Connecting Americans to Their Health Care:
Empowered Consumers,
Personal Health Records
and Emerging Technologies

NATIONAL CONFERENCE
DECEMBER 7-8, 2006
WASHINGTON, D.C.
Connecting Americans to Their Health Care: Empowered Consumers, Personal Health Records and Emerging Technologies

A Networked PHR
David Lansky - Markle Foundation
James Ralston - Group Health Cooperative
Paul Sheils - eHealth, Aetna, Inc.
Omid Moghadam - Intel Corporation
MyGroupHealth
Connecting Patients and Providers
James D Ralston, MD MPH
Group Health Center for Health Studies
Seattle, Washington
Patient Web Sites

Walled online gardens
  Secure and confidential

Connect patients and providers
  Electronic messaging
  Medical records

Shifts the focus of care away from the physician’s office
Some Patient Web Sites

Palo Alto Medical Foundation
Beth Israel Deaconess
Partners Healthcare
Geisinger
Kaiser Permanente
Dartmouth-Hitchcock
Group Health Cooperative
About Group Health

Member-governed, not-for-profit, integrated financing and care delivery system

560,000 patients

860 medical staff

25 medical offices, 2 hospitals

Washington and Idaho

Contracts with 6,130 physicians in Washington
“Your appointment with the doctor is at eleven-fifteen, but his appointment with you is at twelve-fifteen.”
MyGroupHealth Web Services

- Refill Prescriptions
- Secure Messaging
- After Visit Summaries
- Record Access
- Appointment Scheduling
Patients can send secure e-mail to providers they have seen at Group Health.
Test Results with Charting

Your Medical Record

Component Results

- SODIUM
  - Value: 155
  - Flag: 155
  - Low: 145

- POTASSIUM
  - Value: 110
  - Flag: H
  - Low: 98
  - High: 102

- CHLORIDE
  - Value: 97
  - Low: 90
  - High: 100

- CARBON DIOXIDE
  - Value: 22
  - Low: 20

Component Comment:

- POTASSIUM: K corrected reported at 8:00 on 04-12-04 14:45.

Select All  View Line Graph  View Table

Result Comments

- POTASSIUM: K corrected reported at 8:00 on 04-12-04 14:45.
Registration for Shared Electronic Record Services on MyGroupHealth

124,431 (40%) of members, November 2006
Use of Shared Electronic Record Services on MyGroupHealth

- Medical Test Results
- Medication Refill Requests
- After Visit Summaries
- Secure Messaging Encounters
- Medical Conditions
- Appointment Requests
- Immunizations
- Allergies

Graph showing the increase in unique monthly users per 1,000 members from 2002 to 2005 for various services.
"O.K., step away from the laptop and hold up your end of the conversation."
51-year old woman managing multiple chronic conditions

Has a PCP with ≥ 20% all patient encounters through electronic messaging
How Satisfied Are You With the Following Services?

![Bar chart showing satisfaction levels for various services]

- Medication Refills
- Messaging
- Test Results
- Appointments
- Healthwise
- Provider Directory
- MyGH Overall

**Enrollee Response**
- Very Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very Dissatisfied
Patient Web sites connect patients and providers over the Web.

Same patients use MyGroupHealth as use other health care services.

Use and satisfaction of MyGroupHealth is greatest for services actively part of care.
Implications for a Networked PHR

PHR value appears to depend on

- Connecting patients and providers
- Integrating care for patients
Thank you

James D Ralston, MD MPH
ralston.j@ghc.org
A Networked PHR
Paul T. Sheils
eHealth, Aetna, Inc.
How Health Plans Are Helping to Digitize the US Healthcare System:

The Claims-Based Digital Personal Health Record

A New Tool to Engage & Empower Consumers

Paul T. Sheils
eHealth, Aetna, Inc.

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The Digital Health Records Landscape

- **Federal, State & Local Electronic Health Record (EHR) Initiatives**
  - 2004 - President Bush places EHRs on the national health care policy agenda, calls for every American to have an EHR in 10 Years
  - 2004 **Dr. David Brailer appointed as National Coordinator of Health Information Technology**
    - Regional Health Information Organizations
  - 2006 – AHIC established; **EHR standards under development; Executive Order on Quality and Transparency**

"By computerizing health records, we can avoid dangerous medical mistakes, reduce costs and improve care.”
President George W. Bush, January 2004, State of the Union Address

"The use of electronic health records and other information technology will transform our health care system by reducing medical errors, minimizing paperwork hassles, lowering costs and improving quality of care.”
Secretary of Health & Human Services Michael Leavitt, June 6, 2005
**EHRs vs. PHRs**

- **EHRs** – the complete health record - clinician-populated and controlled, “institution-centric” application; derivatives of practice management systems (Cerner, Epic, IDX, etc.).

- **Patient-Populated PHRs** – software applications that permit patients to record results of healthcare encounters, often have health diaries, reminders.

- **Claims-Based PHRs** – patient-controlled, populated initially with claims-based data (may be supplemented patient-populated data, e.g., HRAs).
Rich Clinical Data Derived from Claims

Claims forms contain valuable electronic health information that is available to be shared

**HCFA 1500 (Doctor’s Claim Form):**
- Patient Demographic Info
- Date of Treatment
- Diagnosis
- Procedures
- Identities of Treating and Referring Providers and Contact Information
- (Medications)
- (Lab Values)

**UB 92 (Hospital’s Claim Form):**
AHIP and BCBSA Join Forces to Develop PHRs & PHR Standards

- 2005 - AHIP & BCBSA Collaborate to Develop PHR Standards
- Goals of PHR Collaboration
  - Encourage members to offer PHRs
  - Conduct market research with providers and consumers on PHR value
  - Jointly develop PHR standards
    - Common PHR data elements
    - Plan-to-Plan Portability Standards
      - Pilot Test
  - PHR Awareness and Education Campaign
  - Future: Interoperability with EHR and provider settings
Aetna’s Approach: Data + Decision Support

The CareEngine® Powered PHR

ActiveHealth Management’s CareEngine®

Member Health Profile

- Member Self Reported Data
- Claims Data Mx, Rx, Lx
- Plan Design
- Account Data
- Eligibility Data
- External Data Bases
- Dentist
- Hospital

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The Aetna PHR Video Tour

• Video Tour of Aetna’s CareEngine-Powered Personal Health Record
### Aetna’s CareEngine® - Powered PHR

#### Personalized messages and alerts

- Direct access to Simple Steps To A Healthier Life
- Personalized Health Assessment and Action Plan

#### Guided approach called “Walk Me Through” encourages employees to self-report health information

- Print and take to next office visit

#### Multimedia tour of PHR

<table>
<thead>
<tr>
<th>Immunizations</th>
<th>Date of Immunization</th>
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<tbody>
<tr>
<td>Hepatitis A</td>
<td>01/15/06</td>
</tr>
<tr>
<td>Influenza</td>
<td>11/18/05</td>
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<table>
<thead>
<tr>
<th>Family History</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Jones, Mother</td>
<td>Diabetes, GERD, Hypertension</td>
</tr>
<tr>
<td>James Jones, Father</td>
<td>Skin Cancer</td>
</tr>
<tr>
<td>Mary Fredericks, Sister</td>
<td>Breast Cancer</td>
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</table>

<table>
<thead>
<tr>
<th>Medications</th>
<th>Purchase Date</th>
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<tbody>
<tr>
<td>Doxycycline</td>
<td>06/06/2006</td>
</tr>
<tr>
<td>Diphenhydramine</td>
<td>02/12/2006</td>
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<tr>
<td>Lisinopril</td>
<td>10/10/2006</td>
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<tr>
<td>Advil</td>
<td>11/18/2005</td>
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<tr>
<td>Multivitamin</td>
<td>08/20/2006</td>
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<table>
<thead>
<tr>
<th>Allergies</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Food</td>
<td>Peanut, Soy, Poison Ivy, Bee Stings, Codine</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Medication</td>
<td></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Conditions &amp; Symptoms (Self-Reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back Pain</td>
</tr>
<tr>
<td>Rash</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Conditions (Based on Analyzed Insurance Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>High Blood Pressure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tests &amp; Procedures</th>
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</thead>
<tbody>
<tr>
<td>Glucose</td>
</tr>
<tr>
<td>Hemoglobin A1c</td>
</tr>
<tr>
<td>Creatinine and Creatinine Clearance</td>
</tr>
<tr>
<td>Foot Examination</td>
</tr>
<tr>
<td>Retinal Eye Examination</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospital Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abington Memorial</td>
</tr>
<tr>
<td>Jefferson Hospital</td>
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Benefits of a Health Plan, Claims-based Personal Health Record

- **Member-Controlled**
  - Strict Authentication and Authorization

- **HIPAA and State Law Compliant**

- **Portable – Two Types of Portability**
  - Place PHR data in secure, portable storage devices (smart cards, flash drives, etc.)
  - Plan to Plan (improves the longitudinal view and value of the PHR)

- **Interoperable with the EHR**
  - Common data fields, protocols, clinical vocabularies
  - PHR = downstream recipient and/or upstream supplier

- **Enhancing the Physician Encounter**
  - One-Page Summary; “Print this page”

- **Member View & Provider View of the PHR**
  - Member View Can be Customized; Provider View Should be Standard

- **Informatics-Informed – The real power of PHRs**
  - Advanced analytics, algorithms and rules engines delivering customized content, alerts, recommendations, guidance, hints
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Intel Corporation
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