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Post Conference Edition

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2008 PHIN Conference: Thank you!

by Lynn Gibbs Scharf

On behalf of the conference planning committees, we'd like to thank you for attending the 2008 PHIN Conference and helping to make it a success. It was exciting to see everyone roll up their sleeves and start building Communities of Practice.



Our goal this year was to build our public health community through the sharing of promising practices and lessons learned, and we succeeded. Sessions were electric and eclectic; challenges were offered and received. The sessions were energetic and purpose-driven. You provided lively, passionate, healthy debates that are needed to continue to evolve and enhance PHIN.

We would like to thank the planning and event committees, presenters, and participants. You've helped lay the ground work for PHIN's future.

I hope, like me, you will look back at 2008 PHIN Conference and remember it as the re-birth of PHIN, the place and time when a CDC-driven program evolved into a thriving, robust, self-driven community.

We look forward to the future and to improving the public's health through informatics.

Lynn Gibbs Scharf
Director,
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Relaunched and on course: Vocabulary Community of Practice

by John Abellera

Public health has long recognized the need to develop interoperable information systems to share vital public health data and information. One critical component to this is the adoption of standardized vocabulary and messaging formats. CDC recognized the need to address the issues surrounding the adoption of vocabulary standards and to support the development of vocabulary standards within public health.



During this conference, a series of new Communities of Practice (CoPs) were established, including a revitalized and renamed CoP to address public health vocabulary. A session led by Dr. Jim Case from the University of California–Davis and Mamie Jennings Mabery from CDC facilitated dialogue and problem solving around vocabulary development, usage, and distribution. The goal of the session, “Vocabulary and Messaging”, was to bring together messaging colleagues in a community setting to share ideas, identify collaborative efforts, and develop solutions to solving common public health vocabulary and messaging challenges.



Mabery discussed past CoPs: “CDC first formed a vocabulary CoP in 2005. However, there were recognized limitations with the group’s scope and approach. So the original CoP was expanded (in 2006) to invite participation from state and local health departments and was renamed the Public Health Vocabulary Community of Practice (PHVCoP).” Mabery added: “Two and half years later, the community continues to thrive, grow, and provide new strategic possibilities for vocabulary standards adoption in public health.”



Formally recognized biomedical standards (e.g., ICD9-CM, SNOMED, HL7 and LOINC) are the most widely adopted vocabulary standards within public health, but they are not all encompassing. Groups like CDC’s PHVCoP need to address these issues and work with standards development organizations to meet public health needs. However, the standards developing process is fraught with issues associated with the management of information system development, public health practice requirements, and public health policy constraints.

Dr. Case remarked: “It is important that we (the community) learn from our past experience.” He went on to add that “there are several key steps in establishing a vital CoP. In the preparation stage, finding an advocate, gaining organizational support, and developing the participatory spaces are essential and should always be in place before implementation.”

To learn more about CoPs, visit the [PHIN CoP website](#).



Wednesday plenary gives participants a look into the future

by Rosalyn Bell

Wednesday's plenary session, "Every Journey Begins with One Step: People Collaborating to Improve Public Health", was presented by Dr. Seth Foldy, chief medical officer of the [Wisconsin Health Information Exchange](#) and Dr. Perry Smith, state epidemiologist, New York State.

Dr. Foldy's presentation, "The Future is Already Here," was a mock presentation from PHIN Conference 2018. He described a series of real-time situations starting with a small revolt: Driven by workforce shortages in local and state public health agencies, local and state leaders—supported by philanthropists and associations—demanded congressional and presidential attention to focus on these workforce shortages.

Dr. Foldy illustrated how high-volume operations and information reuse became major targets of our work. CoPs focused on the thorny problem of interoperability at the core of public health operations, developing common requirements, standards, and open source code to ensure data could be reused from one application to the next.

Dr. Foldy noted that during this time, we reduced unneeded idiosyncratic information requirements encoded in state and local laws, regulations, and practices, which allowed considerable standardization of inbound information and applications. (This was a long, hard slog that demanded considerable focus!). He closed by explaining how federal incentives to automate processes were largely withheld until satisfaction was achieved with the interoperability available to absorb and integrate data streams.

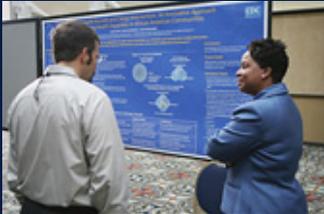
Dr. Smith's presentation, "A Situation Awareness Approach Collaborating on Natural Public Health Surveillance Response Systems," focused on public health surveillance and response systems that face many challenges today, at the federal, state and local levels. He explained how using the approach of situation analysis, a term currently applied frequently to using electronic data, can gain real time understanding of a situation.

Dr. Smith's presentation assessed the current public health informatics situation, outlined the implications, and described courses of action that could address some of those challenges. He noted that public health information systems must be capable of many functions, and users at different levels of government do not all have the same data needs and capabilities. He pointed out how a greater discussion is needed among all involved parties at all levels of government to clarify public health goals in regard to data needed and how best to exchange information.



2008 poster session competition

by Christi Dant



This year's PHIN conference had more abstract submissions than all of the previous conferences. CDC's Dr. Janise Richard shepherded the judging process with thirty-three assessed by 23 judges. The judges picked their top two, and later narrowed the batch down to the top twelve after hearing the oral presentations. Each group of judges then recommended first, second, and third place rankings.

Honorable mentions:

- *Using Antiviral Prescription Data to Enhance Influenza Surveillance*, CDC, Atlanta, Craig Hales, Roseanne English, Jerome I. Tokars.
- *Integrating Open-Source Technologies to Build Low-Cost Information Systems for Improved Access to Public Health Data*, University of Washington, Qian Yi, Richard E. Hoskins, Elizabeth A. Hillringhouse, Svend S. Sorensen, Mark W. Oberle, Sherrilynne S. Fuller, James C. Wallace.
- *Disease Surveillance Information Sharing* submitted by JHU Applied Physics Laboratory in Laurel, MD, Nathaniel R. Taberero, Joel M. Jorgensen, Joshua D. Suereth, Wayne A. Loschen.
- *Development of an HL7 Message Structure to Electronically Report Notifiable Condition Information from Healthcare to Public Health*, University of Utah and Utah DOH, Deepthi Rajeev, Melissa S. Dimond, R.Scott Evans, Lisa Wyman, Robert T. Rolfs, Stan Huff, Richard Kurzban, Catherine Staes.

Third Place went to the poster on *Evaluation of Syndrome-Specific School Absenteeism Data for Public Health Surveillance* lead presenter Shuying Shen and a team comprised of colleagues from University of Utah, Utah Department of Health, and Davis County (Utah) Health Department.

Second place was awarded to lead presenter Teresa Hines, representing a team from the Department of Navy and Marine Corps Public Health Center in Portsmouth, VA, for their entry, *Use of Electronic Data for the Surveillance of Antimicrobial Resistance*.

And the first place winner for the PHIN 2008 Poster Competition was *Potential Improvement in Timeliness of Infectious Disease Notification Attributable to Electronic Laboratory Reporting—Florida, 2002—2006*, presented by John M. DePasquale, CDC, representing a team from the Bureau of Epidemiology at the Florida Department of Health in Tallahassee, FL.

All of the posters can be viewed on the [conference site](#).



Racing ahead in environmental health informatics

by Lisa Hines

Practical tools employing cutting edge technology was the theme of Tuesday's session, "Applications in Action: Environmental Health." Three new, easy-to-use applications designed to improve environmental health surveillance and data collection were showcased.

Dr. Gary Marsh and Mike Cunningham demonstrated new software, Rapid Assessment and Characterization of Environmental Risk (RACER), which was developed with support from the University of Pittsburgh's Environmental Public Health Tracking Network team. RACER enables public health practitioners to go beyond identifying and characterizing environmental risks, and enables them to analyze risk to a community over time from an environmental exposure. This capacity will allow health officials to quickly assess whether health tracking activities are needed, or a targeted investigation is warranted.

Dr. Lorraine Backer and Rebecca LePrell demonstrated the new Harmful Algal Bloom-related Illness Surveillance System (HABISS) created by NCEH. HABISS is unique because it includes human health data and data from animals made ill by exposure to harmful algal blooms.

"With a tool like HABISS, we can protect health in a very tangible way, which has not been possible before. Public health officials will be able to forecast when harmful blooms are likely to occur and can warn the public before they come in contact with the algae," said Backer.

Brian Levine concluded the session with a demonstration of integration between NCPHI's Specimen Tracking and Results Reporting System (STARRS) and NCEH's Laboratory Sample Tracking and Results System (LSTARS). STARRS is a new web services initiative to integrate laboratory information systems within CDC and with partners in outside laboratories. LSTARS is an enterprise laboratory tool used for collecting information about specimens. The integration between STARRS and LSTARS allows public health partners to submit specimens to CDC and review results. This reduces data entry at CDC and improves efficiency and accuracy. Users are now able to apply standard specimen identification numbering systems and standard vocabularies to describe shipments, specimens, and results.

RACER, LSTARS, STARRS, and HABISS clearly demonstrate the capacity informatics to advance environmental public health in new and important ways.



Unveiling the Public Health Research Grid

by: Jay Jones



A grid is a way to connect large numbers of computers at different organizations on a national scale. When connected, each of these computers can share data, services, and other computer resources. Once the Public Health Grid (PHGrid) is implemented, computers connected to it will be able to tap into the resources and services of other computers on the grid.

On Wednesday, three sessions dealt with the NCPHI/Centers of Excellence (COE) grid research project. *PHINews* spoke to Dr. Tom Savel, Medical Officer, before the sessions to discuss how these presentations were chosen:

“These three presentations represent very valuable and innovative grid work. They aren’t just showing what the Public Health Informatics Research Grid is; they are demonstrating the real value of it. For instance, the MedLEE presentation shows how an existing, valuable service can be placed on a grid so that others can use it.”

Wednesday’s session, “The Public Health Research Grid: An Initiative by NCPHI and the Centers of Excellence,” consisted of the following presentations:

MedLEE, a natural language processing (NLP) service, on the PHGrid: Participants learned about MedLEE and the efforts underway to make the system available as a service on the PHGrid. An NLP system attempts to process vast amounts of text in a reasonable amount of time and accurately extract and encode the relevant biomedical information so that it is in a standard format.

Utah PHGrid demonstration project: Grid-enabling the Environmental Public Health Tracking Network: Participants were presented with a description of the Utah Public Health Informatics grid prototype. The prototype uses de-identified birth records from the Utah vital records system and air quality data from the Department of Environmental Quality.

Research Grid Services to Support Disease Surveillance: The session covered what each of NCPHI’s academic COEs is providing to evaluate the PHGrid environment. The services presented included a synthetic medical records generator that can provide developers with background data containing realistic outbreaks.

After the sessions, Dr. Savel stated that he thinks the “participants now have a good understanding of the kind of value that can be provided with services on a grid infrastructure—that it’s not just all hype; grid really does work.”

PHIN Conference 2008 closes; the road goes on and on

by: Jay Jones

The 2008 PHIN Conference closed on August 28 with two exceptional speeches by Drs. Robert Hendler and Patrick O'Carroll, with final thoughts on the week from Dr. Leslie Lenert.

Dr. Bob Hendler, vice president of clinical quality and regional chief medical officer for [Tenet Healthcare Corporation](#), opened his talk by challenging the artificial divide between clinical health care and public health, as well as pointing out their common goals. His experiences in public health include disaster preparedness, and he is directly responsible for Tenet Hospitals in Texas, Alabama, Georgia, and Louisiana. He was also involved in Tenet's response to Katrina.

Dr. Hendler presented challenges facing the US healthcare system ("ranked last in healthcare among the industrialized countries in almost every area studied"), and now a recent report by the [Commonwealth Fund Commission on a High Performance Health System](#) determined that US healthcare is getting worse and appears to be on the wrong track. Dr. Hendler believes that in the future, the US health care system should have one clear goal, not myriad goals, and that common goal should be "reliable processes driven by readily available and easily understood information that guarantees the correct care is given to each patient each time without mistake."

"We expect challenges as we launch new areas: We are learning to collaborate."

Les Lenert
NCPHI Director

Following Dr. Hendler's presentation was Dr. Patrick O'Carroll. "The future is out there for us to make," declared Dr. O'Carroll, regional health manager for the [University of Washington's Northwest Center for Public Health Preparedness](#) (and 17-year CDC veteran).

Dr. O'Carroll outlined the models that public health informatics should consider when building its future, in the same tradition as the automotive industry's anti-lock braking systems and electronic steering control models. His question to the community is "Can informatics help prevent injuries?" He proposed that end-user tools and applications might one day allow people to "point and click" items such as "exercise" or "green lives" to receive information to help them accomplish both. Technology might also provide home testing for common infectious diseases. He challenged the audience to not just build technology but to ensure that it is used to make the public healthier.



PHIN Conference 2008 closes *(continued)*



Dr. O'Carroll also stressed the need to educate and influence legislators to support public health informatics and public health appropriately. In a process he calls "geocoding by legislative district," O'Carroll hopes we can engage legislators to understand what impacts people in their districts. Further, he thinks we should leverage public health informatics tools for education, searching for ways we can help teachers in elementary, middle, and high school as they educate future generations.

Dr. Les Lenert, NCPHI's director and conference opening speaker, closed the conference by noting the "amazing stories of collaboration" presented at this year's conference and other conference achievements. Overall, he highlighted Dr. Kolonder's support of PHIN and the launching of CoPs as major accomplishments for the PHIN community.

"We expect challenges as we launch new areas: We are learning to collaborate," he said, suggesting that the push to form communities may be met with initial resistance, but this is a natural process that occurs when any organization or group undergoes a significant change. Growth is often accompanied by pain, but that pain should not be seen as a reason to abandon the growth efforts. In the end, we will all benefit from robust, vital communities.

Recordings of presentations are available on the [conference site](#).

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Want More *PHINews*?

We hope you enjoyed the conference and the daily edition of *PHINews*!

The paper you're reading now is a special edition of *PHINews*, the PHIN community's quarterly e-newsletter. Each Fall, Winter, Spring, and Summer, you can go to the PHIN website (www.cdc.gov/phn) and check out the latest in PHIN news, events, and special features.

Be sure to browse the *PHINews* archive, which contains interviews with informatics thought leaders, as well as articles about what's in PHIN's future and how the community is shaping it.

If you'd like to be on the *PHINews* distribution list, send an email to PHIN@cdc.gov.

Hope you had a great PHIN Conference!

PHINews Staff

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