

Consumer and eHealth - Options for Personal Health Record

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Influences Driving Adoption of Personal Health Records (PHR)

- Educated Consumers desire to be a partner in care with their healthcare providers
- Spiraling Cost of Health Care
- Efficiency and Safety Mandates
- Quality – Adherence to evidenced based treatment guidelines
- Aging population
- Increased incidence of Chronic Diseases



Personal Health Record (PHR) Defined

The Personal Health Record (PHR) is a tool for collecting, tracking and sharing important information about an individual's health or the health of someone in their care. Using a PHR will help people make better health decisions and improves quality of care by allowing them to access and use information needed to communicate effectively with others about their healthcare.

Source: AHIMA

“The personal Health Record (PHR) is an Internet-based set of tools that allows people to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it. PHRs offer an integrated and comprehensive view of health information, including information from doctors such as diagnoses and test results, and information from their pharmacies and insurance companies”

Source: Markle Foundation (2003). Connecting for health a public-private collaborative: The personal health working group final report. July 1, 2003

Personal Health Record (PHR) Defined

More than just static repositories for patient data; they combine data, knowledge and software tools, which help patients to become active participants in their own care.

Source: Tang, P., Ash, J., Bates, D., Overhage, J., Sands, D. (2006). Personal health records: Definitions, benefits, and strategies for overcoming barriers to adoption. Journal of American Medical Informatics Association.13(2).

The definition of Personal Health Records (PHRs) is still evolving. Implementations to date have ranged from web pages for patients to enter their own data manually, to physician-hosted patient portals giving patients access to their electronic health records (EHRs), to employer/payer portals which give patients access to claims data. The intent of all of these systems is clear—to give patients better access to their own healthcare data and enable them to be stewards of their own information.

Source: Halamka, J., Mandl, K., Tang, P. (2008). Early experiences with personal health records. Journal of American Medical Informatics Association. 15(1)

Personal Health Record (PHR) Defined

- **Basic Attributes of PHR**
 - The consumer makes informed decisions about his or her health.
 - A PHR provides the consumer with access to their health information.
 - This health information is provided in a format to support continuity of care.
 - Information in the PHR should be understandable to the individual and/or their care providers.
 - The consumer secures the record and decides who can access their PHR information.
 - The PHR provider is responsible for system design that secures the information, mechanism to monitor unauthorized access and policies to address unauthorized access and / or disclosure of personal health information.
 - A PHR is not a replacement for the legal medical record.

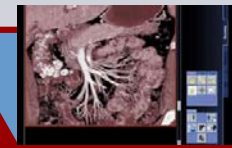
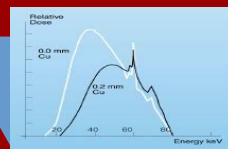
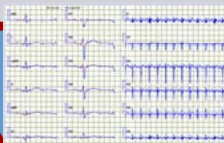
Prerequisites of an Effective PHR



Partnering with Consumer – Consumer-Centered Care Processes



EHR Utilization by All Team Members Supporting Data Interoperability



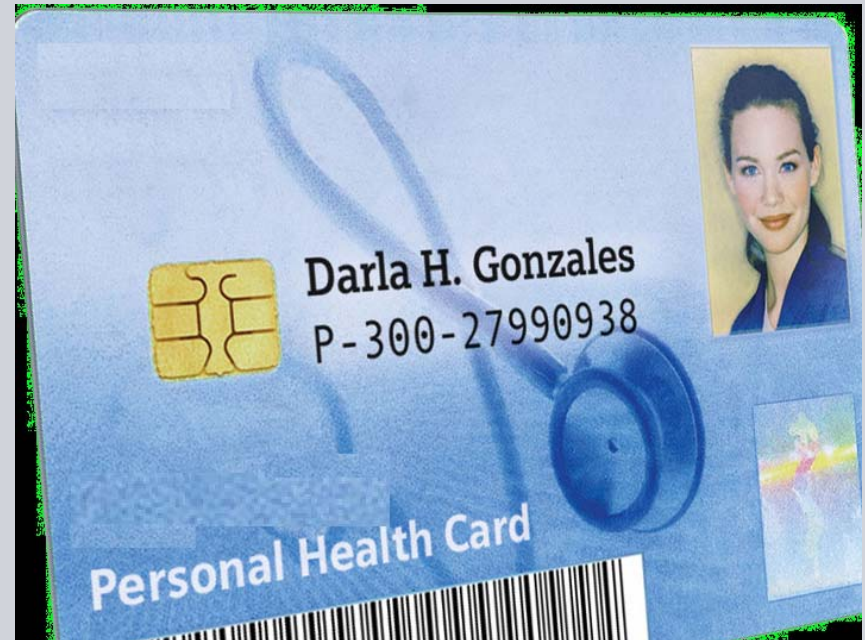
Results, Conditions, Procedures, Medications, Allergies



Health care Infrastructure — Common Components/Standards

Personal Health Cards Support of Personal Health Data

- Personal Health Cards are portable and secure used to store demographic data and critical healthcare information about patients.
- Authentication Device in addition to carrying clinical data
- Assists with both access to health care and storage of health data.



What's on the Card?



Patient Identification & Demographics

Name: Smith, John
Sex: Male
DOB: 11-18-1942
Address: 23 East 92nd Street
 New York, NY 10029
Home Tel: (212) 245-3455
Work Tel: (212) 826-1212 Ext
 2332

Insurance: Oxford [Policy No.
 2134323]
Emergency Contacts:
 Ellen Smith, Wife (212)-226-1232



Recent Laboratory Results

Glucose	190	(70 – 110) mg/dL	4-2-2006
Glucose	150	(70 – 110) mg/dL	4-16-2006
Glucose	130	(70 – 110) mg/dL	4-20-2006
PSA	5	(0 – 4) ng/mL	1-23-2005



Medical Summary & Problem List



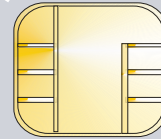
Recent Healthcare Encounters



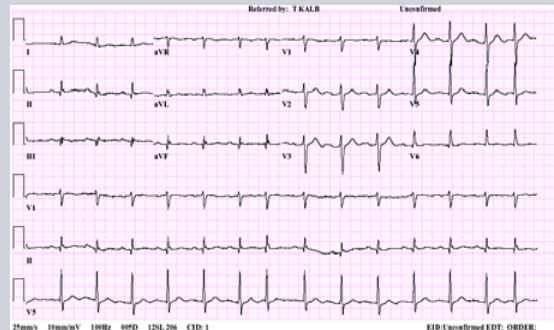
Current Medications & Allergies

Medications:
 Coreg (12.5mg) 2xDaily
 Accupril (40mg) 1xDaily
 Glucovance (500/5) 2xDaily
 Humulin 70/30 25-30 units as needed

Allergies:	Type:
Penicillin	Drug
Peanut (severe)	Food
Latex	Environ



Compressed EKG Image



Pointers to Remote / Off-card Data

Personal Health Card Components

Card Manager – Creates the Card

Printing information on the card chip: graphical and textual; one or both sides

Embossing; Photograph; Bar Code

Encodes on smart chip: pin or key

Records in internal card manager database

Multiple printers can be attached



Card Viewer/Emergency Card Viewer
MS-Windows XP

Stand alone Viewing

- ✓ Kiosk in waiting room
- ✓ Non participating medical organization
- ✓ ER

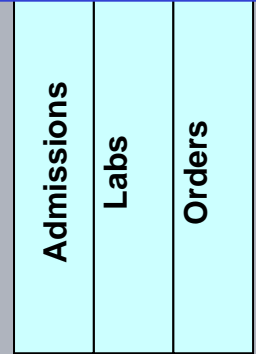
Web Cam
(for Photos)



Card Printer
Encoder
Embosser



Card Manager
(Windows XP Server)



HL7 Messages



Card Editor
MS-Windows XP

Card Editor and Viewer

Views and edits information

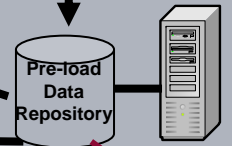
Automated Mode:

Retrieves information from the data repository (collected from internal HIS systems) and places information on card

Manual Mode:

Provides entry form to be filled and this information is loaded on the card

Card Viewer
MS-Windows XP



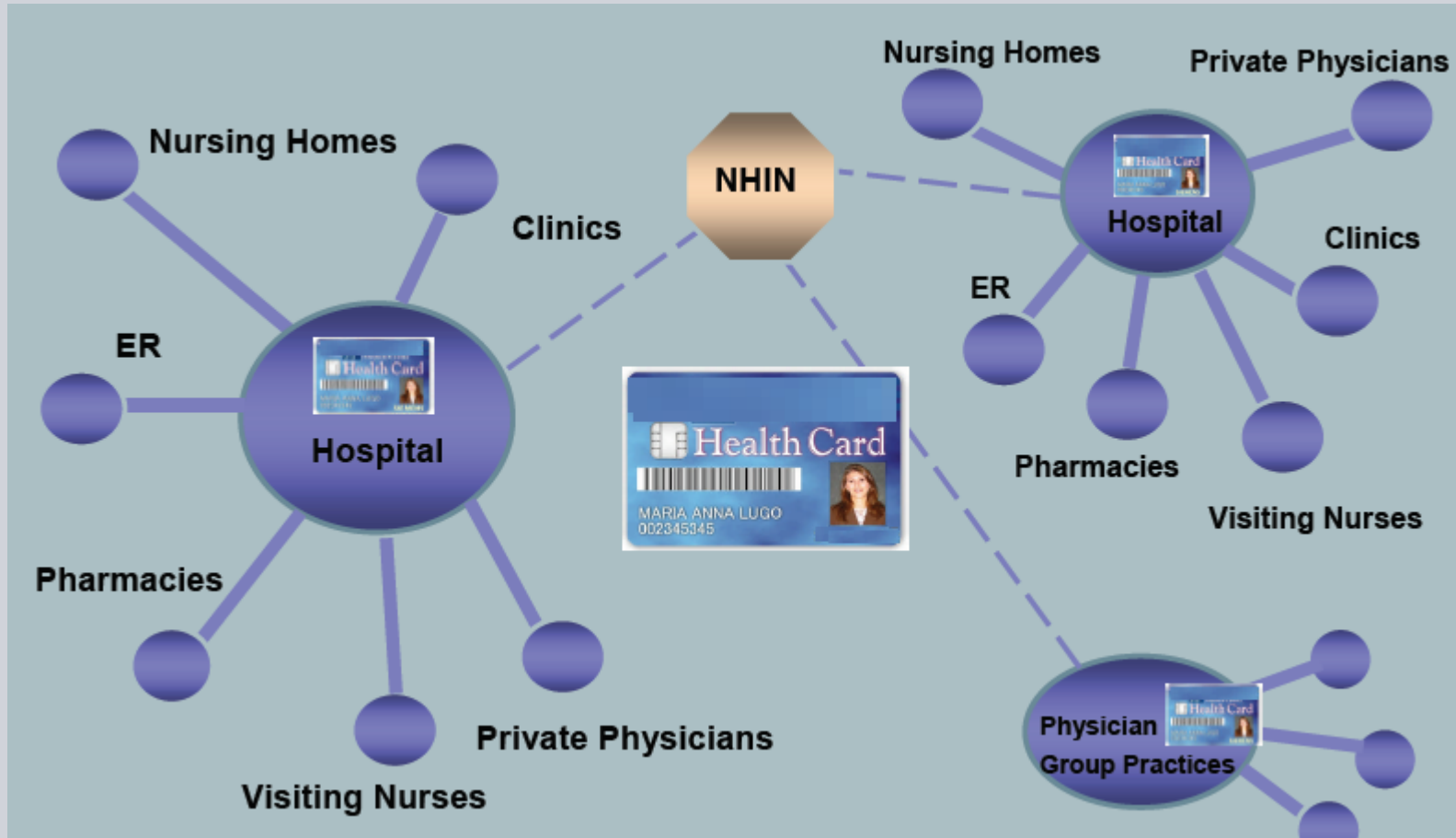
Data Import & Preparation

Data is automatically downloaded from hospital EHS system to pre-load repository

Enterprise Connectivity

The means for collecting and storing information from existing HIS (ADT and clinical systems) prior to loading onto the card

Personal Health Card as the Connector of Health Information



The Role of Nursing Informatics in PHR Adoption

- Assume leadership roles in deploying technology to assist with consumer health maintenance.
- Design systems with Personal Health Record in mind
- Design systems to match the requirements of the population you serve.
- Adopt Standards – Terminology and Data Interoperability (HL7 CDA / CCD)

Questions?