Breaking through Patient Education Barriers: Success through Individualized Mobile Tablet Education

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PURPOSE

Delivering effective patient education in today's complex health care environment of short stays and complicated medical and self care regimens requires staff buy-in, patient engagement, creativity, and efficiency in nursing workflow.

Utilizing tablet delivered videos for patient education allows for value-added nursing time to be utilized addressing questions and concerns that are instigated through the education, and for completion of teach-back to ensure understanding, rather than in providing a broad overview of a medical condition or self care.

The use of mobile tablet technology provides these benefits by inciting interest and engagement in both patients and care providers, allowing for easy modification and electronic tracking by care providers, and provides a mobile platform from which future enhancements can develop.

SIGNIFICANCE

Patient education is critical to effective patient centered care, allows patients to actively participate in health care decisions, and is an important aspect of preventing readmissions through producing the changes in knowledge, attitudes, and skills necessary to maintain or improve health.

However, nurses at our hospital had limited tools for education outside of written material, and they increasingly have less time to spend teaching patients.

Healthcare has discovered that lecturing patients is not sufficient, but instead, patients must receive individualized, repeated information that is assessed for understanding utilizing the teach-back method. Initial efforts to implement teach back were ineffective due to the amount of time and skill required.

Had Enough Time with Patients

Important Things Did Get Done
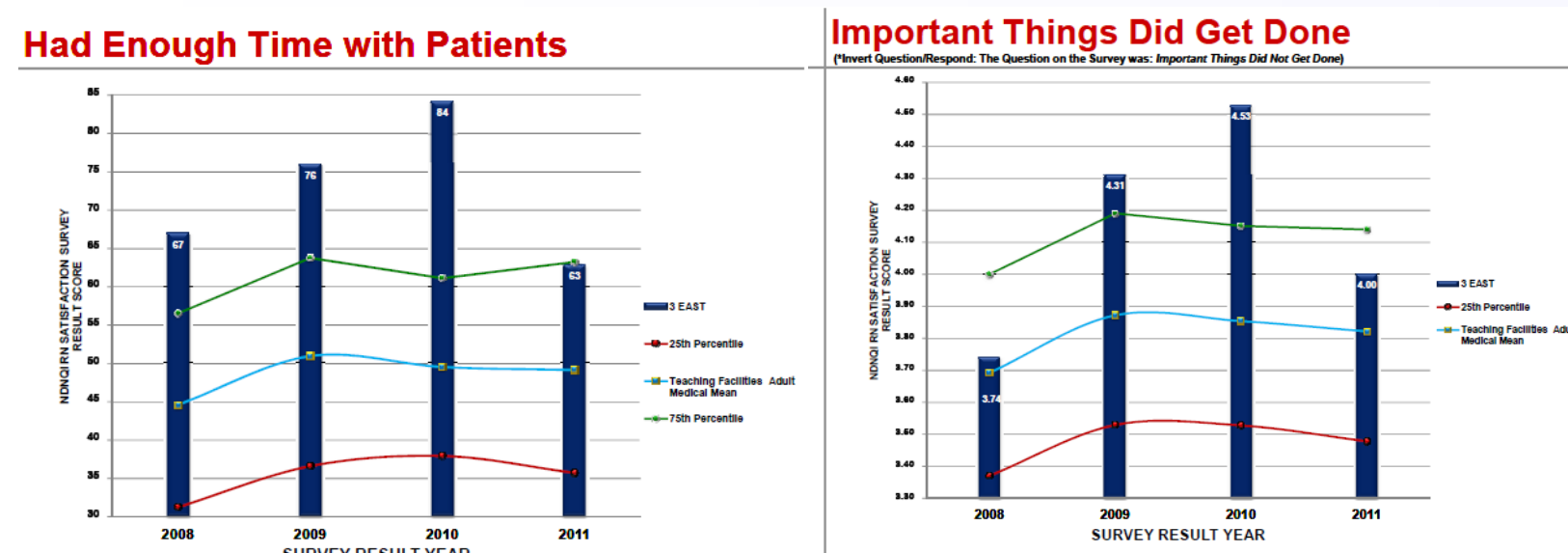
STRATEGY AND IMPLEMENTATION

Phase I:
Goals: To determine if videos delivered via tablet technology could be incorporated in nursing workflow and viewed positively by patients in the hospital setting.
Scope: 100 randomly selected patients received tablet education from 30 nurses on 3 units (Cardiac surgery, Cardiac medicine, and observation / thoracic) using 2 shared tablet devices per unit.
Method: RN Individually selected videos from 175 possible options

Phase II:
Goals: To determine if videos delivered via tablet devices would improve patient outcomes, and both patient and RN satisfaction.
Scope: All patients on the same 3 units receiving tablet education from all staff RN's using one tablet device per RN.
Method: Videos organized into one touch templates based on common diagnoses and procedures, shown longitudinally throughout hospitalization, with understanding assessed utilizing pre-selected teach back questions.
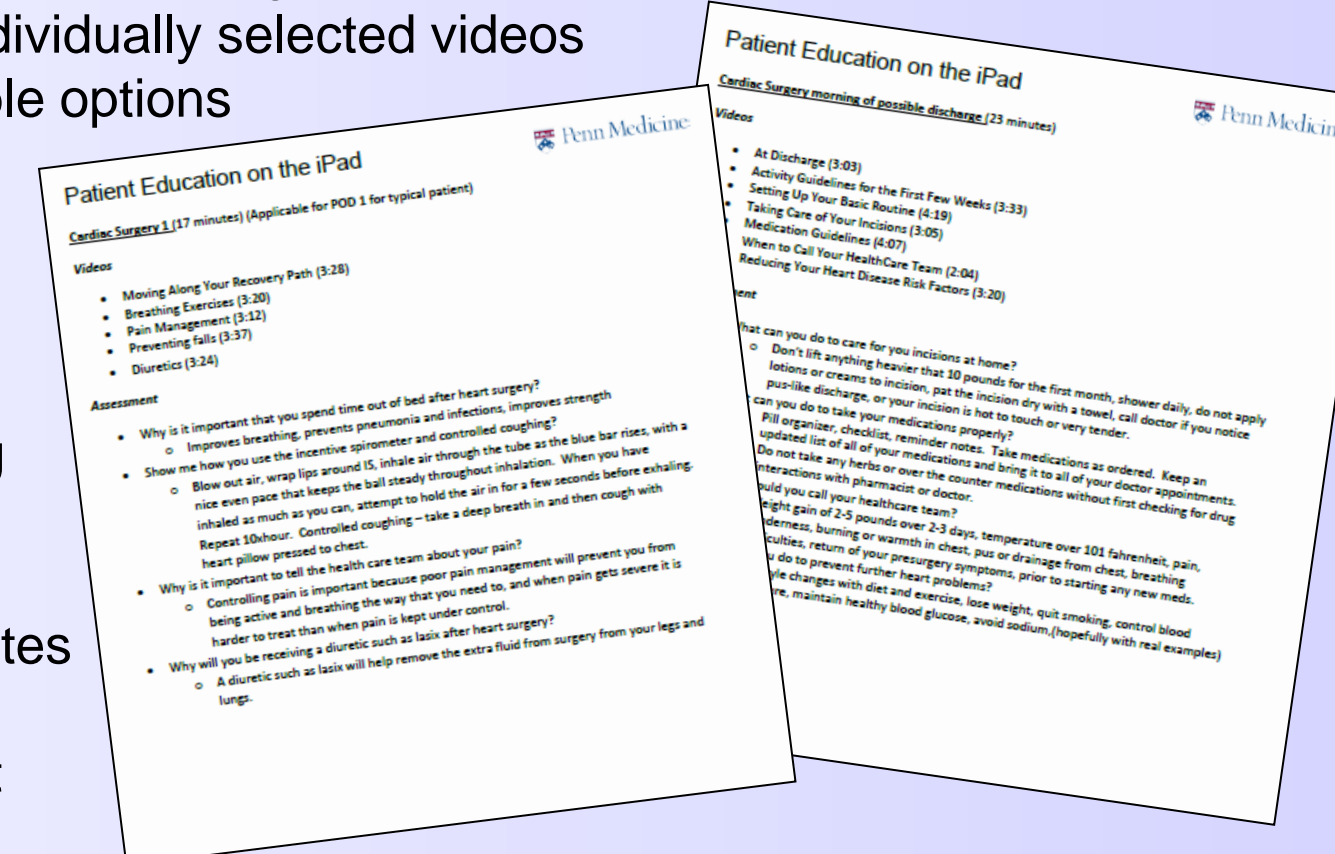
Focus on RN workflow efficiency and maximized value-added time for:
▪ storing ▪ obtaining ▪ programming ▪ securing the tablet ▪ assessing understanding
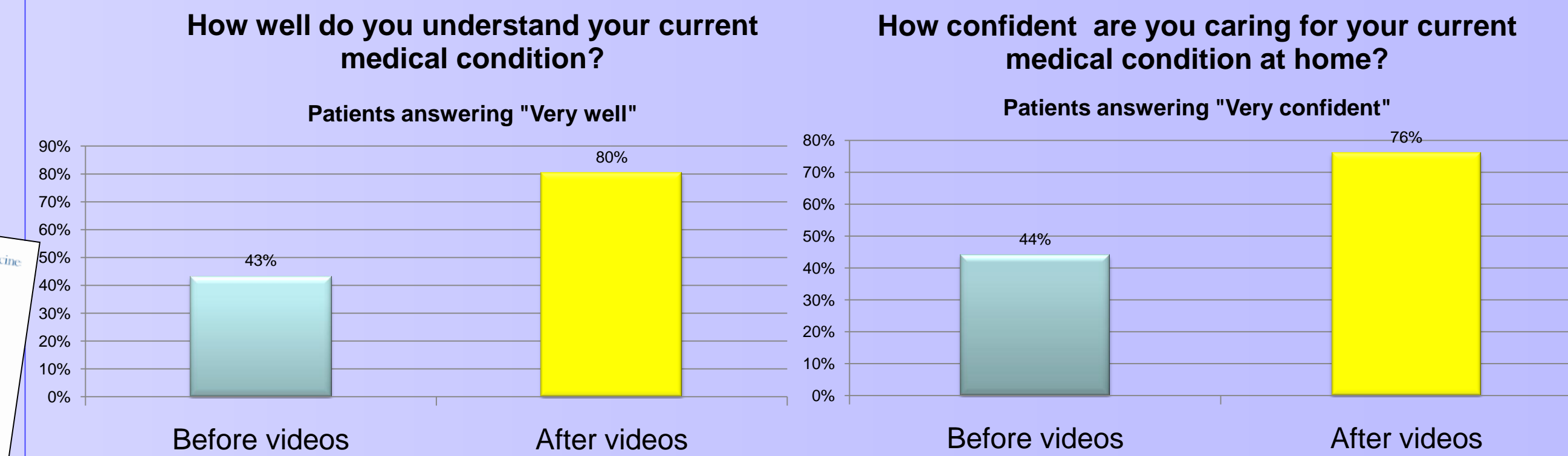
All nurses on the 3 units were taught the established process through an individual training session, with reference materials and CNS and staff champions available on the unit. Teach back questions for all templates were housed conveniently on the main screen of the tablet, and documentation was simplified by building the template's contents into nursing policy so that content could be documented using only template name and teach back response. Feedback on the process and content is easily submitted via the tablet.

Focus on patient centered care:
Patients enjoy watching the assigned videos at their leisure, and repetition is utilized without frustration by nurse or patient. The nurse is able to identify which videos have been viewed in their entirety, and provides corresponding written materials.
Patients mark the video where they have questions, and the nurse addresses questions and assesses the learning objectives by assessing specific teach-back questions.
Patients identify with the information delivered by multicultural actors who appear to be real patients with their same concerns and goals.
By spending less RN time on a general overview, and more time initiating teach-back of key concepts and troubleshooting identified barriers to self care, the time spent by the nurse in patient education is value-added, patient centered and satisfying for both nurse and patient.

EVALUATION

Phase I: showed that patients felt overwhelmingly more confident in their self care and more knowledgeable about their condition after utilizing mobile tables.

How well do you understand your current medical condition?
Patients answering "Very well"
Before videos: 43% — After videos: 80%

How confident are you caring for your current medical condition at home?
Patients answering "Very confident"
Before videos: 44% — After videos: 76%

After only a brief period of use the initial pilot nurses felt that the amount of time to initiate the tablet teaching was minimal and that the patient benefited more than other forms of teaching.

Approximate the time you spent setting up the tablet for viewing and educating the patient on how to use it?
- 0 – 5 min: 59%
- 6 – 10 min: 28%
- 11 – 20 min: 10%
- 21 – 30 min: 2%
- 31 – 40 min: 1%
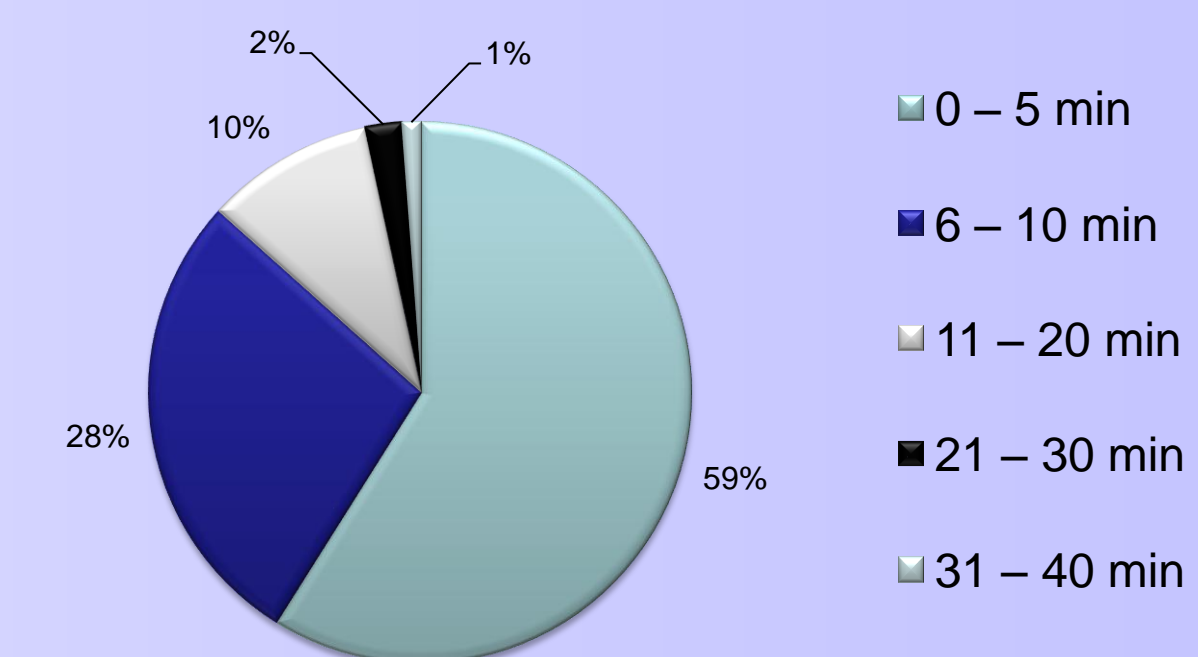
As opposed to other means of educating you might have chosen, to what degree do you feel that the patient benefited from receiving education using the iPad?
- Clearly more benefit: 66%
- Somewhat more benefit: 33%
- No additional benefit: 1%
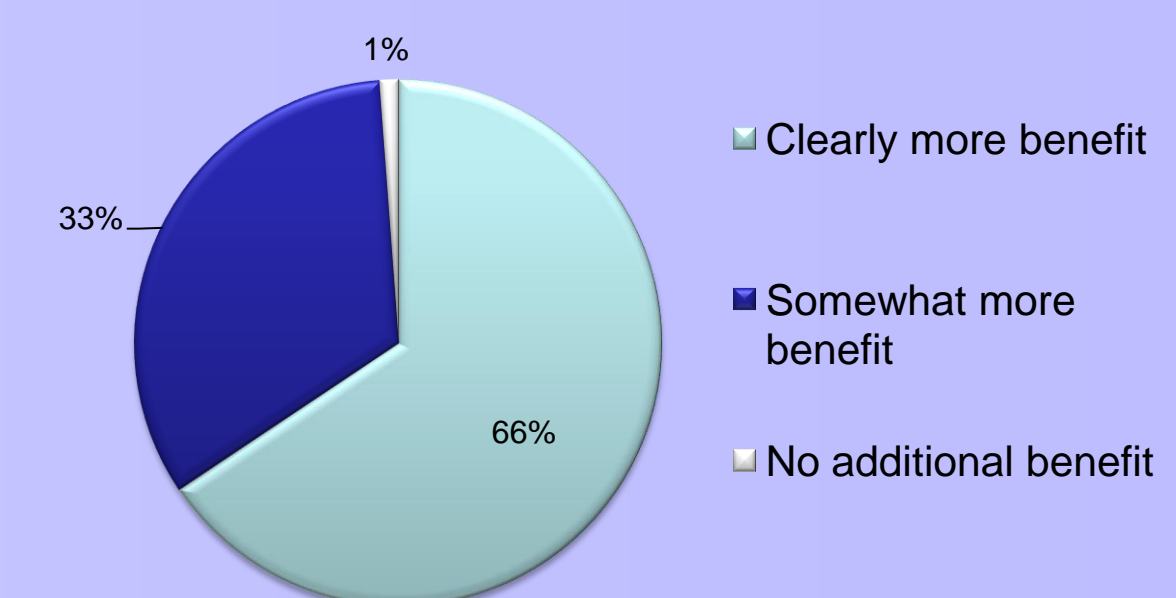
Phase II of the project is currently tracking **readmission rates**, **HCAHPS scores**, **NDNQI RN survey** results, and documentation of percentage of correct **teach back response rates.**

IMPLICATIONS FOR PRACTICE

Mobile technology allows endless options for future enhancements, including access throughout the continuum of care from pre-admission to post discharge. Continued enhancements to the application are projected to allow automatic upload of video content viewed to the electronic medical record, as well as interactive displays for educational needs assessments. In addition, the mobile platform is anticipated to be utilized for video conferencing, photography upload to the EMR, and patient self tracking of activity, pain, dietary intake, and meal selection.