Secondary Use of Healthcare Data for Public Health

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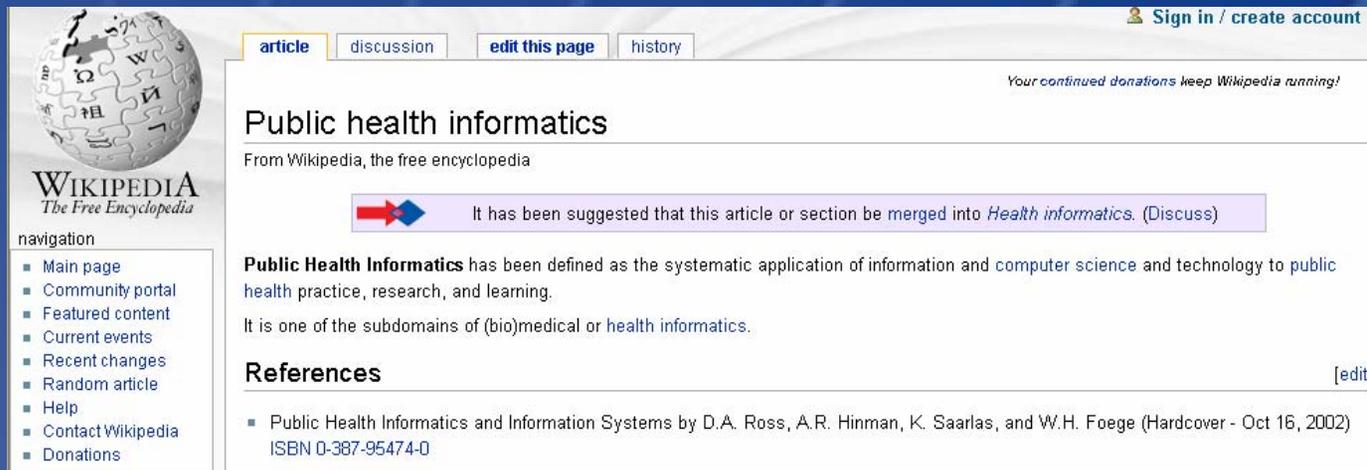
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Agenda

- NCPHI Overview

- Three disparate secondary uses of clinical data for PH

- Present and Future States for PH

- Summary

Public Health Informatics

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

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

NCPHI MISSION:

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

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

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NCPHI: Guiding Principles

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

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

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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

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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

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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

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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

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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)

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Public Health Uses of Clinical Data Present vs. Future Sate

- Whats 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

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Thank you!

Questions?

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