



TB Case Management in Practice - 1

Initiating the Care

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Identifying Risk Factors That Lead to Development of TB Disease

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**As tuberculosis (TB) disease rates in the United States decrease, finding and treating persons at high risk for latent TB infection (LTBI) has become a priority.**

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 **Targeted Tuberculin Testing**

- Detects persons with LTBI who would benefit from treatment
- De-emphasizes testing of groups that are not at high risk for TB
- Can help reduce the waste of resources and prevent inappropriate treatment

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 **Persons at Risk for Developing TB Disease**

Persons at high risk for developing TB disease fall into 2 categories:

- Those who have been recently infected
- Those with clinical conditions that increase their risk of progressing from LTBI to TB disease

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 **Recent Infection as a Risk Factor (1)**

Persons more likely to have been recently infected include:

- Close contacts to person with infectious TB
- Skin test converters (within past 2 years)
- Recent immigrants from TB-endemic regions of the world (within 5 years of arrival to the U.S.)

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 Recent Infection as a Risk Factor (2)

- Children  $\leq 5$  years with a positive TST
- Residents and employees of high-risk congregate settings (e.g., correctional facilities, homeless shelters, health care facilities)

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 Increased Risk for Progression to TB Disease (1)

Persons more likely to progress from LTBI to TB disease include:

- HIV-infected
- Those with a history of prior, untreated TB or fibrotic lesions on chest radiograph

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 Increased Risk for Progression to TB Disease (2)

- Underweight or malnourished
- Injection drug users
- Those receiving TNF- $\alpha$  antagonists for treatment of rheumatoid arthritis or Crohn's disease

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Steps in TB Case Management

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Step 1

- Receive case report: review and decide on urgency within one working day (prioritize workload)
- Contact medical care provider within one working day of receipt of report
  - Establish rapport
  - Educate provider about case manager's roles/responsibilities and those of the LHD
  - Educate provider about TB control program services and oversight responsibility

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Step 2

Upon notification of a TB suspect:

- Assign the case to a staff member
- Review the initial TB report for completeness
- Assess the risk of transmission
- Determine control measures that need to be implemented

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 **Step 3**

**Make sure that the initial report includes:**

- **Name, address and telephone number of the person making the report**
- **Copy of the hospital admission and discharge summary**

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 **Step 4**

- **Patient's payment source – to assist with follow-up care and additional tests if needed**
- **Hx of prior TB treatment - either for LTBI or TB disease**
  - At greater risk for drug resistance
- **Patient's weight - to ensure appropriate medication dosages**

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 **Step 5**

**Review and identify any problems/concerns**

- **Is treatment regimen appropriate?**
- **Is more clinical information needed?**
- **Is patient infectious? Is isolation needed?**
- **Are there other medical/social problems that need to be addressed?**

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**TB** Step 6

- Initial contact with patient by home visit (or in the hospital) within 3 working days of report
  - Establish rapport
  - Explain role of public health nurses/outreach staff
- Assess home environment
  - Space
  - Ventilation

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**TB** Step 7

- Assess current status of patient
  - Physical
  - Psychological
  - Financial
  - Social
  - Cultural

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**TB** Step 8

- Provide education about TB and TB management
- Assess for compliance with home isolation, if required
- Assess for barriers to adherence and need for DOT
- Initiate contact/source investigation
- Review medications and potential adverse reaction
- Present contract or agreement documents for treatment (legal orders as last resort)

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 Step 9

- Ongoing case management throughout course of treatment
- Meet with team members to review case on a monthly basis

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 Collaborating With Community Providers

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 Case Management of Patients Under Care of Private Providers

- Responsibilities of the private physician
- Responsibilities of the local Health Department

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**TB** Co-management of TB Patients- 1

**Private physician is responsible for:**

- Reporting all suspected and confirmed TB cases to LHD
- If hospitalized, submit discharge plans for review and approval of health department
- Consulting with TB control to assure:
  - Appropriate treatment regimen
  - All info required for RVCT provided
  - Order for DOT, if indicated
  - Ongoing medical assessment

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**TB** Co-management of TB Patients - 2

**Private physician is responsible for:**

- Managing other illnesses and any reported problems with medications
- Maintaining communication with TB control when:
  - Patient fails to keep appointment
  - Patient relocates without transferring care
  - Patient discontinues care

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**TB** Co-management of TB Patients - 3

**Private physician is responsible for:**

- Maintaining communication with TB control (con't):
  - Compliance issues arise
  - Updated clinical, radiographic, and bacteriologic information becomes available
  - Patient transfers care to another provider
  - Patient completes therapy
- Providing clinical update at least quarterly (monthly preferred) and as requested by TB control

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 **Co-management of TB Patients - 4**

**Local Health Department is responsible for:**

- Assigning case manager
- Conducting risk assessment for non-adherence; providing DOT, if indicated
- Maintaining ongoing surveillance
- Ensuring contact investigation is completed
- Carrying out mandated responsibility to protect the health of the public

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 **Co-management of TB Patients - 5**

**LHD responsibilities (cont'd)**

- Ensuring private provider has current information on diagnosis, treatment, and management of TB
  - Maintaining TB register
  - Obtaining update on patient's status every 1 to 3 months
  - Monitoring that follow-up sputum specimens are collected until documented conversion

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 **A Resource: "Guidelines for Collaborating with Community Physicians"**

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 **Templates**

- Initial communication with provider in the private sector
- DOT contract and documentation forms
- Authorization for release of medical information
- Medical evaluation form, update forms
- Nursing assessment form
- Treatment completion letter

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 **Planning for Discharge of the Hospitalized Patient**

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 **Planning for Discharge**

**Provider should contact Health Department to discuss plans for transitioning patient from hospital to community. Discharge may be considered if patient:**

- Is on appropriate drug regimen and tolerates the medications
- Shows signs of clinical improvement
- Agrees to DOT
- Treatment regimen can be ensured
- Agrees to home isolation while still infectious

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**TB** Before Discharge

- Assess patient's infectiousness and need for isolation
- Inquire about the household composition to initiate the contact investigation
- Is the infectious patient a candidate for voluntary isolation versus a legal order of isolation
- Patients discharged to a facility need to be assessed for infectiousness

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**TB** Public Health Interventions

Visit patient's residence to:

- Verify the validity of the address
- Determine the stability of patient's living arrangements
- Identify all contacts
- Evaluate all high-risk contacts
  - Immunocompromised
  - Children less than 5 years of age

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**TB** Alternative to Hospitalization

Criteria for considering home isolation of infectious patients (AFB smear positive):

- Completion of at least 2 weeks of treatment
- Shows signs of clinical improvement
- Decreased AFB on smears

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**TB** Home Isolation

Patient /family education should include the following:

- Importance of wearing a mask when outside for MD visits
- Importance of being available for DOT
- Need for signed agreement re: isolation and DOT

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**TB** Returning to Work or School

Review the following to determine eligibility:

- Assessment of clinical improvement
- Adherence to medication regimen
- Characteristics of TB disease
  - MDR vs pan-sensitive organisms
  - Pulmonary TB vs extra-pulmonary disease
- Characteristics of those who may be exposed

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