



# MEDICATION OMISSIONS: THE ELEPHANT IN THE ROOM

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## Abstract

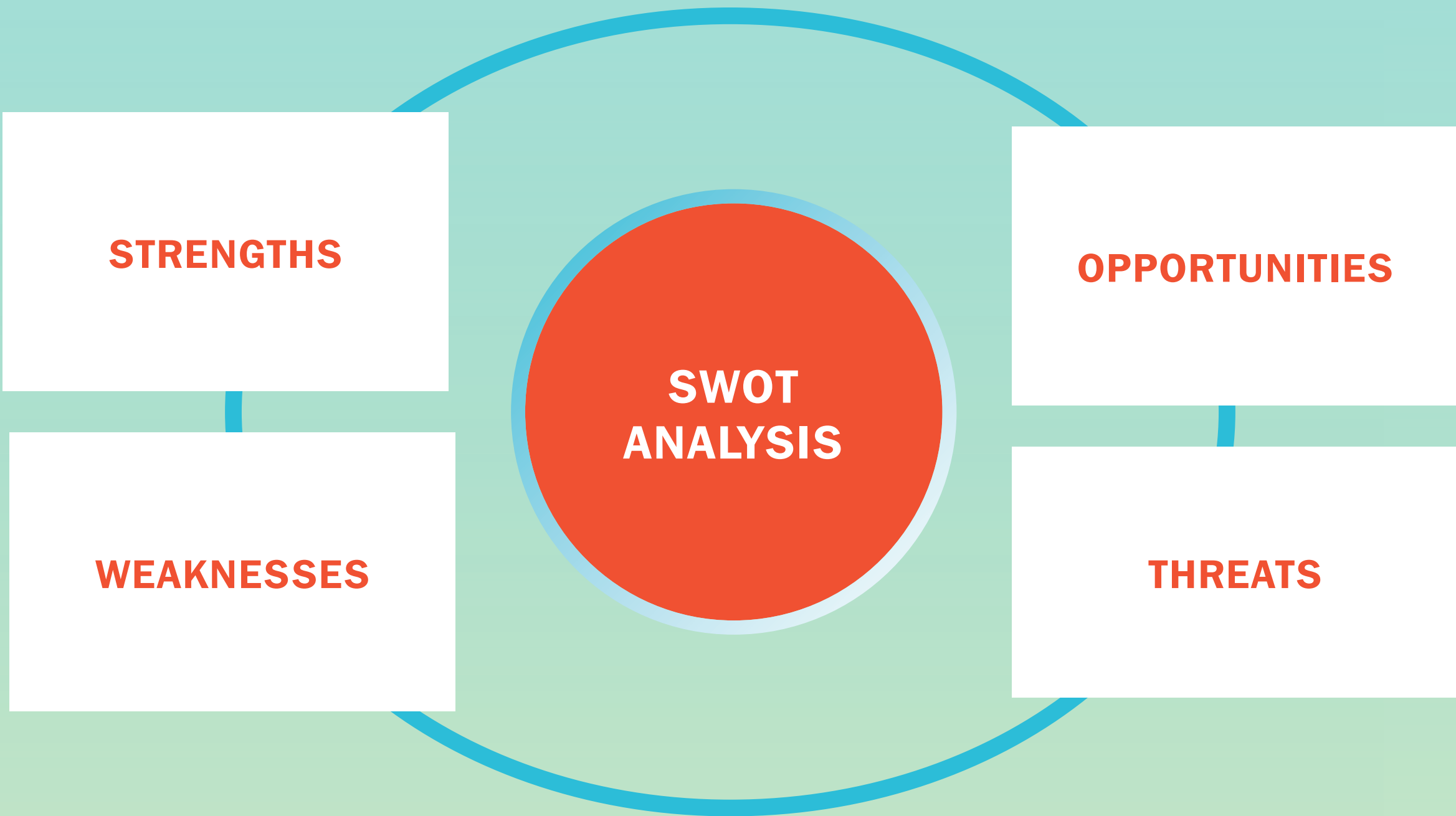
The Institute of Medicine (IOM, 2000) reported that medical errors are the fifth leading cause of death in the United States (as cited in Nelms & Treiber, 2011). Medication variances are included within the description of preventable medical errors and are considered to be an issue of global concern to those receiving and administering care in any hospital setting. Medication omissions are identified in the nursing research literature as one of the top reasons for medication variances. At Geisinger HealthSouth Rehabilitation Hospital in Danville, Pa, we experienced what the nursing research has identified; in 2012, it was noted that 64% of our medication variances were omissions. At the end of the first quarter in 2013, medication omissions as a reason for medication variances increased to 81%. Understanding reasons for medication omissions at our hospital required an assessment of the current medication process. The nursing Shared Governance and Unit Council Committees were charged with reducing the number of medication variances due to medication omissions in the second quarter to less than 50%. Ensuring that patients consistently receive medications in a manner that enhances safety had to be part of our nursing culture.

## Objectives

1. To reduce medication variances specific to medication omissions by 50% in the second quarter.
2. To identify two unsafe nurse medication administration processes that could lead to medication omissions.
3. To revise the current medication administration policy to address specific process opportunities.
4. To evaluate the current nurse on-boarding process and ensure that medication variances, in particular medication omissions, as a patient safety issue is being addressed.

## Methods

Ten registered nurses serving as members of either Shared Governance or Unit Council Committees completed a SWOT analysis identifying strengths, weaknesses, opportunities, and threats with medication administration process and policy. In addition, each registered nurse was required to complete a summary review of five nursing research studies made available by the Chief Nursing Officer. This review was to be completed before the medication administration observations occurred.



- Five medication administration observations completed by each registered nurse at 0800 or 2000 for a total of 50 observations over one month. A checklist was provided to each registered nurse for completion and submission.
- Each registered nurse was responsible for reviewing the current medication administration policy.
- A four-hour retreat was conducted with all ten registered nurses to analyze 40 medication omission incident reports for the time period of January 2012 through March 2013.

## Results

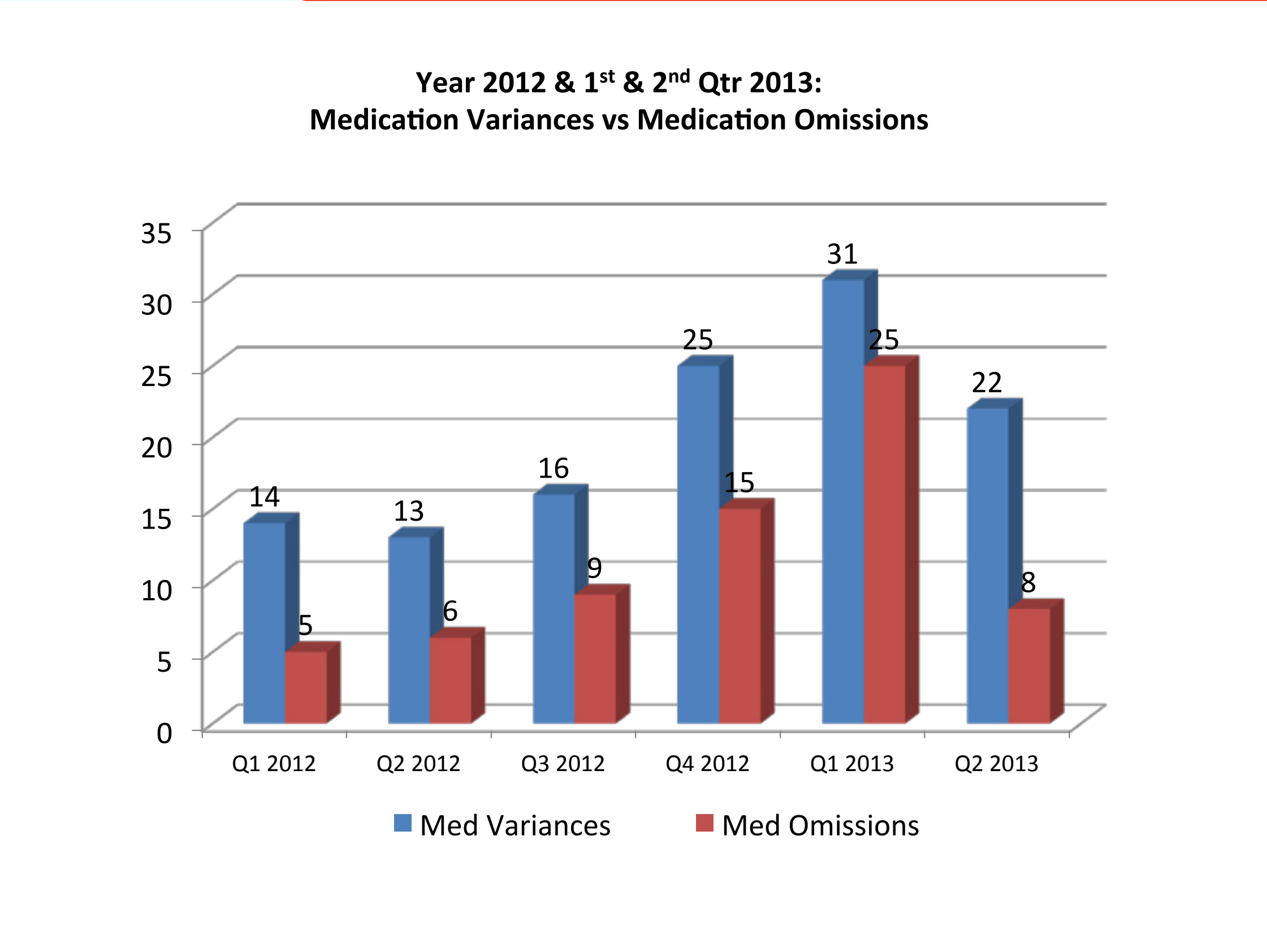
- 56% of medication administration process per policy out of compliance due to 1) medications being pulled or poured prior to entering the patient's room, 2) medications signed off on the medication administration record prior to the actual medication administration to the patient, and/or 3) nurses interrupted during medication administration to complete non-medication administration activities.
- Nurses administering medications cited a lack of awareness of policy as a reason for deviating from best practice during medication administration.
- Serious medication variances inclusive of omissions have a personal and professional impact on nurses involved as demonstrated by lack of confidence when interviewed.
- There was no evidence of a medication administration review process at the end of each medication pass or each shift to ensure that all medications were administered as ordered.

## Quality Improvement Action Plan

- Sign off medications after armband check, two patient identifiers and administration of medications occurs, NEVER before. Nurses hold each other accountable for this process. Ensure that the medication administration policy reflects that level of detail.
- Limit distractions during medication administration with the use of an identifier at the medication cart indicating that medication administration is in process (signage on the medication cart).
- Open medications in the patient's room while educating the patient about medications being administered. Do not open medications in hallway.
- Take medication cart into all patient rooms except isolation patients for the medication administration process.
- Review a typical medication administration encounter during the patient and family orientation program that is completed within the first 24 hours of hospitalization. This gives the patient and family an idea of what to expect
- Implement a bi-weekly medication management meeting that reviews all medication related variances. Stakeholders are Chief Nursing Officer, Nurse Manager, Quality Manager, and Pharmacist. Opportunities for improvement, tracking and trending are identified at this meeting and communicated as necessary to nurses.
- Hospital Educator content revision to the nurse on-boarding process ensuring that medication administration compliance is reviewed, documented and understood using the teach-back method.
- Implement an end of shift medication administration review conducted by front-line nurses paired up to review the work of peers. There is a sign-off process that this has been completed at the end of each shift.

## Discussion

There were four identified unsafe practices occurring during medication administration that could result in medication omissions: 1) signing off of administered medications prior to giving to patient, 2) multiple distractions leading to nurse interruptions during the process, 3) medications were being opened and poured in the hallway and not in the patient's room, and 4)



the medication cart was not taken into the patient's room at the time of medication administration. Through SWOT analysis, current nursing research findings, and analysis of 40 incident reports related to medication omissions, it was determined that there was an opportunity for quality improvement. Observations by ten registered nurses on five separate occasions at the 0800 and 2000 medication administrations for a total of 50 reviews identified that 56% of the time nurses were out of compliance with current policy. The quality improvement action plan was implemented on April 15, 2013. The second quarter results for medication omissions as a percent of total medication variances came in at 36% and was reduced significantly from the 81% result for the first quarter of 2013.

## Conclusion

Medication omissions, the elephant in the room, exist because nurses do not recognize its significance. At Geisinger HealthSouth Rehabilitation Hospital, the nursing department took this challenge on in an effort to deliver a higher standard of care. Through an aggressive action plan, ten registered nurses were able to reduce both the number of medication variances and percentage of medication omissions for the second quarter to 36%. This was a significant reduction from the first quarter result of 81%. This remains an area of focus for nursing as the need to sustain the results is essential.

## References

Grove, S.K., Burns, N., & Gray, J.R. (2013). The practice of nursing research: Appraisal, synthesis, and generation of evidence. St.Louis, MO: Elsevier Saunders.

Johnson, M., Tran, D.T., & Young, H. (2011). Developing risk management behaviours for nurses through medication incident analysis. The International Journal of Nursing Practice, 17, 548-555.

Nelms, T., & Trieber, L. (2011). A study to reduce medication administration errors using watson's caring theory. The International Journal of Human Caring, 15(3), 24-33.

Popescu, A., Currey, J., & Botti, M. (2011, First Quarter). Multifactorial influences on and deviations from Medication administration safety and quality in the acute medical/surgical context. Worldviews on Evidence-Based Nursing, 15-24.

Schelbred, A. B., & Nord, R. (2007, June 29). Nurses' experiences of drug administration errors. The Journal of Advanced Nursing, 60(30), 317-324.

Tang, F.I., Sheu, S.J., Yu, S., Wei, I.L., & Chen, C.H. (2007). Nurses relate the contributing factors involved in medication errors. The Journal of Clinical Nursing, 16, 447-457.