

HIT Research Update [Fall 2009]

Dear colleagues,

As many of you know, researchers at Brigham and Women's Hospital, Harvard Medical School, and Harvard Business School have initiated five new evaluation studies in electronic health records and IT. These studies, funded by the AHRQ, are among the exciting new projects that will engage MAeHC physician practices in ongoing health IT research. Please find descriptions and contact information for each project included this newsletter – you may hear from one or more of these projects in the near future. We look forward to potentially working with you!

Improving Laboratory Monitoring and Results Management

PI: Steven R. Simon, MD

Goals:

- Design, implement and evaluate clinical decision support and a laboratory results management system by identifying barriers and facilitators of lab monitoring.
- Create an intervention to improve the management of abnormal laboratory results.
- Develop laboratory monitoring alerts (CDS) and a results management system.

Physician Involvement: Medical practices enrolled in this study will be selected for 1) CDS use at the time of initial prescription of selected target medications; or 2) guideline use for improved abnormal test result management.

Questions? Interested? Contact Dr. Simon at steven_simon@hms.harvard.edu or (617) 509-9938

CERT HIT Improve Antihypertensive and Lipid-lowering Therapy

PI: Steven R. Simon, MD

Goals:

- Evaluate the effectiveness of clinical decision support (CDS) for primary care physicians (PCPs) treating hypertension and hyperlipidemia.
- Evaluate CDS in combination with automated telephone outreach (IVR), a system that interacts with patients, for PCPs treating hypertension and hyperlipidemia.

Physician Involvement: If interested, medical practices using Version 8 of eClinicalWorks will implement either of the two types of CDS alerts alone and/or in combination with IVR, to analyze effectiveness of these two systems.

Questions? Interested? Contact Dr. Simon at steven_simon@hms.harvard.edu or (617) 509-9938

SPOTLIGHT ON: **“Meaningful Use”**

On June 16, the Meaningful Use Workgroup released a recommended definition for the term “meaningful use” of electronic health records (EHR). The definition is critical for identifying physicians and hospital providers who will receive national reimbursements for EHR use beginning in 2011. **For more meaningful use information, visit MAeHC’s website:** <http://www.maehc.org/ARRA.html>.

Updates from the Workgroup:

- Seven national priorities informing “meaningful use”: 1) patient engagement; 2) reduction of racial disparities; 3) improved safety; 4) increased efficiency; 5) coordination of care; 6) improved population health; and 7) privacy and security.
- **“The ultimate vision [of meaningful use] is one in which all patients are fully engaged in their healthcare, providers have real-time access to all medical information and tools to help ensure the quality and safety of the care provided while also affording improved access and elimination of health care disparities.”** (“Meaningful Use: A Definition”, July 16, 2009)
- The definition will be tailored to various health care settings; quality measures to assess “meaningful use” will vary across medical specialties.

How do new projects support “meaningful use”?

1) Laboratory Monitoring and CERT Antihypertensive and Lipid-lowering Therapy

The aims of these projects cut across several policy priorities related to the Meaningful Use objectives and measures. Both projects implement and test the effectiveness of clinical-decision support at the point of care, directly addressing the 2013 Meaningful Use objectives. Alerts for improving drug monitoring and reminders for managing hypertension and hyperlipidemia seek to improve patient quality of care and safety; these interventions should also positively influence clinicians’ efficiency at delivering care. The results management intervention will test the effectiveness of a system-enhancement to improve test result communication to patients, thereby helping clinicians engage patients, and addressing a policy priority of Meaningful Use. Together, these efforts will not only assist practices in achieving Meaningful Use but also demonstrate the value of reaching these milestones and guide practices nationwide on pathways to implementation.

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The Impact of Ambulatory EHR Implementation and Use on Medical Expenditures and Utilization; Ambulatory EHR ROI Analysis

PI: David Bates, MD

Goals:

- Evaluate effect of EHR adoption on health care utilization and medical costs
- Examine associations between EHR and CDE usage, and utilization
- Calculate revenue gains, cost reductions, and expenses realized by practices of various sizes from the adoption of ambulatory EHRs

Physician Involvement: MAeHC practices will receive a letter describing in more detail the part of this study that will rely on claims data; no practice involvement is required for this part of the study. In a separate mailing, MAeHC practices will receive a letter describing the ROI analysis and an accompanying survey. Our research team will work with your practice to complete it.

Questions? Interested? Contact Julia Adler-Milstein at

jadlermilstein@hbs.edu

Unintended Consequences of Electronic Prescribing

PI: Jeffrey Rothschild, MD and Eric Poon, MD

Goals:

- Examine the frequency of e-prescribing errors, and their contributing factors, to characterize their unintended consequences (UCs).
- Use data from three perspectives (pharmacy, physician practices, and patients) to develop recommendations for preventing e-prescribing errors and mitigating other UCs of e-prescribing.

Physician Involvement: Medical personnel at enrolled practices will participate in 30-45 minute interviews with study staff. Dr. Rothschild will also conduct observation studies of EHR medical practices that have been enlisted. Physicians will receive recommendations for safe e-prescribing practices.

Questions? Interested? Contact Dr. Jeffrey Rothschild at

jrothschild@partners.org

Ambulatory Quality Measurement

PI: Eric Schneider, MD

Goal: Compare quality measurement using electronic medical records linked in a health information exchange to two traditional quality measurement approaches:

- 1) NCQA's hybrid method (aggregated commercial health plan claims data plus medical record review)
- 2) NCQA's "claims-only method" (aggregated commercial health plan claims data without medical record review)

Physician Involvement: Health plan members who are your patients will complete a brief survey and be invited to consent to medical record review. Physician practices eligible for participation will allow the evaluation team to conduct a review of medical records of the patients who give written consent.

Questions? Interested? Contact Dr. Eric Schneider at

eschneid@hsph.harvard.edu

SPOTLIGHT ON: "Meaningful Use"

How do new projects support "meaningful use"?

2) Ambulatory Quality Measurement: Ambulatory quality measurement is a key part of the definition of "meaningful use." Dr. Schneider's project is evaluating the strengths and weaknesses of EHRs linked in a community health information exchange as a robust source of ambulatory quality measurement data. The results will guide the design of measurement and reporting systems that are accurate and actionable while minimizing the burden on busy clinicians.

3) Unintended Consequences of Electronic Prescribing: CPOE and ePrescribing are integral components of electronic health records and have been one of the earliest and most widely adopted features. Because of the efforts to disseminate quickly ePrescribing adoption, practitioners are beginning to uncover the unintended consequences resulting from the use of these technologies. Our project will systematically characterize these unintended consequences and recommend approaches for preventing or managing them so that the healthcare community can maximize its investment in CPOE and ePrescribing to improve the quality and safety of care.

Participating Institutions include Brigham and Women's Hospital, Department of Ambulatory Care and Prevention of Harvard Medical School and Harvard Pilgrim Health Care, Harvard Business School, Harvard School of Public Health, and Partners HealthCare System.