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### Reducing Readmission Rates Within 30 Days of Discharge by Increasing Frequency of Calls by the East Bay Transitions Care Department

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**Reducing Readmission Rates Within 30 Days of Discharge by Increasing Frequency of  
Calls by the East Bay Transitions Care Department**

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N660: Practicum: Quality Improvement and Outcomes Management

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## Abstract

**Background:** Within the organization, the estimated cost of readmissions is \$10,107.00 per day. Managing readmission rates within the hospitals has been challenging due to multiple factors. Readmissions cause financial and emotional stress on patients and their families, along with the stresses experienced during hospitalization.

**Problem:** The yearly readmission goal for the Transitions Care Department is below 14% per month. In 2022 the Transitions Care Department has been above 14% for most of the year, averaging 17%. Hospital readmissions impose a substantial financial and resource burden on the healthcare system.

**Interventions:** Staff training will ensure their effectiveness in carrying out responsibilities. They will make at least two weekly calls to medium and high-risk patients, with daily call tracking. Standardized documentation for CHF and sepsis diagnoses will be implemented. Transitions Care Managers will actively participate in readmission calls and engage in discussions. CHF patients will receive scales for weight monitoring, and medication reviews will be conducted during calls. Transitions Care Nurses will interview readmitted patients to understand contributing factors.

**Outcome Measures:** The specific aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

**Results:** In April and June, the main outcome results achieved were below the targeted threshold of 14%. Overall, staff feedback on the project has been positive, noting the increased call frequency's remarkable impact on trust and patient relationships. While the project alone may not

be the sole cause of the positive impact on readmission rates, it undoubtedly contributed significantly. Concurrently introduced initiatives have also played a role in improving outcomes.

**Conclusion:** The Transitions Care staff's commitment to calling patients twice weekly has reduced readmissions and improved patient outcomes. Continuing with these calls and complementary initiatives promises further progress. This proactive approach enhances care quality and patient satisfaction while addressing readmission challenges. Expanding the initiative to other Transitions Care Departments can extend its success.

**Keywords:** Transitions Care Department, readmissions

## Reducing Readmission Rates Within 30 Days of Discharge by Increasing Frequency of Calls by the East Bay Transitions Care Department

Post discharge follow-up plays a significant role as patients transition from the hospital to a lower level of care. The patient's continued recovery is dependent on the care and follow-up patients receive post-discharge. The continuum plays a significant role in early symptom detection, escalation, and treatment initiation, which can help prevent readmission to the hospital.

A considerable cost incurred within the United States healthcare system is related to hospital readmissions. Additionally, an estimated \$52.4 billion is spent annually to care for patients readmitted to the hospital within 30 days for the same diagnosis. In 2018, There were 3.8 million 30-day all-cause adult hospital readmissions, with a 14% readmission rate and an average readmission cost of \$15,200.00 (Beauvais et al., 2022).

Some patients have high copays for hospital admissions, and may have to take time off of work, sometimes unpaid. Families are also faced with similar situations while caring for loved ones. When admitted to the hospital, patients face stress due to financial issues, in addition to experiencing mild to extreme stress for sleep deprivation, pain, tube, financial issues and tube and line restrictions which refer to the limitations placed on patients regarding the use of medical tubes and lines attached to their bodies. These tubes and lines serve different purposes, such as delivering medications, fluids, or nutrition, monitoring vital signs, draining fluids, or assisting with breathing. While these medical interventions are necessary for the patient's well-being and treatment, they can also be a source of discomfort and stress. (Abuatiq et al., 2020).

The East Bay Transitions Care Department services Northern California, which includes both Oakland and Richmond hospitals. The main goal of the department is to reduce

thirty-day readmission rates by telephonically managing low, medium and high-risk patients for approximately thirty days.

According to Rath (2008), there are four CliftonStrengths domains: executing, influencing, relationship building, and strategic thinking. Four of my five top strengths fall within the executing category, and one falls within relationship building. My strengths are responsibility, harmony, deliberative, belief, and consistency. As an aspiring leader, I strive to be a dependable leader. It is essential that the staff feel their leader is dependable to help build a trusting relationship to be built. My project is reducing 30-day readmissions by increasing the frequency of calls to medium and high-risk patients to a minimum of twice a week. As this project is launching, my relationship with each staff member has played a significant role in their willingness to help with this project. My strength as a responsible person has helped me gain trust with management that this project will get done and results will be delivered. Servant leadership is a form of moral-based leadership where leaders prioritize followers' needs, i.e., employees, customers, and other stakeholders (Canavesi & Minelli, 2021). I hope to be a servant leader. One must be able to serve others to lead effectively.

### **Problem Description**

One of the metrics that is followed closely in the East Bay Transitions Care Department is the readmission rates within 30 days. For the department, one of the yearly goals set by the region is to decrease the readmission rates. The yearly readmission goal for the Transitions Care Department is below 14% per month. In 2022 the Transitions Care Department has been above 14% for most of the year, averaging 17%. It has been challenging to meet yearly readmission rates due to multiple factors, which include but are not limited to organizational and patient

issues. Multiple projects have been launched and new projects continue to be introduced to combat financial loss due to readmissions.

Medicare financially penalizes hospitals for same-diagnosis readmissions within 30 days of discharge. This creates further burden on the healthcare system. The U.S. Patient Protection and Affordable Care Act initiated the Hospital Readmissions Reduction Program (HRRP) and the Hospital-Acquired Condition Reduction Program (HACRP). Under these programs, reimbursements are reduced if hospitals have high rates of readmission and hospital-acquired conditions (Hollenbeak et al., 2020).

Within the organization, the cost of readmissions is estimated at \$10,107.00 per day. Early detection and escalation is critical in preventing readmissions. Early identification can initiate proper management, lessening the need for higher acuity care (Vincent et al., 2018). Increasing the call frequency will help prevent symptoms from worsening and needing rehospitalization, thus avoiding readmission costs. The Transitions Care program was developed to address the issue of high hospital readmission rates. When patients transition from the hospital setting to a lower level of care, coordination, and communication between healthcare providers is often needed. This can lead to gaps in care, medication errors, and a lack of follow-up appointments, increasing the risk of complications and readmissions. Additionally, patients often face challenges during the transition from hospital to home. Patients may need more understanding of their post-discharge care instructions, struggle to manage their medications, or need support services. These factors can contribute to poor self-care, worsening health conditions, and, ultimately, readmissions. Transitions Care program was implemented to address these challenges. This project was chosen to help reduce readmission costs to the organization and patients.

## Available Knowledge

### PICOT Question

A Population, intervention, comparison, outcome, and time statement was created to aide in the search for literature. For this project the PICOT statement was: In adult medium and high-risk patients with 30-day hospital readmissions (P), how does increasing call frequency (I) compared to standard care (C) within a 30-day period affect the rate of hospital readmissions (O) during the 30-day post-discharge period (T)?

### Search Strategy

Using databases such as Cochrane Library, CINAHL, and PubMed, a literature search was performed. The keywords used were *readmission, chronic condition management, care coordination, transition care, follow-up care, outpatient case management, and telephonic case management*. The timeframe was limited from 2018-2022. The searches resulted in over 100 articles. After a thorough review, articles that were not peer-reviewed academic journals and those overall deemed to be not helpful for this project were eliminated. Five articles were reviewed using John Hopkins research evidence appraisal tool (see appendix A).

### Appraisal of Evidence – Refer to Appendix A for evaluation table.

Vernon et al., (2019) conducted a cohort study and discussed the importance of discharge follow up by nurses for geriatric patients. The authors concluded that close follow up post discharge helps reduce thirty-day readmission rate. This research article was rated Level IIA according to John Hopkins research evidence appraisal tool.

One of the key assessments the transitions care nurses and social workers conduct is that patient has a follow up appointment with primary care physician or a specialist. Kojima et al., (2022) and Hoyer et al., (2021) found that interventions post discharge such as primary care



doctor visit and transitions care follow ups may have positive association with reducing readmission rates. Both agree that there are unmet challenges in reducing readmissions. The research article Kojima et al., (2022) was rated Level IIIA according to John Hopkins research evidence appraisal tool. The research article by Hoyer et al., (2021) was rated Level IIIB according to John Hopkins research evidence appraisal tool.

Pugh et al., (2021) details how culture in the organization and collaboration between multiple disciplines can affect readmission rates. The transitions care nurses and social workers have to collaborate with other departments such as home health, different clinics and other care managers. This research article was rated Level IIIB according to John Hopkins research evidence appraisal tool.

Liang et al., (2021) found that the tele-homecare program significantly reduced mortality and ED visits, whereas no significant effect on readmission was observed. For secondary outcome evaluation, patients' quality of life indicated significant improvement. Furthermore, the authors recommend studies be conducted if including physiotherapists to assist patients to enhance their functional status will help with readmission rates. As the Transitions team works in increasing contact with patient, this research helps to look at broader options such as bringing back physical therapy at home via outpatient physical therapy benefits. This research article was rated Level IA according to John Hopkins research evidence appraisal tool. From the review of all the research articles it is evident that post discharge follows up has a positive impact on reducing 30-day readmissions if the correct steps are followed. Moreover, the research articles indicate that more work needs to be done regarding managing patients in the outpatient settings, and additional improvement processes need to be implemented to reduce readmissions.

## **Discussion**

In addition to increasing call frequency to twice a week, discussions were held on additional steps to take to improve readmission rates. The decision was made to gain patients' perspectives on the reason for their readmission. The aim was to get qualitative data on reasons for readmissions from the patient's point of view. Transitions Care Nurses visited all patients who were readmitted in the Oakland campus at bedside and conducted an interview. The survey presented to patients was not a validated survey, questions were decided on and reviewed by management (see appendix B). According to the survey taken in April, clinical factors were the highest contributing factors to readmissions. In the month of May most patients reported that readmissions were undesirable and frustrating (see appendix C).

## **Rationale**

The Plan-Do-Study-Act (PDSA) cycle is a quality improvement framework used in healthcare to test, implement, and measure changes in processes and systems. The PDSA cycle is a simple approach to expedite improvement processes. The Institute for Healthcare's Model for Improvement (IHI) has developed a clear guide to help healthcare organizations implement the PDSA cycle. In the Plan step, the healthcare team identifies an area that needs improvement and plans to work on it. The team decides on what they want to achieve, how they will know if they are making progress, and what changes need to be made. During the Do step, the healthcare team puts the plan into action by making the changes. The changes are tried on a small scale; data is collected and documented. Study: In this step, the healthcare team analyzes the data collected during the implementation phase to evaluate the effectiveness of the changes. This step involves comparing the results to the goals set in the planning phase and determining

whether the changes had the desired effect. In the Act step, the healthcare team chooses what to do with the changes they tried. If the changes are successful, the organization can use them more widely. If the changes are unsuccessful, the team can change the plan and try again (Institute for Healthcare Improvement, n.d.).

The Transitions Care Department is constantly evolving, and small tests of change is often implemented multiple times throughout the year. The department manager uses the PDSA framework which has proven to be useful (see appendix D). The team is familiar with PDSA and will not have to go through understanding an unfamiliar framework. Using the PDSA framework for the planned project will give the team a chance to start small, evaluate and have a chance to change as needed, continue to work and make improvements (see appendix E).

The Stevens STAR model is a structured approach that can guide teams to improve care delivery (Appendix F). It involves a process that starts with primary research and continues through evidence summary, translation, integration, and evaluation. This approach helps teams to make data-driven decisions, test changes on a small scale, and continuously improve care delivery. For this project aimed at increasing call frequency to twice a week, the Stevens STAR model can be used as a guide. The model helps teams to set clear goals, gather data by counting each call, analyze the data collected by counting each call, and evaluate the results (University of Texas Health Science Center at San Antonio, n.d.)

### **Specific Project Aim**

The specific aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

## **Context**

The East Bay Transitions Care Department is a considerably small department consisting of seven registered nurses, two licensed medical social workers, one senior operations specialist and one manager. The department follows adult patients who are 18 years and above discharged to home without home health, assisted living facilities and board and care. Patients discharged to a skilled or custodial nursing facilities are excluded. Patients are automatically referred to the program after being assigned medium, high, or low risk for readmission. The transitions care nurses and social workers, work with patients on disease management, educating patients on warning signs and symptoms of a worsening condition, care coordination with other disciplines, and assisting with social aspects as needed. One major strength is that the team is flexible to changes. Another strength is that staff turnover is low, which helps create a trusting relationship and strong sense of unity within the department. The staff was notified regarding the project plan and details on the test of change during a staff meeting, concerns and questions were addressed by the manager and project leader. The department has experienced multiple workflow changes and frequent small-scale tests of changes throughout the year. The unit's culture in relation to the project's potential success is one of adaptability and embracing change. The staff members have demonstrated a willingness to adopt new practices and approaches to improve patient care and have readily embraced the change of calling patients twice a week as part of the program's implementation.

For this project, the strengths, weaknesses, opportunities, and threats (SWOT) analysis is performed to highlight both the positive and negative elements. The project will be significant because it can help decrease the high cost of readmission rates. For patients who have copays, it will be cost-avoided. At the same time, returning to the hospital causes undue stress on patients

and families. The project also provides an opportunity for clinicians to build a trusting relationship with patients. While underscoring the benefits of this project, it is essential to note its limitations. When clinicians increase call frequency to high and medium risk patients, the percentage of patients called that are low risk may decrease. Additionally, managing daily caseloads, patient availability for assessment and physician availability for escalation may be a challenge (see appendix G).

The team will be notified of the project plan and implementation during a staff meeting and will be given an opportunity to ask questions. The key stakeholders for this project are the continuum administrator, coordination of care service director and department manager. Reducing readmission rate is one of the organizations top priorities, therefore this project is of high interest to leadership. The department manager will give periodic updates to leadership and update staff of feedback. Effective communication and engagement with stakeholders for the project is crucial, taking into account their power and interest dynamics. The Chief Administrator (CA), who holds significant power and great interest, requires periodic high-level updates on the program's progress, outcomes, and alignment with organizational goals. The Director and Manager are responsible for daily operations and need more detailed updates regarding operational changes, resource needs, and feedback from staff and patients to address concerns promptly. The Area Manager, a stakeholder with high power and moderate interest, should be kept informed about key performance indicators, patient feedback, and notable achievements or challenges. By tailoring updates to meet their specific needs and involving them appropriately, the program can maintain stakeholder support, allocate necessary resources, and leverage expertise to overcome potential barriers.

The total cost for this project is \$37,862.5 per month. The major cost incurred is for RN and MSW time used to make the extra calls for the high and medium-risk patients per day. Additionally, a one-time staff training cost is included. The cost-benefit of this project can deliver substantial favorable results with projected savings of avoidable readmission costs, estimated to be approximately \$2,728,890.00 (see appendix H).

### **Intervention**

To impact the overall 30-day readmission rates of Oakland and Richmond hospitals a test of change was introduced to increase call frequencies to high and medium risk patients followed by the East Bay Transitions Care Program to a minimum of twice a week. Patients are categorized as high, medium, or low risk based on their medical history, comorbidities, and the number of visits to the emergency department or hospital. The Transitions Care staff start with an initial assessment (IA) call, which can take around thirty minutes or more. During this call, a detailed assessment is conducted, covering symptoms, disease education, medication review, durable medical equipment needs, and social and emotional factors. Vital signs such as blood pressure, heart rate, blood sugar, and weight may also be collected depending on the patient's condition. The availability of appointments and transportation options is reviewed and assessed. Subsequent calls, known as follow-up calls, are shorter in duration but still include all the necessary details. If symptoms are present or worsening, all cases are promptly escalated, and follow-up calls are made the following day to monitor symptoms. By catching symptoms early and addressing them in real time, the program can address issues on an outpatient basis, preventing emergency department visits and subsequent readmissions to the hospital. This proactive approach helps prevent complications from worsening, ensuring that patients receive appropriate care and support and reducing the likelihood of unnecessary hospital readmissions.

In addition to increasing call frequency there are other changes implemented which included:

- use of standardized documentation for CHF and Sepsis diagnosis.
- transitions care managers attend readmission calls and discuss reasons.
- provide scales to CHF patients.
- review medications on every call.
- transitions nurses visit readmitted patients at bedside and complete interviews to gain their perspective of the readmission.

The incorporation of these comprehensive measures reflects a strategic approach aimed at elevating patient care quality, reducing readmission rates, and embracing a more holistic perspective in identifying the factors contributing to readmissions. It is imperative to emphasize that these initiatives have been thoughtfully introduced in tandem with the primary project of calling patients twice a week. Implementing these measures is intended to reinforce patient well-being, mitigate the likelihood of readmissions, and foster a deeper understanding of the intricate factors that may influence readmission occurrences.

### **Family of Measures**

**Outcome Measure:** The specific aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

**Process Measure:** 100 % of staff logs in patients in the patient referral data platform, 100 % of staff calls medium and high-risk patients twice weekly.

**Balancing Measure:** The percentage of patients called that are low risk may decrease due to the extra time dedicated to medium and high-risk patients.

### **Study of the Intervention**

Measurement strategy options were discussed with the department manager and senior operational specialist. The decision was made for the operational specialist to create a patient referral data platform. Staff logs in patients in the patient referral data platform. Project leader will open every patient's chart logged in the patient referral data platform and count calls made by the Transitions Care staff and log number of calls after patient has been discharged from the program. Data will be shared with staff at monthly staff meetings.

Meetings were held with the aim of identifying gaps in the department, agreed reducing readmissions was an urgent issue that needed to be tackled. The decision was made to increase frequency of calls to twice a week (Plan), staff calls patients twice a week and logs patients on referral data platform and project leader counts calls every month and logs on the platform (Do). The project leader studies data collected along with senior operational specialist and presents it to leadership and staff (Study), evaluate if the test of change is a positive impact on re admission rates or a new cycle of improvement will need to be implemented (Act). The outcome measure for this project is to successfully attain the target of reducing avoidable readmission rates to below 14 percent among high and medium-risk patients within the first three months from the project's commencement. As for process measures, it is expected that 100 percent of staff will log patients into the patient referral data platform, which will be reviewed twice a week by the project leader. The leader will thoroughly review each chart, count the number of calls made, and record the information. Additionally, all staff members are expected to make calls to medium and high-risk patients twice weekly. As a balancing measure, it is important to acknowledge that



the increased emphasis on medium and high-risk patients may potentially lead to a decrease in the percentage of low-risk patients being contacted. This is due to the additional time and attention devoted to addressing the needs of higher-risk individuals. However, the prioritization of medium and high-risk patients ensures that those who are most susceptible to complications receive the necessary support and monitoring.

### **Ethical Considerations**

The Jesuit value of *Cura personalis*, translates to "care for the whole person" which prioritizes giving equal attention and consideration to the mind, body, and spirit (University of San Francisco, 2023). *Cura personalis* can be effectively applied in the project of increasing call frequencies in the Transitions Care department to decrease readmission rates. By focusing on *Cura personalis*, the project aims to provide comprehensive care that attends to the physical, emotional, and social well-being of patients. The emphasis on *cura personalis* also aligns with the Jesuit value of treating each patient as a whole person, beyond their medical conditions. The increased call frequencies enable healthcare providers to better understand patients' emotional and social aspects, assessing their overall well-being and identifying potential barriers to recovery. This holistic approach allows the team to address the physical health and the emotional and social factors contributing to readmissions. Furthermore, *cura personalis* encourages the Transitions Care Department to foster a compassionate and empathetic environment. By actively listening to patients during the calls, the team healthcare can create a space where patients feel heard, supported, and empowered in managing their health.

The project also aligns with the American Nurses Association Ethical Standards of advocating for patients by optimizing their health, avoiding additional readmission costs, and taking accountability for outcomes. The project demonstrates a commitment to providing quality

healthcare while upholding ethical principles (American Nurses Association, n.d.). This project has been approved as a quality improvement project by faculty using QI review guidelines and does not require IRB approval.

### **Outcome Measure Results**

The project lead has diligently supervised staff adherence to the two-weekly patient calling schedule, ensuring that all patients have been logged in the patient referral form with a commendable 100% compliance rate. Moreover, meticulous tracking of the calls made by the staff demonstrates that all patients referred to the Transitions Care Program and managed for thirty days have received an impressive eight to eleven calls monthly, effectively solidifying that patients are being contacted at least twice daily. This level of consistent and frequent communication underscores the staff's commitment to the project's objectives and emphasizes the thoroughness of patient engagement within the Transitions Care Program. In April and June, the main outcome results achieved were below the targeted threshold of 14% (see appendix I).

### **Summary**

The project has received overall positive feedback from the staff reporting that the increased frequency of calls has had a remarkable impact on fostering trust and strengthening relationships with patients. Launched in April and spanning until June of this year, the project witnessed notable success in terms of reducing readmission rates, as both April and June recorded rates below the targeted threshold of 14%. However, it is worth noting that in May, readmission rates experienced a slight increase, reaching 17.1% (see appendix I). This upward trend can be attributed to various factors, including a higher patient census, temporary staff shortage, and the simultaneous implementation of multiple other initiatives aimed at addressing readmissions.

In discussions with the management, it was recognized that while the project alone may not have been the sole cause of the positive impact on readmission rates, it undoubtedly made a significant contribution. Notably, various additional initiatives introduced concurrently, such as bedside visits, medication review, and the provision of scales to patients with congestive heart failure (CHF), likely played a role in reducing readmissions. Consequently, a decision has been made to continue the implementation of twice-weekly patient calls alongside these complementary initiatives. Increasing call frequencies to twice weekly allowed closer monitoring and support during the transition period. Providing personalized care and attention to individual patients' needs empowers them to manage their health actively, resulting in better outcomes. The project also emphasized the importance of a multidisciplinary approach, involving professionals from different disciplines to provide comprehensive support. Ongoing training and education for staff members ensured consistent and standardized patient care, enabling effective communication and collaboration. This holistic approach aims to sustain and build upon the positive outcomes achieved thus far while further enhancing efforts to minimize readmissions.

### **Conclusion**

The Transitions Care staff remains committed to calling patients twice a week, and they have reported positive outcomes. The implementation of twice-weekly patient calls has a positive impact on reducing readmissions. Staff feedback highlighted the fostering of trust and strengthened relationships with patients as a result of increased call frequencies. While it is important to acknowledge that other initiatives introduced concurrently may have contributed to the overall reduction in readmissions, the significance of twice-weekly calling cannot be undermined. The observed success underscores the value of proactive engagement with patient's post-discharge, facilitating better monitoring, support, and early intervention when necessary.

Moving forward, the continued implementation of twice-weekly calls, along with complementary initiatives, holds promise for further reducing readmission rates and improving patient outcomes. By maintaining this proactive approach, healthcare organizations can continue to enhance the quality of care and patient satisfaction while effectively managing the challenges associated with readmissions.

Moreover, the positive impact of twice-weekly calling in reducing readmissions presents an opportunity to consider expanding this initiative to other Transitions Care Departments within the organization. By sharing best practices and implementing similar protocols, the organization can extend the benefits of proactive patient engagement and potentially replicate the success achieved in reducing readmission rates. By implementing this expansion, a larger number of patients would have the opportunity to reap the advantages of the enriched follow-up care facilitated through regular calls, ultimately resulting in enhanced patient outcomes. Additionally, this approach holds the potential to alleviate the burden on various aspects of healthcare, including resources, staff, patients, and their families. Embracing this initiative can lead to a more efficient and effective healthcare system, fostering improved patient experiences and better overall health outcomes.

## References

- Abuatiq, A., Brown, R., Wolles, B., & Randall, R. (2020). Perceptions of stress: Patient and caregiver experiences with stressors during hospitalization. *Clinical Journal of Oncology Nursing*, 24(1), 51–57. <https://doi.org/10.1188/20.cjon.51-57>
- American Nurses Association. (n.d.). *What is the nursing code of ethics?*  
<https://www.nursingworld.org/practice-policy/nursing-excellence/ethics/code-of-ethics-for-nurses/>
- Beauvais, B., Whitaker, Z., Kim, F., & Anderson, B. (2022). Is the hospital value-based purchasing program associated with reduced hospital readmissions? *Journal of Multidisciplinary Healthcare, Volume 15*, 1089–1099.  
<https://doi.org/10.2147/jmdh.s358733>
- Canavesi, A., & Minelli, E. (2021). Servant leadership: A systematic literature review and network analysis. *Employee Responsibilities and Rights Journal*, 34(3), 267–289.  
<https://doi.org/10.1007/s10672-021-09381-3>
- Hollenbeak, C. S., Spencer, M., Schilling, A. L., Kirschman, D., Warye, K. L., & Parvizi, J. (2020). Reimbursement penalties and 30-day readmissions following total joint arthroplasty. *JBJS Open Access*, 5(3), e19.00072–e19.00072.  
<https://doi.org/10.2106/jbjs.oa.19.00072>
- Hoyer, E. H., Golden, B., Dougherty, G., Richardson, M., Lepley, D., Leung, C., Deutschendorf, A., Brotman, D. J., & Stewart, R. W. (2021). The paradox of readmission prevention interventions: Missing those most in need. *The American Journal of Medicine*, 134(9), 1142–1147. <https://doi.org/10.1016/j.amjmed.2021.04.006>

Institute for Healthcare Improvement (n.d.). *How to Improve*.

<https://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx>

Kojima, N., Bolano, M., Sorensen, A., Villaflores, C., Croymans, D., Glazier, E. M., & Sarkisian, C. (2022). Cohort design to assess the association between post-hospital primary care physician follow-up visits and hospital readmissions. *Medicine*, *101*(46), e31830. <https://doi.org/10.1097/md.00000000000031830>

Liang, H., Hann Lin, L., Yu Chang, C., Mei Wu, F., & Yu, S. (2021). Effectiveness of a nurse-led tele-homecare program for patients with multiple chronic illnesses and a high risk for readmission: A randomized controlled trial. *Journal of Nursing Scholarship*, *53*(2), 161–170. <https://doi.org/10.1111/jnu.12622>

Pugh, J., Penney, L. S., Noël, P. H., Neller, S., Mader, M., Finley, E. P., Lanham, H. J., & Leykum, L. (2021). Evidence based processes to prevent readmissions: More is better, a ten-site observational study. *BMC Health Services Research*, *21*(1). <https://doi.org/10.1186/s12913-021-06193-x>

Rath, T. (2008). *Strengths based leadership: Great leaders, teams, and why people follow*. Gallup, Inc.

University of San Francisco. (2023). *Our Mission and Values*. [Our Mission and Values | University of San Francisco \(usfca.edu\)](https://www.usfca.edu/our-mission-and-values)

University of Texas Health Science Center at San Antonio. (n.d.). *Stevens' STAR model for transforming practice*. School of Nursing. [STAR Model | School of Nursing \(uthscsa.edu\)](https://www.uthscsa.edu/school-of-nursing/star-model)

Vernon, D., Brown, J. E., Griffiths, E., Nevill, A. M., & Pinkney, M. (2019). Reducing readmission rates through a discharge follow-up service. *Future Healthcare Journal*, 6(2), 114–117. <https://doi.org/10.7861/futurehosp.6-2-114>

Vincent, J.-L., Einav, S., Pearse, R., Jaber, S., Kranke, P., Overdyk, F. J., Whitaker, D. K., Gordo, F., Dahan, A., & Hoeft, A. (2018). Improving detection of patient deterioration in the general hospital ward environment. *European Journal of Anaesthesiology*, 35(5), 325–333. <https://doi.org/10.1097/eja.0000000000000798>

## Appendices

### Appendix A: Evidence Evaluation Table

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Vernon, D., Brown, J. E., Griffiths, E., Nevill, A. M., & Pinkney, M. (2019). Reducing readmission rates through a discharge follow-up service. <i>Future Healthcare Journal</i> , 6(2), 114–117. <a href="https://doi.org/10.7861/futurehosp.6-2-114">https://doi.org/10.7861/futurehosp.6-2-114</a>	Cohort study	756 patients across seven hospital wards were identified; 303 were identified for the intervention and 453 in a - comparison group.	Reduction in readmission rates of patients who receive discharge follow up service.  Useful for understanding how discharge follow up services can affect readmissions.	Level IIA
Kojima, N., Bolano, M., Sorensen, A., Villaflores, C., Croymans, D., Glazier, E. M., & Sarkisian, C. (2022). Cohort design to assess the association between post-hospital primary care physician follow-up visits and hospital readmissions. <i>Medicine</i> , 101(46), e31830. <a href="https://doi.org/10.1097/md.00000000000031830">https://doi.org/10.1097/md.00000000000031830</a>	Retrospective cohort study	9,236 patients who are 18 years and older who were discharged alive from inpatient hospital admissions or observation from January 1, 2019 to September 9, 2019 from 2 large academic hospitals with a PCP from the same academic center.	Timely post-hospitalization PCP visit after hospital discharge were associated with lower risk of hospital readmission at 30 and 90 days.  Useful for presenting staff with research that has proved PCP follow up has positive impact on reducing readmission and to encourage staff to continue to ascertain that all patients have scheduled PCP appointments within 5-7 days of discharge.	Level IIIA
Hoyer, E. H., Golden, B., Dougherty, G., Richardson, M., Lepley, D., Leung, C., Deutschendorf, A., Brotman, D. J., & Stewart, R. W. (2021). The paradox of readmission prevention interventions: Missing those most in need. <i>The American Journal of Medicine</i> , 134(9), 1142–1147. <a href="https://doi.org/10.1016/j.amjmed.2021.04.006">https://doi.org/10.1016/j.amjmed.2021.04.006</a>	Retrospective analysis	Discharged patients referred to receive 1 of 3 post-discharge interventions between January 2013 and July 2019.	Patient level characteristics that were associated with the highest risk for readmission tended to be associated with lack of receipt of the intended care coordination interventions.  Useful in identifying high-risk population for readmission.	Level IIIB



<p>Pugh, J., Penney, L. S., Noël, P. H., Neller, S., Mader, M., Finley, E. P., Lanham, H. J., &amp; Leykum, L. (2021). Evidence based processes to prevent readmissions: More is better, a ten-site observational study. <i>BMC Health Services Research</i>, 21(1). <a href="https://doi.org/10.1186/s12913-021-06193-x">https://doi.org/10.1186/s12913-021-06193-x</a></p>	<p>Mixed method, multi-stepped observational study</p>	<p>Data from 10 VA hospitals across the US was used. 314 patients were interviewed. 105 patients were observed.</p>	<p>Performing all recommended care transition processes consistently and for all patients for which they are applicable may have potential to further reduce early readmissions.</p> <p>Useful for reinforcing with the transitions team and the patients, the importance of consistent post discharge follow-ups and interventions.</p>	<p>Level III B</p>
<p>Liang, H., Hann Lin, L., Yu Chang, C., Mei Wu, F., &amp; Yu, S. (2021). Effectiveness of a nurse-led tele-homecare program for patients with multiple chronic illnesses and a high risk for readmission: A randomized controlled trial. <i>Journal of Nursing Scholarship</i>, 53(2), 161–170. <a href="https://doi.org/10.1111/jnu.12622">https://doi.org/10.1111/jnu.12622</a></p>	<p>Randomized controlled trial (RCT)</p>	<p>Two hundred patients from a regional hospital who were scheduled to receive home care after discharge were randomly assigned to the intervention group (<math>n = 100</math>) or the control group (<math>n = 100</math>).</p>	<p>For final outcome evaluation, the researchers found that the tele-homecare program significantly reduced mortality and ED visits, whereas no significant effect on readmission was observed. For secondary outcome evaluation, patients' quality of life indicated significant improvement.</p> <p>Useful for looking at other options such as physical therapy at home to help the patient's functional status which, in the long run, will help with preventing readmission.</p>	<p>Level IA</p>

## Appendix B: Readmission Interview questions

# Readmission Interview Questions

### Who is being interviewed? (circle one)

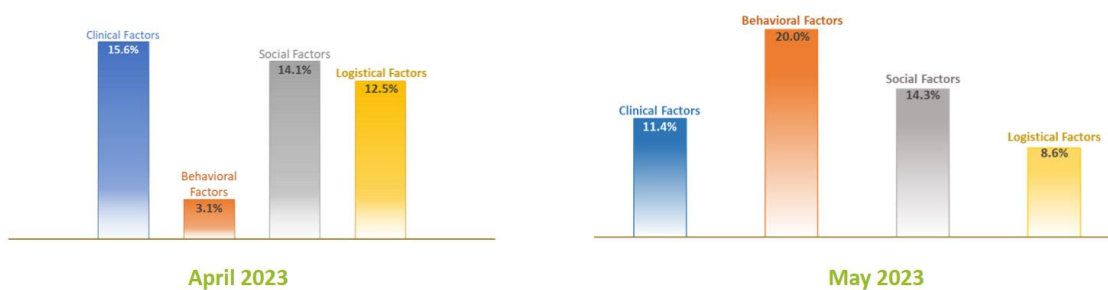
Patient    Family/Caregiver    Both    Other (specify) \_\_\_\_\_

- **Why were you hospitalized earlier this month?**
  - Prompt for patient/caregiver understanding of the reason for hospitalization.
- **When you left the hospital:**
  - How did you feel?
  - Where did you go?
  - Did you have any questions or concerns? If so, what were they?
  - Were you told by anyone about what sepsis is?
  - Did anyone explain to you that after discharge, you might not feel well for a while, like having difficulty sleeping, fatigue, weakness, loss of appetite, depression or difficulty concentrating?
  - Were you able to get your medications?
  - Did you have an appointment with your primary care provider?
  - Did you need help taking care of yourself?
  - If you needed help, did you have help? If so, who?
  - Were you made aware of resources available for people who have had sepsis?
- **Tell me about the time between the day you left the hospital and the day you returned:**
  - When did you start not feeling well?
  - Did you call anyone (doctor, nurse, other)?
  - Did you try to see, or did you see a doctor or nurse or another provider before you came?
  - Did you try to manage symptoms yourself?
  - Prompt patient/caregiver to describe any self-management techniques they used.
- **In our efforts to provide the best possible care to you and others like you, can you think of anything that we—or anyone—could have done to help you after you left the hospital the first time so that you might not have needed to return so soon?**

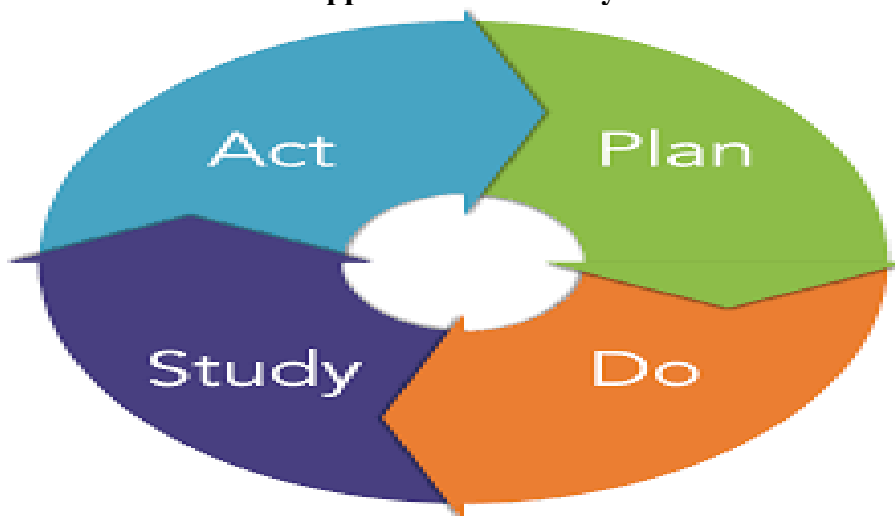
### Appendix C: The Four Readmission Factor Categories

## The Four Readmission Factor Categories

CLINICAL	BEHAVIORAL	SOCIAL	LOGISTICAL
changing circumstances after discharge in a way that led to the readmission	A sense that readmissions are undesirable and frustrating	challenges in accessing services: appointments, transportation, medications, equipment	lack of coordination of post discharge transitional care or follow-up



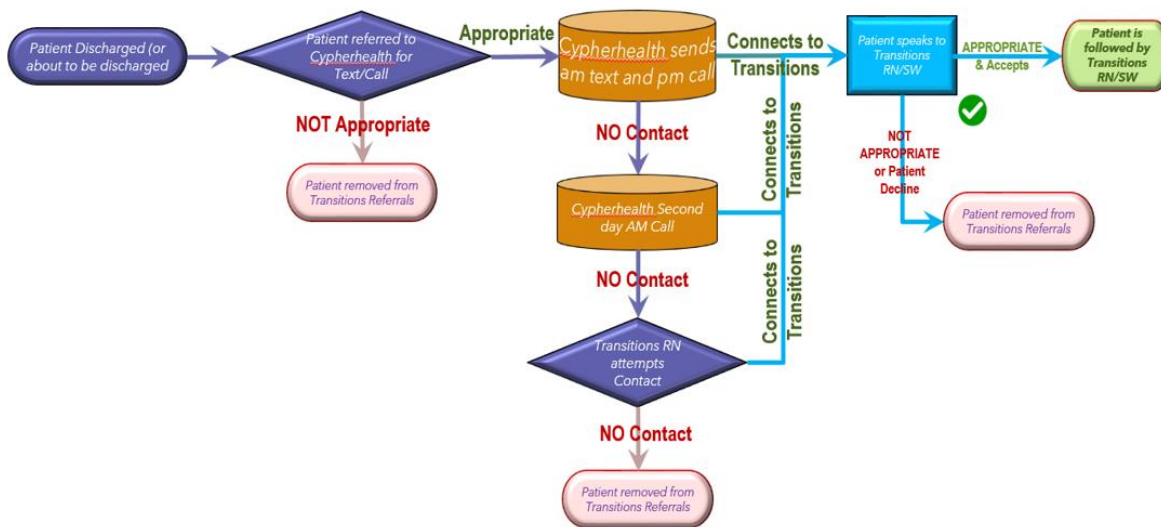
### Appendix D: PDSA Cycle



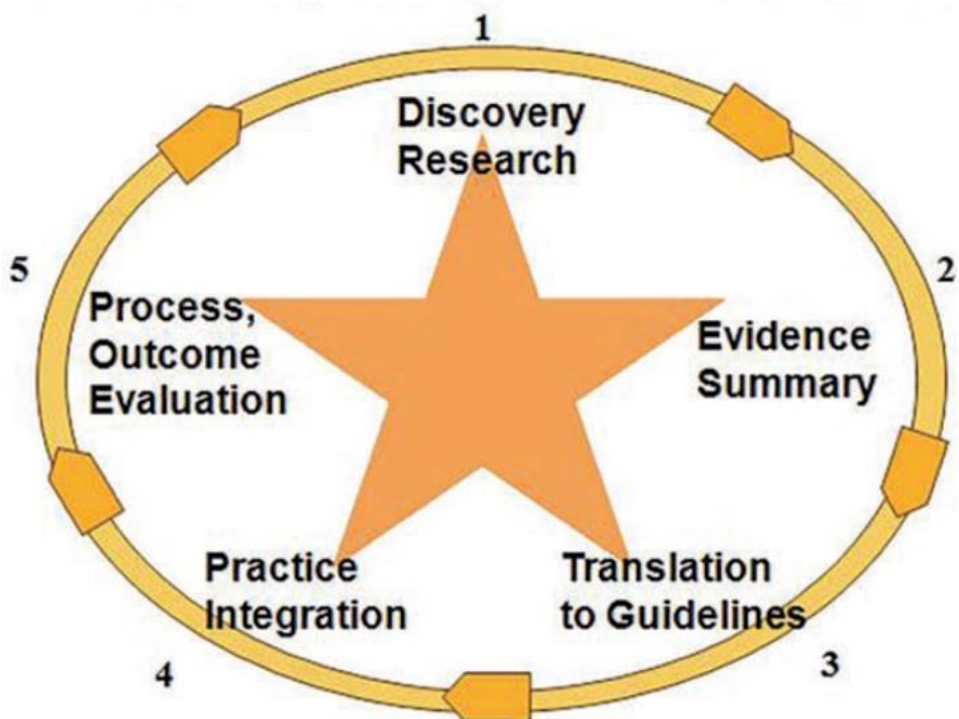
### Appendix E: Test of Change

Reducing Readmission Rates Within 30 Days of Discharge by Increasing Frequency of Calls by the East Bay Transitions Care Department

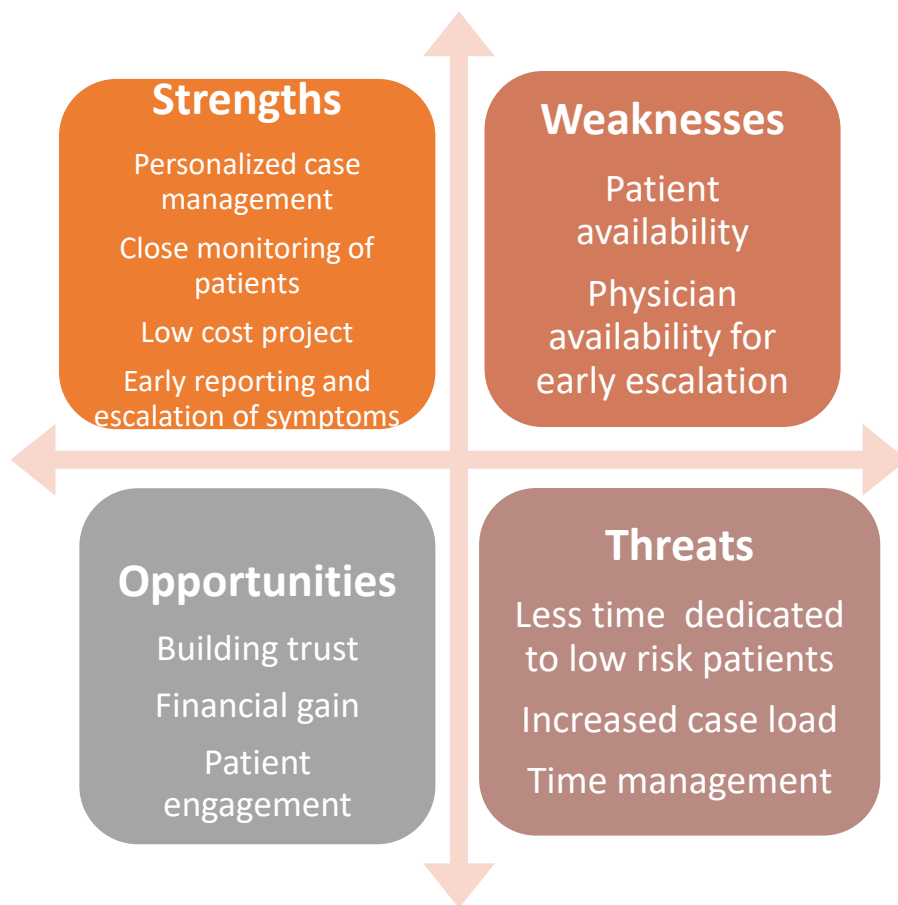
## Current State Process Map – Cypherhealth Test of Change



**Appendix F: The Stevens STAR model**



## Appendix G: SWOT Analysis

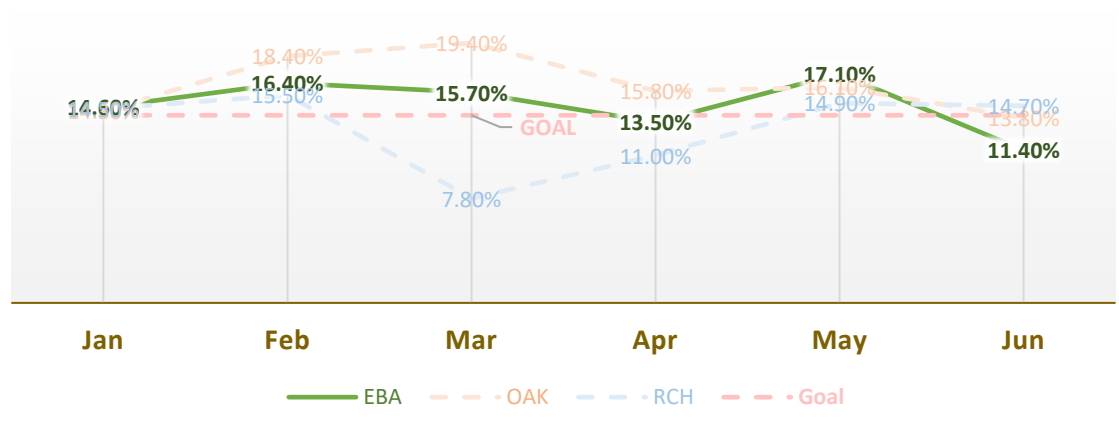


**Appendix H: Budget Analysis for Reducing Readmission Rates Within 30 Days of Discharge by Increasing Frequency of Calls by the East Bay Transitions Care Department**

<b>Improvement Revenue (Cost Avoidance)</b>	<b>Total Cost per Day</b>	<b>Total Cost per Month</b>	<b>Total Cost Year 1</b>	<b>Total Cost Year 2</b>
<b>Hospital Cost/Readmission/Day</b>	\$10,107	\$303,210	\$3,638,520	\$3,638,520
<b>RN time/hr/day</b>	\$1,575	\$31,500	\$378,000	\$378,000
<b>MSW/hr/day</b>	\$300	\$6,000	\$72,000	\$72,000
<b>1 X RN training cost</b>	\$262.5	\$262.5	\$262.5	
<b>1 X MSW training cost</b>	\$100	\$100	\$100	
<b>Project Duration</b>	16 weeks			
<b>Total Project Cost/month</b>	\$37,862.5			
<b>Estimated savings/year with 25% readmissions prevented</b>	\$2,728, 890			

### Appendix I: East Bay Transitions Readmission Data

#### East Bay Transitions - Readmission Data





## Appendix J: Project Charter

**Project Charter:** Improving 30-day readmission rate in the East Bay Transitions Care Program

**Global Aim:** To impact the overall 30-day readmission East Bay hospitals by increasing call frequencies to high and medium risk patients followed by the East Bay Transitions Care Program to a minimum of twice a week.

**Specific Aim:** The specific aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

**Background:** Within the organization, the estimated cost of readmissions is \$10,107.00 per day. Substantial financial and resource burden is placed on the healthcare system due to hospital readmissions (Kane et al., 2021). Due to multiple factors it has been a challenge to manage readmissions rates at Richmond and Oakland hospitals. Additionally, readmissions cause undue financial and emotional stress on patients and their families. When admitted in a hospital patients experience mild to extreme stress of sleep deprivation, pain, tube and line restrictions, and financial issues. Awaiting test results was a major cause of stress in patients (Abuatiq et al., 2020).

### Sponsors

Senior management staff, Department managers

### Goals

The East Bay Transitions Care Program aims to improve the current readmission rates by increasing call frequencies for medium and high-risk patients to two times or more times per week.

### Measures

#### Outcome Measures:

- The specific aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

#### Process Measure:

- 100 % of staff logs in patients in the patient referral data platform.
- 100 % of staff calls medium and high-risk patients twice weekly.

#### Balancing Measures:

- The percentage of patients called that are low risk may decrease due to the extra time dedicated to medium and high-risk patients.

### Team Members

Department managers

Nurses

Social workers

Operational specialists

## References

- Abuatiq, A., Brown, R., Wolles, B., & Randall, R. (2020). Perceptions of stress: Patient and caregiver experiences with stressors during hospitalization. *Clinical Journal of Oncology Nursing*, 24(1), 51–57. <https://doi.org/10.1188/20.cjon.51-57>
- Kane, J. M., Hall, M., Cecil, C., Montgomery, V. L., Rakes, L. C., Rogerson, C., Stockwell, J. A., Slain, K. N., & Goodman, D. M. (2021). Resources and costs associated with repeated admissions to picus. *Critical Care Explorations*, 3(2), e0347. <https://doi.org/10.1097/cce.0000000000000347>

## Measurement Strategy

**Background (Global Aim):** To impact the overall 30-day readmission rate of East Bay hospitals by increasing call frequencies to high and medium risk patients followed by the East Bay Transitions Care Program to a minimum of twice a week.

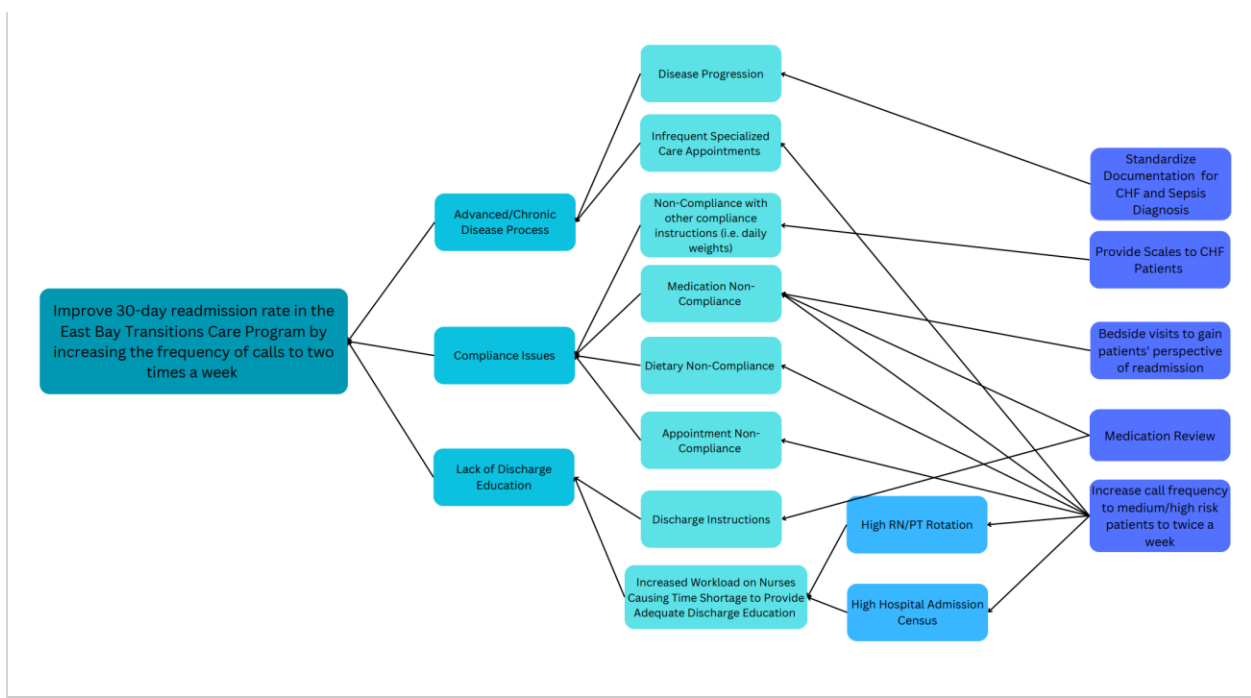
**Population Criteria:** Adult high and medium risk patients discharged from the hospital.

**Data Collection Method:** Staff logs in patients in the patient referral data platform. Project leader will open every patient's chart logged in the patient referral data platform and count calls made by the Transitions Care staff and log number of calls after patient has been discharged from the program.

## Changes to Test

- Train staff, call medium and high-risk patients twice a week minimum
- Track daily calls.
- Use standardized documentation for CHF and Sepsis diagnosis.
- Transitions care managers attend readmission calls and discuss reasons.
- Provide scales to CHF patients.
- Review medications on every call.
- Transitions nurses visit readmitted patients at bedside and complete interviews to gain their perspective of the readmission.

### Driver Diagram



### Project Timeline

PROJECT TIMELINE					
TASK	ACCOUNTABILITY	MONTH			
		FEBRUARY	MARCH	APRIL	MAY
<b>1. CREATE PROJECT CHARTER</b>					
1A. Identify Stake Holders	CNL				
1B. Seek Sponsors	CNL				
1C. Arrange Meetings	CNL				
1D. Build Draft Charter	CNL				
<b>2. IMPLEMENT TEST OF CHANGE</b>					
2A. Train Staff	CNL				
2B. Initiate Calls Twice a Week	TEAM				
2C. Develop Plan for Data Gathering	SENIOR OPS SPECIALIST				
2D. Use Standardized Documentation for CHF and Sepsis Diagnosis	TEAM				
2E. Transition Care Managers Attend Calls and Discuss Reasons	TEAM				
2F. Provide Scales to CHF Patients	TEAM				
2G. Review Medication on Every Call	TEAM				
<b>3. COLLECT DATA</b>					
3A. Count Every Call Made Per Patient and Log Onto Patient Referral Data Platform	CNL				
<b>4. EVALUATE COLLECTED DATA</b>					
4A. Present Results to Team	CNL				
4B. Review Feedback From Management	CNL				

- The Plan-Do-Study-Act (PDSA) cycle is a quality improvement framework used in healthcare.
  - It is used to test, implement, and measure changes in processes and systems.
  - The PDSA cycle expedites improvement processes and is a simple approach to making changes.
  - The Institute for Healthcare's Model for Improvement (IHI) provides a guide for implementing the PDSA cycle.
  - The PDSA cycle consists of four steps: Plan, Do, Study, and Act.
  - In the Plan step, the healthcare team identifies an area for improvement and plans their approach.
  - The Do step involves putting the plan into action on a small scale and collecting data.
  - During the Study step, the team analyzes the collected data and evaluates the effectiveness of the changes.
  - In the Act step, the team decides what to do next based on the results. Successful changes can be implemented more widely, while unsuccessful changes can be modified and tried again.
  - The Transitions Care Department regularly implements small tests of change using the PDSA framework.
  - The department manager finds the PDSA framework useful and familiar to the team.
  - Using the PDSA framework for the planned project allows the team to start small, evaluate, make necessary changes, and continue improving.
- 
- The Plan-Do-Study-Act (PDSA) cycle is a healthcare quality improvement framework that tests, implements, and measures changes in processes and systems.
  - The Institute for Healthcare's Model for Improvement (IHI) provides a guide for implementing the PDSA cycle.
  - The cycle consists of four steps: Plan, Do, Study, and Act.
    - Plan: Identify an area for improvement and plan the approach.
    - Do: Implement changes on a small scale and collect data.
    - Study: Analyze the data and evaluate the changes' effectiveness.
    - Act: Decide on next steps based on the results.
  - The Transitions Care Department regularly uses the PDSA framework for small tests of change.

## Appendix K: IRB Certificate



Completion Date 25-Feb-2023  
 Expiration Date 25-Feb-2026  
 Record ID 54534097

This is to certify that:

**REDIET GEBREMICHAEL**

Has completed the following CITI Program course:

Not valid for renewal of  
 certification through CME.

**Human Subjects Research (HSR)**

(Curriculum Group)

**Human Subjects Research (HSR)**

(Course Learner Group)

**1 - Basic Course**

(Stage)

Under requirements set by:

**University of San Francisco**

**CITI**

Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320  
 Fort Lauderdale, FL 33301 US  
[www.citiprogram.org](http://www.citiprogram.org)

Verify at [www.citiprogram.org/verify/?w4be7b3fb-3ec6-4a38-b94f-cdfb3607d8fe-54534097](http://www.citiprogram.org/verify/?w4be7b3fb-3ec6-4a38-b94f-cdfb3607d8fe-54534097)

## Appendix L: Statement of Non-Research Determination Form



### CNL Project: Statement of Non-Research Determination Form Student Name: Rediet Gebremichael

**Title of Project:** Reducing Readmission Rates Within 30 Days of Discharge by

Increasing Frequency of Calls by the East Bay Transitions Care Department

**Brief Description of Project:**

**A) Aim Statement:** The aim of this project is increasing call frequencies to high and medium risk patients to reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

**B) Description of Intervention:** Increasing call frequency to a minimum of twice a week from the baseline of once a week or as needed.

**C) How will this intervention change practice?** This intervention will change practice as RNs and MSWs are mandated to call and follow up with patient twice a week from the baseline of once a week or as needed calls.

**D) Outcome measurements:** Reduce avoidable readmissions below 14% per month from current baseline of 17%, by June 2023 in the East Bay Transitions Care Department.

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.	X	
The specific aim is to improve performance on a specific service or program and is <b>a part of usual care</b> . ALL participants will receive standard of care.	X	
The project is <b>NOT</b> 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 <b>NOT</b> follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, <u>assessment</u> or evaluation of the organization to ensure that existing quality standards are being met. The project does <b>NOT</b> develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <b>NOT</b> seek to test an intervention that is beyond current science and experience.	X	
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.	X	
The project has <b>NO</b> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
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., <b>not</b> a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
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>	X	

**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 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):**  
**Rediet Gebremichael**

**Signature of Student:**

A handwritten signature in black ink, appearing to read "Rediet Gebremichael". The signature is written over a horizontal line.

**DATE** 4/29/2023

**SUPERVISING FACULTY MEMBER NAME (Please print):**

**Signature of Supervising Faculty Member**

**DATE** \_\_\_\_\_

*David Ainsworth*

Date: 8.5.23