Reaching consumers with (their own) health information

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Markle Foundation

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CONNECTING FOR HEALTH℠
MARKLE FOUNDATION   *A Public-Private Collaborative*

IOM's Six "Aims" for U.S. Health Care

▶ Safe—avoiding injuries to patients from the care that is intended to help them.

▶ Effective—providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).

▶ Patient-centered—providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

▶ Timely—reducing waits and sometimes harmful delays for both those who receive and those who give care.

▶ Efficient—avoiding waste, including waste of equipment, supplies, ideas, and energy.

▶ Equitable—providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

The "Design Rules" that depend on patients

1. *Care based on continuous healing relationships.*
2. *Customization based on patient needs and values.*
3. **The patient as the source of control.**
4. *Shared knowledge and the free flow of information.*
5. Evidence-based decision making.
6. Safety as a system property.
7. *The need for transparency.*
8. *Anticipation of needs.*
9. Continuous decrease in waste.
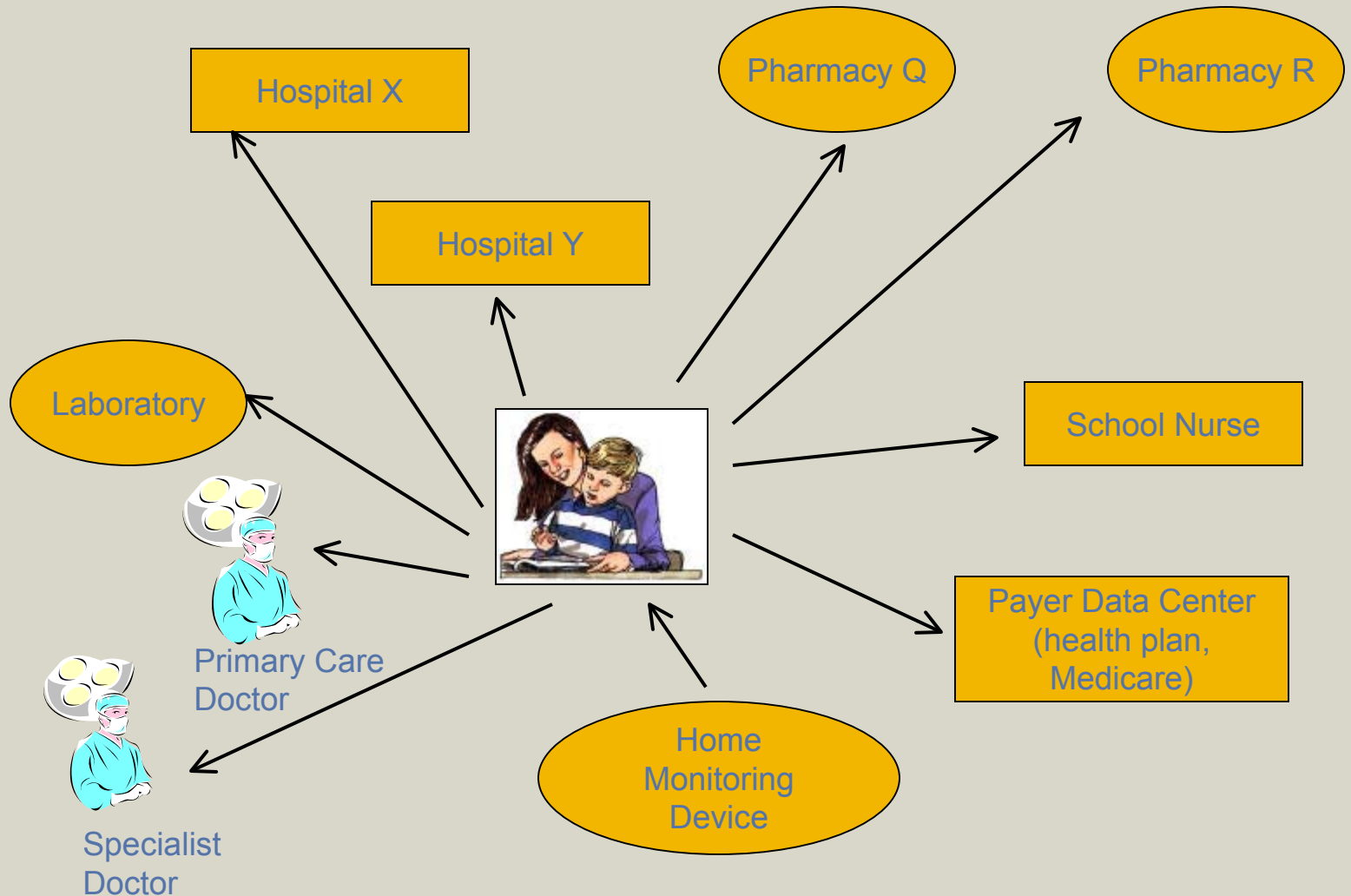10. Cooperation among clinicians.

Potential of a "personal health record"

▶ Giving individuals access to and control over their personal health information enables:

- Patients better able to maintain health and manage their care

- More reliable care; e.g., in emergency situations

- Greater efficiency, less duplication of tests and quicker access

- Improved satisfaction, lower cost and greater choice

- Improved health care quality and safety

- More effective communication and collaboration between patients, doctors, pharmacies, and others

What is a "personal health record"?

- No good answer today
- Some of its attributes:
    - Person controls own PHR
    - Contains information from entire lifetime
    - Contains information from all providers and self
    - Accessible from any place, at any time
    - Private and secure
    - Transparent – strong audit trail
    - Interactive across one's health care network

Retrieving your health information

The Person as an Information Hub
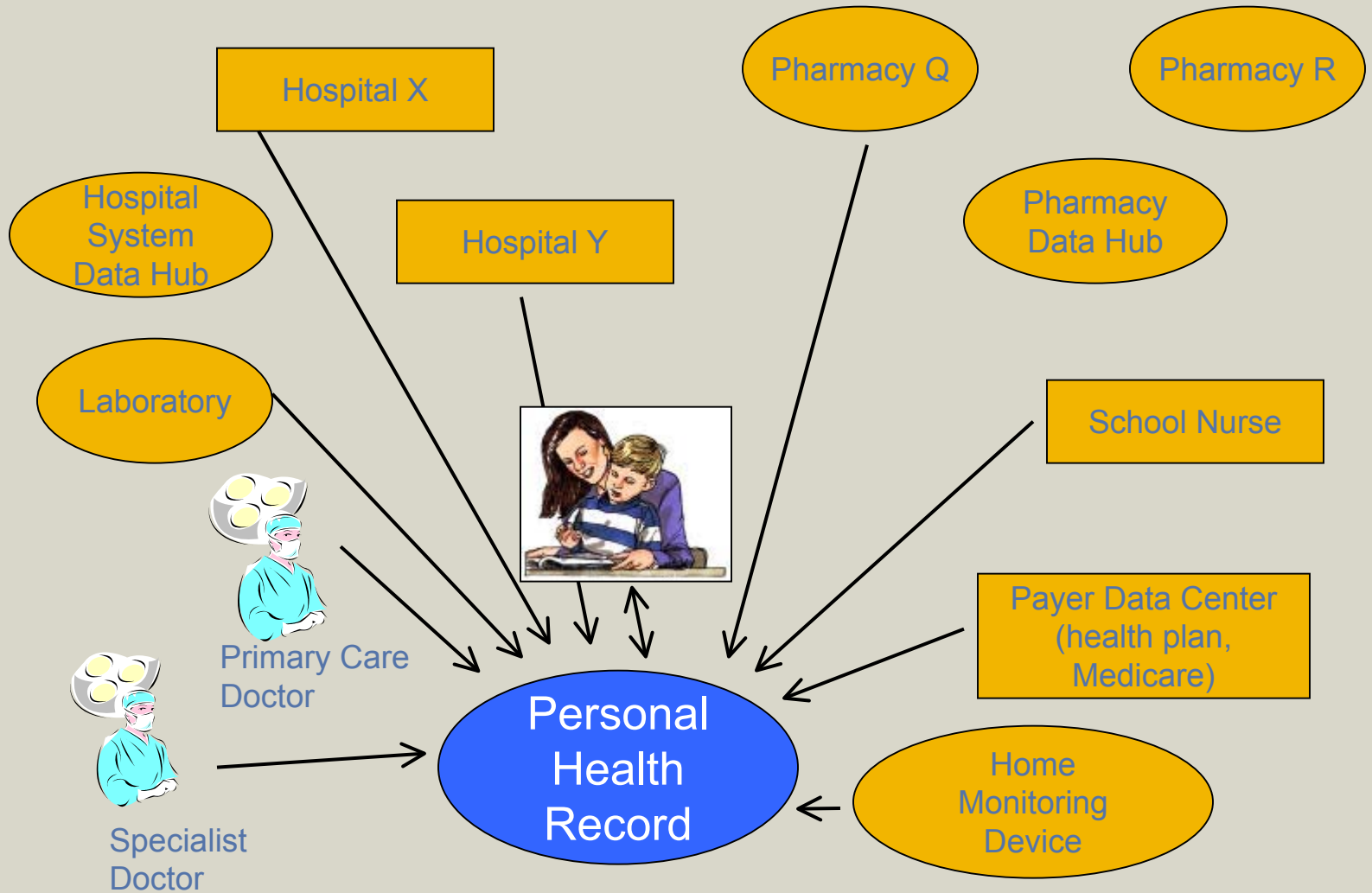
Janet McNichol   family members | settings | exit   [   ]   search

Home   Messages   Community   Diary   Graphs   Reports   Education   Profile

Health Record

QuickStart

Click here to quickly add to your record.

My Imported Information

Go to my imported information archives

View My Records

Visits (8)

Prepare summaries for my visits with care providers.

Conditions (12)

Medications (4)

Allergies (2)

Surgeries (3)

Immunizations (7)

Tests (54)

Coverage

Automatic alerts

This tool automatically scans for potentially harmful interactions among the medications, herbs, vitamins, and allergies entered in your files.

Common Questions

How can this tool benefit me?

How is my information kept private?

How can I print or fax my records?

How may I view my past activities?

Save money through mail order

Did you know that you could **save 30%** of your annual copay fees by purchasing your prescriptions mail order instead of through a retail pharmacy?

- Save time (no more tips to the

File   Edit   View   Favorites   Tools   Help

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Health Record

Visits | Conditions | **Medications** | Allergies | Surgeries | Immunizations | Tests | Coverage | Basics

| add medication | check interactions | | Health Record summary | how to |

Current Medications	Date▼	Frequency	Source
Click on an item to edit, delete or view related information.			
Glyburide XL 5MG Tablet SA	05/30/2003	every morning	Rite-Aid
Zyrtec 10MG Tablet	05/28/2002	as needed (PRN)	Sav-on

Past Medications	Date▼	Frequency	Source
Imitrex 20MG Nasal Spray	05/30/2003		Walgreens
Rolaids 550mg Tablet, Chewable	11/05/2002		Rite-Aid

[Copyright]   [Policies]   [Medical Review]   [Feedback]

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Coverage

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dr display - Microsoft Internet Explorer

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Google ▾   [   ] »

Display Trackers   [close]

⊗ **Alert**

Your data indicates recent low blood sugar. Low blood sugar can be caused by a variety of factors. To learn more, click here. Medications are a common cause of low blood sugar. To make sure your medication list is up to date, click here.

Review data for : iSenseU1 a

Select date to display: 1/2/2003   1/3/2003   1/4/2003   1/5/2003   1/6/2003   1/7/2003   1/8/2003   All Days   All Days Enlarged

Displaying Glucose Data for : 1/3/2003

Glucose mg/dl graph with values 280, 239, 199, 160, 120, 80, 40, 0 on vertical axis; time axis 1/3, 3am, 6am, 9am, noon, 3pm, 6pm, 9pm. Tooltip: 137.5 (1/3/2003 3:47)

Options:

Legend:

Graph:

Alarm Icons: ■ Elevated Glucose Range > 250   ▨   Areas of possible sensor errors

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close

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Review data for : iSenseU1 a

Select date to display: 1/2/2
Days   All Days Enlarged
Displaying Glucose Data for :

Glucose mg/dl graph with values 280, 239, 199, 160, 120, 80, 40, 0 on y-axis and 1/3, 3am on x-axis

Options:

Legend:

Alarm Icons:

Health Record - Microsoft Internet Explorer

Medications, Herbs, Vitamins

close

Add Medications, Herbs, Vitamins

When (approximately) did you (or the person you are creating this record for) begin taking **Aspirin 325 MG Tablet**? (mm/dd/yyyy)   `5/30/2001`

Dosage taken   `1`   `TABLET`

Frequency taken   `every morning`

Are you (or the person you are creating this record for) still taking **Aspirin 325 MG Tablet**?   ◉ Yes   ○ No

Do you want to hide this item when you print, fax or electronically share your health record data with others?
(To see your authorizations, go to settings)   ○ Yes   ◉ No

◀ back   cancel   finish

File   Edit   View   Favorites   Tools   Help

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| Home | Messages | Community | Diary | Graphs | Reports | Education | Profile |

Message Center

Message Center Home   **Inbox**   Sent

Inbox

send a new message

	📭	**From**	**Subje**
☐	✉	ACME Health	Remind
☐	✉	ACME Health	Rezulin

archive checked items

[Copyright]   [Po

Messaging - Microsoft Internet Explorer

Send a graph or report - Dr. Jones

Confirm and Send

The following information is exactly as your care provider will see it. Please review carefully, then click '**submit**' at the bottom to send. If you need to make changes, click the '**back**' button until you get to the part you want to change.
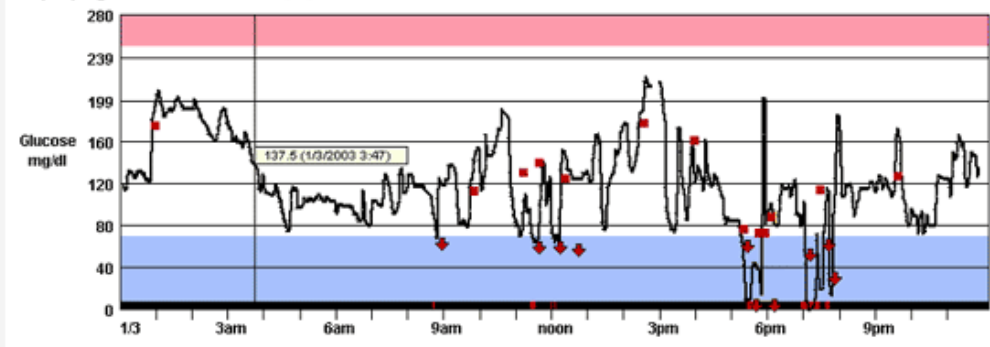
Message from: Janet McNichol

Subject:	Blood Glucose Graph		
Date:	6/2/2003 7:37 PM	Patient Age:	53
Patient Phone:		Patient DOB:	4/5/1950
Provider:	Dr. Jones	Patient Gender:	Female

Question
Dr. Jones, my PHR said that taking my aspirin may cause my blood sugars to go low, and now my blood sugars are low. Should I stop taking my aspirin?

Select date to display: 1/2/2003 1/3/2003 1/4/2003 1/5/2003 1/6/2003 1/7/2003 1/8/2003   All
Days   All Days Enlarged
Displaying Glucose Data for : 1/3/2003

Glucose mg/dl

137.5 (1/3/2003 3:47)

280
239
199
160
120
80
40

1/3   3am   6am   9am   noon   3pm   6pm   9pm

Options:

Patient Physician Communication

user: Dr. Jones | exit

○ search for patients   view records for: All Patients ▼

Home **Message Center** Health Record   Health Risks   Care Plans   Trackers **Admin** Reports

Inbox | Sent | Archive-Received | Archive-Sent |

Messages for: All

		From
	👤	Janet McNichol
	👤	Buck David Smith
	👤	Janet McNichol
	👤	Buck David Smith
	👤	Janet McNichol
☐	👤	Buck David Smith
☐	👤	Janet McNichol
	👤	Janet McNichol
	👤	Sample User

archive checked items

Messaging - Microsoft Internet Explorer

Confirm and Send

The following information is exactly as your patient will see it. Please review carefully and click the **'submit'** button at the bottom to send. If you need to make changes, click the **'back'** button until you get to the area of the process you want to change.

Message from: Dr. Jones

Subject:	Re: Blood Glucose Graph		
Date:	5/12/2003 2:06 PM	**Patient Age:**	53
Patient Phone:		**Patient DOB:**	4/5/1950
Provider:	Dr. Jones	**Patient Gender:**	Female

Reply

Janet, I'll have you continue the aspirin - I'm glad you mentioned you are taking it. Instead, let's go to just a half pill of the Glyburide each morning, and also since it's been more than a year since our last Hemoglobin a1c and cholesterol profile I'll ask that you schedule to have this drawn by the lab in the next couple weeks. I'll share the results with you electronically once they are available.
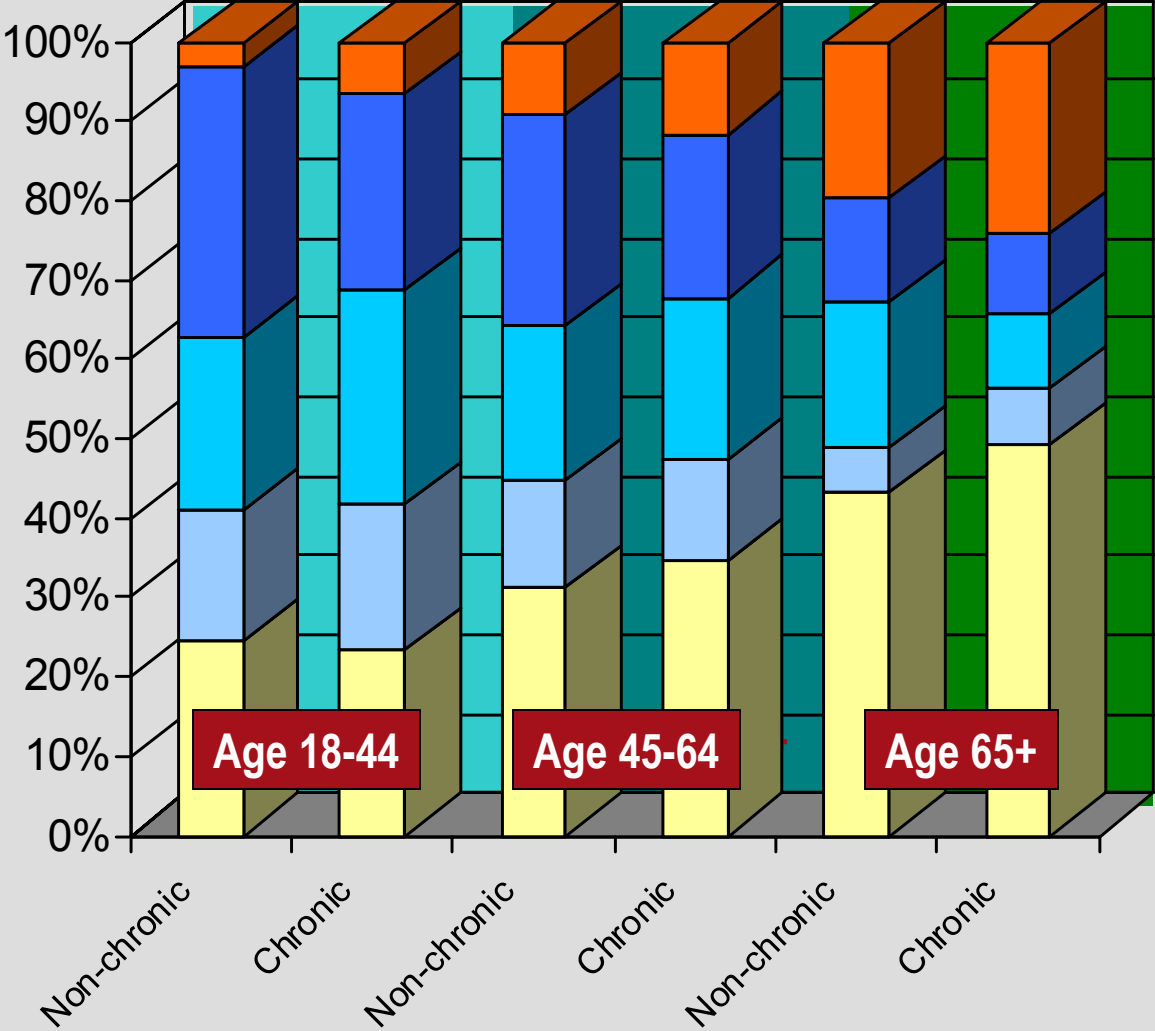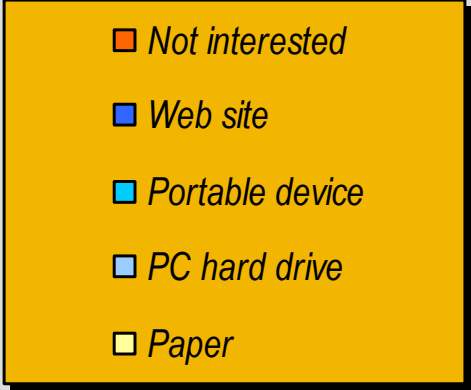
Patient Education Information:

Why should your hemoglobin A1c be controlled?

What is hemoglobin A1c?

Monitoring test for diabetes

Beyond Blood Sugar: Testing A1c

◀ back   cancel   submit ▶

[Copyright]   [Policies]   [Medical Review]   [Feedback]

The PHR Environment - 2005

- ▶ **Paper**: Remains the only available or practical means for many people.

- ▶ **Electronic**: Carries much greater potential for rapid, convenient and secure data sharing over time.

  - ■ Desktop-based: Consumers may store PHR data locally on the hard drive of within software applications on their personal computer.

  - ■ Web-based: Applications may store PHR data on a secure Web server.

  - ■ Portable devices: Products that enable consumers to store personal health information on smart cards, personal digital assistants (PDAs), mobile phones or USB compatible memory devices.

- ▶ Each data-storage medium may be preferred by different types of patients.

- ▶ No matter the electronic data storage medium, the Internet will probably provide the best way to <u>update</u> the PHR with information from professionals and institutions.

People vary in their preference for PHR media

PHR services today

- ▶ **Patient education, self-care content and consensus guidelines**
- ▶ **Secure messaging**
- ▶ **Appointment scheduling and reminders**
- ▶ **Preventive service reminders**
- ▶ **Adherence messaging**
- ▶ **Patient diaries (pain, symptoms, side effects)**
- ▶ **Longitudinal health tracking tools (charts, graphs)**
- ▶ **Drug interactions checking**
- ▶ **Rx refills**
- ▶ **Financial information, such as Explanation of Benefits**

Degree of interest in PHR

- **High reported desire for specific functions:**
  - **Email your doctor – 75%**
  - **See test results – 63%**
  - **Look for mistakes in my record – 69%**
- **Principal interest by caregivers, frequent health system users (chronic illness, elderly), computer savvy**
- **Primarily offered as portal by large delivery systems**
- **Loyalty marketing**
- **Offering only a 'view' of EMR**
- **"Untethered" PHRs not proving viable**

Current interest in PHR tools

- ▶ **Thirty five percent of respondents would use seven or more features of a PHR today if it were available.**

- ▶ **Almost all respondents (91 percent) are *very concerned* about their privacy and keeping their health information secure. However, most people believe that technology provides appropriate protections.**

- ▶ **People who suffer from chronic illness and/or are frequent health care users are less concerned about privacy and security. For example, 41% of the healthy would not want to receive lab results online due to privacy concerns, compared with 36% of those with chronic conditions.**

PHR sponsors

Multiple-Service Institutional Gateways	**Multiple-Service Aggregators**
• Large IDNs (e.g., VA, KP, GHC, CareGroup, Partners, Cleveland Clinic) • Some payers (e.g., Cigna)	• Fortune 500 companies • Payers
Single-Service Institutional Gateways	**Single-Service Aggregators**
• Pharmacy or PBM, e.g., Walgreens, Albertsons, MedcoHealth) • Smaller-practice physicians	• Disease management vendors • Medicare's Web-based EOB • Individuals

PHR suppliers

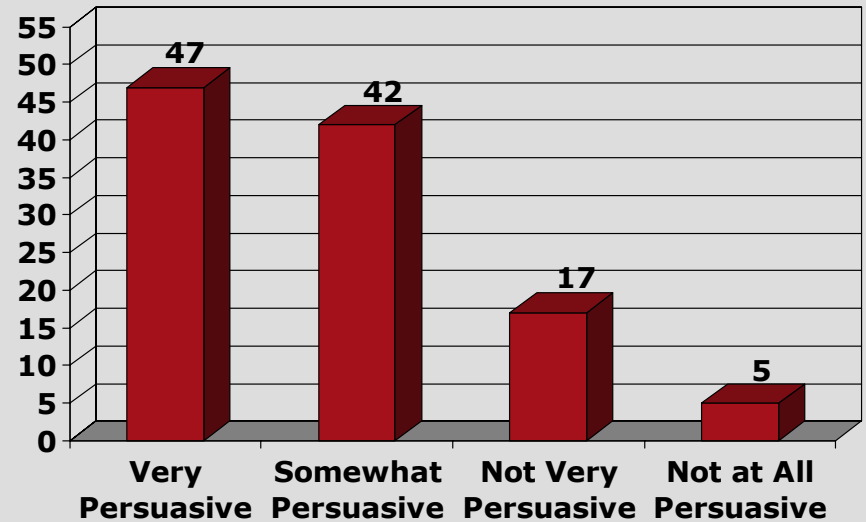| Multiple-Service Institutional Gateways	Multiple-Service Aggregators
Examples: • Epic • Cerner • IDX • McKesson • GE • Home-grown or gov't contracts	**Examples:** • WebMD • Capmed • People Chart • Telemedical
Single-Service Institutional Gateways	**Single-Service Aggregators**
Examples: • Medem • Home-grown • Plug-in applications to specific EHRs (e.g., Kryptiq's integration with GE's Logician)	**Examples:** • Medtronic • Imetrikus • MyFamilyMD • HealthHero • eDiets and WebMD Weight Loss Clinic

PHR challenges

Multiple-Service Institutional Gateways	Multiple-Service Aggregators
PHR not updated or portable when patient leaves institution.	Lack of standards and incentives make data-sharing difficult and business model unproven.
Single-Service Institutional Gateways	**Single-Service Aggregators**
PHR limited to one service, and not updated or portable when patient leaves institution.	PHR limited to one service, and lack of standards and incentives make data-sharing difficult and business model unproven.

Research findings about public messaging

- ▶ **People have a limited and inaccurate understanding of health information technology issues today. The American public is <u>largely unaware of, but receptive toward, the potential value of PHRs.</u>**

- ▶ **Most people <u>want convenient access to and control over their health information</u>, and many express a desire to check the accuracy of the records that clinicians keep on them.**

- ▶ **Most people do want certain <u>healthcare services and information available electronically</u>, particularly when it represents a convenience.**

- ▶ **The <u>preferred medium of a PHR varies by age</u>, with younger people more receptive to electronic tools and older people more receptive toward paper.**

- ▶ **People <u>prefer to work with their doctors</u> to access these services.**

Responses to Mock Ads

You have three seconds to remember every doctor you've ever seen, every procedure you've ever undergone and every medicine you've ever taken.

You could do just that if your medical history was all together, safe and sound and in one place. That's why online medical records are such a great idea. They mean you can get to your medical information instantly. That could be a real life saver in the event of an accident or sudden illness.

ONLINE
Medical Records Foundation

	Very Persuasive	Somewhat Persuasive	Not Very Persuasive	Not at All Persuasive
	47	42	17	5

Implications for Medicare

▶ Focus on benefits, not features

▶ Prescription drug benefit is opportunity

▶ Migrate the portal to become personal medication list

▶ Experiment with authentication, portability, integration issues

▶ Educate beneficiaries about:

  ▪ Value of seeing own information

  ▪ Expectation that all providers share info

  ▪ Specific risks associated with medications

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