Public Health and Meaningful Use: Understanding Syndromic Surveillance and How to Submit

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Webinar Agenda

▲ Who is M-CEITA?

▲ Stage 1 and Stage 2 Meaningful Use Menu Objectives: Syndromic Surveillance

▲ Overview of Syndromic Surveillance and the Michigan Syndromic Surveillance System (MSSS)

▲ How is this Information Used to Improve Health?

▲ The MSSS Onboarding Process
Who is M-CEITA?

▲ Michigan Center for Effective Information Technology Adoption (M-CEITA)

▲ One of 62 ONC Regional Extension Centers (REC) providing education & technical assistance to primary care providers across the country

▲ Founded as part of the HITECH Act to accelerate the adoption, implementation, and effective use of electronic health records (EHR), e.g. 90-days of MU

▲ Funded by ARRA of 2009 (Stimulus Plan)

▲ **Purpose:** support the Triple Aim by achieving 5 overall performance goals

**THE TRIPLE AIM**

1. Improve patient experience
2. Improve population health
3. Reduce costs
M-CEITA's Performance

▲ 5,100+ providers enrolled for M-CEITA support, impacting 1.6 million patients
▲ 4,000+ providers are live on EHR
▲ 2,700+ have achieved Meaningful Use standards

▲ Latest survey shows 99% of M-CEITA customers are satisfied with services
M-CEITA Services

M-CEITA offers subsidized and commercial services to assist with Meaningful Use and practice transformation. Our Health IT services include:

- Meaningful Use Support
- Security Risk Assessment
- Targeted Process Optimization (Lean)
- Attestation/Audit Preparation
## M-CEITA Subsidized Services for Providers

<table>
<thead>
<tr>
<th>M-CEITA Service Delivery</th>
<th>Medicare EPs</th>
<th>Medicaid EPs</th>
</tr>
</thead>
</table>
| **Engagement**<br>
*Establish baseline performance, educate* | ✔️ | ✔️ |
| **EHR Selection** (if needed)<br>*Guidance for 2014 certified products* | ✔️ | ✔️ |
| **Planning**<br>*Develop transition plans<br>Identify key process changes* | ✔️ | ✔️ |
| **Implementation**<br>*Establishing timelines for project mgmt.* | ✔️ | ✔️ |
| **Meaningful Use**<br>*Support MU objectives<br>Assist with registration & attestation* | ✔️ | ✔️ |
Stage 1 and Stage 2 Meaningful Use Menu Objectives: Syndromic Surveillance

What do the measures entail?
## STAGE 1 MENU OBJECTIVE

Submit electronic syndromic surveillance data to public health agencies

<table>
<thead>
<tr>
<th>What the Measure Requires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performed at least one test of certified EHR technology’s capacity to provide electronic syndromic surveillance data to public health agencies and follow-up submission if the test is successful.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What That Means for You</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your EHR comes equipped with the ability to electronically send syndromic surveillance data (e.g., influenza population data). You have to test your EHR’s ability to electronically transmit that information to a public health agency. Even if the test fails, you have successfully met this objective!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are You Excluded from Having to Do This?</th>
</tr>
</thead>
<tbody>
<tr>
<td>You could be excluded from meeting this objective for either of these reasons:</td>
</tr>
<tr>
<td>• You don’t collect any reportable syndromic data</td>
</tr>
<tr>
<td>• There’s no system in place to which you can send information</td>
</tr>
</tbody>
</table>
### STAGE 2 MENU OBJECTIVE

**Submit electronic syndromic surveillance data to public health agencies**

<table>
<thead>
<tr>
<th>What this measure requires</th>
<th>The EP performs successful ongoing submission of electronic syndromic surveillance data from CEHRT to a public health agency for the entire EHR reporting period.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What that means for you</strong></td>
<td>Your EHR comes equipped with the ability to electronically send syndromic surveillance data (e.g., influenza population data). You have to successfully submit that information to a public health agency for the entire reporting period. In Stage 1, you tested your EHR’s ability to electronically transmit that information to a public health registry. Now in Stage 2, you must successfully submit this information electronically on a continuing basis.</td>
</tr>
</tbody>
</table>
| **Are you excluded from doing this?** | You could be excluded from this objective for any of these reasons:  
  - You are not in a category of providers that collect ambulatory syndromic surveillance information on patients during the reporting period.  
  - You operate in a jurisdiction for which no public health agency is capable of receiving electronic syndromic surveillance data in the specific standards required by your EHR.  
  - You operate in a jurisdiction where no public health agency provides timely information on the capability to receive syndromic surveillance data.  
  - You operate in a jurisdiction for which no public health agency that is capable of accepting the specific standards required by your EHR can enroll additional EPs. |
What is Syndromic Surveillance?

- Overview of Syndromic Surveillance and the Michigan Syndromic Surveillance System (MSSS)

- The importance of Syndromic Surveillance to public health
Syndromic surveillance has been used for early detection of outbreaks, to follow the size, spread, and tempo of outbreaks, to monitor disease trends, and to provide reassurance that an outbreak has not occurred.

*Overview of Syndromic Surveillance.* Henning. MMWR / Sep 24, 2004 / 53(Supple);5-11
Syndromic Surveillance: Background


1998: Developing programs for “early detection and investigation of outbreaks” was cited by CDC

*Preventing Emerging Infectious Diseases: A Strategy for the 21st Century*

2000: CDC called for “new mechanisms for detecting, evaluating, and reporting suspicious events”

2001: Priority to develop a rapid means of disease detection was further accelerated by the events of 9/11 and anthrax mailings
Syndromic Surveillance: Rationale: Bioterrorism

**FIGURE.** Syndromic surveillance — rationale for early detection

- *t* = time between detection by syndromic (prediagnostic) surveillance and detection by traditional (diagnosis-based) surveillance.

- Overview of Syndromic Surveillance. Henning. MMWR / Sep 24, 2004 / 53(Supple);5-11
Syndromic Surveillance in Michigan

Objective and Functionality
Syndromic Surveillance: Michigan Objective

The objective of the Michigan Syndromic Surveillance System (MSSS) is to detect bioterrorism, emerging infections, and naturally occurring outbreaks more rapidly than through traditional detection and reporting.
Syndromic Surveillance: Michigan Overview

▲ MDCH has been monitoring trends in syndromic presentation to Emergency Departments (EDs) for almost a decade

▲ The system allows for rapid detection of unusual illnesses and potential outbreaks from healthcare registrations

▲ LHDs and MDCH Epidemiologists can view charts, maps and registration data online (web-based system)
Syndromic Surveillance: The Basics

▲ Data is exchanged in real-time between participants and MDCH

▲ Legacy fields include*:
  - Patient age, sex, home ZIP code
  - Visit date and time
  - Data exchange and acknowledgement information
  - Chief complaint

▲ Data from every visit are transferred
  - Complaint coder will correctly classify visit into syndrome categories

Syndromic Surveillance: How Does It Work?

- Patient registers with basic demographic info and the chief complaint – a short description of symptoms that led the person to visit the ED.

- Registration triggers a message with the necessary information which is sent securely to MDCH in Lansing.

- Chief complaint is classified into 1 of 9 syndromic categories that can be aggregated for review and analysis.

- Detection algorithm runs every hour and an alert is generated if aberration in the levels of a syndrome is detected.
Syndromic Surveillance: How Does It Work?

Patients register at ED

Secure data transfer

CoCo

Classifies chief complaint into syndromes

MI Syndromic Surveillance System

~90 participating hospitals in MI

>10,000 ED registrations submitted each day

+ Poison Control Center Data
## Syndromic Surveillance Categories

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>% of Visits</th>
<th>Example</th>
<th>Sample Text (not inclusive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastrointestinal</td>
<td>9-13%</td>
<td>“Stomach Pain”</td>
<td>Abdominal, stomach, gastric, enteritis, diarrhea, vomiting, nausea, n, v, abdomen, abd, gastroenteritis, nvd</td>
</tr>
<tr>
<td>Respiratory</td>
<td>8-16%</td>
<td>“Difficulty Breathing”</td>
<td>Cough, sore throat, congestion, wheezing, asthma, croup, respiratory, strep, cold, bronchitis, pneumonia, asthma, sob, sinus, uri, dyspnea, dib</td>
</tr>
<tr>
<td>Constitutional</td>
<td>7-10%</td>
<td>“General weakness”</td>
<td>Fever, weakness, dizziness, dizzy, temp, temperature, flu, light headed, chills, lethargy, fatigue, sweating, lethargic, febrile</td>
</tr>
<tr>
<td>Neurological</td>
<td>6%</td>
<td>“Confusion”</td>
<td>Migraine, headache, disoriented, syncope, fainted, paralysis, tingling, seizure, stroke, cva, convulsion, loc, mental, vertigo, meningitis, numb, confusion, dizzy, unconscious</td>
</tr>
<tr>
<td>Hemorrhagic</td>
<td>3%</td>
<td>“Nose bleed”</td>
<td>Epistaxis, bleeding, hemoptysis, hematuria, hematemesis, blood, bleed, hematochesia, hemorrhagic, hemorrhaging</td>
</tr>
<tr>
<td>Rash</td>
<td>1.5-2.5%</td>
<td>“Hives and itching”</td>
<td>Rash, hives, bumps, petechiae, purpura, ivy, dermatitis, pox, scabies, spots, shingles</td>
</tr>
<tr>
<td>Botulinic</td>
<td>&lt;0.5%</td>
<td>“Slurred Speech”</td>
<td>Slurred, diplopia, dysphagia, photophobia, dysarthria, speaking, swallowing, blurred</td>
</tr>
<tr>
<td>Other</td>
<td>12-19%</td>
<td>“Right foot injury”</td>
<td>Laceration, injury, mva, broken, sprain, bite, abrasion, wound, suture, concussion, sunburn, pressure, fall, sugar, gsw, monoxide</td>
</tr>
<tr>
<td>Default</td>
<td>40-44%</td>
<td>“Med Refill”</td>
<td>Everything else (default category) – if complaint contains none of the recognized keywords – e.g. “assault/neck”, diabetes, back pain</td>
</tr>
</tbody>
</table>
 Syndromic Surveillance: Complaint Coder

▲ CoCo correctly classified 98% of complaints
- CoCo originally designed by the RODS team
- MDCH version “trained” using MI ED chief complaints

▲ System is trained to recognize terms and categorize based on significance
- “vomiting and fever” could be GI, but “fever” is more significant; categorized as constitutional
- “bleeding lacerations” could be hemorrhagic, but “lacerations” is more significant; categorized as other
Eligible Healthcare Providers

This chart details the health providers from which MI will accept syndromic data.

<table>
<thead>
<tr>
<th>Eligible Healthcare Provider</th>
<th>Can Participate in MSSS?</th>
<th>Submission Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Emergency Departments</td>
<td>Yes</td>
<td>Emergent Guide</td>
</tr>
<tr>
<td>Urgent Care Centers</td>
<td>Yes</td>
<td>Emergent Guide</td>
</tr>
<tr>
<td>Hospital Inpatient Settings</td>
<td>No</td>
<td>--</td>
</tr>
<tr>
<td>Physicians (Primarily MD &amp; DO)</td>
<td>Yes</td>
<td>Ambulatory Guide</td>
</tr>
<tr>
<td>Dentists or dental surgeons</td>
<td>No</td>
<td>--</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>No</td>
<td>--</td>
</tr>
<tr>
<td>Optometrists</td>
<td>No</td>
<td>--</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>Yes</td>
<td>Ambulatory Guide</td>
</tr>
<tr>
<td>Physician Assistants (furnishing services in a FQHC or RHC led by a physician assistant)</td>
<td>Yes</td>
<td>Ambulatory Guide</td>
</tr>
<tr>
<td>Chiropractors</td>
<td>No</td>
<td>--</td>
</tr>
<tr>
<td>Certified nurse-midwife</td>
<td>No</td>
<td>--</td>
</tr>
</tbody>
</table>
Syndromic Surveillance: Local Health Department User

▲ Can see all healthcare registrations made by residents of local health jurisdiction

▲ Cannot compare local health jurisdiction activity to overall healthcare facilities activity
Syndromic Surveillance: Healthcare

▲ Can see total healthcare registrations made at a facility or system

▲ Can access overall statewide Michigan activity

▲ Cannot see specific detailed information about statewide activity
Examples of Current Uses

Seasonal Illness and Routine EpiAlerts
Syndromic Surveillance: Seasonal Illness

▲ Ability to compare past seasons
  - Example: Constitutional visits
  - Seasonal influenza season vs. pandemic influenza
Examples of Use: Seasonal Illness

▲ Earlier detection of seasonal illnesses
  - Example: Constitutional visits
  - Syndromic surveillance vs. laboratory reporting
Examples of Use: EpiAlerts

▲ The detection algorithm runs every hour at the state and county level for each of the Syndromic Categories.

▲ Email alert is sent if the threshold is exceeded by a certain magnitude or a certain number of times in a 24-hour period.
Examples of Use: EpiAlerts

▲ Alerts for potential outbreaks are sent to State and Regional Epidemiologists

▲ Assess alert
  – Compare alert data to historical data
  – Data is reviewed for anomalies
    ▪ Demographics (age, gender, ZIP code) and chief complaints

▲ Review recent communicable disease cases

▲ Notify LHD immediately if alert is significant
Examples of Use: EpiAlerts – Situational Awareness

▲ Kent County Constitutional Alert, June 28, 2013, 7:30 pm
▲ Much younger age distribution
  - Alert period: Median – 5.0 years; Mean – 20.9 years
  - Past 3-month data: Median – 21.0 years; Mean – 29.7 years

Healthcare Registrations

<table>
<thead>
<tr>
<th>Admission Date</th>
<th>County Registrations</th>
<th>Moving Average</th>
<th>Constitutional</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-Apr</td>
<td>6.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29-Apr</td>
<td>8.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-May</td>
<td>7.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29-May</td>
<td>6.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-Jun</td>
<td>9.0%</td>
<td>7.0%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>28-Jun</td>
<td>9.0%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percent of Total Visits

<table>
<thead>
<tr>
<th>Age Group</th>
<th>During Alert Period</th>
<th>Comparison Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 years</td>
<td>59.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>10-19 years</td>
<td>5.7%</td>
<td>9.0%</td>
</tr>
<tr>
<td>20-29 years</td>
<td>4.4%</td>
<td>8.0%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>3.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>4.6%</td>
<td>4.6%</td>
</tr>
<tr>
<td>50-59 years</td>
<td>5.7%</td>
<td>6.9%</td>
</tr>
<tr>
<td>60-69 years</td>
<td>5.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>70-79 years</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>80-89 years</td>
<td>1.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>90-99 years</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>100 or older</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>
Examples of Use: EpiAlerts – Situational Awareness

▲ ↑ complaints of fever
  - Further analysis showed increase in fever complaints accompanied by vomiting

▲ Likely an escalation of norovirus-like illness activity in Kent County
  - Norovirus-like illness outbreak reported among youth in a sports camp on June 28, 2013

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Number of Complaints During Alert Period</th>
<th>Average Number of Complaints During Similar Period in the Past 3-months</th>
<th>Percent of All Constitutional Complaints During Alert Period</th>
<th>Average Percent of All Constitutional Complaints During Similar Period in the Past 3-months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>62</td>
<td>39.2</td>
<td>71.3%</td>
<td>62.8%</td>
</tr>
<tr>
<td>Fever accompanied by Vomiting</td>
<td>12</td>
<td>3.1</td>
<td>13.8%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Weakness</td>
<td>15</td>
<td>11.67</td>
<td>17.2%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Dizzy</td>
<td>8</td>
<td>9.9</td>
<td>9.2%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Chills</td>
<td>1</td>
<td>1.9</td>
<td>1.1%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
Functionality

Epiplot, Downloading Data, Data Filters, and Ad Hoc Searches
Syndromic Surveillance: Main Screen

**RODS**
v4.3 Production

**Main Epiplot**

- **Total**
- **Respiratory**
- **Gastrointestinal**
- **Rash**
- **Constitutional**
- **Hemorrhagic**
- **Neurological**
- **Botulinic**

Note: Graphs will automatically update themselves every 20 minutes
Functionality: Epiplot and Downloading Data
Functionality: Data Filters

▲ Time Period

▲ Gender

▲ Age
Functionality: Data Filters Example – Constitutional Illness by AGE

Youth Aged 0-17 years
Healthcare Registrations (weekly aggregate)

Adults Aged 18 years and older
Healthcare Registrations (weekly aggregate)
Functionality: Data Filters Example – Constitutional Illness by AGE

Youth Aged 0-17 years
Healthcare Registrations (weekly aggregate)

Adults Aged 65 years and older
Healthcare Registrations (weekly aggregate)
Functionality: Ad Hoc Search

1. List the initial item or part of word
   - Ex: AND=flu

2. Further narrow down the chief complaints by listing parts of word or wording to NOT include in the search
   - Ex: NOT flushed flux fluid
Functionality: AD HOC Search Example – Healthcare Users

▲ Extract own data
- Daily or Weekly ILI data from their ED for aggregate reporting to LHD
- Using a data filter to extract cases who meet the ILI case definition
Summary

Conclusion and Next Steps
Syndromic Surveillance: Conclusion

▲ MDCH has been monitoring trends in syndromic presentation for the past 10 years

▲ MSSS is a reliable source for syndrome-specific data
  – Cannot define true disease burden but lends insight on magnitude

▲ Enhanced surveillance protocols have been developed for preparedness

▲ In-depth analyses inform public health efforts
Syndromic Surveillance: Next Steps

▲ Enrollment of primary care practices
  – Detection algorithms are not currently being run on this data stream
  – Goal is to use this data to detect significant communicable disease events

▲ Next steps
  – Receive and review data from primary care providers
  – Determine capabilities of running algorithms similar to those on ED data
MSSS Surveillance – Onboarding Process
Michigan Syndromic Surveillance System (MSSS)

Steps for Submitting Syndromic Surveillance Data to the “New” MSSS

1. Learn About MSSS Requirements
   - Review the MSSS Public Health Reporting Website [here](#)
   - Review the MSSS Submission Guide [here](#)
   - Learn how to create and register Object Identifiers (OIDs) [here](#)
   - Choose a sub-state Health Information Exchange (HIE) or Qualifying Organization (QO) to transport your message to MHIN. See options [here](#)
   - Contact MSSS Technical POC John Christensen with questions

2. Register for Testing/Ongoing Submission
   - Register at the Michigan Public Health and Meaningful Use Testing Registration Website [here](#)
   - Be sure to register NPIs for all doctors who wish to attest for Syndromic
   - Contact the DCH Public Health Meaningful Use team with MU registration questions

3. Test and Refine your MSSS Message
   - Contact John Christensen for access to Michigan’s Syndromic Message Validator
   - Submit a Test Message at the Validator to attest for MU Stage 1 Year 1 (not Year 2)
   - Refine HL7 2.5.1 Messages at the Validator to prepare for MU Stage 2 and your live feed
   - Coordinate with John Christensen on the MSSS Data Submitter Spreadsheet—this helps confirm facility names to be used and other important data

4. Test Your MSSS Transport Method
   - Contact your HIE rep and John Christensen to set up a transport test through MHIN to the Syndromic Database
   - Note that all submitters should use Michigan’s Syndromic Message Validator (see previous step) to perfect their Message before live testing

5. Send Test MSSS Messages
   - Send your Syndromic Messages with the MSH 11 field set to “T” for “Test”
   - Coordinate with John Christensen on test status, Message fixes (if required), and timeframes for moving to production

6. Send Production MSSS Messages
   - When approved for production feed by John Christensen, switch your Syndromic Message MSH 11 field to “P” for “Production”
   - Hospitals submitting legacy Syndromic Messages should terminate their legacy (VPN) feed when their new feed moves to production
   - Coordinate with John Christensen on status of feed status and resolving any issues that appear

Spreadsheet feeds MSSS databases so data is accepted

Need Help?

Contact John Christensen of Altenum for technical information, submitter onboarding assistance, access to the Syndromic Validator (MDCH-V), help with troubleshooting, and OID creation and registration questions. johnc.christensen@altenum.org

Contact the MDCH Meaningful Use Team for Meaningful Use registration, verification, and questions. DCHPublicHealthMU@michigan.gov

Contact Katie Arends of MDCH for application sign-up to view data (participating facilities/professionals) and user training/support. ArendsK@michigan.gov
Learn About MSSS Requirements

▲ Review the MSSS Public Health Reporting Website

▲ Review the MSSS Submission Guide
Learn About MSSS Requirements

▲ Learn how to create and register Object Identifiers (OIDs)

- View the MDCH OID Registration page:
  https://mimu.michiganhealthit.org/oid
Learn About MSSS Requirements

▲ Learn how to create and register **Object Identifiers (OIDs)**

- View the MDCH OID Tipsheet:

Learn About MSSS Requirements

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- Register NPIs for all providers who will attest for MSSS
Michigan Syndromic Surveillance System (MSSS)

Steps for Submitting Syndromic Surveillance Data to the “New” MSSS

1. Learn About MSSS Requirements
   - Review the MSSS Public Health Reporting Website here
   - Review the MSSS Submission Guide here
   - Learn how to create and register Object Identifiers (OIDs) here
   - Choose a sub-state Health Information Exchange (HIE) or Qualifying Organization (QO) to transport your message to MHIN. See options here
   - Contact MSSS Technical POC John Christensen with questions

2. Register for Testing/Ongoing Submission
   - Register at the Michigan Public Health and Meaningful Use Testing Registration Website here
   - Be sure to register IDIs for all doctors who wish to attest for Syndromic
   - Contact the DCH Public Health Meaningful Use team with MU registration questions

3. Test and Refine your MSSS Message
   - Contact John Christensen for access to Michigan’s Syndromic Message Validator
   - Submit a Test Message at the Validator to attest for MU Stage 1 Year 1 (not Year 2)
   - Refine HL7 2.5.1 Messages at the Validator to prepare for MU Stage 2 and your live feed
   - Coordinate with John Christensen on the MSSS Data Submitter Spreadsheet—this helps confirm facility names to be used and other important data

4. Test Your MSSS Transport Method
   - Contact your HIE rep and John Christensen to set up a transport test through MHIN to the Syndromic Database
   - Note that all submissions should use Michigan’s Syndromic Message Validator (see previous step) to perfect their message before live testing

5. Send Test MSSS Messages
   - Send your Syndromic Messages with the MSH 11 field set to “T” for “Test”
   - Coordinate with John Christensen on test status, message fixes (if required), and timeframes for moving to production

6. Send Production MSSS Messages
   - When approved for production feed by John Christensen, switch your Syndromic Message MSH 11 field to “P” for “Production”
   - Hospitals submitting legacy Syndromic Messages should terminate their legacy (VPN) feed when their new feed moves to production
   - Coordinate with John Christensen on status of feed status and resolving any issues that appear

Spreadsheet feeds MSSS databases so data is accepted

Need Help?
Contact John Christensen of Altenum for technical information, submitter onboarding assistance, access to the Syndromic Validator (MDCH-V), help with troubleshooting, and OID creation and registration questions. john.christensen@altenum.org

Contact the MDCH Meaningful Use Team for Meaningful Use registration, verification, and questions. DCH/PublichealthMU@michigan.gov

Contact Katie Arends of MDCH for application sign-up to view data (participating facilities/professionals) and user training/support. ArendsK@michigan.gov
Test and Refine Your MSSS Message

▲ Contact John Christensen for access to Michigan’s Syndromic Message Validator
   - Note: While M-CEITA is happy to assist, you DO NOT need to go through M-CEITA for MSSS support

▲ Submit a Test Message at the Validator to attest for MU Stage 1 Year 1 (not year 2)

▲ Refine HL7 2.5.1 Messages at the Validator to prepare for MU Stage 2

▲ Coordinate with John Christensen on the MSSS Data Submitter Spreadsheet
Test and Refine Your MSSS Message

▲ Milestones:
- One Test Message at Validator Web Site
- Approved Facility IDs

MSSS Onboarding Milestones
**Michigan Syndromic Surveillance System (MSSS)**

**Steps for Submitting Syndromic Surveillance Data to the “New” MSSS**

1. **Learn About MSSS Requirements**
   - Review the MSSS Public Health Reporting Website [here](#).
   - Review the MSSS Submission Guide [here](#).
   - Learn how to create and register Object Identifiers (OIDs) [here](#).
   - Choose a sub-state Health Information Exchange (HIE) or Qualifying Organization (QO) to transport your message to MHIN. See options [here](#).
   - Contact MSSS Technical POC John Christensen with questions [here](#).

2. **Register for Testing/Ongoing Submission**
   - Register at the Michigan Public Health and Meaningful Use Testing Registration Website [here](#).
   - Be sure to register NPIs for all doctors who wish to attest for Syndromic.
   - Contact the DCH Public Health Meaningful Use team with MU registration questions.

3. **Test and Refine your MSSS Message**
   - Contact John Christensen for access to Michigan’s Syndromic Message Validator.
   - Submit a Test Message at the Validator to attest for MU Stage 1 Year 1 (not Year 2).
   - Refine HL7 2.5.1 Messages at the Validator to prepare for MU Stage 2 and your live feed.
   - Coordinate with John Christensen on the MSSS Data Submitter Spreadsheet—this helps confirm facility names to be used and other important data.

4. **Test Your MSSS Transport Method**
   - Contact your HIE rep and John Christensen to set up a transport test through MHIN to the Syndromic Database.
   - Note that all submitters should use Michigan’s Syndromic Message Validator (see previous step) to perfect their Message before live testing.

5. **Send Test MSSS Messages**
   - Send your Syndromic Messages with the MSH 11 field set to “I” for “Test”.
   - Coordinate with John Christensen on test status, Message fixes (if required), and timeframes for moving to production.

6. **Send Production MSSS Messages**
   - When approved for production feed by John Christensen, switch your Syndromic Message MSH 11 field to “P” for “Production”.
   - Hospitals submitting legacy Syndromic Messages should terminate their legacy (VPN) feed when their new feed moves to production.
   - Coordinate with John Christensen on status of feed status and resolving any issues that appear.

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**Spreadsheet feeds MSSS databases so data is accepted**

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**Need Help?**

- Contact [John Christensen](mailto:john.christensen@altranum.org) of Altranum for technical information, submitter onboarding assistance, access to the Syndromic Validator (MDCH-V), help with troubleshooting, and OID creation and registration questions.
- Contact the MDCH Meaningful Use Team for Meaningful Use registration, verification, and questions: [DCHPublicHealthMU@michigan.gov](mailto:DCHPublicHealthMU@michigan.gov)
- Contact [Katie Arends](mailto:KarendaK@michigan.gov) of MDCH for application sign-up to view data (participating facilities/professionals) and user training/support.
Test Your MSSS Transport Method

▲ Contact your HIE rep and John Christensen to set up a transport test through MiHIN to the Syndromic Database

▲ Use Michigan’s Syndromic Message Validator to perfect the Message before live testing
Test Your MSSS Message Transport Method

△ Milestone:
- Follow-up Test at MSSS or Validator Web Site

MSSS Onboarding Milestones
Michigan Syndromic Surveillance System (MSSS)

Steps for Submitting Syndromic Surveillance Data to the “New” MSSS

1. Learn About MSSS Requirements
   - Review the MSSS Public Health Reporting Website [link]
   - Review the MSSS Submission Guide [link]
   - Learn how to create and register Object Identifiers (OIDs) [link]
   - Choose a sub-state Health Information Exchange (HIE) or Qualifying Organization (QO) to transport your message to MHIN. See options [link]
   - Contact MSSS Technical POC John Christensen with questions

2. Register for Testing/Ongoing Submission
   - Register at the Michigan Public Health and Meaningful Use Testing Registration Website [link]
   - Be sure to register NPIs for all doctors who wish to attest for Syndromic
   - Contact the DCH Public Health Meaningful Use team with MU registration questions

3. Test and Refine your MSSS Message
   - Contact John Christensen for access to Michigan’s Syndromic Message Validator
   - Submit a Test Message at the Validator to attest for MU Stage 1 Year 1 (not Year 2).
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   - Coordinate with John Christensen on the MSSS Data Submitter Spreadsheet—this helps confirm facility names to be used and other important data

4. Test Your MSSS Transport Method
   - Contact your HIE rep and John Christensen to set up a transport test through MHIN to the Syndromic Database.
   - Note that all submitters should use Michigan’s Syndromic Message Validator (see previous step) to perform their message before live testing
   - Send your Syndromic Messages with the MSH 11 field set to “T” for “Test”.
   - Coordinate with John Christensen on test status. Message fixes (if required), and timeframes for moving to production

5. Send Test MSSS Messages
   - When approved for production feed by John Christensen, switch your Syndromic Message MSH 11 field to “P” for “Production”.
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6. Send Production MSSS Messages

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Contact Katie Arends of MDCH for application sign-up to view data (participating facilities/professionals) and user training/support. [ArendsK@michigan.gov](mailto:ArendsK@michigan.gov)
Send MSSS Test Messages

Send your Syndromic Messages with the **MSH 11** field set to “T” for “Test”

▲ Coordinate with John Christensen on test status, Message fixes (if required), and timeframes for moving to production
Michigan Syndromic Surveillance System (MSSS)

Steps for Submitting Syndromic Surveillance Data to the “New” MSSS

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Send Production MSSS Messages

▲ When approved for production feed by John Christensen, switch your Syndromic Message **MSH 11** field to “P” for “Production”

▲ Coordinate with John Christensen on status of feed and resolving any issues that may appear
Questions?

ADDITIONAL CONTACT INFO:

MEANINGFUL USE
888-MICH-EHR
mceita@altarum.org

MSSS ONBOARDING
John Christensen
john.christensen@altarum.org

Next webinar
September 3rd @ noon

Electronic Cancer and Birth Defect Meaningful Use Reporting: Ambulatory Care’s Contribution to Cancer and Birth Defect Surveillance

MDCH
Fatema Mamou
MamouF@michigan.gov