

PHIN Conference News

Atlanta, GA



Wednesday, August 29, 2007

Today's Highlights

Plenary Session—
ONC Perspectives:
Public Health in the
National Health IT Agenda
Grand Ballroom,
M4 North Tower
8:30 – 10:00 a.m.

Closing Plenary—
Health Grids
Grand Ballroom,
M4 North Tower
3:00 – 4:00 p.m.

Exhibit Hall Hours

Today
8:00 a.m. to noon

Program Changes

Please note that the
morning plenary session
has been extended
until 10:00 a.m.

Kelly Cronin, Office of the
National Coordinator, will be
replaced in the opening Plenary
Session by Kristen Brinner, PhD,
HHS-Office of the Secretary.

SI-5, Subject Matter Expert
Meeting—DAMC, scheduled
for 1:00 - 2:30 p.m., has been
moved to the Atrium.

Peter Covitz, NIH, will be
replaced in the closing Plenary
Session by Mark Adams of
Booz Allen Hamilton.

Plenary Explores Complexities of Health Information Technology Policy

Tuesday's plenary session, "Mining the Clinical Health Information Technology Policy Landscape: Opportunities and Challenges for Public Health," gave attendees a chance to join David Cardenas, director of informatics, Los Angeles County Public Health Department, and three distinguished speakers.

Kevin U. Stephens, M.D., J.D., director of the Department of Health, City of New Orleans, La., focused on personal health record (PHR) importance. He described the post-Katrina health care and medication-access/refill problems that New Orleans' citizens and health care providers faced in a predominantly paper-based health care system. "Disasters are here to stay," he said, advocating PHRs' ability to enable

visit tracking, promote wellness, discourage inappropriate ER or prescription use, assure accurate medications, and provide drug interaction information and surveillance. "PHRs are as simple to use as an ATM card...It's all about patient control," he noted, recommending tax incentives for both consumers and providers. Stephens added, "It's time to get this started. We have the technology."

Amy Zimmerman, M.P.H., director of the Rhode Island Department of Health's HIE, delved into the complexities of health information technology (HIT) legislation, regulations, and policy, as well as establishing and managing a community-guided HIE. In developing HIE, she posed these

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Panelists during yesterday's plenary session.



Open Conversation participants provide input on PHIN.

More than 100 Attend PHIN Open Conversation

The PHIN Open Conversation, sponsored by the National Center for Public Health Informatics (NCPHI), Division of Alliance Management and Consultation (DAMC), provided participants with an opportunity to discuss PHIN-related topics in an open and receptive environment. Building on the success of last year's event, participation in the session was up from last year, with over 100 people attending.

"I attended the Open Conversation last year and they definitely listened. CDC leadership is actively involved. We are feeling heard and supported through action and seeing a difference this year. The continuity of CDC staff who were new last year has moved the effort forward

while providing a component of stability," observed Keith Kearney of the Minnesota Department of Health.

Dr. Les Lenert, the new NCPHI director, started the session, discussing the strategic direction of PHIN. Dr. Lenert sees NCPHI moving from an organization focused on development and operations toward a more science and services based organization. In the future, participants will collaborate on services by creating various communities of practice to further the goals of public health and making PHIN a reality.

Following the opening session, participants broke into five facilitated group discussions to engage in detailed dialogue around

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Unconventional Wisdom 3

Budgeting for your Public Health Information System

By Raymond D. Aller, M.D.

OK! So you've selected that ideal information system, and now it's time to take the project to the Public Health Agency Board of High Muckety-Mucks (everyone has one of these boards—they just have different names from place to place). A key part of the project plan is the cost. But that's simple, right? The vendor has quoted a license fee, an installation charge, and yearly maintenance costs. Add those up, and...

you have just made a major error. These vendor-quoted costs represent a minority—some would say a small minority—of the installation cost. Internal project management and staff training is not only more costly, but far more crucial to the success of the project. Some experts have estimated that internal expenses amount to 70% or more of total project cost.

Even after your brand-new system is up and running, you will need to account for costs of ongoing maintenance

and updates. Again, most of this is provided by internal resources. Without ongoing maintenance and updates, system function will deteriorate, and you will have wasted your capital and human investment. Over time, anticipate the need for significant system upgrades—or replacement. For marketing and support reasons unrelated to your organization's direct needs, the vendor may decide to "sunset" your system. In that case you'll have to move to another product from your vendor, or start

over and choose another system. A few vendors have corporate policies against sunsetting—something you might want to consider up front.

A variety of data from public health and health care agencies are making clear the value of sophisticated process-flow information systems. Go forward and claim that value. Just do it with a realistic view of costs, while you temper your rosy view of the many benefits.

See you all at PHIN 2008! Have a safe journey home.



Networking and Awards Luncheon

The Networking and Awards Luncheon provided all the traditional fanfare, food, and fun that attendees enjoy. To facilitate networking, tables were outfitted with signs specifying topics or associations, including Knowledge Management, PHIN Requirements, ASTHO, AHPL, BioSense, and Communities of Practice. Participants lined up outside the ballroom, looking forward to the delicious Italian foods, as well as talking and enjoying the planned activities.

Marty Cicchinelli, CDC/NCPHI, and Valerie Rogers, NACCHO, conference co-chairs, presided over the awards and recognition ceremony. Ms. Cicchinelli announced that the poster award will now be called the Donald A. Nestor Annual PHIN Conference Poster Award, making this award even more meaningful. Ms. Cicchinelli noted that the first, second, and third place winners were from Utah, quite an honor for the University of Utah and the Utah Department of Health. According to Janise Richards, poster awards committee chair, "This is the first time we have conducted a poster competition at the PHIN Conference,



First prize winner Adi Gundlapalli, M.D., Ph.D., University of Utah, for "Applying NLP Methods to VA Electronic Notes to Improve Information Sources Available for Epidemiologic Investigation."

and we hope to do it every year."

Ms. Rogers and Ms. Cicchinelli later recognized the PHIN Conference Planning Committee, the Abstract Selection Sub-Committee, the Poster Award Committee, NACCHO Conference Planning Committee Team staff, the CDC Conference Planning Team staff, and the Accreditation Subcommittee.

Triple Play of Public Health Software

The application demonstration session allowed conference participants to see three different software products, each of which can help regional and local public health departments operate more effectively.

Second Life is one of several Multi User Virtual Environments (MUVES), Karen Ngowe of Northrop Grumman (NG) explained. It is an artificial world in which users can create and script practically anything (or anybody) they can imagine. The platform is open source, with many modules and templates available for use or customization. Joseph Rothschild (NG) then introduced the "Play2Train" project, in which users can learn and practice decision-making and planning skills through role-play in the virtual world. Rameshsharma Ramlohl and Jaishree Beedasy of Idaho State University joined the presentation remotely to discuss their project to develop a virtual world specifically for the purpose of emergency response scenarios.

HL7 Messaging Workbench is a mature and stable system, supported by the North American Association of Central Cancer Registries (NAACCR), an umbrella organization working toward registry interoperability. Ted Klein of Klein Consulting explained how this system can be used to standardize cancer-registry reporting messages. With local implementation, this could bypass the hospital registry step and send reporting messages directly to the state registry. This streamlined process would benefit hospitals and care providers, and shorten the lag time for returning diagnostic results to the patient.

Klein explained that all HL7 messages are not created equal: the HL7

standard is a consensus standard, which means that any portion that cannot be agreed upon by all is left as "optional." Therefore, each implementation is unique, and requires customization when merging message data into a repository. HL7 Messaging Workbench captures the standards, with customizable constraints and examples, and generates machine-readable specifications that are not subject to interpretation. It generates HTML, XML, and sample messages. It also tests sample messages for conformance to specification (validation against regular expression).

This solution is not the only out there, Klein admits. "But HL7 Messaging Workbench is free."

The third presentation discussed the redesign of the PHIN website. Dr. Tom Savel, Centers for Disease Control and Prevention, explained the issues driving this initiative, including outdated information, missing or recursive links, and a general difficulty in locating information. The site was redesigned from the ground up, rather than reworked from the existing site. New processes include a purge of all outdated information, implementation of a change-control process, and the creation of a document library that will contain all documents linked from anywhere in the site, except draft documents, which will remain in the discussion forums until approved. New features include common navigation links at the top of each page, highlighted news and events announcements, and clear links to resources and activities.

Each page also includes a feedback link to facilitate customer feedback, www.cdc.gov/ncphi.

Highlights of Biosurveillance Data Analysis

The Tuesday afternoon PHIN session titled "Analysis of Biosurveillance Data" was presented to a room filled with over 60 conference attendees. There are many challenges that exist with evaluating complex biosurveillance data. This enlightening session reflected the need to develop more effective analysis methods to improve disease assessment and reporting.

Tung Ly, Health IT Analyst from New Orleans says he attended the session "to learn how to effectively examine vaccine preventable disease reporting as a way to monitor biosurveillance data."

Kali Crosby, CDC BioSense Analyst, was also excited to listen to the afternoon session. "I would like to see different aspects on what causes false alarms and what are the panelists' conclusions in data analysis" stated Ms. Crosby.

Peter Elkin, professor of Medicine at the Mayo Clinic College of Medicine, was one of the first presenters of the session. He explained his research to show how well SNOMED CT could represent data held in chief complaints. His results showed SNOMED CT had a sensitivity of 98.7% for matching clinical terms found in chief complaints of clinical record. Elkin suggested future research should focus on how well chief complaints can be relied upon to provide the basis of a national biosurveillance system.

Dr. Peter William from Johns Hopkins University Applied Physics Laboratory introduced a method for minimizing syndromic false alarms for public health. Dr. William suggested using ratios or proportions to one or more daily records in a database to avoid false alarms in syndromic monitoring. His approach to minimize these alarms is to use information-theoretic techniques to determine the conditions' proportions are preferable to counts for separating potential public health signals from background noise in order to effectively monitor data streams.

David Buckeridge, Assistant Professor of Epidemiology and Biostatistics at McGill University, presented his study on evaluating outbreak detection methods for surveillance systems using BioS-TORM. His presentation offered several solutions to the problem of limited evidence on the relative performance of outbreak detection methods. The software architecture developed from this project sets a foundation for modular surveillance systems.

The session concluded with Dr. Arthur Davidson, director of Public Health Informatics at Denver Public Health, who examined how vaccine preventable disease reporting can be an evaluation tool for comprehensive reporting of communicable diseases.

Part 3 What's Happening with NEDSS?

Did you know? The following are some interesting tidbits of information about NEDSS projects:

- More than 35 states have received, developed, or purchased NEDSS-compatible surveillance applications.
- At least 35 states receive and process lab result data electronically.
- Sixteen states use CDC's NEDSS Base System (NBS).
- Since NEDSS was launched in 2001, more than \$77 million has been awarded to NEDSS projects—in 57 jurisdictions—to foster the design, development, and support of integrated surveillance systems.
- In fiscal year 2007, CDC awarded more than \$10 million to NEDSS projects in 57 jurisdictions.
- More than 26 states have received free Orion Rhapsody software licenses from the NEDSS project. Orion Rhapsody is the software core of the NEDSS message solution.
- The first Orion Rhapsody training, sponsored by the NEDSS project, was held August 20–24, 2007. Ten people were in this first class and came from Hawaii, Texas, Arkansas, North Carolina, California, and Wyoming. Ad-

ditional classes will be conducted in Atlanta about once per month.

- NEDSS team members are collaborating with CSTE, under the auspice of AHIC (American Health Information Community), to establish and disseminate national standards for electronic exchange of case reports.
- NEDSS team members are helping states receive standards-based ELR data from LabCorp and Mayo.
- At least six commercial vendors have developed and installed NEDSS-compatible surveillance applications in local and state health departments.
- CDC will continue to support the NBS. In August, release 1.1.6 was ready to be delivered to states. This release includes improved performance and additional user work-queues.

Please contact any member of the NEDSS team if you have questions.
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News from PHIN Partners

PHIN Partners, Moving into the Future Together

By Michelle Meigs, APHL

Through multi-partner collaboration, open communication, and true commitment to success, the public health community can take full advantage of health information technology, both now and into the future.

The Public Health Information Network (PHIN) is one resource that all domains of public health informatics can use to help bolster support for and to gain direction in health information technology. Over the years, PHIN has served as a sounding board and as a standard to measure the worth of our public health information systems' output. Just as importantly, PHIN has also fostered a growing network of friends and colleagues with whom to share experiences.

Over the course of this year, the Centers for Disease Control and Prevention has been working diligently to finalize the new PHIN 2.0 requirements. Concurrently, the Association of Public Health Laboratories has pursued many initiatives to help public health laboratories realize a flexible information technology (IT) infrastructure that will fit into a broader architectural context, such as PHIN and the National Health Information Infrastructure (NHII).

The most important of these initiatives is the Public Health Laboratory Interoperability Project (PHLIP). Participants in this initiative see PHLIP as

the following:

- A brain trust where information and laboratory scientists at the state and federal levels harmonize how we do business;
- A collaboration opportunity that defines and utilizes viable IT architecture options for the exchange of electronic laboratory data;
- A community that supports Laboratory Information Management System (LIMS) user groups to hone their systems to meet interoperability requirements;
- A repository that documents decisions that are made, fiscal and human bandwidth, and lessons that have been learned;
- A way to develop and disseminate vocabulary and messaging implementation guides to meet the needs of the Public Health Laboratory; and
- The collaborative definition of common goals and national priorities in a production environment.

Whether promoting the next generation of PHIN-compliant LIMS or advancing the use of national data standards and data exchange methodologies, APHL is working to keep our public health laboratories relevant in the evolving domain of health information technology.

APHL looks forward to continuing to collaborate with its PHIN partners to harmonize a public health voice in the national health IT agenda.

A Word from the Council of State and Territorial Epidemiologists

By Lisa Dwyer, Dr. Perry Smith, and Steven MacDonald, CSTE

The Council of State and Territorial Epidemiologists (CSTE) is a professional association of public health epidemiologists working in states, local health agencies, and territories. CSTE has worked in partnership with The Centers for Disease Control and Prevention (CDC) for more than five decades and has been successful in supporting the efforts of state, local, and territorial health professionals in using epidemiological data to improve public health practices. CSTE establishes national guidelines and standards for the conduct of public health surveillance for infectious diseases and non-infectious conditions.

The CSTE annual conference, held in June 2007, featured an eight-hour PHIN Workshop that included a dialogue between CDC and CSTE members regarding the future direction of PHIN and CDC-developed applications. It also provided a forum for debate and discussion of the status and course of public health infor-

matics at the state and local levels. CSTE recognizes the importance of national surveillance, reporting, and interoperability.

CSTE recognizes the importance of PHIN and strongly supports ongoing activities around PHIN. Epidemiologists work with, analyze, and exchange information and data as part of their essential functions every day. Needless to say, epidemiologists cannot perform successfully if informatics, technology, and capabilities are not constantly updated and refined to match the changing landscape of disease surveillance. CSTE supports PHIN activities through dedicated CSTE staff and a large group of state and local active consultants who are organized into a Public Health Informatics Team, a Surveillance Coordination Group, a Surveillance Policy Committee, a NEDSS subcommittee, and Confidential Morbidity Reporting and Electronic Laboratory Reporting workgroups.

CSTE is currently conducting the

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Harmonizing Public Health Voices in National Health IT

By William D. Hacker, M.D.
Commissioner, Kentucky Department
for Public Health, ASTHO

The 5th Annual Public Health Information Network (PHIN) Conference exposes participants to valuable cutting-edge practices in informatics. The knowledge gained can help states strengthen informatics projects at all levels of public health activities. This conference offers the opportunity to network with colleagues across the country to promote collaboration and innovation.

At the Association of State and Territorial Health Officials (ASTHO), our vision for information systems encompasses five key areas:

- Seamless communication and information exchange between multiple stakeholders in a multi-directional capacity;
- A foundation based on common standards to foster interoperability between systems;
- Systems that are relevant to making decisions in the real world of state public health;
- Support from sustainable funding and sound business models; and

- Protection of the privacy and confidentiality of personal health information.

This vision needs to be facilitated through coordination and collaboration among private partners, federal, state, and local government agencies, and other organizations in a way that respects the accelerated pace at which the world of public health is changing.

Public health needs to go into the next 5 to 10 years with a unified strategy for achieving our shared informatics vision. Before a strategy can be developed, we need to identify the goals that we want to accomplish within those years and define how we are going to measure our success. Without this framework in place, we won't know if we have accomplished anything that is useful to public health.

ASTHO and its members are honored to be involved with the PHIN Conference again this year. ASTHO is committed to fostering partnerships and leveraging a place for public health in the national health IT arena; two critical issues for our members, which can be advanced through conferences such as this.

The Role of NAPHIT

By Michael Hill, DHA(c), MPH, MPA
President, NAPHIT

The National Association for Public Health Information Technology (NAPHIT) is a proud participant in the PHIN Conference. NAPHIT was formed to help leaders in public health IT deal with new challenges created by the events of September 11, 2001, the subsequent threats of bio-terrorism, and an ever-increasing role of technology in public health programs. State and local public health agencies need information systems and reliable, secure underlying technologies that allow timely sharing of accurate and relevant public health data.

NAPHIT, a non-profit organization, provides leaders in public health informatics and information technology (IT) with a venue to exchange ideas and experiences, discuss and shape current public health information policy, and learn about tools and technologies that help them better support public health. At the NAPHIT 2007 Annual Meeting, to be held Sunday, August 26, we are pursuing the theme, "The Integrated Public Health Enterprise: Connecting Business Processes through IT."

NAPHIT presents regular webinars to members and invited guests on topics of interest to health department IT staff. These webinars focus

on the way in which information technology can make our health agencies stronger and our populations healthier. As the custodians of information technology, an important tool in the practice of public health, we must maintain focus on supporting the business needs of our agencies rather than focusing just on technology.

As a national organization, NAPHIT members represent state, territorial, and local public health agencies and organizations. Along with exchanging ideas and best practices to improve quality and reduce costs, we also influence the development and adoption of standards in public health information technology through advocacy and advice to decision makers at the federal, state and local level. We also promote a strategic approach to managing information technology solutions that support public health programs.

Our key issues and strategies currently include strengthening the country's public health infrastructure, especially in light of the current national focus on disaster preparedness and response; impacting legislation on data sharing to support core functions of public health; and developing a viable professional organization in order to secure the achievement of its vision and goals.

Please complete your evaluation form in order to obtain your CE units. Free laptop locks for all conference evaluators.

PHIN Conference Reception Makes a Splash

Over a thousand PHIN attendees cruised into the Georgia Aquarium for Monday evening's reception celebration. Guests and their families from around the country joined together to explore the aquarium and experience exceptional food, beverages, and conversations.

The Georgia Aquarium is the world's largest and most engaging aquarium with more than eight million gallons of fresh and salt waters, holding 100,000 fascinating sea animals representing 500 species from around the globe. Many conference attendees got a glimpse

of giant whale sharks and touched slimy stingrays and spiny sea stars...ouch! Others were captivated by the whimsical movements and colors of the rare leafy sea dragons in the Coldwater Quest Exhibit. Inside the coral reef gallery, which is one of the largest living coral reef exhibits in the world, guests were able to explore the living art of underwater cities.

Jean McGraw, chief operating officer from Richmond, Virginia, was thrilled to attend the aquarium reception and the PHIN conference. This is Ms. McGraw's first PHIN conference

and she was pleased about the "prospect of RHIO and CDC to collaborate together to enhance public health."

The Georgia Explorer Exhibit showcased the state's coastal frontier. Horseshoe crabs, sea turtles, and whales are just a few among the many creatures that live within Georgia's coastal waters. Several marine habitats featured a loggerhead sea turtle and the many colorful fish of Gray's Reef, an underwater area off the Georgia coast designated a National Marine Sanctuary.

Monday night's reception at the Georgia Aquarium provided an amazing and wild experience for PHIN conference attendees and their families.



Attendees at the Georgia Aquarium.

Plenary

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questions: "What are the necessary safeguards? Who is responsible for assuring confidentiality? What authorization is necessary for permission to use data and informed consent? And how is this data going to be used?"

She noted the importance of overcoming the public's mistrust of government and how insurer data is handled, and she described the sticky issues of consumer consent and authorization. With respect to access to records, she noted that the Rhode Island HIE is "building up data" and observed that policy should be driving technology. Zimmerman reflected on the future of individual HIEs including their role as population-based systems and the future of information-sharing initiatives between HIEs and public health. "HIE is an iterative process between the policy and the technology," she

remarked. "It goes back and forth."

Final speaker Thomas M. Leary, M.A., senior director of Federal Affairs, Healthcare Information and Management Systems Society (HIMSS), described the need for convergence of mainstream HIT and public health. Leary provided an update on recent legislative actions, including 81 pieces of health IT-related legislation introduced during the first session of 110th Congress. Leary pointed out HHS Secretary Leavitt's personal mission to maximize the use of IT, and he noted the "upcoming philosophical challenges" within the legislative branch, where HIT may run some risk of being politicized. Lastly, he explained that in the face of Medicare and Medicaid reform, and other key initiatives, HIT may have to be a subset of one of the other initiatives. He encouraged the audience to be part of the discussion: "We need to educate our leaders," he said, "Translate that passion into action!"

Open Conversation

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specific topics. The discussions were scenario-based, looking at the future of PHIN. The topics included PHIN Communications, PHIN Technical Assistance, PHIN Governance and National Initiatives, PHIN Collaborative Development, and International Requirements. During these sessions, participants engaged in conversations about key issues related to the future of PHIN.

Tom Savel, M.D., acting associate director for science, NCPHI, explains, "To facilitate applied research activities throughout the domain of public health informatics, we all need to be part of a strong, shared foundation to achieve a common perspective." Dr. Savel also added, "A grid infrastructure at a technology level can

facilitate a true community of practice at a social level."

NCPHI will leverage the information and feedback received during the Open Conversation in planning future priorities and activities for PHIN. "This session provides us with direct input from our stakeholders and partners. The success of PHIN relies on this type of collaboration," says Lynn Gibbs-Scharf, director for DAMC.

As a result of participants' great feedback from last year's session, NCPHI redesigned the PHIN website, launched the PHIN Collaborative Forum, increased the use and frequency of webinars that engage the PHIN community, identified key people to answer questions regarding PHIN, and refined the PHIN requirements. This year's session promises more developments for the future of PHIN.

Question of the Day

How will you apply what you learned during PHIN 2007?



Brandi Falgoust, MPH
Louisiana Dept. of Health
Baton Rouge, LA

"I have learned a lot about different types of data analysis and skills for data entry. These are skills that I can apply to our tobacco control program."



Gabriel Rainisch, MPH
Constella Group
Atlanta, GA

"I was interested in PHIN 101 and some of the other orientation courses. This new information will allow me to collaborate with others that have a more technical background."



Jennifer Price
Madison Research Corp.
Huntsville, AL

"It is interesting to see what other states are doing differently, and what we need to be looking at."

CSTE

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"Assessment of State Electronic Disease Surveillance Systems," aimed at eliciting information on systems used for public health surveillance and case management, focusing on government systems (e.g., the NEDSS-based system) as well as state- and vendor-developed systems. CSTE is currently collaborating with CDC on numerous endeavors: implementing a joint National Assessment of State Notifiable Conditions; developing a searchable national Notifiable Conditions Knowledge-Base; reviewing reporting definitions, minimum data elements and disease-specific data elements necessary for initial case reporting; developing the official list of Nationally-Notifiable Conditions; and seeking to collaborate on and gather information about the future of the nation's public health electronic reporting and informatics systems.

CSTE welcomes the opportunity to collaborate with all PHIN partners, which is essential to be successful in public health in this informatics age.

All conference presentations and content are available for download on the PHIN Conference website, www.cdc.gov/phincconference.