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Barbra Pacatang

University of San Francisco, bmpacatang@yahoo.com

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Evidence-Based Improvement Project Prospectus Draft 2

Adapted from Squire 2.0 Guidelines

Empowering Patient Care Technicians to Reduce Non-Ventilated Hospital-Acquired
Pneumonia in an Acute Care Hospital in Northern California

Barbra Pacatang

University of San Francisco, School of Nursing and Health Professions

Instructor: Professor Dave Ainsworth

July 30, 2024

Abstract

Problem: Non-ventilator hospital-acquired pneumonia (nv-HAP) is increasingly becoming a significant concern in healthcare settings. Studies have indicated that nv-HAP accounts for a substantial portion of hospital-acquired pneumonia cases, with a high associated mortality rate. The prevalence of nv-HAP underscores the importance of implementing robust HAP prevention bundles. Prevention, early recognition, and appropriate management of nv-HAP are essential to improve patient outcomes and reduce the burden on healthcare facilities.

Context: A 28-bed capacity Stroke Telemetry Unit incurred six nv-HAP incidents in 2023. Patients needed to be more compliant with the nv-HAP prevention bundles. Patient care technicians (PCTs) are instrumental nurses' partners in accomplishing this feat. An assessment survey of the PCTs showed a knowledge deficit on the nv-HAP prevention bundle.

Interventions: A quality improvement project on PCT education is in place to address the knowledge deficit. Educating the PCTs on the HAP prevention protocol ensures that patients' safety and well-being will be the staff members' priority. They will better understand the process and prevent the spread of pneumonia to other patients.

Measures: The outcome measure is decreasing HAP cases by 17% and decreasing one HAP incident in a stroke telemetry unit. In addition, PCTs can verbalize and apply the HAP prevention bundle.

Results: In June 2024, six PCT education sessions were offered to achieve full attendance. However, only ten out of the 24 PCTs were able to attend. Despite the lower turnout, the attending PCTs expressed satisfaction with the education content, empowering and equipping them with the necessary knowledge and skills to educate patients and their families on

preventing hospital-acquired pneumonia. Although a higher attendance rate was targeted, the positive feedback and impact on participation were deemed satisfactory. No new HAP incidents were reported in terms of metrics, but the unit has not yet reached the regional benchmark. During the project implementation, the percentage of patients getting out of bed for meals, teeth brushing, and ambulation remained the same.

Conclusions: Empowering PCTs through education on nv-HAP prevention is highly valuable in healthcare. Patient care quality can improve by equipping PCTs with knowledge and skills to prevent pneumonia. Such education initiatives are crucial to ensure continuous updates in understanding and practices. Empowered PCTs can effectively implement preventive measures, reducing pneumonia incidences and enhancing patient outcomes. This holistic approach has the potential to revolutionize patient care and contribute to a healthier healthcare system. To address the low turnout in PCT education sessions, strategic alterations such as adjusting timing and location, enhancing content and delivery methods, and promoting sessions across various channels can engage and motivate participants for a more successful educational session.

Keywords: non-ventilator hospital-acquired pneumonia, pneumonia prevention, HAP bundles, patient care technicians, nursing assistant education

Personal Leadership Statement

As a Nurse Leader, I firmly believe in empowering patient care technicians (PCTs) to prevent non-ventilator hospital-acquired pneumonia (nv-HAP), reduce the spread of infections, and improve patient outcomes. I am confident that hospitals can significantly enhance patient safety and lower healthcare costs by educating staff members about how diseases can spread and provide them with the necessary tools and resources to prevent infections.

Furthermore, empowering staff members to prevent hospital-acquired infections can significantly impact staff morale and engagement. When staff members feel they have a crucial role in preventing infections, they are more likely to take ownership of their work and strive for excellence (Dennerlein & Kirkman, 2023). Empowered staff can create a more positive healthcare work environment, lower turnover rates, and improve patient care.

The top priority for all hospitals should be empowering staff members to prevent hospital-acquired infections. As a Nurse Leader, I am committed to providing staff members with the necessary resources for infection prevention. In doing so, the healthcare organization can create a culture of safety and accountability. This commitment ensures that staff members feel supported and secure, significantly reducing the spread of infections and improving patient outcomes.

Problem Description

Hospital-acquired pneumonia (HAP) is pneumonia that develops within more than 48 hours after hospital admission (Wilkinson et al., 2021). HAP is divided into two distinct groups: ventilator-associated pneumonia (VAP) and non-ventilator-associated hospital-acquired pneumonia (nv-HAP) (Wolfensberger et al., 2020). This improvement project, with its ambitious goal to reduce HAP incidences in the unit by 17% and improve patient outcomes significantly, is a testament to our commitment to patient safety and care. It is a goal that is not only achievable but also essential for the well-being of our patients.

Hospital-acquired pneumonia is a severe threat to patients and healthcare providers alike. It can result in extended hospital stays, heightened healthcare expenses, and even fatalities. However, with proper education and empowerment, patient care technicians (PCTs) play a vital role in preventing HAP. This initiative focuses on implementing a robust PCT program to combat HAP in our Telemetry unit. The program will educate PCTs on HAP prevention strategies, such as the rationale for increased ambulation, getting patients out of bed for meals, and teeth brushing or oral care. Education is provided through in-person training sessions. This project also emphasizes the importance of collaboration with other interdisciplinary healthcare teams, including the physicians, physical therapists, occupational therapists, and discharge planners to promote the program and increase participation, recognizing their valuable contributions to the project's success.

Quality Gap

The Stroke Telemetry Department utilizes state-of-the-art equipment and sophisticated resources to monitor and manage stroke patients comprehensively to improve outcomes and prevent further complications. This unit is designed to respond quickly to Code Stroke incidents,

using advanced telemedicine technology to connect with offsite neurologists for immediate assistance. According to Jackson and Chari (2019), the average length of stay for inpatient stroke with ICU stay was 6.7 days, of which 4.7 days were spent in the ICU. However, for inpatient stays for stroke without an ICU stay was 3.9 days.

The Stroke Telemetry unit focuses on three metrics that matter for HAP prevention. The regional office sets metrics goals, and the unit must meet its objectives. First, out-of-bed (OOB) for meals is currently at 30%–40% with a goal of 50% and above. Second, teeth brushing or oral care averaging at 70%–80% with a goal of 90% and above. Third, ambulation is at 40%–50%, with a goal of 70% based on the patient’s current level of function. All of these are from a hospital-based healthcare system in Northern California. (See Appendix A for details on Gap Analysis).

To evaluate the program’s success, HAP incidences in the Stroke Telemetry unit should be tracked before and after the project implementation. The PCTs’ feedback continues to enhance and tailor the program to their needs. Improved PCT skillset and PCT empowerment can create a safer and more effective healthcare environment. Completing this project will help the unit achieve its goal of reducing nv-HAP and decreasing length of stay, aligning with the regional goal of reducing re-admission rates and patient harm.

Specific Project Aim

The specific aim of this quality improvement project is to reduce nv-HAP by 17% from a baseline of six HAPs in 2023 to a target of five HAPs by August 1, 2024.

Available Knowledge

PICO Question

A PICO question was created to aid the literature search for evidence supporting the quality improvement project. For this project, the PICO question was:

How does educating patient care technicians on getting patients out-of-bed for meals, teeth-brushing or oral care, and ambulation compared to standard care decrease non-ventilator hospital-acquired pneumonia in stroke telemetry floor patients of an acute care hospital in Northern California?

Search Strategy

A comprehensive systematic literature search was performed using the following keywords: *non-ventilator hospital-acquired pneumonia, hospital-acquired pneumonia, out-of-bed for meals, teeth brushing or oral care, patient mobility, and ambulation*. The databases utilized were CINAHL Ultimate and PubMed. The electronic search was limited to articles published between January 1, 2019, and 2024, filtered for English language. Duplicates and articles not related to the quality improvement projects were excluded.

The top five articles considered for this study involved interventions aimed at reducing nv-HAP. These articles were examined and rated according to the Johns Hopkins Nursing Evidence-Based Practice Evidence Level and Quality Guide. Of the five articles considered in this review, one was a randomized trial, three studies (retrospective, research, and experimental), and one systematic review. These articles are rated I to IV. (See Appendix B).

Literature Review

Carey et al. (2022) established the impact of non-ventilator-associated hospital-acquired pneumonia (nv-HAP) on patient outcomes. Through a robust retrospective cohort study using data from U.S. veterans hospitalized in Veterans Health Administration hospitals, the authors unequivocally concluded that nv-HAP was significantly linked to increase in-hospital mortality, prolonged hospital length of stays, and escalated hospital costs. These findings emphasize the imperative of preventing nv-HAP and implementing proactive strategies to enhance outcomes for hospitalized patients. The study also established a profound association between nv-HAP and adverse patient outcomes among U.S. veterans. The compelling findings highlight the critical need for stringent infection control measures and targeted interventions to curtail the incidence of nv-HAP and elevate the overall quality of care for hospitalized patients. This article was rated III-B.

Giuliano et al. (2022) conducted rigorous data analysis to scrutinize the incidence, mortality, and cost trends of non-ventilator hospital-acquired pneumonia (nv-HAP) in Medicare beneficiaries from 2015 to 2019. Their research study provides valuable insights into the profound impact of nv-HAP on patient outcomes and healthcare costs. The analysis of nv-HAP over a specific timeframe offers a detailed examination of the trends and patterns associated with this condition. The study's findings contribute significantly to the body of knowledge surrounding nv-HAP and potentially drive meaningful improvements in patient care and healthcare resource allocation. This article was rated III-B.

Johnson et al.'s (2023) study protocol for a randomized controlled trial assesses the effects of a structured walking intervention or an out-of-bed mobility initiative on patient mobility, length of hospital stay, and overall functional status. By focusing on ambulation as a

crucial component of care for older adults in the hospital setting, the authors share decisive insights into improving health outcomes, hospital discharge disposition, and potentially avoidable hospital complications. This article was rated I-A.

Mitchell et al.'s (2019) systematic review identifies effective strategies to reduce nv-HAP incidents in aged-care facilities. The authors emphasize the critical importance of implementing comprehensive infection control measures, such as hand hygiene, patient education, improving quality and frequency of oral care, dysphagia screening, and early and prompt mobilization to minimize the risk of nv-HAP. Additionally, the review asserts the significant impact of antimicrobial stewardship and vaccination programs in preventing and controlling infections in healthcare settings. The authors provide insights into evidence-based approaches that healthcare facilities must adopt to combat non-ventilator-associated hospital-acquired pneumonia and enhance patient safety. This article was rated III-A.

Stepinski, Rowe, and Robertson's (2022) experimental study evaluated the effects of enhanced oral care on medical-surgical patients at a 208-bed community hospital. The intervention entailed implementing a comprehensive oral care protocol and assessing its impact on the occurrence of hospital-acquired pneumonia, length of hospital stays, and overall health outcomes. The results unequivocally demonstrated that the oral care intervention significantly reduced hospital-acquired pneumonia incidents and resulted in shorter hospital stays. These findings highlight the critical role of oral care in enhancing patient outcomes for medical-surgical patients. This article was rated I-A.

Several vital strategies emerged after reviewing the literature on preventing non-ventilator hospital-acquired pneumonia. Studies have highlighted the implementation of oral care or teeth-brushing protocols for non-ventilated patients, which has shown promise in preventing

pneumonia. Furthermore, the promotion of early mobilization and getting the patient out of bed for all meals have been identified as crucial elements in nv-HAP prevention. Overall, the literature emphasizes a multifaceted approach, including infection control measures and comprehensive patient care protocols, to effectively reduce nv-HAP incidences.

Rationale

Creating measures to prevent HAP will reduce the risk of infections, improve patients' safety, and decrease the length of hospital stays. Hospitals are high-risk environments for patients, and many factors contributing to HAP are preventable. Moreover, healthcare organizations can identify high-risk patients, provide appropriate care and treatment, and promote early recognition and treatment of HAP symptoms to improve patient outcomes.

I utilized John Kotter's Eight-Step Change Model to implement this quality improvement project. King, Gerard, and Rapp (2019) noted that Kotter's eight-step change model can be a practical framework for implementing hospital-acquired pneumonia prevention strategies. Kotter's (2012) model emphasizes creating a sense of urgency as a first step. Due to the increased number of nv-HAP incidents in the Telemetry Department, it is imperative to conduct PCT education to decrease the number of HAP cases. Four robust sessions of PCT training were conducted. The second step is forming a powerful coalition of key stakeholders to ensure the project's success. The HAP champions include nurse leaders, patient care technicians, staff nurses, physical therapists, and educators. The HAP champions will lead the PCT education project and continue building momentum for change, eventually decreasing the number of HAP cases. The third step is creating a vision for change. A vision of decreased HAP through education on the HAP bundle elements has been created and communicated to the group. The fourth step is communicating the vision. The PCT empowerment vision was communicated to

the rest of the Telemetry team through start-of-shift huddles, mid-shift huddles, staff meetings, and weekly meetings with the HAP champions.

The fifth step is identifying and removing obstacles such as resistance to change. It is important to empower the staff to act on the vision by giving them the tools to implement change and contribute to the change process. Extensive training of the HAP champions will train the rest of the PCT team, facilitate and guide the champions in eliminating challenges, and involve them in the project's success. The sixth step is creating short-term wins. Small victories along the way boost staff members' morale and build momentum. To ensure continued engagement with the project and the vision, small wins are being celebrated during huddles and staff meetings, recognizing and appreciating the efforts of each team member. The seventh step is building on the change by continuously pushing forward. The eighth step is anchoring new approaches in the organization's culture by embedding new behaviors and processes.

Applying these steps to implementing hospital-acquired pneumonia prevention strategies can help ensure that all stakeholders are engaged and that the necessary changes are sustainable and effective in reducing the incidence of pneumonia in healthcare settings.

Context

A microsystem assessment was conducted, which provided a comprehensive understanding of the complex interactions and dynamics within a Stroke Telemetry Department as they relate to the hospital-acquired pneumonia prevention initiative. The unit comprises stroke-certified registered nurses, patient care technicians, unit secretaries, telemonitor technicians, one assistant nurse manager per shift, and the department manager. The interdisciplinary team includes the hospital-based specialist, neurologist, respiratory therapist,

physical therapist, occupational therapist, speech therapist, laboratory staff, dietary staff, discharge planners, social workers, and environmental services staff.

For PCT demographics, only 50% have formal nursing assistant education; the other 50% have diverse backgrounds, including Environmental Services, Operator Services, and the Dietary Department. The diverse PCT backgrounds pose a more significant challenge in understanding patient care and establishing a workflow. The knowledge deficit of PCTs must be addressed to decrease HAP, increase understanding and compliance with the HAP bundles, and improve patient outcomes.

The patient demographic includes adults within the age group of 50 and above. Neurological cases in the stroke unit include admitting diagnosis of ischemic stroke, post-thrombolytic therapy patients, and post-carotid endarterectomy (CEA) patients. However, the unit also caters to non-stroke telemetry patients, including adult patients with a diagnosis of congestive heart failure (CHF) exacerbation, various cardiac arrhythmias, myocardial infarction (MI), diabetes with diabetic ketoacidosis (DKA), gastrointestinal (GI) bleed, alcohol withdrawal patients and sepsis.

Due to the complexities of stroke patients, there is significant hesitation from the newer PCTs in getting patients out of bed during mealtimes and eventually ambulating patients. The knowledge deficit of the PCTs on the HAP bundles is a major contributory factor to HAP incidents.

The Stroke Telemetry Department fosters a culture of unwavering compassion and commitment to continuous improvement. Staff collaboration is the challenging part. The team has strong staff, yet sometimes, the team does not work cohesively in patient care delivery.

Despite initial resistance, the staff have become increasingly open to embracing a change in work culture. They have demonstrated a growing willingness to adapt and embrace new working methods through open communication, clear explanations of the benefits, and active involvement in the process. This shift in attitude is a positive and encouraging development for the entire team.

In addition, Nurse Leaders always try to emphasize empathy and understanding for patients and the staff. The Nurse Leaders, including the Department Manager, consistently seek opportunities to elevate the staff's skills and knowledge through rigorous training and professional development, united in the dedication to delivering superior, patient-centered care.

SWOT Analysis

A strength, weakness, opportunity, and threat (SWOT) analysis of the department was conducted to address the hospital-acquired pneumonia incidents. The SWOT analysis identifies areas that require improvements to enhance patients' quality of care and service, as it ultimately leads to better outcomes. Moreover, it allows identifying potential barriers or challenges that might obstruct individuals or organizations from achieving HAP-free goals.

Strengths include the improved awareness of the nv-HAP initiatives that lead to more cognizant staff on the HAP prevention bundles. **Weaknesses** include inadequate PCT education, as 50% of the PCTs have non-medical backgrounds. Communication between the nursing staff needs improvement. Interdepartmental coordination is imperative as hospital-acquired pneumonia incidents need to be addressed in a multidisciplinary way. The lack of patient and family awareness of the HAP bundle elements should also be included. **Opportunities** include PCTs practicing their skills under the supervision of Registered Nurses and PCT instructors as well as rapid staff turnover.

Threats to this quality improvement initiative may be related to external factors, including limited resources or project funding. The project might not align with the organization's policies and procedures. A shift in patient demographics could pose a threat to the HAP prevention initiatives. The rise of antibiotic-resistant bacteria poses a significant threat to treating HAP and other infections. (See Appendix C for details on the SWOT analysis).

Staff members can contribute to process enhancement and foster favorable transformation on stroke and non-stroke management within the department and the healthcare organization to help reduce HAP incidences. The staff can effectively elevate efficiency and productivity by recognizing compliance barriers in HAP prevention, like ambulation, getting out of bed for meals, and teeth brushing. The staff can work together to devise feasible remedies and execute and oversee new procedures to achieve desired goals. Furthermore, by consistently offering feedback and recommendations for additional advancements, they can actively engage in the evolution and flexibility of the process and shifting demands. By proactively engaging in process improvement, microsystem members can showcase their dedication to excellence and play a vital role in the healthcare organization's success. Identifying and leveraging patterns such as metrics that matter, admission and re-admission trends, and communication, among many factors, is essential in enhancing a department's performance.

The key stakeholders in this HAP prevention initiative include the clinical nurse leader, the nurse manager, the nurse educator, the HAP champions, the physical therapist, the physicians, the Quality Improvement Team, and the patient and family. The stakeholders were analyzed to comprehensively understand the various parties interested in or affected by the project. One highly effective method for conducting stakeholder analysis is the power/interest grid discussed by Baig et al. (2023). The power/interest grid is instrumental in identifying key

stakeholders, such as those with high power and high interest, which require close management, as well as those with low power and low interest, which may require minimal effort in terms of engagement. Using this method, project managers can strategically prioritize their engagement and communication strategies to effectively manage stakeholders throughout the project lifecycle.

Hence, the Clinical Nurse Leader will allocate the budget, support, and resources and set organizational priorities for the initiative. The physicians, nurses, and physical therapists are directly involved in patient care and play a vital role in implementing preventative measures, proper diagnosis, and treatment protocols for HAP. The Quality Improvement Team works to monitor and improve the quality of care provided, often by collecting and analyzing data related to HAP incidence rates and outcomes. Involving the patients and families in understanding and complying with preventative measures is crucial. The patient and family can actively participate in their care to minimize the risk of HAP and help reduce HAP incidents by 17% by August 1, 2024. (See Appendix D for details).

Establishing communication protocols and encouraging input from all team members facilitates seamless information sharing with internal and external stakeholders. Continuous process improvement is crucial for staying ahead. One example of the Stroke Telemetry unit is using Kamishibai cards (K-cards) to improve the HAP prevention process. A K-card is a tool that started in manufacturing environments such as the Toyota Production System but is now widely used in healthcare to prevent hospital-acquired infections (Shea et al., 2019). Regularly reviewing the K-cards, experimenting with new approaches, and identifying areas for improvement can lead to better outcomes.

Intervention

Educating the PCTs on the HAP prevention protocol ensured that patient safety and well-being were the staff members' priorities. The PCTs had a better understanding of the disease process and prevented the spread of pneumonia to other patients. The PCT education sessions were interactive and incorporated lectures, group discussions, role-playing, and teach-back methods. The patient care technician education included:

1. The education for PCTs hired in 2024 heavily focused on the HAP bundles, including OOB for meals, teeth brushing, and ambulation. This included the introduction of the 2023 PCT workflow developed by the Telemetry Department's HAP Committee.
2. The entire PCT team underwent a comprehensive re-education on the 2023 PCT workflow developed by the HAP Committee. This highlighted our commitment to continuous learning and adaptation.

The workflow (see Appendix E for the complete list of workflows):

1. The workflow included PCT tasks and expectations at the start of each shift for the three different shifts (days, evenings, and night shifts).
2. There were blocked times allocated for ambulation during day and evening shifts.
3. The workflow also outlined PCT tasks and expectations at the end of each shift.
4. Reinforced the use of the PCT break list form.

Return on Investment

The nv-HAP prevention bundle comprised a set of interventions to reduce the incidence of pneumonia during a patient's hospital stay. Implementing such a bundle can have several potential benefits, including decreased patient morbidity and mortality, shorter hospital stays, and reduced healthcare costs associated with treating HAP.

Implementing the HAP prevention bundle requires resources such as education and training of the nursing staff, purchasing supplies, and potential changes in the workflow. The nursing staff must be educated about the bundle components, emphasizing compliance and proper execution. This will involve additional costs for training programs.

As for cost reduction, implementing a HAP prevention bundle could potentially reduce the organization's expenses. This could mean fewer prolonged hospital stays and additional medications and treatments to address hospital-acquired infections. In addition, reducing complications like HAP could lead to better patient outcomes, potentially lowering reducing re-admissions and associated costs. Giuliano et al. (2022) found that the mean cost per hospital stay was \$20,189 more for nv-HAP than those without.

The department will benefit from training the entire PCT staff. The training team is comprised of one educator, one physical therapist, five registered nurse champions, and five patient care technician champions. There will be 20 staff members per session for eight sessions during training. The education team is estimated will cost \$3,000.00. The staff training is estimated to be \$1,280.00. Notably, the staff education will incur a savings of \$13,629.00 per case of HAP avoided. (Please refer to Appendix F for the financial analysis).

Study of the Intervention

Several categories of measures are investigated to evaluate the effectiveness of the nv-HAP prevention initiative. The outcome measure included a decrease in HAP cases by 17% or a decrease of at least one case. Secondly, PCTs applied the HAP prevention bundle in the department and verbalized the importance of using the HAP prevention bundle.

The process measures included increased PCT awareness of the HAP prevention bundle to at least 90%. The second process measure consisted of an increase in mobility score from a

baseline of 50% to a goal of 70%. The third process measure included an increase in the percentage of teeth-brushing incidents to 90% from 75%. Lastly, the percentage of patients out-of-bed for meals increased from 22% to 50%.

The balancing measures for nv-HAP prevention involved multiple aspects. First, the financial impact of these strategies was monitored to ensure their cost-effectiveness and sustainability. Second, measures were implemented that addressed staff workload to maintain a productive and healthy workforce. Continued monitoring of staff burnout and rapid turnover was necessary to identify and address issues that may arise which ensured the stability of the healthcare team.

The Plan-Do-Study-Act (PDSA) model is a robust framework for systematic intervention in preventing HAP. This four-stage problem-solving approach empowered the healthcare teams to plan meticulously, execute, evaluate, and refine specific interventions aimed at HAP prevention. By application of the PDSA model, healthcare professionals methodically assessed and optimized interventions such as early ambulation or the mobility protocol, got patients out-of-bed for meals, and scrupulous teeth-brushing or oral care, ultimately enhancing the overall prevention of HAP. (See Appendix G for the full PDSA model).

One key strategy for managing nv-HAP was educating and training the PCTs. With the proper education and training, healthcare staff learned about the best practices for preventing and managing nv-HAP, including methods to reduce the risk of infection transmission, proper hand hygiene techniques, and appropriate use of antibiotics. Sanchez-Pena et al. (2021) presented the three stages of the education intervention—diagnosis, intervention, and evaluation aimed at the nursing staff. The diagnostic stage used a questionnaire for the staff to identify knowledge gaps on the HAP bundles, which included proper oral care, the importance of getting the patient out of

bed for meals, and mobility or ambulation. According to Sanchez-Pena et al. (2021), the intervention stage educated the PCTs on the HAP bundle using Keller's ARC Motivational Design Model by focusing on the learner's attention, relevance, trust, and satisfaction via workshops, demonstrations, teaching aids, and work models. The PCT education program consisted of eight sessions for four weeks. A post-survey questionnaire was issued to the PCTs in the evaluation stage that assessed learning and improvement on the HAP bundle compliance. (Please refer to Appendix H for the pre-and post-survey questionnaire).

Ethical Consideration

This nv-HAP prevention project unequivocally reflects Jesuit values. This project demonstrates an unwavering commitment to *cura personalis*, prioritizing the health and well-being of patients. Additionally, the emphasis on prevention aligns perfectly with the Jesuit value of being men and women for others, protecting individuals within the hospital and the wider community. Furthermore, the project focuses on consistently striving for excellence and improving healthcare practices for the greater good. The pneumonia prevention project embodies Jesuit values by promoting holistic care, social responsibility, and the relentless pursuit of better health outcomes.

In addition, this nv-HAP prevention project embodies the American Nurses Association's ethical standards. The project is committed to providing safe and quality patient care, a cornerstone of the ANA's Code of Ethics. The organization prioritizes patient safety and well-being by implementing robust measures to prevent pneumonia. This project exemplifies the ethical obligation of staff to engage in evidence-based practice and continuous quality improvement. The project demonstrates a firm dedication to staying updated with the latest research and best practices in alignment with the ANA's ethical guidelines. Overall, the

pneumonia prevention project strongly supports the organization's steadfast adherence to the ethical standards set forth by the American Nurses Association. This project has been approved as a quality improvement project by faculty using QI review guidelines and does not require IRB approval.

Statement of Determination

This hospital-acquired pneumonia prevention initiative focuses on educating patient care technicians to empower them to prevent hospital-acquired pneumonia and infections. The PCT education focuses heavily on the HAP bundle and meeting the regional benchmark, which includes ambulation to the goal of 70%, out of bed for meals to 50%, and teeth brushing or oral care to the goal of 90%. (See Appendix I for the full statement of determination).

Outcome Measure Results

In June 2024, four patient care technician education sessions were conducted. However, only ten out of the 24 PCTs could attend the class. The lower PCT class attendance led to little change in the regional target.

Despite the lower-than-expected turnout, those who attended the class expressed satisfaction with the education content. The session was empowering, as it equipped them with the necessary knowledge and skills to effectively advocate for and educate patients and their families on preventing hospital-acquired pneumonia. Although a higher attendance rate was initially targeted, the positive feedback received and the education session's impact on those who could participate was deemed satisfactory.

Regarding metrics, no new HAP incidents were reported during the project implementation. However, the unit has not yet achieved the regional benchmark. In June 2024, the percentage of patients getting out of bed for meals was 31.6%, which fell short of the target

of 50%. Similarly, the rate of teeth brushing remained at 79.5% against a goal of 90%, and the ambulation or mobility scores remained at 58.6% to the desired 70% (See Figure 1).



Figure 1. Outcome measure results.

Summary

Key Findings

In June 2024, the HAP Committee rolled out education sessions to the PCTs, emphasizing the prevention bundles of nv-HAP. Despite the quality of the education provided, the attendance rate of PCTs was disappointingly low, and consequently, the unit's metric scores did not show significant improvement. Despite the quality of the education provided, the intended impact on the unit's metric scores was not fully achieved.

Lessons Learned

Analysis of the situation revealed a key factor contributing to this outcome—the timing of the education sessions. June is when many individuals take their vacations, and the staff present in the unit during this time predominantly consists of per diem staff or travelers.

The feedback received from the PCTs echoed this concern, as they highlighted the challenge of attending the education sessions during months known for increased staff absences due to vacation plans. This factor likely played a significant role in the low attendance, as it disrupted the continuity of education and hindered the effective implementation of the HAP prevention bundles

Contributions to Change

The Patient Care Technicians (PCTs) empowerment project has slowly made a significant impact in transforming the nursing unit. Firstly, the project is showing enhanced overall patient care by fostering better coordination and communication among nursing staff. By streamlining workflows, PCTs are now taking a more proactive role in patient care, which leads to more efficient and comprehensive support for patients. This improvement in workflow is expected to elevate the quality and timeliness of care provided.

Moreover, the empowerment initiative has positively influenced staff satisfaction and morale. By involving PCTs in decision-making and instilling a sense of ownership and responsibility, the project is gradually enhancing morale and job satisfaction across the entire nursing team. This initiative has contributed to creating a more positive work environment, which in turn is fostering increased productivity and enhanced teamwork.

Overall, even with the initial participation of only a few PCTs in the training, the project has deliberately initiated tangible, positive changes within our nursing unit, benefiting both staff and patients alike.

Conclusion

Empowering patient care technicians through education focusing on non-ventilator hospital-acquired pneumonia and infection prevention holds immense value and usefulness in healthcare. The overall quality of patient care can be enhanced by equipping the PCTs with the knowledge and skills to prevent pneumonia. The sustainability of such education initiatives is crucial, as it ensures that PCTs continuously update their understanding and practices. Moreover, the implication for practice is significant, as empowered PCTs can effectively implement preventive measures, reducing the incidence of pneumonia and improving patient outcomes. This holistic approach to education and empowerment has the potential to revolutionize patient care and contribute to a healthier healthcare system.

The significantly low turnout underscores the need for a revised approach to engage and motivate participants effectively. Strategic alterations such as adjusting the timing or location and enhancing the content and delivery methods can be introduced to bolster participation and accomplish the intended objective of educating the PCTs. Moreover, an extensive promotion of the PCT education sessions across various channels and effective communication strategies can

create awareness and generate interest among the target audience, thereby fostering a more successful educational session.

When faced with challenges regarding the timing of project implementation, both participants and the organization must carefully consider several implications:

1. Implementing the HAP prevention project in a delayed manner can have a cascading effect on the unit's quality metrics, significantly impacting patient safety.
2. Timing issues can also compromise the quality of the project. These consequences can have long-term effects, including loss of stakeholder confidence, decreased patient satisfaction, and potential project rework.
3. Repeated delays or compromised quality can tarnish the team's reputation in the HAP prevention initiative, eroding trust and credibility.

Therefore, it is imperative to prioritize effective project management, which includes setting realistic timelines, conducting thorough planning, and maintaining proactive communication. By doing so, the implications of timing challenges can be mitigated, ensuring the successful implementation of the PCT education program, thus empowering the PCTs and improving patient outcomes.

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Appendix A: Gap Analysis

Gap Analysis		
Area under consideration: Decrease non-ventilator hospital-acquired pneumonia (HAP) in a stroke telemetry unit.		
Desired State	Current State	Action Steps
Decrease the incidence of HAP by 17%	In 2023, there were 24 reported HAP cases in the hospital, and 6 of those from the Stroke Telemetry unit.	To educate the PCTs to utilize the HAP bundle, which includes an increase in pt ambulation to 70%, Out of bed for meals to 50% and above, and Teeth brushing to 90% and above.

Appendix B: Top Five Article Evidence Ratings

Evaluation Table

PICO Question: How does educating patient care technicians on getting out-of-bed for meals, teeth-brushing or oral care, and ambulation compared to standard care decrease non-ventilator hospital-acquired pneumonia in stroke telemetry floor patients of an acute care hospital in Northern California?

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
<p>Carey et al. (2022). The association between non-ventilator-associated hospital-acquired pneumonia and patient outcomes among U.S. Veterans. <i>American Journal of Infection Control</i>, 50(12), 1339-1345.</p>	<p>Retrospective cohort study</p>	<p>133 veterans were hospitalized in Veterans Health Administration hospitals.</p>	<p>The 12-month study established the impact of nv-HAP on patient outcomes. The authors conclude that nv-HAP was significantly linked to increase in-hospital mortality, prolonged hospital length of stay, and escalated hospital costs. Findings emphasize the critical need for stringent infection control measures and targeted interventions to curtail nv-HAP incidents and enhance the overall quality of care for hospitalized patients.</p>	<p>III-B</p>
<p>Giuliano et al. (2022). Incidence, mortality, and cost trends in non-ventilator hospital-acquired pneumonia in Medicaid beneficiaries, 2015-2019. <i>American Journal of Infection Control</i> 51, 227–230.</p>	<p>Research study</p>	<p>5,668,417 Medicaid beneficiaries between 2015 and 2019; 75,909 were diagnosed with nv-HAP.</p>	<p>Rigorous data analysis to scrutinize the incidence, mortality, and cost trends of nv-HAP. Findings contribute significantly to the body of knowledge regarding nv-HAP and offer meaningful improvements in patient care and healthcare resource allocation.</p>	<p>III-B</p>
<p>Johnson et al. (2023). Assisted ambulation to improve health outcomes for older medical inpatients (AMBULATE): Study protocol for a randomized controlled trial. <i>Trials</i>, 24(1), 1-14.</p>	<p>Parallel two-control design, individual-level randomized trial.</p>	<p>Medical units in five hospitals; four in the Cleveland Clinic Health System and the Baystate Medical Center.</p>	<p>The out-of-bed mobility initiative or the “culture of mobility,” will test the effectiveness of mobility technicians in improving patients’ ambulation outcomes, including functional status, hospital discharge disposition, and the incidence of potentially avoidable hospital complications.</p>	<p>I-A</p>

<p>Mitchell et al. (2019). Strategies to reduce non-ventilator-associated hospital-acquired pneumonia: A systematic review. <i>Infection, Disease & Health</i>, 24(4), 229-239.</p>	<p>Systematic review</p>	<p>Aged-care facilities from January 1 to August 3, 2018.</p>	<p>This study identifies several highly effective strategies to reduce nv-HAP incidents. The authors emphasize the critical importance of implementing comprehensive infection control measures. The review provides insights into evidence-based approaches that healthcare facilities must adopt to combat nv-HAP and enhance patient safety.</p>	<p>III-A</p>
<p>Stepinski et al. (2022). Impact of an oral care intervention among medical-surgical patients. <i>Nursing Continuing Professional Development</i>, 31(2), 91-98.</p>	<p>Experimental study</p>	<p>208-bed community hospital in northeastern United States.</p>	<p>This study evaluates the effects of enhanced oral care on medical-surgical patients. The intervention entailed implementing a comprehensive oral care protocol and assessing its impact on the occurrence of HAP, length of hospital stays, and overall health outcomes. Findings show that the oral care intervention significantly reduced the incidence of HAP and resulted in shorter hospital stays. These findings underscore the critical role of oral care in enhancing patient outcomes for medical-surgical patients.</p>	<p>I-A</p>

Appendix C: SWOT Analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ➤ Decreased hospital length of stay ➤ Improved well-being of the patients ➤ Minimize complications related to immobility, such as pneumonia, blood clots, and muscle deconditioning. Lessen delirium incidents. ➤ My microsystem revised the Patient Care Technician’s workflow that focused heavily on the HAP bundle. ➤ The healthcare staff’s perception of the project’s strength is the multidisciplinary involvement in following up on the HAP bundles. 	<ul style="list-style-type: none"> ➤ Lack of proper planning in project implementation ➤ Inadequate training of staff ➤ Poor communication and coordination among departments ➤ Staff education needs to improve ➤ Areas that are internally perceived as weaknesses include: ➤ The project may face resistance from staff. ➤ There may be a lack of accountability.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ➤ Promoting public awareness and education on HAP prevention can contribute to better outcomes for patients. ➤ My microsystem can collaborate with other healthcare facilities to share best practices and develop effective strategies for preventing HAP. 	<ul style="list-style-type: none"> ➤ External factors that may negatively impact HAP prevention initiatives include limited funding or resources, hospital policies, procedure changes, and disease outbreaks. ➤ Unexpected events could be economic downturn. ➤ Shifts in patient demographics can pose a significant threat to the HAP prevention project.

Appendix D: Power/Interest Grid

P O W E R	KEEP SATISFIED Director Department Manager	MANAGE CLOSELY Patient Care Technicians Nursing Team Educators
	MONITOR (minimum effort) Quality Improvement Team	KEEP INFORMED Physical Therapists Physicians
	Low	High

INTEREST

Adapted from Baig, N., Khan, S., Bashir, I., & Ma, J. (2023). Does China Pakistan economic corridor become an avenue to achieve sustainable development goal no. 2 (food security) in Pakistan: Under the condition of COVID-19? *PLoS ONE* 18(1): e0279520.
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Appendix E: Workflow

NIGHT SHIFT WORKFLOW

- Patient's mobility status should be assessed by the RN during admits/transfers, like skin checks, and should be communicated during NKA
- NOCS shift to start DAILY WEIGHTS, and CHG baths
- NOCs shift to ensure bedside tables are clear and chairs are ready for patients who can get up for breakfast
- NOCs shift break RN and PCTs to fill out weight & mobility list to be handed off to day shift PCTs
- Off going PCT to do **"WALKING ROUNDS"** and give brief overview of patients to on-coming PCTs (example: pts needing frequent rounding, baths that were not done, etc) at shift change
- Primary RN to give report to PCTs assigned to their patients (use Report Sheet)
- At the end of shift: perform safety checks, ensure bedside table s are clear and rooms are tidy, supplies replenished, foleys emptied, ~~purewicks~~ (canisters) changed if halfway full), and others drains are emptied, and last incontinence care and repositioning done

RNs, PCTs, and ANMs as needed will continue to WORK TOGETHER in providing excellent care with every patient encounter.

DAY SHIFT WORKFLOW

- Patient's mobility status should be assessed by the RN during admits/transfers, like skin checks, and should be communicated during NKA
- Primary RN to give report to PCTs assigned to their patients (Use Report Sheet)
- Off going PCT to do **"WALKING ROUNDS"** and give brief overview of patients to on-coming PCTs (example: pts needing frequent rounding, baths that were not done, etc) at shift change
- All patients must be up for meals and ambulate twice a shift. Exceptions would be:
 - STRICT BEDREST
 - HIGH or LOW HEART RATE
 - LOW OXYGEN LEVEL (saturation level)
 - HIGH or LOW BLOOD PRESSURE
 - SHORTNESS OF BREATH
- Blocked time for AMBULATION: **1030 – 1130am**
At this time, **EVERYONE, RNs, PCTs, ANMs** will work on ambulating every patient who are able to ambulate. Goal is to have 1 staff member ambulate at least 1-2 patients
- Other ambulation times will either be before sitting up for meal or before going back to bed after meal
- At the end of shift: perform safety checks, ensure bedside tables are clear and rooms are tidy, supplies replenished, foleys emptied, ~~purewicks~~ (canisters) changed if halfway full), and others drains are emptied, and last incontinence care and repositioning done
- DAY SHIFT: responsible for baths for ODD ROOMS
- MISCELLANEOUS TASKS:
 - work with RNs in preparing rooms for new admits/transfers
 - transport pts for discharge, if no transporter available
 - declutter unit/patients' rooms as needed
 - help with sitter breaks

RNs, PCTs, and ANMs as needed will continue to WORK TOGETHER in providing excellent care with every patient encounter.

EVENING SHIFT WORKFLOW

- Patient's mobility status should be assessed by the RN during admits/transfers, like skin checks, and should be communicated during NKA
- Primary RN to give report to PCTs assigned to their patients (Use Report Sheet)
- Off going PCT to do **"WALKING ROUNDS"** and give brief overview of patients to on-coming PCTs (example: pts needing frequent rounding, baths that were not done, etc) at shift change
- All patients must be up for meals and ambulate twice a shift. Exceptions would be:
 - STRICT BEDREST
 - HIGH or LOW HEART RATE
 - LOW OXYGEN LEVEL (saturation level)
 - HIGH or LOW BLOOD PRESSURE
 - SHORTNESS OF BREATH
- Blocked time for AMBULATION: **1630 – 1730**
At this time, **EVERYONE, RNs, PCTs, ANMs** will work on ambulating every patient who are able to ambulate. Goal is to have 1 staff member ambulate at least 1-2 patients
- Other ambulation times will either be before sitting up for meal or before going back to bed after meal
- At the end of shift: perform safety checks, ensure bedside table s are clear and rooms are tidy, supplies replenished, foleys emptied, ~~purewicks~~ (canisters) changed if halfway full), and others drains are emptied, and last incontinence care and repositioning done
- EVENING SHIFT: responsible for baths for **EVEN ROOMS**
- MISCELLANEOUS TASKS:
 - work with RNs in preparing rooms for new admits/transfers
 - transport pts for discharge, if no transporter available
 - declutter unit/patients' rooms as needed
 - help with sitter breaks

RNs, PCTs, and ANMs as needed will continue to WORK TOGETHER in providing excellent care with every patient encounter.

UNIT: _____

DATE: _____

PCT BREAK LIST

15min – 30min – 15min

30min – 30min

TIME	NAME OF PCT
	1
	2
	3

SITTER BREAKS

	1
	2
	3

Appendix F: Financial Statement

Utilization of the HAP bundle to decrease hospital-acquired pneumonia by August 2024

Improvement Revenue (Cost Avoidance)		# of cases	Cost per Case	Annual Cost
Hospital-acquired penumonia cases		6	\$ 20,189.00	\$ 121,134.00
Total reduction of HAPs by 17%		5	\$ 20,189.00	\$ 100,945.00

Education Improvement Team

Staff	hourly rate + benefits	# of staff in the training team	30-min training cost	Total # of training sessions	Annual Cost
Nurse Educator	\$ 85.00	1	\$ 42.50	8	\$ 340.00
Physical Therapist	\$ 80.00	1	\$ 40.00	8	\$ 320.00
Registered Nurse (RN)	\$ 85.00	5	\$ 42.50	8	\$ 1,700.00
Patient Care Technicians (PCTs)	\$ 32.00	5	\$ 16.00	8	\$ 640.00
Total cost of the training team					\$ 3,000.00

Nursing staff training costs

Staff	hourly rate + benefits	30-min salary rate	# of staff per 30-min training sessions	Total # of training sessions	Annual Cost
PCTs	\$ 32.00	\$ 16.00	10	8	\$ 1,280.00

Depreciation Expense - Equipment

Equipment	# of equipment			useful like of equipment (yrs)	Annual Cost
	Cost/Unit	needed	Total Cost		
Walker	\$ 43.99	10	\$ 439.00	5	\$ 87.80
Wheelchair	\$ 160.00	2	\$ 320.00	5	\$ 64.00
Patient chairs	\$ 1,140.00	10	\$ 11,400.00	5	\$ 2,280.00
Total depreciation cost					\$ 2,431.80

Projected Savings/Cost Avoidance		Cost/Incidence	Total Implementation Cost	Projected Annual Savings
Reduce HAP by 17%		\$ 20,189.00	\$ 6,560.00	\$ 13,629.00

Appendix G: Quality Improvement Project Charter

Title: Empowering Patient Care Technicians to Reduce non-ventilated Hospital-acquired Pneumonia in an acute care hospital in Northern California.

Global Aim: Patient care technician (pct) empowerment is crucial in reducing non-ventilated hospital-acquired pneumonia (ny-HAP). PCTs must receive the necessary training on the HAP bundles and provide resources to prevent HAP. Fostering collaboration and ensuring effective communication across healthcare teams aims to reduce the burden of HAPs and enhance the overall quality of patient care.

Specific Aim: To reduce ny-HAP in a stroke telemetry unit in an acute care hospital by 17% in 2024. Based on the department's baseline data, the stroke telemetry unit incurred 6 HAPs in 2023.

Background:

Non-ventilator HAP is associated with substantial morbidity, mortality, and costs during an episode of acute care (Giuliano et al., 2023). Also discussed by Giuliano et al. (2023), ny-HAP represents most cases of HAP, with an estimated rate of one out of 100 hospitalized patients and a crude mortality rate of 13%-30%. With the 6 HAPs in the stroke telemetry unit, it is imperative to create an action plan on HAP management.

Sponsors:

Quality Leader	Timothy Campbell Janet Hayes
Nursing Director	Anna Mulessa
Department Manager	Aly Angeletti
Physical Therapy Specialist	An Leong

Goals of the project:

To provide the PCTs a better understanding of nyHAP to increase compliance with the HAP bundle and reduce HAP incidence in a stroke telemetry unit.

- PCTs education and training on ambulation within and/or above the department goal of 70%.
- PCTs education and training on getting the patient out-of-bed (OOB) for meals within and/or above the department goal of 50%.
- PCTs education and training on teeth brushing or oral care within and/or above the department goal of 90%.

Measures: Outcomes, Process, Balance

Measure	Data Source	Target Condition
Outcome <ul style="list-style-type: none"> Increased percentage patients ambulating twice a shift. Increased the percentage of teeth brushing twice a shift. Increased percentage of patients getting out of bed for all meals 	KP Healthconnect KP Healthconnect KP Healthconnect	70% 90% 50%
Process <ul style="list-style-type: none"> PCT education PCT timely documentation 	KP HealthConnect	
Balance <ul style="list-style-type: none"> No increase in staffing 		

Team members:

Team Leader	Barbra Pacatang
RN Co-lead	Vanessa Pino-Kelly
HAP Champions	Talisha Maxwell
	Krestel Palanog
Educators	Maile Mauer
	Narlyn Llamas

Appendix H: PCT Survey Questionnaire

PCT SURVEY

Unit: _____ Date: _____

Education: HS Some College College Graduate Post Graduate

Nursing Assistant/ Nursing education: Yes No

Number of years as a PCT at Kaiser Permanente: 1- 4 yrs 5-9 yrs 10-14 yrs > 15yrs

Number of years at Kaiser Permanente: 1- 4 yrs 5-9 yrs 10-14 yrs > 15yrs

Job before working as a PCT at KP Roseville _____

PCT Workflow	1-Never	2-Rarely	3-Sometimes	4-Often	5-Always			
Do you set up room for patient admissions?				1	2	3	4	5
Do you help prepare a patient for discharge?				1	2	3	4	5
I get report from RNs at the start of my <u>shift</u> ?				1	2	3	4	5
Do you get a report from your RN on the patient's diet?				1	2	3	4	5
Do you get a report from your RN if the patient needs help feeding?				1	2	3	4	5
Do you get a report from your RN on the patient's mobility status?				1	2	3	4	5
Do you get a report from your RN on the patient's fluid restriction?				1	2	3	4	5
Do you document the patient's intake?				1	2	3	4	5
Do you document the patient's output (BM, urine)?				1	2	3	4	5

ADAPTED FROM: Campbell, A.R., Kennerly, S., Swanson, M., Forbes, T., Anderson, T. & Scott, E.S. (2021). Relational quality between the RN and nursing assistant: Essential for teamwork and communication. *Journal of Nursing Administration*, 51(9), 461-467. <https://doi.org/10.1097/NNA.0000000000001046>

PCT Technical Skills	1-Strongly Agree	2-Disagree	3-Neutral	4-Agree	5-Strongly Agree
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I am comfortable using mobility equipment like Sara steady?

I am comfortable using mobility equipment like vertical lift – mobile

I am comfortable using mobility equipment like vertical lift – overhead

I am comfortable using mobility equipment like lateral transfer equipment

I am comfortable with repositioning patients

I am comfortable assisting patients with different mobility status

I am comfortable assisting patients on range of motion exercises

I am comfortable taking care of a stroke patient

I understand the care experience goals of the unit

I am comfortable with AIDET and service behaviors with patient and family

I am comfortable with escalation chain of command for events that require further assistance

I need more education on: _____

Appendix I: Statement of Determination



CNL Project: Statement of Non-Research Determination Form

Student Name: BARBRA PACATANG

Title of Project: Empowering Patient Care Technicians to Reduce Non-Ventilator Hospital-Acquired Pneumonia in an acute care hospital in Northern California.

Brief Description of Project: A hospital-acquired pneumonia (HAP) prevention initiative focuses on educating patient care technicians (PCTs) to empower them to prevent HAP. The PCT education will focus heavily on the HAP bundle and meeting the regional benchmark, which includes ambulation to the goal of 70%, out of bed for meals to 50%, and teeth brushing or oral care to the goal of 90%.

Aim Statement: The PCT empowerment initiative aimed to decrease HAP incidence by 17% by August 1, 2024, through PCT education on the HAP prevention bundles.

A) Description of Intervention: Intervention will include:

1. In-person group discussion on the HAP prevention bundles in partnership with the Education Department.
2. RN and PCT HAP Champions will be trained to teach the class.
3. The PCT education will be interactive, incorporating lectures, group discussions, role-playing, and teach-back methods. These strategies will provide ample opportunities for the PCTs to practice their skills under the supervision of RNs and PCT instructors.
4. Restructuring of the PCT workflow to set expectations, improve staff efficiency and quality of care.

B) How will this intervention change practice?

Educating the PCTs on the HAP prevention protocol will ensure that patients' safety and well being will be the staff priority as they have better understanding of the disease process and prevention measures. Educated PCTs can prevent the spread of pneumonia to other patients, improve patient outcome and significantly lower healthcare costs.

Lastly, preventing HAP is not just beneficial to the patients, but to the PCTs as well. By preventing and reducing HAPs, PCTs are less likely to get sick, reducing the risk of absenteeism, and ensuring continuity of care for the patients.

C) Outcome measurements:

Outcome measure includes reduced HAP incidence by 17% or better through meeting the benchmark for out-of-bed for meals to 50% or better, ambulation to 70% or better, and teeth brushing or oral care to 90% or better.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

(<http://answers.hhs.gov/ohrp/categories/1569>)

This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	YES	
The specific aim is to improve performance on a specific service or program and is a part of usual care . ALL participants will receive standard of care.	YES	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	YES	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment, or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	YES	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	YES	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	YES	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	YES	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal	YES	

research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.		
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>“This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board.”</i>	YES	

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit it for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print):

Barbra Pacatang

Signature of Student:

bmpacatang

DATE: 6/25/2024

SUPERVISING FACULTY MEMBER NAME (Please print):

Signature of Supervising Faculty Member

Dave Ainsworth

DATE 6/25/2024