IS 531 – Healthcare Information Systems Analysis & Design

Lecture 6

Personal Health Record

(Chapter 16)

http://www.csun.edu/~dn58412/IS531/IS531_SP15.html

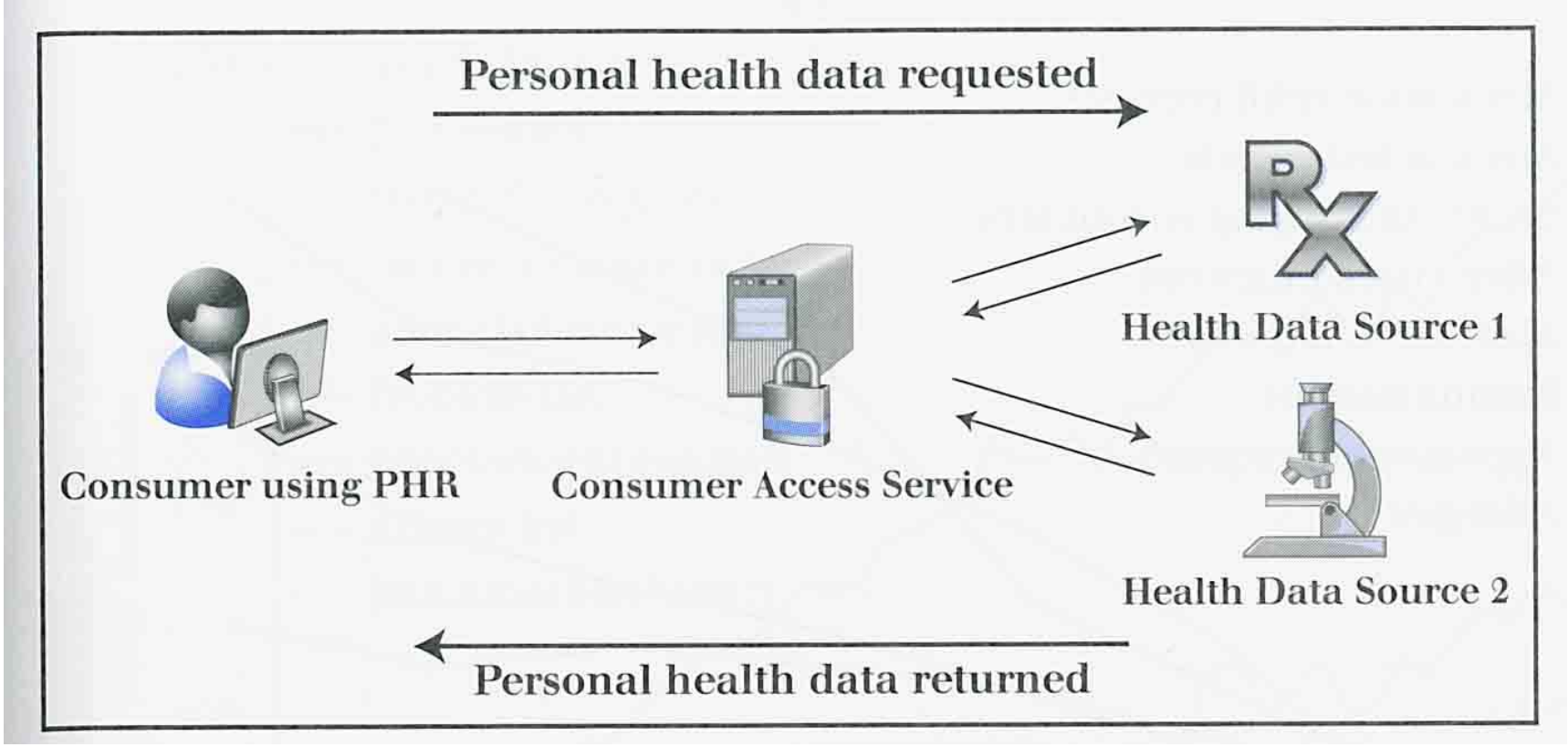
Learning Objectives

1. Personal Health record (PHR) vs. Electronic Health Record (EHR)
2. Stand-alone, tethered, and networked PHRs.
3. Common functionality available in the PHR – Benefits and concerns
4. Impacts of PHRs
5. Issues in implementation and adoption

Personal Health Records

- A private, secure application (different from an EHR)
- Data from an EHR or providers accessible to patients, 24/7 from home
- Information from multiple sources entered by the patient
- Driven by patients: access, provide, manage, share personal health info

Personal Health Records



PHRs

- Precursors to Electronic PHRs: notebooks, files, written records.
- Standalone systems: not tied to any healthcare system.
  - Google Health PHR, Microsoft's Health Vault
- Tethered systems: tied into a healthcare system.
  - My HealtheVet PHR from the VA
- Networked systems : access data from multiple locations

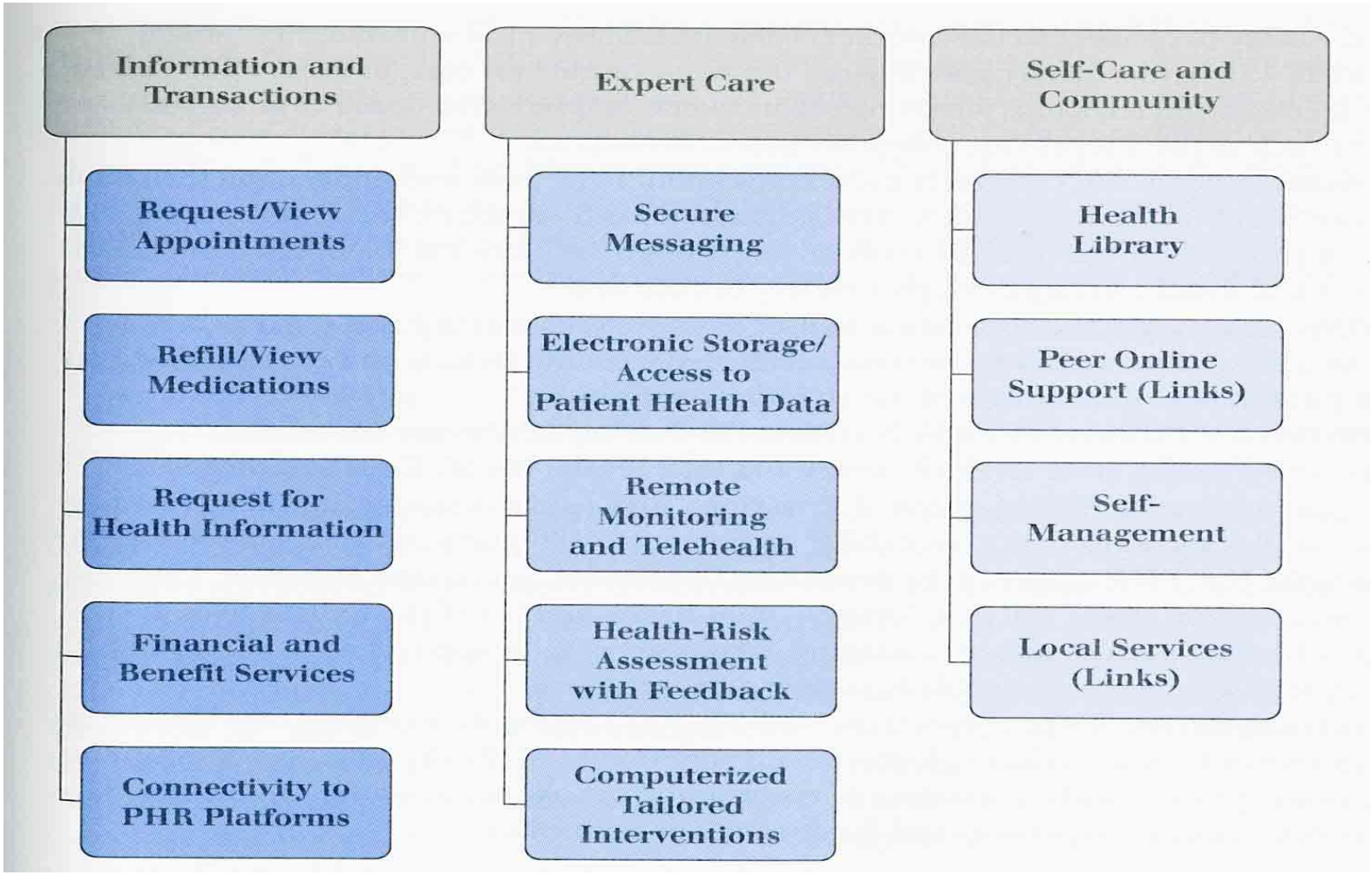
Attributes of an ideal PHR

CONNECTING FOR HEALTH COMMON FRAMEWORK, 2006 MARKLE FOUNDATION

Attributes of an Ideal Personal Health Record

1. Each person controls his or her own PHR.
2. PHRs contain information from one's entire lifetime.
3. PHRs contain information from all healthcare providers.
4. PHRs are accessible from any place at any time.
5. PHRs are private and secure.
6. PHRs are transparent. Individuals can see who entered each piece of data, where it was transferred from, and who has viewed it.
7. PHRs permit easy exchange of information across healthcare systems.

Personal Health Records



PHR Functions . . .

- EHR personal heath information
  - Lab and test results
  - Medication lists
  - Appointment
  - After-visit summaries
  - Clinical notes
  - Patient clinical reminders

. . .PHR Functions

- Secure messaging
- Self-entered data
- Proxy use (delegation)
- Administrative and finance

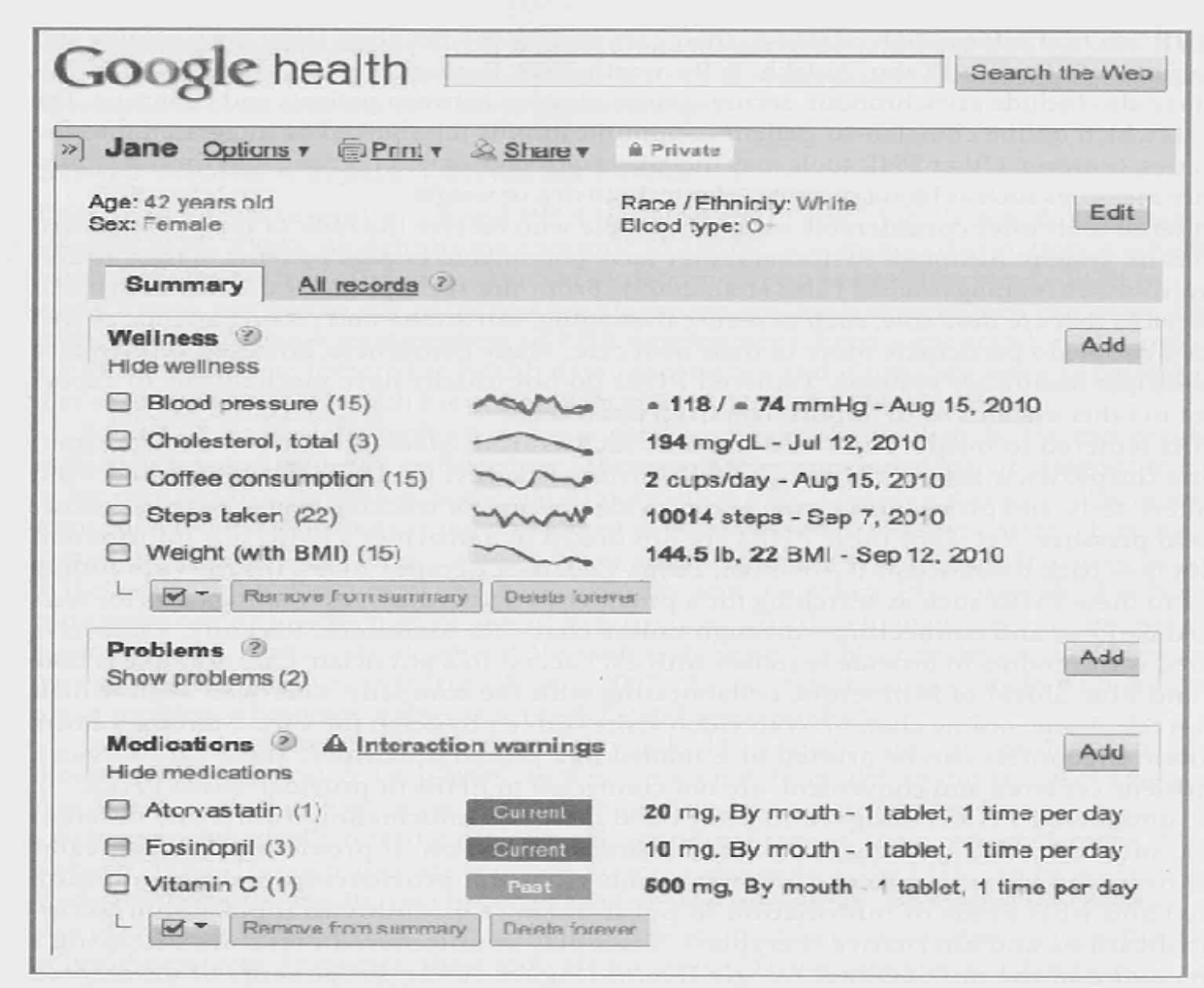
EHR Personal Health Information

- Lab and test results
- Medication lists
- Appointments
- After-visit summaries
- Clinical notes
- Patient clinical reminders

Lab and Test results

- Display test names, test values, normal ranges (may have some extra info: what for, why, what next)
- Benefits:
  - Reduce patient waiting time
  - Avoid letters and phone calls
- Concerns:
  - May confuse and worry patients
  - Display non-sensitive results only

Lab and Test results



Medication Management

- List past and current prescribed medications (doses, instructions, allergies)
- Benefits:
  - Can check prescriptions for administering
  - Discussion with physician for clarification
  - Share info with other providers
- Concerns:
  - Inaccurate and incomplete if medications are from multiple providers

Appointment Management

- Time, date, location for scheduled visits, tests, procedures.
  - Can request appointments (subjected to provider confirmations)
- Benefits:
  - Keep track upcoming care: reduce missed /cancelled appointments
  - Patient convenient, less phone scheduling
- Concerns:
  - Institutions can not control open access
  - Self-selected appointments not match with level/type of care needed

After-visit Summary

- What, advice, vital signs, prescriptions
- Benefits:
  - Help patients recall the discussion during clinical encounter
  - Reinforce clinical advices
  - Can share info with caregivers

Clinical Notes

- The actual physician write-up of the visit
- Benefits:
  - Better understand clinician assessments and decisions
  - Better understand clinician issues and treatment options
- Concerns:
  - Terminologies may confuse patients
  - Clinicians resist sharing notes or even alter them

Clinical Reminders

- Notices on recommended screening and preventive cares
- Benefit:
  - Increase patients adherence to preventive care

Secure Messaging

- Confidential and secure online communication between patients and their providers
- Benefits:
  - Convenient 24/7 access
  - Can include available medical record
- Concerns:
  - Fitting in professionals' workflow: time, responsibility
  - Reimbursement for time in online service
  - Patient may unintentional misuse

Self-Entered Data

- May include prior medical history, family history, alternative medications, self-recorded vitals
- Benefits
  - Important data complementary to EHR
  - Patient can see the trends needing attention
- Concerns:
  - What type of data to enter
  - Clinical responsibility to view and response to information

Proxy Users

- Permit other persons (parent, caregivers) access to patient PHR (may have different levels of access)
- Benefit:
  - Sharing information and care with givers
- Concern:
  - Release information intended to be private

Administration and Finance

- Ability to view bills, copayments, coverage benefits (may take online payments)
- Benefits
  - Help manage care and finances
  - Improve knowledge of benefits

Issues Related to PHRs

- Delegation of access to PHR via a proxy user
- Access to financial, medical claims
- Privacy (who accessing what)

Impacts of PHR

- Patient satisfaction (timely interaction with providers, 24/7 from home)
- Provider satisfaction (conflicting perceptions)
- Quality of care (subjected to digital divided)
- “Participatory Medicine”: patients are responsible for their health

Issues

- Effective utilization from users increase the efficiency of the systems
- Change in clinical works: process, responsibility, time
- Handle patient data: what data, what format, who is responsible for viewing/ answering
- Provider resources and liability
- Consumer protection of privacy

PHR Adoption

- Access: connect to Internet by users
- Awareness: knowledge about the PHR tools and their values
- Usability: easy-of-use
- eHealth literacy: computer literacy (how), effective usage of the system (what for)
- Meaningful use: favorable user perception
- Clinical integration: PHR should be considered as a source of information for healthcare professionals

A PHR Sample

http://www.myphr.com/Default.aspx

Closing Note

"Most patients should have access to EHR by 2014 (Executive Order 13335, 2004)"

Why we haven't had it NOW !