TB Case Management: Why all the “Fuss”? 

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Disclosures

No disclosures
Objectives

At the conclusion of this presentation, you will be able to:

• Explain the role of public health in the management of tuberculosis (TB)
• Identify the most important strategy used during the initial patient interview
• Describe the current guidelines for the treatment of TB diseases
Secondary Objectives

At the conclusion of this presentation, you will be able to:

• List two goals of nursing case management in the Tuberculosis Program

• Identify three elements of the Case Management Process

• Describe three activities that the nurse case manager conducts during the Assessment Phase of the Case Management Process
Why so much Fuss about Case Management?

“Case management is an effective intervention for use in tuberculosis (TB) control to ensure that patients complete an appropriate and effective course of anti-TB treatment in the shortest time possible.”

*Tuberculosis Nursing: A Comprehensive Guide to Patient Care*, 2nd edition, 06/13/11, Page 1
Role of the TB Nurse Case Manager

The role of the nurse in TB is to provide and manage the care of the TB patient and is directed towards achieving specific goals.
Without Nurse Case Managers…

Patients would be discharged from the hospital without coordination with public health

• Self-administration instead of directly observed therapy
• Inability to provide education to patient
• Missed opportunity to assess medication tolerance
• Possible missed follow-up with provider
Without Nurse Case Managers…

Individuals with TB not reported to state
  • Missed opportunity for
    • Free meds
    • Incentives and enablers
    • Review of treatment plan
    • Education and needs assessment
Furthermore…

Individuals with TB not reported to state
- Incomplete TB statistics
  - Drug resistance and risk factors
  - Genotyping
Without Nurse Case Managers…

An organized contact investigation would not occur
  • Poor interview
  • Lack of coordination for testing of family members
  • Missed opportunities for window period treatment
  • Increased anxiety workplace and schools
Without Nurse Case Managers…
Question 1

The goals of case management in the TB Program include:

a) Assuring continuity of care
b) Preventing further transmission
c) Providing education
d) Assuring completion of therapy

- a and b
- a and d
- b and c
- All of the above
Goals of Nursing Case Management in the Tuberculosis Program (1)

- To provide continuity of care
- To assure the prevention of disease progression & drug resistance
- To verify that care is consistent with national standards
- To assure complete TB treatment in appropriate time frames and with minimal interruption
Goals of Nursing Case Management in the Tuberculosis Program (2)

• To assure transmission is prevented
• To provide education to the patient, family and/or community
• To assure that individuals with presumed or confirmed active TB are reported according to regulations/laws
Goals of Nursing Case Management in the Tuberculosis Program (3)

• To assure TB program activities are implemented according to national standards of care

• To assure that Nurse Case Managers have the opportunity to participate in policy development and studies
Case Management Team

• Public Health Nurse Case Manager

• Medical provider

• Contact investigator

• Others
Question 2

Major elements of case management include:

a) Social activities  
b) Evaluation  
c) Documentation  
d) Incentives

• a and b  
• b and c  
• c and d  
• All of the above
Elements and Activities of the Case Management Process

1. Case Finding
2. Assessment
3. Problem Identification
4. Plan Development
5. Implementation
6. Monitoring for variance
7. Evaluation
8. Documentation
Case Management Activities

Case management activities are based on
- State regulations/laws/statutes
- National standards of care
- Policies/procedures established within the state
- Specific physician orders
Case Finding

“The identification of persons with TB disease or infection”

- Establish relationships and communicate with local healthcare providers regularly
- Track patients who are hospitalized to avoid interruption of care
- Ensure contact investigations are initiated and completed according to policy/guidelines
- Provide education on TB infection and/or TB disease
- Ensure reporting regulations/laws are followed
Reporting Tuberculosis

Presumed and confirmed cases of TB should be reported to PH authorities within one working day of identification

- Culture positive for Mtbc

- Culture-negative (“clinical”) cases

- Presumed TB starting on TB treatment

- Pulmonary and extra pulmonary sites

Latent TB infection (LTBI) not reportable in all states
HIPAA and Communicable Disease Reporting

HIPAA allows reporters to provide medical information necessary for public health surveillance, investigations and interventions
TB REPORTING

Labs, medical providers, health care facilities

Local Health Department

MDH
Minnesota Department of Health

CDC

WHO

Mayo Clinic Center for Tuberculosis
Question 3

In the Assessment Phase of the Case management process, the nurse would conduct the following activities:

a) Monitor the patient’s response to treatment
b) Conduct home visit and review patient’s psychological status with family members
c) Send all family members and coworkers in for screening
d) Identify factors influencing adherence

• a and b
• b and d
• a and d
• c and d
Initial Assessment -1

If the patient is hospitalized, complete a hospital visit to:

• Conduct the initial assessment of the patient
• Obtain demographics of the patient
• Obtain copies of hospital records and x-rays reports
Copies of Reports from Diagnostic Studies…
Initial Assessment -2

If the patient is hospitalized, complete a hospital visit to:

- Gather information to initiate the contact investigation
- Obtain other case related information
Tools for Discharge Planning
Ongoing Assessment-1

Conduct a home visit as soon as discharged

- Determine extent of illness
- Obtain health history
- **Evaluate knowledge & beliefs about TB during interview**
- Administer and monitor medications
- Identify barriers to adherence
- Review psychosocial status
- Determine infectious period
Determine Infectious Period
Ongoing Assessment-2

- Monitor clinical response to treatment on a regular basis
- Review the treatment regimen
- Identify positive and negative motivational factors influencing adherence
- Address the educational needs of the patient
- Review the status of the contact investigation to determine further action
Revisiting the Contact Investigation

• Finding and treating additional persons with active TB

• Finding and treating persons with LTBI to prevent further cases
Contact Investigations – A Crucial Prevention Strategy

- 10 contacts are identified for each person with infectious TB

- 20%–30% of all contacts have LTBI

- 1% of contacts have TB disease

  - One-half develop disease in the first year after exposure

CDC
Problem Identification

- Identify and address
  - Existing problems
  - Potential new problems
- Coordinate with other team members
- Monitor the problems
Problem Identification

• Sputum samples = AFB smear positive
• Patient works in a factory and needs income
• Goal is to have patient return to work ASAP
• Will provide medications with directly observed therapy (DOT)
• Anticipate talking with provider about obtaining sputum samples
• If delayed conversion of smears will look at causes
• Will assist patient to explore other supports (food shelf)
Plan Development

- Establishing the plan of care
- Monitoring the plan of care and the patient’s response
- Adjusting the plan of care as needed
Establishing a Plan of Care

Something as important as obtaining follow-up sputum samples
Implementation

• Monitor the patient’s response to treatment, interventions and adherence
• Make referrals for other community services
• Obtain other necessary medical services
• Negotiate and establish a DOT plan; adjust as needed
• Identify and implement strategies to assure continued adherence
• Educate patient/family about the TB infection and/or TB disease
Directly Observed Therapy

Health-care worker observes the patient swallow each dose of TB medications
Education

An estimated 1 out of 3 people in the world are infected with tuberculosis.

TB is preventable and curable.

Talk to your doctor to get tested for TB.

www.health.state.mn.us/tb
Monitoring Activities for Variance

May include any/all on a regular basis:

- Radiographic studies
- Sputum bacteriology
- Other laboratory testing
- Visual acuity, color discrimination, hearing
- Adherence
- Assessment for signs/symptoms of drug side effects and/or adverse reactions
Problem Identification: Side Effects
Evaluation

• Individual
  • Review and update plan at least monthly

• Program
  • Identify strengths and weaknesses of health care system
  • Assure regulatory reports are submitted program activities
    • Case reports
    • CI reports
  • Conduct cohort reviews at least quarterly
  • Participate in policy development
Documentation

- Conduct regular reviews of the patient’s medical record
- Document case management activities in confidential way
- Medical record should be kept so it reflects picture of patient, process, and progress
Laws/Regulations/Guidelines

• Know the laws, policies, procedures and guidelines governing nursing within your state
• Know what, when, and to whom you must report.
• Know the national standards of care for TB
• Know your physicians and other related healthcare providers
Isolation & Legal Measures

• Least restrictive

• Requires proof of infectiousness

• May require documented history of nonadherence to Isolation and/or DOT

• Examination Authority assigned to state or local PH department
Do Not Board for Potentially Infectious Clients
In Conclusion…

TB Nurse Case Management is the coordination of medical, nursing and social services to ensure that every patient with presumed and/or confirmed tuberculosis or TB infection has access to the appropriate evaluation and is able to complete the most effective treatment regimen.
Furthermore…

Case management is dynamic and ever changing and provides a continuous challenge. That is what makes nurse case management interesting, challenging, and fun!
References

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TB Medical Consultants Minnesota

- Mayo Clinic Center for Tuberculosis
  - Regional TB Medical Consultation
  - [http://centerfortuberculosis.mayo.edu](http://centerfortuberculosis.mayo.edu)
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