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Initiating Standardized and Structured Handoff for Nurses in the Outpatient Setting

Keri Wagner

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Initiating Standardized and Structured Handoff for Nurses in the Outpatient Setting

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Abstract

Background: Handoff is the transfer and acceptance of patient care responsibility achieved through effective communication. Patient-specific information moves from one caregiver to another, to ensure continuity and safety. Ineffective handoffs negatively impact patient safety, patient and staff satisfaction, adverse events, missed care, and treatment delays.

Purpose: To decrease adverse events associated with ineffective handoff and improve nurse satisfaction by implementing a structured, electronic handoff process, inclusive of a standardized handoff report in an outpatient setting.

Methods: This quality improvement project implemented an evidence-based, electronic, structured, handoff process, utilizing situation-background-assessment-recommendation (SBAR). A pre-implementation survey was created to identify intra-organization patient transitions and assess nurse satisfaction. Reporting to Improve Safety and Quality (RISQ™) data for handoff were also evaluated. Four weeks and eight weeks after implementing the new handoff process a repeat satisfaction survey was sent to the nursing staff, RISQ™ data was analyzed and use reports were initiated.

Results: Initiating this structured and standardized handoff process, inclusive of identifying the transitions requiring handoff, led to an increase in nurse satisfaction with statistical significance p<.001 in 87.5% of the satisfaction categories, a 42% decrease in adverse events associated with handoff and an increase in the use of a structured handoff process.

Conclusion: Structuring outpatient handoff for defined care transitions, utilizing a report derived from the electronic medical record can improve patient safety and increase nurse satisfaction.

Keywords: handoff, handover, structured, unstructured, shift, report, bedside, multidisciplinary, patient, oncology, satisfaction, safety, tool
Initiating Standardized Outpatient Handoff

Introduction

The Joint Commission and Institute of Medicine (IOM) note that inadequate handoff can impact safety and lead to treatment delays, inappropriate treatment, and increased length of stay (Wolfe, 2001). In the outpatient oncology setting at a large, academic medical center, patients are choosing to receive care closer to their homes. This outpatient organization has sites within and outside of New York City, which allows patients to receive care at any of the sites, if the care recommended is delivered there. At one of these sites, the nurses saw an increase in care transfer requests and noticed that communication regarding these transfers were ineffective. This negatively influenced nurse satisfaction and care coordination, resulting in delayed or missed care.

Background

Communication breakdowns, such as ineffective handoffs, are a major causative factor of adverse events in healthcare (Müller et al., 2018). Consequences of ineffective handoff include medication errors, disruption in care coordination, delays in care, and potentially increased length of stay (Shahid & Thomas, 2018). Handoff was highlighted as an area of concern back in 2001 when the IOM reported that handoffs impact patient safety (Wolfe, 2001). In 2006, the Joint Commission added a National Patient Safety Goal aimed at improving the effectiveness of communication among caregivers which later became a provision of care standard (PC. 02.02.01, EP 2), and The World Health Organization Collaborating Centre on Patient Safety (Solutions), the World Alliance for Patient Safety, and the Commonwealth Fund launched The High 5s Initiative, which included prevention of patient care handoff errors (High 5s: Standard Operating Procedures, n.d.; Haig et al., 2006). Handoff remains a complex patient safety issue;
and improving it with a standardized, structured handoff can improve patient and staff satisfaction as well as safety, including decreasing missed care, adverse events, and treatment delays (Sentinel Event Alert 58 Inadequate Hand-off Communication, 2017).

Safe and effective handoff is an institutional priority that warrants improvement. In a complex organization, consisting of multiple sites in New York and New Jersey, there were inconsistent practices for handoff which impacted the patient experience and safety. Evidence of handoff inconsistency was seen in internal quality reporting where gaps in care coordination, missed care, and treatment delays were attributed to ineffective handoff. The site of this project was an ambulatory, institutional oncology practice that delivers multimodality interventions for cancer patients. The site primarily serves an adult population with limited accommodation of pediatric patients with support. The oncologic modalities offered include infusion, radiology, radiation, medical and surgical consultation, as well as interventional radiology services for all oncologic disease types.

Handoff in the outpatient setting is not clearly defined, not standardized, and at the project site, was minimally utilized. Patient and staff satisfaction suffered because of this deficiency and adverse events such as poor care coordination, missed care, and treatment delays were attributed to communication breakdowns. The Joint Commission Provision of Care standard (PC.02.02.01), element of performance (EP) two (2) says “the organization's process for hand-off communication provides for the opportunity for discussion between the giver and receiver of patient information” and includes “the patient's condition, care, treatment, medications, services, and any recent or anticipated changes to any of these” (Sentinel Event Alert 58 Inadequate Hand-off Communication, 2017).
The purpose of this project was to implement a structured handoff process, inclusive of a standardized, electronic, report in an outpatient oncology clinic. Implementation of this handoff process provided an evidence-based, patient-centered, information-sharing process that was timely, efficient, and equitable meeting all six aims of the IOM Quality domains (Six Domains of Health Care Quality, n.d.). According to the literature reviewed, improving the handoff process increases patient satisfaction, staff satisfaction, and patient safety including reducing missed care, adverse events, and treatment delays.

**Problem Statement**

The increased risk of compromised patient safety such as delayed or missed care, insufficient care coordination and decreased nurse satisfaction in outpatient oncology patients is due to the lack of a structured process for handoff between nurses, as indicated by inadequate, truncated, missed, or fragmented information sharing and missed care.

**Review of the Literature**

Melnyk et al. (2010) recommend asking clinical questions in terms of population of interest, intervention, comparison intervention, outcome, and time (PICOT). Utilizing the following PICOT question: In outpatient oncology, how does a structured handoff tool compared to unstructured handoff tool affect patient safety or patient experience, an extensive search of the literature was completed (Melnyk et al., 2010). The evidence reviewed was elicited from multiple databases including Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, Embase, and PubMed. Keywords for this search included the following: outpatient, handoff, handover, structured, unstructured, shift, report, bedside, multidisciplinary, patient, oncology, satisfaction, safety, and tool. Boolean terms AND and OR were also utilized. These searches yielded a large body of evidence (PubMed 99, CINAHL 341, Embase 300, &
Cochrane 1), results were reviewed and filtered for English, full text, and date range between 2010 to 2021. Ultimately, 462 articles were found, for which abstracts were reviewed and 36 articles were critiqued, utilizing the Ohio State evidence-based practice (EBP) tool kit’s rapid critical appraisal tools (See Appendix A). These 36 articles were ultimately used as compelling evidence for this project. The levels of evidence, as per Melnyk et al. (2010), for these articles ranged from level V (Systematic Review or Meta-Synthesis of Descriptive or Qualitative Studies) to level VI (Descriptive or Qualitative Study), with the majority as level VI (See Appendix B)(Melnyk et al., 2010).

Most of the literature reviewed spoke to inpatient transfers of care such as inter-shift handoff, or unit to unit handover, with only a small representation related to outpatient or ambulatory transfers. For example, Hilligoss and Cohen (2013) looked at inpatient handoffs as well as the handoff from the emergency department to general practice offices. They observed the relationship between the people giving and receiving report, noting a lack of established language and interprofessional differences impact the quality of information being reported (Hilligoss & Cohen, 2013). Helmig et al. (2020) did a single institution study looking at transitions of care between remote facilities. Implementation of their standardized, mnemonic type handoff tool improved communication between caregivers (Helmig et al., 2020). Despite the paucity of outpatient-specific information, the recommendations for best practice associated with handoff are clear. The literature was reviewed to saturation with the following themes identified; standardization, use of a tool to support the process, integration of the electronic medical record, patient involvement, reduced distractions, and inclusive of education and training (See Appendices C and D).
Standardization

The most common theme identified regarding handoff is related to standardization, which was so heavily represented that 94% of keeper articles noted the need for it (See Appendices C and D). Standardization, or a standardized process, for completing handoff inclusive of what, when, and how to do this is clearly defined in the literature. Structure in this regard was associated with overall patient safety and was addressed in most articles. For example, a reduction in adverse events associated with missed care is described by Thomas et. al (2013); Farhan et al. (2012), and Freitag and Carroll (2011) speak to improved patient and staff satisfaction related to structured handoff. Supporting this process by creating standards of care, or policies, which guide nurses as to when, and what, to communicate helps facilitate adoption and adherence to complete, safe and effective handoff (Bressan et al., 2019; Raeisi et al., 2019). It is clear after reviewing the literature that unstructured or non-standardized handoffs contribute to inaccuracy, omissions, and reduced patient safety concerns.

Tools

Building upon standardization, structure in the form of a tool is also referenced in many of the keeper articles. Tools that support standardization with handoff referenced the use of mnemonics. Mnemonics, such as SBAR (Situation – Background – Assessment – Recommendation) and IPASS (Illness severity – Patient summary – Action list – Situation awareness – contingency planning Synthesis), among others, provide a framework or structure for handoff and is associated with improvement in patient safety and satisfaction (See Appendices C and D). Salzwedel et al., (2016) note that without structure there is potential for missed care and adding a tool inclusive of vital components supports improved safety. SBAR was found in one-third of all articles reviewed and was the most common mnemonic in the
keeper articles. It is well represented in nursing literature and is taught during nursing orientation. Müeller et al. (2018) noted improved safety when employing SBAR for structured communication. Studies utilizing a tool were conducted with a variety of caregivers in a variety of settings, multiple tools were utilized but all were structured in design and the results were overwhelmingly in favor of including them as they improve information transfer of vital components of care (See Appendices C and D).

**EMR Integration**

Integration of information captured in the medical record is a complicated recommendation. Many of the articles reviewed addressed electronic versions of handoff, electronic checklists, and utilizing information from the record, but few spoke specifically to the manner in which it should be actualized (See Appendices C and D). The systematic review of literature completed by Delardes et al. (2020) took the deepest dive into this theme. They speak to the limited literature, potential impacts on length of stay, adverse events, time to procedure, and handover completeness noting that optimal handoff is inclusive of electronic handovers (Delardes et al., 2020). Schuster et al. (2014) spoke to the electronic instruments and noted although ideal, the copy-forward component of documentation led to outdated information. However, they also note that the shortened version of the information provided by a structured handoff far outweighs the manual process of mining through an entire record. The mix of information sources was also noted as a positive contributor. Having a combination of nursing, physicians, and other caregiver information helps to create a tool that is reflective of the patient and the vital communication touchpoints (Schuster et al., 2014). Thomas et al. (2013) advises using standard forms, checklists, and/or templates but also stresses the importance of utilizing clinical information systems. Although the literature does not state that an electronic tool is the
key to positive outcomes, many of the articles speak to the potential for future research (See Appendices C and D).

Distraction Reduction

The IOM reminds us that the exchange of patient information is essential, but the process is often complicated by systematic and process issues, as well as less than ideal conditions including distractions (Wolfe, 2001). Distractions are known to be problematic all over healthcare and the literature reviewed tells us it is the same with handoff. Minimizing, or lessening distractions, during information sharing is connected to more concise and valid information sharing. The literature, although limited, notes that communication during handoff should be uninterrupted (Evans et al., 2012). Although several articles spoke to distraction reduction, none mentioned exactly how to actualize this component (See Appendices C and D).

Patient Involvement

Drawing from inpatient data, the literature tells us that patient satisfaction is impacted by having the patient involved in the handoff process (Freitag & Carroll, 2011). Patient involvement is described in the literature as creating an environment for transparency and patient participation (Flink et al., 2012; Reilly et al., 2013). Patients that were included in the studies reviewed noted feeling safer, more included in their care, and had increased confidence in their care team (Maxson et al., 2012). Although patient involvement is expected and represented in the literature, there is no literature associated with outpatient or ambulatory settings (See Appendices C and D).

Training

Education is often connected with success when it comes to project implementation. The literature related to handoff agrees with this, noting that for handoff interventions to succeed,
education needs to be considered an essential component (Roberts et al., 2012; Sawatsky et al., 2013). Unlike most of the other themes, the literature provided components for education including training focusing on communication styles and the related behaviors for successful transfers of information (Streeter & Harrington, 2017).

**Summary**

Ineffective handoff is clearly, and consistently, noted as a concern for patient safety. Adverse events, treatment delays, and missed care can be influenced by a structured and standardized handoff process. Although there are variations in the literature in terms of how to structure, what tool to use, and what impact the programs have, it is clear that creating a structured handoff process is imperative. To best summarize the literature review findings, Streeter and Harrington (2017) highlighted a qualitative analysis of nurse descriptions. In their study, they collected data from nurses surrounding information exchange and communication. The nurses interviewed described moments surrounding best/worst and incoming/outgoing handoff moments. The findings of this study highlighted the benefits of a structured handoff process and spoke to the limitations of not having these components in place. Organized, detailed, and comprehensive handoffs were the themes identified for the best information giving, with the worst themes including inaccurate or incomplete. The best experiences allowed the nurses to look at the medical record or chart and included a focused receiver of information. This study is the lived experience of the nurse and it supports what the literature recommended (Streeter and Harrington, 2017).

Although most of the literature is considered low level, as it is mainly descriptive and qualitative, a large body of evidence was reviewed with consistent recommendations.
appreciated. As a result of this review, a structured handoff process, supported by a standardized report, was implemented to positively impact nurses’ satisfaction and patient safety.

This project employed these learned strategies and an electronic, standardized, structured handoff process was implemented. This DNP student partnered with multidisciplinary key stakeholders including informatics, clinical specialist, nurse professional development specialist team (NPDS), superusers (or champions for the initiative), and end-user stakeholders. As the evidence supported utilizing the data-rich electronic medical record, report development required collaboration with informatics throughout the entire process. Since SBAR is heavily represented in the literature and well known to the nurses, it was utilized as the structure for handoff in this project. The SBAR sections were drawn from the medical record and defined by the evidence, the format is content specific to the handoff setting.

The handoff report, drawn from the medical record, was inclusive of vital patient information and was immediately available for any encounter. The handoff report used clear, established, common language while minimizing barriers and allowed for closed-loop communication. The entire process was supported by education, competency and was evaluated for effectiveness.

**Theoretical Framework/Evidence-Based Practice Model**

This project included technology and required a change in behavior, thought, and practice; and as a result, Rogers’s Diffusion of Innovation (DOI) theory was utilized (See Appendix E). Building on Gabriel Tarde’s diffusion curve and Ryan and Gross’ adopters, Everett Rogers created the Diffusion of Innovation theory which is a well-known change model guiding technological innovation. Starting with knowledge, which includes the decision-making characteristics, the innovation moves to persuasion where relative advantage, compatibility,
complexity, trialability, and observability influence the decision made about an innovation. This theory considers the adoption process of change, or innovation, and the role of the people associated with the change. DOI speaks to five main adoption principles, these are knowledge, persuasion, decision, implementation, and confirmation. Knowledge of these principles help with diffusion as it highlights what will help, or hinder, the process. DOI also explains the role of the adopters and how they can influence change momentum and lead to diffusion. There are five adopter categories: innovators, early adopters, early majority, late majority, and laggards. Innovators have the idea and early adopters are eager to get on-board, but most end users fall into the early majority. Once the early majority adopt the process hits a tipping point and change happens. The late majority follow with the laggards being the last to adopt (Rogers, 2003).

Prior to this project, the use of handoff varied by site, experience, and whether the nurse works inpatient or outpatient. Most nurses participating in the project associated handoff with the acute care setting where shift to shift handoff is a common and expected practice. In the outpatient setting, however, the use of handoff was the exception, not the rule. The nurse’s knowledge and experience played both a positive and negative role in implementing the new process. Persuasion to make a change was influenced by how important the end-users felt it was to them, how easy they thought the change would be and how visible the difference was. Prior to this project, the nurses expressed frustration and created their own “homegrown” handoffs to support their practice and their patients. Their actions helped to persuade change. Roger’s theory reminds us that there are early adopters who are open to new innovations, followed by the early majority who can see the vision sooner rather than later. The early adopters at the site were the nurses who had worked with their groups to create interim handoff tools. They saw an opportunity to improve care and put something in place. The remainder of the groups were the
early majority, as they saw the possibility and started to use them. Having superusers helped to diffuse adoption of a change through those less likely to adopt the changes early (such as the late majority and the laggards). Having the early adopters and the early majority in agreement with the need to change, and project components determined, facilitated the implementation of this evidence-based, quality improvement project.

Once the project passed the “chasm” with the early adopters it reached the “tipping point” (Rogers, 2003). The late majority were the end-users of the existing handoffs, they did not create them or see the early impact of the tools that were created. Examples of these nurses are the ones who did not create but still used “homegrown” tools. The laggards were the ones who only do things when they were told they had to. They did not take part in this project, as it was voluntary.

**Methods**

This quality improvement project translated current handoff research, and internal evidence, to create a structured and standardized handoff process for outpatient nurses. Key stakeholder meetings, including nursing executive leadership, informatics, clinical and nurse professional development specialists began in July 2021. Following site and university IRB approval, all nurses at the site were invited to participate in this, evidence-based, quality improvement project (see Appendices F and G). Informatics meetings started immediately to facilitate tool build, based on the literature, and structured in SBAR format. Education was provided to all nurses, inclusive of communication style, communication behaviors, components of handoff, and the plan for the handoff report, which is drawn from the medical record and structured utilizing SBAR (see Appendix H).

The nurse volunteers, or “superusers” were met with, by the DNP student, to individually review the project in-depth, to describe the role of a superuser role; they received a pre-
implementation survey in October 2021. The superusers were given access to the electronic handoff tool and were asked to employ it during patient transitions and provided feedback on the report. They reviewed and reached a consensus on the report, modifications were made based on feedback. The remainder of the nurses completed both an online learning module and in-person hands-on training before project rollout in December 2021. Hands-on training focused on eliciting the handoff report from the clinical information system as well as defining the transition and handoff moments.

**Goals and Objectives**

The objective of this project was to implement and evaluate an evidenced-based handoff process in an outpatient oncology setting. Utilizing online learning modules and hands-on sessions with the support of department superusers, a structured handoff process was initiated with the goal of increasing nursing satisfaction and decreasing adverse events associated with ineffective handoff. Project roll-out began in September 2021 and was completed in December 2021.

**Table 1**

*Goals and Objectives*

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objective</th>
<th>Projected Outcome</th>
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</table>
| To educate the nurses (superusers and participants) on the topic of evidenced-based handoff, inclusive of the electronic report. | • Superuser education sessions will be held twice a day for two (2) weeks.  
• Superusers will complete the online education module before the remainder of the participants.  
• All nurses will attend a hands-on session at their scheduled Unit Based Council (UBC) meeting or | • 80% of all users will attend training.  
• 80% of all users will complete the online module. |
To implement a consistent, structured, handoff process at an outpatient oncology site.

- Individually scheduled with their department superuser.
- Utilizing a DNP student-created, survey, nurses will demonstrate increased satisfaction with the handoff after implementation of a structured process.
- Utilizing use reports nurses will demonstrate increased use of the electronic handoff process.
- Utilizing internal adverse event reports, a decrease in adverse events will accompany handoff implementation.

- 50% increase in nurse satisfaction with handoff
- 50% increase in handoff utilization
- 10% decrease in adverse events

Note: Goals and Objectives focused on education and implementation and its impact

Project Site and Population

The site of this project was a suburban, community-based, institutional oncology clinic. Nurses at this site deliver multimodality interventions for primarily adult patients with limited accommodation of pediatric patients with support. Nurses, in all departments, were eligible to participate in the project. There was a total of 115 eligible participants, all of which were offered initial education and invited to participate. 63 nurses agreed to participate as superusers, 63 of the superusers completed the first survey, 55 completed the second, and 38 completed the third survey, with an attrition rate of 40%. The 63 nurses (or superusers) that participated in this project, reviewed and tested the handoff report, encouraged their peers to complete the learning module, re-educated their peers on the project and the handoff moments, and provided feedback to the DNP student throughout all stages of the project.
Measurement Instruments

Pre-Implementation

A pre-implementation survey, a Red Cap survey, created by this DNP student, was sent, by email, to all participating nurses in October 2021. The survey had sixteen (16) questions, four (4) centered around demographics, four (4) addressed the current status of handoff, and the remaining eight (8) addressed nurse satisfaction with handoff (See Appendix I). Demographic questions were a mix of multiple-choice and text response questions. Current handoff status questions included one open-ended and three yes or no questions, two of which only needed to be answered if handoff was done in their department. Eight (8) satisfaction questions had a six-point Likert scale as follows; strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. As the survey was created by the DNP student, validity and reliability were not established.

The institution’s electronic database: Reporting to Improve Safety and Quality (RISQ™) system was used to measure adverse event impact. The specific focus of this project revolved around the reports characterized as missed care, care coordination treatment delays, and ones where handoff was found in the context of the report. Historical data was reviewed, by the DNP student, from January to October 2021 to establish a baseline. There was a consistent presence of handoff-related events where nursing could have played a role. Data was then reviewed monthly starting in November 2021 and continued throughout the duration of the project including January 2022 data.

Prior to project implementation, there was no structured process for handoff, so the initial use of a structured handoff process was zero (0). Use of the newly created handoff report was measured utilizing an electronic use report, created by the informatics specialist. This report was
elicited from clinical information systems and was delivered electronically to the DNP student weekly throughout the project duration.

**Implementation**

During the implementation phase of the project, superusers received a 16-question survey, estimated to take five (5) to ten (10) minutes to complete at three (3) points throughout the project (one pre- and two (2) post given one month apart (see Appendix F). Results of these surveys were kept in a password-protected file within the institution’s secure and encrypted system. Data from the survey was only accessed by this DNP student. Satisfaction data was obtained from the survey responses and evaluated utilizing Statistical Package for the Social Sciences (SPSS) by the DNP student. RISQ™ report data was elicited and evaluated for volume and theme.

The handoff report was created, and access was given to the superusers in November 2021. The superusers ran the report checking for validity and reliability of the information pulling from the medical record. They also tested the capability of the manual entry components. During this timeframe, an issue log was created and addressed by the DNP student and the informatics stakeholders. After the first two (2) weeks no further issues were identified but testing and feedback continued for a total of four (4) weeks.

The newly created handoff tool was moved from the test environment to production in December 2021. All nurses were provided with an updated online education module in November 2021 (see Appendix J). A teamshare site was created by the DNP student which contained an issue log. Nurses were advised to communicate any issues to the superusers who entered it on the issue log under technical or use issues. Weekly status calls with the DNP student and the informatics specialist reviewed and reconciled all technical issues; end user use
issues were addressed with re-education by the DNP student. The use of the tool was evaluated weekly by the DNP student through use reports.

Post-Implementation

One-month post-implementation, the survey was re-sent to all superusers by email in January 2022. The survey was the identical satisfaction survey they received before implementation. It was repeated on a third occasion in February 2022.

Ethical Considerations/Protection of Human Subjects

At both the site and university level, the Internal Review Board (IRB) determined that this project represented an evidence-based, quality improvement project, and as such, full IRB review was not required. Data collected was aggregated and did not contain any nurse or patient-specific data. All information gathered was via an anonymous survey sent to the nurses by email. Participants were known only by a participant number, maintaining anonymity. The nurses had the right to decline participation if they chose as involvement in this project was voluntary. The clinical information system was encrypted and protected, and the internal RISQ™ reports, which were used for data analysis, were de-identified and housed in a secure file, accessed only by the DNP student. As this was a quality improvement project there was no perceived or actual risk to the users, and patients, as they received the usual standard of care (Institutional Review Boards Frequently Asked Questions, 2019).

Data Analysis

Project data was coded into SPSS and multiple data checks were performed (IBM SPSS Statistics for Windows, 2020). Data cleaning was done on all data input, and outliers were evaluated for exclusion. All statistical assumptions were considered.
Results

This quality improvement project was implemented at an outpatient oncology site over a five (5) month time frame from September 2021 to February 2022. The site provides oncology care for roughly 400 patients per day offering a variety of oncologic services. 57% of the 115 nurses at this site agreed to participate in the project as superusers. Superusers represented all departments/modalities; 11% Radiology (1), 35% Medical Oncology (2), 16% Infusion (3), 16% Surgical Oncology (4), 6% Radiation Oncology (5), and 8% Symptom Care (6), 3% Research (7), 3% Non-oncologic (8), 2% Dermatology (9). Their nursing experience ranged from three (3) to 39 years, with an average of 15 years and their outpatient experience ranged from one (1) to 26 years with an average of eight (8) years. The educational breakdown of the superusers, was as follows; 5% had Associate Degrees (1), 27% had Master’s degree, or were in progress of getting their Master’s Degree (3) and the remaining 68% had their Bachelor’s Degree (2), see table 2.

Table 2

Superuser Demographic

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Range (Min-Max)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>2.22</td>
<td>.522</td>
<td>1-3</td>
<td></td>
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<tr>
<td>Associates</td>
<td></td>
<td></td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>Bachelors</td>
<td></td>
<td></td>
<td></td>
<td>68%</td>
</tr>
<tr>
<td>Masters</td>
<td></td>
<td></td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>Nursing Years</td>
<td>15.37</td>
<td>9.053</td>
<td>3-39</td>
<td></td>
</tr>
<tr>
<td>Outpatient Years</td>
<td>8.33</td>
<td>6.8</td>
<td>1-26</td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>3.33</td>
<td>1.934</td>
<td>1-9</td>
<td></td>
</tr>
</tbody>
</table>
Radiology 11%
Medical Oncology 35%
Infusion 16%
Surgical Oncology 16%
Radiation Oncology 6%
Symptom Care 8%
Research 3%
Non-oncologic 3%
Dermatology 2%

Note: Demographic data was captured in the DNP created survey

100% of the 63 superusers completed the initial education module and hands-on training. 68% of the superuser noted that they use handoff; however, only 12% of them said handoff was used consistently and only 19% reported using some sort of tool or outline for handoff. The superuser feedback defined the moments where handoff was currently utilized. The transitions identified were shift to shift, coverage, site to site, modality to modality, appointment to appointment, and urgent transitions. All existing tools were reviewed and compared to validated handoff tools in the literature. The structured report was developed based on the components identified in the internal and external evidence (see Appendices K and L). After the report was completed, a second education module was created and availed to all nurses. This reviewed the main components of the program but also highlighted the newly created report along with the handoff transitions and expectations (see Appendix J).
Use of Handoff

Prior to project implementation, there was not a standardized or structured process for handoff in any of the identified transitions, representing an initial use rate of zero (0). The use of handoff in the outpatient setting is variable. Unlike the acute care setting, not every encounter requires handoff making use a challenge to compare. In an attempt to start quantifying this, use reports were created to assess when the report was elicited by a user. In the first month post-implementation, there were 23 encounters where the handoff report was elicited by 20 individual users (32% of superusers). In the second month of use, this increased to 31 encounters where the handoff report was elicited and 24 individual users (38% of superusers). Although this shows a promising increase in use, more data is needed to assess the average number of handoffs by department.

Event Reports (RISQ™)

A review of all RISQ™ reports in the outpatient setting revealed a total of 47 in November 2021, 40 in December 2021, and 35 in January 2022. At the site where structured handoff was implemented, a total of 12 handoff RISQ™ reports, representing appointment to appointment and site to site handoff adverse event, were entered during November 2021, one month after education completion, eight (8) in December 2021, after implementing the new process, and five (5) in January, one month after implementation. Of note, the January RISQ™ included one event where the handoff event was during lunch coverage. A 42% decrease in handoff events reported were appreciated after implementation representing a large effect size, see Table 3.
Table 3.

*RISQ™ report data*

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<th>Mean</th>
<th>Std Dev</th>
<th>Cohen’s d</th>
<th>Effect Size</th>
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<td>Reports</td>
<td>8.33</td>
<td>3.51</td>
<td>6.56</td>
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*Note:* Cohen’s Standard Effect Sizes; Size of effect d; Small: 0.2; Medium: 0.5; Large: 0.8

**Nurse Satisfaction**

Of the 63 superusers, all 63 completed the first satisfaction survey, 55 the second survey, and 38 the third survey, representing a 40% attrition rate over the four months between survey one (1) and three (3). Statistical significance was appreciated in all areas of satisfaction except the “is handoff time consuming” questions where an increase in satisfaction was appreciated but not representing statistical significance, see Table 4. The time consuming question was the only question that was assessing a negative connotation towards handoff which may have contributed to its difference from the remainder of the questions.

Paired t-tests were conducted to compare the satisfaction scores before and after the implementation of the new outpatient nurse handoff process. There were eight components of handoff where satisfaction was assessed, all eight were tested. There was a significant increase in the satisfaction scores associated with ease of use (easy) after the intervention (mean=5.16, SD=.679) than before the intervention (mean=3.87, SD=1.277); paired t(37)=6.053, p<.001. There was not a significant increase in the satisfaction scores associated with time associated with handoff (time) after the intervention (mean=3.16 SD=1.366) than before the intervention (mean=3.82, SD=1.333); paired t(37)=-2.038, p=.049. There was a significant increase in the satisfaction scores associated with handoff being clear, logical, and concise
(CLC) after the intervention (mean=5.21, SD=.843) versus before the intervention (mean=3.5, SD=1.390); paired \( t(37)=6.924, \ p<.001 \). There was a significant increase in the satisfaction scores after the intervention (mean=5.16, SD=.754) than before the intervention (mean=3.71, SD=1.228); paired \( t(37)=7.164, \ p<.001 \). There was a significant increase in the satisfaction scores associated with handoff report matching the patient (match) after the intervention (mean=5.21, SD=.704) compared to before the intervention (mean=3.87, SD=1.256); paired \( t(37)=7.222, \ p<.001 \). There was a significant increase in the satisfaction scores associated with handoff’s effectiveness for patient safety (pt saf) after the intervention (mean=5.42, SD=.683) than before the intervention (mean=4.18, SD=1.486); paired \( t(37)=5.849, \ p<.001 \). There was a significant increase in the satisfaction scores associated with handoff’s effectiveness for continuity of care after the intervention (mean=5.50, SD=.647) than before the intervention (mean=4.58, SD=1.388); paired \( t(37)=4.505, \ p<.001 \). There was a significant increase in the satisfaction associated with handoff’s effectiveness for nurse to nurse interaction after the intervention (mean=5.47, SD=.687) than before the intervention (mean=4.39, SD=1.424); paired \( t(37)=5.107, \ p<.001 \). These results demonstrated that implementing standardized handoff for nurses in the outpatient setting increased nurse satisfaction in seven (7) of the eight components.

Table 4

Paired t-test summary table

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<td>Mean (SD)</td>
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<td>3.50 (1.390)</td>
<td>5.21 (.843)</td>
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<td>37</td>
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Discussion

This quality improvement project aimed to implement a structured and standardized nursing handoff process at an outpatient oncology site with the goal of decreasing adverse events, increasing use, and improving nurses’ satisfaction. The literature reviewed noted that implementing a standardized handoff process, inclusive of a tool, and integrating key patient components from the electronic medical record would have a positive effect on nursing satisfaction and would decrease adverse events associated with ineffective handoff. The findings from this project showed a statistically significant increase in nurse satisfaction along with an increase in use of the process, and a decrease in adverse events at this site.

The 63 superusers played an integral role in implementing this project. The literature and regulatory bodies drove the structure and the majority of the components of the handoff report, however with a paucity of literature dedicated to outpatient, inter-institutional handoff, the superusers’ input was invaluable. The superusers provided insight into current practice, helped to define the transitions, and tested the reliability of the report. The outpatient transitions were identified through their survey responses which included the moments where handoff was currently being used and the RISQ™ reports which represented the potential and actual breakdowns with handoff. Identifying these transitions allowed the DNP student to make

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<td>4.39 (1.424)</td>
<td>5.47 (.687)</td>
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Note: Statistical significance is appreciated in seven of the eight questions
recommendations about when handoff must happen. This included shift to shift, coverage, and transfer of patient care which were appreciated in the literature, but also identified were interventions that would be completed by another nurse and same day appointments where the patient has a physical, psychosocial or behavioral event during the first visit. These two handoff moments are unique to the outpatient clinics.

The originally perceived, and the later appreciated, practice gap, 68% of nurses reporting use of handoff, 12% of them using it consistently, and only 19% of them had some aspect of structure, played a key role in defining the need for the project. The lack of a standardized practice for handoff was contributing to care coordination issues and both the decrease in reported events and increase in use show that implementing this project was vital to support a safe patient experience. Including the current state in the updated education module and having the superusers embedded in each modality facilitated this change in practice.

Adoption of the new handoff process was met with mainly positive feedback. The nurses had been dissatisfied with the inconsistency of handoff and the lack of care coordination was impacting patients. The initial round of education highlighted the evidence and the issue at the site. Educating the nurses had a positive impact on superuser recruitment, with 63 of the possible 115 nurses agreeing to participate in the project. The second round of education highlighted the data from the initial survey and allowed the nurses to see the connection between the literature and their practice. The superusers, became the early adopters, the influencers, and the ones who got the remainder of the nurses to join the movement to safer transitions of care. Rodgers DOI tells us that having the influence of early adopters helps an innovation become a reality (Rogers, 2003). Although all 63 did not complete the final questionnaire they did remain connected to the project, providing feedback on the report, encouraging their peers to use it, and later played a key
role in providing feedback to the users when moments for handoff were missed or incomplete. Continued measurement of this intervention is imperative to assure patient safety and nurse satisfaction remain positively impacted.

The largest barrier to the project was an unexpected three (3) month roll-out delay. The DNP student needed to re-address the key stakeholders and re-ignite support for the project. Although this could not have been avoided or planned for, the DNP student took the extra opportunities to educate and rally organizational support. The project delay made for short measurement intervals which may have impacted the long-term impact. However, despite the shorter timeframe, the impact of the intervention was unaffected. An unanticipated challenge associated with this intervention was measurement of use. The unpredictable nature of the outpatient handoff transitions requires a more detailed look into the use of the process. In order to accurately assess use, an average number of handoffs needs to be established. Once averages, or patterns, for outpatient handoff are available, use can be better evaluated.

Facilitators to this project’s success included having the best evidence, institution-level support, resources, the superusers, as well as the nurses’ verbalized dissatisfaction with the current handoff process. High level, high quality, evidence supported improved patient safety and satisfaction. The interdisciplinary collaboration between nursing and informatics allowed the DNP student to bring the robust patient information from the medical record into the handoff report with the click of an icon. The ease of use of the report and the willingness of the superusers to not only validate its reliability but also to promote its use played a key role in this project’s success. Future implications for this intervention include continued measurement for sustainability and expansion to the other outpatient sites.
Conclusion

According to the literature, and the findings associated with this project, a successful handoff process should include an electronic report drawn from the medical record and inclusive of vital patient information, training, a definition of the transitions and the moments where handoff is required, and support from superusers. Structuring outpatient handoff for these defined care transitions can improve patient safety, specifically, care coordination, and increase nurse satisfaction.

Prior to standardizing the process, handoff at this outpatient site was inconsistent and often incomplete. The lack of a structured process was a cause of dissatisfaction for the nurses and a safety issue for the patients. Implementation of the evidence-based, structured handoff process, at this site, had a positive impact on nurse satisfaction as well as patient safety and experience. It is the goal and priority of nurses to provide the highest level of care to patients and having safe and effective patient transitions is imperative to do this.
References


implementation of a resident handoff bundle. *Academic Pediatrics, 16*(6), 524–531.

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https://doi.org/10.1097/nur.0b013e3182777011


https://doi.org/10.1016/s1553-7250(13)39010-2

https://doi.org/10.1097/01.naj.0000370154.79857.09


https://doi.org/10.1016/j.jopan.2014.08.144


https://doi.org/10.1016/j.jcrc.2015.12.016


Appendix A

Rapid Critical Appraisal Tools

### RAPID CRITICAL APPRAISAL OF A QUALITATIVE STUDY

**PROJECT DESCRIPTION/LEVEL OF STUDY**

- **Project Title:**
- **Date:**
- **Reviewer(s) name(s):**
- **PICO Question:**
- **Article citation (APA):**

**Indicate the level of the study you are appraising:**

**Recommendation for article inclusion in the body of evidence to answer your question:**

### GENERAL DESCRIPTION OF STUDY

**OVERVIEW**

1. **Purpose of study,** including research question(s) or hypotheses:
2. **Design/Method:**
3. **Sample:**
4. **Setting:**
5. **Data Collection:**
### Appendix B

#### Levels of Evidence

| Level | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Level I |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Level II |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Level III |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Level IV | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Level V | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Level VI | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Level VII | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

#### Legend:

1. Delarodie et al., 2020
2. Thomas et al., 2013
3. Schuster et al., 2014
4. Bresson et al., 2020
5. Farhan et al., 2012
6. Helms et al., 2020
7. Frentag & Carroll, 2011
8. Fles et al., 2013
9. Rasmussen et al., 2019
10. Roffe et al., 2012
11. Sawatzky et al., 2015
12. Roberts et al., 2012
14. Street et al., 2011
15. Maxson et al., 2012
16. Ford & Heyman, 2017
17. Evans et al., 2012
18. Mardis et al., 2016
20. Sabbe et al., 2016
22. Muller et al., 2018
23. Horvitz et al., 2013
24. Ong et al., 2011
25. McMurray et al., 2010
26. Stawier et al., 2015
27. Johnson et al., 2016
28. Radke, 2018
29. Chapman et al., 2016
30. Reichenberg et al., 2010
31. Fresco et al., 2016
32. Kerr et al., 2014
33. Mullan et al., 2015
34. Bigham et al., 2014
35. Nagpal et al., 2012
36. van der Merwe & Hubner, 2013
## Appendix C

**SYNTHESIS OF EVIDENCE: Best Practice Process for Handoff**

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Standardized | X | X | X | X | X | X | X | X | X |    |    | X  |    |    |    |    |    |
| Tools (SBAR*) | X*| X | X |     | X |     | X | X | X*| X  |   | X  | X  | X | X  | X  | X |
| EMR Integration | X | X | X |     |   | X |    |    |    |    |    |    |    |    |    |
| Distraction |    | X | X |     | X |    |    |      |    |    |    |    |    |    |    |    |
| Patient Involvement |   |   |   | X | X |     | X | X |    |    |    |    |    |    |    |    |
| Training | X |    | X | X | X | X |    |    |    |    |    |    |    |    |    |

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35. Nagpal et al., 2013
36. Flemming & Hubner, 2013
Appendix D

SYNTHESIS OF Outcomes: Best Practice Process for Handoff

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Legend:

1. Delardes et al., 2020
2. Thomas et al., 2013
3. Schuster et al., 2014
4. Bressan et al., 2020
5. Farhan et al., 2012
6. Heilig et al., 2020
7. Frietag & Carroll, 2011
8. Hink et al., 2012
9. Reisd et al., 2019
10. Reilly et al., 2013
11. Sawatsky et al., 2013
12. Roberts et al., 2012
14. Street et al., 2011
15. Maxson et al., 2012
16. Ford & Heyman, 2017
17. Evans et al., 2012
18. Mardix et al., 2016
20. Saltvedel et al., 2016
22. Muller et al., 2018
23. Horwitz et al., 2013
24. Ong et al., 2011
25. McMurray et al., 2010
26. Streeter et al., 2015
27. Johnson et al., 2015
29. Chapman et al., 2016
30. Riesenber et al., 2010
31. Friar & et al., 2015
32. Kerr et al., 2014
33. Mullan et al., 2015
34. Bigham et al., 2014
35. Nagpal et al., 2013
36. Flemming & Hubner, 2013
Appendix E

Theoretical Framework

Sample Participant Survey Email

Hello everyone,

For those of you that are unaware I am in the final year of my DNP program at the University of Massachusetts, Amherst and about to start my capstone project. Based on the feedback from a number of teams and from reviewing RISQ™ reports, I have decided to focus on structuring handoff in the outpatient setting. As part of this project, I am asking for your help in gathering data by completing a quick survey now, after we implement the handoff process in the fall and again in the beginning of 2022. It is a very simple 16 question survey, broken into 3 parts, I promise it will only take 5-10 minutes max! Although your participation in this survey is completely voluntary, I would not only be eternally grateful, but it would also allow you to have an early voice in the development of this program.

To add incentive, and because I like competition and having a little fun, I will treat the group with the highest percentage of responses to a pizza lunch or bagel breakfast.

Survey link: [Embedded URL]

Thank you for your consideration and, hopefully, your participation,
Keri
Appendix G

Recruitment Flyer

Outpatient Handoff Initiation Project

Ineffective handoffs impact patient safety and nurse satisfaction, we can change this with your help!

Do you want to be part of the team that changes the way we share information in the outpatient setting?

Contact Keri Wagner for more information
# Appendix I

## Nurse Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>What department do you work in?</td>
<td>Medicine, Surgery, Radiation, Dermatology, Radiology, Other</td>
</tr>
<tr>
<td>How many years have you been a nurse?</td>
<td>* must provide value</td>
</tr>
<tr>
<td>How many years have you been a nurse in the outpatient setting?</td>
<td>* must provide value</td>
</tr>
<tr>
<td>What is your highest level of RN preparation?</td>
<td>Associates, Baccalaureate, Baccalaureate in progress, Masters, Masters in progress, Doctoral, Doctoral in progress</td>
</tr>
<tr>
<td>What are the transitions where you believe handoff is needed in your department?</td>
<td>* must provide value</td>
</tr>
<tr>
<td>Is handoff done in your department?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Is there a consistent process for handoff</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Do you have a structured handoff tool?</td>
<td>Yes, No</td>
</tr>
<tr>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1) Handoff is easy to do</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>2) Handoff is time consuming</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>3) Handoff is clear, logical and concise</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>4) Handoff contains sufficient information to provide patient care</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>5) Handoff report given matches patient details/needs</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>6) Handoff is effective for patient safety</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>7) Handoff is effective for continuity of care</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
<tr>
<td>8) Handoff is effective for RN:RN interaction</td>
<td>○ Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Slightly Disagree</td>
</tr>
<tr>
<td></td>
<td>○ Agree</td>
</tr>
</tbody>
</table>
Appendix J

Go-Live Handoff Education Update

Appendix J
Background

- Variations in the handoff process result in inefficiencies in patient care.
- Multiple handoffs occur throughout the course of a patient's stay.
- Handoffs are often fragmented and inconsistent.
- Miscommunication during handoffs can lead to adverse events.
- Handoff processes are often complex and time-consuming.

Overview

- Handoffs are critical in ensuring patient safety.
- Challenges in handoffs include: lack of standardization, variability in information transfer, and limited opportunities for feedback.
- Goals of the handoff process include: clear communication, timely updates, and continuous improvement.

Handoff in Outpatient

- Outpatient handoff is essential for effective transition of care.
- Challenges in outpatient handoffs include: timing, location, and patient adherence.
- Strategies for improving outpatient handoffs include: standardized tools, electronic communication, and patient education.

Handoff Program Development

- Development of a comprehensive handoff program requires a multidisciplinary approach.
- Key components of a successful handoff program include: education, communication, and feedback.
- Implementation strategies for handoff programs include: collaboration with stakeholders, education programs, and ongoing evaluation.

First Step: Adding the Care Team Icon

- The care team icon is an essential component of the handoff process.
- The care team icon provides a visual representation of the care team and their roles.
- The care team icon helps to ensure that all members of the care team are included in the handoff process.

Handoff Components

- Handoff components include: patient demographics, medical history, current medications, vital signs, and laboratory results.
- Handoff components are used to ensure that all relevant information is transferred to the receiving care team.

Direct entry components – Nursing Summary

- Direct entry components are critical for ensuring accurate and timely transfer of patient information.
- The nursing summary provides a comprehensive overview of the patient's status.
- Direct entry components include: vital signs, medications, allergies, and laboratory results.

Direct entry components – Nursing Contact

- Direct entry components are essential for ensuring effective communication between care providers.
- Nursing contact information provides a means for care providers to reach each other.
- Direct entry components include: contact information, patient demographics, and medical history.

Benefit of Handoff

- Benefits of handoff include: improved patient outcomes, reduced medical errors, and increased team collaboration.
- Handoff processes are designed to improve communication and ensure patient safety.

Handoff Process

- The handoff process is a critical component of patient care.
- The handoff process involves a systematic transfer of patient information from one care provider to another.
- Handoff processes are designed to ensure that all relevant information is transferred to the receiving care team.
### Appendix K

**Handoff Report Components**

<table>
<thead>
<tr>
<th>Name, MRN, Age (DOB), Sex, Attending, Language, Code Status</th>
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</thead>
<tbody>
<tr>
<td><strong>Diagnosis</strong></td>
</tr>
<tr>
<td>- Pulled from ICD codes</td>
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<tr>
<td><strong>Nursing Summary</strong></td>
</tr>
<tr>
<td>- Entered by nurse, updatable, remains across visits</td>
</tr>
<tr>
<td><strong>Protocols</strong></td>
</tr>
<tr>
<td>- Only active will show</td>
</tr>
<tr>
<td>- Pulled from PIMS/CTMS</td>
</tr>
<tr>
<td><strong>Nursing Contact</strong></td>
</tr>
<tr>
<td>- Entered by nurse, updatable, remains across visits</td>
</tr>
<tr>
<td><strong>Nursing Handoff Instructions</strong></td>
</tr>
<tr>
<td>- Handoff Tasks/Instructions</td>
</tr>
<tr>
<td>- Entered by nurse, updatable, remains across visits</td>
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<tr>
<td><strong>Allergies</strong></td>
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<tr>
<td>- Pulls from CIS</td>
</tr>
<tr>
<td><strong>Fall Risk</strong></td>
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<tr>
<td>- Pulls from CIS</td>
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<tr>
<td><strong>Implanted devices</strong></td>
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<tr>
<td>- Pulls from CIS</td>
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<tr>
<td><strong>RBC</strong></td>
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<tr>
<td>- Pulls from ONE, AHS, T&amp;A note</td>
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<tr>
<td>- Opportunity to add psychosocial components to the what is important question</td>
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<td><strong>Next Appointments</strong></td>
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<td>- Pulls from CIS/Cadence</td>
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<td><strong>Labs</strong></td>
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<td>- Most recent within 90 days</td>
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<td><strong>Vitals</strong></td>
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<td>- Most recent within 18 months</td>
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<td><strong>Pending Orders</strong></td>
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Appendix L
Sample Handoff Report