TUBERCULOSIS NURSE CASE MANAGEMENT

TRAINING TUESDAYS
What is it?
Basics of Tuberculosis (TB) Nurse Case Management

There are a lot of things to know about TB.

There are a lot of things to know about TB case management.
What is TB Nurse Case Management?

Public health workers in TB programs and other facilities play an integral role in helping patients complete TB treatment through the use of a strategy referred to as case management.

The strategy’s goal is to provide patient-centered care for completion of treatment and to ensure all public health activities related to stopping TB transmission are completed.
Basics TB Nurse Case Management

Assign case manager for team effort.

Provide education, monitoring, and patient support.

Assure adherence and successful treatment completion.
Nurse Case Management (NCM)
Initial Steps in TB NCM

1. Assign TB nurse case manager
2. Contact provider or hospital for basic information
3. Review information (treatment, transmission, and control)
4. Receive and process Initial Request for Medication (IRM)
5. Conduct home or hospital visit and initial interview
6. Develop and implement treatment plan
7. Assess progress and need for adjustments
8. Consider motivation, adherence, need for incentives, or enablers
Requirements for TB NCM

Who is a TB case manager?

- Trained in TB case management
- Trained in TB contact investigations
- Fit-tested for N95 respirator or mask

What training is required?

- TB 101 (CDC online course)
- Module 6 (CDC course)
- TB NCM Core Competencies National TB Controllers Association (NTCA)

TB 101 for Health Care Workers | Web-Based Courses & Webinars | TB | CDC
Self-Study Modules - Continuing Education Activities | Self-Study Modules on Tuberculosis 6 - 9 | TB | CDC
TB Nurse Case Manager | National Tuberculosis Controllers Association (tbcontrollers.org)
Basic Information

- Patient demographics
- TB testing: Immune Gamma Release Assay (IGRA) and/or Tuberculin Skin Test (TST)
- Medical notes including lab results
- Radiography reports
- Sputum smear and culture result
- Molecular test result

The forms will help to know what information to obtain.
Initial Request for Medication (F-44000)

Fill out form completely:
- Weight
- Insurance (card)
- Dosing
- Provider signature

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Medications</th>
</tr>
</thead>
</table>
| - Name (Last, First, Middle Initial) | - Demographics:  
  - Date of Birth (mm/dd/yyyy)  
  - Address (Street or Rural Route)  
  - City  
  - Zip Code  
  - LHID/Clinic to Send Meds  
  - Other contact, as needed  
| - Race  
- Ethnicity  
- Hispanic  
- Non-Hispanic  
- Weight  
| - Patient Insurance Information  
  - Patient has no insurance: MTB Dispensary covers entire cost.  
  - Patient has insurance: Include photocopy of insurance card. MTB Dispensary to cover co-pay or deductible.  
  - Prescription insurance provider and number.  
- NAME - Clinician (Print clearly)  
- NAME - Hospital/Clinic/Facility  
| - Address (Street, City, State, Zip code)  
- Telephone Number  

| Medications | Medications:  
- Medication:  
  - Dose:  
  - Frequency:  
  - Duration of Therapy:  
  - Isoniazid (INH)  
    - Dosage:  
    - Frequency:  
    - Duration of Therapy:  
  - Rifampin  
    - Dosage:  
    - Frequency:  
    - Duration of Therapy:  
  - Ethambutol  
    - Dosage:  
    - Frequency:  
    - Duration of Therapy:  
  - Pyrazinamide  
    - Dosage:  
    - Frequency:  
    - Duration of Therapy:  
  - Vitamin B6 (pyridoxine)  
    - Dosage:  
    - Frequency:  
    - Duration of Therapy:  
| - Other:  
- Monitoring Orders  
  - Directly Observed Therapy (DOT) is the standard of care for patients being treated for TB disease in Wisconsin.  
  - Always the patient at least weekly for side effects and medication toxicity. Hold medications and call if present.  
| Signature  
- Signature:  
- Date Prescription Ordered:  
- Pharmacy:  
  - MTB Dispensary Pharmacy  
  - Other, List  
- Ship medication to:
Initial Request for Medication (F-44000)

- Diagnostic tests
- Symptoms
- Reason for treatment, risk factors (resistance, adverse reactions)
- Baseline tests

**Diagnostic tests**

**Symptoms**

**Reason for treatment, risk factors (resistance, adverse reactions)**

**Baseline tests**
<table>
<thead>
<tr>
<th>Activity</th>
<th>Month of Treatment Completed</th>
<th>End of Treatment Visit</th>
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<tbody>
<tr>
<td></td>
<td>Baseline 1 2 3 4 5 6 7 8</td>
<td></td>
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<tr>
<td>MICROBIOLOGY</td>
<td></td>
<td></td>
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<tr>
<td>Sputum smears and culture¹</td>
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<tr>
<td>Drug susceptibility testing²</td>
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<tr>
<td>IMAGING</td>
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<tr>
<td>Chest radiograph or other imaging³</td>
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<tr>
<td>CLINICAL ASSESSMENT</td>
<td></td>
<td></td>
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<tr>
<td>Weight⁴</td>
<td></td>
<td></td>
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<tr>
<td>Symptom and adherence review⁵</td>
<td></td>
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<tr>
<td>Vision assessment⁶</td>
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<tr>
<td>LABORATORY TESTING</td>
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<td></td>
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<tr>
<td>AST, ALT, bilirubin, alkaline phosphate⁷</td>
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<td></td>
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<tr>
<td>Platelet count⁸</td>
<td></td>
<td></td>
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<tr>
<td>Creatinine⁹</td>
<td></td>
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<tr>
<td>HIV⁰</td>
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<td></td>
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<tr>
<td>Hepatitis B and C screen¹⁰</td>
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<tr>
<td>Diabetes Screen¹¹</td>
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</tbody>
</table>

From: Executive Summary: Official American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis

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Home or Hospital Visit

Initial interview:

- When were they sick?
- Who are they?
- Where have they been?
- What do they do?
- Who do they know?
- What do they know?

This is the beginning of a contact investigation.

Assess barriers levels of knowledge.
Visit Work Setting

Inform supervisors or human resources of investigation.

Assess:
- Space (large-small)
- Proximity of workers (close or far apart)
- Air flow (exchange per hour)
- Schedules of index patient (shifts how many hours)
- Work friendships
- Break or lunch space
Case Manager Responsibility

- Establish trusting relationship
- Educate patient about TB and treatment
- Develop treatment and monitoring plan
- Ensure adherence
- Conduct systematic review of patient progress
Get to Know the Patient

- Medical health history
- Knowledge, attitudes, and belief of TB
- Ability to follow the TB treatment plan
- Resources (e.g., family, other social support, finances)
- Anticipated barriers (e.g., lack of transportation) and perceived barriers (e.g., TB medications will be very expensive) to treatment
- History of adherence to previous TB treatment regimens or other medication
Open-Ended Questions

- What are some of the difficulties you have taking medication?
- How do your family members or close friends feel about your TB?
- How do you feel about taking your TB medication?
- How severe do you think your illness is?
- What problems has your illness caused for you?
- What are the most important results you hope to get from this treatment?
Open-Ended Questions

- What do you know about TB and what causes TB?
- What do you think TB does to your body?
- What treatment do you think you should receive for TB?
- What caused you to go to the doctor who diagnosed your TB?
- What did you think when you were told you had TB?
- How do you think you got TB?
Building Trust and Rapport

- Recognize it develops over time but foundation starts immediately
- Use effective communication:
  - Active listening
  - Appropriate nonverbal communication
  - Patient-level communication
Building Trust and Rapport

- Find common ground.
- Involve the patient in the development of treatment plan.
- Be open about the patient’s cultural beliefs.
- Understand and fulfill the patient’s expectations about treatment when possible.
- Be consistent in what you do and say to the patient.
- Display respect and empathy.
Effective Communication

- Use simple, nonmedical terms.
- Use the appropriate language level.
- Limit the amount of information.
- Discuss the most important topic first and last.
- Repeat important information.
- Listen to feedback and questions.
- Use concrete examples.
- Make interactions with the patient as positive as possible.
- Provide patient education materials.
Treatment and Monitoring Plan

- Develop plan within one week of diagnosis
- Develop specifically for each patient
- Plan should include descriptions of:
  - Treatment regimen
  - Monitoring plan (adverse reactions)
  - Adherence strategies
  - Evaluation (treatment and response)
- CDC Self-Study Module 4: [Treatment of Latent Tuberculosis Infection and Tuberculosis Disease](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6731a1.htm)
Contact Investigation

- Begins on day one
- Is a skill or art more than it is a science
- Is a process that continues throughout treatment
- Takes time and experience
- Requires good communication skills and cultural competency
Close Contact

- First or highest priority
- Household and family
- Close friends and visitors
- Young children
- Hospital staff
- Congregate settings
Contact Investigation

- Can involve schools or public spaces
- May get media attention
- It is critical to communicate and collaborate with other partners
- Could require additional staffing and funding
Health Setting Contact

- Can be problematic
- Must have good prior relationships
- Do not identify too many contacts
- Use same principles apply to these settings as apply to other settings
- Must report to local health department
Wisconsin Timeline

- Is available online
- Can help you in the process of NCM
- Does NOT substitute for experience—it is a tool that can help you along the way
- Call us with questions or help
- Learn what you can now
  - The hardest way to do TB NCM is to wait until you have a case because you need to know a lot of things...
What You Need To Know About TB

- Nature of *M. tuberculosis*
- Pathophysiology of tuberculosis (infection and disease)
- TB prevention and vaccination
- TB diagnosis (latent and active)
- TB treatment (latent and active)
- Drug resistant TB
- TB control
- TB reporting and laws
- TB contact investigation
What You Need to Know About TB NCM

- Laws regarding public health and TB (infectiousness and isolation)
- TB reporting and use of Wisconsin Electronic Surveillance System (WEDSS)
- TB control (in works settings, healthcare settings, residential settings)
- Local TB epidemiology (who has TB where you live?)
- Assessment and screening of persons with TB
What You Need to Know About TB NCM

- TB testing (tuberculin skin test and Interferon gamma release assay)
- TB drugs (dosages, side-effects, adverse reactions)
- Directly observed therapy (DOT) and treatment adherence
- Interviewing and communication skills (including using an interpreter)
- Training and education of local population
- Cultural awareness and sensitivity of local population (e.g., Hmong)
Questions?