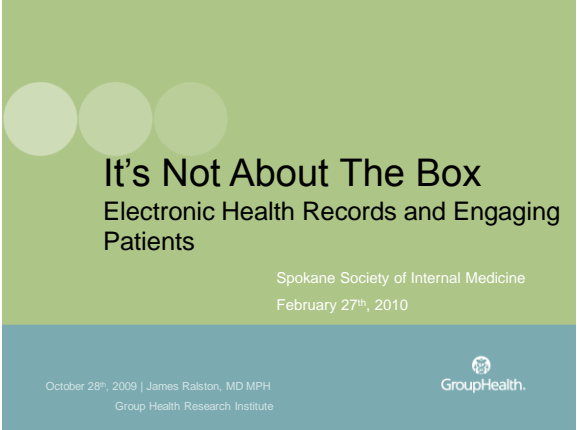


It's Not About the Box: Electronic Health Records and Engaging Patients
James Ralston, MD, MPH



It's Not About the Box
Electronic Health Records and Engaging Patients

Faculty Disclosure
James Ralston, MD, MPH

Dr. Ralston has indicated that he does not have any relevant financial relationships or affiliations that may have a direct bearing on the subject matter of this CME activity.

This morning's objectives

- Understand the principles of meaningful use of Electronic Health Records (EHR) as proposed by Center for Medicare and Medicaid Services
- Describe how patient access to the medical record fits into proposed criteria for meaningful use of EHRs
- Describe how patient access to the medical record can improve the quality of care

Mary

- 55-year-old woman, married, working part-time as consultant, two teenaged sons
- Type 2 diabetes on insulin, hypertension, hypercholesterolemia, obesity, depression, and asthma
- Scheduled for annual checkup with Dr. Tryhard in one week
- Feeling more blue lately and just this week has been reaching for albuterol a couple times during the day for shortness of breath
"I'll just wait until my appointment. He is so busy."

Dr. Tryhard

- 25 minutes for Mary's appointment
- Office BP 145/85 with home BPs averaging 150/85, LDL 95, HbA1c 8.5, due for health goals review, retinal exam, foot exam, screening for cervical cancer, breast cancer, and colorectal cancer
- Taking lisinopril, felodipine, atorvastatin, aspirin, NPH insulin, sertraline

The encounter

- Agenda negotiation
- Worsening depression and dyspnea are first on the list
- At 25 minutes, Mary has a handwritten plan to start triamcinilone MDI, increase sertraline and felodipine, check home blood pressures, move her cat to the garage, clean her house, obtain a mammogram, go to an allergy referral, and return to the clinic in three weeks

Mary

- Leaves with a pile of referrals and the handwritten instructions
 - "How am I going to do all this in the next three weeks?"
- Wonders for a second in the parking lot about the triamcinilone MDI
 - "Yes, I think I just take this as needed."
- The next day,
 - "What did I do with that plan I had with Dr. Tryhard?"

Mary is not unusual

- Fewer than half of U.S. patients with hypertension, depression, diabetes, and asthma are receiving appropriate treatment
- Patients recall or comprehend as little as half of what physicians convey in an outpatient visit
- Rapid increase in chronic disease prevalence and complexity
- Chronic conditions account for 75% of health care costs

*Wagner, Health Affairs 2001
Schillinger, Arch Int Med 2003*

Dr. Tryhard

"Am I running an ER?"

Dr. Tryhard is not unusual

- Requires 18 hours a day for preventive and chronic care needs of a panel of 2,500
- Current system remains focused on intermittent office visits with a physician
- Care is reactive rather than proactive

*Ostbye, Ann Fam Med 2005
Yarnall, Am J Pub Health 2003*

Dr. Tryhard then reads...

- Beginning in 2011, CMS will pay incentives to providers who use Electronic Health Records
- In 2015, CMS will begin deducting payments to providers who are not using Electronic Health Records

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Qualifying for EHR Incentives from CMS

- Eligible providers and hospitals use a certified EHR
- Eligible providers and hospitals show meaningful use of the EHR
- Meaningful use criteria rolled out in three stages between 2011 and 2013
- Maximum incentive currently \$44,000K over five years
- Reductions in payment currently 1% in 2015 increasing to 5% in 2019

What's up with meaningful use

- Step toward supporting larger reform of health care practice and standardization quality
- Aligns with other CMS quality initiatives and metrics
- Largely supports joint principles of the Patient-Centered Medical Home endorsed by ACP, AAFP, AAP, AOA (2007).

Meaningful use: health outcome policy priorities

- Improving quality, safety, efficiency, reducing health disparities
- Engage patients and families in their health care
- Improve care coordination
- Improve population and public health
- Ensure adequate privacy and security protections for personal health information

Meaningful use: overview of stages

- Stage 1: collecting structured data, clinical decision support, reporting quality measures, patient and family access to EHR (public comment until mid-March 2010)
- Stage 2 : expected to focus on structured data exchange and continuous quality improvement (anticipated end of 2011)
- Stage 3: expected to focus on advanced clinical decision support, population health, and enhanced engagement of patients and families with EHR (anticipated end of 2013)

Meaningful use: health outcome policy priorities

- Improving quality, safety, efficiency, reducing health disparities,
 - - Stage 1, Goals for Care and Measures
- Engage patients and families in their health care
- Improve care coordination
- Improve population and public health
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Goals: quality, safety, efficiency, disparities

- Provide access to comprehensive patient health data for patient's health care team
- Use evidence-based order sets and computer physician order entry
- Apply clinical decision support at the point of care
- Generate lists of patients who need care and use them to reach out to patients
- Information for quality improvement and public reporting

Measures: quality, safety, efficiency, disparities

- 16 groups of measures
- Process measures include computer physician order entry for at least 80% of all orders and implementation of at least five clinical decision support rules relevant to quality
- Ambulatory quality measures for primary care include 29 metrics for preventive and chronic care including percent eligible with screening mammograms and those with controlled blood pressure
- Separate measures for specialties
- All measures can be based on automated data

Meaningful use: health outcome policy priorities

- Improving quality, safety, efficiency, reducing health disparities
- Engage patients and families in their health care
 - -Stage 1, Goal
- Improve care coordination
- Improve population and public health
- Ensure adequate privacy and security protections for personal health information

Goal: Engage patients and families

- Provide patients and families with timely access to data, knowledge and the tools to make informed decisions and to manage their health

Measures: Engage patients and families

- Measures, Stage 1
 - % of all patients with access to personal health information electronically (including lab results, problem list, medication list, allergies)
 - % of encounters for which clinical summaries were provided
- Measures, Stage 2 or 3
 - % of patients with access to secure messaging with providers

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Meaningful use: health outcome policy priorities

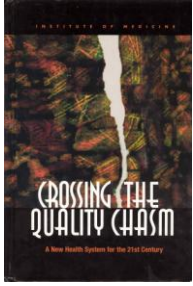
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Quality and EHRs

- Patient-Centered
- Timely
- Effective
- Safe
- Efficient
- Equitable



Crossing the Quality Chasm, IOM 2001

Who offers patients direct engagement with the HER?
Some Patient Web Sites

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



What is usually offered to patients

- Refill prescriptions
- Secure messaging
- After-visit summaries
- Electronic record access
- - Test results, lists of conditions, allergies, immunizations
- Appointment scheduling



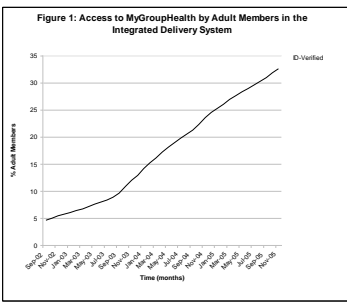
Improving quality with patient engagement in EHR

- Ensure access to care when and where it is needed and preferred, whether in person, over the phone or through the Internet
- Enable redesign of practices teams for proactive and comprehensive care

Berry, Ann Int Med 2003
 Wagner, Eff Clin Pract 1998

Rapid adoption in some organizations

- 58% of adult Group Health enrollees (186,111) on MyGroupHealth-December, 2009
- Approx 27% of adult Kaiser enrollees (2.4 million) on HealthManager- July, 2008



Ralston, JAMIA 2007
 Silvestre, Health Affairs 2009

Why overall access is important

- Supports the use of the EHR by patients while accommodating the diversity of patient needs and preferences for accessing care
- Alleviates concern about possible loss of personal contact with physicians
- Can help address potential disparities in access associated with online health services

*Zickmund, J Gen Intern Med 2008
Roblin, JAMIA 2009*

Access, EHRs and quality

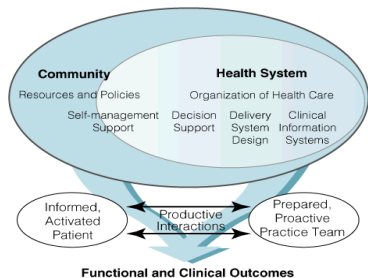
- Improving access in person, over the phone, and through the Internet
 - improves timeliness and patient centeredness of care
 - supports stronger patient engagement with the EHR
 - does not appear to improve the effectiveness or clinical quality of care

*Harris, Diabetes Care 2009
Federowicz, HCFO/RWJF 2008
Chen, Health Affairs 2009*

Improving quality with patient engagement in EHR

- Ensure access to care when and where it is needed and preferred, whether in person, over the phone or through the Internet
- Enable redesign of practices teams for proactive and comprehensive care

Chronic Care Model



Wagner et al, *Eff Clin Pract* 1998

Trials in hypertension and type 2 diabetes

- Hypertension trial n = 778 Diabetes trial n = 84
- Based on Chronic Care Model
- Care manager integrated with primary care
- Shared electronic medical record with patients over Web site
- Electronic mail
- Electronic collaboration on home glucoses or blood pressures



Green, *Cont Clin Trials* 2008
 Goldberg, *Jt Comm J Qual Saf* 2004

Trials in hypertension and type 2 diabetes

- Hypertension (n = 778)
 - BP < 140/90, 56% Intervention vs. 31% control (p < 0.0001)
- Type 2 Diabetes (n = 83)
 - Hemoglobin A1c 0.70% lower in intervention group (p = 0.01)
 -

Green, *JAMA* 2008
 Ralston, *Diabetes Care* 2008

Patient-Centered Medical Home pilot, Group Health

- Relationship between patient and primary care physician is at the core
- Primary care physician leads a team responsible for collaboration in care planning with patients and coordination of services
- Continuous healing relationships will be proactive and comprehensive
- Access will be centered on patients' needs and be available 24/7 by various modes
- Systems will be aligned to achieve most efficient, satisfying, and effective patient experiences

Reid, Am J Manag Care 2009

Joint principles of the Patient-Centered Medical Home

- Personal physician
- Physician-directed medical practice team
- Whole person orientation
- Care is coordinated and/or integrated
- Quality and safety are hallmarks
- Enhanced access to care
- Payment reform

March, 2007: AAFP, ACP, AAP, AOA

Patient-Centered Medical Home pilot, Group Health

- Decreased physician panel size and increased desktop medicine
- Outreach between visits to patients based on quality deficiency reports
- Communication of new team roles to patients
- Promotion of secure e-mail and phone visits

Reid, Am J Manag Care 2009

Patient-Centered Medical Home pilot, Group Health

- After one year,
 - Improved patient experiences of care on 6 of 7 measures
 - Improved composite clinical quality of care score of 1.2 to 1.6%
 - Improved well being of physicians and staff
 - More secure e-mail, phone, and specialty visits
 - No change in overall costs

Reid, Am J Manag Care 2009

Mary, revisited

- 55-year-old woman, married, working part time as a consultant, with two teenaged sons
- Type 2 diabetes on insulin, hypertension, hypercholesterolemia, obesity, depression, and asthma
- Scheduled for annual checkup with Dr. Tryhard in one week

Mary, revisited

- Prior to annual checkup,
 - Retinal exam, screening for breast and colorectal cancer
 - BP averaging 125/80 after collaborating with clinical pharmacist
 - Sertraline increased after behavioral nurse assessment. Feeling better
 - Insulin being adjusted by nurse specialist
 - Azmacort being used regularly, cat in garage, allergy referral in place. Has typed plan of care in EHR and available to her on patient Web site
 - Mary sends in her questions and agenda for appointment over e-mail

The encounter, revisited

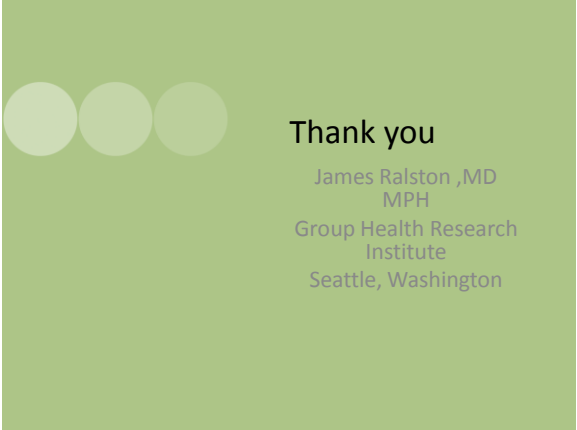
- Dr Tryhard and Mary spend much of the encounter revisiting and establishing goals for future care, including Mary's desire to get off insulin

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Key resources

- Lorenzi NM, Kouroubali A, Detmer DE, Bloomrosen M. How to successfully select and implement electronic health records (EHR) in small ambulatory practice settings. *BMC Med Inform Decis Mak.* 2009;9:15.
- Berry LL, Seiders K, Wilder SS. Innovations in access to care: a patient-centered approach. *Ann Intern Med.* Oct 7 2003;139(7):568-574.
- Reid RJ, Fishman PA, Yu O, et al. Patient-centered medical home demonstration: a prospective, quasi-experimental, before and after evaluation. *Am J Manag Care.* Sep 2009;15(9):e71-87
- DHHS Health IT Web site: <http://healthit.hhs.gov/portal/server.pt>
- Proposed Rule for CMS Incentive Program <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=CMS-2009-0117-0001>



Thank you

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