



Southeastern National Tuberculosis Center
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TB Case Management De-Constructed

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September 22, 2010

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.



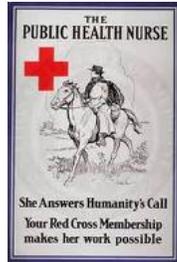
What is Case Management?

A → B

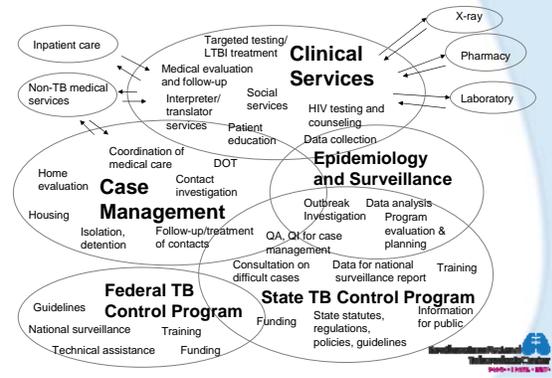


Definition

Primary responsibility for coordination of client care to ensure that the client's medical and psychosocial needs are met through appropriate utilization of resources



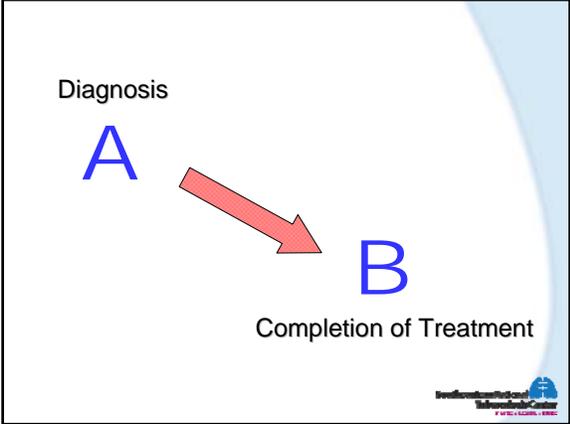
Elements of a Tuberculosis Control Program

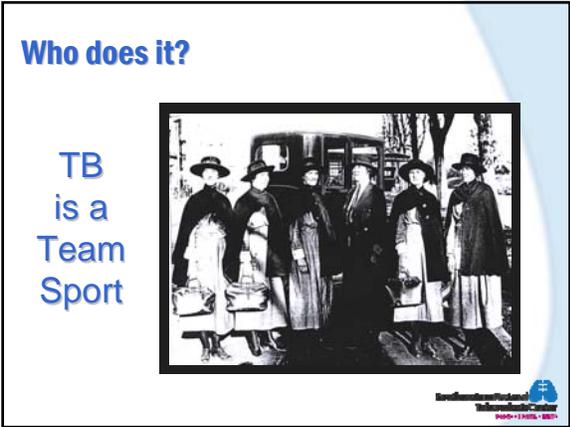


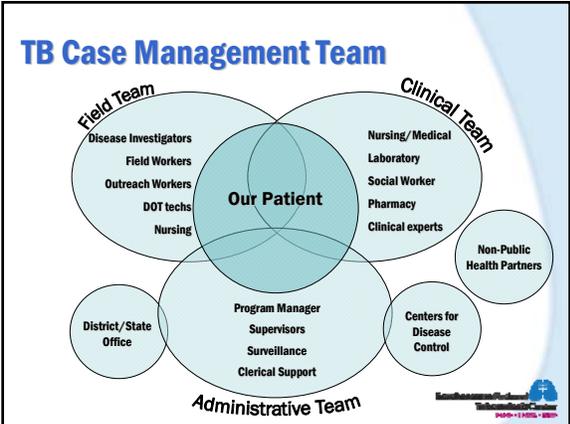
Primary goals of case management

- 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









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 **E** =  =  = 
 - 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 co-morbidities
- 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%

	2010	2011	2012	2013	2014
Objective 1	86%	87%	89%	91%	93%

* - 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%

	2010	2011	2012	2013	2014
Target 3	65	67	70	72.5	75

* - 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%

	2010	2011	2012	2013	2014
Objective 6	40%	45%	50%	55%	60%



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%

	2010	2011	2012	2013	2014
Objective 8	91.4%	91.7%	92%	92.5%	93%



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

	2010	2011	2012	2013	2014
Objective 10	75%	77.1%	79.3%	81.3%	83%



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%

	2010	2011	2012	2013	2014
Objective 12	88%	89%	90%	91%	92%



Ongoing case reviews

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

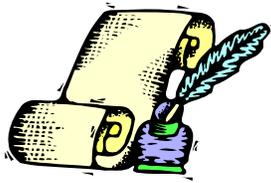


Case Management Evaluation: The Cohort Review

- 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



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.”

International Center for Tuberculosis Control
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