Does specialized training in the use of I-PASS Increase confidence in reporting a change in medical condition?

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Abstract

"Failure to rescue (FTR) is failure or delay in recognizing and responding to a hospitalized patient experiencing complications from a disease process or medical intervention" (Hall et al., 2020, Background section). It is viewed in three parts: failure to recognize, failure to report, and failure to treat. The first two of these are dependent on nursing. The use of an effective communication tool like I-PASS can increase confidence in reporting a change in patient condition. I-PASS stands for Illness severity, Patient summary, Action list, Situation awareness, and Synthesis by the receiver. Training for RNs on the use of the I-PASS tool should increase their confidence in its use, and increase the incidence and quality of reporting a change in patient condition to a provider.

While there is limited research examining the effect of I-PASS usage on outcomes, very little of the research is focused n nursing, and none found examined the use of I-PASS as a communication tool for RN communicating a change in patent condition to a provider. Given that FTR has a strong nursing component, one specifically related to reporting a change in patient condition, it s important to determine if the use of I-PASS can decrease failure to communicate.

Introduction

Off-shift RNs at the Edward P. Boland Medical Center who notice a change in patient condition should report it to the Medical Officer of the Day (MOD). MODs do not work full time for the VA, and are therefore often unfamiliar with the patients, and do not get report from the physicians they are covering. This means that in addition to simply reporting a change in a patient's condition, the nurse needs to give an accurate summary of that patient's background. This complicates an already difficult situation. The use of structured communication tools can aid in gathering, organizing and reporting information to other members of the health care team. The purpose of this project is to determine if training in the use of the I-PASS tool can increase confidence in reporting off to a provider.

Review of Literature

A review of literature (ROL)was performed, examining the use of I-PASS as a tool for communication. Initially, articles were to be selected from the last 5 years, but there were limited published, peer reviewed. I then decided to open the criteria broader. There is a single article from 2017 which was included due to its nursing specificity, the rest are from five years or less.
Findings of the ROL include:
• Perceived errors in handoff decreased after implementation of I-PASS and 75% of nurses reported that I-PASS improved/greatly improved handoff (Blazin et al., 2020).
• There was an increase in key elements of communication with use of I-PASS (Starmer, et al, 2017)
• Statistically significant increases in information quality, interaction & support, efficiency, and patient involvement were shown after I-PASS training (Nemati et al., 2022).
• Physicians trained in the use of I-PASS had a decrease in adverse events (AE) from 1.7 to 0.9 AE/year (Starmer et al., 2022).
• Providers in a pediatric ED trained in I-PASS had a decrease (75-37.5%) in information loss at report (Yanni, 2023).
• Formal training in I-PASS increases its utilization dramatically (Hughes et al., 2019).
• One study found no significant difference in AEs with the use of I-PASS in six Argentinian PICUs (Jorro-Barón et al., 2021).

(Simulation Learning, 2024)

Methodology

Research question: Can training in the use of the I-PASS tool increase user confidence in reporting a change of condition to a provider?

Hypothesis: RNs who receive specialized training in the use of the I-PASS tool will report a higher confidence in its use, along with an increase in perceived quality of report of a change in patient condition to a provider.

Design: Quasi-experimental. A group of RNs working on the community living center (a long-term care unit) will be recruited for the study. They will anonymously self-report confidence in reporting a change in patient condition to a provider. Specialized training on the use of the I-PASS tool will be provided. After training is completed, the group of RNs will be given the survey again, and asked to rate their confidence in reporting a change in patient condition again. Data regarding differences in the pre-and post-training will be gathered and compared.

Ethics: FHSU IRB clearance will be obtained prior to initiation of the study.

Theoretical Framework

Experiential Learning: Experience-based learning is founded on the principle that experience should be the main premise for learning, it values participant activity highly (Landers et al., 2020). It is focused around learning through experiences, ideally through direct participation (Bonnel et al., 2018). The I-PASS tool will be explained to the participants, and discussion will be had. Through the use of simulation, participants will assess a patient, then utilize the I-PASS tool to give a report to a simulated physician. This allows for experience, reflection, conceptualization, and experimentation.

(Experiential Learning,Simply Explained, 2023)
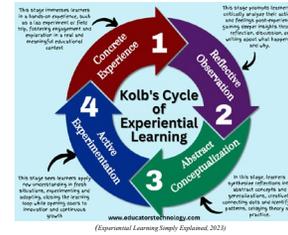
Implementation

Prior to initiation of the training, anonymous surveys will be emailed to the MOD group, asking them to rate several areas of change in patient condition communication from CLC nurses. This information will be used to determine which aspects of the communication should be focused on in the training. Prior to any teaching or simulation, the participants will be asked to submit an anonymous survey, rating their confidence in several aspects of communicating a change in condition to an MOD. Then instruction on the I-PASS tool will be given, followed by group discussion.

Next sim lab will be used to allow for an assessment of a patient with an acute health concern. The RN will be allowed to utilize the I-PASS tool to collect and organize information. The nurse will then report the change in patient condition (including medical history and baseline findings to an MOD (role played by providers who agree to participate).
Finally, the participants will be asked to anonymously answer the initial survey.
Differences between the pre-education scores and post-education scores will be collected and interpreted.

Anticipated Findings

It is anticipated that after training in the use of a structured communication tool (I-PASS), RNs will report an increase in confidence in reporting a change in patient condition to a provider. Training in the use of a structured communication tool, if it leads to increased confidence, should increase both incidences of reporting, and the quality of those reports.

Conclusions and Future Research

The need to decrease adverse outcomes is a priority in healthcare. Failure to Rescue comprises some of the most disastrous adverse outcomes that can occur. Nursing is the primary factor in two out of the three factors leading to Failure to Rescue (failure to recognize, and failure to report). If specialized training can increase confidence in recognition and reporting a change in condition, then it is a step towards decreasing incidences of Failure to Rescue. Future research should examine if the providers rate the timeliness, completeness, and accuracy of reporting from RNs as improved with specialized training.

References

Blazin, L. J., Sitthi-Amorn, J., Hoffman, J. M., & Burlison, J. D. (2020). Improving patient handoffs and transitions through adaptation and implementation of of i-pass across multiple handoff settings. Pediatric Quality & Safety, 5(4), e323. https://doi.org/10.1097/pq9.0000000000000323
Bonnel PhD GNP-BC ANEF, Wanda, Katharine, S. A.-B., & Christine, H. R.-B. (2018). Teaching with technologies in nursing and the health professions: Strategies for engagement, quality, and safety (2nd ed.). Springer Publishing Company.
Experiential learning simply explained. (2023). Educators Technology. https://www.educatorstechnology.com/2023/08/experiential-learning.html
Hall, K. K., Lim, A., & Gale, B. (2020). Failure to Rescue. Agency for Healthcare Research and Quality. https://www.ncbi.nlm.nih.gov/books/NBK555519/
Hughes, H. K., Serwint, J. R., O'Toole, J. K., Spector, N. D., & Ngo, T. L. (2019). I-pass adherence and implications for future handoff training. Journal of Graduate Medical Education, 11(3), 301–306. https://doi.org/10.4300/jgme-d-18-00861
Jorro-Barón, F., Suarez-Anzorena, I., Burgos-Pratx, R., De Maio, N., Penazzi, M., Rodriguez, A., Rodriguez, G., Velardez, D., Gibbons, L., Abalos, S., Lardone, S., Gallagher, R., Olivieri, J., Rodriguez, R., Vassallo, J., Landry, L., & Garcia-Elorrio, E. (2021). Handoff improvement and adverse event reduction programme implementation in paediatric intensive care units in argentina: A stepped-wedge trial. BMJ Quality & Safety, 30(10), 782–791. https://doi.org/10.1136/bmjqs-2020-012370
Landers, M. G., O'Mahony, M., & McCarthy, B. (2020). A theoretical framework to underpin clinical learning for undergraduate nursing students. Nursing Science Quarterly, 33(2), 159–164. https://doi.org/10.1177/0894318419898190
Nemati, S., Fathi, M., Nouri, B., & Valiee, S. (2022). Effects of an specific methodology (i pass the baton) on quality of handoff information among nurses: A controlled study. Journal of Healthcare Quality Research, 37(5), 268–274. https://doi.org/10.1016/j.jhqr.2022.02.011
Note-National core indicator adult family survey is open [https://thearcca.org/important-notice-national-core-indicator-adult-family-survey-is-open]. (2018). The Arc California.
Rahman, N. (2018). Meet the robot helping to save real lives. Hour Detroit. https://www.hourdetroit.com/health/meet-the-robot-helping-to-save-real-lives/
Simulation learning. (2024). VirtaMedED. https://virtamed.com/simulation-learning
Starmer, A. J., Schnock, K. O., Lyons, A., Hehn, R. S., Graham, D. A., Keohane, C., & Landrigan, C. P. (2017). Effects of the i-pass nursing handoff bundle on communication quality and workflow. BMJ Quality & Safety, 26(12), 949–957. https://doi.org/10.1136/bmjqs-2016-006224
Starmer, A. J., Spector, N. D., O'Toole, J. K., Bismilla, Z., Calaman, S., Campos, M, Coffey, M., Destino, L. A., Everhart, J. L., Goldstein, J., Graham, D. A., Hepps, J. H., Howell, E. E., Kuzma, N., Maynard, G., Melvin, P., Patel, S. J., Popa, A., Rosenbluth, G.,...Landrigan, C. P. (2022). Implementation of the i-pass handoff program in diverse clinical environments: A multicenter prospective effectiveness implementation study. Journal of Hospital Medicine, 18(1), 5–14. https://doi.org/10.1002/jhm.12979
Yanni, E., Calaman, S., Wiener, E., Fine, J. S., & Sagalowsky, S. T. (2023). Implementation of ed i-pass as a standardized handoff tool in the pediatric emergency department. Journal for Healthcare Quality, 45(3), 140–147. https://doi.org/10.1097/jhq.0000000000000374