RAISING the BAR

EVERYONE HAS A HAND IN PATIENT SAFETY

Diane Waeltz BSN, RN , Stephanie Sanders BSN, RN, MBA, DRNP(c), Donna Fine, PharmD, Nancy W. McMann MS MT(ASCP), Anne Ruegner BS, PMP, Mary Lou Kurilla MSN, RN

Keystone Alliance For Performance Excellence

Abington Memorial Hospital

MAGNET RECOGNIZED AMERICAN NURSES CREDENTIALING CENTER

The Problem

- Medication errors continue to be a focus of regulatory agencies, public reporting, and patients.
- Abington Health (AH) identified the opportunity to improve the medication administration process to decrease medication errors.
- AH needed to implement a technological solution that augmented existing nursing practices, using a cost neutral education plan and roll out.

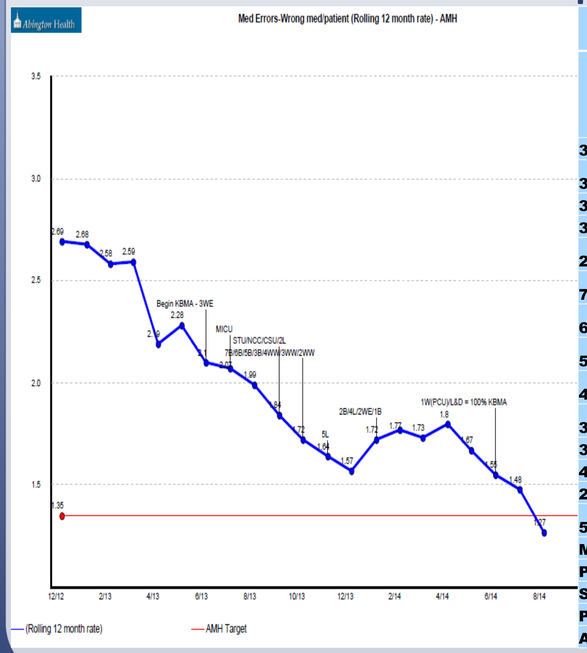
AIM

With no available benchmark data for medication errors, an internal goal was developed: Reduce medication errors by 50% in FY13 using clinical information technology coupled with standardized nursing approaches to improve medication administration and patient outcomes. Existing CPOE, pharmacy automation and the eMAR was leveraged to assist physicians, pharmacists and nursing staff in preventing medication errors at the bedside.

Approach & Deployment

- Create an interdisciplinary working group ,supported by Senior Leaders, to implement a barcoding solution , Knowledge Based Medication Administration (KBMA)
- The team consisted of a subgroup of educators, clinical informaticists, and IT analysts to assess needs and create education for staff
- Use pilot units to gauge success of avoiding workarounds, cost neutral education, and go-live efforts
- Perform workflow analysis for the RN, Respiratory and Pharmacy staff
- Assess equipment needs, develop budget, and make purchases
- Train using a train the trainer model; deploy go lives in phases, unit by unit roll out through the organization with support to staff 24/7
- Develop staff feedback mechanisms, encouraging emerging workflow solutions; identify process metric to assess use of scanning, define and develop outcome metric to measure medication error rate

Results



KBMA AMH Report 5-26-2014 through 6-02-2014

Dept	Total Admin'd	KBMA SCAN %	Med Admin Count In KBMA	KBMA No SCAN %	No Scan Admin Count	Direct EMAR %	Direct EMAR Count
3WE	2027	97%	1967	1%	10	2%	51
3 Lenfest	2434	94%	2297	1%	17	5%	121
3T1 & 2	2233	95%	2122	0%	6	5%	59
3T 4	857	95%	810	0%	2	5%	45
2 Lenfest	3097	93%	2886	2%	71	4%	144
7 Buerger	2660	97%	2573	0%	4	3%	81
6 Buerger	1882	95%	1789	1%	18	4%	74
5 Buerger	1910	92%	1764	2%	35	0%	110
4 Buerger	355	95%	337	1%	4	4%	12
3 Buerger	2220	95%	2118	0%	9	4%	90
3WW	2012	97%	1951	0%	7	3%	54
4WW	1694	98%	1665	0%	5	1%	24
2WW	2294	95%	2168	1%	18	5%	108
5 Lenfest	4882	93%	4558	1%	43	6%	281
MBU	1599	92%	1468	1%	8	8%	123
PCU2	2151	92%	1986	1%	19	7%	146
SCN	552	76%	422	9%	36	15%	96
Pediatrics	310	96%	298	1%	2	3%	8
AVERAGE	1954	94%	1843	1%	17	5%	90

Integration

- Decreasing medication errors that reach the patient aligns with Abington Health's key success factor of patient safety and clinical excellence.
- Decreasing harm to patients aligns with AH vision of being the most trusted partner

Learning

- **Scanning Issues**: Syringe antibiotics would not scan well, bar code wrapped and condensation a problem. Solutions were 2D barcode on med labels, new labels helped with condensation. Oral syringes gave warning for multidose when not needed, able to adjust for the staff in configuration.
- **Reports**: Canned reports did not provide necessary data. Created two custom reports.
- **Lessons Learned**: All medication errors are not eliminated by technology. KBMA is only a tool; nurses must still use the 6 rights of medication administration. Technology cannot replace nursing practice. **Nurses remain the final safety net in administering the right medication to the right patient.**

Results

- Medication errors that reached the patient decreased by 50%.
- All of the units have implemented KBMA and are achieving 94% compliance with scanning.

Outcomes

- Documentation of medication administration now occurs at the bedside
- Detection of dispensing errors is more easily discovered and corrected
- Reporting of near misses has increased