Implementation of a Standardized Nurse to Nursing Assistant Hand-Off Process in the Inpatient Setting

Laura T. Goebel

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IMPLEMENTATION OF A STANDARDIZED NURSE TO NURSING ASSISTANT HAND-OFF PROCESS IN THE INPATIENT SETTING

DNP Project
Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

St. Catherine University
St. Paul, Minnesota

Laura Terese Goebel
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This is to certify that I have examined this
Doctor of Nursing Practice DNP project manuscript
written by

Laura Terese Goebel

and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by
the final examining committee have been made.

Dr. Gretchen A. Moen, DNP, APRN, CNP
Name of Faculty Project Mentor

05/21/2021
Date

DEPARTMENT OF NURSING
Abstract

Communication is critical to nursing and considered to be the backbone of successful nursing collaboration (Kear, 2016). Effective communication during delegation from the registered nurse (RN) to the nursing assistant (NA) is important for optimal teamwork and work-flow in the fast-paced inpatient setting. Inconsistencies in the delegation process lead to frustration and disconnect among the nursing staff at a suburban inpatient hospital unit which was the site of this DNP project. The goal of the project was to improve communication, teamwork, and efficiency of work-flow through the use of a standardized RN to NA hand-off delegation tool. A pre-implementation survey was conducted to determine participant’s perceived need for improvement with the current delegation processes. A standardized hand-off tool was then developed and used by the nursing staff during the delegation process. Evaluation of the participants perceived improvement in the hand off process was assessed through the use of a post-implementation survey. Results of the post-implementation survey showed a majority of participants felt neutral about improvement to RN and NA communication and teamwork with use of the standardized hand-off process. Additional study into individual vs team readiness for change, motivation for participation in quality improvement projects, and additional strategies for successful RN to NA communication is needed to successfully impact the RN to NA delegation process.

Keywords: nurse, nursing assistant, communication, delegation, standardized, efficient, hand-off process, teamwork, collaboration, quality improvement.
Introduction

The efficient and safe delivery of nursing care in the inpatient setting relies on communication, collaboration, and optimal team work. Communication is critical to nursing and considered to be the backbone of successful nursing collaboration (Kear, 2016). The registered nurse (RN) and nursing assistant (NA) cannot function in their roles as members of the patient care team and without effective, efficient communication. If the work of the nursing care team is strained, the strain could potentially lead to patient care delays and disconnected teamwork (Wagner, 2018). The relationship of nursing communication to the efficiency and quality of care delivered, and to optimal teamwork among staff has been the topic of prior nursing investigations, although such investigations primarily focus on nurse to nurse communication (Fernandez, Tran, Johnson, and Jones, 2010). Identifying and implementing strategies that address the communication sharing between the RN and NA may improve efficiency of care and promote clarity of roles and expectations (Walsh et al., 2018).

Communication from the RN to the NA includes delegation of tasks often called a hand-off process. According to The Joint Commission (2017), a hand-off is a real time process where the transfer and acceptance of patient care responsibility is achieved through effective communication from one caregiver to another. Failure to communicate delegated tasks effectively can result in missed patient care and lead to frustration between staff members (Wagner, 2018). Missed cares could result in poorer patient outcomes and an increase in patient care errors (The Joint Commission, 2017). Effective communication and collaboration within the nursing team must be given priority when developing efficient communication strategies from the RN to the NA during the hand-off process of delegation in order to optimize staff work-flow, productivity, staff collaboration, and decrease staff frustration.
**Problem Statement**

The expectations between RNs and NAs vary between individuals and between shifts, creating confusion and frustration between team members. The lack of uniformity and timeliness when communicating delegated tasks from the RN to the NA may prevent RNs from meeting the demand for efficient patient care in a hospital unit with high patient acuity. Inconsistencies in style of delegation, expectations, and collaboration contribute to sub-optimal work-flow. Clear expectations and standardized hand-off processes of delegation would help to clarify roles.

**Needs Assessment**

A small focus group of invested participants from the designated inpatient unit met in July 2020 to discuss perceived need for improvements on the unit. Due to restrictions of the coronavirus pandemic, the focus group was limited to those attending the monthly unit council meeting. The group was comprised of RNs, NAs, and the unit manager. Collectively, the group noted that an increase in census of high acuity patients appeared to result in a decrease in timely, effective communication from the RN to the NA during the hand-off delegation processes occurring at the beginning of each shift. The participants expressed that the RN and NA often had different expectations of one another’s collaboration and contribution to patient care during the shift. Some NAs prioritized connecting with their RNs more than others and some RNs assumed some patient care responsibility to the NA that was not clearly verbalized or delegated by the RN. This resulted in team disconnect and frustration. They verbalized that optimizing the delegation process could improve this critical process of their work-flow.

**Significance and Contribution to Literature and the Nursing Profession**

The study of nurse to nurse communication has historically been the focus of inquiry whereas communication between the RN and NA has recently emerged as an area of interest.
This project evaluated the effect of implementation of a standardized tool for RN to NA communication during the handoff process of delegation. In addition, the project offered insight into RN to NA hand-off strategies and efficacy of using a standardized hand-off process. There existed a potential to deliver more efficient care, build team work and increase morale by improving the overall communication and collaboration between the nursing staff.

**Purpose statement**

The purpose of this quality improvement project was to improve the process of communication of care expectations during RN to NA delegation of tasks for an inpatient medical/surgical unit using a standardized hand-off tool. A literature review was guided by the question posed: in the inpatient setting, what is the effect of a standardized RN-to-NA hand-off process, compared with usual practice, on role clarity, team communication and collaboration, and efficiency of staff?

**Goal and Objectives**

With implementation of the standardized hand-off process, the goals of this project were to improve efficiency of RN and NA work-flow, improve RN and NA communication and collaboration and improve clarity of roles and care expectations.

**Objectives:**

- >50% staff participation in pre-implementation survey and hand-off tool education
- >50% of staff use the standardized hand-off process during implementation phase
- >50% staff participation in post-implementation survey
  - 70% of participants report an improvement in efficiency of patient care
  - 70% of participants report an improvement in collaboration and teamwork between the RN and NA
○ 70% of participants report improvement in role clarity

**Theoretical Framework**

The theoretical framework for this project was based on the Dyadic Interpersonal Communication Model (DICM). The central concept of the DICM is interpersonal nursing communication focusing on dynamic, interactive processes between a sender and a receiver. The DICM model supports the idea that the clearer the message from the sender, the more likely the message will be understood by the receiver, and addresses outside influences like perception and attitude during communication (Antai-Otong, 2007). Interpersonal consistency is an area of growing interest when evaluating group behavior, meaning that for a group to function, members need to be on the same page and agree on how things should be done (Mojzisch et al., 2014). This DNP project attempted to validate and better define accuracy and perception of verbal and non-verbal communication from sender to receiver through consistent, standardization of the delegation hand-off process.

**Review of Literature**

A literature review was conducted through CINAHL, PubMed, and Medline databases using keywords including (delegation), (nurse), (nursing assistant), (teamwork), (efficient), and (communication) with the Boolean phrase “and”. A ten-year range of publication, 2010-2020, was selected to assure current data yet allow for earlier studies that may offer applicable evidence related to the topic. Publications were limited to those in English, available in full text, and involving discussion of delegation of care. Randomized control trials (RTC), scholarly journals, systematic reviews, descriptive studies, qualitative projects, and meta-analysis studies were prioritized. Exclusion criteria was set to duplicate studies, studies older than 2010, and studies that did not offer evidence applicable to nursing communication specifically.
Initially, 116 articles and abstracts were identified. After application of inclusion and exclusion criteria, articles were then screened for relevancy and application potential. In total, 19 full text articles were reviewed and twelve of the studies were selected to support the exploration of strategies for nursing assistant delegation and communication. The studies were selected based on their strength, quality, and relevance of results. Additional research was discovered by reviewing reference lists and abstracts of other research articles which added understanding and insight to the topic of investigation. Quality improvement studies that focused on nursing delegation and communication were reviewed and included as appropriate.

To evaluate the strength and quality of evidence, The Johns Hopkins Hospital/Johns Hopkins University appraisal toolkit (2019) was utilized. Articles meeting high and good quality ratings were prioritized for appraisal. Of the twelve articles selected, there are two level II systematic reviews, and the remainder were high quality level III articles including mixed method, descriptive, and comparative. Additionally, a high-quality level IV publication from The Joint Commission (2017) and a high-quality level V quality improvement project was included.

The number of studies found that addressed the effectiveness of delegation within the RN to NA care model despite the wide use of this model across healthcare systems was limited (Kaernested, 2012, Kear 2016, & Wagner, 2018). Review of the available literature identified themes associated with current RN to NA delegation in addition to insight into perceived overall needs in relation to communication and collaboration among the nursing care team during delegation and its effect on patient care and staff relationships (Campbell et al, 2020; Wagner, 2018; Yoon, Kim and Shin, 2016). Factors found to influence delegation included inconsistent and unclear communication, teamwork strain/frustration and lack of trust among staff members (poor teamwork), and inefficient practices (Campbell et al, 2020).
In a quantitative study, Gravlin and Bittner (2010) identified ineffective delegation as a reason for missed nursing care and a limiting factor to successful workflow. The identified missed nursing cares were often ambulating, toileting, bathing, and feeding; all of which were delegated tasks in the RN to NA care delivery model used by many healthcare organizations (Wagner, 2018 and JC, 2017). The study sought to identify factors related to successful delegation as reported by RN’s and NA’s themselves across three hospitals. The results revealed a that there was implicit assumption surrounding activities of daily living that neither the RN or NA were recognizing, resulting in gaps in care. Breakdown in communication was the number one factor leading to errors in patient safety (Wagner, 2018).

The Joint Commission (2017) echoes these findings with their identification of inconsistent expectations between the sender and receivers as a common problem within nursing hand-offs. Potential for patient harm is introduced whenever the receiver gets information that is incomplete, untimely, or misunderstood (The Joint Commission, 2017). Patient safety is a universal priority in healthcare therefore the need for commitment to hand-off communication strategies is pivotal for achieving safe patient care. The Joint Commission’s Center for Transforming Healthcare’s Hand-off Communications Project identified standardization of tools and methods as a conclusive recommendation for healthcare settings to promote clearer, timely communication between nursing staff (The Joint Commission, 2017).

Seattle Children’s hospital developed a faster and more thorough report process that provided the nursing staff more informed clinical care with the use of a nursing assistant hand-off sheet (Field, 2019). The NA’s were happy with the hand-off because of the clear information it provided, and the hand-off process led to an increase in completion of nursing cares including ambulation and oral care. The nursing leadership of Seattle Children’s hospital found the ideas
for improvement of the hand-off sheet were most effective because they came from valuable stakeholders, being the staff themselves.

Walsh et al. (2018) studied the RN hand off exclusively and found that incorporating a standardized and consistent reporting format significantly improved work effectiveness and communication. The Walsh et al. study was relevant to the project because it addressed methods to improve communication during a hand-off process. The collaborative model recommended by Walsh et al. (2018) promoted empowerment of the participants which resulted in better work-flow dynamics.

Effective delegation involves the transfer of information and the behaviors and attitudes of senders and receivers during delivery. In an emotionally and physically taxing line of work, such as nursing, awareness of interactions is important and mutual trust is critical for effective delegation (Yoon, Kim, & Shin, 2016; Kaernested & Bragadottir, 2012 and Campbell et al., 2020). Evaluating the need for change in healthcare communication and exploration of the way healthcare providers communicate and collaborate with one another influences workplace collegiality (Rubin, Balaji, & Barcikowski, 2009).

Gravlin & Bittner (2010) found that even though activities of daily living were a part of the NA job description, the activities may not be recognized as such by the RN or NA. Nursing assistants reported that communication methods and attitude exhibited by the RN were factors affecting successful delegation (Gravlin & Bittner, 2010). A focus group conducted by Rubin, Balaji, & Barcikowski (2009) identified barriers to RN and NA communication to include ineffective delivery of information between one another and role-strain experienced by NAs when delegated tasks were assumed to be known by the NA, instead of asked of the NA by the RN. Results of the focus group found that decreased productivity and low morale in NAs
stemmed from feelings of disrespect or assumption of duties coming from the RN. The qualitative feedback strongly supported a concept of mutual learning and strong communication between the community of participants (Rubin, Balaji, & Barcikowski, 2009).

Johnson et al. (2015), found that how RNs delegate and supervise healthcare assistants was important in the management of bedside care in the acute hospital setting. Hospital units that had a strong collaborative element were found to have greater mutual understanding of their own unique contribution to patient care. The mutual collaboration was demonstrated by the RN delegating information in an organized way, prioritizing tasks for both the RN and NA with plans for the RN to participate in cares alongside the healthcare assistant (HCA). Having a sense of co-working promoted positive interactions between RN and HCA’s (Johnson et al., 2015).

In contrast to co-working, working in parallel led to role confusion and missed communication opportunities (Johnson et al., 2015). One HCA was concerned about being provided with insufficient patient information despite being a caregiver potentially providing the greatest amount of direct patient care. Another drawback to working in parallel versus co-working was the lack of awareness of who was responsible for what, leading to role confusion which does not promote optimal nursing teamwork (Johnson et al., 2015).

Wagner (2018) conducted a quality improvement project exploring delegation-communication strategies between RNs and unlicensed assistive personnel (UAP). Nursing assistants fall into this UAP category. Participants of the study found value in fostering a sense of trust between the RN and UAP to optimize fruitful professional teamwork (Wagner, 2018). Clearly defined responsibilities and engagement by the RN strengthened relationships and diminished feelings of disrespect during hand-off. Face-to-face interaction and mindful
communication techniques were identified strategies to facilitate teamwork during the delegation process (Wagner, 2018 and Campbell et al., 2020).

The literature review revealed barriers to effective delegation. Successful delegation requires knowledge and understanding of the delegation process, and a level of comfort with communicating and holding accountability. Simply put, many nursing staff are not prepared or trained to delegate. Rubin et al. (2009) notes that many RNs have limited prior knowledge or experience in supervision and delegation of tasks. While nursing formal education may have theoretically covered supervision and delegation of tasks, in the work place there is often not clear, consistent education. Proficiency of delegation skills of new RNs ranked low when compared to other competencies (Gravlin & Bittner, 2010), but both novice and expert RNs alike potentially lack clear understanding of the accountability needed for delegating tasks to the NA. When basic cares seem routine, the NA may become complacent in carrying them out while the RN becomes less consistent in supervision, resulting in lack of accountability for the cares for which the RN is ultimately responsible (Gravlin & Bittner, 2010).

Another identified barrier to effective and efficient delegation was variable performance status within the nursing care team. Kaernested & Bragadottir (2012) referred to this phenomenon as the “bell curve” of performance. While majority of people work at their competency level, some inevitably will be overachieving, exceeding job requirements while others are underachieving and unable to meet expectations. Variable performance may be unavoidable, but it is nonetheless a contributing barrier to effective delegation because it leads to a mismatch between performance and the task to be carried out.

System level barriers, including poor staffing ratios and continued demand for high quality patient care, were other factors to consider when identifying limitations to effective
delegation. Gravlin & Bittner (2010) found that workload, including increase in volume or acuity of patients, was a reason for unsuccessful delegation leading to missed patient care. System inefficiencies that are out of the frontline workers reach yet lead to sub-optimal work flow and could lead to staff dissatisfaction (Gravlin & Bittner, 2010). Engaging frontline RNs and NAs in creating better work structures and processes increased engagement in their expected role.

**Project Design**

A non-experimental pre-post project design was used to determine the effectiveness of a standardized hand-off process on RN to NA efficiency, communication, and collaboration during the delegation process. The project was approved as a quality improvement project by the Saint Catherine University Institutional Review Board (IRB) and did not require formal IRB approval from the site of implementation due to its identification as a quality improvement project. Permission for the quality improvement project was provided in writing by the project site unit manager.

**Setting and Sample**

The project took place within a large metropolitan hospital in the Midwest region of the United States. The sample was drawn from all RNs (n=53) and NAs (n=31) who were currently employed full and part time on the 42-bed adult medical/surgical hospital unit from January 2021-April 2021. The potential number of participants was 84.

**Ethical Considerations**

Participants were informed of the project purpose, goals, and objectives. Participation was voluntary, and consent was obtained prior to initiating the project. Declining participation had no impact on the individual’s relationship with St. Catherine University or work
environment. All employees were provided the use of a computer at the project site to ensure equal access to participation in electronic surveys and survey results were confidential.

**Project Implementation**

**Pre-Implementation**

To establish baseline practice for delegation hand-off processes, verbal feedback was collected during a unit council meeting at the practice site in July 2020 and informal interviews were held with the nursing staff throughout the remainder of 2020. The feedback reviewed previous unsuccessful strategies to improve delegation, the current delegation process, and assessed the need for improvement. The staff were unable to recognize a standard or recommended practice for hand-off processes of delegation on the unit and identified and a lack of clear communication between RN and NA. The current delegation hand-off process typically involved a verbal report whenever the RN and NA team were able to connect with each other during the beginning hours of the shift.

RNAs and NAs were asked to complete an electronic pre-implementation survey using the SurveyPlanet platform. The survey was designed to assess perceived need for improvement in the current delegation hand-off process, perceived benefit of a standardized process for delegation, how that improvement in the hand-off process may promote more efficient work flow, and RN-NA team collaboration and communication during delegation. The survey consisted of 8 individual questions and used a 5-point Likert scale; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree for participant responses. Known barriers to effective communication included inconsistency and time constraints. Role confusion in the delegation hand off-process was also ranked by the participants. An additional section of the
survey allowed for open-ended feedback and participant comments about the current delegation hand-off process utilized on the unit.

**Development of Standardized Hand-off Process**

Upon completion of >50% of the pre-implementation surveys, a standardized hand-off process was developed by the project director based on survey results, literature review, and discussion of current practice. The hand-off process consisted of a standardized template to be completed by the RNs and physically handed-off to the NAs within the first 30 minutes of the shift (Appendix B). Delegated cares were clearly delineated and included many of the frequently missed cares identified in the literature review (Wagner, 2108). A face-to-face verbal exchange was encouraged to accompany the hand-off of the completed tool as outlined by the DICM model.

**Education and Implementation**

Education was provided to participants after development of the standardized hand-off process. Seven, 15-minute education sessions were provided at the practice site and included a verbal explanation and PowerPoint presentation highlighting the goals, objectives, and general outline for the standardized hand-off tool and process. A sample of the standardized hand-off tool was provided during education sessions. Educational sessions were offered during a staff meeting or in between shifts for the convenience of participants, and were available on weekdays and weekends, mornings and afternoons. To reach staff who may be assigned to work on the unit during implementation, the nursing staff within the float pool received information via email that included the educational PowerPoint and a concise explanation from the project director. After >50% of possible participants had received formal education, implementation of the standardized hand-off process began February 22, 2021.
Post-Implementation

A survey of participants was conducted four weeks post implementation of the standardized hand off process delegation tool. The post implementation survey replicated the style and platform of the pre-implementation survey. The survey assessed perceived improvement in delegation following use of the standardized process and tool. Surveys took approximately 5 minutes to complete. Links to the survey were provided via email to all the RNs and NAs scheduled to work on the unit during the time the study was completed. Pre-implementation surveys were available for a 3-week period prior to implementing the standardized delegation hand-off tool and post-implementation surveys were available for 3 weeks. The project director and unit leadership personnel encouraged participation in the project and completion of the surveys through email and face to face contact during pre-shift huddles.

Barriers

The COVID-19 pandemic presented a number of barriers to implementation of this project. Specific restrictions to social interaction limited the hands-on, face to face model for the educational sessions. The stress experienced by frontline healthcare workers increased as the pandemic continued and may have impacted staff willingness to adapt and embrace a change in work-flow.

Evaluation

Descriptive statistics were used to evaluate the project. The results of the pre-project implementation survey confirmed a perceived need for change of the delegation hand-off process with 77% of participants expressing they agree or strongly agree the current practice needed improvement. There was a positive response that inconsistency, time constraints, and role confusion/power were active barriers for the current hand-off process. Greater than 50% of
survey participants agreed that a structured hand-off process would improve RN to NA collaboration and teamwork. Table 1 includes all results, including anonymous answers to the open-ended opportunity for comments.

**Table 1**

*Pre-Implementation Survey Results (n=48)*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is need for improvement in the current hand-off (shift report) process between the RN and NA on Station 88</td>
<td>0.02%</td>
<td>0.06%</td>
<td>18.6%</td>
<td>63.3%</td>
<td>14.1%</td>
</tr>
<tr>
<td>A structured hand-off process would promote RN and NA collaboration</td>
<td>0.02%</td>
<td>0.02%</td>
<td>4.3%</td>
<td>38.6%</td>
<td>55.6%</td>
</tr>
<tr>
<td>A structured hand-off process would promote RN and NA teamwork</td>
<td>0.02%</td>
<td>0%</td>
<td>7.2%</td>
<td>34.6%</td>
<td>57.7%</td>
</tr>
<tr>
<td>An improvement in the structure of the hand-off process between RN and NA would promote efficiency of individual work flow</td>
<td>0.02%</td>
<td>0.02%</td>
<td>0.06%</td>
<td>44.7%</td>
<td>51%</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale; rate from 1-5 how you feel inconsistency is applicable on Station 88 as a barrier for current hand-off process</td>
<td>0%</td>
<td>0.02%</td>
<td>12.8%</td>
<td>62.8%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale; rate from 1-5 how you feel time constraints is applicable on Station 88 as a barrier for current hand-off process</td>
<td>0.02%</td>
<td>0.02%</td>
<td>9.3%</td>
<td>55.7%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale; rate from 1-5 how you feel role confusion/power is applicable on Station 88 as a barrier for current hand-off process</td>
<td>0%</td>
<td>9.8%</td>
<td>35%</td>
<td>36.8%</td>
<td>18.4%</td>
</tr>
</tbody>
</table>

| Please list other perceived barriers or comments on the current Station 88 delegation process. | "RN does not lay out expectations for the NA" |
| "The biggest barrier is time constraints" |
| "Inconsistent hand-off sheets used by NA’s" |
| "Communication issues which lead to resentment and frustration when delegation tasks are not understood" |

Post-implementation survey results were mixed. Overall, the results show that 34% of participants agreed or strongly agree that the implemented hand-off process improved RN and NA communication. The majority of participants felt neutral about improvement to RN and NA communication and teamwork with use of the standardized hand-off process using the tool. Of all participants, 35% agreed that collaboration was promoted with the standardized hand-off process while 37% were neutral in this category. The lack of variability between responses indicated that there was no significant impact on collaboration with use of the standardized hand-off process tool. Open ended comments revealed the following themes; participants struggled with the execution of the standardized hand-off process and that the tool has not yet been optimized to their satisfaction. Table 2 highlights the post-implementation survey results in detail.
**Table 2**

*Post-Implementation Survey Results (n=19)*

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The structured hand-off (shift report) process improved communication between</td>
<td>6.4%</td>
<td>34%</td>
<td>25.5%</td>
<td>34%</td>
<td>0%</td>
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<tr>
<td>the RN and NA on Station 88</td>
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<tr>
<td>The structured hand-off process promoted RN and NA collaboration</td>
<td>0.05%</td>
<td>17.5%</td>
<td>36.8%</td>
<td>33.1%</td>
<td>8.8%</td>
</tr>
<tr>
<td>The structured hand-off process promoted RN and NA teamwork</td>
<td>0%</td>
<td>40.8%</td>
<td>30.6%</td>
<td>16.3%</td>
<td>10.2%</td>
</tr>
<tr>
<td>The structured hand-off process improved efficiency of individual workflow</td>
<td>11.6%</td>
<td>23.3%</td>
<td>55.8%</td>
<td>9.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off</td>
<td>4.2%</td>
<td>29.2%</td>
<td>50%</td>
<td>16.7%</td>
<td>0%</td>
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<tr>
<td>include inconsistency, time constraints, and role confusion/power. Using the</td>
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<td>same scale, rate from 1-5 how you feel inconsistency has improved with the</td>
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<td>structured hand-off process on Station 88</td>
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<td>29.8%</td>
<td>38.3%</td>
<td>22.5%</td>
<td>0%</td>
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<td>structured hand-off process on Station 88</td>
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<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off</td>
<td>0.05%</td>
<td>14.5%</td>
<td>60%</td>
<td>14.5%</td>
<td>9.1%</td>
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<td>include inconsistency, time constraints, and role confusion/power. Using the</td>
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<tr>
<td>same scale, rate from 1-5 how you feel role confusion/power has improved with</td>
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<tr>
<td>the structured hand-off process on Station 88</td>
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</table>

Please list other perceived improvements or comments on the structured hand-off process

- "The tool is a good idea but not being used properly"
- "Feels like double reporting"
- "The NA seem to prefer their own method"
- "Took away from priority for face to face part of hand-off"
- "Old changes die hard on this unit"

Despite mixed results, the post implementation survey adequately addressed the study question posed: in the inpatient setting, what is the effect of a standardized RN-to-NA hand-off process, compared with usual practice, on role clarity, team communication and collaboration, and efficiency of staff? Because the pre and post survey were not identical, assumptions for a paired t-test were not met. Using a homogenous survey would have increased validity and accuracy of measure. Of note, survey response rates were significantly lower with the post-implementation (22%) compared with the pre-implementation survey (57%). The exact reason behind this is unknown but may be related to a lack of motivation or willingness from staff to participate in the project to the end. Another limitation, previously discussed as a barrier to data collection, were the restrictions surrounding the coronavirus pandemic. More hands-on education and interaction during the initial data collection process may have yielded a more relevant, personalized tool for participants during the standardized process. An assessment midway through the implementation period may have provided an opportunity to modify the tool for optimization and potentially increase use of the tool.
Discussion

Successfully incorporating change to the nursing work-flow can be challenging and the results of this project speak to that struggle. Change may be threatening to some staff for a variety of reasons (Costello, 2010). Change can disturb the comfort of status quo, can invoke conflict if staff members disagree that change is needed, and can lead to challenges that are not equally faced across the care team. Kurt Lewin’s (1947) Change Theory describes the importance of eliminating the restraining forces that are preventing the perceived need for change (unfreezing), so that participants can see change is needed, make the change, and adapt it as the new norm (re-freezing).

Adapting to change from the current practice during RN to NA delegation hand-off was challenging for the project site despite project design that incorporated recommendations for a successful hand-off process found in the literature. Pre-survey results gave the impression that the staff was ready to change. The implementation of the standardized hand-off process did not result in a significant change or improvement in efficiency and effective communication for the RN to NA during the delegation process. Acceptance of the standardized process may have been influenced by bias prior to implementation. Such bias could lead to civil disobedience or blatant rejection in participants who have no desire to change the status quo (Costello, 2010). Lengthening the implementation window may have provided more time for staff to adapt to the process but could also increase further rejection and frustration. There is a balance to be found between allowing adequate time for change and minding the attention span of the participants. This window in time is not always clear.
Recommendations

Results of the quality improvement project provided insight into the need to assess readiness for change at the project site unit, the value of face to face education and communication, the need for frequent touch points during the implementation period, and the need to identify strategies to increase participation overall. Low response rates of the post implementation survey made it difficult to evaluate the overall success of the project therefore future projects might strategize how to ensure equal participation of both pre and post implementation surveys for a true comparison. Improving education methods, such as longer and more hands-on education of a proposed hand-off process, could stimulate increased engagement of participants. A mid-implementation assessment, with engagement of stakeholders, may help to sooner optimize the process for success. Finally, since resistance to change was also evident, surveying readiness to change and working intentionally to un-freeze current practice could increase participation and affect meaningful change.

The initial assumption of the project director and endorsed by the unit leadership were not supported by the outcome of the project. A potential to deliver more efficient care, build team work, and increase morale by improving the overall communication and collaboration between the RN and NA continues to exist. Deeper engagement of the users of the hand-off process could result in modifications that are unique and relevant to the specific unit’s workflow. The project team discovered that engagement with key participants was critical in the development of the tool. Future nursing would benefit from having a project completed with more consistent, on-going support of the unit leadership and engagement with participants. More frequent touchpoints with participants and leadership throughout the process may secure consistent participation for the duration of the project. A more hands-on approach pre-
implementation and during education of processes would allow for evaluation of readiness to change and competency of the process. It is important that future nursing leaders promote the importance of change and adaptability amongst their team members since the practice of nursing is constantly evolving and challenges to the status quo are difficult.

**Conclusion**

Efficiency in patient care is an economic driver of healthcare today. Deficits in communication between the RN and NA on a busy inpatient unit can decrease efficiency of care and potentially lead to missed care (Wagner, 2018). Development of a standardized process for delegation hand-off processes supports increased efficiency of care, improves collaboration between RN and NA, and decreases the occurrence of missed cares (The Joint Commission, 2017). This project revealed the need for continued optimization of the hand-off process between the RN to NA. Barriers identified include resistance to change, reassessment mid-project, and inconsistent participation. Results will serve as a platform for future projects that address RN to NA communication and nursing delegation processes moving forward.
References


## Appendix A

### Pre-Implementation Survey

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Answer Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is need for improvement in the current hand-off (shift report) process between the RN and NA on Station 88</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>A structured hand-off process would promote RN and NA collaboration</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>A structured hand-off process would promote RN and NA teamwork</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>An improvement in the structure of the hand-off process between RN and NA would promote efficiency of individual work flow</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale, rate from 1-5 how you feel inconsistency is applicable on Station 88 as a barrier for current hand-off process</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale, rate from 1-5 how you feel time constraints is applicable on Station 88 as a barrier for current hand-off process</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include inconsistency, time constraints, and role confusion/power. Using the same scale, rate from 1-5 how you feel role confusion/power is applicable on Station 88 as a barrier for current hand-off process</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>Please list other perceived barriers or comments on the current Station 88 delegation process.</td>
<td>Open-ended</td>
</tr>
</tbody>
</table>
Appendix B

Standardized Hand-off Tool

Room: ______ Nurse: _________ Code: Full NO CPR Isolation: ______
Vitals: q4 q8 Diet: ________ Blood sugar: Y/N Meals q4: _____
Activity: Independent SBA A1 A2 GB Walker Ambulate: ___ times
Turn: ______ ______ Daily Hygiene: Oral Care Bed Bath Shower
Intake: Tray set-up Total-feed In chair for: Breakfast Lunch Dinner
Output: Up to BR Hat Urinal Purewick ___ Foley: Catheter Wipes___
Urostomy/Colostomy JP G tube Other: ______
Incontinent—Change: ____ ____ ____ ____ Open skin: Y/N
Special Considerations:
(ie: HOH, dementia, shower, anxious, wound, post-op)
Please let RN know of:
(fever, BM, difficulty with transfer, increase in pain)
Notes:

RN will help with ___________________________________________
## Appendix C

### Post-Implementation Survey

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Answer Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>The structured hand-off (shift report) process improved communication between</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>the RN and NA on Station 88</td>
<td></td>
</tr>
<tr>
<td>The structured hand-off process promoted RN and NA collaboration</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>The structured hand-off process promoted RN and NA teamwork</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>The structured hand-off process improved efficiency of individual workflow</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>inconsistency, time constraints, and role confusion/power. Using the same</td>
<td></td>
</tr>
<tr>
<td>scale, rate from 1-5 how you feel inconsistency has improved with the</td>
<td></td>
</tr>
<tr>
<td>structured hand-off process on Station 88</td>
<td></td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
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<td>inconsistency, time constraints, and role confusion/power. Using the same</td>
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</tr>
<tr>
<td>scale, rate from 1-5 how you feel time constraints have improved with the</td>
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<td>structured hand-off process on Station 88</td>
<td></td>
</tr>
<tr>
<td>Barriers to more effective collaboration between the RN and NA hand-off include</td>
<td>Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree</td>
</tr>
<tr>
<td>inconsistency, time constraints, and role confusion/power. Using the same</td>
<td></td>
</tr>
<tr>
<td>scale, rate from 1-5 how you feel role confusion/power has improved with the</td>
<td></td>
</tr>
<tr>
<td>structured hand-off process on Station 88</td>
<td></td>
</tr>
<tr>
<td>Please list other perceived improvements or comments on the structured hand-off</td>
<td>Open-ended</td>
</tr>
<tr>
<td>process</td>
<td></td>
</tr>
</tbody>
</table>