ABSTRACT

PHIN-MS deployment acceptability survey for the data transfer of syndromic data between hospitals and public health

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Objective

The objective of this presentation is to review and evaluate the use of Public Health Information Network (PHIN)[1] Messaging Service (PHIN-MS)[2] for the data transfer of the syndromic data between hospitals and public health. Included is an overview of the methodology used for PHIN-MS, and a review of the usage, adoption, benefits, and challenges within the hospitals and public health agencies in South Carolina. A formal survey is planned with results discussed during the presentation of this manuscript.

Introduction

PHIN-MS can send and receive data securely and automatically. It is used by many hospitals in the state(s) to send data to the South Carolina Department of Health and Environmental Control (SC DHEC) for both our National Electronic Disease Surveillance System and our South Carolina Early Aberration Alerting Network syndromic surveillance system.

DHEC has also implemented the PHIN-MS Route-not-Read (RnR) hub to allow hospitals to easily poll/receive syndromic data reports back from SC DHEC. This enables a two-way communication between the health partners. A basic process flow diagram is shown in Figure 1 below.
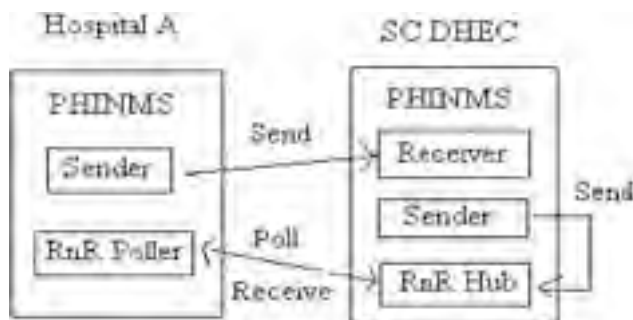

Figure 1 PHIN-MS data transfer diagram.

DHEC began using the PHIN-MS in 2006 for several systems, including the syndromic system beginning in 2008. We initially used PHIN-MS version 2.6, but upgraded to version 2.8.01.

As of August 2010, DHEC was receiving daily syndromic data from 14 emergency departments. These hospitals are receiving data from DHEC using PHIN-MS RnR. Many hospitals are expected to enroll. Positive feedback is normally received, but a formal survey is in process.

Methods

DHEC provides all of the PHIN-MS installation files and technical support to the hospitals, with additional technical support provided by the Center for Disease Control and Prevention in an as needed basis. Most of the intensive IT deployment work is done at SC DHEC rather than at the hospital level, especially with the PHIN-MS RnR hub.

Multiple anecdotal comments regarding the ease of deploying PHIN-MS have been received by SC DHEC. This prompted the creation of a formal survey tool in order to systematically assess the PHIN-MS deployment process. This survey will be provided to hospitals participating in both our National Electronic Disease Surveillance System-based system and the South Carolina Early Aberration Alerting Network syndromic surveillance system.

The survey will focus on the following areas: hospital adoption, satisfaction, challenges, and benefits of using PHIN-MS.

Some questions included in the survey are:

- How satisfied is the hospital using PHIN-MS?
- How easy is the hospital to adopt PHIN-MS as the messaging tool for the data exchange?
- How easy is the PHIN-MS installation process for the hospital?
- How satisfied is the hospital with the technical support provided by SC DHEC?

- What are the top challenges the hospital has experienced during the implementation?

Results

A summary of the survey will be discussed. Barriers to recruiting hospitals into the system were mostly because of competing priorities within the healthcare setting. South Carolina does not mandate hospitals to report syndromic data. Once a hospital is recruited into the system, sending data through PHIN-MS at the hospital has proved successful so far.

Conclusions

PHIN-MS sends data securely, reliably, and automatically. The hospitals need only very little resources to implement and maintain, especially with the PHIN-MS RnR; health partners can exchange data in a two-way communication securely and easily. PHIN-MS has shown its potential to be the standard for data transfer of syndromic data, as well as several other systems like ELRs, cancer registry, and so on. PHIN-MS will be a valuable tool for increasing the state and local hospital's surveillance systems implementation.

Acknowledgements

References

1 The Centers for Disease Control and Prevention. Public Health Information Network. http://www.cdc.gov/phin/.
2 The Centers for Disease Control and Prevention. Public Health Information Network Messaging System. http://www.cdc.gov/phin/phinms/.
3 The Centers for Disease Control and Prevention. The Early Aberration Reporting System. http://emergency.cdc.gov/surveillance/ears/.

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