ESSENCE Features for 2019

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Objective

The objective of this presentation is to discuss the new features that are under development for ESSENCE in 2019. This is a chance to describe the features, the use cases for the features, and open a dialogue with the community on potential new enhancements that are available.

Introduction

The ESSENCE system is a community-driven disease surveillance system. Installed in over 25 jurisdictions across the US, the system is built on a single codebase that is shared across all instances. While each individual location can customize many of the settings, data sources, and configurations, the underlying code and functionality is shared. This means that when one jurisdiction works with the Johns Hopkins University Applied Physics Laboratory (JHU/APL) to create a new feature, it is available to all sites.

Methods

The roadmap for ESSENCE in 2019 is based upon ongoing and future projects between jurisdictions and JHU/APL. While specifics can change before features are deployed, the following list of new features have exceptional capabilities. These include:

Social Elements to the User Experience: Ability for users to share what they are doing within ESSENCE with their peers. Ability for users to see what others are querying and find interesting. Support sharing both within a system and across jurisdictions.

Text Analysis: Text analysis and visualizations to help support the user in building new free-text queries.Provide correlation, trend, and association analytics for words and phrases to help the user determine what should or should not be included in their queries.

Site Monitoring: Back-end tools and checks to better monitor an ESSENCE system for issues and data irregularities. This administrative tool will help the system maintain its day-to-day availability and improve visibility of errors and issues that may develop over time.

Longitudinal Surveillance: Visualizations and cohort clustering analytics to determine the types of patients who are using the healthcare systems that provide data to ESSENCE. These tools can show patient uses over time with trends to better inform utilization of healthcare resources in a community.

Opioid Overdose Surveillance: Visualizations and analytics to better support the surveillance activities related to the opioid overdose crisis. Work with additional data sources (EMS, Poison Control, Death Records, etc.) to determine the benefit of fusing multiple pieces of information into a common picture for improved opioid surveillance.

And other new features…

Results

The presentation will describe the current roadmap, demonstrate features that are mature enough in the software development process, share mock-ups for features still in the early stages of development and provide use cases for each of the new features discussed.

Conclusions

No organization can build a successful system without the participation and buy-in from its stakeholder community. ESSENCE is an excellent example of a tool built on collective input whose ongoing enhancements benefit all its users. By seeing the roadmap

and understanding the new features for 2019, the community can prepare for upcoming enhancements and begin discussions about other needs and use cases that will drive the development of the next round of ESSENCE features.