NAPHSIS
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Testimony
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On Public Health: Vital Records
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the National Association for Public Health Statistics and Information Systems

The National Association for Public Health Statistics and Information Systems (NAPHSIS) is a non-profit, association whose membership consists of the 57 vital records jurisdictions in the United States. These jurisdictions are the 50 states, Washington D.C., New York City, and five territories. These jurisdictions are legally responsible for the registration of vital events, including births, deaths, and fetal deaths that occur in their jurisdiction.

Vital records agencies register births based, primarily, on information provided by hospitals. Some births are registered by midwives or others involved in non-hospital births. The agencies register deaths based on demographic information provided by funeral homes and on medical information, including cause and manner of death, provided by certifying physicians or other clinicians, depending on the laws of the individual jurisdiction.

In an example of effective federalism, the National Center for Health Statistics (NCHS) enters into contracts with the jurisdictions to obtain data on these vital events and compiles national vital statistics through the Vital Statistics Cooperative Program (VSCP).

Vital records is the premier source of data for many public health purposes. It is population-based (not a sample). It provides cause and manner of death and related medical information about decedents. It provides some health information about both the mother and newborn on birth records. These data serve a variety of surveillance and other needs, including mortality reviews, mother-child health programs, etc.

In partnership with NCHS and other agencies, NAPHSIS has been actively working on behalf of the interests of our members related to exchange of vital records data. A decade ago, jurisdictions began implementing the 2003 U.S. Standard Certificates for birth, death and report of fetal death[1]. To date, 46 of the 57 jurisdictions are using the 2003 standard birth certificate, 46 (not necessarily the same 46) are using the 2003 death certificate, and 38 are using the 2003 report of fetal death.

Current state of public health related standards; coordination of standards development activities; representation and participation by public health in standards activities; where is public health strongest and where is weakest?

NAPHSIS views standards as a necessary component for the efficient and accurate exchange of data for vital records, electronic health records, and public health services. Such standards will enable efficient, accurate sharing of data between healthcare providers and vital records agencies as well as between vital records agencies and various levels of government and public health.

NAPHSIS and NCHS have established standard data formats and transmission mechanisms for sharing data with NCHS and, under an Interjurisdictional Exchange Agreement, with each other. The data for these purposes consist of standard flat files.[2]

In addition, NCHS and NAPHSIS members have worked together to develop a variety of data interchange standards based on HL7.[3] These include:

- Vital Records Domain Analysis Model
- EHR-S Functional Profiles for Vital Records and Public Health
- Implementation Guides for Vital Records Death Reporting for HL7 v2.5.1 and HL7 v3 CDA R2
- Implementation Guides for Birth and Fetal Death Reporting for HL7 v2.5.1 and HL7 v3 CDA R2
- IHE (Integrating the Healthcare Enterprise) definitions for EHR content that can be used to prepopulate and transmit birth and fetal death information
- IHE (Integrating the Healthcare Enterprise) definitions for EHR content that can be used to prepopulate and transmit vital records death information

The most important strength for vital records is the high levels of professionalism and experience of vital records staffs in the jurisdictions. They are committed to high levels of customer service and collaboration with their jurisdiction's health departments, the clinical providers that are the source of birth and medical death information, and state and federal agencies. The relationship between NAPHSIS and its members and NCHS is another strength.

The weakest area for vital records is a lack of participation by member jurisdictions and by vendors and EHR users in the standards process and in moving toward integration with EHRs. Progress toward standard data interchange with EHRs and HIEs is hampered by the fact that most vendors and EHR users are dealing with the demands of Meaningful Use (MU) and have no incentive to develop and test vital records messaging. In addition, state vital records agencies lack resources and incentive for moving forward with standards.

What is the state of information exchanges of public health data from EHR systems; what are the standards being used; what are the drivers, and incentives; what are the challenges and issues?

Two states, under contract with NCHS and the technical support of NAPHSIS, are in the midst of pilot projects transferring data from EHR systems to vital records (VR) systems. The standard

used is HL7 v2.5.1. Two other jurisdictions transfer data from EHR systems to VR systems without using HL7 standards.

Most vital records jurisdictions utilize proprietary electronic birth and/or death registration systems, either built in-house or acquired from one of several vendors. Hospital birth or medical record clerks enter birth certificate data into these systems; funeral homes and medical certifiers enter death certificate data. These systems are not linked with EHR systems nor with HIEs. They have no capability to receive and process standard messages. The various systems use their own data formats; there is no standard for storage or transmission of data within the systems. The systems are able to collect and report the information required by the 2003 U.S. standard certificates.

The main driver toward implementing standards is to facilitate electronic sharing of data across systems. This will decrease the need for repeated data entry of information and reduce errors in transmission.

Another driver is funding from NCHS to support pilots. These pilots help other jurisdictions see the possibilities, rewards, and challenges of implementing standards and getting data directly from EHRs.

A third potential driver is improving quality and timeliness of data in the vital records. Whether such an improvement would actually result from adopting standards and receiving data directly from EHRs is yet to be demonstrated. There are limited fields in the vital records that could be populated directly from a standard EHR. Meaningful population of vital records data would have to include intermediate forms using RFD (Retrieve Form for Data Capture).

The primary challenge is that, even in the pilot states, getting the attention of EHR users and vendors is challenging because there is no VR requirement in MU nor is there strong customer demand for VR data interchange.

Additionally, there is no clear incentive for non-pilot states to move forward with standard data interchange between EHR systems and VR. There is a general lack of awareness about what the standards are or clear understanding about the benefits of standardization activity.

Some jurisdictions are hampered by their ability to be involved in national efforts as their resources and expertise are consumed in satisfying existing jurisdictional and national requirements.

Another challenge is that vital records agencies are also often hampered by a lack of IT support. It most jurisdictions, VR agencies must compete for IT resources with other agencies within their departments or across state departments. Few have sufficient IT resources committed solely to VR.

What are implementation challenges from the public health agency perspective; what are the needs (technical, resources, education, etc.) to advance adoption and use of standards by public health agencies?

Not many vital records jurisdictions will move ahead until VR is in the requirements for MU. Jurisdictions also need to see results of pilots currently underway to see if there are, indeed, strong benefits to adopting these standards. Any progress will require a significant infusion of funding to build and implement solutions. There will need to be a lot of testing of messages and strategies to ensure that accurate information is transmitted to the vital record.

How is privacy and security covered in public health data standards? Are there privacy and security elements embedded in the standards? Is privacy and security under a different workflow process?

In most jurisdictions, privacy and security of vital records data is of paramount importance to protect the privacy of individual records and to prevent their use for fraudulently obtaining birth certificates and then passports, driver licenses, etc. The privacy and security requirements are stipulated in state statutes and administrative rules.

Privacy and security are not under a different workflow process; they are integral to all VR processes.

The IHE Technical Frameworks for vital records contain security considerations.[4] Using Cooperative Agreement funds from NCHS, NAPHSIS has also developed and published security guidelines for its membership.[5]

References

[1] 2003 U.S. Standard Vital Certificate Revisions. http://www.cdc.gov/nchs/nvss/vital_certificate_revisions.htm

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[3] Vital Records Data Interchange Standards.
http://www.cdc.gov/phin/resources/standards/data_interchange.html

[4] IHE Quality, Research and Public Health Technical Framework Supplement; Birth and Fetal Death Reporting.
http://www.ihe.net/uploadedFiles/Documents/QRPH/IHE_QRPH_Suppl_BFDR.pdf

[5] NAPHSIS Security Guide. http://www.naphsis.org/Pages/Security.aspx