

Scan, Watch, Recover: Transforming Discharge Education with QR Code Videos: A Nurse-Led Approach to Foley Catheter Instructions

Sonja Welter, BSN, RN, CPAN UCHealth University of Colorado Hospital Aurora, Colorado

Background

- Effective post-anesthesia discharge education is critical to patient recovery and complication prevention, particularly for those discharged with indwelling devices such as Foley catheters.
- Traditional verbal instructions are often insufficient due to patient drowsiness, time constraints, language barriers and varying literacy levels.
- Integrating digital tools, such as QR-code-accessible video modules, may enhance comprehension and retention of discharge instructions

Objective

- Evaluate the impact of multimodal, multilingual discharge education—including QR code video modules, printed text instruction, and hands-on demonstration.
- To improve patient understanding and discharge outcomes for patients discharged with Foley catheters following anesthesia.

Current Practice

- Phase II nurses provided verbal instructions using the After Visit Summary (AVS) as ordered by the surgeon.
- Patients are provided the written AVS for discharge (English text only)
- Hands on foley catheter teaching is available to nursing staff to show patients and families how to empty, clean and change to leg bag.

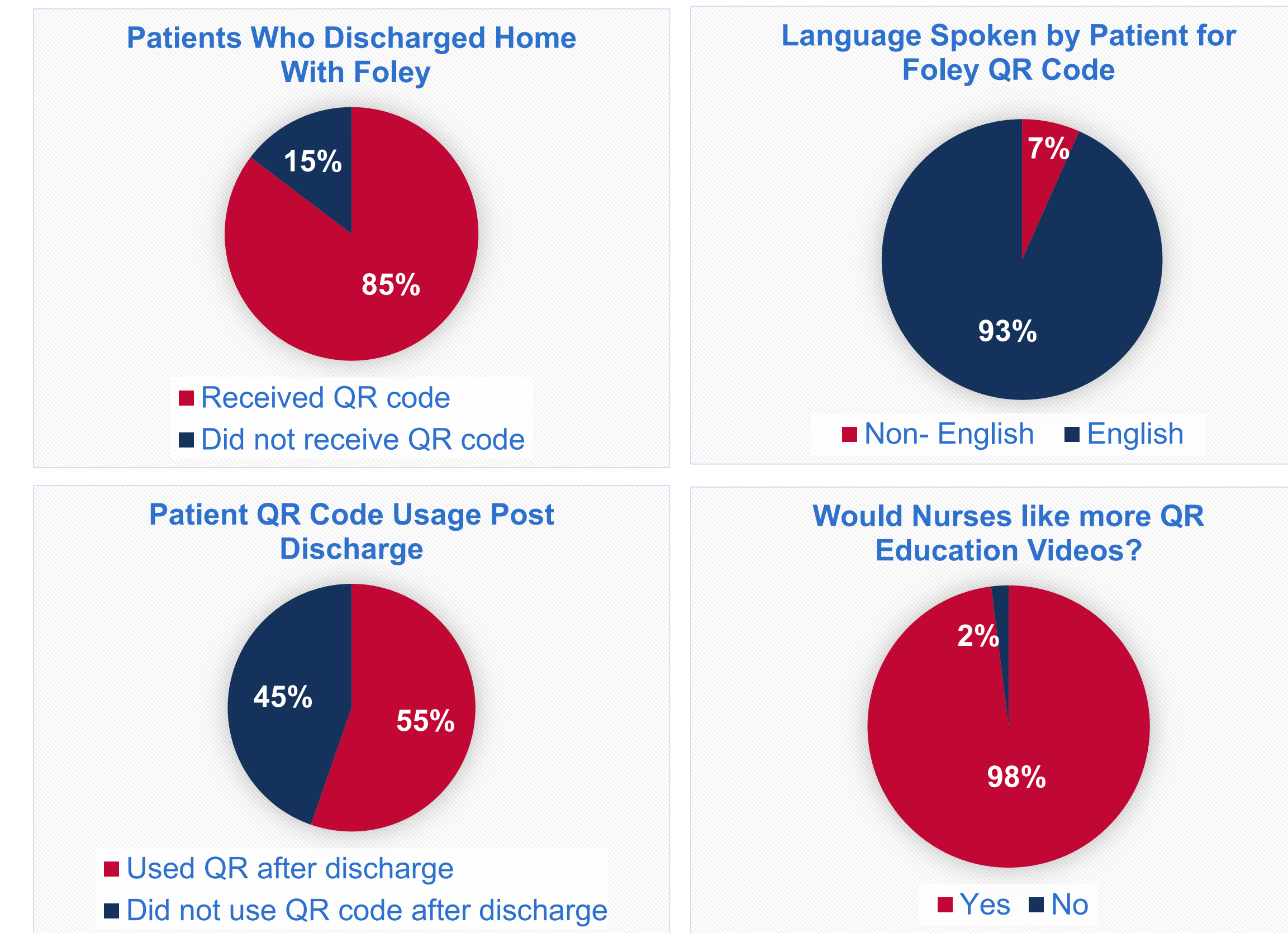
Methods

- Conducted in a post-anesthesia care unit (PACU). Nurses received targeted training on the use and delivery of QR codes linked to short, evidence-based video modules covering Foley catheter care, signs and symptoms of infections and troubleshooting.
- Patients discharged with a Foley catheter received updated AVS to include a printed QR code along with standard written instructions and brief hands on-tactile demonstration.
- To address language diversity materials were made available in English and Spanish, including video content and written instructions when available.
- Nurse engagement, patient satisfaction, and patient comprehension were evaluated through surveys, chart audits, and post-discharge phone calls

Teaching Tools

The image shows two screenshots of the teaching tool interface. The left screenshot, titled "Discharge Teaching Tip Sheet", shows a software interface with a list of discharge instructions. A red arrow points to the "Discharge Instructions" tab, and another red arrow points to the "Add" button. Below the list, there are options to "Add in English" and "Accept". The right screenshot, titled "Video Discharge Instructions QR Code", shows a grid of QR codes. Each QR code is linked to a specific video instruction, such as "Krames your care at home: Caring for your urinary catheter" and "Krames Step-by-step: Emptying your urinary catheter bag".

Results



- A QR-code–based education intervention substantially improved patient understanding of Foley catheters.
- Forty-seven patients rated their knowledge on a 0–5 scale before and after viewing the material. Average scores rose from 2.66 (SD = 1.61) to 3.81 (SD = 0.69), a mean increase of 1.15 points.
- A paired t-test using the observed difference and plausible pre/post correlations produced t-values between 8.6 and 11.6, all with $p < 0.001$.
- This demonstrates a highly statistically significant improvement in patient knowledge.

Conclusion

- Patients who were discharged with a foley catheter and received the QR-based educational video reported that it was helpful and increased their knowledge.
- Over half of the patients discharged home with the QR education videos used the QR code to support their learning at home.
- The QR codes provided meaningful educational support for patients and families during the post-surgical period.

Future Research and Next Steps

- This project demonstrates the value of multimodal and multilingual post-anesthesia education as well as streamlines and standardize patient education.
- Future research will expand to include Jackson Pratt (JP) drains and orthopedic discharge teaching—specifically for crutch and walker use.
- Expanding QR-based video education may support safer transitions of care and reduce preventable post-discharge complications across multiple patient populations.

What other discharge education QR codes do nurses want?

