



**Deep Dive on After-Visit Summaries:
Refining Ix Innovative App #1**

Speakers:

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Background:

Ix innovators shared information about their experiences implementing four very different approaches to after-visit summaries (AVSs):

- primary care and specialty care
- individual visit and episode of care
- highly automated and primarily manual
- commercial and safety-net populations
- urban and rural
- integrated delivery system and community hospital.

The varied approaches highlighted the breadth of AVS applications that can be deployed to deliver effective Ix depending on the varied needs of the population being served and the different resources available at each organization.

Variation Across Settings

Insight #1: After-Visit Summaries have been successfully implemented in a variety of settings, ranging from a community hospital to a major regional health care and health plan provider. Following is a list of the providers highlighted in this session along with the services each provider offers:

- **Group Health:** health plan, health care services
- **Cheshire Medical Center:** general and medical surgical hospital
- **Fox Chase Cancer Center:** hospital providing cancer treatment, research, and prevention services
- **Institute for Family Health:** operates 16 health centers, provides safety net services and health care for the uninsured

Insight #2: After-Visit Summaries have been successfully implemented within a variety of patient populations. Following is a list of the providers highlighted in this session along with the population each provider serves:

- **Group Health:** health plan subscribers in Washington and Idaho
- **Cheshire Medical Center:** community members in Keene, NH
- **Fox Chase Cancer Center:** people (and families) with cancer (in the region and beyond)
- **Institute for Family Health:** medically underserved populations (in urban and rural New York)

Insight #3: After-Visit Summaries have been successfully implemented in different parts of the US, both urban and rural. Following is a list of the providers highlighted in this session along with their location(s):

- **Group Health:** Washington and Idaho.
- **Cheshire Medical Center:** Keene, NH
- **Fox Chase Cancer Center:** Philadelphia, PA
- **Institute for Family Health:** the Bronx, Manhattan, and the Hudson Valley, NY

Insight #4: After-Visit Summaries have been successfully implemented within different economies of scale. Following is a list of the providers highlighted in this session along with information on patient volume:

- **Group Health:** more than 574,000 health plan members
- **Cheshire Medical Center:** 169 bed hospital
- **Fox Chase Cancer Center:** 100 bed hospital
- **Institute for Family Health:** more than 70,000 community members

Insight #5: After-Visit Summaries are currently at different stages of development and implementation. Following is a brief summary of the current status of the AVS for each provider:

- **Group Health:** has fully implemented the AVS and has since implemented an improved version of the AVS
- **Cheshire Medical Center:** has recently begun the process of implementing the AVS (as a paper-based system) and hopes to eventually incorporate the AVS within their existing IT infrastructure
- **Fox Chase Cancer Center:** in process of implementing: pilot program established, currently developing plan for center-wide development and implementation
- **Institute for Family Health:** has implemented the AVS and is in the process of developing an improved iteration that better addresses patient literacy levels and improved formatting that will be available via the patient portal

Impacts

Insight #6: For a tech-savvy organization, the big impact on patient experience of a *paper-based printout* was a surprise. Group Health's intent was to make past medical visit information available through an internet-based patient portal. Over time, the importance of making a paper copy available became apparent. The AVS "innovative app" turned out to have a bigger impact than expected.

Insight #7: Health care providers can maximize impact by using interactive strategies with AVS deployment.

- combine AVS with secure messaging and links to targeted online health content
- use the AVS to guide patient-physician communication
- use the AVS as an opportunity to ask patients open-ended questions about their understanding of the diagnosis and treatment (also known as "teach-back")

Insight #8: AVS dramatically improved patient ratings of patient-physician communication. At Cheshire Medical Center, patient satisfaction increased after implementing the AVS.

- prior to implementing the AVS, 45% of patients rated physician communication during encounter as "excellent"
- after implementing the AVS, in orthopedics, the percentage went up to 82%
- after implementing the AVS, in family practice, it went up to 79%

Insight #9: Group Health experienced fewer follow-up phone calls after implementing the AVS.

- nurses noted a decrease in calls, specifically for the physicians who were utilizing the AVS

Driving Principles

Insight #10: The AVS is a tool for facilitating patient ownership of their health care. The Institute for Family Health developed and implemented the AVS to give underserved patients ownership and control of their own health care information.

Insight #11: The AVS is a method for establishing trust between the patient and the health care provider. The Institute for Family Health:

- found that trust was the biggest barrier to effectively providing health care to historically underserved populations
- used the AVS as a transparent communication tool to help patients understand, feel included, and build trust with health care providers.

Insight #12: The AVS can be a tool to coordinate primary care and specialty care. Fox Chase Cancer Center implemented an AVS as a component of a larger initiative to better coordinate between specialists and primary care providers.

Insight #13: After-Visit Summaries originate from a variety of approaches to improving health care delivery. Following is a brief summary of how the AVS emerged for each provider:

- **Group Health** Group Health Cooperative was opened in 1947 by a community coalition dedicated to making quality health care available and affordable. Group Health's AVS emerged out of an initiative to design and implement a more patient-centered clinical information system.
- **Cheshire Medical Center** The mission of Cheshire Medical Center/Dartmouth-Hitchcock Keene (CMC/D-HK) is to lead our community to become the nation's healthiest through our clinical and service excellence, collaboration and compassion for every patient, every time.
- **Fox Chase Cancer Center** Our Mission: To reduce the burden of cancer by integrating scientific discoveries and technological advances into more effective treatments and prevention strategies. Fox Chase Cancer Center implemented an AVS as a component of a larger initiative to develop and implement a "survivorship care plan" based on evidence-based clinical guidelines and standards to assure quality care is given to cancer survivors.
- **Institute for Family Health** The Institute's mission is to provide access to superior primary care, especially for those who are medically underserved. The

Institute for Family Health developed an AVS in response to research findings that patients often do not understand what happened at the visit or what they are supposed to do next.

Implementation Lessons

Insight #14: Including patient input in the development and/or redesign of the AVS helps ensure the desired impact.

- make the AVS more personalized to client needs and preferences
- allows AVS efforts to focus on the most critical pieces of information

Insight #15: It is not necessary to wait until a threshold is reached before implementing an AVS. Don Caruso from Cheshire Medical Center first learned about the AVS from Group Health at the 2005 IxCenter Conference.

- Cheshire Medical Center is typically technologically savvy, but they had not integrated Ix into their clinical information systems
- the AVS idea took hold before a technological plan was completed.
- It is currently a paper-based system.

Insight #16: In environments with significant obstacles to implementation, leadership and vision are key. Group Health did not originally have any funding support, but the initiative was kept on the table until financial support became possible.

Insight #17: Sometimes, interest, buy-in, and special pads of paper are all it takes to implement an AVS. Cheshire Medical Center was able to quickly implement the AVS by initially implementing it as a paper-based system.

Insight #18: The AVS can serve as a face sheet or launching point for additional Ix resources.

- the AVS can be stapled on top of relevant printed health material (Ix)
- the AVS can contain a link to a relevant internet-based source of health information (Ix) relevant to the diagnosis or treatment

Insight #19: After-Visit Summaries involve varying levels of information technology (IT) infrastructure. Following is a brief summary of how the AVS is (or is not) used within the context of information technology:

- **Group Health:** utilizes an EMR, health content database, and patient portal: the AVS is embedded within their IT system
- **Cheshire Medical Center:** utilizes inpatient and outpatient EMRs, web-based patient education materials, point of care electronic education materials, and a patient portal for financial, clinical, and scheduling activities: the AVS is not

currently associated with any of their IT systems; it is currently a stand-alone paper-based system.

- **Institute for Family Health**: utilizes an EMR/PHR: the AVS is embedded within their IT system

Insight #20: After-Visit Summaries involve varying levels of staff involvement.

Following are pieces of information provided by the four highlighted providers:

- **Group Health**: has multiple FTEs dedicated to maintaining and growing the patient-centered IT structure, which includes AVS-related activities
- **Cheshire Medical Center**: a portion of one FTE is dedicated to patient-centered IT structure, which includes AVS-related activities
- **Fox Chase Cancer Center**: a patient education committee and task force have convened to develop and implement the shared care plan

Insight #21: Gaining buy-in from key constituencies/players involved is important. Fox Chase Cancer Center utilized a patient education committee and a task force as ways to involve patients, staff, and management in the planning process to increase buy-in.

Conclusion

Insight #22: The AVS is an Ix tool capable of addressing the following problems:

- poor patient comprehension of the medical visit: what happened, diagnosis given, treatment prescribed, return instructions
- poor patient recall: inability to remember what happened (relates to comprehension, but is not exactly the same thing)
- inability to relay medical information to family, other support systems, and other medical providers.

Insight #23: AVS has led to several types of quality improvement:

- patient satisfaction
- quality of provider-patient communication
- patient comprehension
- patient recall
- communication with family and other care providers
- coordination of care across medical settings

Additional Resources

For the PowerPoint presentation, which includes **sample after-visit summaries**, visit the IxInsights section of the member portal:

<http://www.informationtherapy.org/members/insights.cfm> and click on “PowerPoint Presentation” for IxInsights #38.

Previous IxInsights Sessions Mentioning AVSs

IxInsights #30, November 2007: Early Findings from PCHIT: Report on New York City Safety-Net Providers

IxInsights #10, December 2005: e-Health at Group Health Cooperative

IxInsights #3, April 2005: Information Therapy to Help Design Chronic Disease Action Plans

Peer Reviewed Journal Articles Summarized in Previous IxResearch Briefings

IxResearch Briefing #12, September 2008

- Physicians Overestimate Patient Understanding of Health Information
Lukoschek, P., et al. 2003. Patient and Physician Factors Predict Patients Comprehension of Health Information. Journal of Patient Education and Counseling.
- Patients Overestimate Their Understanding of Health Information
Engel, Kirsten G., et al. 2008. Patient Comprehension of Emergency Department Care and Instructions: Are Patients Aware of When They Do Not Understand? Annals of Emergency Medicine, 11 July 2008 (Article in Press DOI: 10.1016/j.annemergmed.2008.05.016).

IxResearch Briefing #7, May 2007

- Patient Engagement with Discharge Summaries Can Improve Communication Problems Between Hospital-Based and Primary Care Physicians
Kripalani, S., et al. (2007). JAMA, 297(8), 831-841.

IxResearch Briefing #4, November 2006

- Patient-Focused Interventions: A Review of the Evidence
Coulter, A, Ellins, J. Patient-focused interventions: A review of the evidence. The Health Foundation 2006.

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