

Improving Interprofessional Communications Across Transitions of Care for Patients with Stroke

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INTRODUCTION

- Improving health outcomes related to stroke requires efficient and effective acute care, post-acute care, and care after discharge to home.
- Each transition is crucial to patient management, decreasing post-stroke complications and improving recovery.
- Effective care transitions may ultimately influence the Institute for Healthcare Improvements Triple Aim.
- Preliminary data collected from handoffs between a study and transfer site revealed deficiencies in the accuracy and completeness of the information communicated.
- These communication failures encompassed deficits for risk factors associated with stroke readmissions including aspiration pneumonia, urinary tract infection, and falls.

Purpose

To evaluate the effects of simulation on the communication of interprofessional teams from independent sites to improve transitions of care for patients with stroke with a secondary goal of developing an interprofessional handoff tool.

Research Question

Will interprofessional teams from different care facilities become more effective in communication and collaboration after participating in simulation to develop a handoff tool for patients with stroke?

Objectives

- Examine the interprofessional team satisfaction with current transition of care and their assessment and significance of potential gap(s).
- Evaluate the impact of the simulation on interprofessional collaboration.
- Design a new communication tool for care transitions following simulation.

METHODS

The teams comprised of medicine, nursing, physical and occupational therapy, speech and language pathology, pharmacy, psychology, nutrition, and case management at the study and transfer sites participated in a simulation model of enhanced communication.

- A mixed method approach was utilized with the participants using standardized patient transition of care simulations, and debriefings assessing participant feedback.
- A questionnaire was administered at the beginning to assess the team satisfaction with the existing care transition process, as well as assessment of the completeness of the handoff, and which team members should contribute to the transition of care.
- Quantitative data were obtained through the use of an adaptation of the Modified Interprofessional Collaborator Rubric (mICAR) (Curran et al., 2010) before simulation and after.

Study Design

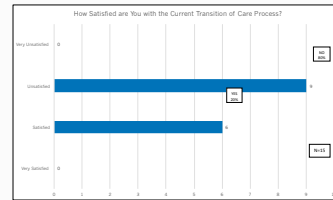
A prospective, non-randomized assessment before and after intervention was conducted to answer the research question. The hypothesis of this study: communication scores will significantly differ following participation in the simulation and development of the handoff tool.

Interprofessional teams from both sites assessed current handoff practice, identified its strengths and weaknesses, and developed a comprehensive tool for transitions of care (KCATS). A second simulation was conducted to assess its impact on collaboration between interprofessional teams from independent care facilities.

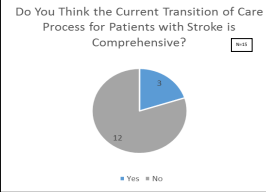
RESULTS

Current Transition of Care Process Satisfaction

A four question survey was taken by 15 participants before simulation using the existing transition of care process between the two facilities.

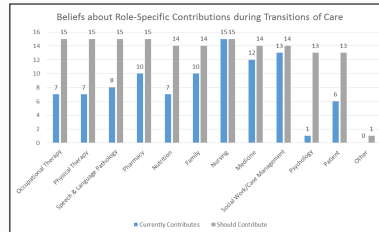


Nine of the fifteen participants reported they were unsatisfied with the current process while 6 reported they were satisfied. No participants indicated they were very satisfied or very unsatisfied with the current process.



Only three of the fifteen participants answered "yes" indicating that the current transition of care for patients with stroke was comprehensive.

Role Specific Contributions

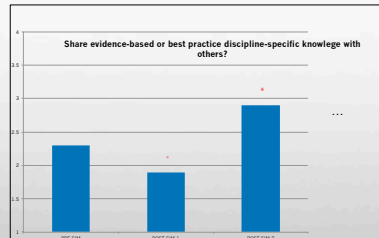


Participants reported their perceptions of current and ideal contributors to the transition of care process respectively.

Of the twelve disciplines identified as potential contributors to the handoff process, only nursing was consistently recognized as a current and ideal contributor participating in the transition of care with all 15 participants indicating.

Interprofessional Communication

A 13 question adaptation of the modified Interprofessional Collaborator Assessment Rubric was completed pre-simulation as a baseline and then after simulation 1 and 2.



mICAR Question 7 asking whether team members should share best practice or discipline-specific knowledge with others had a statistically significant increase in mean difference between simulation 1 and 2 with a p Value of 0.0149

STATISTICAL ANALYSIS

Mean Results of Adapted Modified Interprofessional Collaborator Assessment

mICAR Question	PRE-SIM MEAN (n=15)	POST-SIM1 MEAN (n=15)	POST-SIM2 MEAN (n=15)
1) Communicate with others in a confident, assertive, and respectful manner?	2.7	2.6	2.8
2) Communicate an opinion and participate in care with others?	2.8	2.5	2.9
3) Use communication strategies appropriately in this setting?	2.9	2.5	2.5
4) Communicate in a logical and structured manner?	2.6	2.6	2.8
5) Establish collaborative relationships with others?	2.5	2.3	2.4
6) Integrate information and perspectives from other in planning and providing patient care?	2.4	2.3	2.9
7) Share evidence-based or best practice discipline-specific knowledge with others?	2.3	1.9	2.9
8) Seek input from patients and family?	2.8	2.5	2.5
9) Share opinion and health care information with patients and families?	2.7	2.8	2.6
10) Demonstrate recognition of the relationship between team functioning and quality of care?	2.7	2.6	2.8
11) Contribute to interprofessional team discussions?	2.8	2.5	2.8
12) Seek the perspective and opinion of others?	2.7	2.3	2.8
13) Seek clarification in a respectful manner when understanding care?	2.8	2.3	2.9

1 = Poor 2 = Fair 3 = Good 4 = Excellent

RESULTS

Communication and collaboration scores assessed using the mICAR were significantly different following participation in the second simulation where implementation of the interprofessional handoff tool developed by the team occurred. There was a similar trend of impact of simulation on interprofessional collaboration and communication for 12 of the 13 items on the mICAR. Development of the tool resulted in improved communication and collaboration on all items between simulation1 and simulation2 with the exception of question 3 which remained unchanged. Questions 2, 6, 10, and 12 were identified as most specific to improved communication and interprofessional collaboration. The increase in mean difference between simulation1 and simulation2 for question 2 was significant with a p Value=0.0611. Question 7 asking whether team members should share best practice or discipline-specific knowledge with others had a statistically significant increase in mean difference between simulation1 and 2 with a p Value of 0.0149

CONCLUSIONS

There was enough evidence to suggest that the research question "Will interprofessional teams from different care facilities become more effective in communication and collaboration after participating in simulation to develop a handoff tool for patients with stroke?" is supported. There was statistically significant improvement in the question around sharing best evidenced based practice with others. In addition, all but one of means showed an increase after the second simulation as compared to post simulation1. It is possible with a larger sample size the effects could be statistically significant on greater number of questions. The concept for a specific interprofessional handoff tool for patients with stroke if successful could be used as a proof of concept for modified tools to be developed for a wide range of disease processes and transfer settings

