INSIGHT

TAPPING INNOVATIVE SOLUTIONS & TECHNOLOGY AT JOHNS HOPKINS MEDICINE

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Khanna's Advice for Managing Online Physician Reputation

Ask Johns Hopkins Medicine physicians which of their colleagues has a strong online presence, and one of the names that you're likely to hear is that of orthopaedic spine surgeon A. Jay Khanna.

A. JAY KHANNA
Orthopaedic Surgery

AARON WATKINS
Marketing and Communications

As a professor of orthopaedic surgery and the spine surgeon and division chief for the national capital region for Johns Hopkins' Department of Orthopaedic Surgery, Khanna views his online footprint as a critical element of building his practice. It is so important that he has positioned iPads at checkout stations in each of his practice locations.

Those iPads do more than just gather feedback. Unique software actively encourages patients to rate his performance and post their comments on third-party websites, such as Vitals and Healthgrades, for all the world to see.

This level of transparency may seem intimidating, but Google Jay Khanna or read his patient reviews and you'll see the benefits. The review and professional sites all point Web searchers toward his Johns Hopkins Medicine profile.

Khanna recently authored the chapter "Social Intelligence About the Patient Experience" in the book *Applying Social Media Technologies in Healthcare Environments*. Aaron Watkins, director of internet strategy at Johns Hopkins Medicine, sat down with Khanna to discuss the book and get Khanna's top four tips for how to build your medical reputation's online presence.

1. When a patient asks how they can help you, ask them to write a review on Vitals.com. Vitals is one of the few physician rating websites where users can give a written review along with their ratings.
2. Take a few minutes to review your Johns Hopkins online profile page and confirm that information, such as your phone number, address and clinical interests, are up to date.
3. Put iPads or other devices in waiting rooms or at the checkout desk. It takes 30 to 50 seconds for patients to complete a survey that provides invaluable real-time data. If there's a need for service recovery, your office can do that immediately.
4. Operational issues often impact physician ratings as much as the interaction with the physician. Make sure staff members know exactly what questions are on the survey. When they understand the importance of their role in the patient experience, they bring their A-game.

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Read more of Khanna's tips and the rest of the interview online on the Left-Nav blog at hopkinsmedicine.org/reputation-management.

Note: Khanna is an advisor to Binary Fountain: binaryfountain.com/company/

Plastic Surgery Online Tool Could Transform Resident Training

Carisa Cooney knew it was coming: a brand-new accreditation system to evaluate graduate medical education in 26 different medical specialties, including plastic surgery. So she and colleagues developed an online tool to deal with it.

An assistant professor of plastic surgery, Cooney says plastic surgery residents now have 36 milestones to reach before graduating. Moreover, each milestone contains 10 to 20 separate benchmarks on which resident progress is assessed.

Aware that the milestones were down the road, Cooney and colleagues Rick Redett, Scott Lifchez and Damon Cooney brainstormed a concept in 2012 to manage residents' self-assessments and the attending surgeons' evaluations of resident performance.

Thanks to a grant from the Johns Hopkins University School of Medicine's Institute for Excellence in Education, they began working on a tool that utilized secure Web portals and hand-held technologies to quickly collect data.

"Ideally," she says, "residents could simply hand the mobile device to the attending, who could complete the 5-point scale assessment in just a few taps or clicks."

The idea is simple: Right after completing a surgical procedure, like a nipple reconstruction, residents could complete their own self-assessment and then ask the attending surgeon to evaluate their performance.

This way, the evaluation can be reviewed immediately and discussed with the attending surgeon if there are any questions. It is also an avenue to prompt communication between residents and attending physicians.

"If residents understand what the attending wants or expects, then that will help them get to that level of competency more quickly," she says. "We're also trying to use the tool to more objectively rate the experience."

If the attending is not physically present at that moment, the tool has the capability to email the attending surgeon.

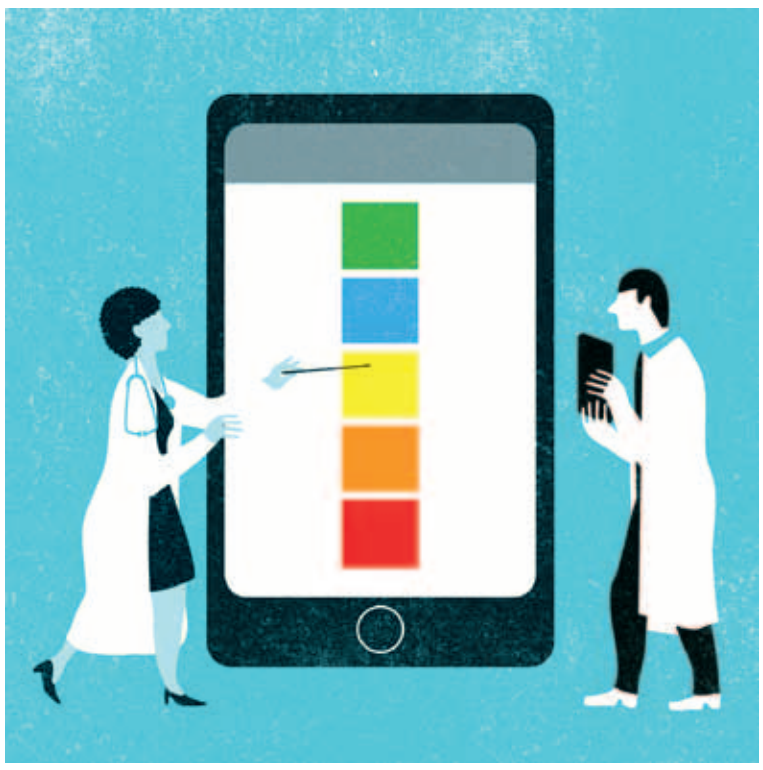
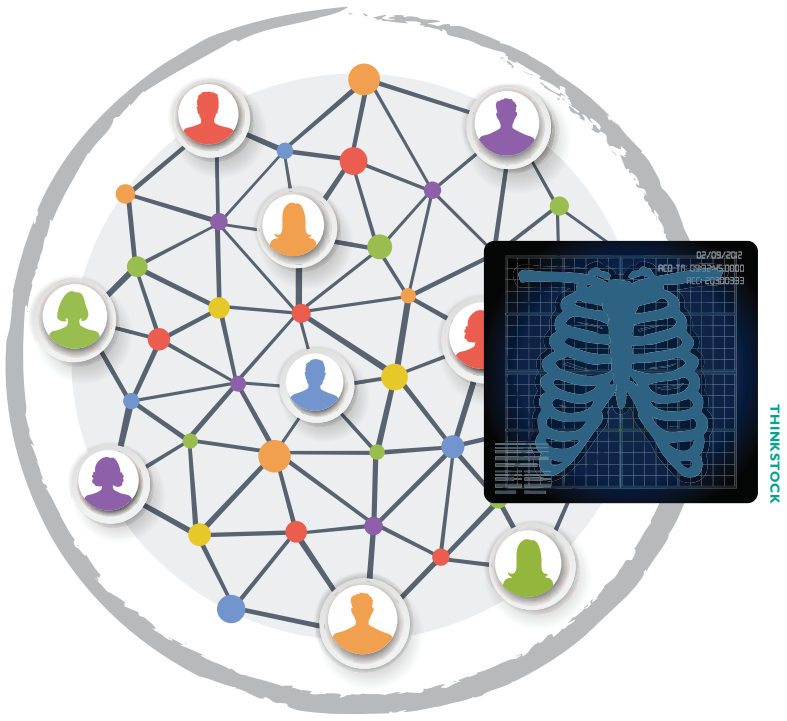


ILLUSTRATION BY ANDRÉ DA LOBA

The Johns Hopkins Department of Plastic and Reconstructive Surgery has been using the tool since January 2014. So far, 38 percent of residents have reported an increase in immediate feedback since using the tool. If successful, the format could be implemented nationally by other procedure-based training programs that must start using the new accreditation system.

E-Learning for Radiologists Makes Global Impact



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Lectures, CT scans and research notes find new purpose in the transfer of knowledge from the Web to radiology professionals around the world.

When he logs in to Google Analytics, Elliot Fishman sees that CTisus.com hosts visitors from 180 different countries. "More than 53 percent are outside of the U.S., from places as far away as Senegal, Madagascar and Bermuda," he says.

As the director of diagnostic imaging and body CT at Johns Hopkins and the 2014 Minnie Award recipient for the Most Effective Radiology Educator, Fishman has written eight textbooks and more than 1,000 journal articles, and he has produced over 1 million pieces of content for CTisus.com (pronounced "CT is us").

CTisus is an educational website developed independent of Johns Hopkins Medicine by Fishman and colleagues in 2000. Today, it has more

ELLIOT FISHMAN
Radiology

than 100,000 registered users—mostly radiology professionals—seeking the latest expert information in their field.

"It's our mission at Johns Hopkins to provide information," says Fishman. "We have so much state-of-the-art material, and we share some of the radiology portion here for free."

A main feature of the site is an image library with more than 200,000 CT scans. Each day, new images of everything from the brain to the bowels are posted and include Fishman's diagnoses, ranging from an intracranial aneurysm to lymphoma.

If members have a question, they can post it to "Ask the Fish," an online discussion forum where Fishman routinely interacts with his readers. Every week, CTisus features one new video lecture; it now offers more than 700 educational videos. Much of the website content also finds a home in one of nine CTisus mobile apps.

How does he find time to do it all? "I am invited to speak at different meetings," says Fishman. "When I come back, I record the lectures for the website. There's a universe of connectivity among all the things I do."

Learn more at CTisus.com.

Text and Voice Messages Remind Patients to Use Glaucoma Medicine

Did you take your medication today? By linking electronic personal health records with text and voice messages, ophthalmologist Michael Boland wants to help patients answer in the affirmative.

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Research shows people with chronic conditions like glaucoma or diabetes can benefit from a friendly reminder to take their medications. Boland, an assistant professor in the Wilmer Eye Institute, says asking medical staff members to provide these reminders has shown to be an effective—yet tedious and expensive—solution.

With a background in engineering, Boland says, "It seemed like a logical extension to use automated text and voice reminders."

He tested his idea through a study of patients currently using eyedrops to lower the pressure in their eyes to alter the progression of glaucoma.

In the first phase of the study, he used an electronic cap to record when the medication bottles were opened. Based on the readings, he found a significant proportion of patients did not use the drops as prescribed. In the second phase, he created a link between the HealthVault personal health record—like MyChart in Epic—and MEMOTEXT, a company that generates voice and text reminders.

To receive reminders, the patients accessed their list of medications in their personal health record, where they could choose the days and times to receive the reminders and whether they preferred text or voice message reminders. Those preferences were then sent to MEMOTEXT, which generated the reminders.

In the end, Boland found the reminders did increase the number of patients who adhered to taking eyedrops by almost 20 percent. Now, he is working through the details, with the hope of integrating medication reminders into MyChart at Johns Hopkins. "This could be implemented with a minimum amount of effort on the part of medical practices and patients," he says.

In addition to medication reminders, the same interface could send educational materials, such as tips, strategies or general disease information, to patients when requested.

Armstrong Institute Helps CDC Go Digital with Ebola Guidelines

Overnight, the Armstrong Institute for Patient Safety and Quality was transformed into something resembling a Silicon Valley technology startup. The typically clean, organized work area was a whirlwind of Post-it notes, video cameras and mobile technology.

The flurry of activity was in response to a request from the Centers for Disease Control and Prevention (CDC) for Johns Hopkins Medicine to lead the effort to create a series of Web-based learning modules to educate health care workers around the country on the proper use of personal protective equipment (PPE) when caring for patients at risk of contracting Ebola virus disease. The deadline for delivery was a scant five days.

The CDC wanted short step-by-step video clips to supplement the guidance on the safe use of PPE. An interactive component would enhance learning by allowing users to personalize their training and select the type of respirator and attire they wear.

"People are visual learners," says Ayse Gurses, a human factors engineer and patient safety faculty member with the Armstrong Institute. "To be efficient and effective, information must be presented contextually and visually to engage health care workers and help them retain the information."

Participants worked in teams to look at the procedures for donning and doffing—putting on and taking off—PPE from multiple viewpoints. "To pull this off, we needed human factors engineers, cognitive psychologists for the teamwork piece, anthropologists and sociologists for how people work together, and instructional designers and technology people to build it," says Peter Pronovost, director of the Armstrong Institute.

After review and discussion, the team identified where problems could occur in the processes and then drafted scripts. From there, the group relocated to a production studio, where the actors rehearsed and then went on camera. The result of the extraordinary collaboration—"Ebola Preparedness: PPE Guidelines"—is now available on the CDC's website and iTunes U.

"The product we produced for the CDC is critically important," says Pronovost. "But the bigger lesson here is what's powerful and what's possible when you bring diverse groups of people together from the government, the private sector and the public sector who can work together to solve these really big problems that our country and the world face."

WEB EXTRA
The Johns Hopkins University collaborated with the University of California and In Silico Solutions to build an interactive 3-D imaging toolkit that could speed up the creation of new drugs to treat or prevent Ebola virus disease infections. Read more at hopkinsmedicine.org/insight.

ILLUSTRATION BY UMBERTO MISCHI