Background

- Pursuant to the Illinois Hospital Licensing Act and Administrative Rule 77 IAC 250.1520 (g): When a drug overdose treatment is provided in a hospital’s Emergency Department (ED), the case shall be reported to the Illinois Department of Public Health (IDPH) within 48 hours after providing treatment for the drug overdose – or at such time the drug overdose is confirmed.
2018

Phased approach to facilitate implementation

– By August 31, 2018: Register for access to the BioSense Platform
– By October 31, 2018: Submit your EMR 1st qtr. Opioid OD data for IDPH to compare and validate with syndromic surveillance numbers
– By December 31, 2018: Begin sending opioid antagonist administration data to IDPH
2020 Expectations

• Facilities have at least one ESSENCE user

• Facilities are able to self-validate their data twice a year

• Facilities are reporting their Opioid Antagonist administrations automatically or manually
Illinois Hospitals Reporting of Opioid Overdoses
48 hours of ED presentation

Stacey Hoferka, MPH, MSIS
Office of Policy, Planning & Statistics
Division of Patient Safety & Quality
March 11, 2020
Syndromic Surveillance at IDPH

Automated data from all IL hospital to IDPH
• Every 15 minutes
• ED and most Inpatient
• Includes:
  • Demographics
  • ZIP code
  • Visit date
  • Facility
  • Chief complaint*
  • Diagnosis*
  • Triage note or clinical impression
  • Disposition
  • Patient ID

*Key data elements

How syndromic can support opioid reporting
• IDPH can extract opioid overdose reporting requirements out of the direct feed
• Minimizes burden on hospitals to report manually every OD
Validation Process - 2020

1. Query internal hospital data
   - For opioid and heroin overdoses in ED

2. Access BioSense=includes ESSENCE tool
   - Review myESSENCE dashboard: Hospital2020_OpioidOD

3. Compare internal data to ESSENCE
   - Report results of comparison in survey link
Hospital Access to BioSense

- New users
- Portal Registration Authority makes request
- IDPH gives access to aggregate data for their facilities
Hospital Access – User password reset

amc.syndromicsurveillance.org
<table>
<thead>
<tr>
<th>Chief complaints test (combination of terms)</th>
<th>Heroin or opioid AND poison / overdose / ingest / intox / unresponsive / loss of consciousness / syncope / shortness of breath / altered mental status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis + chief complaint (Combination of general opioid abuse/dependence ICD-10, with chief complaint text)</td>
<td>F11.[129]0 AND Poison / overdose / ingest / intox / unresponsive / loss of consciousness / syncope / shortness of breath / altered mental status</td>
</tr>
<tr>
<td>Chief complaint alone</td>
<td>Narcan or naloxone</td>
</tr>
</tbody>
</table>

- IDPH uses a more complex query that includes misspellings, general and brand name drugs paired with symptoms, exclusions for negation, SNOMED, legacy ICD-9.

- ‘Chief complaint’ sent to IDPH in syndromic, may have one of many different names in your EMR. It is a free-text or pick list entry for the reason the person is presenting to the ED.
myESSENCE
Criteria

Apply the following criteria to each hospital ED.

If multiple locations, apply the criteria to each separately

Based on past 90 day:

<table>
<thead>
<tr>
<th>IF the hospital ED saw</th>
<th>THEN...</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 opioid ODs in the ED</td>
<td>Absolute difference is +/- 3 or less</td>
</tr>
<tr>
<td>&gt;=10 opioid ODs in the ED</td>
<td>Percent difference is within +/- 20%</td>
</tr>
</tbody>
</table>
Solutions to Differences

<table>
<thead>
<tr>
<th>Opioid OD in syndromic data</th>
<th>Opioid Overdoses in Hospital Internal ED data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low EMR High ESSENCE (priority order set by magnitude of difference)</td>
<td>Low EMR Low ESSENCE (highest priority)</td>
</tr>
<tr>
<td>High EMR High ESSENCE</td>
<td>High EMR Low ESSENCE</td>
</tr>
</tbody>
</table>

IDPH may not be detecting a overdose by opioid or heroin as the cause.

- Hospital query may be too broad
  - non-opioid overdoses
  - opioid-abuse visits that were not an overdose

- Non-specific: i.e. drug-related, overdose, substance abuse.
  - **Easiest solution: provide a more specific chief complaint; e.g. Heroin overdose or Opioid overdose**

- Missing or delayed by many days,
  - Diagnosis completion improvements, if low
Progress 2018 & 2019

Q1 2018 Opioid Overdose Counts

EMR Reported vs. IDPH syndromic surveillance data

Q1+Q2 2019 Opioid Overdose Counts

IDPH Hospital Discharge Data vs. IDPH syndromic surveillance data

R=0.42

R=0.93
Summary

• Goals of validation
  – Accurately estimate burden of opioid OD in ED
  – Timely information for response
  – Sync with other data system notifications

• IDPH can work with the hospital to correct the issue.
• Questions: staceyhoferka.jensen@illinois.gov
SELF-VALIDATION REPORTING

Jessica Ledesma M.Ed MPH
48-Hr Hospital Opioid Reporting Program Manager
Patient Safety & Quality
Illinois Department of Public Health
Self-Validation Form

You will find the link to the Validation form on the 48-Hr Hospital Opioid OD Reporting Website:
http://www.dph.illinois.gov/opioids/48hr-hospitalod-report
<10 Opioid Overdoses to report for the past 90 days
Correct Submission OR Error Message

Number of Opioid Overdoses identified in your EMR for the past 90 days.
* must provide value

Number of Opioid Overdoses identified in ESSENCE for the past 90 days from the validation date entered above
* must provide value

Difference
* must provide value

Is the difference between overdoses identified in ESSENCE and the overdoses identified in your EMR ≤3 or less?
  - Yes
  - No
* must provide value

Confirmation

You answered NO.

Please re-validate your data in 3 months (June)

Please note: your facility has been added to a queue to receive feedback/assistance.

Thank you for your submission.

Number of Opioid Overdoses identified in your EMR for the past 90 days.
* must provide value

Number of Opioid Overdoses identified in ESSENCE for the past 90 days from the validation date entered above
* must provide value

Difference
* must provide value

Is the difference between overdoses identified in ESSENCE and the overdoses identified in your EMR ≤3 or less?
  - Yes
  - No
* must provide value

Confirmation

The answer you submitted is INVALID. The difference between the EMR and ESSENCE is >3-10. DO NOT SELECT YES!

You answered YES.

Thank you for your submission, be sure to validate your Opioid Overdose Data again in September.

Submit
≥ 10 Opioid Overdoses to report for the past 90 days
Your Form has been submitted

For your records

• Email yourself a confirmation of your submission

• Download a PDF version of your submission
  – Includes responses
  – Date and time of submission
Validation Due Dates

• Facilities will be expected to validate their Emergency Department opioid overdose data 2 times a year.

DUE DATES 2020

• March 31, 2020
• September 30, 2020
OPIOID ANTAGONIST REPORTING

Dejan Jovanov
Discharge Data Manager/Systems Architect
Division of Patient Safety and Quality
Opioid Antagonist Administration Reporting

• Report Daily
  – Simple report from pharmacy data
  – With the data for the last 48 hours
  – Any opioid antagonist (most common: Naloxone)

• Automated reporting (Preferred method)
  - Automated script to extract data and send the report
  - Scheduled job
  - 77% of facilities are already reporting using this method

• Manual reporting (Optional method)
  - Report using a webpage
  - Manually entering the information every day
## Opioid Antagonist Administration Reporting

### Required elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility ID</td>
<td>Same Facility ID your hospital is using in MSH4.2 for SS HL7 messages</td>
</tr>
<tr>
<td>Patient ID</td>
<td>The same Patient unique ID you are using in PID3.1 for SS HL7 Message</td>
</tr>
<tr>
<td>Date</td>
<td>Date and time when the opioid antagonist was administered.</td>
</tr>
<tr>
<td>Medication Name</td>
<td>Name of the opioid antagonist</td>
</tr>
<tr>
<td>Medication code</td>
<td>RxNorm or other code system</td>
</tr>
<tr>
<td>Dose</td>
<td>Milligrams</td>
</tr>
<tr>
<td>VisitID</td>
<td>The same visit ID you are using in PV1.19 for SS HL7 message</td>
</tr>
</tbody>
</table>
Automated reporting

• Create the file
  – Include all required elements
  – Column names in the first row
  – Use the naming convention
  – Pipe or comma delimited file
  – Use . CSV extension

• Transfer this report to IDPH
  – Using already existing SFTP connection (Syndromic surveillance, Immunizations and Electronic Lab reporting)

  URL: moveit.illinois.gov
  IP Address: 163.191.60.21 port 22
  Directory for Uploads: /Distribution/DPH/SS-HL7/

<table>
<thead>
<tr>
<th>Naming convention for report files: NPI_YYYYMMDD.csv</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
</tr>
<tr>
<td>Facility with NPI number: 123456789</td>
</tr>
<tr>
<td>File production date of: 2017/12/12 (i.e., December 12, 2017)</td>
</tr>
<tr>
<td>The File Name would be: 123456789_20171212.csv</td>
</tr>
</tbody>
</table>
Manual method

• You need to register

• You will receive email reminders daily with a link
  – Link is unique by facility

• Enter the data into the online web form
  – Data for the past 48 hours
  – Submit report with only Facility ID and Report Date if there is no data to report
Manual method

Syndromic User Request

Use this link to make requests to IDPH for syndromic surveillance access and support

[https://redcap.dph.illinois.gov/surveys/?s=Y884WCDC9M]

1. Organization Type
   * must provide value
   - Hospital

2. Name of Health System or Hospital
   * must provide value

3. Request Reason
   * must provide value
   - Create user account for ESSENCE
   - Hospital upgrade-data validation
   - Hospital Opioid overdose validation
   - Technical Assistance - Training
   - Technical Assistance - other
   - Data access problem
   - Register-manual opioid antagonist reporting

4. Contact Email of person completing form
   * must provide value

Provide email contact for any follow-up questions.
Manual method

Contact Email of person completing form
* must provide value

Hospital contact Name
* must provide value

Hospital contact phone number
* must provide value

Hospital contact email
* must provide value

List hospitals (with city) that user is responsible for (For mandatory opioid reporting)
* must provide value

For Office Use Only

Administration
- PRA verified
- Account created
- EMR validation file submitted

Initials

Submit
Manual method
Manual method
Manual method
Manual method
Manual method