



# Quarterly UPDATE

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## A Message from the CalPHIN Director

By Mark Starr, NEDSS/CalPHIN Program Director  
CDPH/DCDC

We hope you all are enjoying the first few days of Summer. This “Spring” issue of the newsletter was delayed to be able to report on a number of significant events, including a WebCMR milestone. You might have also noticed that we are now publishing from within the new California Department of Public Health (check out the new CDPH logo, as well as our new CalPHIN logo, above). In addition to useful update information, this issue includes an article about the PHLIP project being conducted by our LIMS team with multi-state and national partners, an article about Los Angeles County’s ELR activities (keep those local articles coming!), and a new feature – an acronym list with Web links.

Our staff members continue to be involved in numerous activities beyond our internal (e.g., WebCMR, LIMS, GIS) informatics efforts, such as the PHLIP project mentioned above, the national effort to develop and harmonize “core” CMR data elements (Nancy McQuillen), work with RHIOs and HIEs (check the acronym list!) in California to be sure public health is at the table to tap in to health information streams of the future (Nancy McQuillen, Linette Scott), working with CDC and other States to improve and evaluate the Outbreak Management System (Patrick Anderson, Deb Gilliss), and doing likewise with CDC’s Countermeasures Response Administration software (Trevor Shoemaker), to name but a few. There is also a national effort to assure public health involvement in RHIOs and HIEs, which is described in an article called “Laying the Groundwork for a Unified Public Health Voice” in the first issue of CDC’s PHIN newsletter, *PHINews*, published June 21<sup>st</sup>. Other national updates include the recent release of version 2 of the PHIN Requirements (we’ll provide more on this in a future issue), and the upcoming PHIN Conference August 27<sup>th</sup>-29<sup>th</sup> in Atlanta. More on all of these CDC/national PHIN activities can be found at [www.cdc.gov/phin](http://www.cdc.gov/phin).

Enjoy the issue, send us your ideas and articles, and have a great Summer.

## WebCMR and ELR Update

Our last issue of this newsletter (Winter) provided background and history of WebCMR and ELR project efforts, and a summary of the activities that were underway at that time. Since then, we prepared the needed project update documentation (“SPRs”) for the Department of Finance and received approvals to go ahead with procurement of a software solution. As you have likely seen, two linked RFPs for WebCMR and ELR were issued on June 15<sup>th</sup> and the proposal review process will begin the week of August 13<sup>th</sup> (the full RFPs,

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## California Public Health Information Network

CDPH-DCDC • 1616 Capitol Avenue • MS 7300 • P.O. Box 997377 • Sacramento, CA • 95899-7377 • 916-552-9700 • 916-552-8973 Fax

## PHLIP Update

**By Riki Merrick, MPH, Public Health Information Specialist  
LIMS Service and Support Team Member, CDPH/DCDC**



The Public Health Laboratory Interoperability Project (PHLIP) was introduced in the “LIMS Update” article in the Winter issue of this *Newsletter*. In brief, this Association of Public Health Lab (APHL) sponsored initiative involves establishing electronic messaging (using

appropriate standards) of laboratory information for specific diseases between seven State public health laboratories and CDC. The ability to rapidly exchange such information using modern informatics approaches will support emergency preparedness (e.g., pandemic influenza), multi-state investigations, and other important public health functions to address communicable diseases. Following completion of the Phase One and Phase Two pilots, we are ready for the first production effort.

PHLIP is moving full steam ahead on a wide array of issues that will be critical to move the current participants (the 7 states participating are: CA, CO, FL, IA, MN, NE, VA) into production with their first electronic messaging of influenza test information, with emphasis on sending unsolicited results to the CDC-Epi team. Our LIMS Service and Support Team (LSS) members, Lee Jardin and Andrew Sinyaver, are working hard to ensure correct message transport and validation.

In addition to getting our system ready for the first part of the production phase, we are working, under direction of Paul Duffey at the Microbial Diseases Laboratory (MDL) and David Cottam at the Viral and Rickettsial Disease Laboratory (VRDL) to receive and “consume” an order from the state of Nebraska at the LIMS level to prepare for the next phase of state to state data exchange. In early April, APHL representative Michelle Meigs came to visit the Richmond Campus to get a first hand look at California’s LIMS. The LSS Team provided a full day of demonstrations and discussed our LIMS

implementation, PHLIP activities, and lessons learned.

At the same time PHLIP is looking into the future and California is helping along the way. In recognition of the importance of harmonization and standardization for interoperability PHLIP has formed a separate vocabulary team that is laying the foundation for vocabulary harmonization for future diseases.

PHLIP will start by focusing on the Nationally Notifiable Diseases (NNDs). So far, besides influenza, the vocabulary team has completed tuberculosis, gonorrhea and *Chlamydia*. Throughout the summer the group is expecting to complete syphilis, HIV, *Salmonella*, shiga-toxin producing *E. coli*, *Shigella* as well as *Neisseria meningitidis* and *Bordetella pertussis*. The PHLIP vocabulary team is taking into account the need for data aggregation in their design of the reference vocabulary by creating an hierarchical structure.

During this effort, the important opportunity for vocabulary synchronization with other federal programs has arisen, and first steps in that direction have been made. Though the PHLIP partners recognized that synchronization might slow the speed at which PHLIP could push forward into production with new diseases, they see value in this step as it will decrease the amount of work for participants in the long run.

Because both APHL and the CDC recognize the need for scalability of PHLIP, a JAD session to develop a more scaleable architecture for the next phase is planned for early August. Look for our next update in the Fall.

## Electronic Lab Reporting (ELR) – Learning and Improving

By Raymond D. Aller, M.D.

Director of the Automated Disease Surveillance Section

Los Angeles County Department of Public Health ACDC Program

The ELR program in Los Angeles County is now six years old – we began preparatory work in 2001, and have been live with the laboratory serving our first seven hospitals (Kaiser) since April 2002. In recent years we have been adding additional hospitals/labs (we now get data from five labs, serving nine hospitals and two independent labs), and are working to increase these connections by several more in the near future.

A number of elements are required to make ELR a reality. There must be processes to extract all results from the Lab Information System (LIS), to filter these and select out reportable results, to translate the test/result-name terminology into standard codes (LOINC and SNOMED – Logical Observation Identifier Names and Codes, and Systematized Nomenclature of Medicine), to transmit these results in standard HL7 (Health Level 7) format to the Public Health Data Center, to bring them into the public health database, to match up the result LOINC/SNOMED with the appropriate disease category, and then to load them into the disease reporting system for management by epidemiology and disease control staff.

We were fortunate, in embarking on ELR, to have up and running a robust disease reporting system – visual Confidential Morbidity Reporting (that had gone live in April 2000). When we receive an electronic report of a disease, it is immediately routed into an automated system for follow-up.

To connect the laboratories into the ELR network, we have worked with a contractor whose primary business activity is building order entry/results reporting linkages between clinical laboratories and their clients (commonly called Physician Office Lab-Link (POLL) software). For labs running systems from most LIS vendors (e.g., Cerner, Meditech, etc.) our hospital recruiting and implementation is spearheaded by an Atlas project manager. Labs running a Misys LIS are

implemented by an internal team of two Medical Technologist Data Systems Analysts.

A review of POLL systems/vendors was published in the May 2007 issue of the journal CAP Today. Your friendly local clinical laboratorian receives this magazine – or you can find the article on the [www.cap.org](http://www.cap.org) website.



The most difficult and time-consuming aspect of ELR is in preparing the clinical laboratory/hospital portion of the system – and not because the technical aspects are difficult, but because they must be implemented by lab and hospital staff who may have other projects as their top priority. Implementation in one laboratory doesn't assure a smooth path in others – the implementation strategy must be uniquely crafted for every site. For example, we have been working for over two years to prepare one local hospital lab. After all translations were made and all tables were built and loaded, we were ready to begin testing. We then learned that the hospital had hired a new “security” officer, and added an extra piece of intermediary hardware. Such situations can delay testing by months. We applaud the work of Dr. Stuart Turner and his colleagues at UC Davis, and the support of their work by DCDC under the leadership of Dr. Mark Starr. Their Cal-LIP (a.k.a. “Lab Readiness”) project will give the State a major head start for connecting labs once a central system to process the disease reports is launched.

Patients don't notice what County they're in when they need to go to the hospital. While we focus on connecting hospitals in LA County, we receive lab reports for patients living in other

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## CalPHIN Newsletter – Frequently Used Acronyms and Website Links

AHIC	<a href="http://www.hhs.gov/healthit/ahic.html">http://www.hhs.gov/healthit/ahic.html</a> - American Health Information Community
APHL	<a href="http://aphl.org/">http://aphl.org/</a> - Association of Public Health Laboratories
ASTHO	<a href="http://astho.org/">http://astho.org/</a> - Association of State and Territorial Health Officials
AVSS-CMR	<a href="http://avss.ucsb.edu/">http://avss.ucsb.edu/</a> - Automated Vital Statistics System
CalPHIN	<a href="http://www.calphin.dhs.ca.gov/">http://www.calphin.dhs.ca.gov/</a> - California Public Health Information Network
CCHIT	<a href="http://www.cchit.org/">http://www.cchit.org/</a> - Certification Commission for Healthcare Information Technology
CCLHDM	<a href="http://www.caphld.org/html/cclhdm.html">http://www.caphld.org/html/cclhdm.html</a> - California Conference of Local Health Data Management
CCLHO	<a href="http://www.dhs.ca.gov/cclho/">http://www.dhs.ca.gov/cclho/</a> - California Conference of Local Health Officers
CDC	<a href="http://www.cdc.gov/">http://www.cdc.gov/</a> - Centers for Disease Control and Prevention
CDPH	<a href="http://cdph.ca.gov/">http://cdph.ca.gov/</a> - California Department of Public Health
CSTE	<a href="http://www.cste.org/">http://www.cste.org/</a> - Council of State and Territorial Epidemiologists
DCDC	<a href="http://www.dhs.ca.gov/ps/dcdc/dccindex.htm">http://www.dhs.ca.gov/ps/dcdc/dccindex.htm</a> - Division of Communicable Disease Control
ELR	Electronic Laboratory Report
FSR	<a href="http://sam.dgs.ca.gov/TOC/4800/4928.htm">http://sam.dgs.ca.gov/TOC/4800/4928.htm</a> - Feasibility Study Report
GIS	<a href="http://gis.com/">http://gis.com/</a> - Geographic Information Systems
HIE	<a href="http://en.wikipedia.org/wiki/Health_information_exchange_%28HIE%29">http://en.wikipedia.org/wiki/Health_information_exchange_%28HIE%29</a> - Health Information Exchange
HISPC	<a href="http://www.rti.org/page.cfm?objectid=09E8D494-C491-42FC-BA13EAD1217245C0">http://www.rti.org/page.cfm?objectid=09E8D494-C491-42FC-BA13EAD1217245C0</a> – Health Information Security and Privacy Collaboration
HIT	<a href="http://www.hhs.gov/healthit/">http://www.hhs.gov/healthit/</a> - Health Information Technology
HITSP	<a href="http://www.ansi.org/standards_activities/standards_boards_panels/hisb/hitsp.aspx?menuid=3">http://www.ansi.org/standards_activities/standards_boards_panels/hisb/hitsp.aspx?menuid=3</a> – Healthcare Information Technology Standards Panel
HL7	<a href="http://hl7.org/">http://hl7.org/</a> - Health Level Seven
HRSA	<a href="http://hrsa.gov/">http://hrsa.gov/</a> - Health Services Advisory Group
LIMS	<a href="http://www.limsources.com/about.html">http://www.limsources.com/about.html</a> - Laboratory Information Management System
MDL	<a href="http://www.dhs.ca.gov/ps/dcdc/mdl/default.htm">http://www.dhs.ca.gov/ps/dcdc/mdl/default.htm</a> - Microbial Disease Laboratory
NACCHO	<a href="http://naccho.org/">http://naccho.org/</a> - National Association of County & City Health Officials
NAPHIT	<a href="http://naphit.org/">http://naphit.org/</a> - National Association for Public Health Information Technology
NCID	<a href="http://www.cdc.gov/ncidod/">http://www.cdc.gov/ncidod/</a> - National Center for Infectious Diseases
NCPHI	<a href="http://www.cdc.gov/ncphi/">http://www.cdc.gov/ncphi/</a> - National Center for Public Health Informatics
NEDSS	<a href="http://www.cdc.gov/nedss/">http://www.cdc.gov/nedss/</a> - National Electronic Disease Surveillance System
NETSS	<a href="http://www.cdc.gov/epo/dphsi/netss.htm">http://www.cdc.gov/epo/dphsi/netss.htm</a> - National Electronic Telecommunications System for Surveillance
NHIN	<a href="http://www.dhhs.gov/healthit/nhin.html">http://www.dhhs.gov/healthit/nhin.html</a> - Nationwide Health Information Network
PHIN	<a href="http://www.cdc.gov/phinf/">http://www.cdc.gov/phinf/</a> - Public Health Information Network
PHIN MS	<a href="http://www.cdc.gov/phinf/software-solutions/phinfms/">http://www.cdc.gov/phinf/software-solutions/phinfms/</a> - Public Health Information Network Messaging System
PHLIP	Public Health Laboratory Interoperability Project
RFI	<a href="http://en.wikipedia.org/wiki/Request_For_Information">http://en.wikipedia.org/wiki/Request_For_Information</a> - Request for Information
RFP	<a href="http://en.wikipedia.org/wiki/Request_For_Proposal">http://en.wikipedia.org/wiki/Request_For_Proposal</a> - Request for Proposal
RFQ	<a href="http://en.wikipedia.org/wiki/Request_for_Quotation">http://en.wikipedia.org/wiki/Request_for_Quotation</a> - Request for Quote
RHIO	<a href="http://calrhio.org/">http://calrhio.org/</a> - California Regional Health Information Organization
VRDL	<a href="http://www.dhs.ca.gov/dcdc/vrdl/index.htm">http://www.dhs.ca.gov/dcdc/vrdl/index.htm</a> - Viral and Rickettsial Disease Laboratory

## **WebCMR and ELR Update**

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including key dates on page 7, can be found at <http://www.calphin.dhs.ca.gov/>). The timeline indicates conservatively that we will have a contract in place by March 2008, but there is some expectation that the approval of the second SPR could occur much more quickly than the three months currently allocated – California could have a vendor on-board beginning implementation near the beginning of 2008. In any case, after all the delays, it is good to be moving again on these important projects.

Most urgently, we continue to have opportunities for local participation on the Procurement Evaluation Team (PET), which is forming now in preparation for the August 13<sup>th</sup> review start date. These are critical roles since the PET will drive the vendor selection, and the process has been structured to limit time commitments as much as possible. ***Please contact Terry McIntire-Hicks ([Tmcintir@cdph.ca.gov](mailto:Tmcintir@cdph.ca.gov), or 916-552-9700) with any interest, inquiries or recommendations regarding participation on the PET.***

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**2007 PHIN Conference**  
**August 27-29, 2007**  
**Atlanta, GA**  
**OMNI at CNN Center**

<http://www.cdc.gov/phinconference/>

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## **Electronic Lab Reporting (ELR)**

### **- Learning and Improving**

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jurisdictions. Some jurisdictions now use our vCMR to access and follow up those reports. We look forward to connecting to the State's electronic disease reporting management system, once that becomes available, so that we can automatically route lab results (and other disease reports) to the appropriate jurisdictions. Likewise, we look forward to receiving reports on our patients tested by labs in other jurisdictions.

There is insufficient space in a brief article such as this to describe most of the lessons and learnings we have acquired over the past few years. We're eager to provide guidance to others in California, as we all work toward a faster, more accurate, more complete, and more reliable way to learn of communicable diseases identified by laboratory testing.

Ray Aller, M.D.  
[raller@ph.lacounty.gov](mailto:raller@ph.lacounty.gov), (213) 989-7208

Irene Culver  
 Sue May, MT(ASCP)  
 Sue Lee, MT(ASCP)  
 John Piraino  
 Leslie Millington  
 Zoreh Shabazi  
 Peter Reddy

And many others!

### **CalPHIN Newsletter**

**MANAGING EDITOR:** Mark Starr, [Mark.Starr@cdph.ca.gov](mailto:Mark.Starr@cdph.ca.gov)  
**ASSISTANT EDITOR:** Linda Sandoval, [Linda.Sandoval@cdph.ca.gov](mailto:Linda.Sandoval@cdph.ca.gov)



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**Headquarters:** 1616 Captiol Avenue, MS 7300, P.O. Box 997377, Sacramento, CA 95899-7377 • (916) 552-9700 • (916) 552-8973 (FAX)