OpenNotes: Hospitalists' Challenge and Opportunity

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At a time of societal fascination both with transparency and the explosion of health information technologies, a growing number of hospitals are offering, or will soon offer patients and their family instantaneous access to their doctors and nurses notes. What will this new opportunity for patient engagement mean for the hospitalist? Today, state and federal government regulations either encourage or require healthcare providers to grant patients access to their clinical information. But despite the rules embedded in the federal Health Insurance Portability and Accountability Act (HIPAA), patients often face time-consuming obstacles in their quest for access, and many providers view compliance as a burden. We suggest an alternative view: Over time, we anticipate that inviting patients to review their medical record will reduce risk, increase knowledge, foster active engagement, and help them take more control of their care. The OpenNotes trial provides clues as to how such practice will affect both patients and providers (1, 2). We anticipate that transparent records will stimulate hospitalists, PCPs, and other caregivers to improve communication throughout the patient's hospital stay. OpenNotes offers a special opportunity for improving the patient experience after leaving the hospital as well. Open notes will be viewed by many as a disruptive change, and the best strategy for adapting will be to move proactively to create policies that establish clear guidelines, for which the authors offer some suggestions. *Journal of Hospital Medicine* 2013;8:414–417. © 2013 Society of Hospital Medicine

> Can you explain why Dr. Johnson thinks I should be taking antibiotics, while your note says I shouldn't?

Today you may be surprised by such an inquiry during morning rounds, but such questions are likely coming to your wards. At a time of societal fascination both with transparency and the explosion of health information technologies, a growing number of hospitals are offering, or will soon offer, patients and their family instantaneous access to their doctors' and nurses' notes. What will this new opportunity for patient engagement mean for the hospitalist?

BACKGROUND

Helping patients through highly complicated care processes is no easy feat, and enabling patients and their families to deal successfully with a constantly changing scenario is a particular challenge for hospitalists. Multiple studies show how poorly patients recall information offered them in office visits,[1,2] and such settings are far less stressful than the rapid fire mixture of procedures, multiple medications, and morbid disease processes that take center stage in so many hospitalizations. And now something new: What is in store for patients and their doctors when patients in a hospital room gain access in real time not only to test results, but also to notes written by their hospitalists, nurses, and consultants?

ENGAGING PATIENTS

With the principal goal of promoting more active patient engagement in care, patient portals designed primarily for ambulatory practice are proliferating rapidly. Not only do they offer patients windows into their records and secure ways to communicate with their providers, their goal is also to automate chores such as reporting results or other "administrative tasks" that take away from valuable face-to-face time between providers and patients. First appearing shortly after the dawn of the Internet, secure electronic portals began to offer patients access to much of their chart.[3] Rapidly evolving beyond limited data feeds over very simple connections, portals today share far more data, are spreading rapidly, and in some cases offer patients access to their entire records. Whether or not 1 record can serve all the traditional users and also the patient and family is a fascinating question,[4] but the fact is that patients can now access their records from their computers, and via smartphones and tablets on the go. While lying in hospital beds, they can gain access to their laboratory and test data as the data evolve, and sometimes the patients see the findings well before their busy clinicians. Moreover, family members, other informal caregivers, or a formally designated health care proxy, will access the patient's record as well, whether through

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documented proxy functions or by informally peering at the patient's tablet.

MEANINGFUL USE INCENTIVES

Today, state and federal government regulations either encourage or require healthcare providers to grant patients access to their clinical information. But despite the rules embedded in the federal Health Insurance Portability and Accountability Act, patients often face time-consuming obstacles in their quest for access, and many providers view compliance as a burden. We suggest an alternative view. Over time, we anticipate that inviting patients to review their medical record will reduce risk, increase knowledge, foster active engagement, and help them take more control of their care.

With the goal also of reducing medical errors and improving outcomes, the expansion of portals is accompanied by a combination of incentives, and in the future, sanctions, as the Center for Medicare and Medicaid Services (CMS) refines efforts to promote certified electronic health record technologies that focus on "meaningful use" (MU), which often include patient engagement tools such as portals. In the fall of 2012, CMS announced stage 2 MU objectives, with several having substantial implications for hospitalists and their patients. One calls for "providing patients the ability to view online, download and transmit their health information within 4 business days of the information being available to the provider." Rather than an outpatient-only requirement, it is a practice-based requirement, and we can soon expect hospitalist data to appear on portals.

INSIGHTS FROM TRANSPARENCY IN PRIMARY CARE

The OpenNotes trial provides clues as to how such practice will affect both patients and providers.[5,6] The trial included patients and primary care physicians (PCPs) from 3 diverse settings: Beth Israel Deaconess Medical Center (BIDMC), an urban academic health center in Boston, Massachusetts, and affiliated community practices near Boston; Geisinger Health System, a primarily rural integrated health system in Pennsylvania; and adult medicine and human immunodeficiency virus clinics at Harborview Medical Center, a safety net hospital in Seattle, Washington. More than 100 volunteering PCPs invited 20,000 of their patients enrolled in their institution's portals to read their office visit notes over a 1-year period. Physician–patient messaging was tracked to examine impact on physician workloads, and patients and physicians were surveyed before and after the intervention.

The experience generated considerable enthusiasm and potential clinical benefits among the patients, with little adverse impact on patients and providers. Of particular relevance for hospitalists, more than 4 in 5 patients read their notes, with more than 70%

reporting they understood their medical conditions better and felt more in control of their care, and two-thirds reported increased adherence to their medicines, a finding both unanticipated and striking. More than 1 in 5 shared their notes with others. And in spite of doctors' worries, few found their notes confusing (2%–8% of patients at the 3 sites), worried more (5%–8%), or felt offended by their notes (1%–2%). At the end of the year-long intervention, 99% of patients returning surveys recommended that the practice continue.

PCPs reported virtually no impact on their workflow, although about 1 in 3 reported changing their documentation, given the knowledge that their patients might read their notes. Fewer than 5% of physicians reported visits taking more time, whereas 15% to 20% of physicians reported taking longer to write their notes. Approximately 30% of physicians reported changing the content of their notes to address obesity, substance abuse, mental health, or issues concerning malignancies. Of note, physicians were given an "opt out" function for any note, but they called on this very rarely during the study. And at the end of the year, not 1 PCP chose to discontinue offering patients his or her notes.

The 3 participating institutions felt that the trial was so successful that they decided to expand this practice aggressively. At BIDMC, OpenNotes will soon extend to all clinical departments and include all notes signed in the online record by doctors (including housestaff and fellows), nurses, social workers, physician assistants, clinical pharmacists, nutritionists, and occupational and physical therapists. The only exceptions will be those notes authored primarily by students, and those the clinician chooses to "monitor," thereby blinding access to patients.

With stage 2 MU incentives in place, and the patient engagement movement accelerating, such practice will likely spread rapidly nationwide. We expect that more and more patients will be soon able to read all signed notes by hospitalists in real time. But differences abound among outpatients and inpatients, and PCPs and hospitalists, and inpatient notes are vastly different from those describing office visits. How may this change in practice affect hospitalized patients and their clinicians?

IMPLICATIONS FOR HOSPITALISTS

Most inpatients meet their hospitalists for the first time at admission. During their stay, they may encounter many hospitalists, along with multiple specialty consultants, house officers, nurses, and ancillary providers. Moreover, inpatient notes vary widely in their content and context. They may describe the patient tersely, while spelling out both a broad (and frightening) differential diagnosis, along with options for addressing a range of contingencies. Such notes, written during the acute diagnostic and treatment

phase of an admission, tend to focus primarily on acute and discrete issues at hand, in contrast to outpatient notes that may take a more comprehensive approach. Moreover, given the enormous burden and acuity of illness today among many hospitalized patients, a large volume of data is generated in a very short period of time. Due both to time constraints and complexity, decisions are made quickly, often without the patient's input. When did you last ask a hospitalized patient if you could order specific blood tests? Unless a major therapeutic change is anticipated, how often are your patients told their results as a matter of course?

As acutely ill patients suddenly experience a life out of their control, how will they and their families respond to new access to a large volume of information? Should hospitalists expect an avalanche of questions, or might the prime impact be a change in the nature of those questions, as patients and their families move from "What was the result?" to "What is the meaning of this result, given my condition?" When the patient sees test results and reads consultant notes before the hospitalist has had a chance to review them, how will this impact the process of care and shape the patient's view of the hospitalist? When questions arise, will they discuss them immediately with their hospitalists, might they try to contact the doctor with whom they have an ongoing relationship, or will they wait until discharge to contact their PCPs? One hopes that offering patients ready access to their hospital record will foster trust and facilitate a positive relationship with hospitalists. But notes could also foster confusion and distrust, particularly if patients feel out of the loop and perceive differing opinions among those caring for them.

We anticipate that transparent records will stimulate hospitalists, PCPs, and other caregivers to improve communication throughout the patient's hospital stay. We know that medical errors occur with alarming frequency in all care settings, and unfortunately electronic medical records make it easier to spread erroneous information widely. As providers we are both morally and legally responsible for eliminating such errors, inviting the patient (and family) to review the chart may help prevent mistakes well before an adverse outcome ensues.

OPPORTUNITIES FOR IMPROVED CARE

Open notes will be viewed by many as a disruptive change, and the best strategy for adapting will be to move proactively to create policies that establish clear guidelines. Consider the following strategies:

- Draw on complex provider notes that may include potentially alarming differential diagnoses as an opportunity for engaging and educating the patient and caregiver.

- Try to avoid jargon and wording that patients may find objectionable, such as "patient denies," "poor historian," or even "obese." Instead, use more situational wording, such as "the patient was unclear on his history."
- Avoid abbreviations when possible. They are a frequent source of confusion among clinicians, let alone patients.
- When it is likely that a treatment may not succeed or a diagnosis may prove wrong, address contingency plans in your notes. Where possible, express likelihoods in terms consistent with the patient's level of comfort with numbers.
- Teach trainees to review notes with supervisors before signing.
- Explain to patients and families when they may expect to see your notes.
- Try rephrasing some of the technical content of notes. Move from "incr. Cr – FeNa = Prerenal, 1L IVF," to "Due to dehydration (creatinine rising to 1.8, and fena 0.8), will give 1L IV fluids." Although at first blush this seems like more work, short circuiting need for explanation may save the hospitalist or nurse time later on. And clarity may lead to important additional history from the patient, furnishing perhaps insight into how he or she became dehydrated.
- Expect patients to download, copy, paste, and forward your note. Document with this in mind.
- Discuss with providers concerns about potential medical–legal risks and how to address them.

OpenNotes offers a special opportunity for improving the patient experience after leaving the hospital. For example, providing patients and their families with a medication list may be helpful, but a note adding context to medications may drive the reasoning home and prove vitally important, especially for those faced with complex medical regimens who may have poor health literacy.[7] Moreover, though providers are learning to focus on patient and family education during the discharge transition period in the hope of minimizing rehospitalizations, time spent at the bedside may have little impact.[8] Methods to improve patient/family understanding are often time consuming,[9,10] and time is a luxury hospitalists rarely have. Providing patients full access to their providers' notes may mitigate confusion about salient aspects of the hospitalization or prompt timely questions, thereby facilitating a safe transition home.

Open access to notes should also help hospitalized patients engage a range of individuals well beyond those directly involved in their care. Patients will be increasingly likely to grant access to surrogates, whether through formal or informal mechanisms. Patients and their families may also forward notes to providers in other institutions, an activity that all too often falls between cracks. But such capabilities create both new opportunities and new challenges for hospitalists. On

the 1 hand, they may find themselves more often in the difficult position of trying to arbitrate differences of opinion within a family. Alternatively, family members or friends, including health professionals offering informal consultation, may prove invaluable in helping hospitalists and patients agree on a plan of care developed collaboratively by a wide range of individuals.

FUTURE WORK

Opening hospital notes to patients will affect both clinicians and patients, and the hospital medicine community should begin to consider its options:

- Should we establish a formal curriculum designed to help hospitalists compose notes that will intelligently and efficiently engage patients?
- Can we identify "best practice" techniques for preparing notes that engage patients and families without overwhelming them?
- How can we use such notes to assure respect for the individual needs of patients and their families? How can we best assure maintaining their dignity?
- How can we use open notes to support patient safety? Can they reduce malpractice claims?
- How should we handle unsolicited second opinions initiated by patients and families who shared open notes with providers and others outside the care team?
- Should we encourage hospitals to offer portal access to all patients, including those who may have only a brief, passing relationship with the institution?
- What patient portal functions could best assist patients and families in understanding the content of inpatient notes?
- In the rapidly changing inpatient environment, how should we deal with patient-initiated requests for corrections and changes to notes?
- Should all hospital notes be opened? Should clinicians be able to hide specific notes? Clinicians worry about medical record access for patients with mental

illness; should patients with these or other specified conditions be exempted, and if so, how can one structure such processes openly and honestly?

The inexorable spread of fully open medical records requires rapid and intense intellectual scrutiny. Benefits will accompany risks, and unforeseen consequences are virtually inevitable. But this expression of transparency may soon constitute the standard of care in hospital medicine. We need to shape it carefully so that in inures to the benefit of both our patients and ourselves. Over time, we expect that inviting patients and their families to read notes openly will improve the quality of care and promote patient safety. We should take full advantage of such opportunity.

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