

Background

- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a patient survey that allows for objective comparisons between hospitals. They include a section on communication and education about medications.^{1,2}
- Possible ways to improve scores include altering how nurses teach about medications, and having small information guides that incorporate pictures placed in spaces that a patient would frequently see.³
- It is recommended to keep tools/education for patients simple and at a reading level around the 6th grade.^{1,4,5}
- This study experiments with nursing tools that can potentially assist in the education of patients on medications and is aimed to allow for higher quality medication education that a patient can refer back to at a later time to increase understanding of their medications.

Methods

- This study was conducted on two cardiac telemetry units in a 493 bed community-teaching hospital.
- Medication education handouts over common medications for atrial fibrillation and heart failure were created/updated.
- **Primary outcome:** RN survey results regarding perceptions on medication counseling and utility of the provided medication education handouts.
- **Secondary outcome:** HCAHPS survey results for medication counseling
- Timeline:
 - Pre-survey to nursing: August 2023
 - New handouts available for use: Starting October 2023
 - Post-survey to nursing: November 2023

Results

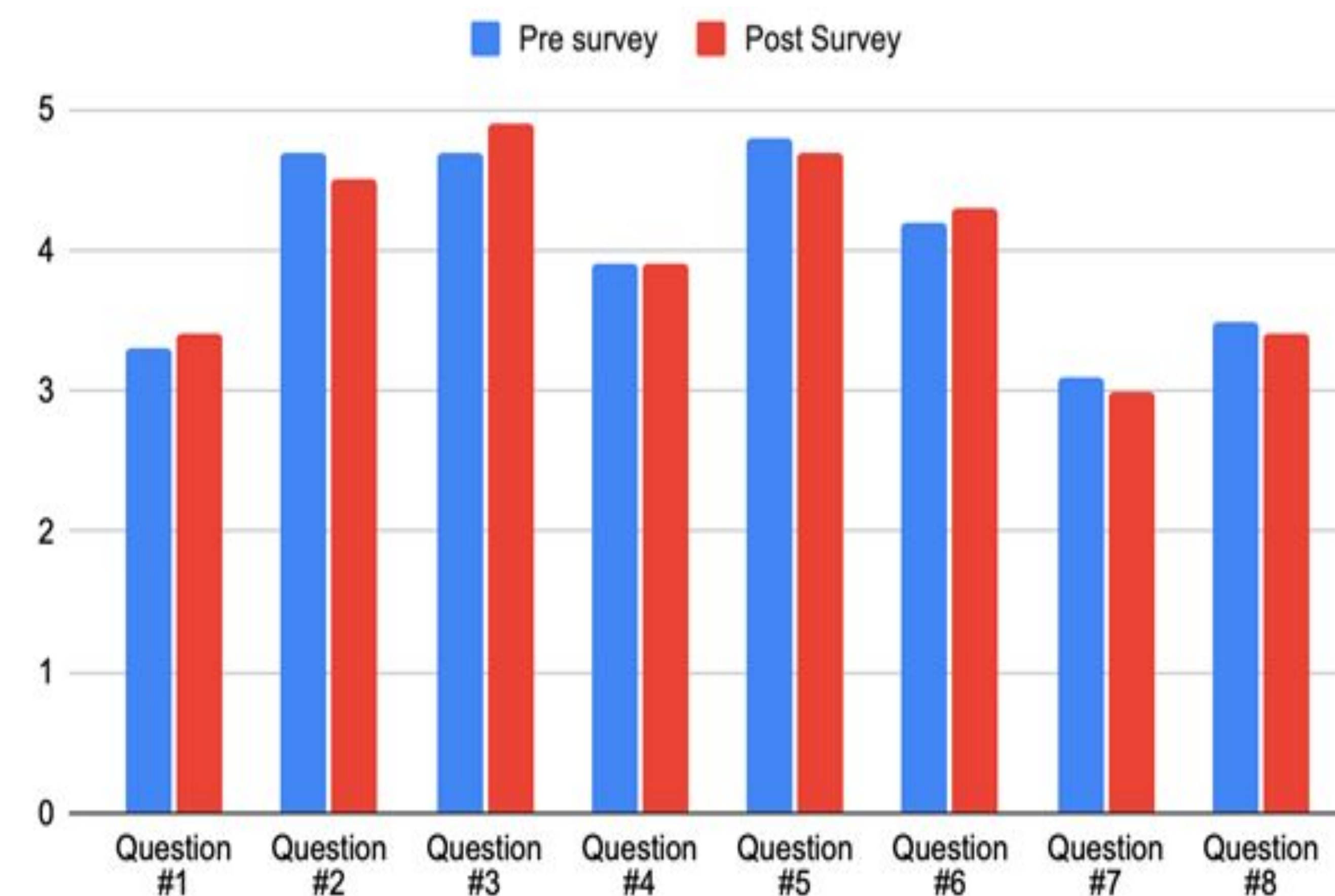
Question	Text
Question #1	I have adequate time available to educate our patients on their medications.
Question #2	I see the importance of educating patients on what medications they are taking every time I give them.
Question #3	How likely are you to tell your patients what their medications are every time they are given?
Question #4	How often do you tell patients the possible side effects of a new medication before it is given?
Question #5	How often do you tell patients the indication (i.e. what it is being used for) of a new medication before it is given?
Question #6	There are adequate resources available to teach patients about their medications.
Question #7	How often do you utilize the teach back method when providing patient medication counseling?
Question #8	How often do you suspect that patients have a hard time understanding education about their medications?

Primary Outcome: Nursing Survey Results

- The pre-survey received 28 responses and the post-survey received 14 responses.
- There were eight universal questions asked on each survey (Table 1) and seven handout-specific questions on the post-survey (Table 2).
- Universal questions responses were assigned a numerical value one through five, which was used to calculate an average.
- The primary outcome of RN survey results was the following:
 - The universal questions had similar responses in the pre- and post-survey (Figure 2).
 - Largest reported barrier to medication education was patient understanding of the education (57.1%), time available (28.6%), and resources available (7.1%).
 - Handouts were less than likely to be used with “sometimes” (35.7%) or less being the most frequent answer
 - Nurses overall thought the handouts were well. designed and adequate with 11/14(78.5%) agreeing or strongly agreeing.
 - Majority also found the handout helpful with 11/14(78.5%) agreeing or strongly agreeing.
 - Most common reason for the handouts not being used was forgetting about them being available 12/14 (82.7%).
 - Majority of nurses said that the patients were receptive to the use of the handouts with 8/14 (57.1%) agreeing or strongly agreeing.

Question	Text
Question #1	How often do you use the new medication handouts in the med room to assist with patient counseling for applicable patients?
Question #2	I think the information on the new education handouts in the med room is adequate and well designed
Question #3	I find the medication education handouts helpful in counseling
Question #4	If you did not use the medication education handout, why?
Question #5	I found my patients to be receptive to the medication education handouts
Question #6	What is the biggest barrier you have with medication education for the patients?
Question #7	(Optional Write In) What would be most helpful in increasing the amount of medication education you deliver on a regular basis (not just at the time of discharge)?

Figure 2: Comparison of Survey Results Between Pre and Post-Surveys



Secondary Outcome: Change in HCAHPS scores

- For the two months before the handouts were made available (August and September 2023) the total score was 68/123 (55.3%).
- For the two months after the handout was made available (October and November 2023) the total score was 65/119 (54.6%).

Discussion

- The impact of the handouts gauged by the responses of the nurses and change in HCAHPS scores was very minimal.
- The handouts were often received positively by the nurses but frequently under utilized due to forgetting they were available. This shortcoming could potentially be improved by increasing promotion of handout use.
- By surveying nurses directly we were able to view their perspective on the importance of medication education along with some of the barriers they are facing.
- The handouts continue to be available in the units affected by the study and were also expanded into outpatient clinics.
- **Strengths:** Future improvements possible from surveying nurses, handouts were well received by nurses and patients when used, put on official letterhead by the hospital, and continue to be given to patients.
- **Limitations:** Lack of direct feedback from patients, limited handout promotion to nurses, and not all patients on the units were affected by the disease states the handouts were created for limiting potential effects.

Conclusion

- Nurses encounter many barriers to performing meaningful medication counseling during hospitalization.
- Disease-state specific medication handouts can be helpful to facilitate counseling.
 - Adequate promotion of the materials is essential for success.
- Further improvement and tool development is needed to improve the medication education provided by nurses and other health care providers.

References

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3. Gillam, Sally W, et al. "Education for Medications and Side Effects: A Two Part Mechanism for Improving the Patient Experience." *Applied Nursing Research*, 30 Nov. 2015, www.sciencedirect.com/science/article/pii/S0897189715002347?via%3Dihub.
4. Eitorai, Adam E M, et al. "Readability of Patient Education Materials on the American Association for Surgery of Trauma Website." *Archives of Trauma Research*, 30 Apr. 2014, www.ncbi.nlm.nih.gov/pmc/articles/PMC4139691/.
5. Gallagher, Celine, et al. "Patient-Centered Educational Resources for Atrial Fibrillation." *JACC: Clinical Electrophysiology*, 1 Sept. 2019, www.sciencedirect.com/science/article/pii/S2405500X19306322?via%3Dihub.
6. Rhee, Rennie L, et al. "Readability and Suitability Assessment of Patient Education Materials in Rheumatic Diseases." *Wiley Online Library*, Oct. 2013.



Patient name: _____		Date: _____		
You are Taking	Drug Class	Medication Examples	What It's For	Potential Side Effects
<input type="checkbox"/>	Diuretics 	bumetanide (Bumex), furosemide (Lasix), torsemide, metolazone	Commonly called "water pills" these increase urination to decrease the build-up of salt and fluid in the lungs and other parts of the body, such as ankles and legs Can decrease risk of hospitalization in certain patients	Dizziness, low blood pressure, decreased potassium
<input type="checkbox"/>	ACE Inhibitors 	lisinopril, enalapril, benazepril, captopril, fosinopril, quinapril, ramipril	Relaxes blood vessels to allow blood to flow more easily, which decreases how hard the heart has to work Can decrease risk of hospitalization and help patients live longer	Dry cough (ACE inhibitors only) Dizziness, low blood pressure
	ARBs 	losartan, irbesartan, olmesartan, valsartan, candesartan		Facial swelling: seek immediate medical attention if occurs
	Neprilysin Inhibitor/ARB 	sacubitril/valsartan (Entresto)	Combination of two medications that work together to relax blood vessels and decrease the build-up of salt and fluid in the body Can decrease risk of hospitalization and help patients live longer	

Figure 1: Heart Failure Medication Education Handout Example