

Using NC DETECT Summary Reports to Share Syndromic Information

Meichun Li, MSIS¹, Amy Ising, MSIS¹, Lana Deyneka, MD, MPH², Dennis Falls, BS¹, Anna Waller, ScD¹

¹ Emergency Medicine, School of Medicine, University of North Carolina, Chapel Hill, NC,

² General Communicable Disease Control Branch, North Carolina Division of Public Health

OBJECTIVE

This paper describes a user driven weekly syndromic report designed and developed to improve the efficiency of sharing syndromic information statewide.

BACKGROUND

The North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT) provides early event detection and public health situational awareness to hospital-based and public health users statewide. Authorized users are currently able to view data from emergency departments (n=110), the statewide poison control center, the statewide EMS data system, a regional wildlife center and pilot data from a college veterinary laboratory as well as select urgent care centers. While NC DETECT has over 200 registered users, there are public health officials, hospital clinicians and administrators who do not access the system on a regular basis, but still like to be kept abreast of syndromic trends in their jurisdictions. In order to accommodate this interest and reduce redundant data entry among active users, we developed a summary report that can be easily exported and distributed outside of NC DETECT.

METHODS

Annotation reports in NC DETECT allow epidemiologists to document the follow-up conducted on syndrome-based aberrations.¹ Users are able to add comments, select a severity level and view the comments of other users in their jurisdiction(s). Several meetings took place with NC DETECT active users to determine how best to incorporate these annotation data with summary information about syndromes into an aggregated report that could be shared with non NC DETECT users. Hospital-based public health epidemiologists (PHEs) conduct syndromic and lab-based surveillance on a daily basis at the 11 largest hospitals in North Carolina using NC DETECT and other sources. They provided examples of summary reports they distribute to colleagues. Prototypes were developed based on these samples and additional feedback was collected. The initial roll out of the Weekly Syndromic Report was released on 11/05/2007. On 05/08/2008, exporting to MS Word functionality was added. In July 2008, an informal email-based survey was sent to all PHEs and the NC Division of Public Health PHE Program Director (DPH PHE PD) (n=11) requesting additional opinions on the utility of the report.

RESULTS

The Weekly Syndromic Report displays weekly syndrome counts for a user-selected two-week window. In addition to allowing users to compare one week to the next, the report allows users to view comments for any documented signal investigations, as well as export all of the tabular data to MS Word for further refinement and distribution (Table 1).

Table 1: Excerpt from Weekly Syndromic Report

Hospital	Hospital A
Syndrome	ILI
Syndrome Count Wk. ending 08/30/08	49
Syndrome Count Wk. ending 08/23/08	38
EARS Signals & Comments	<u>2008-08-26, Syndrome Count: 12, CUSUM Flag: C3. Comments:</u> Monitoring. Patient (14 yoa) reporting bloody diarrhea, abdominal cramps, and vomiting. Patient culture positive for <i>S. sonnei</i> . Monitoring ED for additional cases. No travel history or specific food exposures noted

Of the four users who responded to the informal email survey (36%), all found the report to be useful. Respondents stated that it provides a lot of information concisely, is very easy to download, eliminates some administrative duties and greatly cuts down on the time necessary to gather the information needed for distribution. The DPH PHE PD is able to track the surveillance efforts of the PHEs more efficiently. Enhancements to the report are under development; including functionality to enter results for surveillance using non-NC DETECT data sources, such as laboratory data. New interfaces will allow users to document lab results about respiratory illnesses, influenza, SICA-MRSA, and community-acquired pneumonia, among others. The goal is to create a centralized repository of non-reportable infectious disease surveillance for participating hospitals.

CONCLUSIONS

The ability to easily share the outcomes of syndromic surveillance with colleagues has become a priority in NC. The Weekly Syndromic Report allows active NC DETECT users to download and distribute information to non users, although enhancements are needed to allow users to document surveillance efforts using non-NC DETECT data sources.

REFERENCES

- [1] Ising A, Li M, Deyneka L, Barnett C, Scholer M, Waller A. Situational Awareness Using Web-based Annotation and Custom Reporting. *Advances in Disease Surveillance* 2007 4:167