

TB Nurse Case Management: It's What We Do!

TB Nurses Training
Norfolk, VA
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Priorities of TB Control

- **Priority 1 – Index patient**
 - Promptly detect, report and treat with effective drug regimens all persons who have, or are suspected of having, active TB disease
- **Priority 2 – Contact investigation**
 - Identify close contacts of patients with contagious TB and completely treat those who are found to be infected
- **Priority 3 – Targeted testing**
 - Prevent TB among populations infected with LTBI who are at greatest risk for progressing to disease
- **Priority 4 – Infection control**
 - Prevent transmission in settings at high risk for transmission through effective infection control measures

TB NCM = Quality Healthcare

- Coordinate care among many disciplines
- Address medical and psychosocial needs to improve quality of life
- Work towards specific outcomes
 - Treatment adherence
 - Treatment completion
 - Prevention of further transmission
 - Find infectious patients quickly
 - Begin appropriate treatment quickly

Documented Mile Stones

- Identification of the case
- Determination of Infectiousness
- TB education
- Assurance of adherence
- Contact Investigation
- Smear and culture conversion
- Proof of organism susceptibility

**We
are
responsible**

The Authority is Yours!

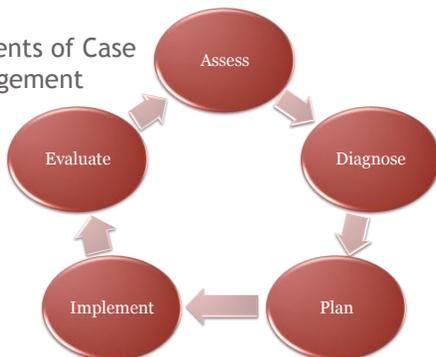
- Ultimately, all TB cases are our responsibility
 - ATS/CDC treatment guidelines
 - DOT is the standard of care
 - HIV testing must be addressed
 - Monitoring the clinical response to therapy
 - Initiating a Contact Investigation

How, I wear many hats?

- It's the Nursing Process
 - Tools developed to assist you in the process
 - Forms available which guide the process
- Guidance is always available



Elements of Case Management



Assessment - What are the details?

- Record Review – Case Finding
 - Reporting Source
 - Chart review
 - Communication with provider
- Index case interview
 - Within 3 days of report, preferably 1 day
 - Repeat in 2 weeks and as necessary
 - Preliminary decision regarding infectiousness
 - Complete necessary agreements

Interview of the Index Case

- Disease characteristics
 - Symptoms, date of onset, bacteriology/NAA, radiography/CT
- Current medical information
 - HIV/ co-morbidities, treatment
- Potential exposure locations
- Potential contacts
- Patient education



Diagnosis - What is the problem?

- Understanding of TB disease
- Response to treatment
- Potential non-adherence
- Maintaining Isolation
- Nutritional needs
- Safe and consistent housing
- Substance abuse
- Access to care – fear, mistrust, anger
- Cultural considerations

Plan - How to address the problem

Tools

- TB Service Plan
- Monitor according to specified time frames
 - 60 days sputum conversion
- Adjust the plan of care as needed

Getting your ducks in a row!



Implement - the plan in action



- Assignment of responsibility
- Medical evaluation
- Treatment
- Monitoring
- Adherence strategies
- Education
- Social Needs
- Follow-up plan

Evaluation - did the plan work

- Critical and often overlooked component
- Continuous and ongoing
 - Case Reviews
 - Cohort Reviews
 - Program Reviews
- Identifies strengths and weaknesses
- Not punitive

Documentation

- Integral part of any type of medical care
- Chronicles care
- Must be legible/clear/concise
- One day, your documentation can and will be used in a court of law.



If isn't documented, It wasn't done!

From start
to finish

Keeping
track of it
all!



**A Day in the Life of a TB
Case Manager**

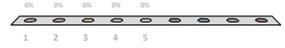
First Steps - Referral Sources

- Lab Reports
 - Positive AFB smear, culture, MTD (NAA rapid test)
- Provider Reports of TB Suspects
- Other sources
 - Clients with concerns
 - B1 immigrant evaluations
 - Refugee Assessments
 - Referrals from other HD programs



Which situation would take first priority?

1. + AFB smear; known NTM
2. TB evaluation referral from local MD; symptomatic
3. +MTD; open to TB program and on TB drugs
4. B1 immigrant with TB symptoms
5. +AFB culture; - smear, person not known to HD



Intake Forms - three choices



Assessment

- TB evaluation referral from local MD; symptomatic
 - Symptoms and history
 - Co-morbidities
 - Home and work settings/family members and coworkers
- B1 immigrant with TB symptoms after HD visit
 - Risk assessment is complete at HD
 - Already referred for chest x-ray
 - No small children or immuno-compromised in home
 - Not yet working

Assessment - Info from MD and Client

- Recent foreign travel to India; 3 month stay
- Symptoms
 - Cough x 2 months
 - 13 lb. weight loss
 - Night sweats
 - Decreased appetite
- Household: spouse and children ages 3 and 6
- Recent Medical Care: ED 2 wks. ago, dentist
- Set time for home or clinic visit!



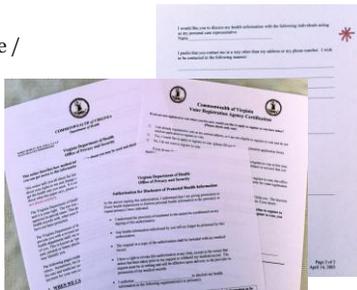
The First Visit

- Required paperwork
 - CHS-1A Consent
 - No Charge for TB evaluation
 - Eligibility done when chargeable services provided



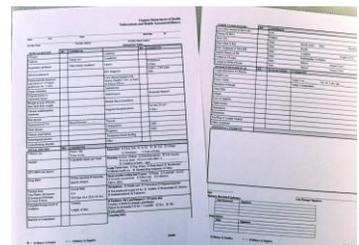
Required Paperwork - 2 HIPAA and Voter Registration

- Privacy Rights
- Auth for Disclosure / Personal Care Representative
- Voter Registration



Assessment Continues - TB Health Assessment and History

- History of present illness
- Medical history
- Physical Exam
- Testing for TB infection



Education re: TB Disease and Evaluation

- Explain health department role
- Disease process
- Ask what client understands; what TB means to them
- Begin to explain contact investigation – begin list
- Discuss nutritional needs
- Assess need for additional food sources
- Assess any other potential barriers

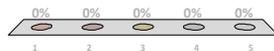
Additional Case Information

- LUL cavitory lesion
- Outpatient bronch: 2+ AFB smear
- NAA not done
- IGRA was negative
- MD has stated he will “probably” start TB meds after more testing



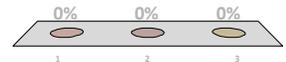
TST or IGRA - When is testing appropriate?

1. When requested by MD
2. Do an IGRA if TST negative
3. Do either if not done already
4. Do a TST if IGRA is negative
5. Do neither for a TB suspect



What testing would you do for this client?

1. TST
2. Repeat IGRA
3. Neither



Isolation Agreement

- Edit for client situation
- Read / both sign/ provide copy
- Provide masks
- Education re: when isolation no longer necessary
- Explore impact of isolation (income, errands, etc.)

Final Plans

- Collect sputa
- Release signed for needed records
- Risk assessment for contacts
- Discuss plan for TB medications
- Explain that services will be on sliding fee after evaluation for TB

After the Visit



- Complete the TB service plan
- Communicate important findings to MD
- Complete Monthly Clinical Assessment flow sheet
- Document the visit on progress notes

TB Disease Care Plan

Virginia Department of Health
Tuberculosis Service Plan

Name _____ Web/Voice _____
DOB _____ ICOP # _____

Goal: Reduce morbidity and transmission with the community.
Objective: Identified case/subject will complete recommended treatment plan and follow-up within standard timeframes.

DATE	ASSESSMENT	PLAN	DOSE	PROGRESSIVE
	<p>Medical diagnosis affecting health status/disease</p> <p>Active tuberculosis</p>	<ol style="list-style-type: none"> 1. Assess medical history and risk factors for acquiring TB infection or for progression to active disease. 2. Complete medical and social history. 3. Assess for symptoms compatible with active TB. 4. Complete initial diagnostic evaluation. Obtain sputum of all pertinent test results and medical records from physician, hospital, lab, etc. (TST results, CXR reports, HIV test results, bacteriology reports, treatment information, etc.) 5. In consultation with medical provider and/or health director, arrange for completion of diagnostic evaluation, if needed. 6. If patient hospitalized or incarcerated, ensure completion and approval of TB Treatment Discharge Plan (TDP). Notify prior to release. Notify discharge appropriate for patient and plans in place for continuity of care. Assess their placement in appropriate and low-risk individual placement in environment. LEAD may request (2009) TB risk for only TB management in the health director's jurisdiction. 7. Assess current treatment plan for conformity to A TREATMENT recommendations. Take immediate action within local district guidelines, to determine reason for deviation to treatment regimen and resolve issue. Involve health director, if needed. 8. Re-evaluate all medications/doses. Obtain list of current medications. Review with medical provider and health director. 		

Monthly Clinical Flow Sheet

Virginia Department of Health
Monthly Clinical Assessment

Name: _____ DOB: ____/____/____ VISION #: _____

RS #	Consequence	Date	Date	Date	Date	Date	Date
1	Treatment Month						
2	Weight (kilograms)						
3	Temperature (F/C)						
4	Bleed Pressure (systolic, diastolic)						
5	Assessment						
6	Cough Frequency						
7	Spitator Assessment						
8	Night cough/Spit						
9	Appetite change/weight loss						
10	Energy						
11	ETOH/Alcohol abuse						
12	ADHD if treated						
13	Side Effect/Toxicity						
14	Use of tobacco						
15	Screening/Confirming TB symptoms						
16	Other/Other Change/Other						

And then.....

- Three sputa collected - 3+, 2+ and 1+
- MTD positive at DCLS
- Labs faxed to MD (private)
- MD starts TB medication, Rx faxed to HD
- Assure correct dosages per treatment guidelines and an appropriate regimen; discuss as needed
- Medications with HD clinician signing LHS-181



Second Visit - Start TB Medications



- Complete TB medication section of medication profile
- Initial 4 drug therapy – a.k.a. RIPE
- Directly observed therapy (DOT)
- Teaching and handouts re: medications and side effects
- Instruct when to call PHN for side effects, give phone #
- Vision evaluation (color, acuity)
- Collect documentation eligibility



Additional Teaching

- Effects of ETOH use and OTC meds
- Reinforce need for isolation to continue
- Explain meaning of + AFB smear and + MTD
- The two children have been evaluated
- Education re: importance of window therapy

DOT Flow Sheet and Vision Evaluation

The image shows two forms. The top form is titled "VISION - Baseline and Monthly until medication discontinued" and includes fields for Date, Name, Sex, Hair, Color, and Height. The bottom form is titled "VIRGINIA DEPARTMENT OF HEALTH DIVISION OF TB CONTROL DIRECTLY OBSERVED THERAPY" and includes fields for DOT Month, DOT Year, DOT Case Manager, Patient Name, Patient Address, Patient's DOB, DOT Start Date, Patient's Sex, DOT Discontinuation Date, Signature, and DOT Site. It also has a table for recording DOT observations.

After the Visit



- Complete DOT sheet
- Communicate with staff who will help with DOT
- Update TB service plan
- Complete bacteriology flow sheet
- Document visit, including client's response to teaching
- Complete Contact List

Bacteriology Flow Sheet and Contact List

The image shows two forms. The top form is titled "Bacteriology Flow Sheet" and includes fields for Name, DOB, and a table for recording sputum collection results. The bottom form is titled "Contact List" and includes fields for Name, Address, Phone, and a table for recording contact information.

In the First Month

- Sputa collection at least every 2 weeks
- See "Controlling Tuberculosis in the United States", page 9, box 3 for release from isolation criteria
- Check on any medication side effects
- Identify any additional contacts
- At third week, *M. tb* complex is identified by DNA probe
- Fax result to treating MD



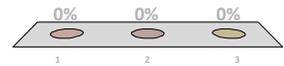
Identification of *M.tb* complex by DNA Probe - what does that mean?

1. Client has *M.tuberculosis* disease
2. The NAA was positive
3. The client only has TB infection
4. The client has *M.tb*, *M.bovis*, *M.microti*, *M.africanum*, or *M. cannetti*



Treatment should:

1. Remain the same
2. Change
3. Contact MD to get new orders



Second Month Visit - 4 wks after Rx start

- Review
 - Sputa results with client: + *M.tb* complex, + AFB smears
 - Need for continuing isolation
 - Med list
 - Diet
- Evaluate for
 - Clinical progress
 - Medication side effects
 - Vision
- Ask about
 - ETOH, OTC medications, herbal products
- Provide
 - HIV results
- Draw LFTs
- Answer questions and address concerns



After the Visit



- Update tuberculosis service plan
- Document visit, teaching and client response on progress notes
- Communicate with treating MD
- Send Contact List to TB Program

Release from Isolation - at 6 weeks

- Client is improving clinically
- Has been on medication for six weeks
- All household contacts have been evaluated and are on treatment if appropriate
- Three consecutive negative AFB smears
- Document on Bacteriology Flow Sheet
- Communicate with treating MD



Drug Sensitivities - at 7 weeks

- Pan-sensitive
- Signed order obtained from treating MD
- Count doses
- Ask MD re: twice weekly therapy
- MD arranges office visit for next week
- Phone call to client to update/advise of appointment
- Sputa collection continues until culture conversion
- Document drug sensitivities on Bacteriology Flow Sheet



At 8 weeks - before visit

- Contact MD and ask for office visit notes
- Ask if treatment plans remain the same or if 2x/week therapy is the plan
- 2x/week therapy is ordered; faxed MD Rx is received, LHS-181 completed and faxed to state pharmacy.



Third Month Visit - 8 weeks after Rx start

- Review
 - Sputa results with client: + M.tb complex, + AFB smears
 - Need for continuing isolation
 - Med list
 - Diet
- Evaluate for
 - Clinical progress
 - Medication side effects
 - Vision – final time
- Ask about
 - ETOH, OTC medications, herbal products
 - Outcome of MD visit
- Discuss
 - change to twice weekly schedule
- Draw LFTs
- Arrange repeat testing for contacts previously negative
- Answer questions and address concerns



After the Visit



- Document on monthly flow sheet
- Document in progress notes
- Document teaching
- Request copy of MD office visit
- Fax MD results of LFTs drawn at visit

Contact Investigation - At 10 weeks after contact is broken

- Schedule second round of testing for contacts
- Schedule chest x-rays for those who are newly positive
- For those with normal chest x-rays, offer treatment for latent TB infection.
- Schedule appointment to start LTBI treatment

At 12 weeks

- Send updated contact list to TB Program

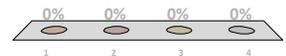
Fourth, Fifth, Sixth Month Visits

- Review
 - Sputa results with client: culture conversion
 - Med list
 - Diet
- Evaluate for
 - Clinical progress
 - Medication side effects
- Ask about
 - ETOH, OTC medications, herbal products
 - Outcome of MD visit
- Draw LFTs
- Answer questions and address concerns
- Estimate end of therapy per guidelines



Sputa culture conversion is:

1. Three consecutive negative AFB sputa smears
2. When the client can no longer produce phlegm
3. Three consecutive negative AFB sputa cultures
4. Two consecutive negative sputa cultures



Treatment Completion



- Arrange for final chest x-ray
- Count doses
 - 40 initiation phase, with PZA
 - 18 weeks or 90 doses continuation phase
- Call MD for order to stop TB meds after complete course of therapy
- Communicate with patient and ORW or other staff
- Send Completion of Treatment form to TB Program

After Treatment Completion - the wrap up



- Continue to follow contacts
- Remove all loose papers from chart
- DOT sheets in patient records
- DOT progress notes in separate section
- File contact investigation notes in separate folder
- Record to OSS
- Keep record nearby for the next year's cohort review

Feedback....Questions....

