

Public Health Data Standards Consortium

<http://phdatastandards.info/>





Medical Library Association 2004 Annual Meeting
Session: The Future of public health Vocabulary and Public health
Data Standards, May 23, 2004, Washington, DC

**Public Health Data Standards Consortium –
an Organized Common Voice from Public Health
in the National Health Data Standardization Efforts**

Anna O. Orlova, PhD

Executive Director, PHDSC

and Johns Hopkins Bloomberg School of Public Health

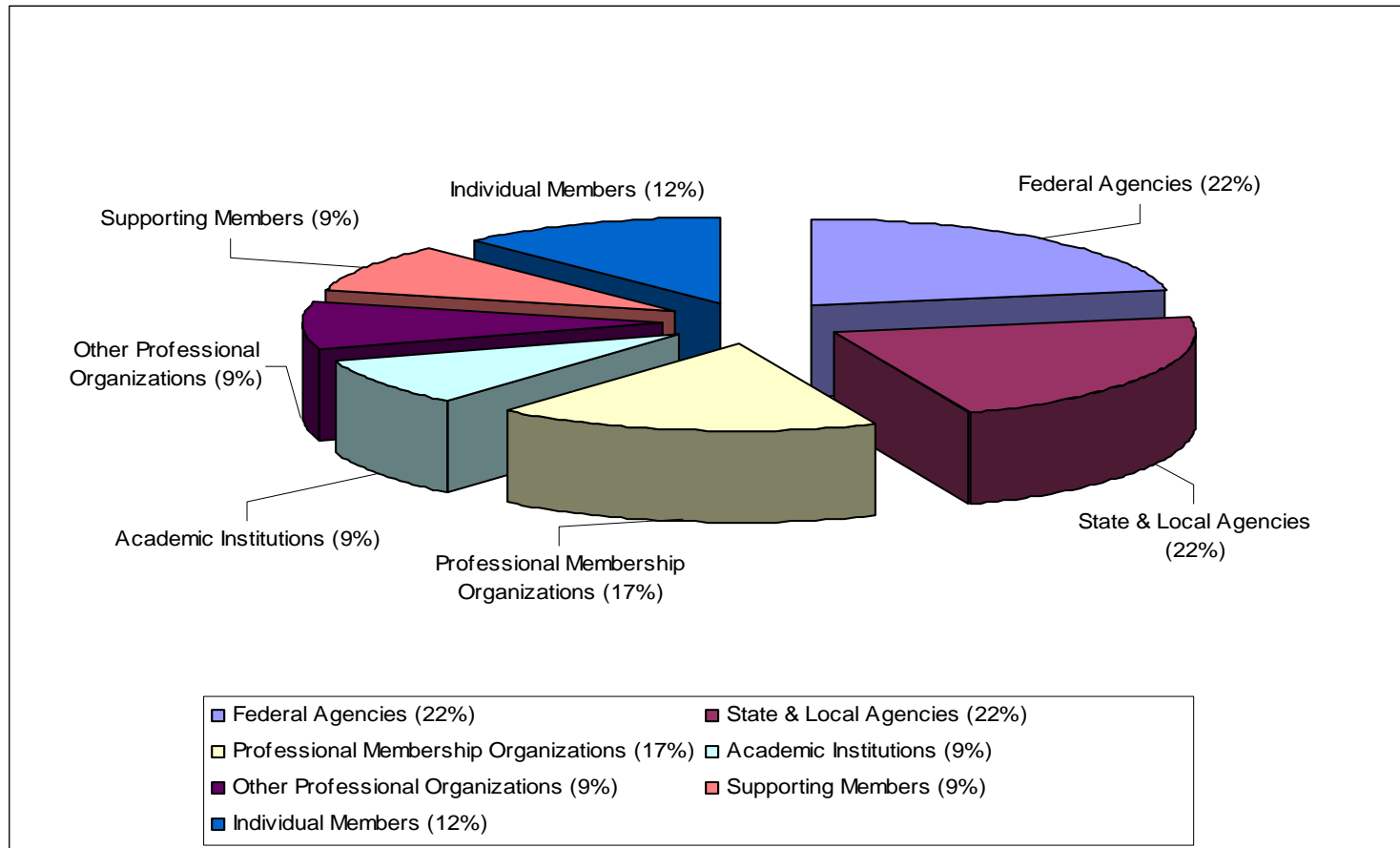


Since 1999, PHDSC has been an active participant in the national efforts of health data standardization

- ◆ The *Public Health Data Standards Consortium* (PHDSC) is a voluntary confederation of federal, state and local health agencies; national and local professional associations; and public and private sector organizations and individuals.
- ◆ PHDSC's primary goal is to promote data standards for population health practice and research.
- ◆ PHDSC members recognized a need for an organized common voice from public health in the national health data standardization efforts resulting in establishment of the Consortium as a not-for-profit organization in July 2003.



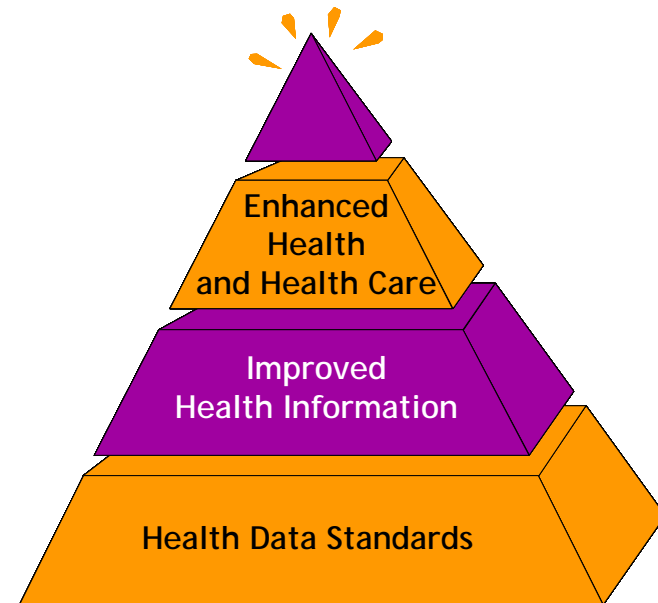
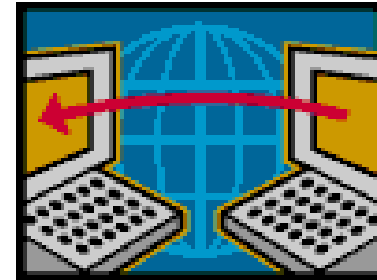
PHDSC - Membership Structure





PHDSC's Mission (abridged)

PHDSC is committed to bring a common voice from the public health community to the national efforts of standardization of Information for health and healthcare





PHDSC's role is to:

- ◆ Identify data standard needs for public health practice and research through collaboration of members and other stakeholders
- ◆ Facilitate the use of existing national standards, *e.g.*, HIPAA-standards, to improve work practices
- ◆ Facilitate the development and implementation of new national standards by representing public health in the standards development process
 - Standards development organizations (*e.g.*, Accredited Standards Committee X12 and Health Level 7)
 - Data content committees (National Uniform Billing Committee and National Uniform Claim Committee)
- ◆ Educate communities about health data standards issues

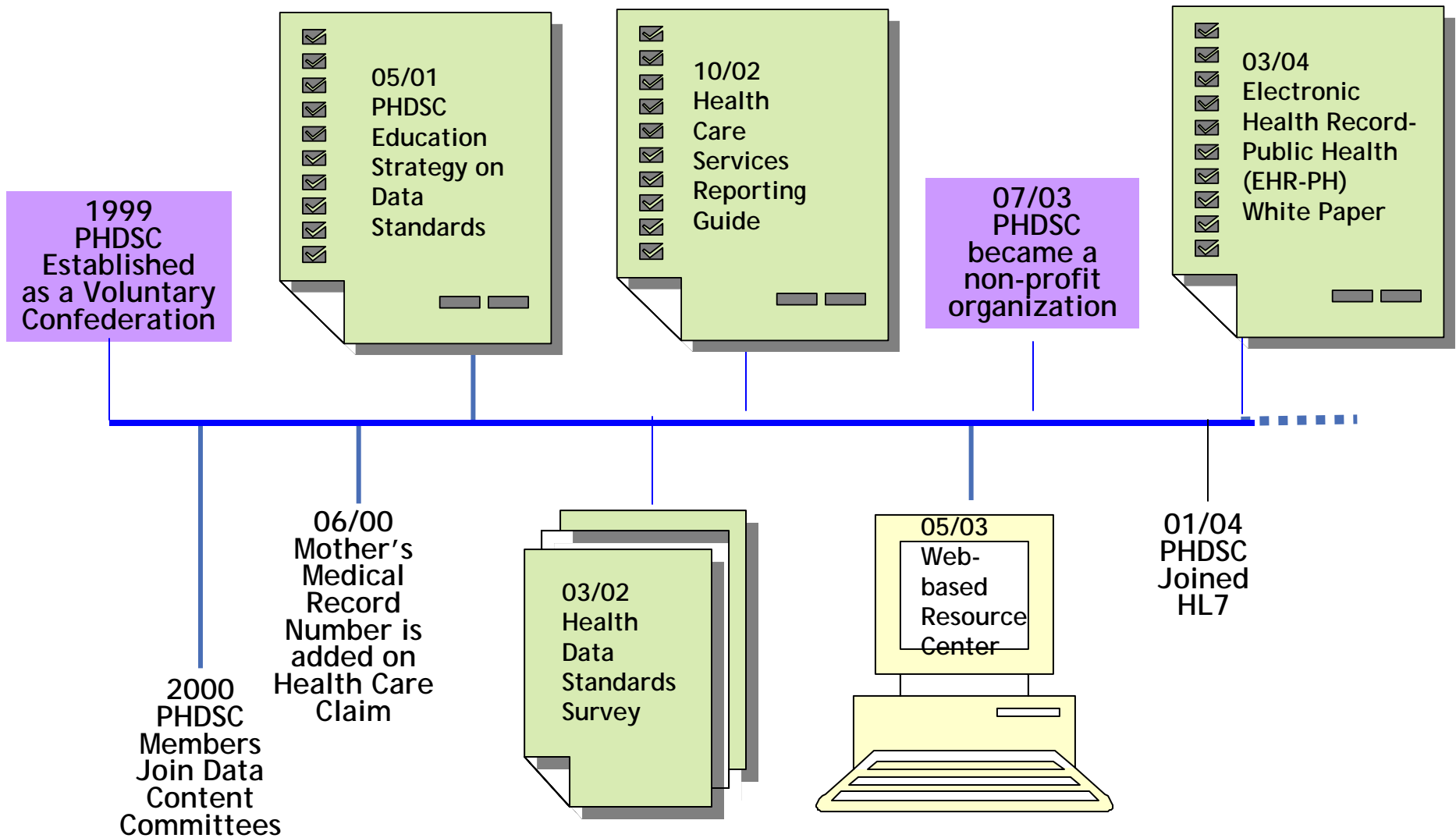


PHDSC supports national efforts to improve health of the US population via standardization of health information including

- ◆ National Health Information Infrastructure (NHII)
- ◆ The Centers for Disease Control and Prevention's (CDC) Public Health Information Network (PHIN) including National Electronic Disease Surveillance System (NEDSS)
- ◆ National, State or Local agencies and public & private organizations promoting standardization of health-related data and integration of clinical care systems and public health systems



PHDSC has a proven track record





PHDSC Leadership

Participation in the SDOs and DCCs

- ◆ Membership in HL7
 - PHDSC is HL7 member since January 2004
 - Participation in the existing HL7 SIGs:
 - Patient Safety,
 - Electronic Health Record
 - Public Health & Emergency Response
- ◆ Participation in other SDOs and DCOs, e.g., X12, NUBC
- ◆ SDOs and DCOs as PHDSC members



PHDSC Leadership

Leading the development of public health informatics

2001 A national agenda for public health informatics

(Yasnoff W, Overhage J, Humphreys B, LaVenture M. A national agenda for public health informatics. J Am Med Inf Ass 2001; 8(6): 535-45.)

2004 Four organizations demonstrate achievements in public health informatics:

- **Public Health Informatics Institute** - *standardization of public health laboratories*
- **RODS Laboratory, University of Pittsburgh** - *syndromic surveillance*
- **Johns Hopkins NLM Training Program in Health Sciences Informatics** - *the only NLM Informatic Training program with public health concentration*
- **PHDSC** - *Electronic Health Record - Public Health Task Force's White Paper on EHR-PH is „the most comprehensive and in depth validation requested by HL7 and the EHR collaborative“; there is a need „to highlight these results to the media and the rest of the industry“*



PHDSC Leadership

Consortium demonstrates leadership in the field through active involvement in the national health data standardization efforts via activities of its
Committees
(former Working Groups)



PHDSC - Ad Hoc Committees

Ad Hoc Committees

- ◆ Ad Hoc Task Force on Electronic Health Record Public Health
 - Bring public health perspectives into the development of the national Electronic Health Record (EHR) standard
- ◆ Payor Type
 - ◆ Bring public health perspectives in standardization of administrative data
- ◆ External Cause-of-Injury [E-code]
 - ◆ Promote the collection and reporting of standardized external cause of injury codes

Ad Hoc Committees

- ◆ Web-based Resource Center
 - Provide information for public health community on national health data standardization efforts
- ◆ Health Care Services: Data Reporting Guide
 - ◆ Facilitate development of national standard implementation guide for reporting health care services
- ◆ Privacy, Confidentiality & Data Sharing
 - ◆ Represent public health interest on privacy and confidentiality issues



PHDSC – Ad Hoc Committees potentially to be launched

Ad Hoc Committees

- ◆ National Health Information Infrastructure (NHII)
 - ◆ Participate in building NHII and Local Health Information Infrastructure (LHII)

- ◆ International Committee
 - Participate in the international efforts on standardization of health information systems

Ad Hoc Committees

- ◆ Public Health Vocabulary
 - ◆ Promote national efforts of developing public health terminology and vocabulary standards

- ◆ Health Data Modeling
 - ◆ Participate in the development of public health/population health reference information model



Public Health Data Standards Consortium

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Public Health Data Standards Consortium
Web-Based Resource Center

- ▶ ABOUT THE CONSORTIUM
- ▶ KNOWLEDGE RESOURCES
- ▶ STANDARDS DEVELOPMENT EFFORTS
- ▶ IMPLEMENTATION CASE STUDIES
- ▶ SEARCH
- ▶ SITE OVERVIEW

STANDARDS FOR IMPROVED PUBLIC HEALTH

ANNOUNCEMENTS

- PHDSC launches new website 1/20/03
- NIH meets with PHDSC board 1/29/03

Let's hear from you...



Public Health Data Standards Consortium

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ABOUT THE CONSORTIUM

WEB-BASED RESOURCE CENTER

Public Health Data Standards Consortium

Do you think something should be done to improve and integrate population health data and information? Do you have trouble knowing what is happening to the health in your community? Are there too many health data systems that don't talk to each other? Are you worried that a bio-terror attack or emerging health threat might escape detection?

As members of the Consortium we are public health professionals and health services researchers expanding educational resources, informing stakeholders, and organizing to assure that health data standards and health data meet our needs and ultimately the health needs of the public.

We are a determined "hands-on" group who work with information technology, recognized public health leaders, researchers, and standards organizations. We actively participate in decisions that impact our ability to use data to improve the lives of mothers, children, students, workers, the aged, and all Americans. Click on "[About the Consortium](#)" to learn more about our organization and activities, including our [Strategic Plan](#), [Our Members](#), [Ongoing Initiatives](#), [How to Join](#) and [Subscribing to our ListServ](#).

Visit our "[Web-based Resource Center](#)," which provides tools and information to facilitate the use and understanding of data standards in public health that affect our day-to-day challenges. In this section you will find papers, presentations, case studies, and tutorials on issues related to public health and data standards. You will also find information on numerous standards development efforts.

Hot Topics & Updates

Upcoming Events

Join the PHDSC

STANDARDS FOR IMPROVING PUBLIC HEALTH



Features of the Web-Based Resource Center

- ◆ Knowledge Resources
 - Tutorials on Public Health, Public Health Data, and Informatics
 - Papers and Presentations on Public Health Data Standards and related issues
 - Links to HIPAA and Health Data Standards Websites
- ◆ Standards Development Efforts
 - Designated Standards Maintenance Organizations
 - Federal and International Standards Efforts
 - Classifications, Vocabularies and Standards Knowledge Resources
- ◆ Implementation Case Studies
 - HIPAA Privacy
 - Data Collection Issues
 - X12



PHDSC Web-Based Resource Center Testimonial

"The PHDSC Web site provides an excellent resource to those of us who are struggling to develop, adopt, implement, understand, and teach public health data standards. The Public Health Data Standards Tutorial will prove invaluable to students and practitioners alike. Standards in public health are often poorly understood, and it remains difficult to find material that succinctly and understandably explains the essential basics. The PHDSC Tutorial performs this role in an exemplary fashion."

Daniel J. Friedman, Ph.D.
Population and Public Health Information Services
Brookline, Massachusetts



PHDSC - Ad Hoc Committees to be launched

Public Health Vocabulary

Goal: to promote national efforts of developing public health terminology and data standards



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Public Health Vocabulary: Building Blocks

PHIN

PHIN-2004: Management and Distribution of PHIN Vocabularies and Identifiers.

May 25, 2004 Atlanta GA

UMLS

SNOMED CT

LOINC

Nursing Terminology Summit

Electronic Health Record



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PHDSC Ad Hoc Task Force on Electronic Health Record-Public Health (EHR-PH)



PHDSC Ad Hoc Task Force on Electronic Health Record-Public Health (EHR-PH)

Participants

Developers

Caesar, Craig; Claudio, Yvonne; Connor, Kathleen; Cortes, Leslie; Coto, Arturo; Davis, Robert; Eisenberg, Floyd; Gioia, Phillip; Greenberg, Marjorie; Grinsteinner, Alan; Hollar, David; Jackson, Brian; Jenkins, Melinda; Kitchelt, Maureen; Kukafka, Rita; Lafferty, Patricia; Manderscheid, Ron; Merryweather, Patricia; Murphy, Gretchen; Orlova, Anna; Peeples, Malinda; Saba, Virginia; Spivack, Richard; Suarez, Walter; Timpka, Toomas; Van Duyne, Ron; Williamson, Michelle.

Validators

Arzt, Noam; Berkowitz, Murray; Brandes, Wayne; Brown, Kevin; Buckeridge, David; Cernoch, Jennifer; D'Attore, Terry; Edmunds, Margo; Elee, Olivia; Forslund, David; Gordon, Barry; Hanken, Mary Alice; Hanrahan, Lawrence; Hall, John; Keelaghan, Eithne; Kim, George; LaVenture, Martin; Ledbetter, Starla; Len, Christie; Lober, Bill; Marchibroda, Janet; Mittal, Vikrant; Richesson, Rachel; Ryan, Deborah; Sappington Rodney; Singer, Steve; Sullivan, Janet; Wangia, Victoria.



PHDSC Ad Hoc Task Force on Electronic Health Record-Public Health (EHR-PH)

Goal: To provide a public health perspective to the evaluation of the HL7 EHR functional model

Objectives:

- ◆ bring the state and local public health agencies and public health research community's perspective into the on-going efforts to develop the HL7 functional model for the EHR, and
- ◆ to demonstrate the benefits of an organized interaction between the public health and clinical health care.



PHDSC Ad Hoc Task Force on
Electronic Health Record-Public Health (EHR-PH)

WHITE PAPER on
Electronic Health Record: Public Health Perspectives

Purpose:

- (1) to communicate to the public health community a need for broader involvement in the national effort to standardize clinical and public health data and information systems, and*
- (2) to describe public health perspectives on the EHR.*



PHDSC Ad Hoc Task Force on **Electronic Health Record-Public Health (EHR-PH)**

The Task Force activities show a need for a better understanding of informatics perspectives of public health by the various stakeholders as follows:

- ❑ public health organization (domain/programs and hierarchical fragmentations) and stakeholders,
- ❑ commonalities among public health domains/programs and public health settings in term of data sources, users, public health goals and functions,
- ❑ role of the EHR in integrating primary care and public health practices,
- ❑ the processes for involving the various public health stakeholders in the national effort for the standardization of health care data via the EHR, and
- ❑ need for public health vocabulary.



PHDSC Ad Hoc Task Force on Electronic Health Record-Public Health (EHR-PH)

EHR: Toward Implementation

Use Case-I	Immunization: EHR and Immunization Registry
Use Case-II	Infectious Disease: Inhalation Anthrax
Use Case-III	Chronic Disease Screening: Hypertension
Use Case-IV	Chronic Disease: Diabetes and Retinopathy Screening
Use Case-V	Injuries: Motor Vehicle Accidents

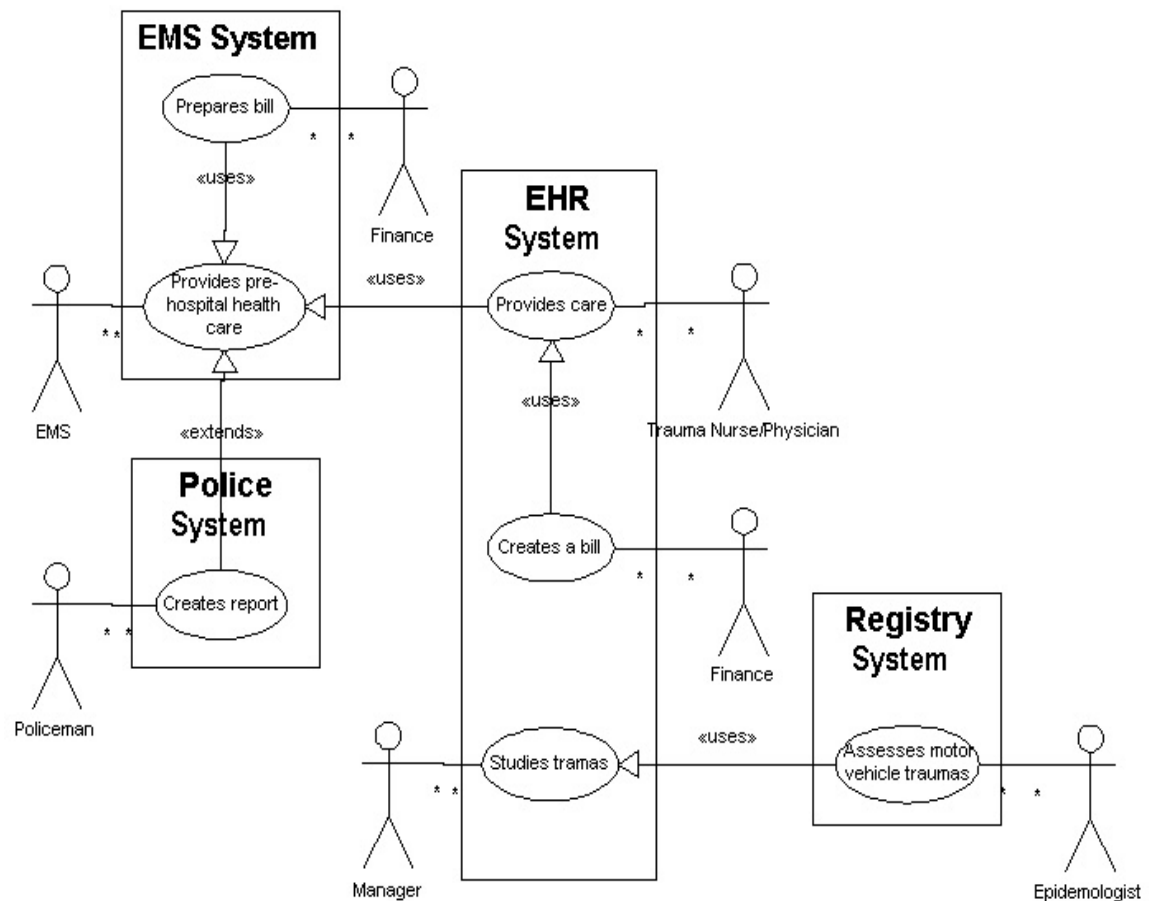


Nursing Terminology Summit's Approach (AMIA, 2003)

Use Case: Injuries: Motor Vehicle Accidents MODEL OF WORK FLOW & DATA FLOW

Data classes needed:

1. Patient demographics
2. Provider information
3. Care provided
4. Injury cause
5. Care cost

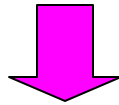




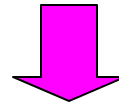
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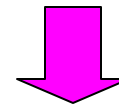
From the EHR Use Case(s) Implementation Demonstration to



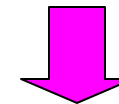
National Population Health Data Model to



Public Health Vocabulary and Data Standards to



Public Health Information Network to



UNITED WE STAND



Join PHDSC to Get Involved

- ◆ To communicate your needs for data and information to inform standard development and implementation process
- ◆ To join us in representing public health perspectives in the standard development efforts
- ◆ To work with us to facilitate use of standards in public health practice and research, *e.g.*, developing implementation guides
- ◆ To help building integrated information systems in public health
- ◆ To stay informed about the latest developments in standardization of health data and information systems
- ◆ To build National Health Information Infrastructure



How to Get Involved

- ◆ Become a member:

Anna Orlova, PhD,
Consulting Executive Director
624 N. Broadway Room 382
Baltimore MD 21205
Phone: 410-614-3463
Fax: 410-614-3097
E-mail: aorlova@jhsph.edu

- ◆ Look for new information about data standards at:

<http://phdatastandards.info>

- ◆ Subscribe to the PHDSC's listserv:

Send an e-mail to LISTSERV@LIST.NIH.GOV with the following test message body: SUBSCRIBE PH-CONSORTIUM-L
YOUR NAME

