



The PHDSC Quarterly Standard E-Newsletter

Promoting Standards Through Partnerships

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Towards Public Health Sector Transformation and Sector Unity: Maximize Health IT Standardization and Meaningful Use of Health IT in Public Health

New PHDSC Informational and Educational Web-Resource Center: Public Health in Health IT Standardization

By Wendy Scharber and Anna Orlova

On April 12, 2011 the Public Health Data Standards Consortium (PHDSC) launched a web-based [Resource Center on Public Health in HIT Standardization](#). The Resource Center contains the [HIT Standards Resource Module](#) and the [HIT Adoption Stories Module](#). Both Modules were implemented from the PHDSC [Business Case: Role of Public Health in National HIT Standardization](#) as a part of the **PHDSC Coordinated Public Health Action Plan on HIT Standards**. The Resource Center is designed to address barriers for public health participation in HIT standardization.

PHDSC welcomes

new members

[Texas Department of State Health Services](#)

[Health Resources and Services Administration](#)

Within the Resource Center, the [HIT Standards Resource Module](#) is an informational resource that describes HIT standardization phases (Needs and Priorities for Standards, Standards Development, Standards Harmonization, Standards Testing, Standards-based HIT Product Certification, and Deployment); and standardization entities.

Within the Resource Center, the [HIT Adoption Stories Module](#) is a searchable database on the varied uses of and activities related to health information technology in public health. The stories cover local, state, federal and international public health agencies, public health research, public health interoperability and standards development, and HIT resources, as well as broader HIT activities that affect public health.

The Story database currently contains 300 HIT stories which will continue to expand. The [Submit a Story Tool](#) allows users to add stories about public health HIT that they are aware of or involved in. Each “**Story**” includes a short overview of the HIT example, activity, resource, or effort and a web link. Where available, the successful outcomes; barriers and challenges; lessons learned; and related web links and/ or journal citations are also provided. The stories are searchable by a set of defined criteria, such as public health topic (e.g., immunization, global health), information exchange stakeholders, business processes, system functions, technology products, and other.

The PHDSC [Resource Center](#) can be used by public health stakeholders to inform health community about their experience in using HIT and to compare this experience with other HIT users; clinicians involved in information exchanges with public health agencies; researchers; academicians teaching public health and health sciences informatics; consumers in advocating for specific services, HIT vendors, and other stakeholders.

Two additional modules will be launched in 2011, Public Health in HIT Standardization, and Public Health Needs for HIT Standards.

This PHDSC project is supported through the Cooperative Agreement with the Centers for Disease Control and Prevention (CDC); Grant #5U38HM000455-03

Operationalizing Standards for Public Health Laboratory Data Exchanges

By Anna Orlova

In February 2011, the PHDSC was awarded a grant to enable real-time electronic information communication between laboratories, public health agencies and clinicians by **operationalizing** existing health information technology (HIT) standards for laboratory information for purposes of public health preparedness. This includes (1) assessment of laboratory flows for situational awareness (routing laboratory reporting) and emergency reporting; (2) harmonization of respective standards for laboratory data exchanges; (3) developing methods and tools for testing these standards at

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<p>Learn about the benefits of joining and become our member</p>	<p>the Integrating the Healthcare Enterprise (IHE); (4) developing and/or updating Public Health Information Network (PHIN) preparedness documents that are related to laboratory response: and (5) developing laboratory certification criteria and contributing into establishing a certification process for standards-based HIT products for PH-Lab to public health by collaborating with PHIN and the Certification Commission for HIT (CCHIT). In addition, we will work with key stakeholders (local, state and federal public health agencies, healthcare organizations, public health professional associations and HIT vendors) to develop a strategy for deploying certified HIT solutions that may support laboratory data exchange for situational awareness and emergency response.</p> <p>The ultimate outcome of this effort is to have a sustainable PHIN operational model for PH-Lab data exchanges for public health preparedness. By achieving this outcome, this key data source will be able to be leveraged in a universal way such that information can be quickly, reliably and economically analyzed, shared, and acted upon to improve emergency response, surveillance, detection and management of communicable and chronic diseases.</p> <p>For more information, please visit project wiki pages at https://wiki.phdsc.org/index.php/PH-Lab</p> <p>This PHDSC project is supported through the Cooperative Agreement with the Centers for Disease Control and Prevention (CDC); Grant #5U38HM000455-03W1</p>
<p>Events of Interest:</p> <p>HL7 Working Group Meeting</p> <p>Lake Buena Vista, FL May 15 -20, 2011</p> <p>AMIA Spring Symposium Orlando, FL May 25 -27, 2011</p> <p>Public Health Informatics Conference Atlanta, GA August 21 -24, 2011</p>	<p style="text-align: center;">Operationalizing Business Processes of Local Health Departments <i>By Anna Orlova</i></p> <p>The PHDSC and representatives from the local health departments have completed their effort to define high-level business processes of local public health agencies. Supported by the National Association of City and County Health Officials (NACCHO), the NACCHO-PHDSC Business Processes Conceptual Framework will guide standardization of Health IT (HIT) solutions for systems interoperability across healthcare and the local public health enterprise.</p> <p>The Framework has been put into operation, guiding the development of:</p> <ul style="list-style-type: none"> • the Integrating the Healthcare Enterprise (IHE) – IHE Public Health Reporting Integration Profile; and • the Health Level Seven (HL7) – HL7 Public Health Reporting Requirements Standard <p>These efforts focus on public health reporting to support local health department activities for case management and care coordination as well as for syndromic surveillance. These standards will help enable electronic information exchanges between clinical and public health settings to meet the business needs of both sectors.</p>

Occupation and Industry Code Sources at ASC X12

By Amy Costello

We continue to have success working with the standards organizations to improve data collection for public health reporting. The PHDSC team prepared a Change Request, on behalf of Dr. Jennifer Taylor of Drexel University, for the addition of the external code source for [Bureau of Labor Statistics Standard Occupation Codes](#) in the ASC X12 standard. The Bureau of Labor Statistics codes were proposed to ASC X12 to establish a [Firefighter Non-fatal Injury Surveillance System](#).

By adding the occupation code to the standard and the reporting implementation guide, states will have the ability to mandate the collection of occupation codes through their public health reporting legislation. With occupation codes as part of the state reporting, researchers and public health professionals will be better able to understand occupation-related injury and disease.

In addition, a request was submitted for the addition of the ASC X12 external code source of [International Classification of Functioning and Disability](#), as well as the [North American Industrial Classification System](#) to the 6020 Reporting Guide.

Please send additional requests for data elements to the PHDSC representatives at ASC X12 (Ms. Amy Costello Amy.Costello@unh.edu and Mr. Robert Davis, rdavis@nahdo.org) so we can continue to improve the standard for public health reporting.

For more information, please visit project wiki pages at https://wiki.phdsc.org/index.php/HDSD_Project_Year3

Support for this project is provided by the
CDC National Center for Health Statistics

**To Learn More
about
Health IT Standards
and
Standardization
Process**

**Visit
[HIT Standards](#)
pages on our website**

Standards for All Payer Claims Databases

By Amy Costello

Based on the success of the Health Services Reporting Guide, the Accredited Standards Committee (ASC) X12 is now supporting an effort to develop standards for state-based All Payer Claims Databases (APCDs).

Many states are struggling with increasing health care costs. In response, at least 12 states have enacted legislation and/or have implemented All Payer Claims Databases. APCDs are large-scale databases that systematically collect health care claims data from a variety of payer sources. Typically created by a state mandate, statewide APCDs include data derived from medical claims, pharmacy claims, eligibility files, provider (physician and facility) files, and dental claims from private and public payers. In states without a legislative mandate, there may be voluntary reporting of APCD

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& Lessons Learned**
with the
Public Health
Community on HIT
Adoption and
Participation in HIT
Standardization Activities
in the next PHDSC
Standard E-Newsletter

<p>Issue.</p> <p>Send your stories to Alla Fridman at afidman@phdsc.org for the next issue of our Quarterly Standard E- Newsletter</p>	<p>data.</p> <p>At the ASC X12 meeting in January, 2011, in Seattle, an announcement was made by the X12 Regulatory Compliance workgroup that ASC X12 will coordinate workgroups in the spring to provide guidance on the most efficient business model for APCD data collection and the resulting work products (e.g., implementation guides). At this meeting, the PHDSC representatives presented an overview of the work of the APCD Council (www.apcdouncil.org), including the development of an interim APCD data submission standard, based on a business model that draws from the ASC X12 837 (claims) and 835 (remittance) transaction sets.</p> <p>For more information, please visit project wiki pages at https://wiki.phdsc.org/index.php/HDSO_Project_Year3</p> <p>Support for this project is provided by the CDC National Center for Health Statistics</p>
<p>Visit our Web-site at www.phdsc.org</p> <p>The Consortium continues to develop and expand its website.</p> <p>We see our website as one of the primary means to disseminate information on Health IT standardization activities to our members and the community at large.</p> <p>Stay tuned for new content and some distinctive features in the near future.</p> <p>Please send comments about our Web-site to Alla Fridman at afidman@phdsc.org</p>	<p>Towards HIT Certification for Public Health: Public Health Functional Profile <i>By Anna Orlova</i></p> <p>On March 27, 2011 the PHDSC EHR-Public Health (EHR-PH) Task Force submitted the Public Health Functional Profile (PHFP) for the Spring Ballot to the Health Level Seven (HL7). The Profile documented functional requirements and conformance criteria for public health data exchanges with clinical Electronic Health Record Systems (EHR-S). It includes the detailed analysis of the HL7 EHR-S Functional Model Release 1.1 for the following public health domains:</p> <ul style="list-style-type: none"> • Early Hearing Detection and Intervention (EHDI), • Vital Records, and • Cancer. <p>Over 130 individuals have joined the PHDSC EHR-PH Task Force to participate in this effort. The project will continue in the next year with the PHDSC working with the state EHDI programs to develop a methodology for translating functional requirements into criteria for certifying EHR-S interoperability with public health information systems. These efforts will enable certification process of clinical EHR-S and public health information systems.</p> <p>We anticipate expanding this Profile in the future to include other public health domains. For example, during the summer we will continue the analysis of the HL7 EHR-S Functional Model's functional requirements and conformance criteria for the Public Health Laboratory Data Exchanges and Birth Defects domains.</p> <p>On April 25, we conducted a webinar to inform the public health community about the Profile and the HL7 Balloting Process of the Profile.</p>

You could find webinar presentations at
https://wiki.phdsc.org/index.php/PHFP_Webinar_04252011

Please join the PHDSC EHR-PH Task Force to develop Public Health Functional Profile by sending e-mail to Alla Fridman at afridman@phdsc.org

For more information, please visit project wiki pages at
https://wiki.phdsc.org/index.php/EHR-PH_Project_Year3

Support for this project is provided by the
CDC National Center for Health Statistics

Health IT Interoperability for Public Health: PHDSC members at IHE Connectathon and HIMSS Interoperability Showcase

By Anna Orlova

Over 400 engineers from leading Health IT (HIT) companies participated in testing of the HIT interoperability standards at the [Integrating the Healthcare Enterprise \(IHE\) North American Connectathon](#) January 17 through January 21, 2011 in Chicago, IL. In late February many of these companies gathered at the 2011 HIMSS Annual Convention to demonstrate the use of interoperable standards in their products by participating in a variety of clinical scenarios that required exchange of information between various care settings

Several companies, PHDSC members, successfully participated in both events, demonstrating interoperability standards developed under the PHDSC projects on the [Early Hearing Detection and Intervention \(EHDI\)](#) Content Profile and the [Maternal and Child Health \(MCH\)](#) Content Profile at the [Integrating the Healthcare Enterprise \(IHE\)](#). The EHDI Profile specifies HIT standards for information exchange between clinical EHR-S and public health EHDI information systems to support work processes and data exchange requirements for the early hearing screening and short-term care follow-up for children ages 0-3. The MCH Profile specifies the content to populate state vital registration systems from the EHR-S at the birthing facilities.

[Greenway Medical Technologies \(GMT\)](#) successfully tested interoperability between their ambulatory Electronic Health Record System (EHR-S) and public health information systems, e.g., receiving Early Hearing Care Plan from the State EHDI information system which coordinates care for children with hearing loss. **Greenway** also successfully tested interoperability between the birthing facility EHR-S and State Vital Registration System.

[Oz Systems](#) successfully tested interoperability between the birthing facility EHR-S, medical device for hearing screening, State EHDI information system, and pediatric office EHR-S by receiving hearing screening results, generating the Early Hearing Care Plan and sending the Plan to the pediatric EHR-S. In addition, **Oz Systems** successfully tested interoperability for exchanging Hearing Quality Measures with hospital EHR-S and State EHDI information system as well as for populating birth registration data from birthing facility EHR-S into State Vital Registration System.

[Atlas Public Health](#) used its Public Health Information Network (PHIN) suite of software, including EHR Gateway, to successfully demonstrate how a state health department can receive immunization content from clinical EHR-S using structured document standards. Atlas collaborated with [Greenway Medical Technologies](#) (EHR-S) and [Software Partners, LLC](#), (State Immunization Information System (Registry)) to exchange immunization information.

[Software Partners, LLC](#), successfully tested interoperability with vendors of EHR-Ss, Surveillance and Personal Health Record Systems (PHR-s) in processing and sending immunization information and performing data reconciliation for patient identification. Software Partners successfully tested Immunization Content(IC), Patient Identifier Cross-Referencing (PIX) and Patient Demographic Query(PDQ) profiles for the latest implementation of their immunization registry application, MatchMerge. In addition, Software Partners collaborated with **[Atlas Public Health](#)** using structured documents to send immunization content

For more information on the PHDSC-IHE EHDl project, please visit our project wiki: https://wiki.phdsc.org/index.php/EHDl_Project_Year3

For more information on the PHDSC-IHE MCH project, please visit our project wiki: <https://wiki.phdsc.org/index.php/MCH>

Support for the EHDl project is provided by the CDC Centers for Birth Defects and Developmental Disabilities. Support for MCH project is provided by the CDC National Center for Health Statistics.

Public Health Informatics Training at Johns Hopkins

By Anna Orlova

Targeting public health professionals currently in practice, The Johns Hopkins Bloomberg School of Public Health, in collaboration with the Johns Hopkins Schools of Medicine and Nursing and the Public Health Data Standards Consortium, launched the **Public Health Informatics Training Program**. This program results in a Maryland State-approved Post-Baccalaureate Certificate in public health informatics. The goal of this program is to offer training in methods and concepts of health informatics and health information technology for application to public health. The program is a long-term effort to assist public health professionals who wish to develop expertise or specialization in this area.

In the Winter 2011, several PHDSC members developed and deliver the online course on ***HIT Standards and Systems Interoperability***. The PHDSC members also participated in teaching the ***Population Health Informatics*** course in the Spring 2011. We are currently working with the National Association of City and County Health Officials (NACCHO) to launch the PHDSC web-resources that will provide access to these online courses via the Johns Hopkins OpenCourseware.

The next cycle of training will begin in late August, 2011, during the 2011/2012 academic year. **Applications will be accepted until May 15, 2011.**

More information about the Public Health Informatics Certificate Training Program can be found or by contacting Ms. Pamela Davis, the Program Coordinator at pdavis@jhsphe.edu or 410-614-1580 or at: <http://www.jhsphe.edu/dept/hpm/certificates/informatics>

PHDSC Members News

Meaningful Use and Immunization Information Systems: A Case Study

By Noam Arzt

In March, 2011, Dr. Noam Arzt, president of HLN Consulting, LLC gave a presentation with his

colleagues from the New York City (NYC) Department of Health and Mental Hygiene at the 45th National Immunization Conference. Titled "Meaningful Use and Immunization Information Systems: A Case Study," the presentation briefly explained the purpose and function of immunization information systems; reviewed the requirements for Meaningful Use for immunization; described the modifications made to the CIR process, tools and systems to support testing, certification, and increased production data exchange; and provided data on the initial uptake of these services in the provider community. Though Meaningful Use testing and production support require careful planning, NYC was able to leverage existing procedure and implementation. Meaningful Use requirements were defined at the federal level, yet their advent is a benefit to promoting interoperability with immunization information systems for all health care providers. Copies of the slides can be downloaded from <http://www.hln.com/assets/pdf/NIC-MU-2011.pdf> and the audio from the presentation will be posted soon on the CDC's NIC website (<http://www.cdc.gov/vaccines/events/nic/default.htm>).

**Report from the IOM Panel:
Study of Patients' Work Information in Electronic Health Records**

By Eileen Storey

At the request of the CDC's National Institute of Occupational Safety and Health (NIOSH), PHDSC Member since 2009, the Institute of Medicine (IOM) has been conducting a study of the rationality and feasibility of incorporating patients' work information into Electronic Health Records Systems (EHR-S). Information from this study will inform efforts at NIOSH to demonstrate feasibility of the inclusion of work information in EHR-Ss by a target date of 2013, and to provide rationale for the inclusion of work information in meaningful use guidelines. Access to patients' work information – such as patient occupation, industry of employer, and work history and exposures in some instances – can provide patients' medical care providers with powerful information for the prevention of work-related injuries and illnesses. The ability to aggregate health data by occupation and or/industry provides surveillance data not only for describing the burden of work-related health problems, but also for describing the distribution of various health outcomes by occupation and industry, and for targeting prevention and intervention programs by occupation or industry group (e.g., workplace wellness programs, medical screenings, etc.).

The IOM announcement can be found here:

<http://www.iom.edu/Activities/Environment/OccupationalHealthRecords.aspx>.

National Health IT News

ONC Privacy and Security Recommendations

By Vicki Hohner

Privacy and security regulations, guidance, and recommendations have been coming in bits and pieces since the passage of the Stimulus Act. This is the first of a series of short articles summarizing HIT privacy and security activity to provide a high level awareness of what is happening in this area.

This brief provides an overview of the activities of the [Privacy and Security Tiger Team](#), a workgroup for the [Health IT Policy Committee](#) that makes recommendations to the [Office of the National Coordinator for Health IT](#) (ONC), on a range of privacy and security issues affecting health information exchange.

The Privacy & Security Tiger Team has made the following written recommendations to ONC since its

inception in early 2010 (see [Recommendations to the National Coordinator for Health IT](#) for the complete recommendations). These recommendations may form the basis of future regulations, guidance, and other requirements and directives for the states, grant participants, and the industry.

- **September 2010:** Recommended a guiding set of practices and core values plus ten recommendations for a trust framework for information exchange specifically for **electronic exchange of patient identifiable health information to meet Stage I meaningful use**. It calls for establishing Fair information Practices (FIPs), an overarching set of principles that constitute good data stewardship and form a foundation of public trust in the collection, access, use, and disclosure of personal information. In addition to the FIPs, the team offers the following set of core values:
 1. The patient/provider relationship is the foundation for trust in health information exchange
 2. Providers are responsible for maintaining the privacy and security of their patients' records.
 3. Patients should not be uninformed about or harmed by collections, uses, or disclosures of their information.
 4. Successful use of health information exchange requires earning the trust of both consumers and physicians.
- **November 2010:** Recommended privacy and security policies and practices on **provider authentication**. The six recommendations focus on creating a high level of assurance that an organization is who it says it is (digital credentials), and that there is an appropriate balance between level of assurance and the cost and burden of implementation. These are **not** recommendations on authentication of individual users of EHR systems.
- **February 2011:** Recommended privacy and security policies and practices associated with **matching patient/individual health information** to support information exchange across healthcare entities. Recommendations cover five categories: standardized demographic formats, evaluating matching accuracy, accountability, identifying/promoting best practices, and supporting the role of patients/individuals.

The most recent meetings focused on issues such as EHR user and patient authentication and identity proofing. Go to [Meetings of the Tiger Team](#) for the agendas, materials and presentations from past hearings as well as information on schedules and participation for upcoming meetings.

Important Deadlines:

Submit Public Comments on the [CDC PHIN Strategic Plan](#) – April 30, 2011

Submit Abstracts to the [CDC Public Health Informatics Conference](#) – May 2, 2011

Submit Public Comments to the [Federal Health IT Strategic Plan: 2011-2012](#) – May 6, 2011