

OBJECTIVES

Evaluate your team's assigned classifier using BioSense Platform tools by completing the following tasks. At the end of this activity, each participant should be able to...

- 1. describe the classifier's scope and purpose,*
- 2. identify evaluation guidelines,*
- 3. describe the rationale for making or not making refinements, and*
- 4. possess a rudimentary ability to manipulate the tools and resources available on the BioSense Platform.*

TASKS

1. Form your team.
 - a. Acquaint or reacquaint yourself with you team members. For example, have each team member share who they are, where they work, what are their agency's overall expectations of syndromic surveillance, and one thing they'd like to learn today.
 - b. Before proceeding to the next step, be sure everyone can identify what is to be accomplished.
 - c. Assign the following team roles.
 - *Operator* – the person who will project their desktop and run ESSENCE or other BioSense Platform application(s) for your team
 - *Recorder* – the person who will note your team's answers and findings to share with the full team
2. Define and note the **public health purpose** of surveillance using your assigned classifier/syndrome. Be sure to discuss each of the following:
 - a. The public health concern related to the opioid-crisis
 - b. The approximate likelihood that the syndrome is present in emergency department (ED) visit data
 - c. What added insight(s) may be gained by trends in this syndrome across shared inter-jurisdictional data

3. Define and note the **scope of syndromic surveillance** using the classifier on ED visit data. Be sure to address each of the following aspects:
 - a. Purpose or intention: The public health question(s) to be answered by the surveillance, and associated planned or possible action(s)
 - b. Relative priority of sensitivity versus specificity
 - c. Time frame for surveillance and observation
 - d. Inclusions or exclusions to the data given the above; e.g., facility or visit types, etc.
 - e. Additional or supplementary data sources; e.g., EMS, 911, poison control center, etc.
4. Review your assigned classifier's definition and discuss anticipated results.
5. Using ESSENCE or another BioSense Platform tool, examine the classifier's performance to determine how it might be refined for better performance. Consider doing the following as part the evaluation.
 - a. Execute the classifier as a query against the **CCQV dataset** and **shared workshop dataset**.
 - b. Review query results at line-level and in visualizations; e.g., time-series.
 - c. Roughly identify keywords that drive results by percentage of probable records captured per classifier terms or term combinations.
 - d. Gauge the proportion of suspect or probable syndrome-visits captured, or missed, by the classifier query.
6. If classifier performance can be improved, make the appropriate component changes, and save and share it with your team using the BioSense ESSENCE *Query Manager*.
7. Discuss and note your team's thoughts on how the classifier should be used at local, state, regional and national levels. Be sure to identify and address interpretation differences at the different levels.

8. Prepare a 5-minute report-out to share your team's key findings with the other teams. Select or appoint a team spokesperson for the report-out and help them prepare 1 or 2 slides that address the following questions.
 - a. What is your team's definition of the public health concern, and how does that relate to the classifier's surveillance scope and purpose?
 - b. Why did your team change or not change the classifier? If it was changed, how does it differ from where you started?
 - c. What caveats or other descriptors should accompany this classifier to help with the interpretation of results?
 - d. What public health action would your team propose from a surveillance signal?