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Standardized Blood Transfusion Documentation

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Prospectus Elements: Standardized Blood Transfusion Documentation

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N653: Internship: Clinical Nurse Leader

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Clinical Leadership Theme

The aim of this project is to improve nurse satisfaction through the use of a standardized blood administration documentation template on the Medical-Surgical Unit. By implementing a documentation template, the goal is that nurses' confidence will improve and there will be fewer adverse outcomes related to blood administration and subsequent documentation. The project begins with creating a documentation template with a policy drop-down for blood transfusions. The process ends with providing in-services to nurses to teach them about the new documentation template and creating reminders for them to use it.

The clinical nurse leader (CNL) functions within the microsystem to implement change in order to improve nurse satisfaction and patient outcomes. The leadership theme that supports this project is Information Manager, as the CNL uses information systems and technology at the point of care to improve health care outcomes (AACN, 2013). The CNL will "use information and communication technologies to document patient care... and enhance accessibility of care" (AACN, 2013, p. 15).

Statement of the Problem

Currently, the documentation of blood transfusions is not standardized within the microsystem. There is no guideline or criteria dictating what the documentation for blood transfusions should include or where it is to be documented. Nurses are unfamiliar with the policy due to infrequency of blood administrations on the unit. After surveying the nurses in the microsystem 20% of them report that they administer blood products once a month and 52% administer blood every six months or less. There are also a number of newly graduated nurses on the unit who have not yet had the opportunity to complete a blood transfusion. It was determined that only 42% of the nurses feel confident in knowing what should be included in documentation

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for blood transfusions. This results in nurses documenting too much or too little information. This type of inconsistency in documentation makes it difficult to track when patients received a transfusion and how they tolerated it. Rock et al., (2007) claimed that the lack of documentation of blood transfusions has been a problem in most hospitals for many years and that there is often not clear guidelines on what specific documentation is required for certain procedures. The patient safety coordinator has reported that there have been reports related to blood being administered incorrectly and without prior consent. The current process is also problematic in that the paper documentation form has been lost resulting in no record of the transfusion.

The theory behind this project is that fewer adverse outcomes related to blood transfusions will occur due to the fact that nurses will have faster access to the blood transfusion policy through a drop-down function in the new template. It is also proposed that nurses will not struggle with knowing what information is necessary to document for blood transfusions and risk omitting critical data from the patient chart. Additionally, with the use of a template, nurses and auditors will be able to quickly locate past blood transfusion documentation notes in the chart (this will allow for review of past complications or transfusion reactions). There have been cases of patients receiving duplicate orders for transfusions because physicians are unable to determine from the chart if the patient was ever transfused. Administering unnecessary or additional blood products are a risk to patient safety and can result in adverse outcomes to patients. Nurses do not always pass on that a patient received a transfusion in shift handoff report. This is also a risk to patient safety in that the oncoming nurse may miss later signs of a potential complication related to the blood transfusion.

Project overview

The aim of this project is to improve nurse satisfaction by 70% through the use of a standardized documentation template on the Medical-Surgical Unit by August 15, 2016. The goal is to improve nurse satisfaction by reducing feelings of uncertainty related to blood administration and subsequent documentation. A secondary goal of this change is to create a universal documentation template that will make it easier for nurses to document blood transfusions and that could potentially be shared with other units. With a standardized template, nurses will not have to worry about missing any essential components of the documentation. It will also reduce the time that they have to spend documenting by eliminating the use of a freetext documentation method for transfusions. Having a standard documentation template will also guarantee that documentation of the blood transfusion is not inadvertently omitted from the patient's electronic medical record. Documentation templates help to standardize clinical information, which results in expedited chart searching, timely display of patient information, better coordination of care amongst providers and improved patient outcomes (Clark et al., 2012). "Templates can also help support the capture of clinical content in a standardized and structured manner" (p. 66). Effectiveness of the project will be determined by surveys administered to nurses addressing feelings regarding blood administration protocol and documentation.

Rationale

Through a detailed microsystem analysis, it was determined that there is a vast difference in the way that blood transfusions are documented. Some nurses document the transfusion in their daily assessment note. This note is already long and cumbersome and is often overlooked by providers and other nurses. Sometimes, nurses use a separate note to document, but without a

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designated blood transfusion title, it is difficult to track the information. Experienced nurses tend to spend a longer time documenting all the aspects of the transfusion, which can be time-consuming and un-necessary. Other nurses have been known to completely omit any documentation of the transfusion in the electronic chart believing that the paper form is the only required documentation. This leads to the possibility of critical information being left out of the Computerized Patient Record System (CPRS). The results of a staff survey (Appendix A) revealed that nurses have expressed feelings of uncertainty regarding what is required to document. Currently, there is not a sufficient policy catered towards the individual needs of the microsystem regarding administering blood products. It is essential to develop a transfusion template because the paper form that is currently used for documentation is often lost in transport to the laboratory and often nurses do not know how to access it once it is scanned into CPRS.

A microsystem analysis was completed to identify the demographics and needs of the unit. There are 19 registered nurses (RNs) and 11 nursing assistants (NAs) assigned to the day shift and 19 nurses and 8 assistants on the night shift. There is 1 nurse manager, an assistant manager and a Clinical Nurse Leader (CNL) working on the unit. Fifty-nine percent of the RNs have their bachelor's degree in nursing (BSN). Fifty two percent of the RNs are between the ages of 35-54. Forty-eight percent of the nurses have worked on the unit 1 to 4 years and 37% have worked 5 to 9 years. The unit frequently hires newly graduated nurses and puts them through a graduate nurse training program.

To begin this project, a generalized survey was conducted by talking to individual nurses in person, using an open communication technique. Nurses were asked to share their thoughts on the current blood administration protocol and documentation procedures. They were asked if they knew where to find the policy for blood administration and the majority claimed that they

did. After actually attempting to find the policy however, most of the nurses were unable to locate it. This proved that there was a need for more education and better access to the existing policy and procedure for blood product administration. While this is an important aspect of improving the practice of blood transfusions on the unit, it will be another large project to tackle after the current project to create a blood transfusion documentation template.

In order to gather the opinions and analyze current practices of all of the nurses working in the microsystem, an electronic, anonymous survey was distributed to the staff through e-mail communication (Appendix A). The first step involved creating non-biased questions that would fairly demonstrated nurses' opinions on their confidence administering and documenting blood transfusions. It was first necessary to consult with the CNL to add any input to the survey. From there, it was required to gain the union's approval in order to ensure that the survey was appropriate to administer to the staff.

The results of the survey revealed that a majority of the nurses administer blood products once a month or less with half of them giving blood every six months or less. This demonstrates that the practice of administering blood products is not a common nursing function in the microsystem, which further justifies the need for more education and a clearer policy on the process. It was originally questioned whether requiring an additional documentation template would add more work to the daily workload requirement of the nurses; clearly, the need for documentation would not significantly impact the day-to-day documentation demand.

Addressing and improving the confidence of nurses who administer and document blood transfusions is a major goal of this project. Of the nurses who responded to the survey, only 39% of them stated they were 100% confident administering blood products. Less than half (48%) of nurses were confident that they know what is necessary to document regarding blood

transfusions. Clearly, there is a significant need for improving nurses' confidence in both the administration and documentation practices of blood transfusions. The most compelling piece of data for this project came from the last question of the survey, which asked if the nurses thought it would be helpful to have a designated blood transfusion template in CPRS. All but one of the nurses who responded agreed that having a short documentation is both necessary and would offer helpful advantages to the nurses.

An audit of patient charts revealed that there is no universal system in place for documenting blood transfusions. Some nurses document in their regular daily assessment note, while others often do not document that a transfusion was given in the electronic record. Those who do document often add either too little or excessive information about the transfusion. The inconsistencies in documentation make it difficult for providers to determine if patients have received a transfusion and make it impossible to track or retrieve data from past transfusions.

Additionally, to support the need for this project, outreach was completed to seek out the input of other CNLs working throughout the country at various VA facilities. Multiple CNLs responded with examples of blood transfusions templates that are already in use. This demonstrates that the proposed project is already in use at other VA's throughout the country. By having access to other documentation templates, a better idea of an effective template designed to fit the individual needs of the microsystem was formulated.

All of the data collected from the staff surveys, chart audits and microsystem analysis support the implementation of a documentation template. The template will be specifically designed to make it easier for the interdisciplinary team to locate transfusion data, allow for nurses to quickly see that the patient had a transfusion recently and provide fast access to any information on past transfusion reaction information.

The project has the potential to save unnecessary and high costs related to patient complications due to the incorrect administration or documentation of blood products.

Complications of blood transfusions can result in longer patient stays, which increases the overall cost of care. In addition to improving patient outcomes, ensuring adequate documentation practices is of paramount importance for nurses within the microsystem. Proper documentation can prevent future costs related to malpractice claims. Cases of malpractice are frequently decided based on the documentation that occurred (Frank-Stromborg, Christensen, & Do, 2001).

Practicing complete and accurate documentation (especially for high-risk procedures) is the only way to defend against potential allegations of professional negligence.

Compared to the potential savings, the cost of the project will be minimal, as it does not require the hiring of any new employees or the implementation of any new technology. It is assumed that the supervising CNL will spend approximately twenty hours of her time over the period of two months advising, supporting and coordinating the CNL student's efforts. The other core person involved in the project will be the clinical application coordinator (CAC) who will be responsible for obtaining, editing and uploading the template to CPRS. The CNL student will be responsible for conducting short in-services to demonstrate the template, answer questions and monitor compliance of the template through monthly audits. The nurse educators will be included in any training about the template to ensure that it will be incorporated into future nurse orientation programs. A detailed cost analysis is included in Appendix B.

Methodology

This change project will focus on the process to develop and implement a standardized template for nursing staff to use to document blood transfusions in the computerized record system. The use of electronic documentation "offers many benefits to health care providers for

data retrieval, avoidance of duplicate documentation, and analysis of care, interventions, and outcomes" (Alexander, Corrigan, Gorski, Hankins, Perucca, 2010, p. 540). The aim for this change is to reduce the time that nurses spend charting by offering a structured documentation template and improve communication amongst healthcare providers by ensuring that the procedure is correctly documented in the patient's electronic record. This project will also involve the need to educate nurses on the desired change and monitor for compliance of the required documentation. Eventually, this change could be rolled out to other units throughout the inpatient and outpatient care settings.

The change theory that will be utilized for this project will be Kotter's Change Model (Appendix C). Kotter's change model involves eight specific steps: establish a sense of urgency, create a guiding coalition, develop a vision and strategy, communicate the vision of change, empower employees for broad-based action, generate short term wins, consolidate the gains and produce more change and anchor new approaches in the culture (Kotter International, 2015). Kotter's theory emphasizes the importance of leadership in any project for change (Mbamalu & Whiteman, 2014). The role of the CNL is based on leadership, which makes Kotter's theory for change appropriate for this project (Appendix D).

After identifying the need for a change, the next step is to establish a sense of urgency within the staff. It will be necessary to obtain the nurses input on this change to factor in their requests and recommendations for the template. "Documentation systems should be designed in consultation with the nursing staff and their concerns should be addressed before the system is implemented" (Alexander, et al., 2010, p. 540). The next step will be create a guiding coalition, which involves forming a group of people to support and guide the change. For this project, the core group of people will include the nursing staff, the CNL, the clinical applications coordinator

(who creates the template) and other nursing leadership including management. Clart et al., (2012) suggests taking a collaborative approach to template design by involving many members of the healthcare team.

The third step is to develop a vision and strategy for the change. This will involve the core group reviewing examples of other blood transfusion documentation templates and developing a draft to present to the nursing staff. The template will need to contain certain aspects about data involved in the blood transfusion. "It is essential to maintain documentation of the transfusion episode. This will include: transfusion start and stop times, observations (pre, during and post-transfusion), adverse events or reactions, dates, times and signatures" (Gray et al., 2007). The next step will be to communicate the vision of change by presenting the template draft to the nursing staff for their input. Once input is received, the template can be revised to meet the requests of nursing staff. The revision process will be lengthy and will best be accomplished with the input multiple staff nurses. "Careful, thoughtful design and the ongoing review of EHR templates and prompts is essential to successful implementation and use" (Clark et al., 2012). The fifth step involves empowering others by removing any obstacles to the change and determining any barriers to the change. It should be well communicated that there is a plan to create a new template so that nurses are prepared to use it when it is fully implemented.

Planning for and creating short-term wins is the next step in the process and will allow for staff to be encouraged and rewarded for participating in the change project. After going through multiple examples of other transfusion templates currently in use at other VA facilities, a template will be chosen and altered to better accommodate the needs of the microsystem. Once the template is functional, it will be tested out amongst a small workgroup of nurses to determine if there are additional revisions to be made. Once the workgroup agrees on the effectiveness of

the template, it will be fully rolled out on the unit. Once the nursing staff and the working group approve the final template, the template can be trialed for usability. Nurses should be asked to use the template to document all transfusions. The next step in the change process involves sustaining acceleration by changing policies and procedures to support the change. The current policy for blood transfusion does not mention anything specifically about the required documentation (see Appendix E). Including the documentation requirement within the blood transfusion policy helps to ensure that nurses are held accountable for completing the template. Watson and Hearnshaw (2010) argue, "Good documentation is essential for investigating adverse events and for audit data collection." Nurses can be reminded that in the event of an investigation, they can rest assured knowing that they used the template to document the required aspects of the transfusion, guaranteeing that no information is accidentally missed.

The final step in the process will be institutionalizing the change. In-services will be provided to staff nurses to demonstrate the new template and also offer educational pointers on blood product administration. Once the final documentation template is implemented, the nurses will be reminded to use the template by discussing it at the weekly staff huddles. Additionally, posters will be placed in common areas around the unit to remind nurses to use the template.

Once the new template is implemented, the compliance rates can easily be tracked by auditing patient records. A log is already kept of all patients on the unit who receive blood transfusions, therefore, the charts of applicable patients can easily be accessed and audited for use of the template.

In order to evaluate the effectiveness of the project, a follow up staff survey will be administered. As the initial survey revealed that the majority of nurses administer blood every two to six months, there will be a delay in retrieving follow up data in order to allow all nurses to

test out the new template in a regular practice setting. In the short term, nurses will have the opportunity to review the blood administration process during in-services dedicated to demonstrating the new blood transfusion template. Nurses will have the opportunity to ask questions and clarify the correct policy and procedure for blood administration. The ultimate goal will be to evaluate if nurses feel less uncertainty regarding what documentation is necessary to complete following a blood transfusion. The post-implementation survey will include questions to gauge nurses' confidence in blood administration and documentation practices. In addition to completing the anonymous surveys, nurses will also be given the chance to share their thoughts on the change during weekly staff huddles. A part of the project will also include an in-service on the basic blood administration protocol; therefore, follow up data will be collected on nurse's overall confidence in administering blood products. Success of the change project will be demonstrated when nurses' expressed confidence in documentation practices improves.

Data Source/Literature Review

The microsystem of focus is a 38 bed acute unit that provides care to medical, surgical and telemetry patients. The most common diagnoses for patients treated on the unit include: pneumonia, chronic obstructive pulmonary disease, alcohol withdrawal, chest pain, cancer, failure to thrive and orthopedic surgery including total knee arthroplasty and shoulder surgery. This unit is particularly in need of a transfusion template note because the patient population is only getting more complex as the veteran population ages and therefore require more advanced care including blood transfusions. There are currently plans for the unit to expand, which will allow capacity for more beds and possibly for further specialization of the microsystem. There is a high demand for nurses in the microsystem to become chemo certified, as there is presently not

a designated chemotherapy unit in the hospital. In general, this population of patients require more frequent transfusions and would further justify the need for a documentation template.

In order to find supporting evidence for this project, a PICO search was conducted. The PICO statement that was developed was: Does the documentation of blood transfusions (P) with the use of a standardized documentation template (I) verses no template or free format charting (C) demonstrate improved nurse satisfaction, better data tracking and/or better transparency of information (O). The search criteria were ultimately reduced to find support on the use of standardized documentation templates in health care. "Templates assist with standardization of essential elements in clinical documentation" (Clark et al., 2012, p. 70). After further narrowing the search criteria and filtering through the results, best practice articles on blood transfusion administration were discovered. "The patient's medical record shall include... documentation of patient consent, the name of the component, the donation identification number, the date and time of transfusion, pre- and posttransfusion vital signs, the amount transfused, the identification of the transfusionist, and, if applicable, transfusion-related adverse events" (AABB, 2014, p. 45). It was ultimately concluded that "using standardized terminology within electronic health records is critical for nurses to communicate their impact on patient care to the multidisciplinary team" (Lundberg et al., 2008, p. 1).

Bennett and Steen (2010) strived to improve electronic documentation by altering existing templates to improve the ease of documentation. In their study, they attempted to improve adherence of documentation by customizing templates to better fit the needs of the patient population. It was discovered that after altering the templates, the documentation completion rates increased significantly. They also utilized the implementation of the revised templates to introduce a training session to familiarize staff with the new documentation. This is

an important study in the support of this project because they suggest that clinical practice can be improved with the use of appropriate and customized templates.

Clark, et al., (2012) is one of the most supportive articles in that it offered useful information on ways to improve patient care through the increased use of the electronic health record (EHR). It suggests that patient care be documented through the use of effective templates and prompts. The authors argue that the use of documentation templates allow for important aspects of clinical care to be captured in a standardized and structured format. Ultimately, quality of care is improved through a better understanding of complications and improved tracking of patient care outcomes. The authors recommend using a collaborative approach when implementing any new template and argue that the use of templates in documentation has been proven to improve quality and thoroughness of documentation.

The authors in another study examined the effect of the implementation of a electronic medical record wound care template on the completeness of documentation and medical coding (Lowe, Raugi, Reiber & Whitney, 2013). The documentation note used multiple variables embedded in the template to help facilitate data collection, improve ordering and medical coding and support clinical decision making. The template helped to improve the use of evidence-based interventions and the documentation of important wound care variables. The authors summarized that inadequate documentation may result in incomplete capture of data. They concluded the article by recommending better documentation of complex procedures using templates. While this article was not specifically about blood transfusion documentation, it does offer support for the proposed change of using a standardized template for documentation of certain procedures.

Another supportive study found that the use of an electronic nursing record using standardized language helps to strengthen the documentation of care by offering more accurate

and efficient information (Nunes, Rego, & Nunes, 2014). This type of documentation helps to evaluate the effectiveness of care, describe the patient's responses to interventions and promotes completion of legal documentation. The authors further support the use of electronic records to increase the clarity of care and reduce ambiguity. Overall, this study supports the goal of this project and the hope to promote standardized and efficient documentation in the electronic medical record.

Watson and Hearnshaw (2010) provide information on the basic practice of blood transfusions in their article published in the *Nursing Standard* journal. It emphasizes the potential for serious risks associated with blood product administrations and stresses the importance of nurses being aware of their role and familiar with the policy and procedures for transfusions. It includes a section on documentation and suggests that the recording of blood transfusions should be done separately from standard nursing notes. The current practice in the microsystem is for nurses to include the documentation of blood products in their daily assessment note; this results in difficulty finding the information and unclear expectations on what is necessary to chart.

The current edition of the *Journal of Infusion Nursing's Infusion Therapy Standards of Practice* supports the practice of documentation that is timely, accessible and efficiently retrievable to the health care team (Gorski et al., 2016). This journal offers the most recent recommendations and support of evidence-based practice for infusion therapy. There is a section specifically designated to address the best practices in the administration of blood products. The authors also offer important suggestions related to how best to document certain aspects of patient care, including blood administration. They suggest that documentation is timely, accessible and easily retrievable to the health care team.

The evidence used to support this project demonstrates the importance of the use of a standardized electronic documentation template. Evidence based practice supports the documentation of blood transfusions, which "should be recorded separately from other routine observations" (Watson & Hearnshaw, 2010, p. 47). The project is further justified after reviewing the potential benefits of standardized documentation and the potential for improved transparency of care.

Timeline

The timeline for this project is limited by the somewhat short semester. In order to ensure completion of the project, a timeline was created (Appendix F). The first step in the timeline is to conduct a unit needs assessment. This step identifies the need for a change and helps to identify potential barriers. Once the project is identified, the action plan will follow the steps outlined in Kotter's Change Model (Appendix D). A survey will be created and sent to the staff to determine their baseline thoughts regarding blood transfusion documentation. One major step in this project is to create the actual documentation template. In order to save time, other CNLs throughout the VA healthcare system were asked to share examples of their template. The CNL will need to be involved in the process of editing and approving the template. Once all of the templates are evaluated, one can be chosen to revise and submit to the CACs. This is where there may be a lag in the timeline as there is no way to speed up the process to get the template established into CPRS. An analysis will need to be conducted on the survey results and will be used as preimplementation data. Once the template is developed and ready to use in CPRS, it will be tested amongst a small work group of nurses to determine if there are any improvements or revisions that need to be made. The nurse manager will need to sign off on the template before it is released for the unit to begin using. Once the template is ready, in-services will be conducted to

make staff aware of the template and to demonstrate its use. At this time, further education can be provided regarding the policy and procedure for administering blood products. More time will be spend educating newer nurses who are less familiar with the practice. Reminders to use the template will need to be posted around the unit. Staff will also be reminded to use the template during weekly staff huddles.

Other steps that do not necessarily fit within a timeline will need to be conducted throughout the project and include communicating with the CACs and nurse educators on a regular basis. The patient safety manager will also need to be involved to determine how the data from the documentation templates can be used to track adverse events. Additionally, the blood transfusion utilization committee will need to be consulted to determine how this project will overlap with their work. Unfortunately, their next quarterly meeting does not occur until after the deadline for this project. It is expected that the implementation of a blood documentation template will allow for faster review of patient data, which will improve the efforts of the utilization committee. Additional time will be spent evaluating the current policy and procedure to anticipate changes that need to occur to reflect the use of a new documentation note. Physicians and other members of the interdisciplinary team will need to be aware of the change so that they can appropriately look out for and utilize the completed transfusion documentation notes in the electronic medical record.

Once the template has been in use, it will be important to collect post-implementation data for the change. A new survey will need to be developed to gauge nurses' response to the template and also to collect potential feedback for the change. Due to the fact that transfusions are not a frequent practice on the unit, adequate time will need to be given to the nurses to have the opportunity to use the template in practice before their opinions are collected. Chart reviews

will need to be conducted for at least the first six months to determine if nurses are appropriately using the template.

Expected Results

During the initial collection of survey data to support the project, it was discovered that a strong majority (95%) of nurses feel that having a designated template in CPRS would be helpful to properly document blood transfusions. Therefore, it is predicted that because this is a desired change in the microsystem, it will be successful and supported. In any change however, there will be a breakdown of individuals who either support the project or challenge the process. The innovators and early majority of people will be supportive of the change and help to push the project forward (King, & Gerard, 2012). The late majority will need more encouragement during the change but will ultimately become supportive of the project. The laggards will only make up a small portion of the microsystem and will prove that there is potential for nursing staff's resistance to change. "Resistance to change in healthcare systems is often led by individuals who are satisfied with the status quo and threatened by change, new ideas, and people" (Harris, Roussel & Thomas, 2014, p. 131). Implementing a new required documentation template may appear like more work to some nurses. While this is true to some extent, the intended template is quite short and only takes a couple of minutes to fully complete. It will save time in the long run by improving the ability of the care team to quickly visualize when the patient received a blood transfusion and if there were any complications. In order to help alleviate the resistance to change, other staff nurses will be included in the planning and implementation process. A draft of the template should already be developed and ready to show to any nurses who are hesitant about the change. The goal will be to re-direct this resistance and encourage nurses to support the change by encouraging their involvement.

The potential benefits of this project are immense. A SWOT analysis is included in Appendix G. Having a separate note with a designated title will make it easier to pull up the patient's history of transfusions. The majority of nurses in the microsystem have already verbalized that they believed a designated CPRS template would be useful to have. It would allow for better transparency of information within the patient chart. The current paper form that is used to document blood administration is delivered to the laboratory after the nurse fills it out and it is frequently lost. A documentation template would speed up the process of essential information making it into the electronic record. Currently, after the paper documentation form is delivered to the lab, it is scanned into CPRS; unfortunately this process can take several days. Due to the high turnaround and number of newer nurses in the microsystem, some nurses revealed that they do not know how to access scanned in documents in the chart. This is a huge barrier to care that a documentation template could easily correct. Having an easily retrievable record of the blood transfusion will also improve the provider's access to important patient data and will quickly confirm when the transfusion was administered.

Nursing Relevance

The process improvement project will help to ensure that all documented information in the patient's chart referring to the blood transfusion is standardized. This will guarantee that critical information is not left out and will also allow for better tracking of transfusion data. Clark et al., (2012) argued that using documentation templates help to improve quality of care for patients by improving clinical outcomes and data tracking. Another potential contribution is that this project is something that can be passed along to other microsystems within the hospital and even other VA healthcare systems.

The use of a structured template reduces any confusion and prevents nurses from questioning what data is necessary to document for the transfusion. Nurses will be confident in knowing that they have met the requirement for documentation and fulfilled their ethical duty to patients by ensuring timely and accurate documentation. The documentation template will help to standardize clinical information, which will ultimately result in expedited chart searching, timely display of patient information, better coordination of care amongst providers and improved patient outcomes (Clark et al., 2012). Ultimately, the project will not only benefit the nurses within the microsystem, but also the physicians, pharmacists and the patient safety team. This project will improve the transparency of care, reduce potential confusion regarding documentation and improve nurses' confidence in blood administration and documentation.

Summary Report

The objective of this project was to improve nurse satisfaction through the use of a standardized blood administration documentation template and to reduce the time that nurses spend charting. Standardized documentation is expected to result in improved nursing confidence, expedited chart searching, timely display of patient information, better coordination of care amongst providers and improved patient outcomes. This project began with a microsystem assessment to determine the needs of the unit and the desires of the nurses. The creation of a transfusion template was something that 95% of the nurses believed was necessary and important to delivering and documenting patient care.

The microsystem where this project took place was a medical/surgical/telemetry unit (B3/B4) with 38 patient beds. The most common diagnoses within the microsystem include: pneumonia, sepsis, COPD exacerbation, heart failure, chest pain, alcohol withdrawal and post-

surgical patients. The unit consists of 38 registered nurses, and the majority of them have worked on the unit 1 to 4 years.

Only 39% of the nurses who were surveyed expressed complete confidence in administering blood products and only 48% knew what was necessary to document regarding blood transfusions. This data supported the need for the creation of a standardized blood transfusion documentation template. In addition to the nursing staff, the clinical nurse leader (CNL) in the microsystem was supportive for the project along with the medical providers.

A large portion of time was spent collecting evidence to support the project. It was also necessary to determine the potential benefits of an electronic documentation template and establish what information would be beneficial to put on the template. Ultimately, it was concluded that it would be faster for the clinical application coordinator (CAC) to edit and make changes to an existing template verses trying to create one from scratch. Unfortunately, this meant that in order for the project to move forward, there were more people to rely on.

The initial work on this project began when I got in touch with the clinical practice council at my last work site. They shared their current blood transfusion template, the challenges they had experienced and the revisions that were being made to it. I requested for their CAC share their blood transfusion template. The template was shared with someone who retired a month later and did not make the template available to her replacement. The project then involved reaching out to CNLs through a dedicated e-mail group to evaluate other practices and templates being used for blood transfusion documentation. A review of all of the templates was conducted to determine which one most closely fit with the needs of the microsystem and would address the necessary components of care. Additional changes had to be made to fit with the goals of this project and address the aspects that the nurses wished to include. The CAC at the

current worksite contacted the other facility to get the electronic file for the template so that it could be implemented into CPRS. After three attempts she still did not receive a response.

While waiting for the electronic template file, I continued to collect and analyze survey responses and communicate with nurses in the microsystem. I also arranged to meet with the patient safety coordinator and the blood transfusion utilization committee. I continued to reach out to nurses about the change and seek their input and concerns regarding the current practice for blood transfusions. I was able to meet with the CAC and work on making changes to the template while we waited for the electronic file to be sent. A workgroup was formed to discuss necessary components of the template. The staff nurse workgroup helped to ensure that nurses' input was a part of the change project.

It was concluded that the delay in receiving the template resulted in a significant suspension of the proposed timeline. Once the template was received, multiple meetings had to take place to revise and edit the template. It was then listed as a test template for the workgroup to evaluate and try out. Once the workgroup suggested changes to the template, they had to be submitted to the CAC. There was also a delay in getting a name approved for the template. A title for any documentation note has to first be requested and approved. Currently, final changes are being made to the template while a formal title is being approved.

The majority of nurses administer blood products every six months or less. This means that the evaluation of the template will be time consuming. Instead of waiting for nurses to utilize the template in regular practice, they will be surveyed after the template is demonstrated during an in-service. Now that the template is finally approved, the rest of the nurses in the microsystem will have the opportunity to try the template in a test chart. A survey will be administered to the nurses after they are in-serviced on the new template to determine if their

confidence in documenting blood transfusions increases. It is expected that having a structured template will improve nurses' confidence when documenting transfusions because they will no longer need to rely on free text charting.

In order to fully evaluate the success of this project, nurses will need to be surveyed six months and then a year after the template is officially released. This will provide ample time for nurses to use the template in a real practice setting verses obtaining their input on a theoretical scenario. The post-implementation survey has been developed to align with the initial staff survey in order to best compare the results related to increased staff satisfaction. As the template was just released last week, there is not yet any data to demonstrate the effectiveness of this project.

The project will be sustainable because it fits with the organization's current procedures and push for electronic documentation. It is expected that in a few years, there may be an ability to scan blood products into the electronic medication record. At that time, the template might need to be shortened to reflect the change in practice. It will still be important however to have a record of the transfusion in the patient's chart and to have a standardized way to document potential transfusion reactions.

To further ensure the sustainability of this project, I will continue to act as the champion along with my CNL preceptor in moving this project forward and ensuring that the nurses are aware of the availability of the template and the need to use it. Flyers have been prepared and will be posted in the break room, at the nursing stations and on individual computer stations to remind nurses to use the template. As this is a desired change, the nurses are eager to start utilizing the template and will also aid in spreading the word and demonstrating the use of the new documentation note. I will function as an outcomes manager in evaluating the adherence to

the use of the template and reviewing post-implementation survey data. Audits will be conducted on a monthly basis to determine the adherence to the template.

Once the template is fully implemented, it will allow for faster recovery of information and will confirm when patients receive blood products and if there were any complications. Patient safety risks will reduce due to improved documentation of any transfusion reaction and greater transparency of information amongst the interdisciplinary team. Physicians will no longer have to call nurses to determine if blood was given and the administration of blood products will not be lost in nurse-to-nurse report. The project will be successful in that it fits with the microsystems needs based on the results of the initial staff survey. Additionally, the unit's patient population is becoming more complex as the population ages and therefore requires more advanced care, including blood transfusions. This change project will continue to be a needed addition to the microsystem. Based on the positive preliminary feedback, is expected that this project will continue to improve communication, reduce confusion regarding documentation and improve nurses' confidence in blood administration and documentation.

Ultimately, it was concluded that when relying on other people, it is important to maintain patience. Timelines are a valuable guideline in any change project, but may need to be altered due to unanticipated delays. The delay in retrieving the electronic template file gave me the opportunity to work on other aspects of the project. I was able to coordinate with the patient safety coordinator, the blood transfusion utilization committee and communicate with the nurse workgroup. Another CNL has already reached out to me about my project in hopes that the blood transfusion documentation template can be implemented in her microsystem. Functioning as a CNL for this project has allowed me to act as a valuable member of the nursing team to advocate

for nurses and patients, utilize information and synthesize data in order to improve overall outcomes.

References:

- American Association of Blood Banks. (2014). Standards for blood banks and transfusion services. Standards Program Committee. 29th ed. Bethesda, MD: AABB
- American Association of Colleges of Nursing (AACN). (2013). Competencies and curricular expectations for clinical nurse leader education and practice. Retrieved from: http://www.aacn.nche.edu/cnl/CNL-Competencies-October-2013.pdf
- Alexander, M., Corrigan, A., Gorski, L., Hankins, J., Perucca R., (2010). Infusion nursing: An evidence-based approach (3rd ed.). St. Louis, Mo.: Saunders/Elsevier.
- Bennett, K. J., & Steen, C. (2010). Electronic medical record customization and the impact upon chart completion rates. *Family Medicine*, 42(5), 338-42.
- Clark, J. S., Eichelmann, T. A., Fuller, J. C., Hays, S., Lobdell, B. B., Mangat, N., & ... Warner,
 D. M. (2012). Electronic Documentation Templates Support ICD-10-CM/PCS
 Implementation...Practice brief: practice guidelines for managing health information.
 Journal Of AHIMA, 83(10), 66-71 6p.
- Frank-Stromborg, M., Christensen, A., & Do, D. E. (2001). Nurse documentation: not done or worse, done the wrong way--Part II. *Oncology nursing forum* (Vol. 28, No. 5).
- Gorski L., Hadaway L., Hagle M., McGoldrick M., Orr M., Doellman D. (2016). Infusion therapy standards of practice. *Journal of Infusion Nursing*. 36:1. S1-S159.
- Gray, A., Hearnshaw, K., Izatt, C., Kirwan, M., Murray, S., & Shreeve, K. (2007). Safe transfusion of blood and blood components...art & science clinical skills: 14. *Nursing Standard*, 21(51), 40-47 8p.
- Lowe, J. R., Raugi, G., Reiber, G., & Whitney, J. D. (2013). Does incorporation of a clinical support template in the electronic medical record improve capture of wound care data in

- cohort of veterans with diabetic foot ulcers? *Journal of wound, ostomy, and continence* nursing: official publication of The Wound, Ostomy and Continence Nurses Society/WOCN, 40(2), 157.
- King, C. & Gerard, S.O. (2012). Clinical Nurse Leader Certification Review. Springer Publishing
- Kotter International. (2015). The 8-Step Process for Leading Change. Retrieved from Kotter's 8-Step Process for Leading Change:

 http://www.kotterinternational.com/the-8-step-process-for-leading-change/
- Mbamalu, G., & Whiteman, K. (2014). Vascular Access Team Collaboration To Decrease

 Catheter Rates in Patients On Hemodialysis: Utilization of Kotter's Change Process.

 Nephrology Nursing Journal, 41(3), 283-288 6p.
- Nunes, S. T., Rego, G., & Nunes, R. (2014). The experience of an information system for nursing practice: the importance of nursing records in the management of a care plan. *Computers Informatics Nursing*, 32(7), 322-332.
- Rock, G., Berger, R., Filion, D., Touche, D., Neurath, D., Wells, G., & ... Afzal, M. (2007).

 Documenting a transfusion: how well is it done?. *Transfusion*, 47(4), 568-572 5p.
- Watson, D., & Hearnshaw, K. (2010). Understanding blood groups and transfusion in nursing practice. *Nursing Standard*, 24(30), 41-49 9p.

Appendix A

Pre-Implementation Survey

1. How ofte	en do y	ou administe	er blood prod	ucts?				
Once a we or more		A few times ponth	oer Once a month	O E	•	O I hav	e never administered it	blood
2. How com	ıfortab	le do you fe	el administeri	ing blo	ood products	?		
I am 100% confident		now enough to ster blood	I am mostly familiar or I cou up the policy		I might ask remind me of th procedure		to I have never administered blood this unit	lon
3. Do you k	now w	here to find	the blood tra	nsfusi	on policy?			
Yes I could pro No 4. Would ye Yes No	·		od transfusion	n polic	ey is easy to fi	ind?		
5. Are you o transfusion		ent that you	know what to	docu	ment after ac	lministe	ring a blood	
I am 100% confident that what is require	I know	I generall know what is important			Il of the I mi uired to for help another	from	I don't document the nursing note (only the paper form)	
6. Would it	be hel	pful to have	a designated	blood	transfusion	template	e in CPRS?	
Absolutely transfusion separate	deserve	S a POSSII	oly, as long as the nplate is short	e	Undecided	1	No, we already have e to chart	nough

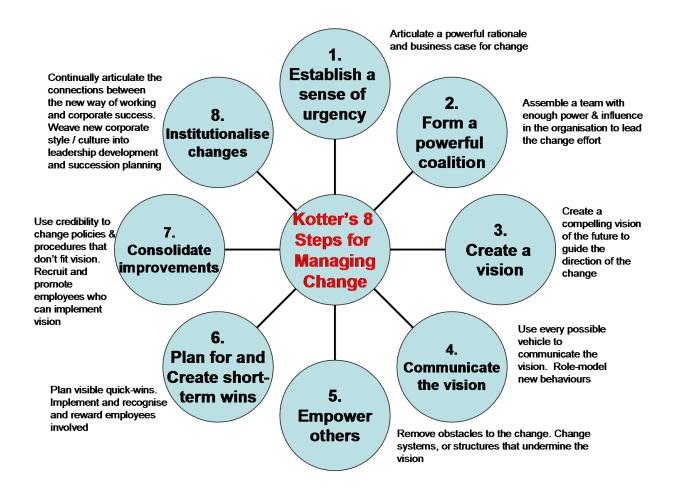
Appendix B

Cost Analysis

Staff	Time Spent	Total Cost
Clinical Nurse Leader	\$50 X 20 hours x 1.5	\$1500
Clinical Application Coordinator	\$40 X 5 hours x 1.5	\$300
Nurse Educators	\$45 X 2 hours x 1.5	\$135
Total Cost		\$1935

Appendix C

Kotter's 8 Steps for Managing Change



Retrieved from:

http://www.enterprise learning.com.au/images/ELD%20 working%20 Images/Koters%208%20 Step%20 Change%20 Model.png

Appendix D

Action Plan

Create a sense of urgency (1 Week)

Demonstrate how other VA's are already using transfusion documentation templates. Discuss the importance of having a standard documentation template.

Build a guiding coalition (2-3 Weeks)

Form a working group that will be responsible for creating the template, revising the policy and educating nurses on the proposed change.

The group should consist of: staff nurses, CNL, clinical applications coordinator, nursing management.

Form a strategic vision and initiatives (3 Weeks)

Review other examples of documentation templates.

Address areas that need to be included in the documentation template.

Enlist a volunteer army/Communicate the vision (2 weeks)

Present the proposed template to nursing staff and obtain their input/suggestions for

Enable action by removing barriers (2 weeks)

Talk with staff to reduce any resistance to change. Show nurses how short and easy to use the template is.

Communicate the advantages to using electronic documentation.

Implement the new template in CPRS as a trial

Generate short term wins (4 weeks)

Offer incentives to nurses who have participated and supported the project. Prepare and post adherence rates.

Sustain acceleration (4 weeks)

Revise the existing policy and procedures for blood transfusion documentation to reflect the new required change for electronic documentation using the template.

Institute change (Ongoing)

Implement the template

Continue to remind nurses to use the template

Track compliance rates

Appendix E

Reno VA Blood Transfusion Policy

BLOOD TRANSFUSION POLICIES

PURPOSE

To establish and ensure a safe and effective Blood Transfusion Policy for VA Northern California Health Care System (VANCHCS) patients. This document focuses on the critical points as applicable to blood transfusion at the Sacramento VA Medical Center and the Martinez VA Outpatient Clinic. For a more detailed version of these procedures, please refer to the Standard Operating Procedures for Transfusion Service.

RESPONSIBILITIES

- a. The Chief of Staff is responsible to the VANCHCS Director for the proper operation of the transfusion program in compliance with all VA directives.
- b. The Chiefs of Surgery, Anesthesiology, Medicine, Nursing, and Pathology and Laboratory Medicine are responsible for orienting their staff (on an on-going basis) regarding relevant transfusion policies, procedures, and appropriate indications for transfusion of blood products. It is their responsibility to ensure adherence to the procedures delineated in these policies. Since practices used in non-VA hospitals do not necessarily parallel those used in a VAMC, the orientation will be directed to newly-appointed personnel, e.g., incoming residents, physicians, nurses, and medical technologists.
- c. The Chief, Pathology and Laboratory Medicine Service is responsible for the professional supervision of all laboratory aspects of the blood transfusion process, including the acquisition and storage of blood, typing of donor and recipient blood, compatibility testing, and issue of blood.
- d. The Transfusion Officer shall be the Chief, Pathology and Laboratory Medicine Service (or designee), and is responsible for the oversight of the blood usage. A review of blood usage will be reported to the Operative and Invasive Procedure Functional Team, Transfusion Functional Team and the Medical Executive Council on a quarterly basis.
- e. The Transfusion Functional Team will monitor blood component usage, transfusion reactions and blood utilization data.
- f. The physician ordering the procedure or transfusion will present the patient with an informed consent which must be signed before the transfusion is given. The appropriateness of the transfusion request is the responsibility of the ordering physician.
- g. The Blood Bank Specialist or designee is responsible for the initial training and annual competency of all technologists performing blood bank tasks, and for the timely review of all laboratory testing performed by technologists. Any adverse effects of transfusion will be referred to the Transfusion Functional Team.

- h. The Blood Bank technologist is responsible for the accurate and timely performance of all appropriate laboratory testing.
- i. Nursing Service is responsible for the initial training and annual competency of all nursing personnel on the ordering, obtaining, and transfusion of blood products as well as signs of Transfusion Reactions. *Annual in-service training and annual competency testing must be maintained and documented.*

POLICIES

- a. The Blood Bank will provide suitable blood and blood components to meet the transfusion needs of patients under treatment in VANCHCS.
- b. Transfusion practices and problems will be reviewed and documented by the Transfusion Functional Team at least quarterly.
- c. In accordance with VHA Handbook 1106.1, Paragraph 9, blood transfusion practices will meet or exceed current American Association of Blood Banks (AABB) standards.
- d. The Blood Bank must use the blood bank module software of the VistA Blood Establishment Computer System (VBECS) or any future authorized replacement for all blood bank or transfusion practices.
- e. Blood and Blood Components must be ordered through VBECS, and VBECS's Blood Transfusion Record Form must be used for the documentation of the transfusion.
- f. Operating Room locations must scan patient armbands and blood products utilizing the Vista Blood Bank Software to verify correct identification of patients and blood products to be administered.
- g. The Blood Bank does not draw and process blood components for transfusion. Blood and Blood Components are obtained from contracted suppliers and a minimum level stored on site. Only blood from volunteer donors can be utilized.
- h. A means will be provided for patients to undergo *autologous pre-operative donations* as per compliance with the Paul Gann Safety Act. The patient's provider is responsible for ensuring patient safety and advising against autologous donation if physical risks to the patient are evident. Arrangements for donations may be made with our suppliers.
- i. *Directed Donations* are available to patients but not encouraged. Arrangements for donations may be made with our suppliers. Laboratory Service will provide contact telephone numbers upon request.
- j. The Transfusion Officer is to provide guidance to the service performing *Therapeutic Phlebotomy* and must ensure the procedure is performed in a manner consistent with AABB standards.
- k. *Perioperative autologous or blood salvage procedures* performed during surgery must be under the guidance of the Transfusion Officer, who is also responsible for the annual review of the standard operating procedures.

- 1. All suspected transfusion reactions must be promptly investigated by Blood Bank personnel. The extent of the investigation is determined by the Transfusion Officer or designee.
- (1) If suspected complications occur during a transfusion, the transfusion must be interrupted and the patient's provider and Blood Bank notified immediately. The transfusion may be resumed only with appropriate medical approval once it has been determined it is safe to do so.
- (2) All necessary remedial actions taken to prevent recurrences of transfusion reactions must be documented in the patient's chart, in the Blood Bank, and in the minutes of the Transfusion Functional Team.
- m. Suspected incidents of transfusion-transmitted diseases must be investigated to determine if the etiology can be traced to a blood or blood component transfusion.
- (1) When a patient receives unsuitable blood or blood products, the recipient's provider is responsible for notifying the patient. The provider must document this notification and the notification must be maintained in the chart and a copy maintained in the Blood Bank.
- (2) The procedures for look back and notification of transfusion-transmitted diseases must follow those listed in 21 CFR 610.47.

REVIEW. RESCISSION OR REISSUE DATE

Pathology and Laboratory Medicine Service (113) will review this policy for rescission or reissue within five (5) years of the date of issue.

REFERENCES

VHA Directive 1106.01, October 2008
Food and Drug Administration 21 CFR 610.47, April 2009
Standards for Blood Banks and Transfusion Services, 26th edition, 2009
AABB Technical Manual, 16th edition, 2008
Policy Statement 11-61, Informed Consent, October, 2009
Policy Statement 11-15, Patient Identification, February 2010

ORIGINAL EFFECTIVE DATE Unknown

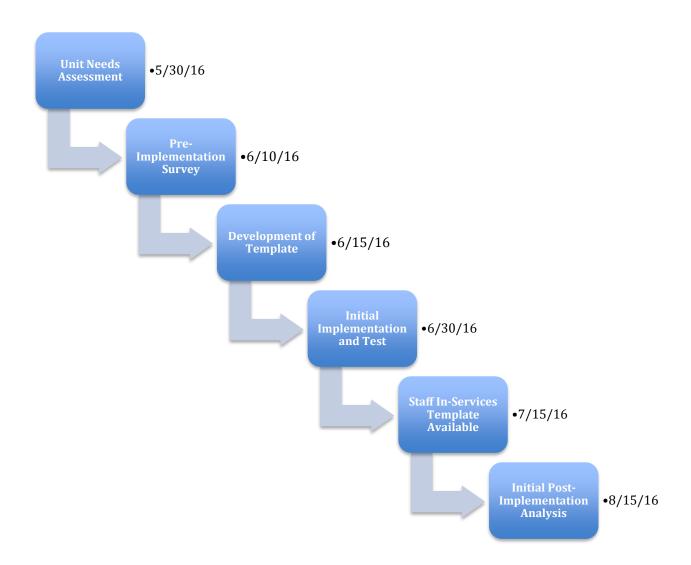
RESCISSION

Rescinds Policy Statement 113-1 dated October 17, 2006

Brian J. O'Neill, M.D. Director

Appendix F

Proposed Timeline



Appendix G

SWOT Analysis-Blood Transfusion Documentation Template

Strengths

- Universal charting structure for documenting blood transfusions that are administered in the microsystem
- Eliminates confusion among nursing staff regarding required documentation
- Ability to have a drop-down with an abbreviated version of the transfusion policy for quick access
- Easily locate past transfusions administered in patient's chart through the note title (this will allow review of past complications or transfusion reactions
- Opportunity to educate nurses on blood transfusion policy and address potential questions
- New nurses are unfamiliar with the blood transfusion policy and have difficulty locating it- having it more accessible will improve safety of transfusions
- Reduce potential for transfusions to be administered without prior consent through increased staff education

Weaknesses

- Nurses will be required to document a second note in addition to their standard assessment note
- Nurses may not see the benefit in an additional documentation note
- Transfusions are not administered on a regular basis, which may make it difficult to implement the change
- Need for chart auditing to monitor compliance with utilizing the documentation template
- Nurses may forget to use the new documentation note
- Potential for change to be viewed as "more work"
- Resistance to change

Opportunities

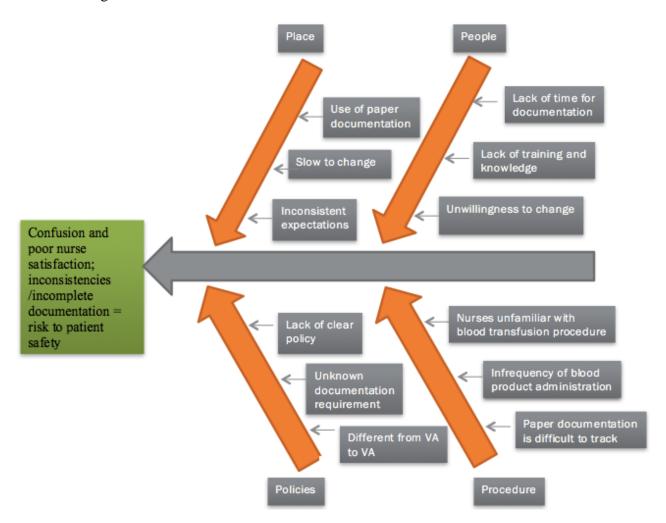
- Potential to expand the use of the documentation template to other units including inpatient and outpatient
- Ability to coordinate with other VA facilities to determine current practice and share template once developed

Threats

- Potential for other/universal template to be developed on a macrosystem level
- Risk for change in current documentation systems- entire VA system may be switching EPR system
- Potential for blood to eventually be scanned into the medication administration, which would make the documentation template obsolete

Appendix H

Fishbone Diagram



Appendix I

Flow Chart

