Now Casting – Putting Clinicians in Supporting Roles

12:45 PM EST | December 8th, 2022 | 2022 SyS Symposium

Facilitator:

- Gabriel Ann Haas, MPH – Kansas Department of Health and Environment

Speakers:

- Kellie Wark, MD, MPH – University of Kansas Medical Center
- Adrienne Malik, MD – University of Kansas Medical Center
- Brittani Valentine, DO – University of Kansas Medical Center

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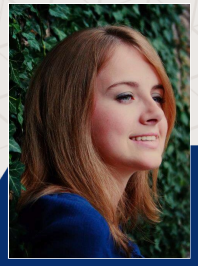

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KANSAS SYNDROMIC SURVEILLANCE PROGRAM

Kansas Department of Health and Environment

EMR-ging Health Threats: Can Clinician Engagement Enhance Syndromic Surveillance Practice?

Gabriel Ann Haas, MPH

With Panelists Dr. Wark, Dr. Malik, & Dr. Valentine

from The University of Kansas Medical Center

December 8th, 2022

Kansas Department of Health and Environment

Division of Public Health

Introductions & Outline

Key Objectives:

- Discuss the ways in which clinician engagement might enhance surveillance efforts
- Discuss challenges, concerns, and barriers to clinician engagement & education
- Learn from Kansas and others about successes in engaging emergency department staff & hear thoughts from a physician about syndromic surveillance.
- Discuss the best ways to make connections with clinicians in your own jurisdictions

Background

Need to Enhance Feedback Loop Between Medicine & Public Health for Surveillance Purposes

- Mayo Clinic Survey of clinician public health engagement (Bornstein et al. 2021)
  - Respondents had a fairly good knowledge of public health functions, but very few had a personal interaction with public health in the past 2 years or were aware of how to work with public health organizations in their community. Many rated their public health education in medical school as inadequate.
- Syndromic Example: EVALI scope initially determined in ESSENCE from a provider tip-off. Timely public health investigation is key to resolution & prevention.
  - **If clinicians are aware of how surveillance systems work, they may be more inclined to report or record something unusual**.

Background

Syndromic Surveillance depends directly upon accurate & timely EHR documentation by clinicians

- Degree to which clinicians are aware this system is in place at all, or that their documentation is monitored for public health, is largely unknown
- Reliability of case definitions reliant on clinician documentation often flawed:

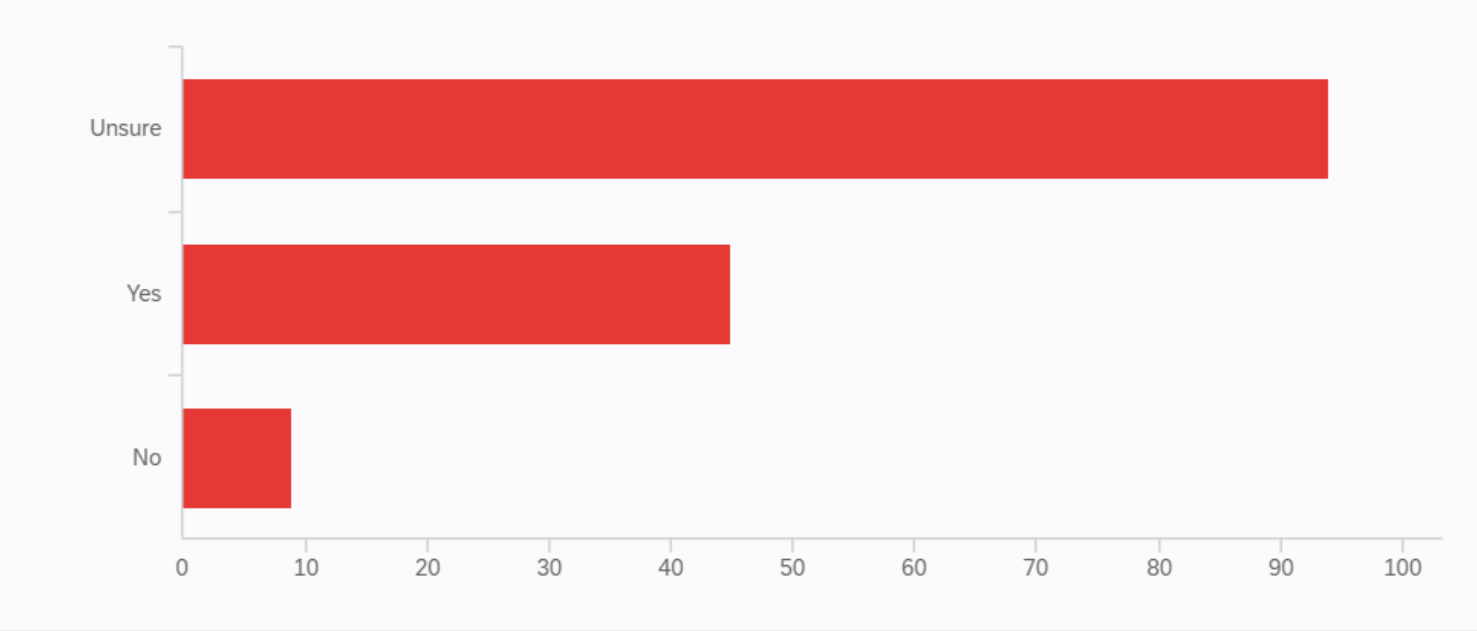
- Documentation audits reveal large (>50%) discrepancies in ICD codes and actual diagnosis, with **greater experience** associated with **lower accuracy** of billing codes (1-3)

- Billing codes perceived as negatively impacting day-to-day work, minimally impacting patient care, with perceived irrelevance to clinical care (4-5)
- No standardization of EHR entry (4)
- Transmission of contextual factors still relies on past surveillance tools (telephone, fax) --> **if clinicians were aware documentation was utilized for more than administrative billing purposes, would they be more apt to include key contextual or social factors?**

1. MacIntrye C et al Aust NZ J Public Health; 1997, 2. Peabody J. et al. Medical Care; 2004, 3. Farzandipour M. et al. Int J Inf Manage. 2010, 4. Watzlaf et al. 2007, 5. Butz et al. 2016

Have you heard of syndromic surveillance?

Is the health department able to monitor de-identified ED or urgent care visit records for public health surveillance purposes?



Results

Perceived importance of being aware of public health surveillance trends

- 36% always important → 48% frequently important → 15% sometimes

Perceived importance of improving data quality for public health surveillance

- 28% critically important → 36% very important → 32% moderately important → 4% slightly important → 0% not important

“If you knew your documentation and coding impacted public health action and outbreak detection, would you be more inclined to to improve the most pertinent parts of your documentation?”

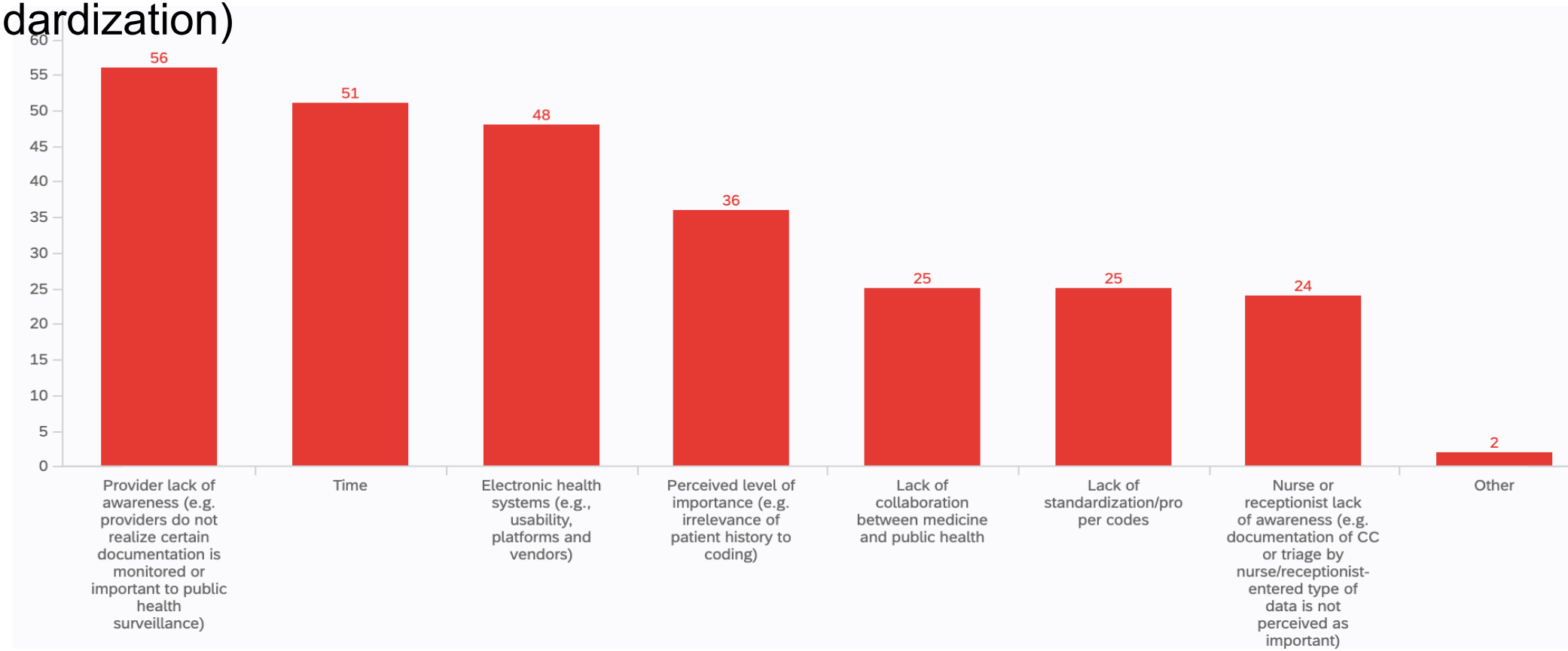
- 61% yes → 37% maybe → 2% no

”If you knew specific codes or language were more likely to trigger an event of concern, would you be more apt to use those codes or language of interest?”

- 70% yes → 29% maybe → 1% no

Results

Perceived barriers to improving documentation and coding as it relates to public health surveillance: **most important factor was provider lack of awareness** (perceived more important than time, EHR platforms, public health-healthcare collaboration, coding standardization)



Conclusions

- ED providers are largely unaware documentation and codes are used for public surveillance purposes, and this **lack of awareness was deemed by physicians as more important than time or utility of EMR** in factors needed to improve data quality

- Critical information that would be typically captured and coded into a key syndrome is often missing, but **providers are unaware of what types of information may be monitored** or useful (and where)

- Clinicians likely more invested than administration/IT in surveillance for public health outcomes and SyS is an opportunity for frontline clinicians to see their own documentation at work

Action

- **Participatory research approach to engage frontline workers**
  - Local public health & clinicians can work to improve tracking of certain events.
    - Understanding documentation practice helps us to interpret data, write queries
    - Collaboration for active monitoring – use of a key word, codes, etc.
  - Opportunities for applied public health research, academic-public health partnerships

- **Improved communication**
  - Initially opens channels of communication to target surveillance efforts (tipoffs, inquiry)
    - An ED provider might contact KSSP about a concerning increase in _____.
  - Feedback loop to clinicians → lower threshold for certain diagnostics (e.g., flu testing, stool cultures, patient histories (vaping), etc.),
  - Investigate preferred communication channels to share important trends back to providers, especially in times of crisis

Question 1

Audience: How might clinician engagement enhance public health practice? What are things you would like to see improved?

Question 2

Panelists: What was your initial impression of Syndromic Surveillance? Do you see a role for clinicians?

Question 1

Audience: Has your jurisdiction attempted to reach out to local providers? Why or why not? What are the barriers?

Question 4

Panelists: What have KDHE and KU done so far and what have each of you learned? Do you have tips for engaging EM clinicians in other jurisdictions?

Question 3

NSSP/CSTE: Can you provide an update on Project EMR-GE and engagement at the national level?

Question 6

Everyone: What should collaboration look like and what steps do we need to take to get there? Any other questions for our panelists or audience?

Thank You

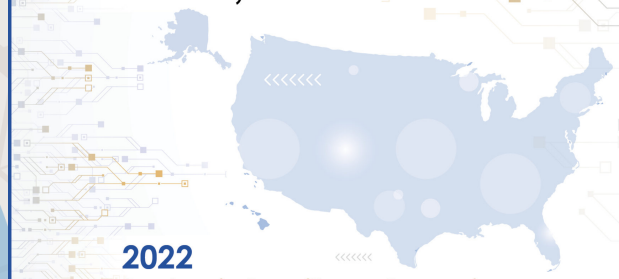
Please direct further inquiries to gabe.haas@ks.gov

Additional thanks to partners at the University of Kansas Health System's Department of Emergency Medicine and Division of Infectious Diseases

National Syndromic Surveillance Program

Community of Practice

Resources that Advance the Science and Practice of Syndromic Surveillance



2022 Syndromic Surveillance Symposium

December 6–8, 2022

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