PERSPECTIVES ON HEALTH INFORMATION TECHNOLOGY

Connected Digital Health For Patients, Clinicians, And Health Systems
Kaiser Permanente Overview

- USA’s largest non-profit health plan and hospitals
- Integrated health care delivery system
- Over 10 million members
- Over 17,000 physicians and over 45,000 nurses
- Over 180,000 employees
- 38 hospitals
- Over 650 outpatient surgery centers and other medical offices
- KP HealthConnect© is the world’s largest private electronic medical records system
- Our personal health record, My Health Manager on kp.org, is a shared record for the patient, their family, and all members of their care team
The Connected Digital Health Agenda

Connected digital health represents a convergence of capabilities that empowers individuals to manage their health on their own terms, further redefining the patient / care giver relationship.

The next evolution of health care enabling efficiency, convenience, and continuous patient engagement.

Electronic medical records across settings of care and organizations.

“Bricks & mortar” healthcare.

Electronic Health Records With Interoperable Health Information Exchange

- Internet/Intranet
- Mobile
- Social
- Voice/Video

- Physicians & Other Care Professionals
- Hospital/Polyclinic
- Pharmacy
- Imaging
- Lab
Anytime, Anywhere Access

58% of U.S. adult cell phone owners have smartphones (as of January 2014).

37% of online visits on kp.org use the mobile device application.

With the KP app, members can:
- locate facilities
- access medical records
- refill prescriptions
- make appointments
- email caregivers
- view test results
Digital Is Meeting The Needs Of Individuals Today

In 2014:
- 43 million visits through kp.org
- 16 million visits through mobile app
- 38 million test results viewed
- 20 million secure emails to doctors
- 18 million prescription e-refills
- 4 million office visits scheduled

4,900,000 Registered Users
1,570,000 Mobile Application Downloads
100,000,000 Mobile Interactions
Consumers and care teams decide together when to visit live or virtually

ACCESS

CONVENIENCE

QUALITY

AFFORDABILITY

HEALTH & WELLNESS
The New Normal ... Virtual Care
The New Faces Of Our Members
Patient-physician Relationship Still Paramount
**Clinician Role Changes**

**Industrial Age Model of Care**
- One patient at a time
- Only know about patients who appear in your office
- No use of IT
- Limited use of “physician extenders”

**Information Age Model of Care**
- Safety and efficiency in an evolving environment
- Accountability for panel/population
- Transparency
- Use of EMR, registries, internet
- Team care (including patient)
- Moving care out of doctor’s office
Clinician Considerations

- Virtual care tools must strengthen the relationship between the patient and the health care team, not replace it.

- Virtual care should not be just moving the same care into a different channel.

- We need to use virtual care tools to provide care in entirely new ways that leverage appropriate technologies.

- We need to use virtual care tools to enable self care and self confidence for individuals.
What Do Clinicians AND Patients Need?

- More complete data, analyzed and transformed into **visual**, easily **understood** and **actionable** information
- Connect with individuals according to their goals, preferences and needs
- Engage the patient and their community
- Less clerical work – automate the routine
Behavioral Data
(Life Style Choices, Preferences, Activities, QoL)

Demographics & Firmographics
(Age, Address, Employer, Industry)

Medical Records
(encounter, labs, Rx, medical devices, etc.)

Social Data
(Friends, Family, Affiliations, Communication, Activities)

Personal “-omics”
( Genomics, Proteomics, Transcriptomes, Metabolomics)

Contextual

Environment
(Temperature, Humidity, Pollen Count,...)

Geographic
(Closest Hospital, Pharmacy, Care Clinic,...)
Key Policies for Health IT and Information Exchange

Pillars of Health Information Policy

Trust
- Data use agreements and privacy adherence, including security
- Prohibit unanticipated use and commercial gain from aggregated patient records
- Use national and international accredited standards

Transparency
- Sunshine for policy development, decision-making
- Fair fees and costs that do not change financing arrangements
- Qualified parties free to choose technical and organizational solutions
Interoperability Is A Means To An End, Not A Goal In Its Own Right

- **Goal:** Comprehensive person-centered information available when and where it is needed to inform patient and clinician decision-making

- **Multiple means to this end – different tech best fits different models:**
  - Copies of data extracts transactionally exchanged between entities (Trillium Bridge is a good example of this means to the end)
  - Access to data which resides in authoritative systems e.g. via APIs
  - Multiple models of data aggregation with shared access to data
  - Single systems and databases shared among multiple entities

- **All** these means of achieving the end should be enabled equally
THANK YOU

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