain 8: Leadership

Future Applications
Acknowledgements

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Public health as a discipline has evolved since the mid-nineteenth century, changing as scientific knowledge expands. Consequently, public health officials continuously work to identify ways to refine programs meant to improve the delivery of health services that prevent the spread of disease. In recent years, declining tuberculosis (TB) morbidity in the United States has resulted in a decline in public health TB nursing expertise. Concurrently, clinicians and public health officials increasingly report that TB cases are more complicated than cases reported prior to the emergence of human immunodeficiency virus (HIV) and drug-resistant strains of TB. This dynamic has created a knowledge gap that will only continue as experienced public health nurses age out of the workforce. Because federal funding dedicated to maintaining a robust public health TB infrastructure has declined steadily for two decades, efforts to eliminate TB are in serious jeopardy. To preserve and grow expertise in the specialty area of TB nursing, this publication seeks to provide a framework with which new nurses can expand their knowledge about and master the skills required in the practice of TB nurse case management.

The core competencies in this document are organized into domains using the framework developed by the [Community/Public Health Nursing Competencies established by the Council of Public Health Nursing Organizations (CPHNO)](https://www.china-council.org) and the Public Health Foundation Council on Linkages between Academia and Public Health Practice. Building on that framework, this document applies tiered core competencies to TB nurse case management as a specialty.

This document is intended for nurse case managers (NCMs) who provide direct care to persons with TB infection and disease. However, supervisors and managers who oversee TB services will also benefit from the content contained in this document. The authors understand that there are jurisdictions where NCMs fill multiple roles within their respective institutions, including director of nursing or chief nursing officer. Consequently, levels of mastery (Tiers 1–3) within each competency will vary according to individual backgrounds, job duties, and years of experience. While Tier 3 competencies are briefly addressed within selected domains, CPHNO Domain 7, Financial Planning, Evaluation and Management Skills, are not addressed in this document.
The three tiers of community and public health nursing competencies are:

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The TB NCM core competencies integrate:

1. Tiered core competencies for public health professionals
2. Elements of the nursing process
3. Previously published NTNC case management competencies
4. Centers for Disease Control and Prevention (CDC) *Self-Study Modules on Tuberculosis*
Introduction

Elements of the Nursing Process

The nursing process is the traditional framework for providing care to patients and communities across practice settings. This framework consists of assessment, diagnosis, planning, implementation, and evaluation. Its elements and activities may occur simultaneously and are usually ongoing within the context of public health.

- **Nursing assessment** is the systematic collection and analysis of data, culminating in a nursing diagnosis. Assessment is the initial phase of the nursing process. It is usually continuous and involves collaboration with patients, families, caregivers, health care facilities, and providers involved in delivering health care services.

- **Planning** involves the development of intervention strategies that address needs identified during the assessment. Interventions should always include measures for desired outcomes. Outcome measures should be based upon pre-determined criteria and include time frames for achievement.

- **Implementation** is the execution and completion of nursing strategies identified in the planning phase. Implementation requires communication of the plan to all participants involved in the patient’s care, including the patient and the patient’s family.

- **Evaluation** may be a singular event or, more commonly, an ongoing activity that documents both the patient’s response to interventions and the extent to which the desired outcomes have been achieved. To evaluate, the nurse assesses the patient or community using the criteria and associated measures established during the planning phase.
Elements and Activities of the TB Nurse’s Case Management Process

The TB nurse’s case management process builds on the nursing process framework and includes the following elements and activities:

- TB case finding and reporting
- Assessment
- Problem identification
- Plan development
- Implementation
- Data analysis
- Evaluation
- Documentation

The TB NCM focuses on the individual TB patient and the patient’s impact on the health statuses of individuals, families, and groups. The TB NCM is directly or indirectly involved in interventions that strive to cure TB disease and mitigate TB transmission in the community.

While workload or assignments vary according to local resources, assigned roles, and local epidemiology, public health programs in the United States prioritize activities for the following groups:

- Persons confirmed or suspected of having TB disease
- High-risk contacts with infectious pulmonary TB
- Persons who were born, traveled, or resided in a country with an elevated TB rate for at least 1 month, including newly arriving immigrants and refugees
- Persons with immunosuppression, current or planned, including HIV infection, organ transplantation, or treatment with tumor necrosis factor-alpha (TNF-alpha) antagonist (for example, infliximab, etanercept, and others), steroids (equivalent of prednisone ≥15 mg/day for ≥1 month), or other immunosuppressive medication
- Persons living or working in congregate settings where TB is more common (for example, homeless shelters, prisons, and long-term care facilities)
- Persons having close contact with someone with infectious TB disease at any point during their lifetime
Job Titles

Positions with nursing responsibilities that involve TB nurse case management include those with the following job titles:

- TB Nurse Case Manager
- TB Public Health Nurse
- Public Health Nursing Advisor
- Other categories as defined by local or state health jurisdictions

Competency Goals

The goals of TB NCM core competencies are to:

- Identify the functions of TB programs that describe or correspond to the role of nurses who provide care to patients with TB
- Identify the essential knowledge, skills, and attitudes of the TB NCM
- Facilitate the professional development and training of TB NCMS

Duties of the TB Nurse Case Manager

TB NCMS employ a case management model to accomplish TB-specific tasks in the following areas:

- Domain 1: Assessment and Analytical Skills
- Domain 2: Program Planning
- Domain 3: Education and Communication
- Domain 4: Cultural Humility
- Domain 5: Community Engagement
- Domain 6: Public Health Science Skills
- Domain 7: Financial Planning and Management Skills
- Domain 8: Leadership
References


Domain 1: Assessment and Analytical Skills

Competent TB NCMs can collect and analyze assessment data to provide patient care and to develop and implement interventions that protect the community. The TB NCM should understand and apply information to provide direct care and to educate patients, their families, and the community. This domain encompasses levels of mastery within Tiers 1 and 2, listed below.

Tier 1—Core Competencies apply to generalist community or public health nurses who carry out the day-to-day functions in community or public health organizations

Tier 2—Core Competencies apply to community or public health nurses with an array of program implementation, management, and supervisory responsibilities

**Essential Knowledge**

**Epidemiology of TB**
- Groups at risk for TB exposure and infection
- State and local demographic and epidemiologic profiles
- Local TB program goals and outcomes

**TB Transmission and Pathogenesis**
- TB transmission and pathogenesis
- Difference between TB disease and TB infection
- Groups at risk for progression from TB infection to TB disease
- TB classification system
- Drug-resistant TB
### Domain 1: Assessment and Analytical Skills

#### Screening and Testing for TB
- Identify groups that have a high risk for TB exposure and progression to TB disease
- Know TB test methods: when it is appropriate to test, which test to use, and the rationale for the test selection
- Understand the impact of bacilli Calmette-Guérin (BCG) vaccination on TB testing

#### Diagnosis of TB Disease and TB Infection
- Evaluate the patient’s medical and social history
  - Diagnostic test selection and interpretation
  - Laboratory specimen collection
  - Chest radiography, computed tomography (CT) scans, and other imaging
- Understand the impact of HIV and other immunocompromising conditions, pregnancy, selected vaccines, and diabetes on diagnostic tests

#### TB Infection Treatment
- Determine individual risk for disease progression
- Identify available treatment regimens
- Monitor and recognize medication side effects
- Identify abnormal laboratory findings and when to refer the patient for further evaluation

#### TB Disease Treatment
- Identify available TB treatment regimens
- Have knowledge of TB treatment regimens recommended for specific situations or conditions
- Monitor for adverse drug reactions
- Identify abnormal laboratory findings and when to refer the patient for further evaluation
- Implement strategies that reduce barriers to treatment adherence
- Provide treatment using directly observed therapy (DOT)
- Track and document DOT and self-administered therapy (SAT) medication doses and the treatment duration
- Evaluate and document the clinical response to treatment
# Domain 1: Assessment and Analytical Skills

## TB Prevention in Health Care Settings

- Know state and local regulations governing infection control in various settings
- Assess infectiousness
- Identify potential sites of TB transmission
  - Evaluate household, social and congregate settings
  - Identify isolation criteria
  - Identify environmental factors that increase the risk of transmission: poor ventilation, enclosed or small spaces, proximity of others, etc.
- Know TB infection prevention measures
  - Administrative measures
  - Environmental measures
  - Personal protective equipment (PPE)

## TB Transmission Mitigation in Community Settings

- Adhere to established principles of contact investigations
- Follow surveillance and reporting regulations
- Balance patient rights and public health authority
- Apply the least restrictive isolation measures for patients
- Utilize community and programmatic resources
- Utilize isolation letters, public health orders, and court orders

## Documentation Standards and Patient Confidentiality

- Adhere to Report of Verified Case of Tuberculosis (RVCT) and Health Insurance Portability and Accountability Act (HIPAA) patient confidentiality requirements and exceptions
- Adhere to nursing documentation standards

## Program Operations

- Coordinate clinical care with other providers to ensure safe and holistic care
## Essential Clinical Skills

### Clinical Knowledge and Skills
- Know laboratory specimen collection procedures and handling requirements
- Know interferon gamma release assays (IGRAs) and tuberculin skin tests (TSTs)
- Adhere to documentation standards
- Identify and report adverse drug effects
- Know vision testing, i.e., Snellen and Ishihara
- Use PPE

### Clinical Evaluation Knowledge
- Physical and risk TB assessment
- TB surveillance and reporting case definitions
- Diagnostic criteria for TB disease and TB infection
- Evaluation of persons potentially exposed to infectious TB
- Rationale for laboratory test selection and evaluation of results

### Knowledge of TB Treatment and Medication Administration
- Identify recommended TB disease and TB infection treatment regimens
- Calculate medication dosages
- Understand documentation requirements for DOT and SAT
- Be familiar with specific monitoring requirements for individual drugs
- Recognize medication contraindications and adverse drug reactions
- Adjust plan of care for management of treatment interruptions
- Use established criteria to calculate for treatment completion

### Knowledge of TB Infection
- Treatment monitoring method selection for SAT and DOT
- Individual risk of disease progression
- Identification of barriers to treatment
- Referral process for non-TB or specialty providers
TB Disease NCM Skills and Knowledge

- Conduct periodic assessment that includes
  - Interpretation of diagnostic tests
  - Identification of adverse effects of medication and response to therapy
  - Provision or supervision of DOT
  - Progress toward treatment completion criteria
  - Facilitate patient referrals
  - Barriers to treatment
    - Residential instability (homeless, incarceration)
    - Past history of non-adherence
    - Language barrier
    - Literacy level
    - Food security
    - Cultural beliefs regarding TB and health care
    - Cost of treatment
    - Transportation
    - Psychosocial issues (substance use, mental health, support system)
    - Clinic hours
- Develop and implement strategies to improve adherence
  - Patient-centered care plan
  - Patient agreement contract
  - Incentives and enablers
  - Medication administration delivery methods
- Know infection prevention across settings
  - Infectiousness of the patient
  - Airborne infection isolation (AII)
  - Administrative and environmental controls
  - PPE
Contact Investigation Knowledge and Skills

- Describe elements of a contact investigation
- Establish the need for and scope of contact investigation
- Determine the start and end dates of the infectious period
- Conduct the initial interview with the patient or proxy to gather information
  - History of TB disease, TB infection, or exposure to infectious TB
  - Signs and symptoms of TB disease
  - Medical history
  - Current and previous residence (location)
  - Current and previous employment or school
  - Travel history
  - Substance use disorder
  - Social, recreational, and religious activities
- Develop an investigation plan
  - Provide oversight of the case findings
  - Coordinate investigations in congregate settings
- Conduct site investigation to determine the risk of transmission
- Conduct interviews with persons exposed to TB to gather information about the following:
  - Risk for disease progression
  - High, medium, and low priority contacts and date of last known exposure
- Educate individuals and groups potentially exposed to TB about TB disease, TB infection, and treatment
- Conduct and facilitate an evaluation of persons exposed to TB:
  - TB screening
  - Symptom assessment
  - Risk of exposure and disease progression
  - Need for window prophylaxis
  - Case management for persons exposed or infected
TB NCMs contribute to program planning; however, their responsibilities may vary depending on the organization’s structure. Program planning is the framework that directs resources aimed at reducing TB incidence. Interventions are evidence-based, strategic, effective, and efficient.

TB NCMs should have knowledge of local, state, federal, and tribal laws and regulations about reportable infectious diseases, emphasizing TB. This domain encompasses levels of mastery within Tiers 1, 2, and 3, listed below.

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Comprehensive Program Planning

**To apply, update, and implement public health laws for TB, the TB NCM should**

- Know and apply public health laws as they relate to TB surveillance, reporting, and prevention
- Identify processes related to the revision of existing laws, administrative rules, and the development of new legislation pertaining to TB
To ensure that appropriate and effective policies are in place for TB and that quality is continuously monitored, the TB NCM should:

- Solicit input from the stakeholders to implement policies and quality improvement initiatives that contribute to public health vision, mission, values, and goals
- Allocate available resources to improve program efficiencies and reduce barriers to care
- Ensure the implementation of program policies, processes, and clinical protocols that are consistent with local, state, federal, and tribal laws; standards of care; and guidelines
- Establish a system for data collection that
  - Meets CDC and state reporting requirements
  - Identifies gaps in services
  - Recognizes program strengths and areas where improvement is needed
  - Develops new or modifies existing interventions to improve outcomes
- Prioritize continuous quality improvement (CQI)
  - Collect and analyze data linked to patient outcomes and use findings to improve service delivery and program efficiencies
  - Advance TB case management policies that support the goals of the National TB Performance Indicator (NTIP) project
  - Create specific, measurable, achievable, relevant, and time-bound (SMART) goals that support program and patient objectives
  - Use research-based CQI tools to address challenges
  - Collaborate with the project participants to evaluate the outcome data, audit findings, modifications, and CQI projects
- Document and communicate the evaluation findings to the stakeholders
Domain 3: Education and Communication

TB nurse case management requires effective communication skills to interact with patients, families, and health care providers. Competent TB NCMs demonstrate effective verbal and written communication skills, use strategies that build trust and rapport, and work to ensure that interactions are respectful and equitable. This domain encompasses levels of mastery within Tiers 1 and 2, listed below.

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Patient and Family Communication

To ensure equitable goal setting, the TB NCM should

- Establish equitable goals with the patient and the patient’s family by identifying and prioritizing treatment and care
- Develop and communicate a written plan with the patient and the patient’s family to achieve anticipated goals within a specified timeframe
- Engage the patient and the patient’s family in implementing the plan of care
- Provide an accurate, consistent, and clear message that is relevant to the intended audience

To provide emotional support, the TB NCM should

- Apply cultural humility to patient interactions
- Demonstrate respectful and equitable attitudes and behaviors
- Identify emotional barriers and provide equitable access to care
- Provide education, emotional support, encouragement, and resources throughout the course of isolation and treatment
<table>
<thead>
<tr>
<th>To provide education, the TB NCM should</th>
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<tbody>
<tr>
<td>• Assess the patient’s readiness to learn, level of health literacy, TB knowledge, attitudes, and beliefs</td>
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<tr>
<td>• Identify knowledge gaps and provide information</td>
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<tr>
<td>• Tailor information to meet the needs and health literacy of the target audience</td>
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<tr>
<td>• Develop messages that consider the language proficiency of the target audience</td>
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<tr>
<td>• Disseminate educational materials in multiple formats</td>
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<tr>
<td>• Limit the amount of information in each session</td>
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<tr>
<td>• Provide an overview at the beginning and a summary at the end of each session</td>
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<tr>
<td>• Encourage questions</td>
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<td>• Incorporate the use of support systems</td>
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### Educational Content Areas

<table>
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<td>• Clearly state that TB is curable</td>
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<tr>
<td>• Review how TB transmission occurs</td>
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<tr>
<td>• Define TB infection and TB disease</td>
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<tr>
<td>• Explain isolation processes and limitations on visitors</td>
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<tr>
<td>• Describe disease prevention through the treatment of TB infection</td>
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<tr>
<td>• Clarify the purpose of contact investigation</td>
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<tr>
<td>• Explain the role, responsibility, and legal authority of the health department</td>
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<table>
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<th>The TB NCM should provide education about contact investigation topics, including:</th>
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<td>• Definition of contact</td>
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<tr>
<td>• Infection and disease progression risks</td>
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<tr>
<td>• Test timeframes, whether by IGRA or TST</td>
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<tr>
<td>• Meaning of a positive test</td>
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<td>• Evaluation process after a positive test</td>
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<tr>
<td>• Options for TB infection treatment</td>
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<tr>
<td>• Reasons for deferring TB infection treatment</td>
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<tr>
<td>• Importance of and methods for ensuring confidentiality</td>
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<tr>
<td>• Role of public health staff, support services, and resources</td>
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</table>
The TB NCM should provide or facilitate health care provider education when needed to:

- Assess the knowledge base, identify gaps, and provide information to meet the provider’s needs
- Clarify the role of the private provider and the public health responsibilities for their jurisdiction:
  - Prescription and provision of TB-related medications
  - Medical and clinical care
  - Orders for imaging and monitoring labs
  - Ongoing case monitoring and management
- Provide regular, timely updates on the patient’s progress to the provider and the health care team
Domain 4: Cultural Humility

TB NCMS demonstrate cultural humility when interacting with patients, family members, and members of the health care team. This domain encompasses levels of mastery within Tiers 1 and 2, listed below.

*Cultural humility goes further than cultural competency in that it requires you to step outside of yourself and be open to other people’s identities in a way that acknowledges their authority over their experiences.*

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**Skills and Implementation of Cultural Awareness**

To demonstrate cultural humility, the TB NCM should:

- Acquire knowledge about the practices and beliefs of the individual and the individual's culture
- Be open to each individual's uniqueness
- Recognize how gender identity impacts an individual's care
- Identify gender identity, gender roles, and the associated hierarchy within the patient’s culture
- Apply knowledge about how cultures define behaviors during significant life events
- Understand the impact of faith-based beliefs on disease and treatment choices

- Assess language preferences and literacy levels:
Domain 4: Cultural Humility

- Provide education in a variety of formats in the preferred language and dialect
- Use a language service or in-person interpreters in the language preferred by the patient and the patient’s family
- Understand what the experience of illness means to each patient and its impact on the patient-provider relationship
- Understand that many cultures have health practices different from Western medicine
- Obtain knowledge about cultural traditions, beliefs, and religious holidays to develop a DOT schedule that is acceptable to the patient or family
- Acknowledge the individual’s immigration history and its effect on the patient-provider relationship, including possible barriers to treatment

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## Domain 5: Community Engagement

TB NCMs use knowledge about community resources and local stakeholder interest to prioritize interventions that reduce health and social inequities. This domain encompasses levels of mastery within Tiers 1, 2, and 3, listed below.

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### Collaboration with Partners

**To establish and foster collaborations, the TB NCM should:**

- Identify, establish, and maintain relationships with TB stakeholders
- Identify key partners in the jurisdiction in which services are being provided and recognize the unique resources that are available
- Establish ongoing communication between partners who provide health, social, and behavioral services, i.e., Federally Qualified Health Centers, correctional facilities, homeless shelters, etc.
- Establish rapport with community partners, who can be reliable and trusted sources of TB information
- Engage partners by providing information, training, and educational opportunities
## Promotion of Key Public Health TB Resources

To promote public health resources, the TB NCM should

- Know the TB epidemiological profile of the community
- Modify policies and procedures to reduce health and social inequities and achieve TB elimination
- Demonstrate and apply knowledge of local, state, national, and tribal TB guidelines and available resources
Domain 6:
Public Health Science Skills

Public health sciences skills focus on understanding data used to establish public health programs and policies that are built upon a foundation of evidence-based practice. This domain encompasses levels of mastery within Tiers 1, 2, and 3, listed below.

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Processes to Support Evidence-Based Decision Making

To promote health equity, the TB NCM should
- Apply knowledge of the determinants of health, evidence-based public health practices, and nursing science to develop and implement TB interventions for the elimination of TB
- Conduct a needs assessment to identify and reduce health threats
- Identify the barriers to TB elimination efforts (such as access to stable housing, food security, clean and sustainable water, sanitation, and clean air) confronting individual, family, and population health
- Collaborate with programs and community partners to reduce identified risks
- Participate in research activities that impact health equity and access to care for local populations

To promote evidence-based practices, the TB NCM should
- Use a wide variety of sources and methods to access public health information (i.e., GIS mapping; Community Health Assessment; local, state, and national sources)
- Contribute data to public health informatics related to public health priorities and population-level interventions
- Use research to inform the practice of public health nursing
Domain 6: Public Health Science Skills

- Identify gaps in research evidence that impact public health nursing practices
- Examine gaps and inconsistencies in public health and TB nursing research
- Choose peer-reviewed journals and national-level meetings for disseminating theory-guided and evidence-based practice outcomes
- Demonstrate compliance with the requirements of patient confidentiality and human subject protection
- Apply the requirements of patient confidentiality, human subject protection, and research ethics to data collection and processing
- Model public health science skills when working with individuals, families, and groups
- Support the acquisition and integration of public health science skills in nursing practices
Domain 7:
Financial Planning and Management Skills

Financial planning and management skills are intentionally omitted from this document. As stated earlier, TB-specific NCM competencies contained in this document are meant to provide a foundation for nurses new to TB prevention and care.
## Domain 8: Leadership

At the leadership level, a nurse qualified as a TB NCM exemplifies knowledge of programmatic guidelines and TB case management to promote excellence in public health nursing. This domain encompasses levels of mastery within Tiers 1, 2, and 3, listed below.

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### Knowledge of TB

To demonstrate leadership, the TB NCM should:

- Apply TB knowledge by educating the program staff, decision makers, and community partners
- Exercise CQI through developing and implementing processes that adhere to established standards of care

### Technical Expertise

To demonstrate leadership skills, the TB NCM should

- Exhibit active involvement with information technology in the development, maintenance, use, and ongoing evaluation of computer software used for collecting, processing, and sharing data
- Use current communication technology tools
- Use technology to process information in the case management of persons with TB
- Recognize the role of social media in identifying, understanding, and communicating with various populations
## Domain 8: Leadership

### Policy and Planning

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<td>• Participate in developing, updating, integrating, and implementing policies</td>
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### Collaboration

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<td>• Use critical thinking skills and effective communication techniques, i.e., peer feedback and interactions between patient, families, and community partners</td>
</tr>
<tr>
<td>• Engage, inspire, and empower team members to meet shared patient-care goals</td>
</tr>
<tr>
<td>• Practice CQI</td>
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<tr>
<td>• Enhance the development of inter-professional partnerships providing a foundation of competency</td>
</tr>
</tbody>
</table>

### Research

<table>
<thead>
<tr>
<th>To demonstrate leadership, the TB NCM should:</th>
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</thead>
<tbody>
<tr>
<td>• Know and use current evidence-based research in nurse case management</td>
</tr>
<tr>
<td>• Encourage and contribute to TB research</td>
</tr>
</tbody>
</table>

### Law and Ethics

<table>
<thead>
<tr>
<th>To demonstrate leadership, the TB NCM should:</th>
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<tbody>
<tr>
<td>• Interpret and comply with local, state, federal, and tribal laws and regulations</td>
</tr>
<tr>
<td>• Ensure that TB program operations adhere to local, state, federal, and tribal laws</td>
</tr>
<tr>
<td>• Engage with advisory boards and committees that influence local, state, federal, and tribal laws and regulations</td>
</tr>
</tbody>
</table>
NTNC conceptualizes these competencies as the first part of a three-prong workforce development plan to preserve and expand TB nurse case management infrastructure in public health and community settings. Moving forward, this document will serve as the foundation for the second part of the plan: the development of a competency-based TB nurse case management manual. As the third and final part of the plan, a TB nurse certificate program will be established to validate the foundational knowledge of the TB NCM.

<table>
<thead>
<tr>
<th>Project</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>Modernize the TB NCM core competencies</td>
<td>Define <em>what</em> specific knowledge, skills, and interventions a TB NCM must master to be competent.</td>
</tr>
<tr>
<td></td>
<td>This update organizes competencies according to overarching public health domains. Unlike previous NTNC competencies, the updated version will classify each competency according to a domain and one or more of the following tiers:</td>
</tr>
<tr>
<td></td>
<td>1. Front-line staff</td>
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<td></td>
<td>2. Middle manager or supervisor</td>
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<tr>
<td></td>
<td>3. Executive, policy, or leadership role</td>
</tr>
<tr>
<td>Develop a competency-based nursing manual</td>
<td>Instruct nurses <em>how</em> to implement interventions or perform activities outlined in the TB NCM core competencies document.</td>
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<td>Specific interventions or topics will be labeled Tier 1, 2, or 3.</td>
</tr>
<tr>
<td>Establish a TB NCM certificate program</td>
<td>Validate understanding and application of the nursing process within the TB NCM framework.</td>
</tr>
<tr>
<td></td>
<td>The TB NCM certificate will be offered after the completion of a self-directed educational program that is based on the TB NCM core competencies.</td>
</tr>
</tbody>
</table>