Improving Accuracy of Home Medication Lists After Admission

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Introduction

Having an accurate home medication list at the time a provider decides to order/not order the medication not only increases patient safety but also reduces waste associated with changing orders after ordering and improves efficiency of ordering medications at discharge.

Since the initiation of the National Patient Safety Goal for medication reconciliation, nurses have been obtaining home medication information from the patient and updating the list in the electronic health record (EHR). The provider would review the list, obtain any additional information and order medications needed during hospital stay. Although our documentation showed that this process was completed on every patient, the accuracy of the home medication lists were less than 70%.

Aim

Increase the percent of complete medication entries on the home medication list in the EHR at the time of deciding to order/not order the medication from a median of 69% to 90% by December 31, 2018.

Operational definition: An incomplete medication entry is defined as any one or more of the following is missing or incorrect:

- Medication Name
- Product/Formulation
- Dose/Strength
- Route
- Frequency
- Scheduled dosing times the medications are taken
- Date and time of last dose taken
- No additional medications that the patient is not taking

Methods

A current state assessment documented the admission process for both nurses and providers. A group of providers, nurses, pharmacists and support staff designed a future state process. The table below summarizes the trials completed. Each trial included changes to the process based on the results of the previous trial.

PDSA	Description	Duration
1	RN obtains home med list on paper. Provider enters/updates EHR.	4 weeks
2	Provider obtains and enters/updates EHR. RN reviews list with patient/family to confirm.	4 weeks
3	Pharmacist does admission med rec for all admissions to one unit.	2 weeks
4	EDTC Pharmacist completes med rec for admissions. Floor pharmacists do med recs for new admissions during day.	2 weeks
5	All floor pharmacists complete med recs for new admissions during the day. Med rec pharmacist helps support.	2 weeks
6	3 dedicated pharmacy people providing 17 hours of med rec coverage Monday through Friday.	8 weeks

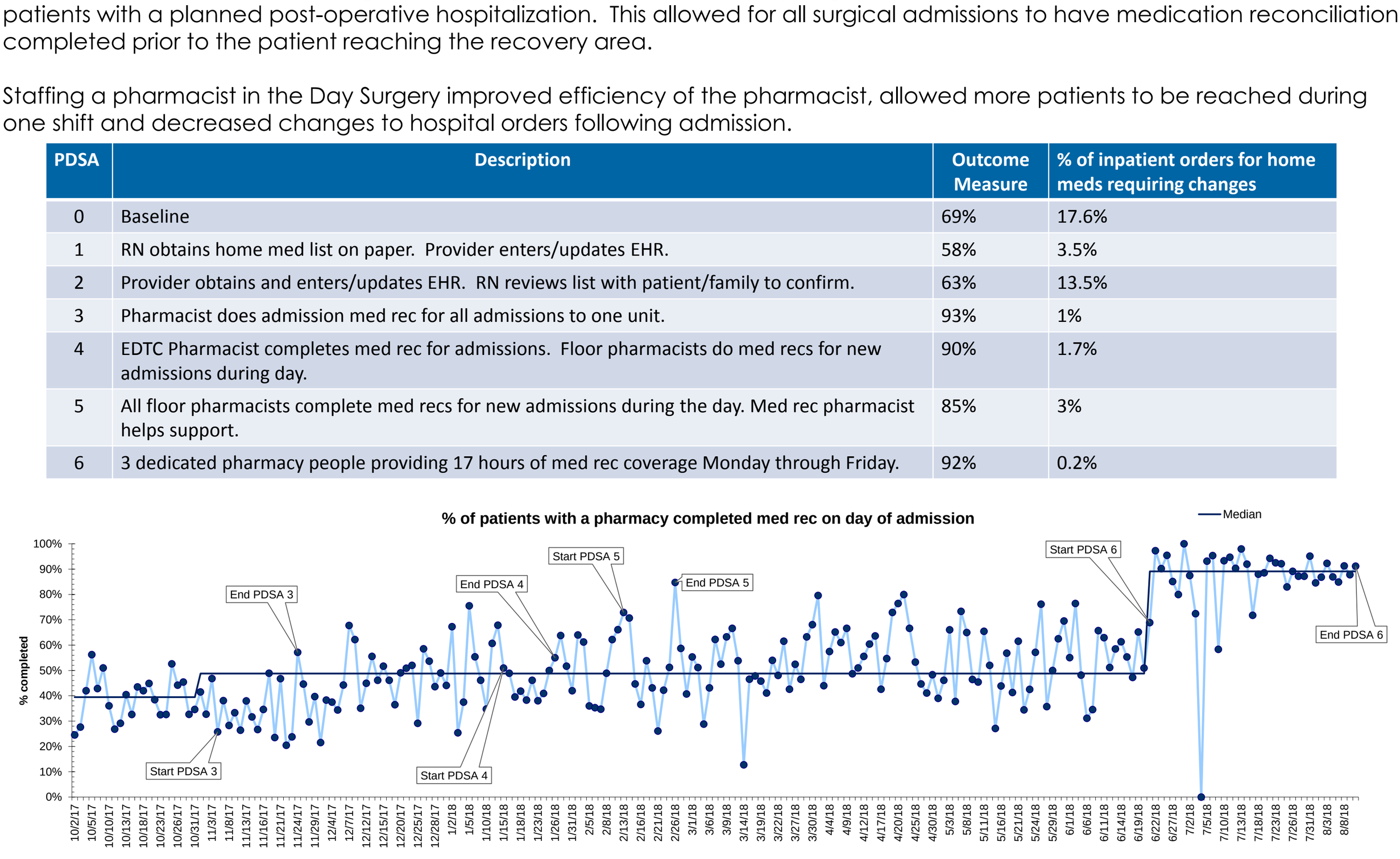
Results

During the first two PDSA cycles, intense efforts were required on the part of nursing leadership, provider support and pharmacy to achieve minimal changes in the outcome measure. Additional cycles of improvement evaluated the introduction of pharmacists to the admission process. Ultimately, the most efficient process was achieved by updating the home medication lists prior to arrival on the hospital unit, and by reaching direct admissions shortly after reaching the unit.

Our most innovative test of change was staffing a pharmacist in the day surgery area to update the home medication list on patients with a planned post-operative hospitalization. This allowed for all surgical admissions to have medication reconciliation completed prior to the patient reaching the recovery area.

Staffing a pharmacist in the Day Surgery improved efficiency of the pharmacist, allowed more patients to be reached during one shift and decreased changes to hospital orders following admission.

PDSA	Description	Outcome Measure	% of inpatient orders for home meds requiring changes
0	Baseline	69%	17.6%
1	RN obtains home med list on paper. Provider enters/updates EHR.	58%	3.5%
2	Provider obtains and enters/updates EHR. RN reviews list with patient/family to confirm.	63%	13.5%
3	Pharmacist does admission med rec for all admissions to one unit.	93%	1%
4	EDTC Pharmacist completes med rec for admissions. Floor pharmacists do med recs for new admissions during day.	90%	1.7%
5	All floor pharmacists complete med recs for new admissions during the day. Med rec pharmacist helps support.	85%	3%
6	3 dedicated pharmacy people providing 17 hours of med rec coverage Monday through Friday.	92%	0.2%



Lessons Learned

Accuracy of home medication lists in the EHR improves with pharmacy involvement.

Initiating medication reconciliation prior to admission (i.e. in the EDTC or day surgery) results in the greatest efficiency.

Accurate home medication list at the time of ordering/not ordering medications improved patient safety and eliminated additional waste in the medication use system.

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