TB Case Management De-Constructed

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Objectives

- Define TB Case management.
- Describe the goals of TB case management.
- Describe the roles and responsibilities of a TB Nurse case manager.
- Understand the roles and responsibilities of the members of a TB case management team.
- Describe two methods for evaluating TB case management.

What is Case Management?
Primary responsibility for coordination of client care to ensure that the client’s medical and psychosocial needs are met through appropriate utilization of resources

Elements of a Tuberculosis Control Program

Primary goals of case management

- Render the patient non-infectious by ensuring treatment
- Prevent TB transmission and development of additional disease
- Identify and remove barriers to adherence
- Identify and address other urgent health needs
Diagnosis

A → B

Completion of Treatment

Who does it?

TB is a Team Sport

TB Case Management Team

Our Patient

Clinical Team

Field Team

Administrative Team

District/State Office

Disease Investigators

Field Workers

Outreach Workers

DOT Techs

Nursing

Nursing/Medical Laboratory

Social Worker

Pharmacy

Clinical experts

Program Manager

Supervisors

Surveillance

Clinical Support

Centers for Disease Control

Non-Public Health Partners
Nurse Case Manager
Primary Responsibilities

- Responsible and accountable to ensure that the case
  - Completes an appropriate course of therapy
  - Is educated about TB and its treatment
  - Has documented culture conversion
  - Has a contact investigation completed, if appropriate

Unlicensed Assistive Personnel
Primary Responsibilities

- Many titles
- Support case investigations
- Support contact investigations
- Assist in ongoing monitoring
- Contribute strategies for adherence to treatment plan
  - DOT
  - Patient advocates

Other Team Members

- Physicians
  - Medical assessment and diagnosis
  - Treatment Plan
- Administrative
  - Surveillance: analysis and interpretation of data, assure reporting
  - Managers/supervisors: direction, support, guidance
  - Clerical: records maintenance, reception, data entry
- Laboratory/Pharmacy
Program Manager’s Role in Case Management

- Provide tools needed to carry out duties
- Provide support

Standards of Care for TB - 1

- Nurse case manager assigned to every case
- Assessment of TB risk – appropriate examination and diagnostic testing
- Monitoring for smear and culture conversion
- Initial interview within 3 days of report

Standards of Care for TB - 2

- DOT is standard of care for all cases
  - Required for MDR-tb and XDR-tb
  - Required for HIV+
  - Required for treatment failures/relapses
  - Required for demonstrated non-compliance
- Identification of contacts for smear positive pulmonary cases
  - Evaluation of contacts
  - Treatment of infected contacts
I got a new case!!!

What do I do now?

Initial Steps to the Reported TB Case or Suspect - 1

- Receive the case report
  - Gather as much info as possible from report source
    - Demographics
    - Client weight
    - Diagnostic work-up to date
    - Current treatment, if any
    - Risk factors
    - Other important facts
      - Family/living situation
      - Work place/school
  - A local standardized reporting form should be used to ensure critical information is obtained quickly

Initial Steps to the Reported TB Case or Suspect - 2

- Local nurse case manager assigned
- Report to TB Control
  - States vary on timeframes
  - Report immediately any case suspected of being MDRTB or XDR TB
  - Any case or suspect that might have media impact (schools, congregate living, etc.)
**Initial Steps to the Reported TB Case or Suspect - 3**

- Consult with medical provider to gather additional information and treatment plan
- Conduct initial interview with client
  - Recommend first visit in hospital, if hospitalized
  - Recommend home visit early in initial follow-up period
  - Assess home environment
    - Space, ventilation, presence of high-risk persons

**Initial Steps to the Reported TB Case or Suspect - 4**

- Initiate new client TB record

**TB Service Plan**

- Must have a plan in the chart
  - Template – not a copy and place in chart form
  - Individualize for each patient
    - Add/subtract Needs/Problems
    - Add/subtract Plan items
  - Built as Word table
  - Also a documentation tool – can sign and date items as completed
    - Can add short comments to form – longer discussion to progress notes
Old DBE forms

- TB record is NOT a DBE record – it is a case management record.
- Old DBE forms no longer appropriate for use in TB record
  - Especially “Exception Notes” – use Progress Notes form for additional charting.

Additional Forms

- TB Risk assessment – only if used during encounters
- DOT Agreement
- Isolation Instructions
- Interjurisdictional Referral forms
- Progress notes – NOT Exception Notes!!!
- TB Case/Suspect Review
- Forms in TB Laws Guidebook
- VDH forms – registration, HIPPA, eligibility, etc.

Initial Steps to the Reported TB Case or Suspect - 5

- Assess completeness of diagnostic work-up
  - Physical
  - CXR – even if extrapulmonary
  - HIV test
  - Baseline blood work – state/local protocol
  - Sputum
    - Baseline vision
    - Baseline hearing
- Arrange for additional testing/medical care as needed
Initial Steps to the Reported TB Case or Suspect - 6

- Assessment of the treatment plan
  - Re-calculate dosages
  - Enough meds?
  - Right meds?
  - Assess for potential drug-drug/food/herbal interactions
  - Follow agency policies and procedures for settlement of treatment plan disputes

Initial Steps to the Reported TB Case or Suspect - 7

- Assessment of infectiousness
  - Activate isolation protocol
  - ? written instructions ?

Initial Steps to the Reported TB Case or Suspect - 8

- If infectious, begin additional information gathering and interview for contact investigation
  - Identify and screen/test high priority contacts
  - Household and other close contacts
  - Small children
  - Immune compromised contacts
Initial Steps to the Reported TB Case or Suspect - 9

- Initial client education
  - Disease vs. Infection
  - Transmission, signs & symptoms, treatment and importance of completion, diagnostic procedures, monitoring and follow-up, meaning of test results.
  - Role of client in treatment plan, role of case manager, role of health department
  - Treatment plan - Direct Observed Therapy (DOT Agreement form)
  - Handling side effects, change in symptoms
  - Disease of public health significance
    - Consequences for failure to follow treatment plan

Initial Steps to the Reported TB Case or Suspect - 10

- Assess for barriers to care
  - Lack of knowledge
  - Cultural
  - Linguistic
  - Substance abuse
  - Homelessness
  - Payer source for care

  - Arrange for resources and make referrals to assist and overcome barriers

Finishing the Job
TB Case Management - Monitoring

- Beyond the initial steps – what happens from month 2 to 6, 9, 12, 15, 18 or 24 to:
  - Render the patient non-infectious by ensuring treatment
  - Prevent TB transmission
  - Identify and remove barriers to adherence
  - Identify and address other urgent health needs

Elements of CM Process: Ongoing Assessment Activities - 1

- Monitor the clinical response to treatment
- Review the treatment regimen
- Identify positive and negative motivational factors influencing adherence
- Determine the unmet educational needs of the client
- Review the status of the contact investigation

Monitoring & Ongoing Activities - 2

- Continued assurance of adherence
- Adverse reactions and toxicity
- Medication changes
- Clinical/bacteriologic improvement
- Clients without positive cultures
- Susceptibility reports
- Complex case management issues
Monitoring & Ongoing Activities - 3

- Treatment updates
- Change in TB provider
- Continuity of case during relocation
- Continued education
- Psychosocial issues
- Continuation/completion of contact follow-up

Complex Case Management Issues

- Other medical issues requiring close case management
  - Dialysis
  - Drug-drug interactions
  - Adverse reactions to TB treatment
  - Substance abuse
  - HIV infection
  - Diabetes
  - Known Hepatitis B/C patients

Implementation – The Crux of the Matter

- Address inadequate treatment regimens
- Address medical and psychosocial comorbidities
- Address gaps in diagnostic testing
- Finish the contact investigation
- Assure monthly evaluations and treatment adherence
- Collect diagnostic specimens as scheduled
Monitoring Case Management

- Role of program manager
  - Understanding the job
  - Policies/procedures
  - Documentation
  - Program evaluation
  - Training & education

Evaluating the Case Management Process

- Directly connected to national and local TB program Indicators

- Where is there room for improvement?

NTIP – the driving force

- CDC’s National TB Indicators Project
  - Program performance measurement
- 15 indicators
- Each state required to submit 5-year plan detailing planned progress towards meeting national objective
Objective 1 – Completion of Treatment

- For patients with newly diagnosed TB for whom 12 months or less of treatment is indicated, increase the proportion of patients who complete treatment within 12 months to 93.0%
  - Five year average 2003-2007 – 84.5%
  - *2007 – 78.4%

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* - most recent data available

Objective 3 – Contact Investigation

- Target 3 – increase the proportion of contacts to sputum AFB smear-positive TB patients with newly diagnosed latent TB infection (LTBI) who start treatment to 88%
  - 2002-2006 – 64.9%
  - *2006 – 60.5%

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* - most recent data available

Objective 6 – Sputum Culture Conversion

- Increase the proportion of TB patients with positive sputum culture results who have documented conversion to sputum culture-negative within 60 days of treatment initiation to 61.5%
  - 2004-2008 – 46.9%
  - 2008 – 27.8%

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Objective 8 – Recommended Initial Therapy

- Increase the proportion of patients who are started on the recommended initial 4-drug regimen when suspected of having TB disease to 93.4%
  - 2004-2008 – 90%
  - 2008 – 90.9%
  - Health departments – 91.8%
  - Private providers – 72.7%

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Objective 10 – Known HIV Status

- Increase the proportion of TB cases with positive or negative HIV test result reported to 88.7%
  - 2004-2008 – 75.1%
  - 2008 – 75.7%
  - Met prior objective targeting selected age range

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Objective 12 – Sputum Culture Reported

- Increase the proportion of TB cases with a pleural or respiratory site of disease in patients ages 12 years or older that have a sputum-culture result reported to 95.7%
  - 2004-2008 – 87.7%
  - 2008 – 82.6%

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**Ongoing case reviews**

- Real time review of cases/suspects
- Periodic and scheduled
- Process evaluation
- Intervention when outcome can still be influenced

**Case Management Evaluation: The Cohort Review**

- Systematic review of the management of all the patients with disease and their contacts.
- A cohort is a group of TB cases counted over a specific time, usually 3 months
- Cases are reviewed set time after they are counted
- Details regarding management and outcomes are reviewed in a group setting.

**Policies and Procedures**
Your guide to case management

• The TB Case Management Directive

Documentation

If you didn’t write it, you didn’t do it

A Guide to Case Management

• The Tuberculosis Service Plan

http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/Programs/Tuberculosis/Forms/documents/SPMast.doc
Tuberculosis Service Plan

- Medical diagnosis affecting health status: Active TB & LTBI
- Potential for recent TB infection: contacts
- Potential for drug side effects/toxicity
- Need for isolation/precautions if infectious
- Potential for community transmission/potential need for CI
- Housing needs
- Potential for non-compliance
- Potential barriers: cultural, language
- Coordination of care
- Other issues: mental, substance abuse, nutrition, social support

Additional Forms

- General and TB Health History
- Vision/hearing
- Bacteriology flow sheet
- Isolation Instructions
- Monthly clinical assessment

Other Case Management Issues for the Program Manager

- Training and education
- Competency assessment and staff evaluation
- Resources
“They don’t know what I do.....if I am not in clinic, I am not doing anything. You know very little of TB happens in the clinic.”