A Nudge in the Right Direction

New technology can guide patients and providers to better decision-making

By Anthony J. Montagnolo

When does a shove deserve a nudge? Our health care system has been shoved in new directions. Insure more people, but receive less reimbursement. Improve quality, but lower costs. Invest in high-tech care, but only if it is high-touch care. Innovate but standardize. Get lean. And fast.

But platitudes, hectoring and politics don’t guarantee effective change or even change at all. Effective change in health care will require a harmonious confluence of people, process and technology.

We recently spent a couple of hours talking with a hospital system chief executive about the latest technological advances listed in ECRI Institute’s “2014 Top 10 Hospital C-Suite Watch List.” But although we expected the usual conversation about emerging technologies and patient outcomes, we ended up discussing the challenge of creating that perfect confluence.

“How do you know which technologies will make a true difference?” was intertwined with other questions, including “How do we get employees to change and adapt to new processes and goals? What makes people change? What drives us to move differently when technology, training, education and incentives have trained us to succeed one way and now we are expected to succeed in a different way? And how does technology play a vital role in enabling or driving that change?”

That’s when I recalled Nudge, an excellent book by Richard H. Thaler and Cass R. Sunstein. The authors promote the notion that we need to think differently about how people make choices and how to influence and motivate ourselves and others to make better choices, whether it is investing in new technology or stocks or helping our employees adjust to different work processes or improve their own health.

Its central idea is that if you wish to change a system or individual, current behavioral science research helps us to create a “choice archi-
tecture” that nudges people to make better decisions without the need for mandates and absolute control. Better information and a clearer understanding of human behavior combine with technology and social forces to nudge us all into a better future. As an example, the digital speed display signs on my daily commute tell me instantly what my speed is as I pass by. It’s not a technology that controls my speed, but it provides instant feedback and a dose of guilt, social pressure and fear of being caught to nudge me into a slower speed if it exceeds the limit. It’s certainly effective on me. I slow down.

Not Just Patients
That intriguing two-hour conversation with the hospital CEO drove me to think differently about technology, nudges and the C-suite Watch List. Several of the technologies on our list nudge us, not just in a new direction clinically for individual patients, but also in a direction that seeks to improve our health system more holistically. More than ever, this year’s watch list puts people, technology and process innovation at its core. Here’s a brief glimpse at a few of the technologies on our list along with consideration of their meaning in the larger context of the changes we need in health care.

The Food and Drug Administration in 2013 approved the Sedasys computer-assisted personalized sedation system from Ethicon. Clinicians are increasingly using the sedative propofol in gastrointestinal procedures such as colonoscopies because of its faster onset and termination of sedation. This leads to faster patient recovery and potentially faster throughput.

Until now, this use of propofol required an anesthesiologist or nurse anesthetist to be present. This new system provides continuous monitoring of the patient undergoing sedation and then uses that information to adjust the levels of propofol and oxygen delivered to him or her. The approved labeling requires an anesthesiologist need not be in the room during a procedure. Therefore, not only might throughput improve, but costs could go down. And the positive nudge — better sedation and easier patient recovery are compatible with lower costs and more efficiency, making the dreaded colonoscopy a little less onerous for the patient — potentially improving compliance.

Another item on our list is less about a specific technology, and more about that confluence of people, technology and process improvement applied to a specific care area and patient population: emergency departments designed for the elderly. The statistics driving this new idea are compelling. The Centers for Disease Control and Prevention estimate that between 2010 and 2050, the number of people 65 or older will double to 89 million. Add to that the fact that older adults are more likely to end up in an ED than their younger counterparts and the case for more efficient and safer EDs seems obvious. Elderly patients provide some extra challenges in a typical ED setting.

For example, elderly patients are more likely to be taking multiple medications for various chronic conditions, are more susceptible to falling and may have a harder time communicating clearly in the often noisy and disorienting ED environment. Seniors Emergency Center at Holy Cross Hospital in Maryland is the first of its kind in the United States, with a separate specific area of the ED designed with special lighting, noise abatement features, flooring that minimizes slipping, and even telephones with bigger buttons. Staff are also specifically trained in geriatrics and how to communicate effectively with these older adults.

And the positive nudge: We begin to truly think of care less as individual acts by individual clinicians, but more as a “system of care” that patients enter for effective treatment. This systems approach is key. It acknowledges the obvious — we can tell you, in exquisite detail no less, what to do — but if you cannot truly comprehend it, the advice falls on deaf ears and patient outcomes suffer.

A third advancement is the overarching and rapid development in the field of data mining and its application to health care. It’s the ubiquitous big data revolution applied to health care. As our ability to capture new data and connect together new and old data advances, the possibilities to improve clinical outcomes, improve patient flow, reduce costs and create more satisfied patients increase in many ways.

If we more closely tracked and managed patient flow through our systems, for example, could we deliver care faster, better and cheaper? Or, could we do a better job of monitoring patient clinical characteristics to find new ways to predict and then prevent post-surgical blood clots? In some sense, the possibilities for improvement seem endless.

Of course, turning all this technology and data into action is another thing altogether, as my hospital CEO friend reminded me. What will it take? Well, perhaps it is not so much about trying harder to improve and motivate. Instead, as Thaler and Sunstein suggest, it’s about trying differently. Perhaps our job is, after all, not to shove but rather to nudge each other into a better future for health care. So, when does a shove deserve a nudge? Now. T

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