

Secondary Use of Healthcare Data for Public Health

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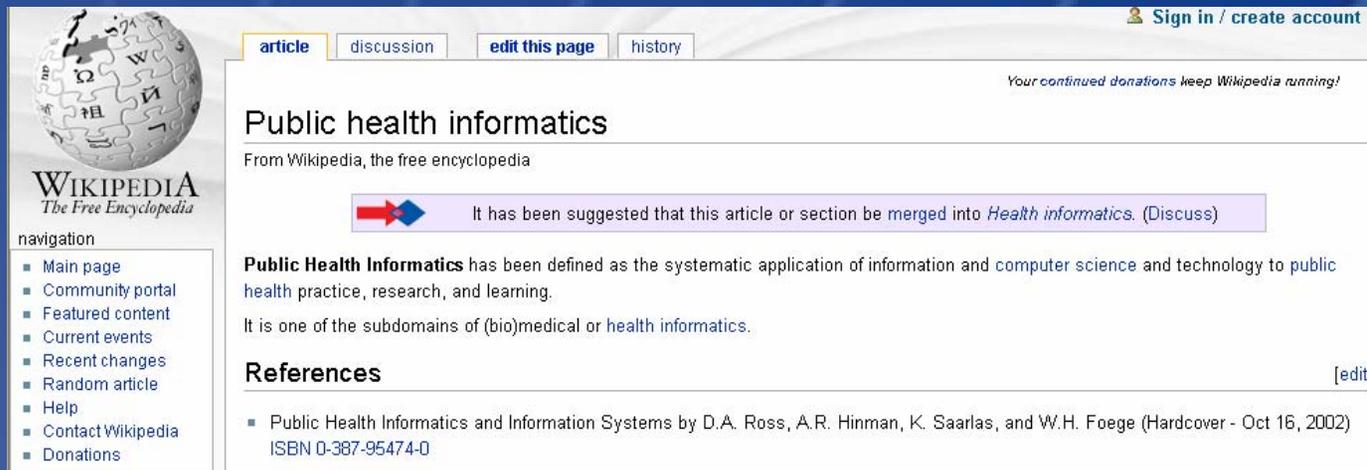


Agenda

- NCPHI Overview
- Three disparate secondary uses of clinical data for PH
- Present and Future States for PH
- Summary



Public Health Informatics



The screenshot shows the Wikipedia article for "Public health informatics". At the top right, there is a "Sign in / create account" link. Below it, a navigation bar includes "article", "discussion", "edit this page", and "history". A donation message reads "Your continued donations keep Wikipedia running!". The article title "Public health informatics" is followed by the text "From Wikipedia, the free encyclopedia". A purple banner with a red and blue arrow indicates a suggested merge: "It has been suggested that this article or section be merged into *Health informatics*. (Discuss)". The main text defines "Public Health Informatics" as the systematic application of information and computer science and technology to public health practice, research, and learning, and notes it is a subdomain of (bio)medical or health informatics. A "References" section lists a book: "Public Health Informatics and Information Systems by D.A. Ross, A.R. Hinman, K. Saarlal, and W.H. Foege (Hardcover - Oct 16, 2002) ISBN 0-387-95474-0". A left sidebar contains the Wikipedia logo and a "navigation" menu with links to Main page, Community portal, Featured content, Current events, Recent changes, Random article, Help, Contact Wikipedia, and Donations.



Public health informatics is the systematic application of information and computer science and technology to public health practice, research and learning.



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CDC – CCHIS - NCPHI

**Centers for Disease
Control and Prevention**

Coordinating Center for
Health Information and
Service



National Center for
Health Statistics

**National Center for
Public Health
Informatics**

National Center for
Health Marketing



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NCPHI MISSION:

To protect and improve the public's health through science and service in health information technology and informatics



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NCPHI provides national leadership

- Developing and promoting the science of public health informatics
- Supporting the necessary research and workforce bases for this growing discipline
- Establishing strong partnerships and facilitating coordinated activities
- Ensuring strong representation for public health in all national Health IT initiatives





NCPHI: Guiding Principles

- Public health/healthcare integration
- Application of best practices
- Applied science



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Public Health Uses of Clinical Data - Federal Perspective

- Surveillance
- Case and Outbreak Management
- Population Health Assessment
- Population Health Interventions



Public Health Surveillance

- Allowed by state and or local law
- Protected under HIPAA
- Provider burdens
 - Active submission of data
 - HIPAA requirement to account for release to patients



Public Health Surveillance

Accountability	Ineffective civil
Transparency	Unaware, many suspect
Permission	None required
Identity Protection	Cultural
Oversight	Governmental self monitoring
Laws/Regulation	State and Local
Standards	Partially used
Benefit	Public's protection



Public Health Statistics

- Sources:
 - From States
 - (covered under data use agreements)
 - E.g., Vital Records
 - From direct CDC Surveys
 - (covered under consent, IRBs, and PH law)
 - E.g., NHANES



Public Health Statistics

	States	CDC
Accountability	None	None
Transparency	Unaware	Aware to Unaware
Permission	None	None to IRB
Identity Protection	De-identification	De-identification
Oversight	Data Steward	Ownership/control
Laws/Regulations	State/Local	None to Federal
Standards	Fully addressed	Partially used
Benefits	Public	Public



Specifically Funded Programs

- Systems - e.g, BioSense
- Data Repositories - e.g,. Cancer Registries
- Research activities (covered under IRB)
- Others



Specifically Funded Programs

Accountability	None
Transparency	Unaware to fully
Permission	Consent
Identity Protection	None to de-identified
Oversight	Control
Laws/regulations	Yes-Funding & Mission
Standards	None to fully
Benefits	Public & research



Present vs. Future State

- Now
 - Data Collection via agreements and law
 - Many aspects - manual process
 - Early integration efforts
- The Future
 - New data sources
 - Semi to Fully automated process
 - Significant data linkage issues
 - New techniques to protect data (eg., filtering, de-identifying)



Public Health Uses of Clinical Data Present vs. Future State

- What's the same?
 - Need to protect the data
 - Balancing the risk vs. the benefit of the data sharing



Public Health Use of Clinical Data Federal Prospective

- Summary:
 - PH with variety of needs for secondary use of clinical data
 - Disease surveillance, health statistics, and CDC-funded programs
 - New challenges to be addressed
 - Access to and best use of novel data sources
 - Automated Collection
 - Increased of volume of data
 - Data integration (linkage) issues
 - Privacy & Security assurance



Thank you!

Questions?

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