

Musings on Patient Safety, Processes, and HIT

By Barry P. Chaiken, MD, MPH

While working on a consulting project in Chile, I connected with representatives from the Universidad Andres Bello who requested an interview to discuss my perspectives on patient safety and the role of processes and technology in delivering safe care. Here are some excerpts from that interview.

1. What are the current strategies and tools for patient safety that you highlight?

This is a very broad question. Patient safety strategies must be grounded in the capabilities of the organization, meaning they must take into account the existing resources—people, facilities, equipment, information technology—available to the provider organization. Starting with simple things first makes the most sense—hand washing, recording incidents under a culture focused on finding the causes of errors rather than looking to assign blame, checklists, and standardizing care and recording outcomes. Once these strategies are applied, organizations can look to examine and revise processes to make care safer. Again, as a first step, a culture that is focused on rooting out causes of errors rather than looking to blame an individual is most important. Only then can processes be objectively examined and revised to reduce the probability of the error occurring again in the future.

2. What are the factors that currently affect the management and safety of the patient?

As noted earlier, the culture of patient safety in the organization has the greatest impact on safety. Organizations that discourage the reporting of errors, through the punishment of clinicians who either commit or report

errors (e.g., peer pressure can intimidate staff from reporting an error), will be unable to learn the root causes of those errors and take steps to prevent their reoccurrence. In addition, a poor culture encourages staff to cover up errors,

work to blame others for errors, and feed an environment of distrust among teams that in contrast should be working together to prevent errors. Organizations that are able to establish a positive culture of patient safety can then establish procedures to identify errors, tabulate them, research their root causes, and revise processes to prevent their reoccurrence.

3. How can a cultural change be made in health organizations to increase the levels of patient safety?

Change must always come from the top leadership in an organization. In addition, no one can be “above the law,” meaning every staff member—irrespective of their prominence, revenue they generate for the organization, or political connections—must be held to the same standards set for others. If such a person commits an error, it requires reporting as it would for any other staff member.



The most difficult and important principle to establish when performing culture change is to remove staff fears of punishment for committing or reporting an error (this does not include acts where staff intentionally hurt the patient). Once established, this principle must be maintained at all cost as a breach of this “rule” will cause the entire system of trust to collapse. Once that happens, it will be very difficult to reestablish the proper culture to enhance patient safety through the activities already mentioned.

4. To what extent do standardized and automated processes for healthcare organizations help reduce costs by using resources more efficiently?

Standardizing and automating processes provides two very valuable contributions to efficiency and safety: 1) It eliminates those processes that have been deemed to be inefficient or unsafe, and 2) It allows the collection of outcomes that can be used to search for potential improvements in the processes. Simply, standardizing processes that are deemed to be efficient and reduce costs inherently generates outcomes that achieve desired results.

5. When using information technology in healthcare, what are the best results for patients?

Information technology in all its uses must focus on improving the care of patients and their experience interacting with staff for both clinical and nonclinical activities. As the knee replacement must be without errors, so must the communication in scheduling an appointment or paying a bill. Patient access to their medical record must also be easy and user-friendly. If the patient experience is of high quality, then the clinical and financial outcomes of the patient will be equally of high quality.

6. There is technology that allows organizations to manage staff workload. Could you go deeper into this topic?

Systems for managing clinical workloads fall into three areas: 1) simple diagnosis and procedure code-driven assessments, 2) clinical staff acuity reporting (e.g., nurse assessments), and 3) information technology

systems that collect data from multiple sources (e.g., EMR, ADT) to assess predicted daily workload. Use of simple diagnosis/procedure codes is fraught with

many problems, including its little correlation with patient care needs on a specific day. For example, a knee replacement patient requires more nursing time Day 1 postop than on Day 2. Clinical staff acuity reporting also has problems. As these systems are very subjective—reporting is done by the nurse caring for the patient—there is much opportunity for bias in reporting and gaming of the system. Systems that use technology provide the most objective assessment of workloads because they use multiple data points available from a medical record (e.g., orders, test results, and patient characteristics such as weight) to determine the future patient needs and workload requirements in the near term. These systems adjust daily based upon their ever-changing data inputs, and therefore more accurately reflect daily patient workloads. During system implementation, organizations customize them to

reflect the capabilities of the organization as well as standards of care in their locale. This customization ensures that the system best reflects how care is delivered in each region and properly accounts for the available organizational resources.

THE GOAL IS TO USE HEALTHCARE INFORMATION TECHNOLOGY TO IDENTIFY THE BEST CARE PROCESSES AND USE THE TECHNOLOGY TO ENSURE THAT THESE BEST PROCESSES ARE UTILIZED WORLDWIDE.

7. Finally, how do you evaluate the development of healthcare information technologies worldwide?

The world is still learning how to best utilize information technology to deliver patient care. Nordic countries seem to be ahead of most of the world in utilizing information technology effectively. The United States has greatly expanded the use of information technology in delivering care, but its fragmented reimbursement systems—how care is paid for—greatly interfere with its ability to obtain value from its investment in these systems.

Information technology systems are evolving. The goal is to use healthcare information technology to identify the best care processes and use the technology to ensure that these best processes are utilized worldwide. In addition, as new medical knowledge accrues, new best processes can then easily be distributed so that everyone follows the best standards of care available. This will help ensure the delivery of safe, high-quality care while utilizing the least amount of resources. *

Barry Chaiken is the president of DocsNetwork Ltd. and has more than 25 years of experience in medical research, epidemiology, clinical information technology, and patient safety. He is board-certified in general preventive medicine and public health and is a fellow, and former board member and chair of HIMSS. He is currently an adjunct professor of informatics at Boston University's School of Management. Chaiken may be contacted at bchaiken@docsnetwork.com.