

Using improvement science models to promote quality and safety

[Health & Medicine](#), [Nursing](#)



Using Improvement Science Models to Promote Quality and Safety Using

Improvement Science Models to Promote Quality and Safety Introduction

One of the key problems currently troubling the health care sector involve inability of health care providers to provide sufficient and suitable care to their patients. This has necessitated the need for redesigning the health care delivery system to accommodate systems centered on facts, and that focus primarily on the patients in an effort to improve services. To achieve improvements, quality improvement science models are used. As explicated by Ernst et al (2010), quality improvement science is a " flexible systems-based approach for improving the quality of health care delivery within daily clinical practice" (p. 14). This paper offers an analysis of two improvement models and how they could foster a culture of quality and patient safety and facilitate changes in process that promote positive outcomes. Subsequently, this paper elucidates how one of the models could be used to address prolonger clinic wait times in Brookwood Medical Center and how it relates to one of the IOMs six aims for improving quality and safety.

Improvement Models

As an example of a quality improvement model, Plan-Do-Study-Act (PDSA) is a quick, chronological, and collective erudition model that presents significant information on factual results relating to the continuing efforts of the health care delivery team (Institute for Healthcare Improvement, 2012). In this model, an initiative for change is recognized in the planning stage, execution and quantification of the initiative conducted in the doing stage, and evaluation of the information to be quantified conducted in the study stage (Ernst et al, 2010). Based on the results of the assessment, a decision

to either approve or discard the initiative is done in the acting stage. In other words, change processes are directed by a continuous process of compilation of information (Ernst et al, 2010). Therefore, quality processes that promote patient safety are adopted while strategies to improve on processes or systems resulting to substandard outcomes are initiated. In so doing, a culture of quality and patient safety is promoted.

The second model of improvement is the change acceleration process highlighted by Polk (2011), and is achieved through innovation and the lean six sigma. In the lean sigma method, the need for change must be defined, measured, and analyzed (Polk, 2011). Subsequently, a procedure for remedial actions must be formulated, and the achieved outcome quantified using relevant measures in order to ascertain whether the intended outcome has been achieved (Polk, 2011). This process, according to Polk (2011) helps eradicate variations and errors that could have a negative effect of quality. In so doing, this process helps promote a culture of quality and safety.

Addressing prolonged clinic wait times

The six sigma process can be used to address the prolonged clinic wait times in Brookwood Medical Center. According to Polk (2011) Six sigma helps "create value by examining what is important to the customer" (p. 39) and also helps identify the processes contributing to better outcomes. As a nurse leader, this could help me identify processes to adopt and those to drop. For instance, processes with better outcomes can be adopted while those with substandard outcomes are dropped. Through the six sigma method, process that cause delays in terms of appointments can be identified and eliminated hence reducing the clinic wait times. One of the IOMs aims for improving

quality and safety is provision of care in a timely manner (Association for Healthcare Resource and Materials Management, 2015). Doing away with processes that contribute to low quality as can be achieved through the six sigma method eliminates all the hurdles that make it impossible for patients to receive timely care. To further delineate timeliness of care in relation to the six sigma model, appointments are made in a timely manner. In a nutshell, quality of care can be improved through improvement science models such as the six sigma and the Plan-Do-Study-Act (PDSA). In these models, the change initiative is identified and subsequent strategies to measure, analyze, and review the outcomes put into practice.

References

- Association for Healthcare Resource and Materials Management. (2015). Supply Chain Services Professionals Role in Achieving the Institute of Medicines Six Aims for Improvement. Retrieved from http://www.ahrmm.org/ahrmm/news_and_issues/issues_and_initiatives/IOM6/
- Ernst, M. M., Wooldridge, J. L., Conway, E., Dressman, K., Weiland, J., Tucker, K., & Seid, M. (2010). Using quality improvement science to implement a multidisciplinary behavioral intervention targeting pediatric inpatient airway clearance. *Journal of Pediatric Psychology*, 35(1), 14-24.
- Institute for Healthcare Improvement. (2012). How to improve. Retrieved from <http://www.ihp.org/resources/Pages/HowtoImprove/default.aspx>
- Polk, J. D. (2011). Lean Six Sigma, innovation, and the change acceleration process can work together. *Physician Executive*, 37(1), 38-42.