

Academia and the EHR: HIT and HIE

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Background

- The Ambulatory Care Network (ACN) practices at NYPH began their preparation for new EHR implementations with a start date of March, 2006
- Practices are located both at the Columbia and Cornell Campus
- Include internal medicine, family medicine, OB/GYN, pediatrics, and geriatrics

NYPH EHR Qualitative Study: Objective

- To identify perceived facilitators and barriers to a large-scale EHR implementation in an academic setting

Methods

- Semi-structured interviews with ACN leadership, IS leadership, medical directors, practice managers and vendors
- All qualitative results were analyzed in accordance to the grounded theory using Atlas ti version 5.0, a qualitative analysis tool

Results

- Important identified themes:
 - Communication
 - Data migration & system transition
 - Hardware, software and technical support
 - Patient privacy & confidentiality
 - Efficiency

Quantitative Study

- Prior to the implementation of two new EHR systems in the ACN practices, we conducted a cross-sectional survey of ACN primary care practitioners
- Practitioners include attending physicians, resident physicians, PAs, NPs, and midwives

Respondents

- 467 practitioners surveyed
- 336 (72%) responded
 - 93% physicians
 - 40% of whom were attending physicians
- 36% of our respondents spend more than 75% of their clinical time in an inpatient setting
- 14% spend less than 25% of their clinical time in an inpatient setting

Results

- 16% communicate with patients by email at least once monthly
- 75% of our respondents were satisfied with past EHRs, but only about half were satisfied with the past transition process
- 73% of our respondents said that the amount of paperwork they have is at least a moderate problem

Selected Results: Current Satisfaction

	EHR users	Paper users
Allergy documentation	79%	50%
Writing and renewing prescriptions	82%	55%
Reviewing lab and radiology results	80%	33%
Communicating referrals	54%	16%

Selected Results: Expectation of Satisfaction

	EHR users	Paper users
Allergy documentation	63%	78%
Writing and renewing prescriptions	55%	61%
Reviewing lab and radiology results	61%	56%
Communicating referrals	60%	56%

Results (continued)

- 68% believe that the new EHR will improve quality of care, 79% medication safety and 81% access to information
- 21% believe the new EHR will decrease overall costs of care
- 65% believe medical record storage cost will be decreased
- 8% of our respondents believed their personal income would increase as a result of the EHR implementation

Conclusions

- Past experiences with EHR implementation were generally negative
- However, present users of EHRs are more satisfied than paper users
- Present EHR users tend to have lower expectations of the new EHR system than paper based users

HITEC-NYS: Health Information Technology Evaluation Collaborative for NYS

HEAL NY

(Healthcare Efficiency and Affordability Law
for New Yorkers Capital Grants Program)

- Implementation grants of \$50,000 - \$10,000,000 per grant (for capital investments)
- Supporting multi-stakeholder HIE initiatives
- Grantees are required to provide matching funds and dedicate some funds for evaluation
- Evaluation efforts are likely to vary in quality and be non-standardized

Why Evaluate?

- Demonstrate value of HEAL initiative
 - Demonstrate uptake and usage
- Encourage future HIT and HIE adoption
 - Demonstrate financial benefits
 - Demonstrate quality and safety benefits
 - Demonstrate patient and provider satisfaction
- Iteratively refine HIT and HIE
 - Understand what is working well
 - Understand where we can improve
- Disseminate lessons learned and successes nationally

HITEC/NY

- Multi-institutional collaboration
- Expertise in evaluation, IT, health economics, survey methodology, biostatistics
- Mark Callahan and Lisa Kern from Weill Medical College of Cornell University
- George Hripscak from Columbia University
- Shadi Saleh from SUNY-Albany
- Encouraged and supported by New York State Department of Health

Planned evaluations

- Provider expectations and satisfaction with HIT and HIE
- Consumer expectations and satisfaction with HIT and HIE
- Quality
- Safety
- Financial
 - Perspective of provider
 - Perspective of payers/ purchasers