# Sigma Theta Tau International's 29th International Nursing Research Congress

### Implementation of an Electronic Handover Tool: Learning From Program Evaluation

#### Luanne M. Shaw, DNP, MA (Interdisciplinary), RN, CEN

Kirkhof College of Nursing, Grand Valley State University, Grand Rapids, MI, USA Jean M. Barry, PhD, RN, NEA-BC Kirkhof College of Nursing Suite 300, Grand Valley State University, Grand Rapids, MI, USA

Communication handover, known by many names in the literature, is a source of potential error and risk to patient safety (Joint Commission Resources, 2015). One of the National Patient Safety Goals (NPSG) is to improve the effectiveness of communication among caregivers (Joint Commission, 2017). The literature reports multiple types of electronic-based tools used to reduce errors and mitigate risks to patient safety (Hunt & Staggers, 2011). The implementation of these tools has achieved varying degrees of success using multiple methods of education and training. Barriers to successful implementation have included inability of tools to update information in a timely manner, persistent inaccuracies, clinician resistance to change, duplication of work, lack of training, and lack of integration with the EHR (Davis et al., 2015). Evaluation of programs, such as implementation of an electronic tool, informs of success and opportunities for improvement in future endeavors (Dickerson & Lubeiko, 2016). A large West Michigan Regional Health System (RHS) implemented a new Electronic Health Record (EHR) containing an embedded tool called Professional Exchange Report (PER) to support the practice of nurse bedside communication handover. There was inconsistency in the practice of bedside report and use of the EHR during report by nurses. Staff nurses also relied heavily on a structured paper based report form to both organize their workload and give report. The RHS planned the use of a bundle of educational interventions to implement the new tool and report structure including communications, video demonstration, in-seat training and at the elbow support during the go-live. The purpose of the project was to systematically evaluate the implementation of PER using evidence based methodology, an implementation model for change management, and theoretical framework for process evaluation. Evaluation was based on collection of data and evidence through interviews, pre- and postimplementation surveys, observations of the report process, and review of documents related to planning, implementing and evaluating the program. Determination was made if any changes, even incremental, occurred in length of report, perceptions of the process, or consistency of practice. The objectives of the project were to determine how the RHS planned, implemented, and evaluated its program and what impact was made by the process change. Implications for implementation include key stakeholder involvement throughout the process, use of change management model, and ongoing communication and support for all affected. The use of a theoretical framework, such as the Consolidated Framework for Implementation Research has broad application including program evaluation (Nilsen, 2015).

## Title:

Implementation of an Electronic Handover Tool: Learning From Program Evaluation

### Keywords:

Electronic Bedside Handover, Nursing and Program Evaluation

#### **References:**

Davis J, Riesenberg, L.A., Mardis, M., Donnelly, J., Benningfield, B., Youngstrom, M., Vetter, I. (2015). Evaluating outcomes of electronic tools supporting physician shift-to-shift handoffs: A systematic review. *Journal of Graduate Medical Education*, *7*(2), 174-80. doi: 10.4300/JGME-D-14-00205.1

Dickerson, P., & Lubejko, B. (2016). Developing a program evaluation plan: Options and opportunities. *The Journal of Continuing Education in Nursing*, 47(9), 388-389. *doi:10.3928/00220124-20160817-02* 

Hunt, S., & Staggers, N. (2011). An analysis and recommendations for multidisciplinary computerized handoff applications in hospitals. *American Medical Informatics Association Annual Symposium Proceedings/AMIA Symposium. AMIA Symposium, 2011*, 588.

Joint Commission. (2017). *National patient safety goals effective January 2017: Hospital accreditation program.* Retrieved from <u>https://www.jointcommission.org/assets/1/6/2017\_NPSG\_HAP\_ER.pdf</u>

Joint Commission Resources. (2015). Human factors analysis in patient safety systems. *The Source, 13(4)*. Retrieved from <u>http://www.jcrinc.com/human-factors-analysis-in-patient-safety-systems/</u>

Nilsen, P. (2015). Making sense of implementation theories, models, and frameworks. *Implementation Science, 10*(53). doi: 10.1186/s13012-015-0242-0

# **Abstract Summary:**

This session will describe key learning from the implementation of an electronic tool to support bedside communication handover. Program evaluation and quality improvement methods will summarize strengths and opportunities for improvement in implementation efforts. Implications for practice both locally and globally will also be discussed.

### **Content Outline:**

I. Introduction and background

- A. Significance of problem (i.e. patient safety, communication failures)
- B. Issue within organizations globally (i.e. worldwide initiatives)
- C. One organizations intervention (implementation of electronic bedside tool)
- II. Program Evaluation
  - A. What is it? (i.e. formative and summative)
  - B. Why is it important?
  - C. How evaluation was completed
  - D. Results
- III. Implications for practice

## A. Learnings

B. Local recommendations (i.e. inform future roll-out)

C. Global recommendations (i.e. inform other organizations using tool, best practices for implementation/change management)

First Primary Presenting Author

# **Primary Presenting Author**

Luanne M. Shaw, DNP, MA (Interdisciplinary), RN, CEN Grand Valley State University Kirkhof College of Nursing Affiliate Faculty Grand Rapids MI USA

**Professional Experience:** Over 20 years of nursing experience including emergency, agency, cardiovascular; over 7 years in clinical nursing education, over 10 years of experience in undergraduate nursing education with clinical instruction, interprofessional education and simulation; DNP practicum in health systems leadership; experience in contact hour planning and curriculum development **Author Summary:** Luanne completed the Doctor of Nursing Practice degree with emphasis in health systems leadership. She spent three semesters engaging in system issues, change management, implementation science and evaluation in a large health system. She has served in a clinical teaching role at Grand Valley State University as well as a nurse educator in the clinical practice setting with over 25 years of nursing experience.

Second Author

Jean M. Barry, PhD, RN, NEA-BC Grand Valley State University Kirkhof College of Nursing Associate Professor of Nursing College of Health Sciences Grand Rapids MI USA

**Professional Experience:** PhD in Nursing Administration - 6 years EBP projects and research experience - 27 years Expertise in quality improvement and implementation science - QI 33 years and Implementation Science 4 years

**Author Summary:** Dr. Jean Barry earned her PhD in Nursing Administration from the University of Iowa College of Nursing. She has worked in hospital and nursing administration for over 25 years. She has been in academia for the last 10 years. She teaches in both the masters and DNP program at Grand Valley State University where she is also the coordinator for the Health Systems Leadership track. She is the project advisor for multiple DNP projects.