Pharmacists' Role in Care Transitions

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LEARNING OBJECTIVES

- Identify care transitions where pharmacists can impact patient care through education and medication reconciliation.
- List strategies to improve patient care during transitions of care.

BACKGROUND

- Nearly one fifth of patients experience an adverse event following hospital discharge. Sixty percent of adverse events are preventable and related to medication errors.[1,2]
- Pharmacist involvement in hospital discharge improves patient outcomes by resolving medication discrepancies, preventing ADRs, and improving patient understanding of medications.[3-6]

Inpatient HCAHPS Dimension Composite FY2016 Communication About Meds				
Month	**March**	**April**	**May**	**June**
Medical	22%	9%	1%	11%

OBJECTIVES

- Assess the feasibility of pharmacist-led, comprehensive medication reconciliation and education service for all eligible patients admitted to the medical floor at St. Peter's Hospital.
- Determine project impact with regards to patient satisfaction with communication about medications using HCAHPS scores when pharmacists perform medication education throughout the patient's hospital stay.
- Monitor the number and type of medication discrepancies caught by pharmacists during admission and discharge medication reconciliation.
- Track the number and type of pharmacist interventions made during medication reconciliation and medication education.

DESIGN AND METHODOLOGY

- **Design:** Prospective observational study assessing impact of pharmacist-led medication reconciliation and discharge medication education on patient satisfaction scores pertaining to communication about medications.

RESULTS

Table 2: Transitions of Care Pharmacist Project Impact

	HCAHP "TOP BOX" Score*	Admit Med Rec Completed	Average Time Per Patient to Complete Medication Rec	Average # Discrepancies Per Patient	Total Discharge Education And Med Recs Completed	Average Time Spent on Med Rec Per Patient	Average #of Interventions Per Patient
Sept 2016	1	24	27 min	1.42	15	20	1.20
Oct 2016	46	56	25 min	1.82	46	27	1.55
Nov 2016	67	72	22 min	1.19	56	25	1.66
Dec 2016	1	-	-	-	-	-	-

Table 3: Potential Annual Cost Avoidance at St. Peter's Hospital

Cost Avoidance through Admission Medication Reconciliation Using AHRQ Table[7]	
Average Number of discrepancies/patient found during TOC Pilot	1.5
Extrapolated annual number of medication reconciliations performed by SPH TOC Pharmacist	600
Potential medication errors per year that can be avoided by TOC Pharmacist	900 (600 x 1.5)
Percent medication errors that are potentially harmful to patient per AHRQ[7]	2.5%
Number of harmful medications errors avoided per year with SPH TOC Pharmacist	22.5
Annual gross savings ($4,800 per harmful error per AHRQ)[7]	$108,000

CONCLUSIONS

- Pharmacist involvement in medication reconciliation on admission and discharge appears to correlate with improvement in patient satisfaction scores pertaining to communication about medications.
- Pharmacists consistently catch medication discrepancies during medication reconciliation that were missed by other health care professionals.

FUTURE DIRECTIONS

- 1.0 FTE for a transitions of care pharmacist was approved as a result of this project.
- Expand pharmacist TOC service to include coverage seven days per week.
- Expand medication education service to include targeted disease-state education.
    - Goal: Prevent readmission of high risk groups including heart failure, pneumonia, and total hip and total knee replacements.
- Develop TOC rotations as future resident and student learning experiences.

CONTACT INFORMATION

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REFERENCES

1. Foster AJ, Clark HD, Menard A, et al. Adverse events among medical patients after discharge from hospital. CMAJ. 2004;170:345-349.
2. Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med 2003;138:161-167.
3. Schnipper JL, Kewin JL, Cotugno MC, et al. Role of pharmacist counseling in preventing adverse drug events after hospitalization. Arch Intern Med 2006;166:565-571.
4. Krip Sunil, Roumie CL, Dalal AK, et al. Effect of a pharmacist on clinically important medication errors after hospital discharge. Anals Intern Med 2012;157(1):1-12.
5. Walker PC, Bernstein SJ, Tucker JN, et al. Impact of pharmacist-facilitated hospital discharge program. Acrh Intern Med 2009;23: 2003-2010.
6. Sarangarm P, London MS, Snowden SS, et al. Impact of pharmacist discharge mediation therapy counseling and disease state education: pharmacist assisting at routine medical discharge. American J Med Quality 2013;28(4):292-300.
7. Gleason K, Brake H, Agramonte V, Perfetti C. Medications at transitions and clinical handoffs (MATCH) toolkit for medication reconciliation (2012). Agency for Healthcare Research and Quality web site. Available at: http://www.ahrq.gov/sites/default/files/publications/files/match.pdf. Accessed