

High-Performing Operating Teams in the Weinberg Operating Room: OR Observation Tool

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1 Background

It is a widely known concept that good, effective teamwork drive teams to success. Mazzocco et al. (2009) found that patients had higher odds of complications or death when certain behaviors deemed to reflect good teamwork were missing amongst the operating teams. To be able to deliver the utmost care to surgery patients, establishing high-performing operating teams (HPOTs) is essential. Previous studies have concluded that having fixed operating teams, with no change in team members, resulted in decreased turnover times and procedure duration while increasing patient outcomes (Stepaniak, Vrijland, de Quelerij, de Vries, & Heij, 2010; Stepaniak et al., 2012).

The importance of having fixed teams to create HPOTs has been verified, but **what if the hospital's operating unit cannot have fixed teams?** In a large operating unit such as the Weinberg Operating Unit at Johns Hopkins Hospital, there are no consistent, fixed operating teams. Each staff member is assigned to a specific specialty but the members of the operating teams are constantly changing throughout the day. Since choosing a fixed team to educate towards HPOT is not achievable, we decided to seek for a way to transform the entire Weinberg Operating Unit into a high performing unit.

We believe that once each staff member learns the qualities of HPOT and how to execute the qualities, they will be able to demonstrate high-performance regardless of the unfixed operating teams. We elected to focus on two main qualities of high-performing operating teams: communication and preparedness (Stevens et al., 2012; Stepaniak et al., 2010).

2 Objectives

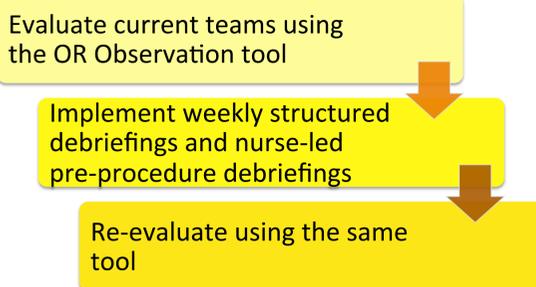
1. Create an Operating Room Observation Tool
2. Validate the created tool
3. Achieve internal validity of the tool by comparing the scores between the tool expert and OR expert

3 Methods for Research

Research Question:

Does the initiation of nurse-led pre-procedure briefings in the OR before each surgical procedure and weekly structured debriefings for OR staff on the surgical service lead to an increased level of teamwork for the OR staff, compared their level of teamwork?

Study Design:



OR Observation Tool:

Multiple OR observations were completed to create a set of questions that will adequately measure the communication and preparedness of operating teams. Operating teams are to be observed and evaluated by the NCIII's (OR experts) and the nursing student (Tool expert) at the same time, separately. Scores are compared at the end of the procedures to determine if the tool is measuring the qualities correctly and if internal validity is achieved.

4 Results/Data analysis

The OR Observation Tool is comprised of total of 14 questions. Seven questions are designed to measure team communication and other seven questions preparedness. The tool includes areas for additional comments that can be referred back to in the future to reassess what happened in the OR. This information can be used later to facilitate the weekly debriefings.

Part of the OR Observation Tool:

How frequently anticipatory questions were asked	1	2	3	4	5
	Never	Rarely	Sometimes	Often	Always
How frequently the nurse asked for clarification	1	2	3	4	5
	Never	Rarely	Sometimes	Often	Always
How frequently requests were repeated	1	2	3	4	5
	Never	Rarely	Sometimes	Often	Always

Scores:

65-70	Always High Performing Team
55-64	Mostly High Performing Team
45-54	Sometimes High Performing Team
35-44	Rarely High Performing Team
< 34	Never High Performing Team

5 Conclusions

A new observation tool was created to measure the performance level of operating teams. The tool assesses the two main qualities evaluated to be the basis of HPOT: communication and preparedness. The research team is in process of achieving internal validity. So far, the results have been promising with observers scoring the surgical team within same categories. Usability survey was also created and is to be completed by the NCIIIs.

6 Future Directions

❖ Focus on Weinberg GYN Surgical Service

❖ Possibly adapt: TeamSTEPPS, an evidence based teamwork guidelines to improve patient safety, for debriefings (AHRQ, 2013)

❖ Possibly adapt: SAFETY Prep, a structured pre-procedural briefing covering information necessary for patient safety, for the nurse-led pre-procedural briefings (Paige et al., 2008)

❖ Utilize the standard OR productivity measures (e.g., case turn around time, planned versus actual time for procedure, and duration of briefing).

7 References

Agency for Healthcare Research and Quality, Rockville, MD. *TeamSTEPPS 2.0*. Retrieved from <http://www.ahrq.gov/news/newsroom/pressreleases/2014/teamstepps20.html>.

Mazzocco, K., Petitti, D., Fong, K., Bonacum, D., Brooke, J., Graham, S., . . . Thomas, E. (2009). Surgical team behaviors and patient outcomes. *The American Journal of Surgery, 197*(5), 678-685. Retrieved from <https://www.clinicalkey.com.ezp.welch.jhmi.edu/#!/content/journal/1-s2.0-S0002961008004595>

Paige, J.T., Aaron, D.L., Yang, T., Howell, D.S., Hilton, C.W., Cohn, I., and Chauvin, S. (2008). Implementation of a preoperative briefing protocol improves accuracy of teamwork assessment in the operating room. *American Surgeon, 74*(9), 817-23. Retrieved from <http://search.proquest.com.ezp.welch.jhmi.edu/docview/212826231?accountid=11752>

Stepaniak, P., Heij, C., Buise, M., Mannaerts, G., Smulders, J., & Nienhuijs, S. (2012). Bariatric Surgery with Operating Room Teams that Stayed Fixed During the Day. *Anesthesia & Analgesia, 115*(6), 1384-1392. doi:10.1213/ANE.0b013e31826c7fa6

Stepaniak, P., Vrijland, W., De Quelerij, M., De Vries, G., & Heir, C. (2010). Working With a Fixed Operating Room Team on Consecutive Similar Cases and the Effect on Case Duration and Turnover Time. *Archives of Surgery, 145*(12), 1165-1170. doi:10.1001/archsurg.2010.255.

Stevens, L., Cooper, J., Raemer, D., Schneider, R., Frankel, A., Berry, W., & Agnihotri, A. (2012). Educational program in crisis management for cardiac surgery teams including high realism simulation. *The Journal of Thoracic and Cardiovascular Surgery, 144*(1), 17-24. doi:10.1016/j.jtcvs.2012.03.006

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