It's All About Jobs

What would Steve do? Steve Jobs, the 20th century's greatest and most successful innovator, engrained that mantra into the heads of every Apple employee. Only those staff members who thought through problems the way Jobs did would offer solutions that were acceptable to their boss. Jobs relied upon his own research and intuition, not focus groups, to guide him. When asked about the research that went into the design of the iPad, Jobs replied "None; it's not the consumer's job to know what they want."

Although physicians employ the iPad in many clinical settings, the tablet computer functions as a front end to existing EMR and other clinical applications. The iPad is not an innovation in and of itself but a tool to innovation, and few healthcare information technology (HIT) vendors actively leverage the "innovation" inherent in the iPad in their clinical applications.

What Would Steve Do?

Therefore, we must ask ourselves, what would Jobs do in healthcare? First, he would not be constrained by current practice. Like hockey, solutions come from skating to where the puck will be rather than where it is. In addition, he would consider all problems together in an effort to create an "ecosystem" that binds one product with another, the same way Apple now threads together the iPhone, iPad, and iMac with iTunes

What would Jobs do in healthcare? First, he would not be constrained by current practice.

and iCloud. Jobs cherished style and ease of use, combining them with function and utility. Any Jobs-inspired healthcare application must be intuitive to use, support efficient workflow, and facilitate the delivery of safe, high-quality care to the patient.

Jobs' vision of integrated, beneficial products does not exist in healthcare today. Clinical applications function within silos struggling to share data with each other, with many incapable of doing so between different releases of the same application. In spite of the government's effort to develop and promote data exchange standards, health information exchanges struggle to achieve widespread use.

How do our clinical applications compare to the ease of use of an iPad? While most of our clinical applications require hours of training to achieve an even novice level of proficiency, the iPad does not require a users' manual. The iPad works seamlessly with the iPhone and iMac, while few if any of our clinical applications work together at all. This requires the writing of expensive custom interfaces and the deployment of single-sign on to glue them together in a Rube Goldberg sort of way. This leads to inefficient workflows driven by unintuitive user interfaces that satisfy the needs of no one.

What Should It Look Like?

Applying Jobs' thinking to healthcare requires us to envision what we want healthcare delivery to look like. This encompasses everything from wait times in physician offices to access, to actionable medical knowledge by both patient and clinicians. The entire spectrum of delivering healthcare at every

Any Jobs-inspired healthcare application must be intuitive to use, support efficient workflow, and facilitate the delivery of safe, high-quality care.

level must be looked at in its entirety, rather than as it is today within silos of points of care and episodic disease events.

Although only Jobs could create a vision for healthcare that accurately reflects his innovative genius, he inspires HIT leaders to apply his lessons. Although many areas require significant rework such as health information exchange, EMR user interfaces, and clinical decision support, Jobs' impact on what consumers do and how they do it forms a starting point for innovation in healthcare.

Follow Jobs

To follow Jobs, jobs—the tasks each healthcare worker is assigned and held accountable for—must be radically changed. Assigned staff duties driven by tradition and linked to professional titles must give way to care delivered by the most prepared, competent, and least expensive resource.

In this new healthcare delivery world, physician activities become more challenging on a cognitive level as other routine tasks such as drug dose recall, use of best-practice order sets, and drug-allergy checking become automated. Physician expertise is assigned to more important tasks including solving difficult diagnostic

problems, devising customized patient treatment plans, and influencing patient adherence to chronic disease care regimens. HIT applications matched intelligently to devices facilitate the workflow and focus physicians on the important tasks that leverage their skills and experience.

Work for nurses and other healthcare professionals changes dramatically, too. More tasks, formerly done by physicians or healthcare specialists, are completed by these professionals guided by innovative HIT. Such HIT places the right professional, with the right knowledge, in the right process, utilizing the right workflow to deliver the best evidence-based care to the patient. Care delivery is focused on patients and their needs rather than the requirements of poorly designed applications deployed on hard to use platforms.

It is difficult to imagine what healthcare delivery would look like today if Jobs applied his genius and vision to care delivery rather than consumer goods. He, as much as anyone, turned a work tool—the computer—into a personal device. Would he have put together a team that meshed together all the needs and capabilities of healthcare workers, patients, providers, and payors into a harmonious unified ecosystem of applications and devices that facilitated the delivery of safe, high quality, and efficient healthcare? Considering the political, social, and economic impediments to achieving such a result, it is unlikely he would have succeeded. Even so, I have no doubt that if Jobs chose that path, patient care would be better due to the marvels he would have created for all of us to use. |PSQH

Barry Chaiken *is the chief medical officer of DocsNetwork, Ltd. and a member of the Editorial Advisory Board for* Patient Safety

& Quality Healthcare. *With more than 20 years of experience in medical research, epidemiology, clinical information technology, and patient safety, Chaiken is board certified in general preventive medicine and public health and is a Fellow and former Board member and Chair of HIMSS. As founder of DocsNetwork, Ltd., he has worked on quality improvement studies, health IT clinical transformation projects, and clinical investigations for the National Institutes of Health, U.K. National Health Service, and Boston University Medical School. He may be contacted at bchaiken@docsnetwork.com.*

REFERENCES

Chaiken, B. (2007). Revolutionary HIT: Cure for insanity. *Patient Safety & Quality Healthcare*, 4(6), 10-11.

Markoff, J. (2011, October 5). Steven P. Jobs, 1955-2011; Redefined the digital age as the visionary of Apple. *The New York Times*.