



Reducing Readmissions

Pharmacist Interventions

Approximately 20% of patients discharged from a hospital experience post-discharge adverse events. Two-thirds of these adverse events are medication-related Adverse Drug Events (ADEs)¹. Nearly one-third of ADEs are serious or life-threatening, often resulting in rehospitalization². ADEs have been shown to be a partial or predominant cause in 13% of preventable hospital readmissions³. Moreover, nearly two-thirds of ADEs are preventable or ameliorable⁴.

Case Study: Targeted Medication Reviews for Skilled Nursing Facilities

- 1634 Pharmacist Reviews in 2017
- 8333 Pharmacist interventions (avg. 5 per review)
- 145 medication errors identified (9% of reviews)
- 1751 medication interactions identified (>1 per review)
- 3011 drug therapy optimizations (>1 per review)
- 460 unnecessary medications discontinued (28% of reviews)
- 6% reduction in Readmission Rate

In 2014, Consonus developed a targeted medication review program for a large Skilled Nursing Facility (SNF) group in the Pacific Northwest. The goal of the program was to decrease 30-day hospital readmissions by targeting the most at-risk patients with comprehensive pharmacist reviews. The program was designed to allow Consonus pharmacists direct access to the facilities' EHR system, so the pharmacists could obtain real-time information to complete each review within 72 hours of the patients admitting at the facilities. Recommendations were shared with facility caregivers

and physicians immediately upon completion of each review.

During 2014-2015, the review program was developed, piloted, and launched at each facility. Readmission rates for the targeted, high-risk patient population averaged 23% during the period. Launch and adoption of the program was complete by January 2016, and the period from 2016 to 2017 saw 30-day readmission rates drop to an average of 17%, a decrease of 6 percentage points. These results are displayed below in Figure 1.

Aside from optimizing medication therapies and decreasing the target population's readmission rates, the SNF Review Program has also likely directly contributed to preventing some potentially costly and

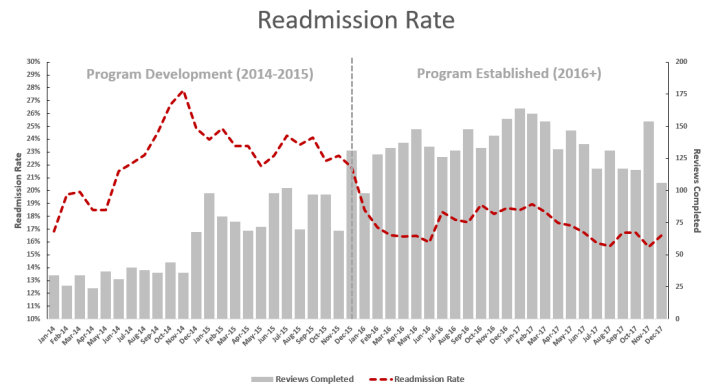


Figure 1: Monthly 30-day readmission rates for high-risk patient population from 2014 to 2017. Gray bars indicate the number of reviews completed each month, and serve as a proxy for the timeline of the program development, pilot (2014), and staggered launch (2015). The dashed line indicates the monthly 30-day readmission rate over the entire study period. Note the significant decrease in early 2016, indicating the program fully launched and adopted at each facility. Note how the program has resulted in maintaining a significantly lower readmission rate in 2016 and 2017.

¹Forster, AJ, et al. "The incidence and severity of adverse drug events affecting patients after discharge from the hospital." *Annals of Internal Medicine* 138.3 (2003): 161-167. PMC. Web. 23 July 2018.

²Kripalani, S, et al. "Effect of a Pharmacist Intervention on Clinically Important Medication Errors after Hospital Discharge: A Randomized Controlled Trial." *Annals of Internal Medicine* 157.1 (2013): PMC. Web. 23 July 2018.

³Dalleur, O, et al. "30-Day Potentially Avoidable Readmissions Due to Adverse Drug Events." *Journal of Patient Safety* [Epub ahead of print] (2017): PMC. Web. 23 July 2018.

⁴Forster AJ, et al. "Adverse drug events occurring following hospital discharge." *J Gen Intern Med* 20.4(2005): 317-323. PMC. Web. 23 July 2018.

life-threatening medication errors. In 2017 alone, the program identified 145 medication errors, most of which were the result of inadequately reconciled medication lists from hospitals.

Pharmacist Interventions

Consonus Pharmacists will ensure each patient discharges the hospital with the highest chance of returning home safely, on time, and with an increased understanding of their medication therapy. We will recommend to discontinue unnecessary medications, reduce regulatory exposure to Skilled Nursing Facility staff, and simplify each patient’s medication therapy to ensure the greatest level of adherence and satisfaction. Some common Pharmacist Interventions are listed below in Table 1.

Partnering with Consonus

Consonus has a proven track record of applying cost-effective pharmacist interventions to transition of care workflows. Our pharmacists will collaborate with your physicians, nurses, and pharmacists to develop beneficial programming to decrease readmission rates. With direct access to your EHR, our pharmacists can work seamlessly within your hospital’s existing workflows to deliver timely and accurate reviews and patient follow up. Call us today to learn how we can help you achieve your goals.

**Schedule a consultation:
Ph 800-891-7575**

Common Pharmacist Interventions

Clinical/ Safety	Adherence	Regulatory
Drug interactions/ ADEs	Refusals on MAR and rationale	Controlled meds- valid prescriptions
Specific stop dates in relation to when started (i.e. antibiotics, LMWHs)	Inhalers vs. nebulizers	PRN psychotropic meds 14 day stop date or rationale for longer
Duration of therapy	Med consolidation	PRN antipsychotics 14 day stop date
Allergy review	Less frequent dosing when appropriate	GDR psychoactive medications
Meds missed from prior care	Insulin pen vs. vials	Diagnosis matched to each medication
Labs	Recommend discharge consult by pharmacist	Antipsychotic use/ indication
Crushing, splitting or mixing with food	IV to PO	Documentation for compliance with Unnecessary Med (F757)
Timing in regard to meals	Cost/ Medication access	Sliding scale insulin
“Beers” meds in those over 65		
Appropriate doses/ CrCl		
Opioid MME		
Duplicate therapy		
Monitoring/ parameters		

Table 1: Common Pharmacist Interventions group by categories: Clinical/Safety, Adherence, and Regulatory. Our pharmacists’ goal is to simultaneously increase clinical outcomes and patient adherence while decreasing the regulatory burden of the Skilled Nursing Facility setting.