

ABSTRACT

Access to and use of syndromic surveillance information at the local health department level

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Objective

To characterize use of syndromic surveillance information for key public health functions at the local health department level, and to make recommendations to facilitate use of syndromic surveillance data for these functions.

Introduction

Syndromic surveillance data have been widely shown to be useful to large health departments. Use at smaller local health departments (LHDs) has rarely been described, and the effectiveness of various methods of delivering syndromic surveillance data and information to smaller health departments is unknown. Syndromic surveillance data and information in North Carolina are available to all local public health staff by several routes. This report characterizes LHD access to syndromic surveillance data and information and their use for key public health purposes.

Methods

Structured interviews were conducted with local health directors and communicable disease nursing staff from a stratified random sample of LHDs during May through September 2009. The survey captured information on the use of the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) web application for direct data access and on the use of syndromic surveillance information for outbreak management, program management, and the creation of reports. Data on direct access to NC DETECT were available for all 85 LHDs in the state.

Results

Surveys were completed with 14 of 15 LHDs (93% response rate). Syndromic surveillance data were used by LHDs for outbreak management (two of 14 (15%)), program

management (three of 14 (21%)), and creating reports for distribution to public health stakeholders and partners (four of 14 (26%)).

LHD staff obtained syndromic surveillance information from hospital-based public health epidemiologists (PHEs) and public health regional surveillance teams (PHRSTs), and syndromic surveillance data directly from NC DETECT. The information distributed by PHEs includes both reports and notification of specific events by telephone, and may include relevant information from patient–hospital records; 22 of 85 LHDs (26%) had access to a PHE. The information distributed by PHRSTs includes regularly distributed standardized reports. Direct access to NC DETECT allows LHDs to create and review aggregate data and to review single event details; direct access is voluntary. At the time of this survey, 29 of 85 LHDs (34%) had NC DETECT logins; staff at 10 of 85 LHDs (34%) accessed the system six or more times in the 6 months before the survey. Use of syndromic surveillance information for outbreak, program, and report uses was associated with receiving information from PHEs or PHRSTs.

Reasons given for not using syndromic surveillance information focused on the time or effort needed to obtain useful information from large NC DETECT data sets. Information from this survey and other North Carolina sources was gathered to support the design of an LHD web portal for NC DETECT. A draft version of this portal that attempts to automate some of the filtering role provided by PHEs and PHRSTs, will be presented.

Conclusions

Syndromic surveillance information is useful to the local level, as evidenced by use of syndromic surveillance information for outbreak, program, and report purposes. Syndromic surveillance information and data are available to

LHDs, and some LHD staff members directly access NC DETECT. However, functional use of this information for public health purposes occurs only where these data have been filtered and reviewed by public health personnel who are routine users of NC DETECT. These results show that distribution of syndromic surveillance information by state and regional staff is effective, and suggest that improvements that support more efficient

filtering and interpretation of syndromic surveillance data, as well as provision of training, may increase use of this information at the local level.

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