

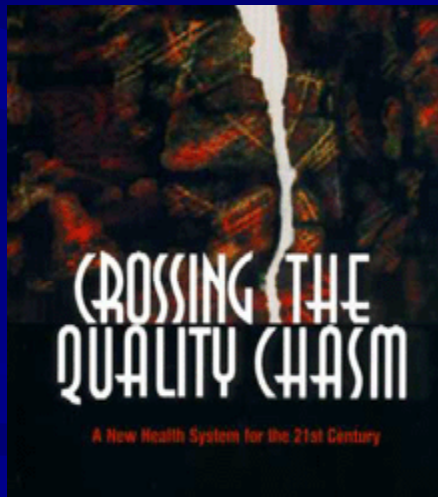
Health Information Technology and the Medical Home

AMIA 2010

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Reinventing Primary Care

“Current care systems cannot do the job.
Trying harder will not work. Changing
systems of care will.”



Institute of Medicine. Crossing the Quality Chasm. 2001

Medical Homes

- Integrated and comprehensive physician-led team care
- Clinical information systems to support this care including decision support and registry functions
- Ready access to care when the patient needs it
- Routine patient feedback to physicians
- Patient engagement in care and decision-making
- Patient-centered care with an emphasis on dignity and respect
- Publicly available information on:
 - Patient-centered care
 - Clinical quality
 - Efficiency

How Is the Medical Home Different?

- Care is distributed among members of team
- Focus on access for patients
- Major effort devoted to managing chronically ill
- Transparency with respect to performance

PCMH and HIT

- 7 Major areas:
 - Clinical Decision Support
 - Registries
 - Team Care
 - Personal Health Records
 - Care Transitions
 - Telehealth
 - Measurement

David Bates and Asaf Bitton. "The Future of HIT in the PCMH". *Health Affairs*. April 2010.

Decision Support

- Delivered within EHRs or Personal Health Records
- Improve processes and intermediate care outcomes
- Reduce adverse drug events
- Many providers won't turn it on (or turn it off)
- Most EHRs include lousy decision support
 - Need better support:
 - Care transitions
 - Medications
 - Chronic disease support

Decision Support in the Future

- Computer “thinking along” with provider
- Able to detect many events in background
 - Use of tools like artificial intelligence
- Help better manage chronic diseases
- Incorporate with proactive population management

Registries

- Population mgmt tool
- Variety of functions
 - Front end views
 - Ability to readily generate lists
 - Usable by multiple providers within team
- Highly functional multi-disease tools not widely available
- Key Needs
 - Abstract registry data from existing EHR
 - Train staff to interface with registries
 - Really strong registry tools

Team Care

- Pivotal for high level of overall PCMH (and system) performance
- May be **most important of all**
- Relationship-centered care
- Most EHRs unable to provide support
- Real-time consultations unavailable
- Creating incentives for other health providers

EHRs and Care Coordination

- Continuity within team
 - Documentation of information
 - Process referrals (both in and out)
 - Share care plans with other providers
 - Assist with transitions
- Must be available to all team members;
and all team members must be rewarded

Personal Health Records

- Increased pt engagement & self-efficacy
- Portable, real-time information
- Many organizations developing PHRs
- Best architecture uncertain
- Lack of pt uptake
- Low health literacy
- Provider hesitancy



February 28, 2008, 8:51 am

Google Unveiling Personal Health Records Service

Posted by Jacob Goldstein



Sounds like we'll finally get a look at Google's much-discussed-but-as-yet-unseen plans to get into the health records business. Today's the day the company will [pull the curtain back](#) on the online service, the

WSJ reports.

Consumer Preferences

Consumer Access to Electronic Tools

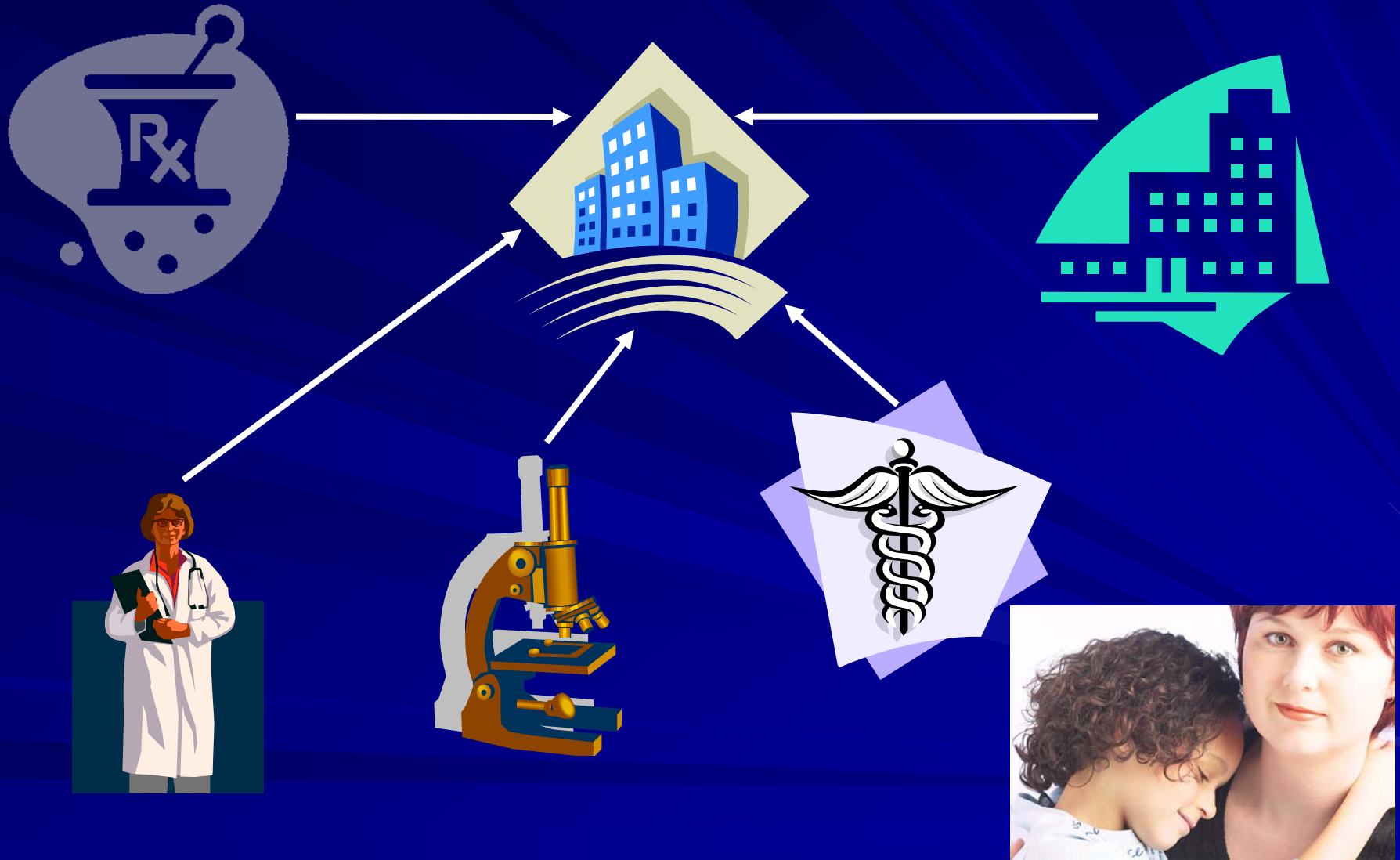
Tool	Would Like to Access	Already Access	Would Pay Extra to Access
Online medical records and test results	78%	6%	26%
Online appointment scheduling	72%	10%	18%
Email to doctor	76%	9%	23%

SOURCE: DELOITTE. 2008 SURVEY OF HEALTH CARE CONSUMERS.⁷

Personal Health Records: Partners Experiences

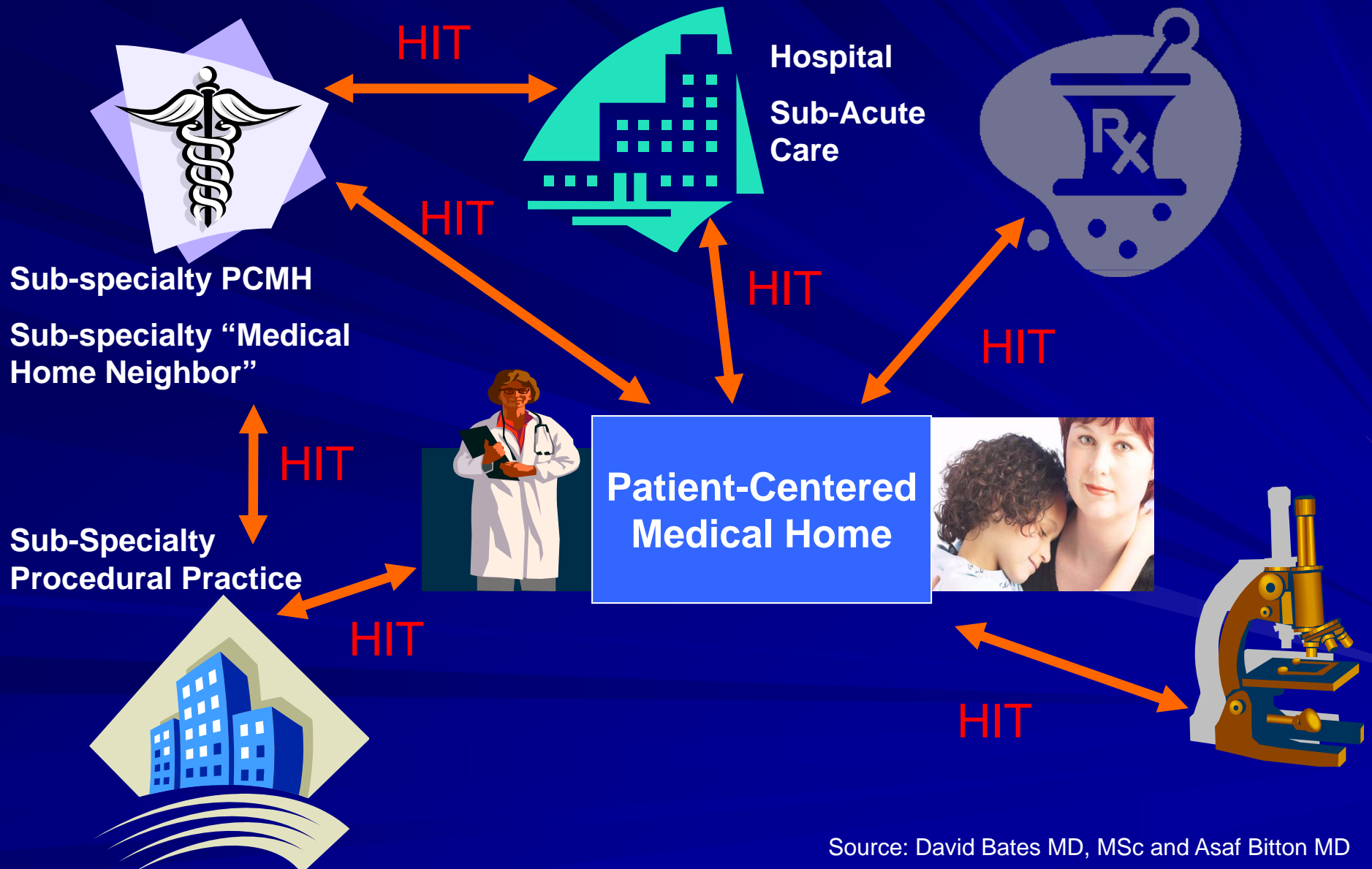
- Have ~80,000 patients using Patient Gateway
- With little stimulation, 15% of patients sign up
 - Some practices have enrolled 60-70% of patients
- Functionalities—ask a question, referral, med refill, check laboratories
- 70% of queries can be handled by someone other than a physician
- Need to bolster functionality for patients with chronic diseases

Current Model: Connection by Billing



Source: David Bates MD, MSc

Accountable Care Organizations: Virtual Integration Through Information



Goroll Payment Model

- Practices receive a yearly, risk-adjusted comprehensive payment for the comprehensive care of each patient in the practice
- Covers all practice expenses, infrastructure and salaries for the primary care team
 - Must use a fully functional EHR

*Goroll, Berenson, Schoenbaum and Gardner,
J Gen Intern Med, 2007*

Massachusetts Coalition for Payment Reform

- Pilot of this payment model in a group of practices
- Key advantages of this approach
 - Payment model
 - All-patient demonstration (including all patients regardless of payer)
 - All high-performing practices

Conclusions

- Electronic health records are increasingly widely being deployed in U.S.
 - Meaningful use criteria will help—but still high-level
- Clear sense of what EHR needs to do to enable medical home not completely defined
 - Key target for research for AMIA members!
 - Need more tools like RPM
- EHR is necessary for success in medical home but not sufficient
 - Payment models in particular need to be adequate
 - Transparency also key