Penn State team's QR code wins REACH Challenge

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"Real-Time Care Experience Feedback Using QR Codes," a Penn State project that allows hospital patients to inform hospital personnel of their experiences -- good or bad -- in real time, is the winner of the 2012 REACH Developer Challenge, sponsored by AcademyHealth and part of the Health 2.0 Developer Challenge.

"As a former health care provider, I have witnessed patients' confusion about why it was taking so long to see a doctor, and I have seen family members worried about their loved ones and unable to get information about them," said Deirdre McCaughey, assistant professor of health policy and administration. "Our application of QR-code technology will enable hospitals to say to patients and their family members, 'We care about you, we are listening to you, and we are willing to talk to you about your concerns right now.'"

The winning team included McCaughey; Dominique LaRochelle, 2009 alumna of the master of health administration program; and Shantanu Dholakia, Ashley Kimmel, Tejal Raichura and Latoya Tatum, graduate students currently in the program. Aamer Ghaffer, an information-technology developer, assisted with the project's QR-code technology.

McCaughey said that the team envisions hospitals and waiting rooms with placards on their walls designed like stoplights that read, "How are we treating you today?" People can walk up to the placard, use the QR-code applications on their phones to scan the appropriate area -- green for good, red for bad -- and be directed to a response-specific web

survey on which they can note their concerns and comments. Ideally, she said, hospitals would have a patient-experience response team on call 24/7 to attend to these concerns immediately.

McCaughey noted that not only will the application benefit patients, but it also will benefit hospitals.

"It is becoming increasingly common for people who are having a [negative experience](#) to tweet about it as they are waiting or receiving care or to blog about the experience afterward," she said. "So now, not only are these patients disappointed with the care they are receiving, but others who did not have the experience can read these tweets and blogs and be influenced by them. In essence, health care organizations are developing reputations via social media that they have little control over."

McCaughey said that this is a growing concern since patients' opinions can directly affect hospitals' revenue streams.

"Under the Value-Based Purchasing Program instituted by the Centers for Medicare & Medicaid Services, [Hospital](#) Consumer Assessment of Healthcare Providers and Systems surveys are sent to former patients asking for a rating of the patients' experiences and the quality of the care they received," she said. "HCAHPS patient-experience ratings account for a portion of the points hospitals earn for patient care, with earned points directly related to the reimbursement that hospitals receive from the Centers for Medicare & Medicaid Services."

Integrating [patient experience](#) and organizational reputation is of paramount importance, noted LaRochelle, who guided the team's practical application.

"Health care providers have a brand to promote and protect," she said.

"It's important to have a multi-faceted strategy to manage both promotion and protection; and that means managing to the communication forums used by patients and their families."

The team's QR-code application aims to ensure patients receive the best care possible while also helping hospitals receive the highest reimbursement possible from the Centers for Medicare & Medicaid Services. The group plans to continue working on the process to fully develop the protocol and currently is negotiating with select hospitals for beta-sites to test the application.

A proto-type test of the team's project, which beat out 17 other projects in the competition, will be showcased at the AcademyHealth National Health Policy Conference to be held in Washington, D.C., February 13-14, 2012. The group will receive travel support to attend the conference and will be presented with a $5,000 cash prize.

Provided by Pennsylvania State University