2016 Updates to Directly Observed Therapy (DOT) for Tuberculosis

May 25, 2016
June 9, 2016

Presented by Jennifer Cochran, Pat Iyer, Marisa Chiang, Laura Smock, Joan Cromwell, Erica Rimpila, and Ben Cruz
Housekeeping

• The webinar is being recorded
• Use computer speakers/headset, or phone to listen
• Participant lines will be muted
• Use the Question Box for technical questions and/or speaker questions and comments
• Will review and answer the questions and comments that are submitted
• Survey pops up when you leave the webinar - please respond!
Objectives

• Describe DOT evaluation process
• Define DOT
• Review criteria for DOT
• Identify strategies for DOT
• Review documentation of DOT
• Describe implementation in the field
• DPH staff met monthly to review and update DOT documentation, criteria and guidelines
  – Review of best practices and quality of care
  – Review of existing (DPH) DOT materials in use
  – Environmental scan of materials in other jurisdictions
• Considered context - MA uses a case management approach, assessing each patient’s needs and strengths
  – Many jurisdictions provide universal DOT
Process (2)

- Investigated use of video or mobile DOT (vDOT or mDOT)
- Forms and guidance for best practices and improved documentation were developed and pilot tested
- Discussed, proposed MAVEN improvements
- Objective of real-time communication and reporting between case management and providers
What is DOT?
Field-based Definition

• A trained health worker **watches** the patient *taking* and *swallowing* every dose of their prescribed TB drugs
  • Includes checking for side effects, documenting the visit, answering questions
  • Cannot be done by a family member

• **Best practice** for adherence and health monitoring

• DOT is dynamic standard of care and is dependent on a patient’s clinical and behavioral status
What is DOT?  
Surveillance Definitions

• Full DOT
  • DOT used for **all** doses for a patient who was taking medication 1-5 times a week OR if the patient was taking medication 7 times a week and DOT was used for at least 5 of those doses (i.e., patient self-administered on the weekend)

• Partial DOT
  • Applies if the patient self-administered any dose while taking medication 1-5 times a week, even if the rest of the doses were observed.

For surveillance purposes, the # of weeks of FULL DOT are counted and reported to CDC. Weeks with partial DOT cannot be counted.
Benefits of DOT

• Studies show that 86-90% of patients receiving DOT complete therapy, compared to 61% for those on self-administered therapy¹

• Collaborations with providers, state, and local public health

Poll #1

• In which region of the state do you work?
  – West
  – Central
  – Northeast
  – Southeast
  – Metro Boston
Poll #2

- For approximately how many patients did you provide DOT in the past year? *(using the field-based definition of DOT)*
  - None
  - 1 to 5
  - 6 to 20
  - Over 20
Strategies for DOT

Concrete documentation and guidelines

• Criteria for DOT and Assessment/Re-assessment Tool
• Guidelines for DOT (Roles and Responsibilities)
• Agreement for collaboration
• Weekly DOT logs
• Incorporating documentation into the MAVEN record
Criteria for DOT – Active TB

- **Consider** DOT for any patient with active/suspected active TB
- **Highest priority** for DOT includes any person who:
  - Is a child or adolescent < 19 years of age
  - Has TB that is resistant to INH+RIF (MDR-TB) or RIF
  - Is currently experiencing homelessness
  - Has a previous history of TB disease
  - Has a history of non-adherence
  - Is on intermittent therapy
  - Is sputum smear-positive (until conversion)
  - Has difficulty taking pills independently due to physical, mental or emotional instability
  - Is unlikely to take medications on their own
Criteria for DOT - Contacts

• **Consider** DOPT for any person who is a contact to a person with infectious TB

• **Highest priority** for DOPT (including window prophylaxis) includes any person who:
  - Is a child or adolescent <19 years of age
  - Is on intermittent therapy, including short-course 3HP
  - Has severely compromised immunity
  - Is a documented converter
  - Has difficulty in taking pills independently due to physical, mental or emotional instability
  - Is unlikely to take medications on their own
Assessment/Re-assessment Tool

• A checklist to determine
  – whether to start a patient on DOT
  – whether to continue to provide DOT for a patient
Assessment/Re-assessment Tool (2)

**Directly Observed Therapy: Assessment/Re-Assessment Tool**

The Local Public Health nurse can assess new patients to determine if the criteria for DOT are met. Complete the form at least monthly to assess the need for continued DOT.

<table>
<thead>
<tr>
<th>Patient Name: ___________________________</th>
<th>DOB: __________ MAVEN ID: __________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Adherence ________________________</td>
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</tbody>
</table>

**Criteria for DOT**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug resistance: MDR-TB (resistant to INH +RIF), or RIF resistant*</td>
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<tr>
<td>Child or adolescent &lt;19 years of age*</td>
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<td></td>
<td></td>
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<tr>
<td>Currently homeless*</td>
<td></td>
<td></td>
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<tr>
<td>Previous episode of TB</td>
<td></td>
<td></td>
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<tr>
<td>History of treatment non-adherence</td>
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<tr>
<td>Intermittent therapy (includes short-course INH-Rifampin)*</td>
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<td></td>
</tr>
<tr>
<td>Sputum smear-positive*</td>
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<tr>
<td>Difficulty taking pills independently due to mental, emotional, or physical instability*</td>
<td></td>
<td></td>
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<tr>
<td>Unlikely to take medications on their own*</td>
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</tr>
</tbody>
</table>

**Additional considerations at re-assessment**

- Missed clinic appointment without notice
- Missed scheduled DOT visit without notice
- Provider concerns about possible side effects
- Has trouble remembering medication(s)
- Severely compromised immunity

**Initial assessment** → Start DOT if patient meets any criteria.
**Re-assessment** → Continuing DOT is strongly recommended if patient meets any of the starred criteria or re-assessment considerations.

**Recommendation**

- [ ] Start/Continue DOT
- [ ] Reduce DOT to _________ per week
- [ ] Use pill box
- [ ] Self-administered therapy

**Comments:** ____________________________________________

Local Public Health nurse or DOT provider signature: __________________________
Where is DOT done?

DOT can be performed in a variety of settings including:

- Home
- Work
- School
- Other pre-determined settings where adherence is assured
Roles and Responsibilities

• Local Public Health Nurse
  – Discusses DOT plan with patient
  – Provide DOT and fill out DOT log
  – Periodically re-evaluate the DOT plan
  – Communicate with DPH
  – Report adverse reactions to TB medical provider

• Division TB Public Health Nurse Advisor
  – works collaboratively with local public health nurse to determine the level of case management needed to ensure adherence
Roles and Responsibilities (2)

- **CHW Supervisor**
  - Facilitate communication between nurses and CHWs
  - Coordinate initial joint visit
  - Assign and review DOT plan with CHW

- **CHW**
  - Provide DOT and initial log
  - Report non-adherence or any other concerns
Directly Observed Therapy (DOT) Agreement

This DOT Agreement is designed to help everyone [patient, direct case manager, and Community Health Worker (CHW)] understand what is expected of them during DOT. The purpose is to promote communication and to lay out the roles and responsibilities for success. The agreement is signed at the beginning of DOT and can be changed as needed. All information will be kept confidential.

I understand that I will receive DOT as part of my TB treatment plan. The DOT plan has been explained to me. I understand that taking TB medicines is the most effective way to kill TB germs. I agree to have a health worker – local public health nurse or community health worker (CHW) – watch me take TB medicine according to the plan.

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Name and Signature of primary DOT provider: ____________________________________________
Date: ____________________________

Name and Signature of direct case manager: _______________________________________________________________________
Date: ____________________________

Note to Local Public Health: Please fax signed agreement to DPH at 617-983-1990.
Completing the DOT Agreement

I, ________________________________, understand and agree to the following:

(Name)

1. I will be at:  _Home  _Work  _Clinic/Local Public Health  _Other location (specify) ____________
at ________________ to receive my TB medicine.

   (time)

2. If, for any reason, I cannot be present to take my medicine at the agreed upon place and time, I will call

   ________________________ at ________________________ to change the appointment.

   (DOT provider)                  (telephone #)

3. I will tell my DOT provider of any complaints, questions, or problems that I have. I understand that if I am
   having side effects to the medicine, I may be asked to go to ____________________________ to see a doctor.

   (Name of clinic/hospital)

4. If I miss my DOT appointments and I do not take my medicine, my case manager/doctor may take stronger
   action to make sure I am taking my medicines.

   ________________________________  ________________________________
   Patient signature                Date
I, ________________________________, agree to:

(Primary DOT provider)

1. Observe patient taking TB medicines at the agreed place and time. If I need to change the appointment place or time, I will let the patient know in advance.
2. Keep patient information confidential.
3. Respond to questions or concerns patient may have.
4. Assist with referrals to other service agencies as appropriate.

__________________________________________  __________________________
Name and Signature of primary DOT provider          Date

__________________________________________  __________________________
Name and Signature of direct case manager          Date
Translations

The DOT Agreement is available in the following languages:

- English
- Spanish
- Portuguese
- Chinese (Simplified)
- Vietnamese
- Haitian Creole
- Arabic
# Weekly DOT Log

**Directly Observed Therapy (DOT) Weekly Log**

<table>
<thead>
<tr>
<th>Week start date:</th>
<th>Week end date:</th>
<th>Case Manager (nurse):</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ / __ / _____</td>
<td>__ / __ / _____</td>
<td>_______________________</td>
</tr>
</tbody>
</table>

**Name:**

**Maven ID:**

**Phone:** (H)  (W)  (M)

**DOT Location:**

**Time:** ________ AM/PM

### Weekly Medication (Dose/Frequency)

<table>
<thead>
<tr>
<th>Dose</th>
<th>INH</th>
<th>RIF</th>
<th>PZA</th>
<th>EMB</th>
<th>Maxi</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>______</td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
<td>______</td>
</tr>
</tbody>
</table>

**Provider:** Initial for each medication observed

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
</tr>
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</tbody>
</table>

**Number of DOT days observed:**

**Additional Comments:** ________________________________

**Signatures:**

(Nurse) ____________________________ (Community Health Worker) __________________

☐ Scanned to MAVEN OR ☐ Faxed to MDPH 617.983.6990

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Division of Global Populations and Infectious Disease Prevention
Bureau of Infectious Disease and Laboratory Sciences | Massachusetts Department of Public Health

Updated 3/2016
Where to Keep the DOT Log

- DOT in the patient’s home with >1 DOT provider
  - Keep the DOT Log at the home to allow each DOT provider to document encounter
- DOT outside of patient’s home with 1 DOT provider
  - Keep the DOT Log with the provider
- DOT in >1 location and >1 DOT providers
  - Each DOT provider keeps their own DOT Log
  - Consolidate at the end of each week before Log is submitted to DPH
The weekly DOT log was piloted with 10 local public health nurses who provide DOT, as well as DPH CHWs.

Some nurses prefer the weekly log.
Concerns from local public health nurses
- Weekly log creates more work than monthly log
- Confusing
- Change is disruptive

What we are doing about it
- Pre-filled printable DOT weekly log in MAVEN will be available in approximately 6 months
  - In the meantime you can write patient’s info once and make copies
- We modified the form to make it less confusing
- Providing training via webinar
Describe Implementation

Voices from the Field

• What do you like about the weekly DOT log?
• Has the DOT log improved communication?
• How did you overcome barriers to the use of the DOT log?

Comments from Joan Cromwell (Chelsea Public Health Nurse), Erica Rimpila (Salem Public Health Nurse), and Ben Cruz (Community Health Worker in Western MA)
Next Steps

• Official implementation date for the new materials in June 10, 2016
• Any local public health nurse who works with DPH CHWs for DOT will be required to use the weekly DOT log
• Others are encouraged to use the weekly log
Resources

• All four documents are posted on the MAVEN Help Section, along with the translations of the DOT agreement.
  – click on the question mark mark on the top right
Resources (2)

- open Tip Sheets
- look in the TB DOT folder

MAVEN Online Help

Expand all  Collapse all

General Information
 Tip Sheets
 Trainings

Class A/B
 TB DOT
 STD
Resources (3)

• Call the DPH Division of Global Populations and Infectious Disease Prevention if you have any questions: (617) 983-6970
Feedback is Welcome

• Call the DPH Division of Global Populations and Infectious Disease Prevention if you have feedback or suggestions on any of the new materials: (617) 983-6970

• New materials are drafts
  – Periodically check MAVEN Help for updates
Questions