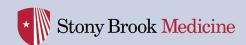


IMPROVING PATIENT EDUCATION THROUGH PHARMACIST-DRIVEN DISCHARGE COUNSELING

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BACKGROUND

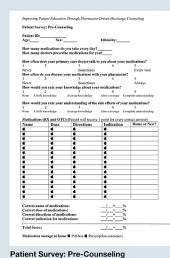
- Drug-related problems, such as adverse drug events and discrepancies between medication regimens, commonly occur after hospitalization.
- 12-17% of patients experience an adverse drug event after discharge which could cause harm to the patient or a readmission. Over 50% of ADEs are preventable.
- Hospital pharmacists have the ability to conduct medication reconciliation, review medications prior to discharge, identify discrepancies and counsel patients. Previous studies have shown that pharmacist medication review and counseling upon discharge decreased the amount of preventable ADEs.
- Low health literacy and numeracy were identified as factors that could increase medication errors post-discharge.

OBJECTIVES

- Evaluate the impact of pharmacist-driven counseling in a large teaching hospital
- Provide education to patients regarding their medications upon discharge from the hospital
- Review the new discharge medication regimen with patients, emphasizing any new medications or changes to previous medications
- Evaluate patient's knowledge of their medications before and after discharge counseling by a pharmacist

METHODS

- This is an ongoing research project with a goal of 75 patients. Preliminary data from 20 patients will be assessed.
- Patients will meet with a pharmacist at least one day into their hospital stay to discuss their new inpatient medications and review home medications which are continued in the hospital.
- Patients will receive discharge counseling from a pharmacist who will discuss their new medication regimen. They will receive written material about new medications, a pill box to emphasize adherence, and a medication calendar with their discharge medications.
- The pharmacist will administer a survey to patients before and after discharge counseling to assess the patient's understanding of their medications.
- The pharmacist will conduct a follow-up phone call within one week after discharge.
- The primary outcome will assess the change in survey scores after pharmacist counseling. HCAHPS scores will be evaluated as a secondary outcome to assess patient satisfaction.



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Patient Survey: Discharge Counseling



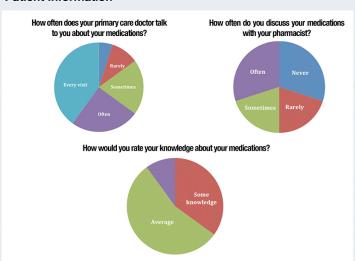
Patient Survey: Post-Discharge Phone Call

PRELIMINARY RESULTS

Patient Information

- Average age of patients who participated in this study: 68.9 years old
- Average number of medications per day prior to admission: 7 medications
- Average number of prescribers prior to admission: 2 prescribers
- Average number of new medications upon discharge: 3 medications
- Common chronic conditions include hypertension, hyperlipidemia, congestive heart failure, diabetes mellitus type 2, coronary artery disease, anemia, GERD and atrial fibrillation

Patient Information



SURVEY RESULTS

	Medication name	Medication dose		Medication indication	Total score
Before Counseling	48%	26%	43%	45%	41%
After Counseling	55%	38%	65%	72%	59%
% Change	↑7%	↑12%	↑22%	↑27%	↑18%

DISCUSSION

- Over 50% of patients reported having an average understanding of their medications in the pre-counseling survey.
- Many patients stated that they discuss their medications with their prescribers during each
 office visit. There were fewer patients who stated that they discuss their medications with a
 pharmacist.
- Many of the patients had several chronic conditions which require multiple medications. The average number of daily medications prior to admission was 7 medications.
- Patients were discharged with an average of 3 new medications. Common new medications included amiodarone, clopidogrel, metoprolol and warfarin.
- There was a significant increase in patient's knowledge of their medications. The average increase in patients' scores after discharge counseling was 18%.
- The medication indication category had the greatest improvement with an increase of 27%.
- The lowest scores involved knowledge of the dose of medications. Many patients stated
 that they forgot what dose they were taking, especially for chronic medications such as antihypertensives.
- Several discharge errors were identified and resolved as a direct result of a pharmacist reviewing the discharge medications. These errors included home medications which were left off the discharge medication list and inappropriate medications due to decreased renal function or chronic conditions.

CONCLUSION

Pharmacist-led discharge counseling improved the patient's understanding of their medications. There was a significant increase in patient's knowledge regarding medication name, dose, frequency and indication after receiving counseling from a pharmacist. Patients stated that they appreciated the opportunity to discuss their medications prior to discharge, especially the new medications. By reviewing the new medication regimen with the patient, the pharmacist was able to emphasize any changes to the medications while in the hospital to prevent possible errors after discharge. The pharmacist was also able to review the discharge medications and identify any possible issues before the patient was discharged.

References

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Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of the presentation.

Alexandra Cabble Nothing to Disclose Edmund Hayes Nothing to Disclose Jeannene Strianse Nothing to Disclose