

# Managing Tuberculosis Patients and Improving Adherence

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# Goals of TB Prevention and Control

1. Identifying and treating persons who have TB disease;
2. Finding and assessing persons who have been in contact with TB patients to determine whether they have latent TB infection (LTBI) or TB disease and providing them with appropriate treatment;
3. Using targeted testing strategies to identify and treat persons with LTBI at risk for developing TB disease; and
4. Identifying settings in which there is a high risk for transmission of *M. tuberculosis* and applying effective infection control measures

# What is Case Management?

- Case management is the efficient coordination of health care services to achieve specific and measurable outcomes.
- The goal of case management is to provide patient-centered care for completion of treatment and to ensure all public health activities related to stopping TB transmission are completed.



# 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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The American Thoracic Society, Centers for Disease Control and Prevention, and Infectious Diseases Society of America jointly sponsored the development of this guideline for the treatment of drug-susceptible tuberculosis, which is also endorsed by the European Respiratory Society and the US National Tuberculosis Controllers Association. Representatives from the American Academy of Pediatrics, the Canadian Thoracic Society, the International Union Against Tuberculosis and Lung Disease, and the World Health

# Who is Responsible for Case Management?

- A patient is assigned a case manager who assesses needs and barriers that may interfere with treatment adherence
- Although one person is assigned primary responsibility, case management involves a team that works together to provide continuity of care (nurses, outreach workers, physicians, social workers, health departments, etc.)
- Successful TB treatment is primarily the responsibility of the case management team, not the patient

# Case Management Plan

- The case manager, together with the patient, develops a “case management plan”
- Key considerations when developing a plan include:
  1. Educating the patient about tuberculosis and its treatment
  2. Discussing expected outcomes of treatment
  3. Reviewing methods of adherence support and plans for assessing response to therapy
  4. Discussing infectiousness and infection control measures

# Case Management Plan

Other components of the case management plan may include:

- Setting up patient reminders and systems to follow-up missed appointments
- Use of incentives and enablers
- Field and home visits
- Coordination of TB care in collaboration with the patient's primary and specialty care
  - Co-morbidities
  - Mental health services
  - Social services

# Patient-Centered TB Care

- Given that TB treatment requires multiple drugs be given for several months, it is crucial that the patient be involved in a meaningful way in making decisions
- Patient-centered care can help ensure successful treatment outcomes because it emphasizes tailoring treatment to address both the patient's clinical and social concerns



# Establishing Trust & Rapport

- Establishing rapport with the patient starts at the initial visit
- Ways to develop rapport include:
  - Using effective communication skills
  - Finding common ground
  - Displaying respect and empathy

# Use Effective Communication Skills

- Active listening
- Using appropriate nonverbal communication
- Communicating at the patient's level of understanding

# Effective Communication & Education Techniques

- Provide information at the appropriate language level
- Use simple, nonmedical terms
- Discuss the most important topics 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
- Limit the amount of information

# Use Open-Ended Questions

- What do you know about TB?
- What causes TB?
- What do you think TB does to your body?
- What did you think when you were told you had TB?
- How do you think you got TB?
- How do your family members or close friends feel about your TB?
- How severe do you think your illness is?
- What problems has your illness caused for you?
- What caused you to go to the doctor who diagnosed your TB?
- How do you feel about taking your TB medication?
- What are the most important results you hope to get from this treatment?
- What treatment do you think you should receive for TB?
- What are some difficulties you have taking medicine?

# Educating the Patient About TB

TB education should begin at the initial patient visit and continue with each encounter. This includes information regarding:

- TB transmission and pathogenesis
- Expected outcomes of treatment
- Benefits and possible adverse effects of the treatment regimen
- Methods of supervision, such as directly observed therapy (DOT)
- Assessment of treatment response
- Infectiousness and infection control

# Using Interpreters

- It is best to use trained medical interpreters whenever possible
- If family members must be used to interpret, this should not include children

# Polling Question

**How often do you use a professional interpreter?**

- Rarely
- Sometimes
- Frequently

# Guidelines for Interpreters

- Ask for the patient's permission to use an interpreter
- Remind the interpreter about patient confidentiality
- Plan the encounter and decide what key points to talk about with the patient
- When possible, meet with the interpreter beforehand to discuss the goals of the encounter, provide instructions and guidance, and to make sure the interpreter is comfortable with the questions and topics that will be discussed
- Ask the interpreter to refrain from adding his or her own comments. Address the patient directly, not the interpreter



# Guidelines for Interpreters

- Ask the interpreter to explain questions or answers to you that are not clear
- Keep the messages simple and factual; use short phrases and focus on one topic at a time
- Give the interpreter time to translate each phrase before continuing; do not interrupt the interpreter
- Ask the interpreter to translate the patient's and the health care worker's own words exactly
- Give the patient time to answer questions

# Adherence to Treatment

- Adherence to treatment means following the recommended course of treatment by taking all medications as prescribed for the recommended time frame
- Nonadherence is a patient's inability or refusal to take TB drugs as prescribed. Examples of nonadherent behavior include:
  - Taking medications inconsistently
  - Missing clinic appointments or follow up tests
  - Missing DOT appointments
  - Refusing medications

# Explaining the Importance of Adherence

- Help a patient feel better sooner
- Cure their TB, and prevent the development of drug resistance
- Help them return to normal activities
- Can prevent the further spread of TB to others

## Ways to document adherence

- DOT/eDOT
- Count doses

# Adherence Tools

Times per week	Number of Doses Observed	Weeks taken	Initial Phase	Continuation Phase	Total
7		0.00	56 doses	126 doses	182
5		0.00	40 Doses	90 doses	130
3		0.00	*	54 doses	94/110
2		0.00	*	36 doses	76/92
<b>Total</b>	<b>0</b>	<b>0.00</b>	<b>8 weeks</b>	<b>18 weeks</b>	<b>26 week</b>
	<b>DOT Doses</b>	<b>Weeks</b>			
<b>Jan</b>					
<b>Feb</b>					
<b>March</b>					
<b>April</b>					
<b>May</b>					
<b>June</b>					
<b>July</b>					
<b>August</b>					
<b>September</b>			<b>Patient N.</b>		
<b>October</b>			<b>DOB</b>		
<b>November</b>			<b>MRN</b>		
<b>December</b>					
<b>Total</b>	<b>0</b>	<b>0</b>			

# DOT vs. Self-Administered Treatment

- DOT is the standard of TB treatment
- DOT allows for early recognition of adverse drug reaction or complications
- Non-adherence can lead to drug resistant TB
- Self-administered treatment relies entirely on the patient to take their medication

# Who Can Supervise DOT?

Can be supervised by:

- Physician
- Health department nurse
- Trained outreach worker
- School nurse
- Pharmacists
- Dialysis or Methadone clinics

Should **not** be supervised by:

- Parents, friends or family members

# Who Should Receive DOT?

- DOT is the preferred treatment strategy and should be considered for all patients because it is impossible to predict which patients will be adherent
- Children and adolescents
  - Parents should not be relied on to supervise DOT
- DOT is highly recommended for patients on intermittent regimens (e.g., patients receiving treatment three times a week)

# Other High Priority Groups for DOT

- Patients with drug-resistant TB
- Patients with positive sputum smears
- Patients with delayed culture conversion
- Patients with treatment failure or relapse
- Patients with HIV infection
- Persons at high risk for nonadherence
  - Homeless or persons with unstable housing
  - Persons who abuse alcohol or use illicit drugs
  - Persons who are unable to take pills on their own due to mental, emotional, or physical disabilities
  - Persons with a history of nonadherence
- Residents at correctional or long-term care facilities
- Patients who have been previously treated for TB disease or LTBI



# DOT for Latent TB Infection Treatment

DOT for LTBI treatment should be considered for persons who are at especially high risk for TB disease, including:

- Young children
- Persons living with HIV/AIDS
- Other immunosuppressed persons
- Nonadherent to LTBI regimen in the past

# Why Are Some Patients Non-adherent?

- Improved or no symptoms
- Lack of knowledge
- Cultural beliefs
- Language barriers
- Lack of access to healthcare (clinic hours)
- Poor relationship between the patient and the health care worker
- Competing priorities
- Stigma
- Mental health

# Addressing Barriers to Adherence

**There are several additional strategies health care workers can use to address barriers to adherence:**

- Create an adherence agreement or contract with the patient
- Help patients keep appointments
- Use incentives and enablers to improve adherence
- Encourage the patient to seek support
- Give TB drugs in easy-to-take preparations
- Coordinate other services

### TB Treatment Agreement

Patient Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Patient Address: \_\_\_\_\_ Provider Name: \_\_\_\_\_

I, \_\_\_\_\_, understand that I have been diagnosed with infectious pulmonary tuberculosis and have been prescribed medication by a physician to treat this disease. If my disease goes untreated, there may be serious consequences:

- My illness may be longer or more severe
- I may spread TB to others
- I may develop and spread drug-resistant TB
- I can die from TB

The \_\_\_\_\_ Health Department has the responsibility of seeing that I complete adequate treatment for my tuberculosis and that I do not expose others to danger. To ensure that this happens, the Health Department will:

1. Supply all medication, x-rays, and laboratory testing required to monitor my disease.
2. Provide medical consultation relating to tuberculosis.
3. Make visits \_\_\_\_\_ to give me medication under supervision and to evaluate for any adverse reactions to the medications.

To complete my treatment and protect my family and friends, I will:

1. Come to the health department clinic to give sputum specimens when requested.
2. Keep all appointments for medical evaluation and x-rays.
3. Be at the agreed-upon location when the health care worker comes to give my medications.

Visit Day(s): \_\_\_\_\_ Time: \_\_\_\_\_ Location: \_\_\_\_\_

If a scheduled visit or appointment falls on a holiday, the health care worker will work with me to make an adjustment in my schedule.

I have read this agreement and understand the following (initial each box):

- My adherence to this treatment regimen is very important.
- I am responsible for the three tasks mentioned above.
- If I fail to complete these tasks, legal action may be taken to make sure I complete treatment.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Health Department Representative

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

# Incentives vs. Enablers

- **Incentives** are small rewards given to patients to encourage them to either take their own medicine or keep their DOT appointments. Incentives should be chosen according to the patients' special needs and interests
- **Enablers** are things that make it possible or easier for patients to receive treatment by overcoming barriers, such as a lack of transportation to get to the clinic (i.e., bus card)

## Examples of Incentives and Enablers

### Money

- Gift cards

### Food

- Nutritional supplements
- Fast food
- Sandwiches
- Canned food
- Food vouchers
- Fruit
- Ice cream

### Beverages

- Juices
- Milk
- Coffee
- Tea

### Clothing

- Socks
- Gloves
- Stockings
- Sweaters
- Coats/Scarves
- Shoes

### Automotive

- Battery
- Gasoline
- Motor oil

### Fishing supplies

- Fishing pole
- Crickets

### Services

- Social service referrals
- Help in obtaining housing, social security, food stamps
- Help in obtaining drug treatment
- Help in paying rent
- Help in obtaining other medicines
- Child care
- Legal services
- Help in obtaining birth certificate
- Help in obtaining driver's license
- Repairing bicycle

### Household

- Paying rent or mortgage
- Cooking utensils
- Furniture
- Pre-paid cell phone
- Cell phone minutes or data

### Transportation

- Bus and subway fare
- Taxi fare
- Bicycle
- Transportation provided by staff

### Seasonal

- Special seasonal treats
- Homemade holiday cookies
- Food baskets
- Birthday cakes and cards

### Personal care

- Toiletries
- Contraceptives (e.g., condoms)
- Razors
- Shaving cream
- Face cream
- Makeup
- Nail polish

### Garden

- Flowers
- Flower bulbs

### For children

- Toys
- Books
- Painting child's nails
- Tea party
- Playing games
- Stuffed animals
- Grab bag with assorted treats
- Chewing gum
- School supplies
- Crossword puzzle books

# **Polling Question:**

**Can you take someone to court for non-adherence?**

- Yes
- No
- Unsure

# Legal Remedies for Non-adherence

Patients who are unwilling or unable to adhere to treatment may be required to do so by law or may be isolated until noninfectious

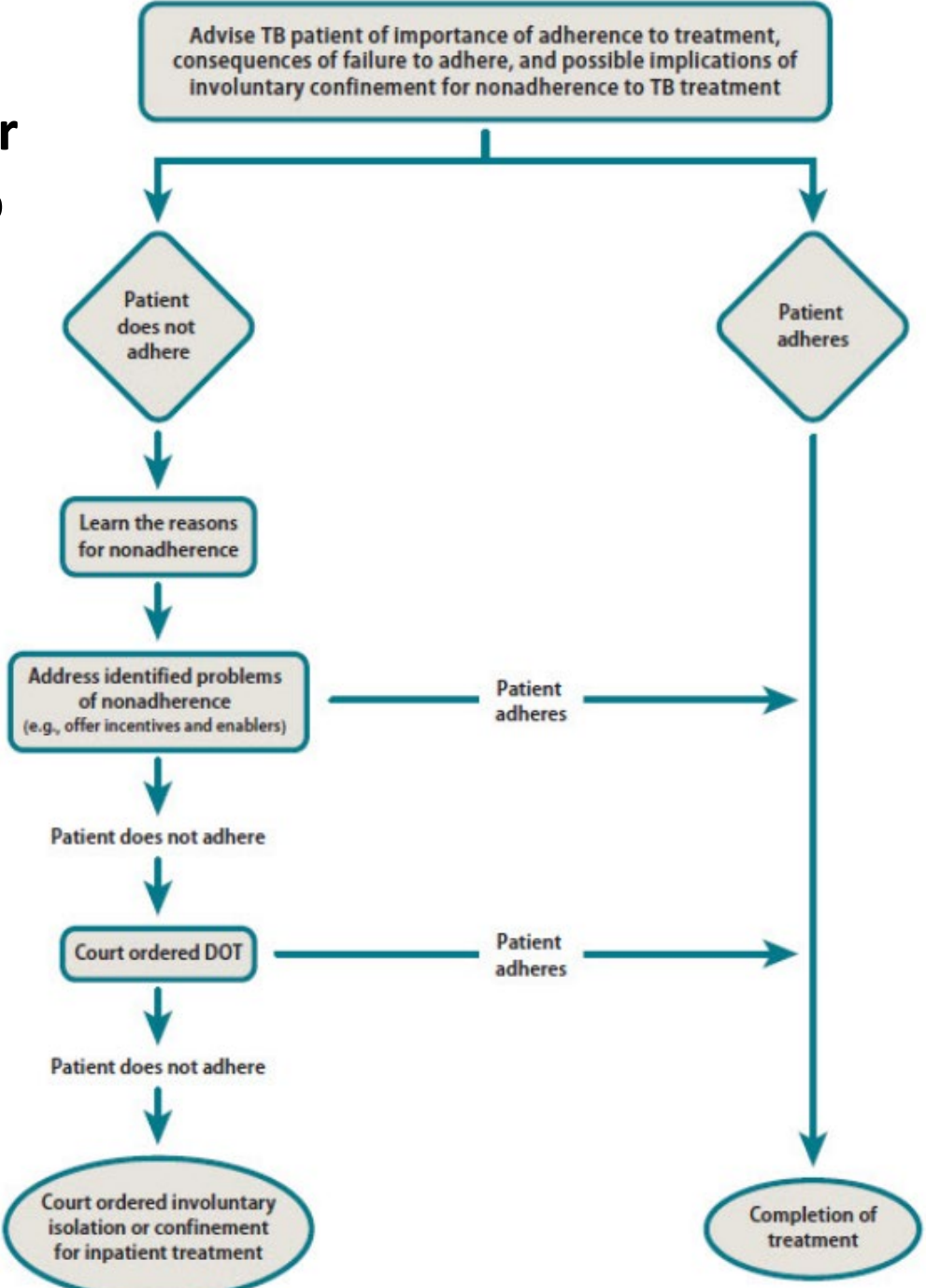
- Progressive interventions plan:
  - Begin with determining the possible reasons for nonadherence
  - Addressing the identified problems using methods such as DOT, incentives, and enablers
  - Adherence agreement
  - The patient should be informed verbally and in writing of the importance of adhering to treatment and the consequences of failing to do so, and the legal actions that will have to be taken if the patient refuses to take medication
  - If the patient does not adhere to DOT, document all interventions



# Court-ordered DOT

- Can be used as a last resort

# Progressive Measures for Nonadherent Patients to a TB Treatment Plan



# Take-Home Points

- TB case management is patient centered
- Patient-centered care optimizes successful outcomes
- Provide culturally and linguistically appropriate education
- Assessment of barriers at the start and ongoing during treatment
- Use DOT or eDOT
- Provide incentives and/or enablers
- Improving adherence begins at the initial meeting