Leveraging Technology for Specialty Refills

Danielle Burkhart, PharmD, MBA, BCACP[1], Richard Demers, MS, RPh, FASHP[1], Mohan Balachandran, MA, MS[2], Christianne Sevinc, MPH[2], Beth Dewan, RPh[1], Richard Fiore, RPh[1], Natalie Goode, PharmD, BCACP[1], Jaclyn Barone, PharmD[1], Troy Rehrig, PharmD, MS[1], Daniel Rubin, PharmD, BCOP[1], Joseph Favatella, PharmD, MBA, BCPS[1]

[1] Pharmacy Services, Penn Medicine
[2] Way to Health, Penn Medicine

Background / Significance

- In 2020, the Penn Medicine Specialty Pharmacy Refill program grew 85% over the previous 24 months with approximately 7,000 specialty refills per month, but faced challenges meeting the growth demands due to a high number of technician vacancies.

- The specialty refill coordination was primarily conducted telephonically with outbound calls from technicians to patients. This process had inherent delays in reaching patients and the majority of outreach required two separate attempts, spanning over three business days, to reach patients and coordinate refills.

- Lastly, the information gathered during the telephone exchange expanded beyond refill coordination in order to meet accreditation requirements, such as medication adherence assessment and triaging clinical questions or concerns related to possible adverse drug effects or goals of therapy. This additional information collected increased communication time with each patient and led to extensive manual documentation of each encounter in electronic health record (EHR) by the technician.

Objectives

- Our team wanted to improve upon our current Specialty Pharmacy Refill model to enhance efficiency of the refill process, minimize administrative burden for the technician role, and continue to provide an excellent patient experience.

- We wanted to learn if leveraging texting functionality for specialty refills would positively impact our program, staff, and patients.

Methods

- **Program impact** was measured through percentage of successful completions defined as check-ins that did not require telephonic intervention from staff.
- **Patient impact** was measured through Net Promotor Score (NPS) surveys sent to patients. Rolling NPS surveys were implemented in November 2021 via the texting platform to any patient that completed at least three refills. The system continues to send NPS surveys to any patient that meets this criteria, with plans to survey each patient annually.
- The data analytics for program and patient impact were collected through the texting data analytics dashboard and aggregated into real-time data.
- **Staff impact** was collected through a time analysis study conducted in February 2021 with 670 patient enrolled in the texting program. Objective of the study was to define texting process versus non-texting process time spent during each workflow step.

Results

- In May 2020, we partnered with Penn Innovations Way to Health (W2H) team to design a texting platform for the Specialty Refill program that was easy-to-use, seamlessly integrated with pharmacy systems and workflows, and addressed all regulatory needs. The chatbot functionality was scripted and pre-programmed based on the parameters specified by pharmacy team.
- The program was able to integrate with EHR system and allow for information collected during texting to be auto-populated in a designated EHR refill note compared to the manual input of this information by technicians during telephone outreach.
- The initial pilot launched July 2020 at 1 Penn pharmacy location, 1 service line, 4 specialty medications, and 42 patients enrolled.
- Currently, the Specialty Pharmacy texting program has expanded to 7 Penn pharmacies, 8 service lines, 189 medications, and 3,593 patients enrolled.

Results continued

- Program impact is continuously assessed through our analytics dashboard and the percentage of successful completions remains high at 80%, with minority of patients requesting to speak with pharmacy staff or not responding within 48-hour timeframe.
- Staff impact analysis of 25 non-W2H and 25 W2H refill patients showed average total time spent for each patient was approximately 7 minutes for non-W2H and 3.5 minutes for W2H, with less time spent communicating with the patient and documenting in the EHR for W2H process.
- The majority of patients were reached on Day 1 with W2H compared to Day 3 for non-W2H.
- The NPS surveys were utilized to determine patient satisfaction. To date, 1,352 survey responses obtained with overall pharmacy program NPS of 91, NPS for W2H texting program of 85.

Conclusions

- The successful implementation of the W2H texting platform to our Penn Medicine Specialty Pharmacy Refill program has positively impacted program, staff, and patient outcomes.
- Over the past 2 years, the W2H texting platform has been widely expanded to many Penn pharmacies, service lines, and specialty medications.
- The W2H texting platform has increased program capacity through shortened time to reach patients by 2 days and 50% reduction in time spent for the W2H process.
- The W2H process reduced administrative burden on pharmacy technicians through decreased number of patient outreaches and the W2H auto-populated EHR notes.
- Lastly, our promotor NPS score for the texting program demonstrates a high level of patient satisfaction with the service while also being consistent with the NPS score for the overall pharmacy program.