

Syndromic Surveillance in the State of Florida

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OBJECTIVE

To gather inventory information on syndromic surveillance deployment and utilization in the State of Florida; To identify issues in developing, operating, and sustaining local systems; To assess needs for system evaluation in order to establish efficacy and effectiveness of syndromic/disease surveillance in the state.

BACKGROUND

Syndromic Surveillance utilizes health-related symptom data to monitor disease outbreaks. Its' potential for prompt detection of disease outbreaks and strengthening of rapid public health response is anticipated. As a result, syndromic surveillance is widely employed by many local and regional health care agencies across the country in both routine monitoring of disease outbreaks as well as in special national events. However, the efficacy and effectiveness of syndromic surveillance are yet to be substantiated. In Florida many localized Syndromic Surveillance have been deployed by county health departments with little oversight or coordination of any state and federal agencies. Furthermore, many aspects including the design, operation, and funding characteristics of these systems are not well known and information and practice are not shared, hindering the potential for regional networks with shared data source, networked platform, expanded geographic coverage. This survey aims to establish an inventory of Syndromic Surveillance in the State of Florida and helps identify issues common among these systems.

METHODS

Counties with population exceeding 100,000 were selected to participate. The county's health department was contacted and appropriate respondents were identified. Data collection was through a mail/telephone survey utilizing a questionnaire made of five sections. After the questionnaire being sent to the participating health departments, a follow-up telephone interview was conducted to ensure participation and data quality. Data collection focused on system operation characteristics, logistics, funding sources, objectives, and barriers and issues in current and future operation. For those counties without a system in place, data collection focused on their perception, interests, and hurdles in developing and deploying one.

RESULTS

Multiple systems are in operation across these counties and nearly every metropolitan area in the State has some sort of system in place, some operates multiple systems simultaneously. While most of the systems are based on data of patient visit to Emergency Department of major hospitals, a few also use over the counter pharmaceutical sales data or school absenteeism data as supplementary source of comparison. There are similarities but also considerable disparities across these systems in terms of their purposes, operation characteristics and case investigation procedures, resources and funding, and system accessibility and portability. With some rare exceptions, most of these systems have not been systematically evaluated. The lack of calibration to suit local needs of these systems prevents comprehensive utilization of the systems as well as data sources. Perceived or encountered barriers to system expansion and interconnection are identified. Lack of standards and guidance is a major concern.

CONCLUSIONS

There are urgent needs to conduct systematic evaluation of the various types of syndromic surveillance systems at both local and regional levels. While the perception and expectation of syndromic surveillance remain generally enthusiastic, there are considerable uncertainties with respect to substantiation of the efficacy of, sustainability and continued funding for, technical guidance for further improvement and local operation of syndromic surveillance. There are also emerging interests in incorporating syndromic surveillance as a part of the public health emergency response system.

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