Clinical transformation and Mr. Lincoln’s “t-mails”

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We hear about electronic health records, computerized physician order entry, “just-in-time” information delivery, telemedicine, picture archiving and communication systems, clinical decision support, the Eclipsys Enterprise system, and radio frequency identification. Anticipating the technology applications and computer literacy expectations that may accompany clinical transformation, “an ongoing, systemwide effort to change clinical processes, practices, and technologies to enhance Baylor’s ability to provide a seamless experience for the patient” (1), can be overwhelming. Perhaps we can find encouragement in Tom Wheeler’s new book, Mr. Lincoln’s T-Mails: The Untold Story of How Abraham Lincoln Used the Telegraph to Win the Civil War (2) (Figure).

The telegraph was less than 2 decades old when the Civil War broke out in 1861. Yet the contrasting responses of the South and North to the acceptance and implementation of the telegraph foreshadowed the outcome of the war. The South held tightly to the ways of the past to support its economic infrastructure and political autonomy. The North looked forward to a new technology-driven economy with advances such as the railroad and telegraph providing connectivity in transportation and communication. Wheeler argues that while the South dabbled in constructing railway and telegraph delivery systems, it was reluctant to cross state lines to create an integrated system. In contrast, the North did not hesitate to pursue a system of seamless connectivity that ignored state lines.

For a brief period the longest rail line in the nation emanated from Charleston, South Carolina. Responding to the threat of the contamination of local customs and states rights by such high-speed intercourse, however, Southern state legislatures enacted laws prohibiting rail lines from crossing state borders. In contrast with the North, where trains sped across political boundaries, Southern interconnection was inhibited. It was a myopia that would return to haunt the Confederacy. . . . The clash between isolated independence and technological interconnection affected the telegraph as well (2, p. 27).

Thus, the continuous flow of railroad and telegraph capabilities across state lines is credited with winning the war for the North. Likewise, clinical transformation seeks to implement processes and practices that will provide consistent care across all facilities in the Baylor Health Care System (BHCS). A systemwide clinical communication infrastructure at each hospital to support Best Care and order set implementation and adoption is an example of Baylor’s commitment to standardizing best practices across the system (1). Wheeler’s book provides a wonderful analogy for us with his premise that “Mr. Lincoln’s T-Mails are a chronicle of how one man, even while confronted by a civil war, applied new technology to define a new kind of electronic leadership” (2, p. xxi). Lincoln became an early adopter of the new telegraphic technology and used it to influence outcomes.

Even though Lincoln’s telegrams have been thoroughly catalogued, scrutinized, and parsed as historical evidence, Wheeler studied them for a new purpose, one especially applicable to our digital age. The uniqueness of this book is in demonstrating how Lincoln scaled the learning curve of technology to accomplish his mission. This is not unlike the challenges set before us with the technological innovations inherent in clinical transformation, which was designed to help BHCS achieve the consistent delivery of safe, timely, effective, efficient, equitable, and patient-centered care. We have been promised that as processes and practices change, technology and the training necessary to use it will be implemented to support these new initiatives.

Just look at how far we have come. Only a few years ago most of us weren’t using e-mail, cell phones, PowerPoint presentations, or BlackBerries, and most of us had not heard of...
the World Wide Web 1.0. Now, try going to a meeting without seeing one or all of these technologies. And think of the impact technology has had on our language. I used to type; now I key. A browser was someone who enjoyed libraries or window shopping. A crash involved a car, a patch was for my tire, boot was a noun, and a virus was something I talked to my doctor about, not my help desk. YouTube is giving everyone with a computer and camera the opportunity to have their 15 minutes of fame. Now we anticipate Web 2.0—the interactive Web with social networks like MySpace and Facebook, information sharing through blogs, and the collaborative opportunities of Wikis (see Wikipedia, the shared encyclopedia, at www.wikipedia.org). We can have our information delivered through webcasts, RSS feeds, or podcasts and get an advanced degree through distance learning in a virtual classroom. We have learned to adapt to and even embrace many of these technologies, and now most of us could not imagine giving up our digital gadgets.

Abraham Lincoln saw an opportunity to do something never before possible during war. He was able to communicate immediately with his commanders in the field and receive updates by the minute. The telegraph closed the information gap by eliminating distance as the controlling factor in the exchange of information and allowed the president to maneuver his armies in the field in almost real time. “Abraham Lincoln embraced the new electronic message capability and thus imposed his leadership in a manner and to a depth never before permitted any other leader in history. The telegraph changed the nature of national executive leadership and provided Abraham Lincoln with a tool that helped him win the Civil War” (2, p. xvi).

Clinical transformation will bring with it new technological tools that will require an investment of time to learn and take many of us beyond our comfort zones. If your concern is new technology and how it will affect your ability to do your job, take a lesson from Mr. Lincoln. “Lincoln's early-adopter instincts, coupled with his being unburdened by the old dogmas, allowed him to outperform his generals in the ability to see change and harness it to his purposes” (2, p. 5). Of course, there were the less-than-enthusiastic generals who were not supportive of the technology that enabled instant communication with their commander in chief. It is suggested that this reluctance was due to their unwillingness to give up their autonomy in the field for the reward of gaining insight into the broad scope of the war campaign through telegraphed messages. Instant messaging enabled Lincoln to unify the troops in the field for military advantage through a virtual presence. An added benefit of instant communication was that newspapers were able to give timely updates on the war's progress, keeping the people engaged at an information level never before experienced during wartime.

General in Chief Henry Halleck did not embrace the new electronic world and “unlike the president, Halleck had failed to internalize the transformational impact electronic messages had on the nature of command” (2, p. 113). As a result Lincoln continued to suffer from a lack of leadership in the field, for “despite all this new capability, Henry Halleck, whose job as general-in-chief was to make decisions, refused to step forward and use the telegraph to take command” (2, p. 113). Is it any surprise that Halleck's nickname was “Old Brains”? Yet even as Lincoln discovered, technology is only a tool, and success in any endeavor is dependent on the character of the people engaged in the process. The same is true today. “Technology was important, but victory depended upon having the right people in command. Ulysses S. Grant's telegrams didn't whine like McClellan's, nor play bureaucrat like Hooker's and Rosecrans', nor procrastinate like Burnside's. In fact, Grant telegraphed as little as possible. He just delivered” (2, p. 141).

Progress is often the result of competent people implementing new tools to grasp an opportunity. Likewise, the technological innovations of clinical transformation will provide growth opportunities at BHCS. “Reliance on the telegraph was the culmination of a transformative process for both the president and General Grant. Such a transformation was proof positive how both men possessed the fundamental attribute of a great leader, and the absolute prerequisite for a wartime leader: the ability to grow and adapt in the job” (2, p. 144).

Our individual roles in clinical transformation will be different, but everyone will be given the opportunity to have an impact. Some, like President Lincoln, will be vision casters, able to see how technology will improve processes and make information connections never before possible. Some, like General Grant, will be early adopters, eager to respond to opportunities set before them to achieve a common goal. While Grant used the telegraph sparingly and perhaps did not choose to initiate communication with it, he is credited with responding in kind to Lincoln's innovative mode of connecting to his field generals. Transitional periods are typically marked by a blending of innovation with the familiar. Some, like the telegraph operator, will be implementers, learning new technical skills to facilitate processes.

The similarities between clinical transformation at BHCS and Mr. Lincoln's t-mails seem obvious. Be encouraged if you consider yourself “technology challenged.” Lincoln was 52 years old when he began using the telegraph in an era when new technology was much more of a radical change than the electronic challenges we encounter today. He embraced the chance to learn something new and apply it to make him more effective. That embracing was his genius. Seeing potential in applying new discoveries has always been the hallmark of a visionary.

Reviewing Lincoln's sequence of telegrams against the timeline of the Civil War is a remarkable study of learning, adaptation, opportunity, curiosity, and courage. Given what Lincoln accomplished in his short life, we should not be amazed that he possessed these innovative attributes. As we stand at the doorstep of steady technology improvement at BHCS, perhaps remembering Mr. Lincoln's t-mails will provide an incentive to press on.