Outline

Introductions
Role of public health surveillance
What is a TB clinic’s surveillance role
What is MAVEN
What MAVEN isn’t
How MAVEN can help inside the clinic
MAVEN Tour
Recommended best practices
The Future!
Who are we?

Division of Global Populations and Infectious Disease Prevention (DGP)

• Andy Tibbs – Team lead for Epidemiology, Surveillance and Research Team

Office of Integrated Surveillance and Informatics Services (ISIS)

• Patrick Randall
Role of Public Health Surveillance
What is TB Surveillance?

Tools for identifying and managing risks to a populations health (NOT Individual health)

- Assuring all cases of TB are identified
- Assessing infectiousness
- Identifying exposures
- Preventing future exposures
- Preventing future disease
Uses for Surveillance Data

- Monitor movements of disease through populations
- Target resources to areas of highest need
- Quantify risk
- Identify best practices and new strategies to reduce public risk
Surveillance Tools in MA

- TB Reporting forms
  - TB Disease
  - TB Infection (LTBI)
- Clinic forms
  - Initial
  - Follow-up
- Other sources/tools
  - Local Boards of Health
  - ELR
  - Medical Records
Role of TB Clinics in TB Surveillance
Assessments

Evaluate disease severity

Determine level of infectiousness

In other words…

Provide information relevant to public risk
Outcomes

Good Treatment outcomes serve two disease prevention/public health purposes:

1. Reduces infectiousness of the current patient or prevents them from becoming infectious.

2. Prevents new cases from developing from previous infection who might begin the chain of transmission again.
Data on TX outcomes

Good data on TX process/outcomes insures:

1. Field staff and local health can adequately support adherence to regimen
2. Treatment resources are not used treating the same patient more than once
3. Closes the loop on investigations of exposure sites and locations
Data Collection Tools

Demographic History Risk Evaluation Treatment Outcomes

In conjunction with reporting forms, the TB clinic forms give a complete surveillance picture of a TB patient.

Important to Send in ALL FORMS (including the Reporting form) for each case seen in Clinic!
What is MAVEN?
MAVEN - Background

MAVEN is a secure web-based disease surveillance and case management system for use by MDPH and local health

- single integrated person-based system
- captures all data elements required for surveillance and case management
- interfaces with the HIE for timely and electronic notification of laboratory reports
- streamlines business processes for case investigation and surveillance
MAVEN wears many hats

Surveillance Tool – Repository for all information collected about an individual patient throughout care and documentation of public health activities

Reporting Tool – Information is extractable and can be viewed in aggregate to see trends, target resources and insure quality

Case Management Tool – A communication mechanisms between all members of a patients care team
What MAVEN Isn’t

A Medical Record

• Looking at information in MAVEN will not give a full clinical profile of the patient
• Not captured in real time (though we try!)

A Chat Tool

• Communications between members of the care team through MAVEN are minimal and professional
• Critical information should also be conveyed by phone
How MAVEN can help inside the clinic
TB Patients often have support outside of the clinic. MAVEN can provide a more holistic view.

Know who is on the TB Care Team in the community

Relevant social history is often included
TB Disease cases in MAVEN often have many attached documents. This can include:

- Overseas evaluations for refugee and immigrant arrivals with TB concerns
- Labs done at other facilities
- Relevant medical records, such as hospital discharge summaries
MAVEN has a number of printable documents relevant to TB Care

- Full case summary printouts
- Partially filled clinic sheets with patient demographics
MAVEN Tour for TB Clinic users
Logging onto MAVEN
MAVEN Splash Screen

Updates/Happenings in MAVEN

MAVEN System News

Our November 2017 MAVEN Webinar: Invasive group A strep follow up: acute care, long term care and beyond will be held Thursday, November 30th, 2017 from 1PM-2PM. Please click here to register to reserve your webinar seat.

If you missed either of our most recent October 2017 MAVEN webinars and would like to view the recordings and slides please click on the following links. Hep C Investigations for LBQWs webinar and the Health Care Personnel Influenza Vaccination for Long Term Care Facilities webinar slides.

MAVEN System Support

If you encounter a problem in MAVEN, please e-mail isishelp@state.ma.us. Provide detailed information such as date, time, description, username, contact information, and attach screen shots. If you encounter an error message, copy and paste the details into your email.

Remember to update your security questions and contact information in the event that you need to reset your password. Password reset functionality is accessed through the login page or by contacting the Virtual Gateway Customer Service, Monday through Friday 8:30am to 5:00pm at 800-421-0538 (Voice) and 617-647-6578 (TTY for the deaf and hard of hearing).

MAVEN Resources

Help Section (programmatic web links, ePostcards, fact sheets, tip sheets, case report forms, release notes)
Clinical Practitioners Contact List
MDPH Disease Fact Sheets
Meningitis and Meningococcal Disease Fact Sheets

Epidemiologists are available during regular business hours (M-F 8:30am-5pm) at 617-933-6800. Outside of regular business hours, an epidemiologist can be paged for urgent situations by calling 617-933-6600 and following the directions.

EDSS MAVEN requires a PDF reader which can be downloaded here.

MAVEN Help Desk: ISIS Staff are available Monday-Friday, 9 a.m. - 5 p.m.

Contact Us

Email Us

ISIS Help Desk 617-933-6801

isishelp@state.ma.us

Last 5 opened events

ISIS Contact Info
Opening an Event in MAVEN
Use this area to add notes about the case.

- **Event ID:** 100762386
- **Event:** Tuberculosis
- **Person:** Donald Duck, Birth Date: 02/08/1980 (Male), Phone: (617) 333-4444
- **Investigation Status:** Open
- **Linked Events/Contacts:** 0 linked event(s)/contact(s) [View]
- **Notifications:**
  - **Disease Status:** TB Disease
  - **Event Date:** 11/01/2017
  - **Event Status:** Contact
  - **Event Type:** Report Date
  - This patient has a positive smear.
  - This patient has been identified as a contact.
  - Event ID is in workflows [View List]
  - Patient Summary
  - MDPH Team: 1

**Notes:**
02/06/2019 12:27 PM (Generic) - Patrick Randall [prandall]
This is the section where notes can be entered about the case. Anyone who opens the event will be able to see these notes.
An asterisk (*) can be used when the full name is not known.
Clinic Visit Attachments

Maven Disease Surveillance Suite - TEST

Event Summary

Basic Information
- Event ID: 100762396
- Event: Tuberculosis
- Person: Donald Duck  Birth Date: 02/08/1980 (Male)  Phone: (617) 333-4444
- Investigation Status: Open
- Linked Events/Contacts: 0 linked event(s)/contact(s) (View)
- Attachments: 1 attachment(s) (Add) (View)
- Notifications: Disease State: TB Disease
  Event Date: 11/01/2017
  Event Status: Contact
  Event Type: Report Date
  This patient has a positive smear.
  This patient has been identified as a contact.
  Event ID is in workflows [View List]
  Patient Summary
  MDPH Team: 1

Adding/Viewing Attachments

Attachments
- Person: Donald Duck
- File: TB_Outreach (45694 - Activated, Traditional).pdf
- Description: Outreach Form
- Status: Requires Review
- Type: General
- Updated By: Patrick Randall
- Security Level: None
- Action: View, Edit, Delete

Showing 1 to 1 of 1 entries
Print Documents

- Follow-Up Clinic forms can be found by selecting the printer icon:
The Demographics and the Clinic Code will be pre-populated on the form.
# Question Packages

<table>
<thead>
<tr>
<th>Question Packages</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Question Package</td>
<td></td>
</tr>
<tr>
<td>01. Administrative</td>
<td></td>
</tr>
<tr>
<td>02. Demographic</td>
<td></td>
</tr>
<tr>
<td>03. ClassA/B</td>
<td></td>
</tr>
<tr>
<td>04. Medical/Risk History</td>
<td></td>
</tr>
<tr>
<td>05. Medical Information</td>
<td></td>
</tr>
<tr>
<td>06. Medications</td>
<td></td>
</tr>
<tr>
<td>07. Provider / Clinic Information</td>
<td></td>
</tr>
<tr>
<td>08. Care Plan / Followup</td>
<td></td>
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<tr>
<td>09. Exposure/Control &amp; Prevention</td>
<td></td>
</tr>
</tbody>
</table>

[View Question Package] [Wizards] [View Wizard]
### Provider/Clinic Question Package

#### Hospitalization Information
- **Was case hospitalized at time of report?**
- **Hospital name**

#### Clinic/Provider Visit Information
- **First Scheduled clinic visit date**: 01/01/2018
- **Primary reason for this evaluation**: [Dropdown]
- **Visit Provider**: [Dropdown]
- **Visit clinic**: [Dropdown]
- **MRN**: 1234
- **Visit type**: [Dropdown]
- **Visit Weight (in lbs or lbs)**: [Input]
- **Clinical status**: [Dropdown]
- **Medical information notes**: [TextArea]
- **Test ordered: ALT**: [Dropdown]
- **Test ordered: Sputum**: [Dropdown]
- **Test ordered: Chest X-ray**: [Dropdown]
- **Test ordered: Other**: [Dropdown]
- **Eye check done for EMB**: [Dropdown]
- **Next/Scheduled clinic visit date**: [Dropdown]
- **Is this the last clinic visit?**: [Dropdown]
- **MDPH review date**: [Dropdown]
- **LBOH review date**: [Dropdown]
- **Clinic name**: [Dropdown]
- **Clinic code**: 2200069727

#### Baseline ALT Result
- [Input]

**Save**  **Cancel**  **Help**
### 06. Medications - Donald Duck - Tuberculosis

#### Treatment Regimen

<table>
<thead>
<tr>
<th>Did patient start treatment?</th>
<th>Treatment adequate?</th>
<th>Reason treatment longer than 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Drug part of Initial Drug Regimen?</th>
<th>Dosage in mg</th>
<th>Frequency</th>
<th>Specify dosage frequency</th>
<th>How many doses per day</th>
<th>Med Start Date</th>
<th>Med Stop Date</th>
<th>Medication Total Doses Expected [(Stop Date - Start Date) / Frequency]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### Comments About Treatment

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Medical/Risk History Question Package

#### HIV Risk History

<table>
<thead>
<tr>
<th>HIV status</th>
<th>Latest HIV test date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MM/DD/YYYY</td>
</tr>
</tbody>
</table>

#### Clinical History

- **Does patient have previous history of TB disease?**
- **Does patient have previous history of TB infection?**
- **Does patient have history of other respiratory illness treatment?**
- **Does patient have history of hepatitis?**
- **Does patient have history of hepatitis? (Retired)**

- **Hepatitis A**
- **Hepatitis B**
- **Hepatitis C**
- **Not Specified**
- **Drug Induced**

#### Non-TB medications

#### Other Risk Factors

- **Occupation**
- **Primary occupation within the past year**
- **Is patient a close contact of an infectious case?**
- **Was patient a missed contact (within last 2 years)?**
- **Was patient a contact to an MDR-TB case (within past 2 yrs)?**
- **Is patient a recent converter (within past 2 years: > 10 mm change)?**
- **Did patient have an abnormal chest x-ray consistent with old TB disease prior to this event?**
- **Patient lived, worked, or extensively traveled within past 5 years to country with high prevalence of disease?**
- **Does patient have an underlying illness that increases their risk for TB?**
- **Was patient a resident of a high risk setting at the time of diagnosis?**
- **Was the patient homeless within the last year?**
- **Did case report substance use within past year?**
- **Does patient have any other risk factor (specify)?**
Additional Features

Push Pin, Workflows, and Tasks
Push Pin

- To see your 30 most recent events, select the Push Pin at the top of the Splash Screen.
Push Pin continued
MAVEN Tasks
Updating/Creating Tasks in MAVEN

To Update a Task:
1. Update Status
2. Enter Completion Date
3. Enter any relevant notes
4. Assign to User (at this time, only assign to USER not GROUP)

To Create a Task:
1. Choose "Assignment" for Type
2. Choose "Pending" for Status
3. Enter Description
4. Assign to User
Workflows

- To see your Workflows, select the Gears Icon at the top of the Splash Screen.
Workflows Continued

Select the MAVEN ID to open the event

<table>
<thead>
<tr>
<th>Type</th>
<th>Due Date</th>
<th>Description</th>
<th>Status</th>
<th>Created By</th>
<th>Last Update</th>
<th>Event</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td></td>
<td>Follow Up Visit</td>
<td>Pending</td>
<td>Mary Kate Marteion</td>
<td>07/29/2014</td>
<td>1000223631 Fudd, Elmer</td>
<td>TB-LTI</td>
</tr>
<tr>
<td>Assignment</td>
<td></td>
<td>Follow Up Visit</td>
<td>Pending</td>
<td>Mary Kate Marteion</td>
<td>07/29/2014</td>
<td>1000223661 Bunny, Bugs</td>
<td>TB-LTI</td>
</tr>
<tr>
<td>Assignment</td>
<td></td>
<td>New Visit</td>
<td>Pending</td>
<td>Mary Kate Marteion</td>
<td>07/29/2014</td>
<td>1000223632 Pig, Porky</td>
<td>TB-LTI</td>
</tr>
</tbody>
</table>
MAVEN
Best Practices
Best Practices Recommendations

MAVEN can be a big help in the TB clinic setting, but it’s also some additional work. Here are some best practices to keep in mind.
Access to Events

Access to TB events in MAVEN is highly controlled. Clinic access is set by most recent TB clinic visited.

To see a patient in MAVEN prior to the initial visit, send DPH a list of upcoming clinic appointments!
Users

- Information in MAVEN is organized for Surveillance, not clinical purposes.
- Best to access the record prior to a visit, rather than during.
  - An administrative user or nurse can prepare needed information for a clinician.
- A small number of adept users with time to learn the system is better than a large pool who never log in.
Get Comfortable

• Be familiar with what is and is not available in MAVEN and how it fits into your clinic’s flow

• Work with DPH on best uses for advanced features like tasking or attaching when you feel ready

• Don’t forget the print documents (PRE FILLED FORMS!)
MAVEN
The Future
For the (near?) Future

- Electronic data transmission?
- Improved access to information (including CXR images) from overseas arrivals
If you are interested in getting your clinic up and running with MAVEN, reach out ISIS Help at 617-983-6801

Other Questions?