Drug Poisoning Surveillance: Leveraging Existing Infrastructure

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Discussion

- Background/Problem
- Solution
- Functional Design
- Benefits
- Limitations
- Future Versioning/Extensible Use

Background / Problem

- MI received first opioid overdose response funding from CDC in 2017 under Enhanced State Opioid Overdose Surveillance (ESOOS)
- ESOOS focused on leveraging/adapting existing infrastructure
  - ME Death Record Abstraction
  - Syndromic Surveillance
- Problems - Lack of access to timely, complete, person-identifiable, line-level non-fatal overdose data
  1. While ME death record data is complete, it is not timely and does inform on non-fatal overdoses
  2. Syndromic is timely, but highly inconsistent and requires extensive expertise to interpret/understand

Solution (1/2)

- We needed to identify a solution that could bridge this gap with timely, line-level data on non-fatal overdoses.

- Leverage MiHIN's "Network-of-Network" HIE architecture, BCBSM has established a mature architecture with high saturation of ADT message exchange across all encounters for P4P-participating partners.

- These ADTs show potential to meaningfully impact a number of surveillance use cases – including drug poisoning/opioid overdose surveillance

Solution (2/2)

- Represents the best available balance between timely and complete, with person-identifiable line-level data.
- Paired with drug poisoning administrative rules, these message feeds can be leveraged to meet reporting requirements
  - Increases completeness of referrals
  - Emergency rules now in place
  - Final, permanent rules are forthcoming
- Minimize impact on reporters
- Will serve as central repository to meet drug poisoning reporting rules referral obligation

Functionality

- MiHIN will establish “listener” on existing ADT traffic
- Applying MDHHS-compiled trigger codes, MiHIN will route copies of matched messages to MDHHS for surveillance
  - ICD-10-CM code-predicated
  - Trigger code value set will be regularly updated and published on a public-facing website for EHR and clinical workflow application purposes
- Manual event referral entry will be available (v2) for:
  1. Providers who may not participate in BCBSM’s P4P program (e.g., CAHs)
  2. For referral message QA purposes
- Drug Poisoning Surveillance Module is being built with the Michigan Disease Surveillance System Environment to leverage existing system functionality.

Benefits / Limitations

- Minimizes reporting impact on reporting providers/systems
  - Public Health surveillance models in Michigan are moving more and more to a model where we can leverage existing infrastructure and information
  - Why re-invent the wheel and burden healthcare provider systems with onboarding activities when available data sources can be leveraged through available architectures?
- But, this is *entirely* reliant on application of relevant ICD-10-CM codes in practitioner use of EHRs.
  - Healthcare provider uptake of these codes will in ADT message feeds will result in more sensitive catchment of administrative rules-covered drug poisoning referrals.

Timeline

- Emergency Administrative Rules are currently in place
  - MDHHS has not formally asked for drug poisoning reports
- Final Administrative Rules are forthcoming
  - MDHHS does not expect to request drug poisoning reports until this automated reporting process is available to hospital submitters
- v1 of this system should go live around Labor Day
  - This version will not include manual reporting functionality, so MDHHS will likely not mandate reporting at this time
- v2 of this system should go live by the end of the year
  - This will include the manual reporting functionality
  - A reportable drug poisoning request will likely coincide with this phase

Future Versioning/Extensible Use

- Current version focuses on leveraging existing ADT feeds
  - We know that BCBSM's P4P implementation is mature and has high uptake across MI hospital environments = complete, relatively representative data source
  - ADTs are timely
  - BCBSM's implementation guidance and P4P onboarding increases likelihood of data completeness and conformance
  - Provides an avenue through which we (MDHHS) can suggest controls for message conformance
- Other, similar "existing" data feeds may be leveraged in the future
  - Continuity of Care Documents (CCDs) in C-CDA architecture could be leveraged -> will be dependent on, and informed by, the outcome of MI eCR activities
  - ELR feeds for toxicological findings
- Could be expanded to other use cases for public health surveillance
  - E.g., Stroke Surveillance

Questions / Resources

- Please feel free to reach out with any question, at any time
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- Emergency Reporting Rules FAQ: https://mha.org/Portals/0/Issues%20and%20Advocacy/Opioids/opioid-emergency-rules-faq-01022019.pdf