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Local specialty pharmacists' role in care transitions for transplant patients on a multidisciplinary team

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BACKGROUND

- The United Network for Organ Sharing (UNOS) bylaws recognized pharmacists as an essential part of the transplant patient care team in 2004.¹ This includes inpatient and outpatient clinical pharmacists; however, there has not been a clearly defined role for community pharmacists in the care of these patients.
- Objectives:** (1) To describe community pharmacist involvement on a multidisciplinary transplant team. (2) To evaluate patient satisfaction of the pharmacist-driven transplant services provided by a local specialty pharmacy.
- Practice Setting:** The Walgreens local specialty pharmacy in Boston, MA at the Joslin Diabetes Center is a community pharmacy that is adjacent to Beth Israel Deaconess Medical Center (BIDMC). It serves as a collaborating partner with the BIDMC Transplant Institute.
- Community pharmacists in a local specialty setting complement inpatient and outpatient providers by improving medication adherence, increasing medication access and providing specialized knowledge of prescription coverage.

METHODS

- Single-center, cohort study that examined the local specialty pharmacy procedures for new solid organ transplants between March 2016 and May 2016.
- The enrollment phase began for each patient whenever the BIDMC team reported a new scheduled transplant to the Walgreens team.
- Interactions that the community pharmacist had with the patient, caregiver, payer, and transplant providers were documented and evaluated from the beginning of the enrollment phase to the patient's receipt of their first refill.
- The interactions were evaluated and the time spent was calculated for each phase of the medication-use-process (MUP) using descriptive statistics.
- Patient satisfaction surveys contained 8 mixed questions (short answer, Likert scale) and were conducted over the phone.
- Northeastern University (NEU) and BIDMC Institutional Review Board approved.

RESULTS

Types of activities	Average time spent (min)
Enrollment	70
Prescribing	45
Dispensing	45
Administering	--
Monitoring	35

At least 3 touch points were made between the pharmacist and each of the collaborators (payers, patients and providers) during the enrollment phase to reconcile and resolve third party issues.

Characteristics	# of participants (%)
Male	14 (93.3)
Age range (mean+/-SD)	39-67 (57+/-8.2)
Caucasians	13 (86.7)
African Americans	2 (13.3)
Kidney Transplant	7 (46.7)
Liver Transplant	5 (33.3)
Liver/Kidney Transplant	1 (6.7)
Kidney/Pancreas Transplant	2 (13.3)

Program Intervention Evaluated	Mean (+/-SD)
Overall Satisfaction	9.6 (1.0)
Bedside Delivery Service	9.78 (0.56)
Medications In Hand During Discharge Counseling	9.93 (0.26)
Understanding Prescription Coverage	9.47 (1.41)
Medication Delivery to Home	9.79 (0.77)
Follow-up and Refill Reminder Calls	9.71 (0.7)

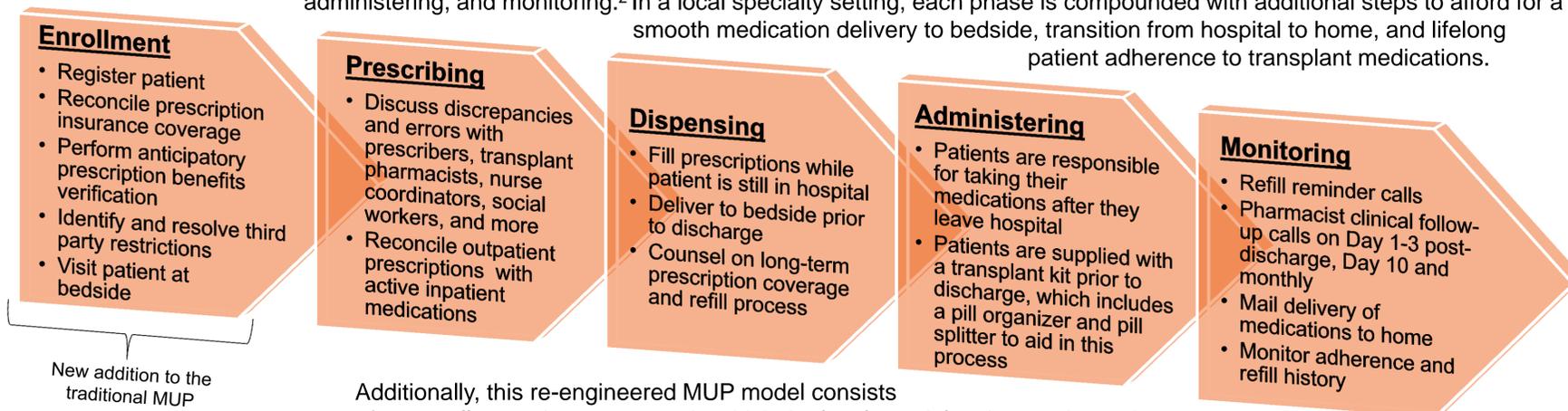
1 = extremely dissatisfied; 10 = extremely satisfied

Positive Feedback	<ul style="list-style-type: none"> Easy and convenient Helpful to have BIDMC pharmacists and Walgreens team working together Smooth, pleasant, and friendly interaction at bedside Comforting to interact with Walgreens before leaving hospital
Areas for Improvement	<ul style="list-style-type: none"> Nothing Provide updated medication list with pill images Have staff who are dedicated to transplant

Participants were asked "What could we have done differently to improve your experience?" and 73% of them answered that they would not change anything about the program.

PROGRAM INTERVENTION

Re-Engineered Medication Use Process (MUP): In a traditional pharmacy, the MUP is a continuum of 4 phases: prescribing, dispensing, administering, and monitoring.² In a local specialty setting, each phase is compounded with additional steps to afford for a smooth medication delivery to bedside, transition from hospital to home, and lifelong patient adherence to transplant medications.



Additionally, this re-engineered MUP model consists of an enrollment phase, a stage in which the local specialty pharmacist assists the transplant team in anticipating barriers to medication access and discusses prescription coverage with providers, payers, patients, and their caregivers. By proactively identifying and resolving barriers to outpatient therapy, the pharmacist is able to assure a smooth medication delivery and transition of care from inpatient to the community.



DISCUSSION/CONCLUSION

- Incorporation of local specialty pharmacist involvement earlier in the transplant process allowed for greater collaboration with the health-system and proactive resolution of barriers to therapy.
- The most time-intensive interactions occurred in the enrollment phase, which averaged 70 minutes spent resolving third party obstacles and communicating face-to-face, over the phone, email or pager with all parties involved in the care of each individual transplant patient.
- Patients were overwhelmingly satisfied with the pharmacist-driven Walgreens transplant program and were most satisfied with having their medications delivered to bedside to have in hand during inpatient discharge counseling.
- Due to the unpredictable nature of transplant, many patients experienced extended hospital stays, which limited study participation. For those who participated, the survey response rate was 56%.
- Future studies are needed to estimate cost savings provided by having community pharmacists involved in the improvement of patient care. This model may be applicable to other health systems to improve continuity of care for all transplant patients.

References: 1. [UNOS] United Network for Organ Sharing. 2011. Attachment 1 to Appendix B of UNOS Bylaws: designated transplant program criteria. Available at https://www.unos.org/wp-content/uploads/unos/Appendix_B_Attachl_XIII.pdf. Accessed November 29, 2015. 2. *Preventing Medication Errors: Quality Chasm Series*. 2007. Washington, D.C.: National Academies Press. <http://www.nap.edu/catalog/11623>. Accessed November 29, 2015.

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