Health Information Technology 101

THE BASICS OF HEALTH IT AND WHY IT MATTERS
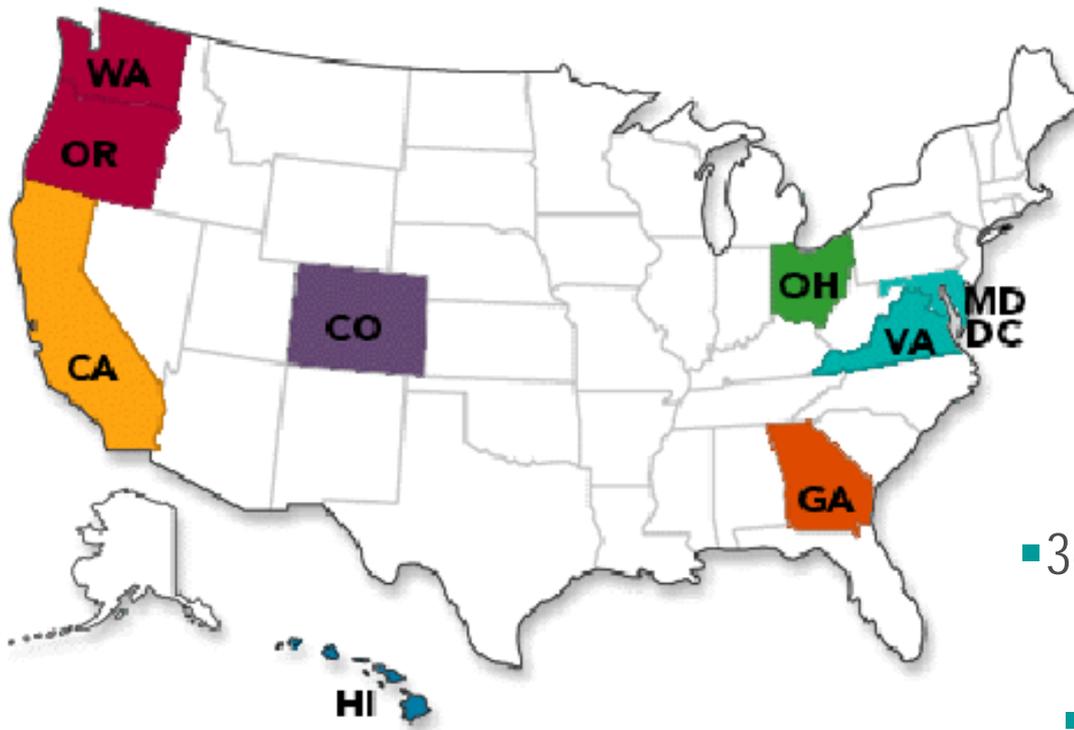
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Why health care IT *really* matters

[Insert Mary Gonzales video]

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About Kaiser Permanente

- Nation's largest nonprofit health plan
- Integrated health care delivery system
- 8.6 million members
- 14,000+ physicians
- 156,000+ employees
- Serving 9 states and the District of Columbia
- 36 hospitals and medical centers
- Approx. 430 medical offices
- $37.8* billion annual revenues

* 2007 revenues

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Health care IT terminology

The terms PHR, EMR and EHR are often used interchangeably.

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Personal Health Record (PHR)

- A set of tools that allows individuals to track and manage their health care and health care financing information.

- Ideally, a PHR provides a comprehensive set of information focused on the person
    - medications,
    - allergies,
    - immunizations,
    - lab test results, and
    - e-mail exchanges between patients and doctors.

- Most PHRs are Internet-based, with security and privacy controls subject to the constraints of the web

Electronic Medical Record (EMR)

- An electronic version of the patient medical record produced and maintained by doctors and hospitals.

- The data in the EMR are controlled by and intended for use by medical providers.

- An EMR is typically created and maintained by a single physician, a practice, or an institution and contains the equivalent of what would be found in a patient's paper chart.

- In most cases, a primary care EMR is not integrated with a specialty care EMR. Nor is an outpatient EMR integrated with an inpatient EMR. Web-based access for patients may or may not be provided.

Electronic Health Record (EHR)

- An electronic record of a patient's longitudinal health information available to care/service providers at multiple points of contact.

- An EHR is inclusive of an EMR but contains information across primary care, specialty care, ancillary care (pharmacy, labs, radiology) and inpatient care settings. EHRs may also include health plan, scheduling and billing information.

- Because of the integrated nature of an EHR, it can offer computerized physician order entry and advanced decision-support tools, which are key to increasing quality and patient safety.

- Web-based capabilities are provided to allow patients secure access to view and contribute to the same health record their caregivers use.

- Note: KP HealthConnect is an EHR.

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State of health care IT in the U.S.

- Most physicians, practices, and hospitals in the U.S. do <u>not</u> have EMRs or EHRs.

- Penetration of both in California is higher than the U.S. as a whole, but EMR/EHRs still cover less than half of all Californians

- In 2004, President Bush committed the country to the goal of assuring that most Americans have electronic health records within the next 10 years (2014).

- The level of policy activity and leadership at the state level has increased significantly.
  - Thirty six bills were passed in 24 states during 2005 and 2006, calling for the use of HIT to improve health and health care.
  - At least 10 state governors have issued executive orders related to the same.

Kaiser Permanente HealthConnect™

- More than just an electronic medical record

- The development and deployment of a highly-sophisticated information management and delivery system

- A program-wide system that integrates the clinical record with appointments, registration and billing

- A complete health care business system that enhances the quality of patient care

Kaiser Permanente HealthConnect™ goals

Quality Our Patients Can Trust

High Quality

- We have clinical information available 24/7.
- Our clinical outcomes are unsurpassed.
- Our clinicians know in real-time the recommended best practices.
- We are the national leaders in patient safety.
- We enhance our research to support evidence-based care.

Personal & Convenient Service

Personal

- We have and use up-to-date clinical, social and patient preference information.
- We provide patients information for shared decision making.
- We enhance personalized care.

Convenient

- Our patients access information via telephone, Web and email.
- We actively support our patients' participation in their own care.
- We minimize wait times and out-of-pocket costs with efficient access to care.
- We achieve superior integration and continuity of care.

Affordable Health Care

Affordable

- We reduce the cost of care and improve visit experiences.
- We eliminate waste associated with paper medical records and missing medical records.
- We eliminate costly in-person services unless medically necessary or desired by the patient.
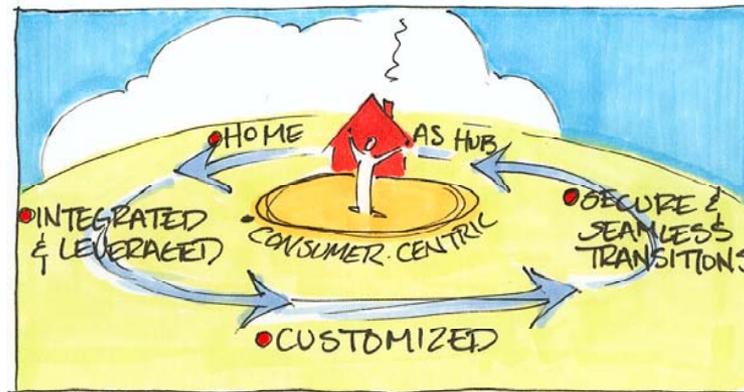- We streamline IT and administrative processes and costs

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Blue Sky Vision
2015: care delivery model is consumer-centric

Home as the Hub
- The home, and other settings, will grow significantly as a locale of choice for some care delivery (diagnostics).
- An individual's care delivery support system has expanded to explicitly include other community and family resources
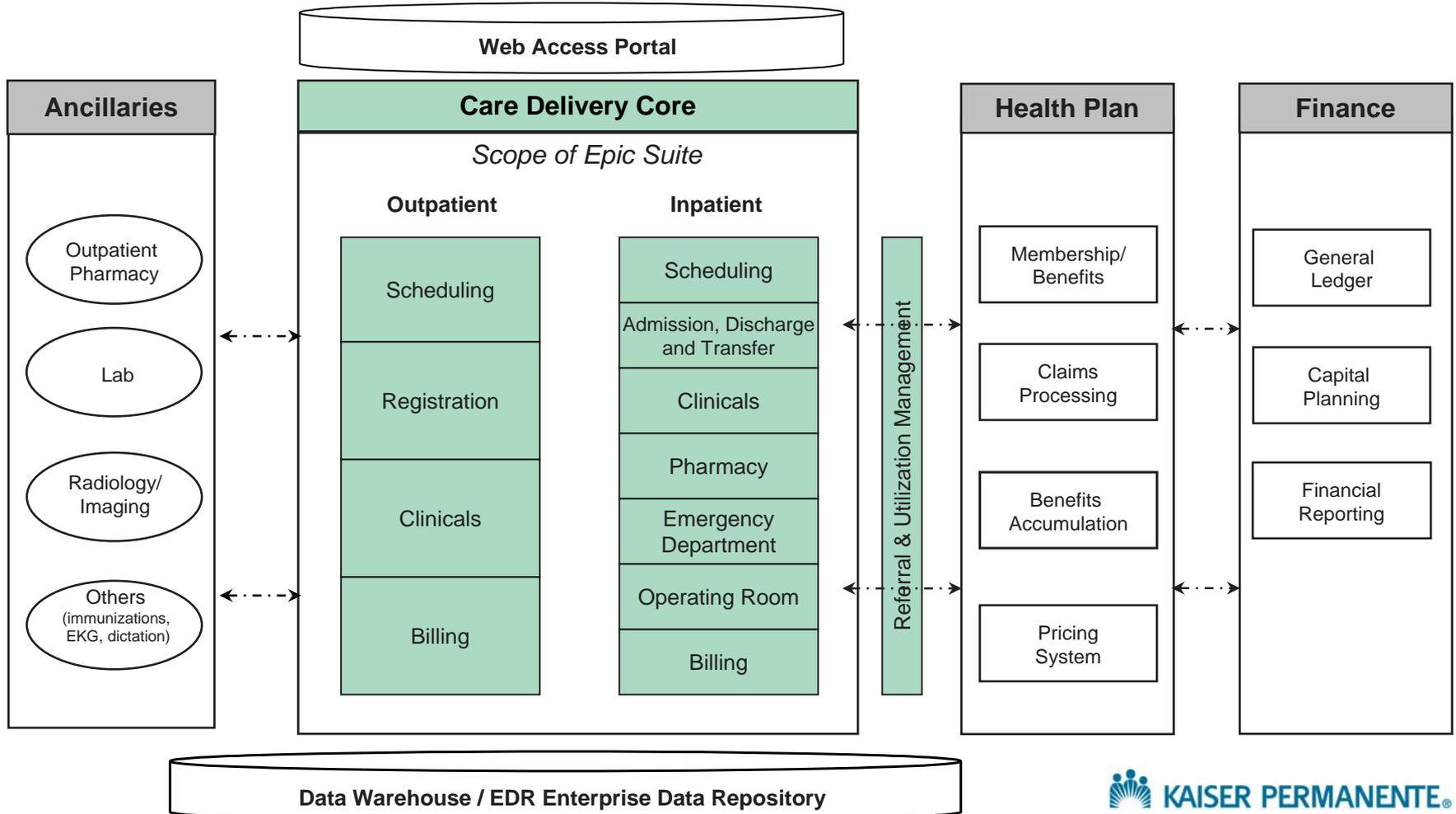
Integration and Leveraging
- Medical services are integrated with wellness activities; care delivery processes are integrated with health plan operations
- IT functionality enables us to leverage scarce or specialized clinical resources - MDs, RNs and other clinical staff.

Secure and seamless transitions
- 'Warm Handoffs' - The human skill sets and operational processes to deliver care and service effectively, efficiently, and compassionately.

Customization
- Occurs at any level of the members' journey with KP (choosing health plans, cost sharing, individual care pathways, and communication modalities.)
- The member drives customization and KP responds.

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Scope of Kaiser Permanente HealthConnect™

PHR Statistics

- Available to all 8.6 million members, including proxy access

- More than 2.3 million active users, with $\geq$80,000 more enrolling monthly

- More than 500,000 secure messages exchanged with practitioners each month

- More than 50 million lab results released on line with more than 20 million reviewed by members

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New players in health care IT

Microsoft, Google, etc.

Benefits realized to date

- Increasingly rational legacy systems environment
  - Retirement of multiple legacy systems=$ millions in savings with much more to come
- 24/7/365 access to health information
  - 11% decrease overall in face-to-face visits
- 7-10% primary care visit reduction in members using secure messaging
- Reduction in ancillary utilization
  - Presumed drop in redundant testing and imaging
- Dramatic satisfaction increases with the use of the After Visit Summary
- Tantalizing:
  - Reduction in progression of diabetic nephropathy
  - Improved pharmacologic intervention in coronary disease (aspirin-lovastatin-lisinopril=ALL)
  - Dramatic (75-90%) reductions in post-AMI mortality
  - Standardization of care—orthopedics, anesthesia, obstetrics, oncology, inpatient nursing care planning
  - "Longitudinal care" is increasing
  - Reduced phone and letter traffic related to results notification

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Top Ten Reasons You Should Listen to Me

- I seem like a nice man
- I have an honest face
- I am 6'6"
- I have come all this way just to talk to you
- I use all the right jargon
- My mother thinks I am smart
- I am a pediatrician, so I know what to do when doctors behave like children
- Kaiser Permanente's annual budget exceeds the GDP of several countries
- Kaiser Permanente's delivery system looks right to you

Or…

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The Answer

- I have been a witness to or a party to all the serious mistakes that can be made when developing or deploying an EHR, and I have survived to tell you about them.

"The Americans can always be relied upon to do the right thing…

…after they have exhausted all of the other possibilities."

Winston Churchill

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