NK6EO – Innovation

Two examples are required (one example must be from ambulatory care setting, if applicable).

NK6EO: Provides two examples, with supporting evidence, of an improved outcome in a care setting associated with a clinical nurse(s) involvement in the adoption of technology.

- *Outcome data must be submitted in the form of a graph with a data table.*

Example NK6EOb: Improving Patient Satisfaction with Discharge Information Using a QR Code Developed and Used by a Clinical Nurse for Patient Education in the Surgical Unit

Problem

The Surgical unit provides nursing care to adult patients requiring elective or emergency surgery and includes palliative care. Many admitted patients require complex diagnostic work-up followed by major/minor surgeries and comprehensive post-operative care. Upon admission to the hospital, the patient is given surgical pre- and post-operative literature. The primary nurse and the Discharge Nurse provide verbal pre- and post-operative education daily for patients whilst in the hospital.

To increase the effectiveness of health education, the information given to patients verbally should be supplemented and reinforced with written materials (Jahan et al., 2014). However, clinical nurse Maha Alotaibi, BSN RN Staff Nurse 1 (SN1), Discharge Nurse, found that literature in the form of pamphlets is often lost by patients, sometimes not read, and it is also sometimes not available in the unit due to printing delays. Health education information was not communicated, and patients were dissatisfied with the information provided to prepare them for their discharge home.

Maha, with her Head Nurse, Diane Ross, MSN RN, CM, and the Unit Council, reviewed patient satisfaction results for April 2021 and found the Discharge Information domain performance rate for the question "During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?" was 48.3 %.

Goal Statement

To improve the patient satisfaction score on the discharge information composite question "During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?" in the Surgical unit at KFSHRC-J.

Participants

Table NK6EOb.1 below provides the list of participants in this project.

Table NK6EOb.1: Team Participating in Improving Discharge Information, Surgical Unit

Name	Position	Department
Maha Alotaibi, BSN RN	SN1 Clinical Nurse, Discharge Nurse, **Team Leader**	Surgery
Sundos Banjar, BSN RN	SN1, Clinical Nurse	Surgery
Mashael Melanie, BSN RN	SN1, Clinical Nurse	Surgery
Diane Lee Ross, MSN RN, CM	Head Nurse	Surgery
Islam Junaid, M.D.	Chairman of Surgery	Surgery
Hussam Bitar, M.D.	General Surgery Consultant	Surgery
Linna Bissar, M.D.	Medical Consultant	Medical
Bilal Sharaf, M.D.	Palliative Consultant	Medical
Ghada Alsarraf	Head	Patient Experience
Daniyah Allahji	Clinical Pharmacist	Pharmacy

Description of the Intervention

Adoption of QR Code technology for patient education materials

In May 2021, Maha, Discharge Nurse led a team of clinical nurses and the interprofessional team to improve patient education with a focus on discharge information. Maha proposed the use of a QR code for patient education materials, and designed the QR code for the unit patient education booklet. In June 2021, the use of the QR code was expanded, with the development of the A-D (Admission-Discharge) Booklet QR Code. The contents of the booklet were compiled and developed by Maha, and consisted of information covering all aspects of the patients' journey from admission to discharge. The multidisciplinary patient health education material was validated by a team of physicians in Surgery and Medical units and the Pharmacy department.

The patient admission process was changed to incorporate the use of this new technology. The A-D Booklet QR Code was provided to patients on admission, by the ward clerk to download onto their mobile phones as well as additional instruction on how to use the electronic A-D Booklet. Throughout the stay in the hospital, the primary nurse, primary physician and ward clerk reinforced the use of the A-D Booklet QR Code.

<u>Clinical nurse educates the interdisciplinary team, patients and families on the use of QR technology</u>

Maha educated nurses, physicians and pharmacists on the new QR code, completed unit rounds to provide continued support, met with patients and families for daily health education sessions, and assisted to download the A-D Booklet QR Code onto patients and family's phones as needed. She assessed the knowledge of the patient or family member on the use of the booklet and the contents of health education specific for the patient. Maha called the patient within five days of discharge to ensure that the patient was in a satisfactory in condition and answered any follow-up questions. A total of 200 patient follow-up calls were made.

All interventions were completed in May to June 2021

Outcome

Patient satisfaction scores on the Discharge Information question "During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?" in the Surgical unit improved following the adoption of QR code technology by clinical nurses to provide discharge information as seen in Graph NK6EOb.

Graph NK6EOb
Discharge Information Domain Performance
Q: During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?
Surgical Unit

	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
SURGICAL UNIT	48.30	48.30	55.99	65.80	53.30	66.63
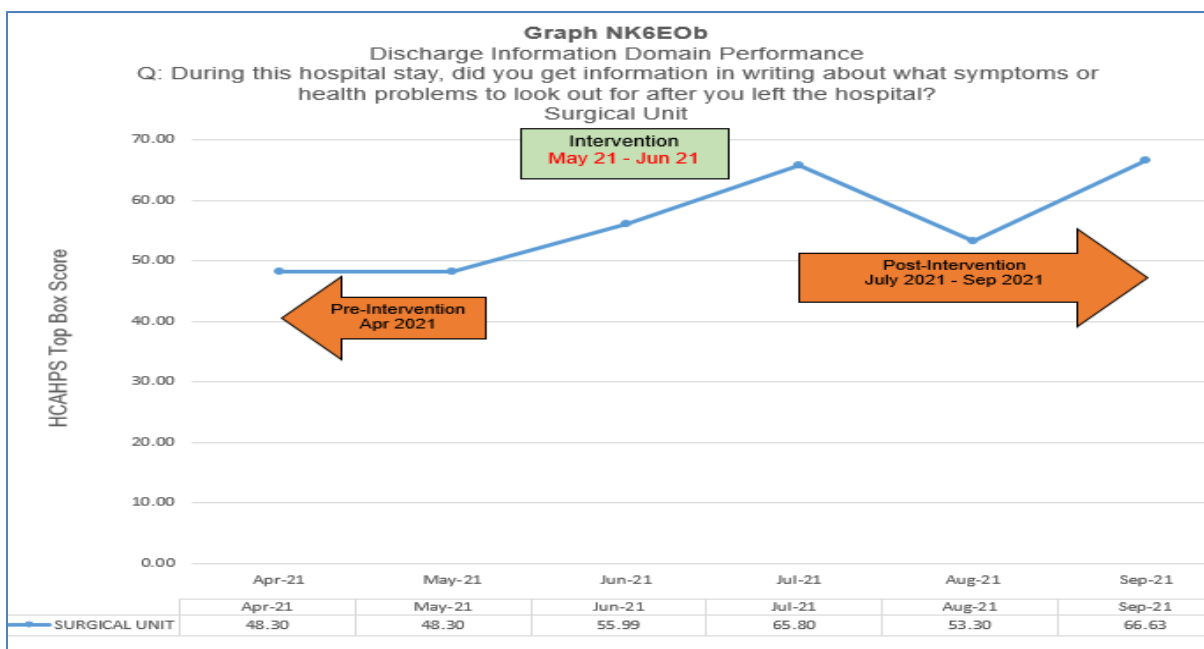
Graph NK6EOb: Discharge Information improvement, Surgical Unit
Patient Satisfaction Question: During your hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

Reference

Jahan, S., Al-Saigul, A. M., Alharbi, A. M., & Abdelgadir, M. H. (2014). Suitability assessment of health education brochures in Qassim province, Kingdom of Saudi Arabia. Journal of Family & Community Medicine, 21(3), 186.