**Improving medication reconciliation discrepancies in general medicine patients discharged to skilled nursing facilities**

**Authors**: Megan Klingler, PharmD;Sara Valanejad, PharmD, MSCR, BCPS; Bethany Delk, PharmD, BCPS; Jillian McLlarky, PharmD, BCPS; Amber Inofuentes, MD; Jessica Dreicer, MD; Michael Chilmaid; Evie Nicholson, RN

**Practice Site**: University of Virginia Health Medical Center; Charlottesville, VA

**Background**: Medication discrepancies are a leading cause of patient harm which can lead to hospitalization. At University of Virginia (UVA) Health Medical Center, a standardized process was implemented in the adult general medicine services to include pharmacist-reviewed medication reconciliations for patients discharged to a skilled nursing facility (SNF) due to the large number of errors that were found on discharge. Between August and December 2021, 25%of patients discharged from UVA Health Medical Center’s adult general medicine services to a SNF had at least one medication error on their discharge medication reconciliation that had the potential to cause harm.

**Aim Statement**: This quality improvement project aimed to reduce the number of patients with at least one medication error on their discharge medication reconciliation that had the potential to cause harm from 25% to less than 20% by May of 2022 to improve outcomes.

**Methods**: Patients who were admitted to any UVA Health Medical Center adult general medicine between August 28th, 2021, and April 2nd, 2022 were included in the data analysis. Data collection during this time occurred weekly. This quality improvement project used tools to help better understand, analyze, and communicate the interdisciplinary team’s quality improvement efforts. A Pareto chart was created based on the initial data to help determine what medication errors were the most significant and what the intervention should focus on. Then, a Plan-Do-Study-Act (PDSA) cycle was implemented to allow the interdisciplinary team to articulate improvement changes, implement the intervention, study the results, and decide on how to proceed with the next steps. Statistical process control (SPC) charts were used to monitor the process performance and compare it to the baseline data.

**Preliminary Results:** Results from the Pareto chart suggested that 70% of errors were categorized as admission medication history errors and errors caused by the medication administration record (MAR) not being reviewed. The first intervention implemented involved re-formatting the standard discharge medication reconciliation pharmacist-specific documentation tool which was identified as a high yield, low effort option for implementation based on the team’s priority matrix. This intervention focused on reducing the number of errors caused by the MAR not being reviewed. Data collection for the first PDSA cycle lasted 8 weeks and included 102 patients. Results of the first PDSA cycle indicated that the intervention that was implemented which focused on changing the pharmacist-specific documentation tool improved pharmacist review of patients’ discharge medication reconciliations. Based on the SPC Charts, the percentage of patients with at least one medication error on their discharge medication reconciliation that had the potential to cause harm after pharmacist review decreased from 19% to 8%. In addition, the percentage of all patients discharged to a SNF with at least one medication error on their discharge medication reconciliation that had the potential to cause harm reduced from 25% to 11% after the first PDSA cycle. Although the percentage of patients with at least one medication error on their discharge medication reconciliation that had the potential to cause harm decreased, errors still occurred that did not relate to the intervention that was implemented.

**Conclusion**: The first intervention implemented in this quality improvement project showed a reduction in the percentage of patients with at least one medication error on their discharge medication reconciliation that had the potential to cause harm. The biggest challenges that were faced during this process were that there is deviation from standard workflow and a lack of consistent communication between prescribing providers and pharmacists. As this quality improvement project continues, there are opportunities to be explored when it comes to improvement in reducing errors on discharge medication reconciliations in patients on the adult general medicine service who are discharged to a SNF.