

NTCA/NTNC Workgroups for Public Health Workforce Development in TB Programs: Core Competencies 2005 Updated 2008

In 2004, the NTCA President called for a dialogue on educating the public health workforce to address projected workforce shortages in TB programs. Early in the year, she convened an interest group of seven national leaders in TB control to discuss issues of competencies, workforce shortages, and needs enumeration.

The group agreed that common competencies linked with job responsibilities should be identified to support competency-based training and development of professionals capable of demonstrating best practices in TB prevention and control programs. Members active in the role should develop the practice-based duty statements by brainstorming and discussing, searching and reviewing the literature, comparing and reaching agreement, and then writing the findings to be presented to the organization's leadership for approval and dissemination.

The following June, the NTCA and NTNC Presidents co-sponsored an adjunct meeting during the NTCA workshop attended by 50 national TB leaders. With facilitation by John Lewis of the Francis J. Curry Center National TB Center, they created four working groups to describe model duty statements and core competencies for selected roles: nurse consultant; nurse case manager, nurse liaison for corrections, and disease investigator/outreach worker. Chairs of the four working groups formed a steering committee to coordinate the work.

Nurse Consultant Workgroup:

Members: Judy Gibson, RN, MSN, CDC, Chair; Jeanne Soukup, RN, BSN, LA County; Connee Martin, RN, BSN, Georgia; Kathy Kolaski, RN, MSN, Georgia; Ann Poole, RN, Georgia; Karen Buford, RN, MS, MSN, Georgia; Carolyn Martin, RN, Georgia; Chasity Wellniz, RN, Arizona (record keeper); and Trang Kuss, RN, MN, MPH, Washington.

This group held their first meeting in June 2004 during the NTCA workshop at which time, by brainstorming, they determined the 12 functions of their duty statement. Each member was responsible for most role functions, but not all functions were carried out by every member. During the following year, they engaged in 13 conference calls, many e-mails, and reviews to develop the model duty statement and select core competencies. The draft model duty statement for the TB nurse consultant translates practice into skill sets and operationalizes the theory. It defines the range of core functions or duties for the TB Nurse Consultant with associated activities and then provides references for the practice.

The selected core competencies for this TB role are the Public Health Nursing (PHN) Competencies by the Quad Council of Public Health Nursing Organizations.

Based on the Core Competencies for Public Health Professionals by the Council on Linkages Between Academia and Public Health Practice, they represent the knowledge, skills, and attitudes needed for the practice of public health.

The nurse consultant working group incorporated feedback from ten public health nurses across the country who are members of NTNC and work in the role of TB Nurse Consultant.

Model Duty Statement: TB Nurse Consultant

The TB Nurse Consultant is a qualified public health nurse who provides:

- TB technical expertise
- Oversight and consultation
- Advocacy and leadership
- Policy
- Surveillance data and epidemiologic profiles
- Training and education materials and models
- Training for monitoring quality improvement of health care practices
- Certification courses for building workforce and assuring competency
- Reporting notification quality assurance and improvement
- Program evaluation (e.g., case management, contact investigation)
- Collaboration with partners
- Inter-jurisdictional referral

Job Titles

- RN Consultant
- TB Nurse Coordinator
- Community Health Nurse (CHN) (beginning level)
- Senior Public Health Nurse (PHN) (next higher level from CHN)
- TB Nurse Consultant
- TB Nurse Educator
- TB Nurse (general)
- TB Surveillance Nurse (county-level position)
- TB Nurse Case Management Consultant
- TB Program Case Manager
- Chief Nurse or Program Specialist

Competency Goals

- To identify TB program functions that describe or correspond to the nurse consultant's indirect patient management role at the state, regional, or local levels. Responsibilities for the individual worker may not encompass all 12 domains.
- To facilitate cross training of public health nursing staff
- To build on the Quad Council PHN Competencies

Domain # 1: TB Technical Expertise

The TB Nurse Consultant is a qualified public health nurse who demonstrates knowledge of

- The epidemiology of TB disease and latent TB infection (LTBI)
- Risk factors for acquisition of TB infection and progression of infection to TB disease
- The groups at high-risk for TB
- Diagnostic tests for TB and interpretation of test results
- Treatment regimens for TB and LTBI
- Airborne pathogen TB-control measures
- Public health goals for TB patient management including promptly initiating and completing effective treatment, stopping transmission, and preventing development of drug-resistant TB
- High-priority candidates for treatment of LTBI
- Regions around the world with a high incidence of TB and migration patterns
- Public health systems and processes for controlling TB

Discusses the clinical presentation and management of the TB patient

- Indications, advantages, turn-around time, and limitations of tests for diagnosis and management of TB such as:
 - Mantoux TB skin test
 - Interferon-gamma assay test (i.e., QuantiFERON test)
 - Chest radiography
 - Sputum induction
 - Mycobacteriology services for AFB smear, NAA (MTD) culture and drug susceptibility testing
 - HIV test (opt-out guidance)
 - Genotyping
 - Other tests as developed
- The importance of medication supervision (e.g., directly observed therapy) and case management for all TB cases

Teaches health care providers and institutional staff the guidance for contact investigation and airborne infection control

Assists with state and national guidance for clinical management

- TB patient with HIV co-infection
- TB patient with drug resistance
- Commonly encountered toxicities, side effects, and clinically important medication interactions for each of the treatment agents

Provides hands-on assistance with problems likely to overwhelm local control efforts (e.g., outbreaks and follow-up)

Domain # 2: Oversight and Consultation

The TB Nurse Consultant is a qualified public health nurse who

- Applies in depth knowledge of state and national TB guidelines in providing technical assistance concerning patient management issues
- Reviews data on TB cases in order to monitor and evaluate
 - Treatment regimen orders
 - Treatment plans and adherence
 - Treatment barriers and interventions
 - Treatment completion
 - Identification, screening, and medical evaluation of high-risk TB contacts
- Assists local health departments to ensure patient is on appropriate treatment, adheres to the treatment, reports adverse events and drug side effects as needed, reports response to treatment, and completes treatment on time
- Provides educational programs to health professionals, students and the general public
 - Correctional facility nurses in investigating contacts to persons with active TB and in identifying and preventing TB transmission
 - Case managers in identifying and addressing treatment barriers such as behavior patterns, cultural beliefs and values, or concurrent psychosocial issues (e.g., substance abuse, mental disorders)
 - Case managers in protecting the patient's rights and the public's health, and to implement civil detention of non-adherent TB patients
 - County health department staff in finding and treating persons with active TB, investigating contacts, and preventing TB in high-risk persons (contacts, persons with TB classifications for travel from pre-immigration/departure medical screening by panel physicians, persons HIV+)
- Assists local health departments in performing contact investigation in accordance with state and national guidelines
- Assists local health departments in educating community providers in performing TB screening and safely providing treatment for LTBI in accordance with state and national guidelines
- Monitors and evaluates local health department capacity to provide/coordinate a core set of public health services including TB control
- Monitors county work plans and budgets for TB prevention and control
- Demonstrates knowledge of state and national guidelines for drug-resistant TB prevention, rapid diagnostic methods, references, and best practices

Domain # 3: Advocacy and Leadership

The TB Nurse Consultant is a qualified public health nurse who

- Provides policy, procedure, and evidence-based practice guidance
- Serves on national, state, regional, and local committees to promote TB control activities
- Establishes working relationships with community organizations, regulatory groups, and health care communities to promote achievement of TB program goals
- Assesses infrastructure to conduct essential public health services: a well-trained workforce, electronic information, computer-based medical record, surveillance, laboratory capacity
- Assesses need for public health law reform using model acts: a Model Public Health Statute and the Model State Emergency Health Powers Act (MSEHPA)
- Provides advocacy to advance community health through activities such as (a) supporting Partnership for the Public's Health, (b) providing expert testimony, (c) writing position papers, (d) forging stronger relationships with policy makers, and (e) developing legislative scorecards
- Develops advocacy tools such as a model advocacy network by voting districts, advocacy policy for associations, and fact sheets for legislators on pending public health issues
- Informs decision makers (lawmakers and policy makers) and educates them regarding the needs of the public, and of the individual TB patient, and how nursing practice supports those needs
- Advocates for and participates in clinical, epidemiological, and operational research

Domain #4: Policy

The TB Nurse Consultant is a qualified public health nurse who:

- Promotes a framework for quality care with policies for professional standards and procedures for care guidelines and implementation steps relevant to TB
- Interprets program policies and procedures to stakeholders
- Writes and verbally presents and summarizes clear and concise performance skills and qualities, position descriptions, care plans, and critical pathways for public health nurses in TB who are case managers
- Articulates the fiscal, administrative, legal, social, and political implications of policies
- States the feasibility and expected outcomes of each policy option
- Uses current techniques in decision analysis and health planning
- Develops mechanisms for monitoring and evaluating performance standards and how activities are carried out
- Provides leadership in developing policies that support TB control and prevention activities
- Uses evidence-based findings in developing a TB health policy proposal and explaining the advantages and disadvantages of each option

- Promotes state and local legislation and regulation aimed at reducing public health risk for TB transmission. Evaluates current regulation to determine support for goals; amends legislation no longer pertinent

Domain # 5: Surveillance Data and Epidemiologic Profiles

The TB Nurse Consultant is a qualified public health nurse who:

- Possesses knowledge of data collection methods, routine surveillance forms, and individual TB worksheets for completion of therapy
- Teaches program staff and key stakeholders how to gather data by procedure
- Analyzes data for contributing factors
- Evaluates implementation of state and national guidelines for persons with TB classifications for travel from pre-immigration/departure medical screening by panel physicians
- Incorporates data for state and national objectives into written reports
- Develops written report in collaboration with program staff and key stakeholders
- Communicates results in writing and through oral presentations
- Identifies the purpose, procedure, and reporting mechanisms for required TB data reporting systems
- Collects data related to TB reported from key reporting sources (clinicians, laboratory, and pharmacy)
- Reports data using standard reporting mechanisms
- Collaborates with other agencies in the collection, analysis, and reporting of TB data (TB cases, contacts, persons with TB classifications for travel from pre-immigration/departure medical screening by panel physicians)
- Follows up on reports to ensure accuracy and usefulness of information
- Participates in program development (e.g., teaching, policies and procedures) as associated with TB data collection and reporting
- Uses reports to determine need for additional data collection (observation, interviews, chart audits, etc.)

Domain # 6: Teaching, Education Materials, and Models

The TB Nurse Consultant is a qualified public health nurse who:

- Conducts assessments to determine the educational needs of health care providers (public and private), community partners, and clients within the jurisdiction concerning the prevention and treatment of TB. Defines gaps in educational materials.
- Evaluates available training materials for consistency with state and national guidance and adapts for local use
- Prepares and disseminates TB educational materials in a variety of formats (written, video, web-based, instructor-led)
- Provides information classes to lay and professional groups (i.e., clinical staff and community groups)

- Uses appropriate methods to prepare educational materials for persons from diverse cultural, socioeconomic, educational, racial, ethnic and professional backgrounds, and persons of all ages and lifestyles. Tailors information to meet the needs of the target audience.
- Recognizes and addresses misconceptions about TB disease, treatment, and prevention in preparing training materials
- Develops indicators for monitoring and evaluating education activities
- Communicates effectively (e.g., in writing, orally, and other ways as needed)
- Teaches agencies concerning the importance of planning for TB risk assessment, health screening, medical evaluation, treatment and case management

Domain # 7: Training for Monitoring Quality Improvement of Health Care Practice

The TB Nurse Consultant is a qualified public health nurse who:

- Conducts site visits to districts and counties to observe how state and national guidance activities are carried out and how performance standards are met
- Analyzes contributing factors to outcome indicators
- Assists in the development of tools for monitoring and evaluating process indicators and intervention points
- Teaches case managers to use performance measures to self-evaluate
- Provides encouragement to local health care staff and recognizes the strengths of the TB program
- Monitors research (TBTC and TB ESC) in order to transfer findings into practice
- Monitors quality of own practice and participates in training

Domain #8: Certification Courses for Building Workforce and Assuring Competency

The TB Nurse Consultant is a qualified public health nurse who:

- Identifies and interprets public health laws, regulations, and policies related to specific certification areas
- Identifies internal and external issues that may affect certification ability
- Facilitates collaboration with internal and external key stakeholders to ensure participation
- Determines appropriate applications and limitations of certification
- Develops a plan to implement courses, including goals, outcome and process objectives, and implementation steps
- Develops and implements initial certification course, to include study materials, minimum practice requirements, training, written examination, continuing education programs, and required hours of clinical or administrative practice for re-certification
- Develops mechanisms for monitoring and evaluating programs for their effectiveness and quality
- Sets minimum practice requirements for TB nurse consultant at direct and indirect patient care level

- Develops study materials, training curriculum
- Develops initial written examination
- Ensures completion of continuing education units and required hours of clinical or administrative practice for re-certification

Domain # 9: Reporting/Notification Quality Assurance and Improvement

The TB Nurse Consultant is a qualified public health nurse who:

- Trains local health department staff in procedures for collecting routine surveillance data and completing individual TB worksheets
- Participates in the establishment of standards for reporting performance.
- Participates in the selection and definition of variables relevant to reporting. Identifies relevant and appropriate data and information sources. Develops mechanisms for monitoring and evaluating reporting activities for their effectiveness and quality
- Applies ethical principles to the collection, maintenance, use, and dissemination of data and information and ensures compliance with Health Insurance Portability and Accountability Act (HIPAA)
- Applies data collection processes, information technology applications, and computer systems storage/retrieval strategies to improve reporting quality
- Identifies, interprets, and teaches public health laws, regulations, and policies specific to reporting and notification
- Accurately presents demographic, statistical, programmatic, and scientific information related to reporting activities
- Establishes and maintains linkages with key stakeholders for reporting to public health authorities and for receiving descriptive epidemiology and recommendations from TB programs
- Partners with communities to attach meaning to collected quantitative and qualitative data
- Enhances accountability for appropriate reporting activities from the local health care providers to local health departments, to the state health department, and to CDC
- Identifies internal and external issues that may impact reporting practices
- Promotes team and organizational learning
- Participates in the review of surveillance systems and software to enhance reporting activities (NTCA Core TB Patient Management Requirements)

Domain # 10: Program Evaluation

The TB Nurse Consultant is a qualified public health nurse who:

- Demonstrates knowledge of four types of program evaluation: process (or implementation) evaluation; outcome evaluation; impact evaluation; cost-benefit and cost effectiveness analyses (GAO 1998).
- Assesses the extent to which a program is operating as it was intended

- Assesses program activities' conformance to statutory and regulatory requirements, program design, and professional standards or customer expectations
- Assesses extent to which a program achieves its outcome-oriented objectives
- Focuses on outputs and outcomes (including unintended effects) to judge program effectiveness
- Assesses the program process to describe how outcomes are produced
- Identifies all relevant costs and benefits, expressed in dollars
- Evaluates individual patient outcomes
- Assesses the net effect of a program by comparing program outcomes with estimate of what would have happened in the absence of the program
- Identifies the program's contribution to achievement of its objectives when external factors are known to influence the program's outcomes
- Compares a program's outputs or outcomes with costs (resources expended) to produce them

Domain # 11: Collaboration with Partners

The TB Nurse Consultant is a qualified public health nurse who:

- Communicates with local health departments and other key partners (e.g., state prisons, parole, mental health, ALA)
- Establishes and maintains relationships with key partners to better serve the needs of the community
- Applies knowledge of resources offered by the key partners to better address the social and medical needs of patients and families
- Works with key partners in creating or changing state guidance to address the needs of the TB patients and the community
- Assesses and provides education and training to the key partners in effective diagnosis and treatment for persons with TB or LTBI
- Provides guidance letter (and phone call) to the health care provider in a primary care organization when they screen, diagnose, or treat a TB patient outlining a treatment plan: how, what, and when to communicate to the health department and how the health department will provide reports to the provider. This letter should state who will provide the contact investigation

Domain # 12: Interjurisdictional Referral

The TB Nurse Consultant is a qualified public health nurse who:

- Teaches local health care providers to maintain continuity of care throughout treatment by working with the health department to track patient care
- Manages the transfer of (1) patient's treatment and care from one level/location to another for completion of medication doses within the designated period; (2) locating information for medical evaluation of named contacts
- Arranges transfer of key primary clinical records

- Selects necessary data and information sources for continuity of care
- Uses national and state guidance in the collection, maintenance, use, and dissemination of data for confidentiality of protected medical information [Health Insurance Portability and Accountability Act (HIPAA) privacy rule and public health]
- Makes relevant inferences from referred data to assign priority follow-up
- Ensures performance standards are met for the inter-jurisdictional referral process