CompleteRx
Living Pharmacy

Case Study

Medication Reconciliation Technician Program

Situation

According to the FDA, medication errors cause at least one death every day and injure approximately 1.3 million people annually in the U.S. While hospitals do their best to maximize patient care and safety, preventable mistakes – such as duplicate orders and administrations, as well as poor patient communication – are, unfortunately, industrywide realities that may exacerbate this problem, putting hospitals at risk of fines and legal fees, and worse, serious patient harm. Through its partnership with CompleteRx, a 186-bed hospital in New York state set out to address this issue at its own hospital, where a number of challenges – including confusing order sets due to outdated or incomplete patient medication histories – were contributing to errors and inefficiencies.

Medication Reconciliation is not accurate on admissions.

54-67% of all admitted patients had **at least one error** that has the potential to cause harm.

More than half of all medication errors occur at **transitions of care**.

Solution

In response to these challenges, CompleteRx developed the Medication Reconciliation Technician Program as a first line of defense against medication errors at the hospital and significantly improve communications about medications (HCAHPS). Among other things, the new program:

Designates a pharmacy technician – dually trained in medication reconciliation and traditional pharmacy functions – to research and enter all medications admitted patients are currently taking into the hospital's Meditech system (previously, there was a diffusion of responsibility across physicians, nurses and pharmacists, leading to gaps and inefficiencies).

Decentralizes the pharmacy, strategically inserting pharmacy technicians into the workflows of different departments to ensure error reduction, while maintaining throughput. With their new dedicated resource, nurses and physicians are able to take advantage of voluntary pharmacy consults – particularly for vulnerable populations – providing patients and their families direct contact with pharmacists in an effort to maximize medication adherence and minimize at-home errors.

Standardizes primary-source verification, previously conducted sporadically and only in the patient care team's elusive spare time, in which pharmacy technicians may confirm the patient's account of his or her medication history directly with physicians to ensure accuracy. This approach also promotes coordinated patient care across nurses, physicians and emergency personnel, improving the group's ability to catch medication errors before they occur.

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Results

In April 2015, CompleteRx performed a two-week pilot study to gain approval for the Medication Reconcilliation Technician Program. After conducting a baseline assessment of the hospital's current processes and then implementing the proposed program, the team saw a dramatic increase in accuracy, from 44 percent to 88 percent. Most importantly, these improvements – which were verified by an independent auditor – eliminated the effect of medication errors on patient care (i.e., residual errors were minor and didn't change patients' treatment course). The new program officially launched in January 2016, and the team expects to see continued improvement in the reduction of medication errors as a result of the new effort.

	AUDIT 1 *Current Process*	AUDIT 2 *Phamacy Involvement*
Number of Patients Seen	74	71
Number of Reconciliations Verified	61	52
# of Errors	34	9
Accuracy Rate	27/61 (44%)	43/52 (83%)
Patient Impact	15/34 (44%)	0

**# of errors that reached the patient*

Breakdown from Audit 1

Total Errors	34
Serious	16
Minor	18

Breakdown from Audit 2

Total Errors	9
Serious	1
Minor	8

Patient Impact Errors	15
Serious	13
Minor	2

This new program saw a **major improvement** in multidisciplinary approach to patient care, including a **65% increase** in communications about medication and a **98th percentile** HCAHPS ranking in **patient satisfaction** on discharge planning.