# in my VIEW...

Personal perspectives to stimulate thinking, change, and even controversy ...

# Impact of Technology on Quality and Customer Experience

This article begins with an analysis of how technology affects communications between healthcare providers and patients; it reflects the author's real-life observations and discussions with physicians—both as a staff member for a healthcare organization and as a patient. The second portion of the article carries those considerations forward, providing examples of how technology impacts other industries and situations. This segment offers the views of a seasoned Lean Six Sigma Master Black Belt with extensive experience in process design and development.

## The Healthcare Perspective
Newton Moore

In the news recently, Virginia Governor Ralph Northam's medical school yearbook picture was displayed, causing an uproar and reaction regarding healthcare professionals' attitudes concerning race. Dr. Damon Tweedy's book, *Black Man in a White Coat*, also shines the spotlight on healthcare disparities of African Americans in the United States. From my experience, there is one thing about which I am clear; without a quality discussion between patient and physician, medical care suffers. Any biases or other similar types of issues that can affect the practitioner's perspective are likely to undermine patient-physician interactions. For patients of color, different gender, or other sources of diversity, this disconnection between the healthcare provider and patient may undermine the communication process. How often are physicians or other healthcare professionals distracted by issues that interfere with the critical communication process between them and the patient?

It occurred to me that the technology used in the healthcare processes might be a distraction impacting communications. I have noticed that multitasking is often required in order for healthcare professionals to obtain the medical records and data they need, and I believe that strains the communication process. Furthermore, I wondered if the process of referring to data from these technological systems might be modified to support better communication. I talked to physicians about this possibility, and I learned that many of them felt awkward when they had to turn away from the patient to look at a computer screen.

Facilitating quality conversations between physicians and healthcare providers is important for all people. I believe that those interactions are effective only when trust exists between the participants and establishing that trust in the healthcare system not only needs to become a greater focus but also needs to involve improved ways of dealing with biases and other factors that build diversity-based gaps.

As an example of this issue, let's focus on a patient's visit to the doctor's office and his/her interactions with the care providers, who are using technology to document their findings. The typical patient's story might be something similar to the description below.

The patient arrives at the doctor's office, checks in, and updates his/her demographic data on an electronic tablet. After sitting in the waiting room, the patient is led back to the examination room, where the nurse or other practitioner confirms why the patient made the appointment, records symptoms, and measures vital quality indicators. The patient notices that the nurse is partially listening to his/her responses while also fiddling with data entry into the system. Suppose that the patient shares that his/her left foot hurts and that the pain seems to be persistent. While providing this information, he/she observes the nurse focusing on the computer screen and typing in data. The caregiver responds with a question, "Did you say it is your left foot or your right foot?" Resigned to answering the question previously asked and answered, the patient restates, "My left foot," hoping the caregiver is paying attention and is truly focused on documenting accurate information.

Many of us have experienced this situation. If the patient is bilingual, a different gender, a different race, or is obviously different from the practitioner, his/her perceptions might misinterpret the experience. Customer experience is important to

healthcare providers who want the best for patients; however, healthcare organizations need to ask questions such as, "How will a person, who doesn't trust the system, feel about the intrusion of technology in the diagnostic process?" The answer needs to be based on an understanding of how to maintain trust-based, effective communications while simultaneously documenting critical healthcare-related information. The key to success would seem to be differentiating the two objectives in a way that meets both of them but not at each other's detriment.

## The Perspective From Other Industries and Processes
Azizeh Elias Constantinescu

The heart of ensuring effective patient care and safety is built on the interactions between patients and providers, which require a trusted relationship, proper diagnostics of symptoms, as well as appropriate treatment and follow-up care. This situation is not exclusive to healthcare; however. When dealing with diversity-related characteristics, a lack of trust can become a barrier in the exchange of important information in any industry or process. As a quality improvement practitioner, I see this dynamic often presented across functions or departments; my task is to shift the focus from emotional responses (which often are unconscious) to the process itself. That process may involve diagnosing an illness, determining how to improve the immigration system, figuring out how to enhance business performance, or a wide range of other concerns.

Based on my experience, I suggest that designing processes with a focus on critical-to-quality characteristics, reflecting both customer and business expectations, is essential to success. So is ensuring that those processes flow in a way that fosters effective and efficient communication.

It's reasonable to ask, however, whether the approaches suggested for healthcare also build trust and reduce the risk of bias interfering with communications in non-healthcare settings. In many industries, technology captivates people, and the focus of their attention shifts from the process to the tool. I have seen this many times and the following three examples are an illustration:

- Many people who are learning the Lean Six Sigma methodology become deeply immersed in the variety of tools that are available for use during projects. There is no doubt that these tools, which represent a technological approach—even when they don't involve computer software—are incredibly useful. In the practice of Lean Six Sigma, however, it's common to hear Master Black Belts and other seasoned practitioners say, "It's the mindset that is important to project success, not the tools." The tools provide a framework for decision making that is based on facts, data, and analysis. Improvement only occurs when the proper decisions are made, however, and that requires communication that not only shares the analytical results but also ensures understanding of the findings' interpretations and potential applicability to the problem being solved. Without trust and a well-developed communication process, risk of making an incorrect decision or taking far longer to make a decision increases substantially.

- Much of my work involves learning and development, and I often hear other professionals working in this arena talk about the software and content housed inside it—in other words, the technological support systems. Just having that system in place doesn't increase staff members' knowledge, skills, and capabilities, however. Instead, learners must trust instructors, coaches, and mentors, and a well-designed, appropriately interactive communication process is necessary to make that happen.

- Similarly, human resources practitioners talk about software and applications used to record interactions. This seems to undermine one of the essential purposes of this function—working

with staff members to address their needs so that they can contribute fully to the organization. Clearly, technology is very valuable for tracking the many metrics associated with human resources management, but only communication that focuses on the staff member, avoids bias, and facilitates interactive dialogue can ensure this purpose is achieved.

Technology captivates us and our focus tends to shift toward it and its features, rather than emphasizing the work that needs to be accomplished and the required quality results. I believe that work is augmented by technology but enabled by people. The discipline and practice of effective and efficient process design and execution addresses these requirements holistically, facilitating the communication that is necessary to build commitment to and compliance with improved processes. Based on that understanding of the work, technology can be inserted deliberately at clearly defined process points without undermining communications. Furthermore, the design of the actual communication process can include steps to ensure that the effect of unintentional biases and other factors, which negatively impact communications, can be reduced or mitigated.

## Conclusion

The old adage says, "There is a time and a place for everything." In the case of building trust between patients and providers, in order to improve the quality of care provided, the use of technology needs to be incorporated into the provider-patient interaction process in a way that enables building trust and improving communication and outcomes. We recommend focusing on designing a process that meets these goals and is executed properly as one way to improve communication outcomes.

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Newton B. Moore has led organizational development initiatives for his organization over the past four years. Prior to that he led IT, nursing informatics, and quality initiatives at Lurie Children's Hospital. Moore also has been involved with corporate and university training related to quality compliance, business technology, and communication. Moore is certified as a Lean Six Sigma Black Belt. For more information, he can be contacted at **nbmoore@sbcglobal.net**.

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