

# PRIVACY AND SECURITY OF HEALTH RECORDS

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# Terms

- **PHI (Protected Health Information)**
  - Protected health information means individually identifiable health information, that is transmitted by electronic media, maintained in electronic media; or transmitted or maintained in any other form or medium.
  - Rule: Individually identifiable health information is information that is a subset of health information, including demographic information collected from an individual, and: Is created or received by a health care provider, health plan, employer, or health care clearinghouse; and relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual; and that identifies the individual; or with respect to which there is a reasonable basis to believe the information can be used to identify the individual.
- **ePHI (Electronic PHI)**
- **PII (Personally Identifiable Data)**

# Terms #2

- ❑ Privacy
  - The state or condition of being free from being observed or disturbed by other people, thus specifically the desire or act of a person to control the disclosure of personal health information.
- ❑ Confidentiality
  - The state of being secret, thus the ability of a person to control release of personal health information to a care provider or information custodian under an agreement that limits further release of that information.
- ❑ Security
  - The state of being free from danger or threat, thus protection of privacy and confidentiality through policies, procedures and safeguards.

# Why Do We Care?

- Ethically, privacy and confidentiality are considered to be rights (in our cultures).
- Information revealed may result in harm to interests of the individual.
- The provision of those rights tends to ensure that the information is accurate and complete.
- Accurate and complete information from individuals benefits society in limiting spread of diseases to society (i.e. HIV).
- The preservation of confidentiality assists research which in turn assists patients.

# Users of Health Information

- Patient
  - Historical information for current and future care
  - Payments
  - Insurance claims
- MD's
  - Patient's medical needs
  - Documentation
  - Interface with other providers
  - Billing

# Users of Health Information

## #2

- Health insurance company
  - Claims processing
  - Approve consultation requests
- Laboratory
  - Process specimens
  - Results reporting
  - Billing
- Pharmacy
  - Fill prescription
  - Billing

# Users of Health Information

## #3

- Hospital
  - Care provision
  - Record of services
  - Billing
  - Vital statistics
  - Regulatory agencies
- Government bureau
  - Birth statistics
  - Epidemiology
- Accrediting organization
  - Hospital review
- Employer
  - Request claims data
  - Review claims for monetary reduction
  - Benefits package adjustments

# Users of Health Information

## #4

- Life insurance companies
  - Process applications
  - Process claims
  - Risk assessment
- Medical information bureau
  - Fraud reduction for life insurance companies
- Managed care company
  - Process claims
  - Evaluate MD's and other health care personnel
- Lawyers
  - Adherence to standard of practice
  - Malpractice claims
- Researcher
  - Evaluate research program

# A Complex Situation!

But, as many other countries have found, most valid uses can be supported by PHI (Protected Health Information) devoid of PII (Personally Identifiable Data).

# De-Identified Health Information

HEALTH INFORMATION IS DE-IDENTIFIED IF IT DOES NOT INCLUDE ANY OF THE FOLLOWING IDENTIFIERS OF THE INDIVIDUAL OR OF RELATIVES, EMPLOYERS, OR HOUSEHOLD MEMBERS OF THE INDIVIDUAL:

- Names;
- Geographic subdivisions smaller than a state;
- Dates directly related to individuals, including birth date, health care service admission or discharge dates, date of death, ages, and all elements of dates (including year);
- Telephone, Fax, etc. numbers;
- E-mail and contact addresses;
- Social security (SSS) numbers;
- Medical Record Numbers;
- Health plan beneficiary numbers (e.g. Phil. Health), Account numbers;
- Certificate/Driver's license numbers;
- Vehicle identifiers and serial numbers, including license plate numbers;
- Device identifiers and serial numbers;
- Web Universal Resource Locators (URL);
- Internet Protocol (IP) address numbers;
- Biometric identifiers, including finger and voice prints;
- Photographic images and comparable images; and
- Any other unique identifying number, characteristic or code.

# Issues for Planning (overview)

- Laws, Rules, & Regs.
- Best Practices
- Existing DB v Custom
- Connectivity
- Historical Retention
- Secure DB
  - Collection & Updating
    - Tracking Info. Source
  - Maintenance
  - Protection
    - Confidentiality
    - Integrity
    - Availability
  - Audit
  - Loss / Corruption
  - Improper Access / Use
- Proper Use of DB
  - Combinations
  - Permutations
  - Simulations
  - Statistics (e.g. Epidemiology)
  - Diagnostic use
  - Teaching
  - Gov't. Access (e.g. Law Enforcement, BIR)
  - Patient Exclusion (HIV)
  - Geographic Notice
- Enforcement
- Patient Rights (define?)
- Patient willingness to provide info. (permission & notice for sharing info., potential false info.)
- Risk Management
- Liabilities & Insurance

# International Considerations

- Phil
  - Data Privacy Act of 2013
  - Personal Data Privacy and Security Act of 2014
- USA
  - HIPPA (The Health Insurance Portability and Accountability Act of 1996, See also: 2003, 2013)
    - Privacy & Security Regs. For PHI / ePHI
  - HITECH (Health Information Technology for Economic and Clinical Health Act of 2009)
  - FISMA (Federal Information Security Management Act of 2002)
  - State Laws (examples)
    - CA: SB1386 - Notification if “personal information” is compromised
    - CA: AB1298 - Adds Medical & Health Insurance info. to “personal” info.
    - NY State SSN Breach Act (2004)
- UK
  - Public Records Act 1958
  - Access to Health Records Act 1990
  - Data Protection Act 1998

# Data Privacy & Security Links

- [http://en.wikipedia.org/wiki/Information\\_privacy](http://en.wikipedia.org/wiki/Information_privacy)
- [http://en.wikipedia.org/wiki/Data\\_security](http://en.wikipedia.org/wiki/Data_security)
- <http://www-01.ibm.com/software/data/security-privacy/>
- <https://www.eff.org/deeplinks/2014/01/data-privacy-means-data-security-and-not-data-retention>
- <http://www.mofo.com/privacy--data-security-services/>
- <http://www.leahy.senate.gov/imo/media/doc/Personal%20Data%20Privacy%20and%20Security%20Act%202014.pdf>
- <http://annuityoutlookmagazine.com/2014/03/privacy-security-simplified/>

# Healthcare Data Privacy & Security Links

- <http://en.wikipedia.org/wiki/Healthcare>
- [http://www.symantec.com/products-solutions/industries/solution.jsp?ind=healthcare&sind=hc\\_providers&solid=in\\_sol\\_sec\\_privacy\\_hc](http://www.symantec.com/products-solutions/industries/solution.jsp?ind=healthcare&sind=hc_providers&solid=in_sol_sec_privacy_hc)
- <http://www.intel.com/content/www/us/en/healthcare-it/healthcare-information-privacy-and-security.html>
- <http://searchhealthit.techtarget.com/feature/Security-School-Data-protection-strategies-for-health-care>
- <http://www.ironkey.com/en-US/solutions/healthcare.html>
- [http://www.csc.com/health\\_services/insights/86718-getting\\_a\\_jump\\_on\\_healthcare\\_data\\_security\\_and\\_privacy](http://www.csc.com/health_services/insights/86718-getting_a_jump_on_healthcare_data_security_and_privacy)
- <http://www.computerweekly.com/podcast/Key-steps-to-big-data-security-in-healthcare>
- <http://www.himss.org/library/healthcare-privacy-security>
- <http://healthitsecurity.com/2014/01/16/coordinating-healthcare-data-privacy-with-security-objectives/>
- <http://www.threatmetrix.com/industries/healthcare/>
- [http://ai.arizona.edu/mis596a/book\\_chapters/medinfo/Chapter\\_04.pdf](http://ai.arizona.edu/mis596a/book_chapters/medinfo/Chapter_04.pdf)
- <http://www.healthit.gov/providers-professionals/ehr-privacy-security>

# Healthcare Data Privacy & Security Powerpoint Presento's

- [https://www.google.com.ph/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0CEYQFjAF&url=http%3A%2F%2Fccr.med.sc.edu%2FHIPAA%2520Training%2520Final%2520Draft%2520031405.ppt&ei=NDQyU9OqJsm3iQeXvIBg&usg=AFQjCNEpNmhBxvP0nBnaZ4281\\_jqFWts1w&bvm=bv.63738703,d.aGc](https://www.google.com.ph/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0CEYQFjAF&url=http%3A%2F%2Fccr.med.sc.edu%2FHIPAA%2520Training%2520Final%2520Draft%2520031405.ppt&ei=NDQyU9OqJsm3iQeXvIBg&usg=AFQjCNEpNmhBxvP0nBnaZ4281_jqFWts1w&bvm=bv.63738703,d.aGc)
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# Healthcare Data Privacy & Security Powerpoint Presento's

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# Privacy and Security of Health Records

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