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Optimizing Transitions of Care to Reduce Readmission Rates

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Optimizing Transitions of Care to Reduce Readmission Rates

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NURS 653: Internship

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Abstract

The timeliness of post-discharge outreach, a component of the Transition of Care (TOC) process, is a critical determinant for readmission. The Health Plan (HP) serves over 260,000 residents of a large San Francisco Bay Area county by working with community partners to provide health care services through its Medi-Cal (MC) and Cal MediConnect (CMC or Medicare-Medicaid Plan) insurance plan.

This project aims to reduce the HP's readmissions by 1.5% to 7.37% from a baseline of 8.87% for CMC members and to 6.8% from a baseline of 8.3% for MC members within one year from the onset of the improved TOC process and implementation of new interventions, the first of which will be to make an initial outreach attempt within 48 hours.

Performance will be measured by monitoring the readmission rates at the hospitals within the HP's contracted network and to track the timing of the post-discharge outreach calls and measure if they were completed within 48 hours post-discharge notification.

The expected results are that readmission rates will be down by 1.5% from the baseline and that there will be an annual net savings of \$107,352. These results will validate the importance of post-discharge outreach as part of the TOC process and its effect on hospital readmissions. The efforts put forth by the Clinical Nurse Leader, Utilization Management, Case Management, and Quality Improvement imply that a collaborative interdisciplinary care team approach is essential to produce these outcomes.

Introduction

Hospital readmission rates have become a top priority for the United States (U.S.) healthcare system due to financial penalties as well as their implication on the quality of care provided. According to the National Committee for Quality Assurance (NCQA) (2020), readmission rates among patients 65 years and older with Medicare was 12.8% in 2018. Readmissions cost the U.S. healthcare system approximately \$17.4 billion each year (Baldwin et al., 2018) as hospitals are penalized and receive reduced payments for excess readmissions under the Hospital Readmissions Reduction Program (Centers for Medicare & Medicaid Services, 2020). Reducing readmissions have become a priority for hospitals and managed care organizations (MCOs) and they are seeking ways on how to remedy this issue.

Transition of Care (TOC) refers to the process of transferring the care of patients between levels of care and facilitating the continuity of care to reduce adverse clinical outcomes. There are several interventions that can be included in the TOC process, one of which is post-discharge outreach to the patient. The timeliness of post-discharge outreach is an important determinant for readmission. A study has shown that timely post-discharge follow-up by a nurse, such as a phone call within 48 hours, can reduce readmission rates by 41% (Trueland, 2019).

Problem Description

The timeliness of discharge notifications at the HP has greatly impacted the timeliness of the post-discharge outreach to the HP members. The author was tasked to follow-up on a HP member recently discharged from an acute setting to home and discovered that patient had already been readmitted during the time between the date of discharge and the date the author was notified to make outreach. The author surveyed the designated TOC Registered Nurse Case Managers (RNCMs) and discovered that, on average, there is one- to two-week lag between the

discharge date and when the RNCM received notification to call the member (see Appendix D). The author reached out to the Medical Director, Utilization Management (UM), Case Management (CM) and Quality Improvement (QI) and learned that reducing readmissions was an organizational priority as was optimizing the TOC process. Improvements to the current TOC process and implementing new interventions could help to reduce excessive readmissions as well as have a positive financial impact to the HP.

Project Overview

The QI team reported that readmission rates in 2018 were 18.65% for Medi-Cal (MC) members and 15.25% for Cal MediConnect (CMC) members and in 2019, 8.3% for MC and 8.87% for CMC (see Appendix A). The global aim of this project is to reduce readmissions by 1.5% to 7.37% from a baseline of 8.87% for CMC members and to 6.8% from a baseline of 8.3% for MC (see Appendix B) within one year from the onset of the improved TOC process. This will be done by enhancing the TOC process as the Institute for Health Improvement (IHI) (2009) suggests that avoidable readmissions can be reduced by improving transitions and care coordination between care settings.

The process begins with discharge notification from the hospital. The process ends with the completion of TOC outreach by the RNCM. By working on the process, we expect 1) reduced readmission rates by 1.5% within one year from the onset of the updated TOC process by 2) making two post-discharge outreach attempts within 48 hours and 30 days of discharge notification and 3) improved care coordination and support by confirming and documenting that a post-discharge visit is scheduled, and 4) discharge instructions are understood by the member. It is important to work on this now because 1) some members are at higher-risk for readmission, 2) members are not being contacted within 48 hours for post-discharge for TOC assessment and

3) to follow-up on post-hospital care coordination or needs. Currently, per the RNCMs' responses via survey, they are not performing TOC outreach until one to two weeks from discharge notification (see Appendix D).

There are four plan-do-study-act (PDSA) cycles in this project. The first PDSA cycle is to make TOC outreach within 48 business hours of discharge notification. This PDSA will be the main focus, as it directly involves interacting with the newly discharged patients at a critical point in time, which will have the most impact on reducing readmission rates and the literature supports making contact within 48 hours is most impactful.

The following population, intervention/issue of interest, (optional) comparison, outcome (PICO) question will guide this project and the plan-do-study-act (PDSA) cycle being focused on: Will Transition of Care outreach within 48 hours (I) to newly discharged members (P) reduce readmission rates (O)?

The specific project aim statement for this PDSA is: We aim to improve the TOC process at the HP. The process begins with discharge notification. The process ends with making TOC outreach within 48 hours of discharge notification. By working on this project, we expect to reduce readmission rates by 1.5% within one year of from the onset of the improved TOC process and implement the new TOC 48-hour outreach protocol by December 2020. It is important to work on this now because 1) some members are at higher-risk for readmission, 2) members are not being contacted within 48 hours for post-discharge for TOC assessment and 3) to follow-up on post-hospital care coordination or needs.

Literature Review

The literature review was initiated by developing the following population, intervention/issue of interest, (optional) comparison, outcome (PICO) question: Will Transition

of Care outreach within 48 hours (I) to newly discharged members (P) reduce readmission rates (O) (see Appendix C)? Research was conducted in CINAHL with criteria were set to include English only and published between 2015 to 2020. Using the terms “newly discharged” and “transition of care” yielded three results, with only one article relevant to the project. The combination of the terms “transition of care” and “readmission” yielded 334 results that included 9 relevant articles highlighting TOC processes and interventions that impacted readmission rates. The 10 selected articles were evaluated using Johns Hopkins Evidence-based Practice (JHEBP) research evidence appraisal tool (see Appendix E).

Otsuka et al. (2019) conducted a retrospective cohort study to evaluate the impact of interprofessional TOC service on 30-day hospital readmissions and emergency department visits. Patients with scheduled post-discharge visits within 30 days were in the intervention group and patients without follow-up TOC service appointments were in the comparison group. Both groups had 330 patients. They found that 8.79% of the intervention group versus 13.94% of the comparison group were readmitted within 30 days, suggesting that patient engagement in the post-hospital follow-up period, which included a TOC service appointment, had an impact on reducing hospital readmissions (Otsuka et al., 2019). This study is rated as LIII A using the JHEBP appraisal tool.

Ouslander at al. (2020) conducted a quasi-experimental study among patients aged 75 and older admitted to non-intensive care beds at a community teaching hospital. Among the intervention group, which consisted of 202 patients, at least one post-discharge contact was made to 142 patients (70%). Post-discharge contact included interventions such as weekly telephone and/or in-person contacts. Of the 202 patients, 37 (18%) were readmitted within 30 days of discharge. Of those 37 patients, 15 (40%) of them did not have post-discharge contact. Patients

who did not receive follow-up or had delayed post-discharge visits to a healthcare provider were associated with several readmissions (Ouslander et al., 2020). This study is rated as LII A using the JHEBP appraisal tool.

Sampurno et al. (2019) conducted a literature review of randomized controlled trials to study the effect of transitional-care interventions on and chronic obstructive pulmonary disorder (COPD)-related readmissions, all-cause hospital readmissions, and all-cause mortality rates in subjects with COPD. They found 13 randomized controlled trials that met the inclusion criteria, which included 2,029 subjects. The interventions included telephone follow-up, educational programs and training, home visits, and structured assessments and care plans. They found that these TOC interventions significantly reduced all-cause readmissions by 28% COPD-related readmissions by 44% (Sampurno et al., 2019). This study is rated as LI A using the JHEBP appraisal tool.

Baldwin et al. (2018) conducted a prospective cohort study to evaluate the effectiveness of a post-discharge follow-up visit to improve TOC and reduce 30-day readmissions. Patients were seen up to 14 days post-discharge at the clinic. Of the 75 patients in the study, only two patients (2.7%) were readmitted in 30 days, representing a significant decrease compared to national benchmark data (Baldwin, Zook & Sanford, 2018). This study is rated as LIII A using the JHEBP appraisal tool.

Wanzhen et al. (2018) conducted a prospective cohort study to investigate the effect of MCO-implemented post-discharge engagement. The study cohort included Medicaid members aged 5-64 years with one or more chronic conditions or only moderate chronic asthma. Post-discharge engagement included telephonic care management, mailings, and pharmacy-based initiatives. It was found that members who were successfully reached for post-discharge

engagement, showed a 33% decrease in 30-day readmissions (Wanzhen et al., 2018). This study is rated as LIII A using the JHEBP appraisal tool.

Dizon and Reinking (2017) conducted a pre-post intervention study that evaluated 30-day readmission rates before, during and after implementation of the TOC program at a hospital in Northern California. They found readmission rates decreased over all three periods using a multifactorial, interdisciplinary approach led by nursing. Baseline admission rates were 13.7% and decreased to 11.8% during planning and 12% during implementation. During intervention implementation, readmission rates were the lowest at 11.4%. This can be attributed to the following TOC interventions that took place during the post-discharge period: one home visit and 3 follow-up calls by a RNCM or a non-RN staff member for lower-risk patients (Dizon and Reinking, 2017). This study is rated as LIII A using the JHEBP appraisal tool.

Strait et al. (2019) conducted a study to evaluate the effectiveness of the nurse and patient encounters during the TOC program in a faith-based community. These encounters included calling 44 patients twice – first at 72 hours and then at 30 days post-discharge to home. During those calls, nurses reviewed food and transportation needs, patients' understanding of discharge instructions, signs and symptoms requiring medical attention, and inquired follow-up appointments with Primary Care Provider (PCP) and/or specialists were scheduled. Baseline 30-day readmission rate was 9.4% in 2016 among 16,289 patients and 2.4% among the 44 participants in the study (Strait et al., 2019). This study is rated as LIII B using the JHEBP appraisal tool.

Kamer Mayer et al. (2017) conducted a systematic review evaluating the effectiveness TOC interventions on 30-day readmissions among general medical inpatients. The findings supported the use of post-discharge phone calls, which varied between one and three calls made

within 30 days of discharge (Kamer Mayer et al., 2017). This study is rated as LIII B using the JHEBP appraisal tool.

Rains (2020) conducted a study to determine the effectiveness of a standardized TOC plan on the readmission of heart failure patients that included medication review, follow-up appointments with a PCP or cardiologist, and post-discharge visits or calls. Seventy percent of the 43 patients received follow-up calls or visits. The overall readmission rate was 16.28% and none of the patients who received follow-up calls were readmitted within 30 days. Those who were called were also able to identify their diagnosis and noted improvement in their condition (Rains, 2020). This study is rated as LIII B using the JHEBP appraisal tool.

Montero et al. (2016) conducted a study among 4,551 oncology patients to evaluate if improving the TOC through the implementation of 48-hour follow-up calls and post-discharge visits within 5 days would reduce readmissions. With these improved interventions, the readmission rate went from 27.4% to 22.9%. They were also able to calculate the annual cost savings as a result of having 96 fewer readmissions over the year-long study period, which was million in direct costs (Montero et al., 2016). This study is rated as LIII A using the JHEBP appraisal tool.

Rationale

The HP's goal is making access to care convenient for all of its members and is contracted with nine hospitals in the county. Excessive readmission rates can pose as a significant financial burden on the HP as hospitals are at risk for substantial penalties for rates above the national benchmark. As previously mentioned, readmissions cost the U.S. healthcare system approximately \$17.4 billion each year (Baldwin et al., 2018) as hospitals are penalized

and receive reduced payments for excess readmissions under the Hospital Readmissions Reduction Program (Centers for Medicare & Medicaid Services, 2020).

In addition to the financial implications, Centers for Medicare and Medicaid Services (CMS) also indicates that 30-day readmission rates are a correlation and measurement of quality of care (Baldwin, Zook & Sanford, 2018). For these reasons, reducing readmission rates and improving transitions of care have become a priority for hospitals and MCOs, such as the HP.

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was performed to assess the health plan's strengths and weakness in its TOC process as well as to look for opportunities for improvement and threats (see Appendix F). During the SWOT, a key strength identified was that there is already TOC processes in place. However, like many processes, there can be some improvements made. There are two documented TOC processes – one for UM nurses and one for the RNCMs. The UM process focuses on the TOC Assessment and how to enter the data into the electronic medical record. The CM TOC process includes a due date as to when the RNCM should be notified of the patients' discharge (i.e. "Utilization Review Concurrent Review Nurse(s) submit to Case Management weekend discharge report prior to 12 p.m. on Monday and daily discharge report prior to 5:00 P.M. on Monday through Friday") and notes that the RNCM is required to make three outreach attempts via phone within three days of receipt. However, the assigned RNCMs stated, via survey (see Appendix D) that they now have one week to make three outreach attempts, indicating that the written TOC process, which is dated in 2016, needs to be updated.

The literature review provides evidence that improving the TOC process has a positive effect on readmission rates. The literature strongly suggests that improving post-discharge

communication via telephone outreach within 48-72 hours of discharge and ensuring follow-up appointments are scheduled and attended are key in decreasing readmission.

The initial startup costs for this project can be estimated as follows: eight one-hour QI meetings and one two-hour in-service training for the nurses. The QI meetings would include three directors (average salary of \$83/hour), one medical director (average salary of \$100/hour), and one QI nurse (average salary of \$50/hour). The QI meetings would cost \$3,180. The in-service training would cost \$1,100 for 11 nurses. The estimated costs for the first year of implementation would be \$4,280 (see Appendix G).

Specific data on the costs of readmissions for the HP is not available. However, this project will base the estimated costs of readmission on the medical group located in a large western state in the U.S. where Baldwin, Zook and Sanford (2018) performed their prospective cohort study. In fiscal year 2015, this medical group's estimated cost of readmissions was \$7,156,800 and the 30-day all-cause readmission rate was 12.3% (Baldwin, Zook & Sanford, 2018). If the improvements from this project have an estimated impact in reducing readmissions at 1.5%, annual net savings would be \$107,352 (see Appendix G). The costs benefits analysis provides the rationale to support this project: For every dollar spent on this project, we estimate saving at least \$49 (see Appendix G).

Methodology

The IHI (2009) states that the rate of avoidable hospital readmissions can be reduced by improving transition processes and care coordination between care settings. The IHI's Transitional Care Model from "Effective Interventions to Reduce Rehospitalizations: A Compendium of 15 Promising Interventions," (Institute for Healthcare Improvement, 2009) helped guide this project as it contains components focused on post-discharge coordination of

care. Kotter's 8-Step Process for Leading Change provided a framework to guide the improvements in the TOC process and a process map was also developed to illustrate the details and sequence of the project and to guide decision-making (see Appendix I).

Before any improvement or changes can be made, an assessment must be performed. An assessment of the clinical microsystem was conducted using the Clinical Microsystem Assessment Tool (Institute for Healthcare Improvement, 2020). The departments involved in this project are UM, CM, and QI, and they are overseen by two Medical Directors. UM consists of four Discharge Planning and Inpatient Review RNs, two Prior Authorization RNs, one RN Manager, one Director, and 10 remaining staff consisting of care coordinators and their supervisor. CM has is comprised of 11 RNCMs (six full-time and five temporary employees), six Social Workers, one RN supervisor, one Nurse Manager, one RN Director and 17 care coordinators. QI has two QI RNs, two Managers, and one Director.

Kotter's 8-Step Process for Leading Change is used to develop the improvements for the TOC process. Kotter model provides a process that drives practice improvement change, starting with creating a sense of urgency, then building a guiding coalition, forming a strategic vision and initiatives, enlisting a volunteer army, enable action by removing barriers, generating short-term wins, sustaining acceleration, and finally, instituting change (Kotter, 2020).

Due to the current rate of readmissions and the financial impact, there was already sense of urgency, as it currently a priority within the organization. A QI team focused on gathering data is already in place. The QI team analyzes claims data to identify readmissions then categorizes by all-cause, specific diagnosis, facility, and line of business (i.e. Medi-Cal or Cal Medi-Connect). The readmission rate was calculated by dividing the total readmissions by

admissions for each line of business (see Appendix A). QI provided baseline data on readmission rates in order to calculate a goal that is feasible and in line with the organization's goal.

There was also a vision of improving the existing TOC processes and tools, which would be seamlessly implemented by RN staff, who would be encouraged to provide feedback and recommendations and identify any barriers they come across during this time of change. The RN staff would be encouraged to address their areas of concern, including feedback, recommendations, and barriers in the weekly staff meeting, or if it was urgent, they could also contact their supervisor via email.

Some barriers identified during the microsystem assessment and by the RNCMs were the delay in receiving discharge notifications (see Appendix J) and needing to update the TOC assessment to include free-text fields to input information about the member's follow-up appointment and a narrative to describe whether the discharge instructions were understood (see Appendix D). Management would help to remove these barriers by working with the facilities to ensure they notified the HP's UM department within 24 hours of a member's discharge and to ensure the UM department notified the RNCM within 24 hours of receipt to prevent any interruptions in the TOC workflow. The date of receipt by UM and CM would be entered into a shared database so that management can run reports to track this process. Management would also provide recognition to the team when it is evident the new process has had positive impact on readmissions, and in turn patient outcomes.

As the literature strongly suggests, improving post-discharge communication is key in decreasing readmission. The first PDSA cycle will include making timelier outreach to newly discharged members, specifically within 48 business hours of discharge notification (see Appendix K). Currently, the TOC process states outreach should be made within three business

days of receiving discharge notification. However, the assigned TOC RNCMs report they have up to one week (see Appendix D). Under the new changes proposed, telephone outreach will be made within two business days from discharge notification. This will be done by shifting the current duties of the two RNCMs assigned to TOC outreach. Currently, their duties include telephone outreach and individualized care plan creation for two populations – newly eligible members of the HP and TOC members, or those recently discharged from the hospital. This project proposes to have the two RNCMs focus solely on the TOC cases, which would be cost-effective as there would be no need to hire additional staff. Their newly eligible cases would be evenly distributed among the other nine RNCMs, which would not greatly impact their current workload. This PDSA will take priority over the other three cycles as it involves direct contact with the newly discharged members at a critical point in time that will have the most impact on readmission. Also, as previously mentioned, the literature supports post-discharge communication within 48 hours as key to reducing readmissions.

The second PDSA cycle will be to provide the RNCM with the discharge notification within 24 hours of receipt from the discharging facility (see Appendix K). This will be done by designating a UM coordinator and UM RN to notify the TOC RNCMs of the discharge report within 24 hours of receipt from the hospital. Notification would be made via email.

The third PDSA cycle will be updating the TOC Assessment tool to include detailed documentation on the member's follow-up appointment as well as "teach back" information regarding the discharge instructions (see Appendix H). Currently, the tool only requires a yes or no answers to the questions "Do you have a follow-up appointment with your doctor scheduled?" and "When you left the [hospital/skilled nursing facility], you should have been given some paperwork with instructions with what to do after you get home, as well as a list of your

medications, and any follow-up doctor appointments. Do you understand the information that was given to you?” The modifications would include individual free-text fields for each question where the RN can document the date, time and provider for the follow-up visit and a “teach back” summary of the discharge instructions and signs and symptoms to be aware of that require medical attention. This interaction would validate that the member has a post-discharge visit scheduled, preferably within seven days of the discharge date, and their understanding of the discharge instructions.

The fourth PDSA includes creating an additional outreach task to the TOC process, which would be for the RNCM to call the member after the scheduled post-discharge follow-up appointment and before the 30-day mark to review their status and inquire if the member has additional care coordination needs (see Appendix K).

Ethical Considerations

Ethical aspects to consider are protecting the member’s privacy, maintaining confidentiality, and respecting their autonomy. There will be instances when the member will not want to speak to the RNCM and defer to someone else or a relative will answer the phone and try to answer on the member’s behalf. In these cases, the RNCM will need to verify that this person is listed as an authorized representative in the appropriate database or the member provides verbal consent that the RNCM can speak to them. In regards to respecting their autonomy, there may be situations where the member does not want to make or attend a post-discharge visit and the RNCM will have to respect their decision while still practicing beneficence by providing education on the importance of seeing one’s primary care provider and/or specialist following a hospital admission.

Measurements

The goals of this project are to reduce readmission rates by 1.5% through two post-discharge follow-ups within 48 hours and 30 days of notification and improved care coordination and support through validating and documenting the patient's understanding of the discharge instructions and signs and symptoms related to the admitting diagnosis. The System of Measures from IHI's "How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations," (Rutherford et al., 2013) will be used as a guide to evaluate the success of the interventions and the goals (see Appendix L).

The outcome measure for this project is: 30-Day Readmission Rate. This is a reliable source of data because it will capture specific the number of readmissions within a 30-day time period at each hospital, which can be easily tracked and compared against previous data to determine whether the interventions have been effective in reducing readmission rates.

The process measures include: TOC follow-up within 48 hours of discharge notification, TOC follow-up within 30 days of discharge notification, Timely Handover, and Post-Hospital Care Follow-up. These will helpful in determining whether patients have been contacted in a timely manner and received critical information, such whether a post-discharge visit was scheduled and discharge summary was provided, which will facilitate self-management of their condition. The balance measure is to track whether there has been an increase in new admissions compared to the previous year's data.

The outcome, process, and balance measures will be built into the reporting tools developed by the QI team. Additionally, a report created by the QI and/or Information Technology department will be created to track the timing of the post-discharge outreach calls and if they were completed within 48 hours and 30 days.

Expected Results

The TOC project is still in the planning stage. It is expected that readmission rates will decrease by 1.5% to 7.37% for CMC members and to 6.8% for MC members within one year from the onset of the improved TOC process or by December 2021. It is also expected that the RNCMs reach 100% compliance in making the first TOC outreach within 48 hours post-discharge instead of 7 to 14 days and there will 100% compliance in making a second TOC outreach call before 30 days post-discharge notification.

Discussion

Although the project is still in the planning stage, there were some key findings that were discovered. Foremost, the goal of reducing readmissions and making improvements to the existing TOC process were already existing organizational goals. Theoretically, this would have made implementing this project easy, but other organizational goals took precedence. However, the author consulted with the Directors and Managers on the viability of the proposed improvements and interventions and made revisions to the project accordingly.

Another finding was that there was some duplication in the TOC process. For example, both the UM and CM teams were utilizing the exact TOC assessment and at one point, both were making outreach to newly discharged members. In addition, after reviewing the current published process as well as surveying the nurses who actually implement it, it was found that there have been some changes, indicating the process is overdue on being revised. Finally, another finding was the success rate of outreach calls made by the RNCMs. Per their estimate, about 70-80% of newly discharged members were reached for TOC assessment (see Appendix D). Although the success rate is low, outreach should still be made in an effort to reduce admission rates and provide the resources needed to help do so.

A key lesson learned during this project was to maintain engagement and involvement of

the team and sponsors. Although there was initial support of the project's goal to reduce readmission rates by improving the current TOC process, it was difficult to obtain feedback and an actual decision on implementing any of the interventions as other organizational goals took precedence. Working remotely also contributed to slow communication.

A second key lesson was to avoid overlap in tasks and responsibilities. During the microsystem assessment, it was found that both UM and CM were conducting outreach to newly discharged members, making them more likely to not participate in TOC assessments as they felt annoyed or pestered by multiple calls by both teams. It is more effective if only one team does the outreach and it makes the health plan appear more organized and collaborative.

A third key lesson is that the QI department and the data they collect is essential for success, especially for health plans. Plans must monitor providers to ensure members are receiving the appropriate care and the data collected by QI helps to support interventions necessary to improve the delivery of care and patient outcomes. QI staff are agents that contribute to change as they collect and analyze data that supports processes and activities designed to achieve demonstrable and sustainable improvement in the health status of its members.

Conclusion

Optimizing the TOC process by performing telephone outreach within 48 hours of discharge and making an additional outreach call before 30 days post-discharge can potentially reduce hospital readmissions, according to the literature. Educating nurses on the effectiveness of these interventions and having them implement them will create more positive patient outcomes as well as help the health plan experience a cost-savings. This project highlights the importance and benefits of a Clinical Nurse Leader (CNL) in a microsystem. The CNL acted as

an information manager by working with QI on gathering and analyzing data, as a outcomes manager by creating a plan on how best to optimize the current TOC process in order to reduce readmission rates, and as an educator and advocate by recommending evidence-based strategies and interventions.

References

- Agency for Healthcare Research and Quality. (2018). 30-Day Readmission Rates to U.S. Hospitals Retrieved from <https://www.ahrq.gov/data/infographics/readmission-rates.html>
- Bailey, M., Weiss, A., Barret, M. & Joanna Jiang, H. (2019). Characteristics of 30-day all-cause hospital readmissions, 2010-2016. Retrieved from <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb248-Hospital-Readmissions-2010-2016.jsp>
- Baldwin, S. M., Zook, S., & Sanford, J. (2018). Implementing Posthospital Interprofessional Care Team Visits to Improve Care Transitions and Decrease Hospital Readmission Rates. *Professional Case Management*, 23(5), 264–271.
<https://doi.org/10.1097/NCM.0000000000000284>
- Benbassat J, Taragin M. Hospital Readmissions as a Measure of Quality of Health Care: Advantages and Limitations. *Arch Intern Med*. 2000;160(8):1074–1081.
[doi:10.1001/archinte.160.8.1074](https://doi.org/10.1001/archinte.160.8.1074)
- Centers for Medicare and Medicaid Services. (2020). Hospital Readmissions Reduction Program (HRRP). Retrieved from <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program>
- County of Santa Clara. (2020). Open data portal: Hospital location inside the Santa Clara County. Retrieved from: <https://data.sccgov.org/Health/Hospitals/t8r2-4r6p>
- Dizon, M. L., & Reinking, C. (2017). Reducing Readmissions: Nurse-Driven Interventions in the Transition of Care From the Hospital. *Worldviews on Evidence-Based Nursing*, 14(6), 432–439. <https://doi.org/10.1111/wvn.12260>
- Institute for Healthcare Improvement. (2020). Clinical Microsystem Assessment Tool.

Retrieved from

<http://www.ihl.org/resources/Pages/Tools/ClinicalMicrosystemAssessmentTool.aspx>.

Institute for Healthcare Improvement. (2009). Effective interventions to reduce rehospitalizations: A compendium of 15 promising interventions. Retrieved from file:///C:/Users/peca/Downloads/STAARCompendiumPromisingInterventionstoReduceRehospitalizations_2009%20(1).pdf

Kamer Mayer, A. K., Leasure, A. R., & Anderson, L. (2017). The Effectiveness of Transitions-of-Care Interventions in Reducing Hospital Readmissions and Mortality: A Systematic Review. *Dimensions of Critical Care Nursing*, 36(6), 311–316. <https://doi.org/10.1097/DCC.0000000000000266>

Kotter, J. (2020). 8-Step Process. Retrieved on October 4, 2020 from <https://www.kotterinc.com/8-steps-process-for-leading-change/>.

Montero, A. J., Stevenson, J., Guthrie, A. E., Best, C., Goodman, L. M., Shrotriya, S., Azzouqa, A.-G., Parala, A., Lagman, R., Bolwell, B. J., Kalaycio, M. E., & Khorana, A. A. (2016). Reducing Unplanned Medical Oncology Readmissions by Improving Outpatient Care Transitions: A Process Improvement Project at the Cleveland Clinic. *Journal of Oncology Practice*, 12(5), 478-e602. <https://doi.org/10.1200/JOP.2015.007880>

National Committee for Quality Assurance. (2020). Plan All-Cause Readmissions (PCR). Retrieved from <https://www.ncqa.org/hedis/measures/plan-all-cause-readmissions/>

Otsuka, S., Smith, J. N., Pontiggia, L., Patel, R. V., Day, S. C., & Grande, D. T. (2019). Impact of an interprofessional transition of care service on 30-day hospital reutilizations. *Journal of Interprofessional Care*, 33(1), 32–37. <https://doi.org/10.1080/13561820.2018.1513466>

Ouslander, J. G., Reyes, B., Diaz, S., & Engstrom, G. (2020). Thirty-Day Hospital Readmissions

- in a Care Transitions Program for High-Risk Older Adults. *Journal of the American Geriatrics Society*, 68(6), 1307–1312. <https://doi.org/10.1111/jgs.16314>
- Rains, M. (2020). Improving Patient Care and Reducing Readmissions Using a Standardized Transition of Care Plan. *Heart & Lung*, 49(2), 214. <https://doi.org/10.1016/j.hrtlng.2020.02.018>
- Rutherford, P., Nielsen, G.A., Taylor J., Bradke P., & Coleman E. (June, 2013). How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations. Institute for Healthcare Improvement. Retrieved from <http://www.ihl.org/resources/Pages/Tools/HowtoGuideImprovingTransitionstoReduceAvoidableRehospitalizations.aspx>
- Sampurno Ridwan, E., Hadi, H., Yu-Lin Wu, & Pei-Shan Tsai. (2019). Effects of Transitional Care on Hospital Readmission and Mortality Rate in Subjects With COPD: A Systematic Review and Meta-Analysis. *Respiratory Care*, 64(9), 1146–1156. <https://doi.org/10.4187/respcare.06959>
- Santa Clara Family Health Plan. (2020). About us. Retrieved from <https://www.scfhp.com/about-us/>
- Strait, L. A., Fitzgerald, E., Zurmehly, J., & Overcash, J. (2019). A Congregation Transition of Care Program Using Faith Community Nurses and Volunteer Faith-Based Nurses. *Journal of Christian Nursing*, 36(3), 158–165. <https://doi.org/10.1097/CNJ.0000000000000625>
- Travis, A. (2020). Improving Heart Failure Patient Transitions of Care and Reducing

Readmissions with a Structured Hand-off Process. *Heart & Lung*, 49(2), 221.

<https://doi.org/10.1016/j.hrtlng.2020.02.033>

Trueland, J. (2019). Preventing readmission: The power of just one phone call or home visit.

Nursing Standard, 34(8), 56–58. <https://doi.org/10.7748/ns.34.8.56.s16>

Wanzhen Gao, Keleti, D., Donia, T. P., Jones, J., & Michael, K. E. (2018). Postdischarge

Engagement Decreased Hospital Readmissions in Medicaid Populations. *American*

Journal of Managed Care, 24(7), e200–e206

Appendix A

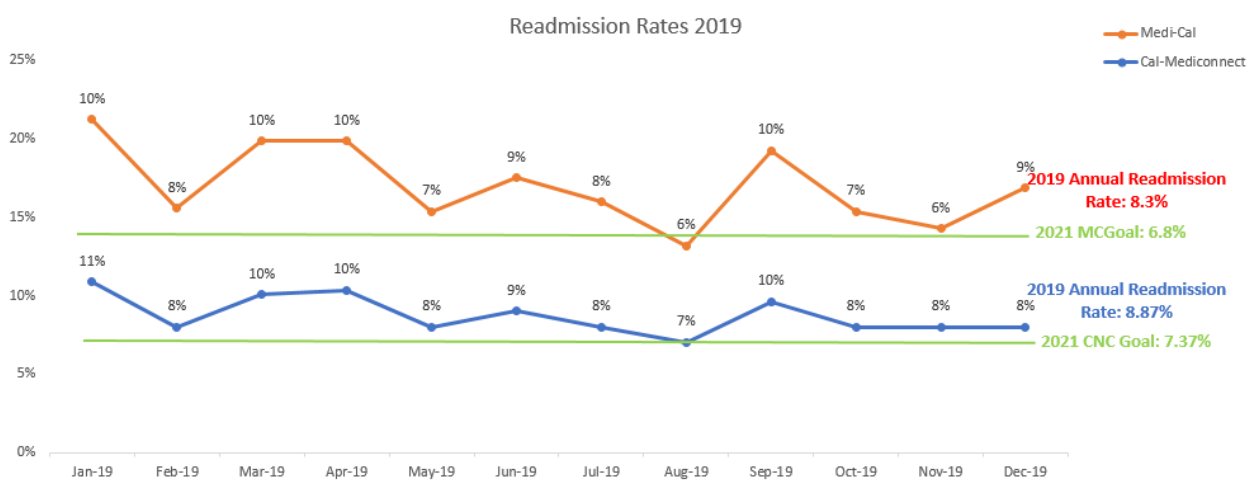
Table A1 Quality Improvement Data

PCR Final Rates (Year)	LOB	Num	Den	Rate
MY 2018	CMC	185	1298	14.25%
MY 2019	CMC	87	981	8.87%
MY 2018	MC	1062	5693	18.65%
MY 2019	MC	354	4263	8.30%

*MY 2020 data not yet available

Appendix B

Figure B1 Readmission Run Rates



Appendix C

Table C1 Literature Evaluation Table

PICO question: Will Transition of Care outreach within 48 hours (I) to newly discharged members (P) reduce readmission rates (O)?

Citation	Conceptual Framework	Design/ Method	Sample/ Setting	Variable studied and their definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to practice
Baldwin, S. M., Zook, S., & Sanford, J. (2018).	none	Prospective cohort study Purpose: To evaluate the effectiveness of a post-discharge follow-up visit to improve TOC and reduce 30-day readmissions	75 patients (n=75) Setting: Posthospital Discharge Clinic located in large Western state	Any patient with inpatient status was eligible.	A chart review of patients' electronic health record was performed to obtain 30-day readmission status, demographics, insurance, primary diagnosis.	Comparative analysis was done between national benchmark and Discharge Clinic readmission rates as well as a complete cost analysis using Agency for Healthcare Research and Quality <i>Readmission Reduction Impact and Financial Analysis Tool</i> .	2.7% were readmitted in 30 days	Strengths: Supported literature review findings. Limitations: Small sample, rates were not compared to a control group This study is rated as LIII A using the John Hopkins Evidence Based Practice (JHEBP) appraisal tool.

Dizon, M. L., & Reinking, C. (2017).	none	<p>Pre-post intervention study</p> <p>Purpose: To evaluate 30-day readmission rates before, during and after implementation of the TOC program</p>	<p>Sample: 21,701 patients (7,238 in the planning period, 6,677 in the implementation period, and 7,156 in the intervention period)</p> <p>Setting: 441-bed acute care community hospital in Northern California.</p>	<p>The following patients were excluded: less an 18 years old at discharge, discharged to another critical care, psychiatric, or rehabilitation facility, maternal, leaving against medical advice, expired.</p>	<p>Summary Data were retrospectively evaluated from electronic medical records from January 2010 to December 2013.</p> <p>Data was measured against the following:</p> <ol style="list-style-type: none"> 1. Did hospital-wide 30-day readmission rates change over the period of the study as compared to a prestudy baseline? 2. What characteristics were associated with 30-day readmissions during the planning, implementation 	<p>Data analysis using Summary Data were used to answer the research questions. Logistic regression was used to compare the rate of each study period to the baseline period. SPSS (Version 23) was used for all summaries and analyses, and for all statistical analyses, $\alpha < .05$ determined final statistical significance</p>	<p>Baseline admission rates were 13.7% and decreased to 11.8% during planning and 12% during implementation. During intervention implementation, readmission rates were the lowest at 11.4%.</p>	<p>Strengths: Real-life setting. First study to evaluate interventions in a hospital-wide program to reduce readmissions in a community hospital.</p> <p>Limitations: Setting was a community-based hospital without tight protocols.</p> <p>This study is rated as LIII A using the JHEBP appraisal tool.</p>
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					and intervention periods? 3. In a subset of patients targeted to receive transitions of care (TOC) services during the intervention period, what was the effect of the program activities on 30-day readmissions?			
Kamermayer, A. K., Leasure, A. R., & Anderson, L. (2017).	none	Systemic review (meta-analysis) Purpose: To evaluate the effectiveness TOC interventions on 30-day readmissions among general medical inpatients	Selected studies were appraised using the Critical Appraisal Skills Programme Tools	Studies focused on TOCs among general med-surg inpatients who were adults discharged to home, skilled nursing or long-term care.	Studies were limited to these criteria (1) interventions to reduce readmission to an acute care hospital setting and (2) discharge planning interventions	The review was performed according to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) guidelines.	Supported the use of post-discharge phone calls and tailored discharge planning	Strengths: 4 Randomized control trials represented Limitations: Small number of studies (13) identified, variations in group characteristics. This study is rated as LIII B

								using the JHEBP appraisal tool.
Kotter, J. (2020).	none	Purpose: Describes 8-Step Process for Leading Change.	n/a	n/a	n/a	n/a	Model drives change by “creating a sense of urgency, then building a guiding coalition, forming a strategic vision and initiatives, enlisting a volunteer army, enable action by removing barriers, generating short-term wins, sustaining acceleration, and finally, instituting change”	Strengths: n/a Limitations: n/a
Montero, A. J., Stevenson, J., Guthrie, A. E., Best, C., Goodman, L.	None	Process improvement project Purpose: To reduce oncology readmissions	Sample: 4,551 oncology patients Setting: Cleveland	Oncology patients were admitted to palliative medicine and solid tumor oncology	Demographics, insurance, diagnoses	Baselines obtained from January 2014 to April 2014. The impact of the following interventions	Readmission rate went from 27.4% to 22.9, suggesting an annual cost savings of \$1.04 million	Strengths: Real-life design. Limitations:

<p>M., Shrotriya, S., Azzouqa, A.-G., Parala, A., Lagman, R., Bolwell, B. J., Kalaycio, M. E., & Khorana, A. A. (2016).</p>		<p>among patients with cancer who were admitted to palliative and general medical oncology services at the Cleveland Clinic</p>	<p>Clinic's main campus</p>			<p>was measured: (1) outpatient follow-up appointments within 5 business days of discharge, and (2) oncology nurse coordinator callbacks within 48 business hours of discharge.</p>		<p>Readmission rates may be underestimated</p> <p>This study is rated as LIII A using the JHEBP appraisal tool.</p>
<p>Otsuka, S., Smith, J. N., Pontiggia, L., Patel, R. V., Day, S. C., & Grande, D. T. (2019).</p>	<p>None</p>	<p>Retrospective cohort study</p> <p>Purpose: To evaluate the impact of interprofessional TOC service on 30-day hospital readmissions and emergency department visits</p>	<p>Total sample: 660</p> <p>Intervention group: 330 patients</p> <p>Comparison group: 330 patients</p> <p>Setting: Two outpatient clinics at an academic medical center</p>	<p>Intervention group: Patients with scheduled post-discharge visits at the post-acute care clinic within 30 days</p> <p>Comparison group: Patients without follow-up TOC service appointments</p>	<p>Demographics, insurance type, Charlson comorbidity index score, number of outpatient visits one year prior to discharge date, number of readmissions/ED visits 30 days prior to discharge date</p> <p>Outcome measures: Primary composite</p>	<p>Statistical analyses were performed using SAS version 9.4.</p>	<p>8.79% of the intervention group versus 13.94% of the comparison group were readmitted within 30 days</p>	<p>Strengths: Large number of patients in study.</p> <p>Limitations: Reutilization at hospitals outside of health system were not included.</p> <p>This study is rated as LIII A using the JHEBP appraisal tool.</p>

				Criteria: Discharged from an academic medical center between September 2013 and October 2014.	outcome was hospital reutilization (readmission or ED visit within 30 days) ED visit that lead to observation or admission was readmission only.			
Ouslander, J. G., Reyes, B., Diaz, S., & Engstrom, G. (2020).	none	Non-experimental study Purpose: To evaluate effectiveness of post-discharge contact on high-risk patients aged 75 and older	Intervention group: 202 patients Setting: 400-bed community teaching hospital	Patients aged 75 and older admitted to non-intensive care unit beds with a high risk condition: 1) hospital readmission within prior 30 days, 2) altered mental status, 3) fall, near syncope; volume depletion, dehydration, and/or acute	Occurrence of 30-day inpatient readmissions and ED visits within 30 days that did not result in admission	Root-cause analyses on each readmission performed by physicians and post-acute care staff using Hospital Medicine Reengineering Network tool and INTERACT quality improvement review tool.	18% were readmitted within 30 days of discharge. Of that 18%, 15 (40%) of them did not have post-discharge contact	Strengths: Real-life design. Limitations: This study is rated as LIIIA using the JHEBP appraisal tool.

				kidney injury; 4) shortness of breath, 5) generalized weakness; and 6) failure to thrive				
Rains, M. (2020).	none	Non-experimental Purpose: To evaluate the effectiveness of a standardized TOC plan on the readmission of heart failure patients	Sample: n=43 patients Setting: Community hospital	All were identified as heart failure patients	Occurrence of 30-day inpatient readmissions and compliance with the TOC bundle components: consistent education, discharge counseling, follow-up appointments scheduled prior to discharge, and a postdischarge follow-up	Root-cause analyses on each readmission to determine the number of TOC bundle interventions received by patients	The overall readmission rate was 16.28% and none of the patients who received follow-up calls were readmitted within 30 days	Strengths: Real-life design. Limitations: Small sample This study is rated as LIII B using the JHEBP appraisal tool.
Sampurno Ridwan, E., Hadi, H., Yu-Lin Wu, & Pei-Shan Tsai. (2019).	none	Systemic review (meta-analyses) Purpose: study the effect of transitional care interventions on and chronic	Ten electronic databases to identify studies that examined the effect of transitional care on COPD readmissions.	Studies included participants aged 18 years and older with COPD.	Occurrences of COPD admissions and transitional care interventions.	Comprehensive Meta-Analysis Software 2.0 was used to analyze data. Cochrane Collaboration Tool was used	TOC interventions significantly reduced all-cause readmissions by 28% COPD-related	Strengths: 13 randomized controlled trials. Large sample size. Limitations:

		obstructive pulmonary disorder (COPD)-related readmissions, all-cause hospital readmissions, and all-cause mortality rates in subjects with COPD		Thirteen RCTs were identified with 2,029 subjects.		to measure quality of trials.	readmissions by 44%	Some trials were subject to selection, performance, and detection bias. LI A using the JHEBP appraisal tool.
Strait, L. A., Fitzgerald, E., Zurmehly, J., & Overcash, J. (2019).	None	Qualitative study Purpose: To evaluate the effectiveness of the nurse and patient encounters during the TOC program in a faith-based community	44 participants in the study Setting: Congregation (church, synagogue, parish) in a large Midwestern three-hospital system	Congregation that had 20 or more members discharged from the hospital during the study period	Demographics, including number of participants, number who went to follow-up appointment, number who went ER, urgent care or were readmitted	Effectiveness of the TOC program was measured by completing two phone calls (72 hours and 30 days post-discharge) defined as the participation by the patient with the RN in both calls.	Baseline 30-day readmission rate was 9.4% in 2016 among 16,289 patients and 2.4% among the 44 participants in the study	Strengths: Real-life design. Limitations: Inconsistent ability to identify potential participants, slow process to get commitment from stakeholders. This study is rated as LIII B using the JHEBP appraisal tool.

Wanzhen Gao, Keleti, D., Donia, T. P., Jones, J., & Michael, K. E. (2018).	None	<p>Prospective cohort study</p> <p>Purpose: To investigate the effect of Managed Care Organization (MCO)-implemented post-discharge engagement.</p>	<p>Sample: Medicaid members (N = 149,748)</p> <p>Setting: Six Medicaid MCOs serving 4 states (southeastern Pennsylvania, Lehigh/Capital–New West Pennsylvania, Louisiana, South Carolina, and Nebraska and DC.)</p>	Medicaid members aged 5-64 years with one or more chronic conditions or only moderate chronic asthma	Outcome measures included thirty-day all-cause readmissions per MCO and the number of successful calls.	Analyses were performed using SAS EG 7.1 with a significance level of $P < .05$ as statistically significant for all comparisons.	Members who were successfully reached for post-discharge engagement, showed a 33% decrease in 30-day readmissions	<p>Strengths: Large sample that spanned across four states.</p> <p>Limitations: Variations in readmission rates, not all interventions were carried over during 2-year analysis</p> <p>This study is rated as LIII A using the JHEBP appraisal tool.</p>
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Appendix D

Figure D1 Transition of Care RN Survey

1. How many days, on average, have passed between the discharge date and when RNCM receives the notification to call member?
 - 1
 - 2
 - Other:
2. What is the expected RNCM response time?
 - 1 business day
 - 2 business days
 - Other:
3. How many outreach attempts do you need to make?
 - 1
 - 2
 - Other:
4. Is TOC Outreach made to:
 - Medi-Cal members
 - CMC members
 - Both
5. Is the TOC Assessment that UM completes different from what CM completes?
 - Yes
 - No (it is same)
6. Approximately, on average, how often do you actually reach a member?
 - 100%
 - 80-90%
 - 70-80%
 - less than 70%
7. How many cases do you get a week?
 - 1-5
 - 5-10
 - 10-15
 - 15+
8. What do you feel are barriers or challenges to the TOC process? Ideas on how these can be solved?
9. How many CM RNs handle TOC? Do you feel it is sufficient?
10. How could the TOC process improve?

Responses:

- | | | |
|--------------|--|---|
| 1. 1-2 weeks | 8. TOC Assessment questions vague; | needs/instructions, follow-up visit |
| 2. 1 week | TOC Assessment questions needs to be customized to address discharge | 9. 2 RNCMs, sufficient |
| 3. 2 | | 10. Improve assessment questions; get discharge notice sooner |
| 4. Both | | |
| 5. No | | |
| 6. 70-80% | | |
| 7. 10-15 | | |

Appendix E

Figure E1 John Hopkins Nursing Evidence-Based Practice Appraisal Tool

Johns Hopkins Nursing Evidence-Based Practice Appendix E: Research Evidence Appraisal Tool			
Evidence Level and Quality: _____			
Article Title:		Number:	
Author(s):		Publication Date:	
Journal:			
Setting:		Sample (Composition & size):	
Does this evidence address my EBP question?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Do not proceed with appraisal of this evidence
Level of Evidence (Study Design)			
A. Is this a report of a single research study? <i>If No, go to B.</i>			
1. Was there manipulation of an independent variable?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Was there a control group?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Were study participants randomly assigned to the intervention and control groups?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes to all three, this is a Randomized Controlled Trial (RCT) or Experimental Study →	<input type="checkbox"/> LEVEL I		
If Yes to #1 and #2 and No to #3, OR Yes to #1 and No to #2 and #3, this is Quasi Experimental (some degree of investigator control, some manipulation of an independent variable, lacks random assignment to groups, may have a control group) →	<input type="checkbox"/> LEVEL II		
If No to #1, #2, and #3, this is Non-Experimental (no manipulation of independent variable, can be descriptive, comparative, or correlational, often uses secondary data) or Qualitative (exploratory in nature such as interviews or focus groups, a starting point for studies for which little research currently exists, has small sample sizes, may use results to design empirical studies) →	<input type="checkbox"/> LEVEL III		
NEXT, COMPLETE THE BOTTOM SECTION ON THE FOLLOWING PAGE, "STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION"			

Johns Hopkins Nursing Evidence-Based Practice Appendix E: Research Evidence Appraisal Tool

<p>B. Is this a summary of multiple research studies? <i>If No, go to Non-Research Evidence Appraisal Form.</i></p> <p>1. Does it employ a comprehensive search strategy and rigorous appraisal method (Systematic Review)? <i>If No, use Non-Research Evidence Appraisal Tool; if Yes:</i></p> <p style="margin-left: 40px;">a. Does it combine and analyze results from the studies to generate a new statistic (effect size)? (Systematic review with meta-analysis)</p> <p style="margin-left: 40px;">b. Does it analyze and synthesize concepts from qualitative studies? (Systematic review with meta-synthesis)</p> <p style="margin-left: 80px;"><i>If Yes to either a or b, go to #2B below.</i></p> <p>2. For Systematic Reviews and Systematic Reviews with meta-analysis or meta-synthesis:</p> <p style="margin-left: 40px;">a. Are all studies included RCTs? → <input type="checkbox"/> LEVEL I</p> <p style="margin-left: 40px;">b. Are the studies a combination of RCTs and quasi-experimental or quasi-experimental only? → <input type="checkbox"/> LEVEL II</p> <p style="margin-left: 40px;">c. Are the studies a combination of RCTs, quasi-experimental and non-experimental or non-experimental only? → <input type="checkbox"/> LEVEL III</p> <p style="margin-left: 40px;">d. Are any or all of the included studies qualitative? → <input type="checkbox"/> LEVEL III</p>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<p>COMPLETE THE NEXT SECTION, "STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION"</p>				
<p>STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION:</p> <div style="border: 1px solid black; height: 150px; width: 100%;"></div>				

NOW COMPLETE THE FOLLOWING PAGE, "QUALITY APPRAISAL OF RESEARCH STUDIES", AND ASSIGN A QUALITY SCORE TO YOUR ARTICLE

Johns Hopkins Nursing Evidence-Based Practice Appendix E: Research Evidence Appraisal Tool

Quality Appraisal of Research Studies			
<ul style="list-style-type: none"> • Does the researcher identify what is known and not known about the problem and how the study will address any gaps in knowledge? • Was the purpose of the study clearly presented? • Was the literature review current (most sources within last 5 years or classic)? • Was sample size sufficient based on study design and rationale? • If there is a control group: <ul style="list-style-type: none"> ○ Were the characteristics and/or demographics similar in both the control and intervention groups? ○ If multiple settings were used, were the settings similar? ○ Were all groups equally treated except for the intervention group(s)? • Are data collection methods described clearly? • Were the instruments reliable (Cronbach's α [alpha] ≥ 0.70)? • Was instrument validity discussed? • If surveys/questionnaires were used, was the response rate $\geq 25\%$? • Were the results presented clearly? • If tables were presented, was the narrative consistent with the table content? • Were study limitations identified and addressed? • Were conclusions based on results? 	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	
Quality Appraisal of Systematic Review with or without Meta-Analysis or Meta-Synthesis			
<ul style="list-style-type: none"> • Was the purpose of the systematic review clearly stated? • Were reports comprehensive, with reproducible search strategy? <ul style="list-style-type: none"> ○ Key search terms stated ○ Multiple databases searched and identified ○ Inclusion and exclusion criteria stated • Was there a flow diagram showing the number of studies eliminated at each level of review? • Were details of included studies presented (design, sample, methods, results, outcomes, strengths and limitations)? • Were methods for appraising the strength of evidence (level and quality) described? • Were conclusions based on results? <ul style="list-style-type: none"> ○ Results were interpreted ○ Conclusions flowed logically from the interpretation and systematic review question • Did the systematic review include both a section addressing limitations and how they were addressed? 	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	
QUALITY RATING BASED ON QUALITY APPRAISAL			
<p>A High quality: consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence</p> <p>B Good quality: reasonably consistent results; sufficient sample size for the study design; some control, and fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence</p> <p>C Low quality or major flaws: little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn</p>			

Appendix F

Figure F1 Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

<p style="text-align: center;">STRENGTHS</p> <ul style="list-style-type: none"> • Teamwork and collaboration among RNs, Directors, Medical Directors • Designated Quality Improvement team • Transition of Care (TOC) process exists 	<p style="text-align: center;">WEAKNESSES</p> <ul style="list-style-type: none"> • TOC process may not be consistently followed • TOC process last updated in 2016 • Short-staffed • TOC process has been managed by two departments
<p style="text-align: center;">OPPORTUNITIES</p> <ul style="list-style-type: none"> • Time to update and improve TOC process • Gather feedback on what works and does not work • Streamline TOC to prevent overlapping outreach 	<p style="text-align: center;">THREATS</p> <ul style="list-style-type: none"> • Noncompliance • Delay in receiving Discharge Report from hospitals • Delay in notifying RN to follow-up with patient

Appendix G

Table G1 Budget/Costs

Estimated Improvement Costs for the First and Second Years		
Labor	First Year Costs	Second Year Costs
8 one-hour QI meetings	\$3,180	\$0
1 two-hour in-service trainings	\$1,100	\$0
Total	\$4,280	\$0

Table G2 Estimated Savings

Estimated Savings for First and Second Years		
Costs	First Year	Second Year
Total Annual Savings	\$107,352	\$107,352
Total Improvement Costs	\$4,280	\$0
Net Savings	\$103,072	\$107,352

Figure G1 Cost Benefits Analysis

Net benefits: Total annual savings minus total annual costs for Year One and Year Two

\$107,352	\$107,352	
(\$4,280)	\$0.00	
\$103,072	\$107,352	\$210,424

Benefit-Cost Ratio: Total annual savings/total annual costs

\$210,424/\$4,280 =

For every dollar spent on this project, we estimate saving at least \$49.

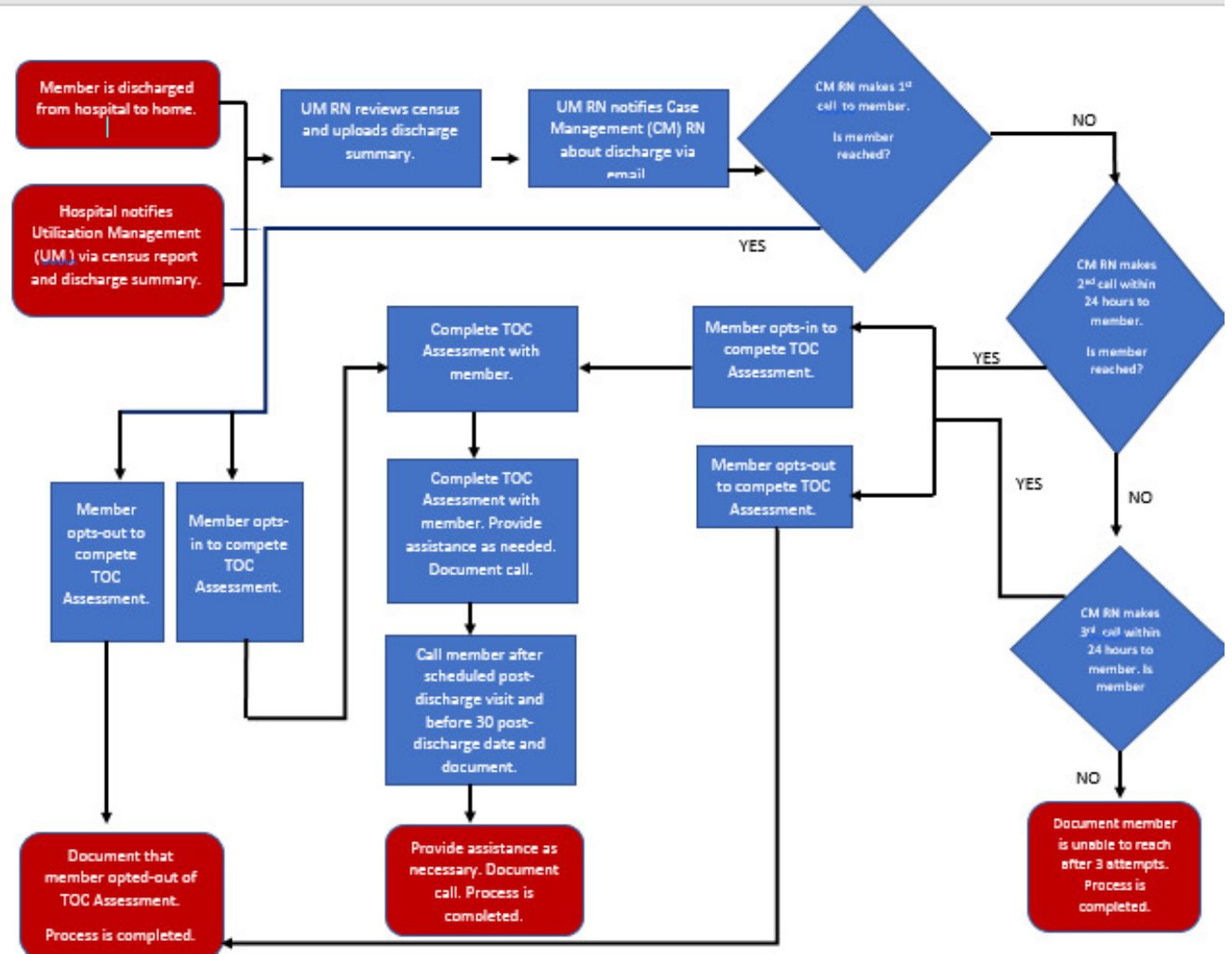
Appendix H

Figure H1 Kotter's Eight Step Process to Change



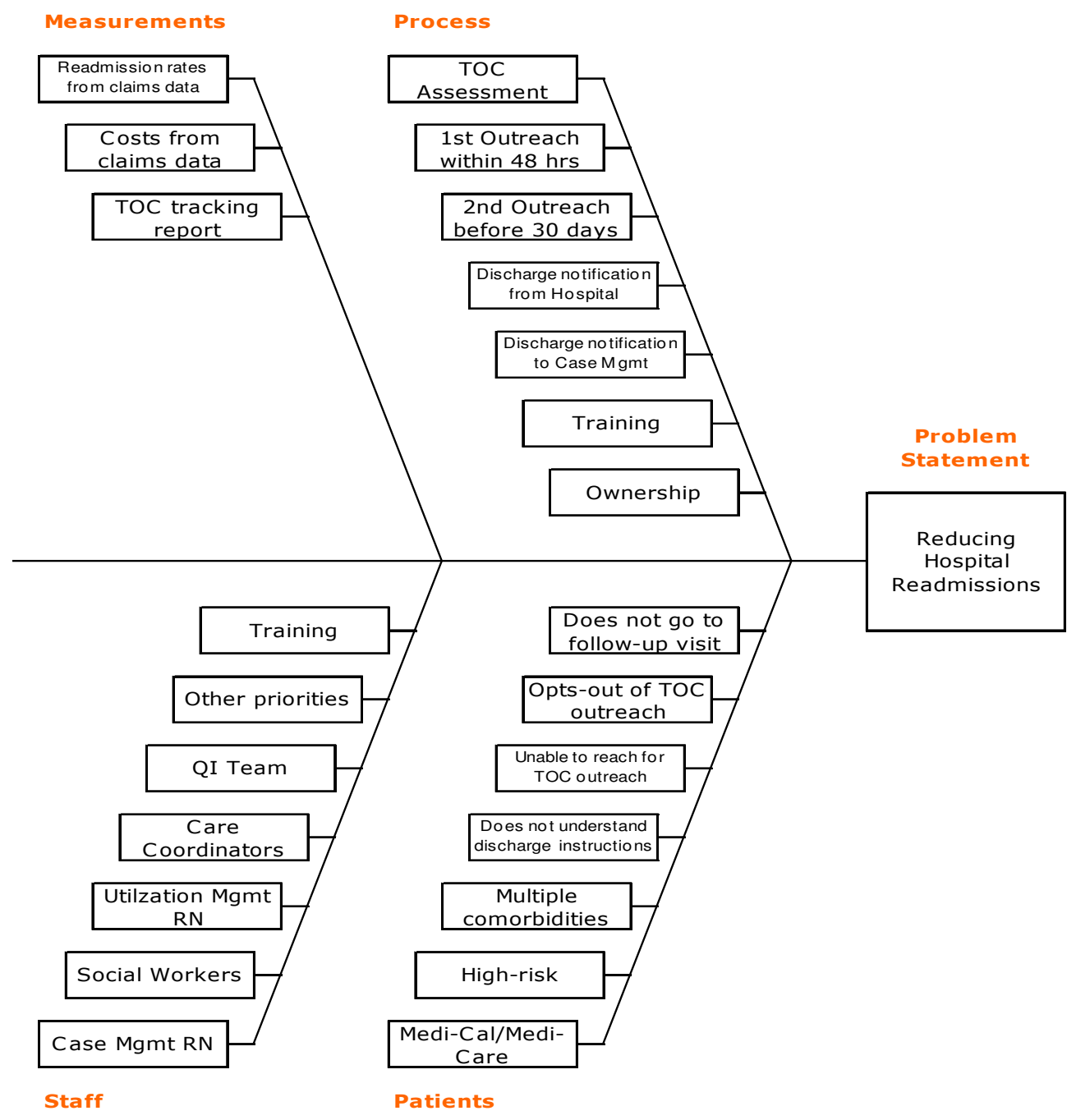
Appendix I

Figure I1 Process Map



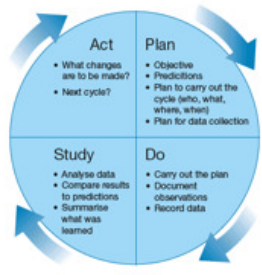
Appendix J

Figure J1 Fishbone Diagram: Cause and Effect



Appendix K

Figure K1 Plan-Do-Study-Act Cycles



Aim: To reduce hospital readmissions by 1.5% by December 2021

PDSA Cycle 4: RNCM to make second TOC outreach within 30 days of discharge notification

PDSA Cycle 3: Update TOC Assessment to include “teach back” information regarding follow-up visit and discharge instructions

PDSA Cycle 2: Provide RNCM with discharge notification within 24 hours of receipt

PDSA Cycle 1: RNCM to make initial TOC outreach within 48 hours of discharge notification

Appendix L

Table L1 System of Measures

Institute for Healthcare Improvement
 How-to Guide: Improving Transitions from the Hospital to Community Care Settings to Reduce Avoidable Rehospitalizations

V. System of Measures

Outcome Measures: Readmissions				
Measure	Description	Numerator	Denominator	Data Collection Strategy
30-Day All-Cause Readmissions	Percent of discharges with readmission for any cause within 30 days	Number of discharges with readmission for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	The number of discharges in the month Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days after the end of the measurement month. This report will: 1a. Pull all the discharges in the measurement month 1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery) The number of discharges after you remove the exclusions is your denominator (or "index discharges"). 2a. Through the unique medical record identifier, identify those (index) discharges that resulted in readmissions within 30 days of the discharge 2b. Remove exclusions (planned readmissions like chemotherapy, radiation, rehab, planned surgery, renal dialysis) The number of (index) discharges that resulted in readmissions within 30 days will be your numerator.
Readmissions Count	Number of readmissions (numerator for % readmissions)	N/A	N/A	Use the numerator specified in the measure above
30-Day All-Cause Readmissions for a Specific Clinical Condition or pilot population	Percent of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge	Number of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	Number of discharges in the month with the specific clinical condition or pilot population Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	See above

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Process Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Timely Handover Communication	<p>Percent of time critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home)</p> <p>Guidance: In order to determine whether critical information has been transmitted you will need to know what you mean by critical information. We recommend you work collaboratively with your receivers to make this determination. See change 4B for ideas.</p>	Number of discharges in the sample where critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home)	Number of discharges in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – for example, collect copies of the transfer forms and count them up, or keep a tally sheet
Patient-Friendly Post-Hospital Care Plan	Percent of patients discharged who receive a customized post-hospital care plan written in patient-friendly language at the time of discharge	Number of patients in the sample who receive a customized post-hospital care plan written in patient-friendly language at the time of discharge	Number of patients in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – for example collect copies of the care plans and count them up, or keep a tally sheet.

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Process Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Post-Hospital Care Follow-up	Percent of patients discharged who had a follow-up visit <u>scheduled</u> before being discharged in accordance with their level of assessed risk	Number of patients in the sample who had a follow-up visit <u>scheduled</u> before being discharged in accordance with their level of assessed risk	Number of patients in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – i.e., at discharge, review record to determine if appointments were made in accordance with risk assessment

Appendix M

Figure M1 Project Charter

Introduction

Hospital readmission rates have become a top priority for the United States (U.S.) healthcare system due to financial penalties as well as their implication on the quality of care provided. According to the National Committee for Quality Assurance (NCQA) (2020), readmission rates among patients 65 years and older with Medicare was 12.8% in 2018. Readmissions cost the U.S. healthcare system approximately \$17.4 billion each year (Baldwin et al., 2018) as hospitals are penalized and receive reduced payments for excess readmissions under the Hospital Readmissions Reduction Program (Centers for Medicare & Medicaid Services, 2020). Reducing readmissions have become a priority for hospitals and managed care organizations (MCOs) and they are seeking ways on how to remedy this issue.

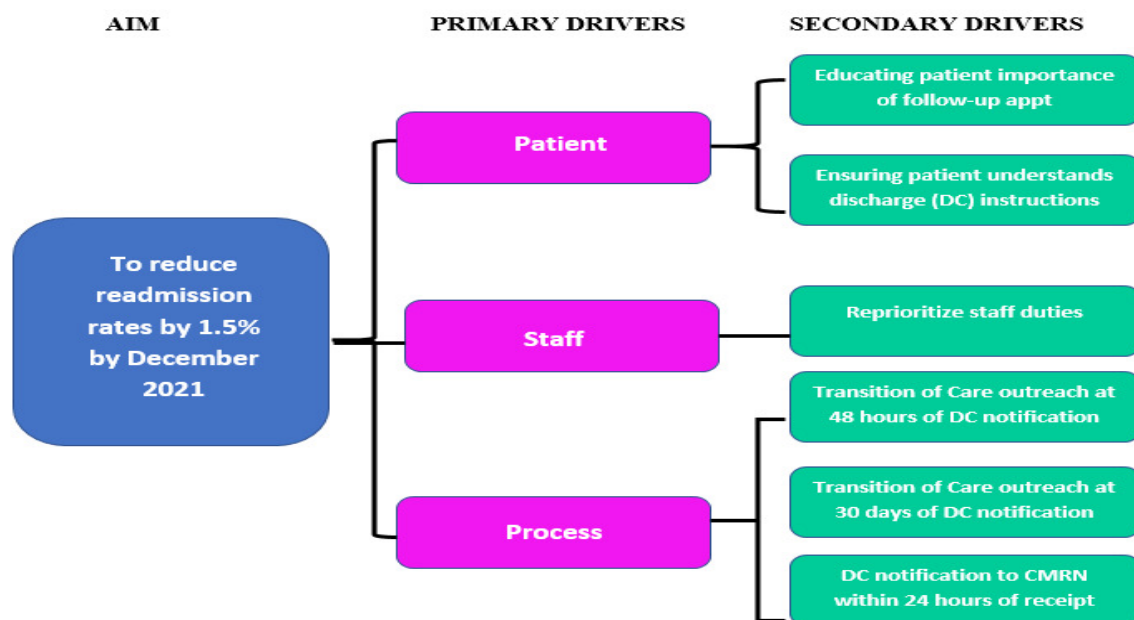
Transition of Care (TOC) refers to the process of transferring the care of patients between levels of care and facilitating the continuity of care to reduce adverse clinical outcomes. There are several interventions that can be included in the TOC process, one of which is post-discharge outreach to the patient. The timeliness of post-discharge outreach is an important determinant for readmission. A study has shown that timely post-discharge follow-up by a nurse, such as a phone call within 48 hours, can reduce readmission rates by 41% (Trueland, 2019).

Background

The Health Plan (HP) serves over 260,000 residents of a large San Francisco Bay Area county by working with community partners to provide health care services through its Medi-Cal (MC) and Cal MediConnect (CMC or Medicare-Medicaid Plan) insurance plan. The HP is contracted with nine hospitals within the county.

The timeliness of discharge notifications at the HP has greatly impacted the timeliness of the post-discharge outreach to the HP members. The author was tasked to follow-up on a HP member recently discharged from an acute setting to home and discovered that patient had already been readmitted during the time between the date of discharge and the date the author was notified to make outreach. The author surveyed the designated TOC Registered Nurse Case Managers (RNCMs) and discovered that, on average, there is one- to two-week lag between the discharge date and when the RNCM received notification to call the member (see Appendix D). The author reached out to the Medical Director, Utilization Management (UM), Case Management (CM) and Quality Improvement (QI) and learned that reducing readmissions was an organizational priority as was optimizing the TOC process. Improvements to the current TOC process and implementing new interventions could help to reduce excessive readmissions as well as have a positive financial impact to the HP. A driver diagram is set up to help guide these changes (see Figure 1).

Figure 1 Driver Diagram



Global Aim

The global aim of this project is to reduce readmissions by 1.5% to 7.37% from a baseline of 8.87% for CMC members and to 6.8% from a baseline of 8.3% for MC (see Appendix B) within one year from the onset of the improved TOC process. This will be done by enhancing the TOC process as the Institute for Health Improvement (IHI) (2009) suggests that avoidable readmissions can be reduced by improving transitions and care coordination between care settings.

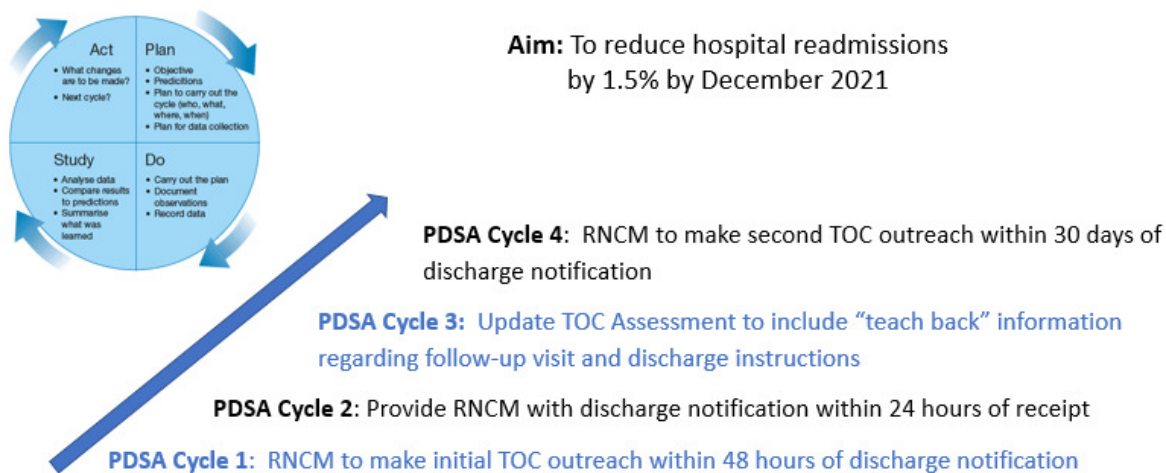
The process begins with discharge notification from the hospital. The process ends with the completion of TOC outreach by the RNCM. By working on the process, we expect 1) reduced readmission rates by 1.5% within one year from the onset of the updated TOC process by 2) making two post-discharge outreach attempts within 48 hours and 30 days of discharge notification and 3) improved care coordination and support by confirming and documenting that a post-discharge visit is scheduled, and 4) discharge instructions are understood by the member. It is important to work on this now because 1) some members are at higher-risk for readmission, 2) members are not being contacted within 48 hours for post-discharge for TOC assessment and 3) to follow-up on post-hospital care coordination or needs. Currently, per the RNCMs' responses via survey, they are not performing TOC outreach until one to two weeks from discharge notification.

Project Description

There are four plan-do-study-act (PDSA) cycles in this project (see Figure 1). The first PDSA cycle is to make TOC outreach within 48 business hours of discharge notification. This PDSA will be the main focus, as it directly involves interacting with the newly discharged

patients at a critical point in time, which will have the most impact on reducing readmission rates and the literature supports making contact within 48 hours is most impactful.

Figure 1 PDSA Cycles



The following population, intervention/issue of interest, (optional) comparison, outcome (PICO) question will guide this project and the plan-do-study-act (PDSA) cycle being focused on: Will Transition of Care outreach within 48 hours (I) to newly discharged members (P) reduce readmission rates (O)?

Specific Aim

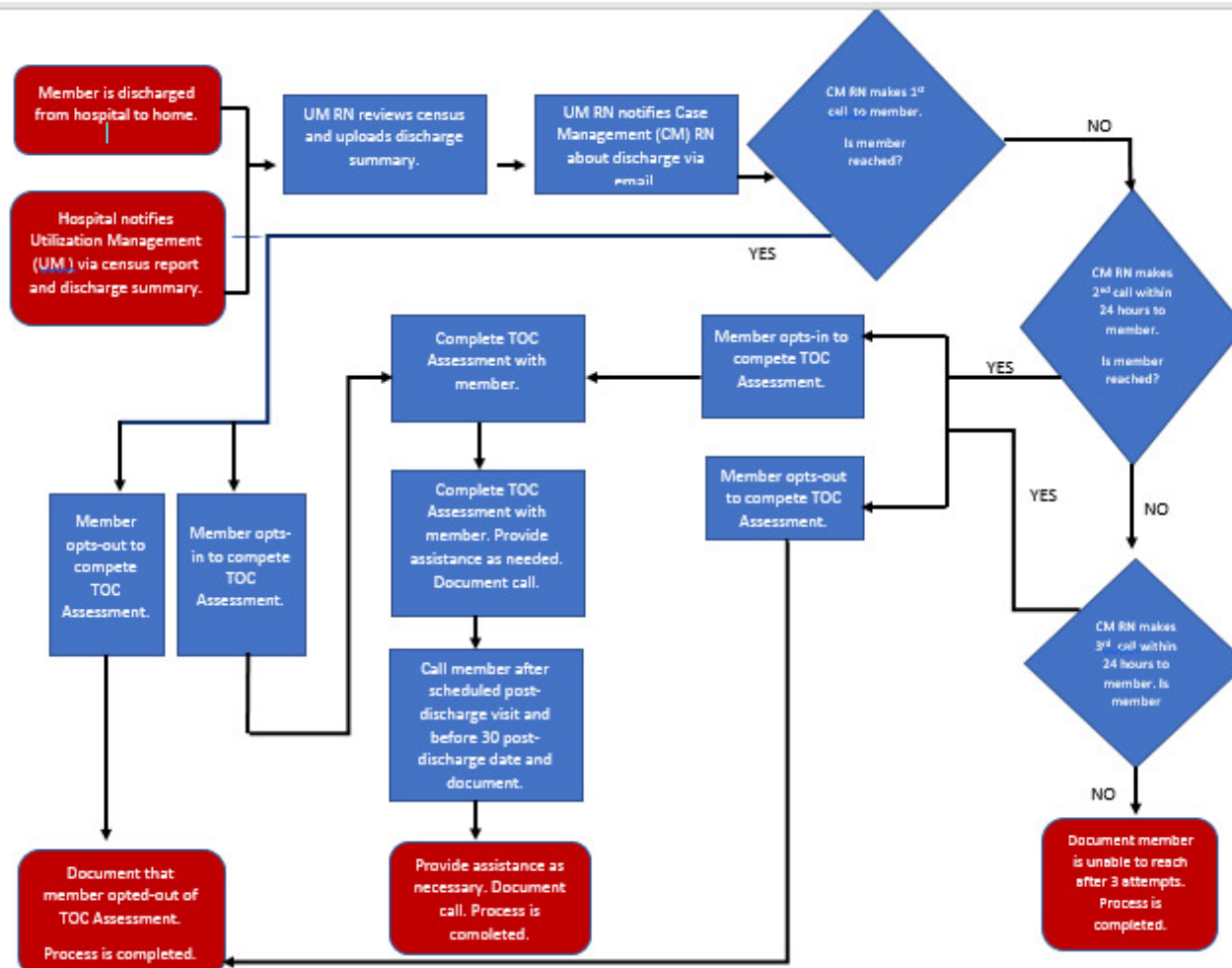
The specific aim statement for this PDSA is: We aim to improve the TOC process at the HP. The process begins with discharge notification. The process ends with making TOC outreach within 48 hours of discharge notification. By working on this project, we expect to reduce readmission rates by 1.5% in one year from the onset of the updated TOC process by making the initial TOC outreach within 48 business hours of discharge notification. It is important to work on this now because 1) some members are at higher-risk for readmission, 2)

members are not being contacted within 48 hours for post-discharge for TOC assessment and 3) to follow-up on post-hospital care coordination or needs.

Methodology

The IHI (2009) states that the rate of avoidable hospital readmissions can be reduced by improving transition processes and care coordination between care settings. The IHI's Transitional Care Model from "Effective Interventions to Reduce Rehospitalizations: A Compendium of 15 Promising Interventions," (Institute for Healthcare Improvement, 2009) helped guide this project as it contains components focused on post-discharge coordination of care. Kotter's 8-Step Process for Leading Change provided a framework to guide the improvements in the TOC process and a process map was also developed to illustrate the details and sequence of the project and to guide decision-making (see Figure 2).

Figure 2 Process Map

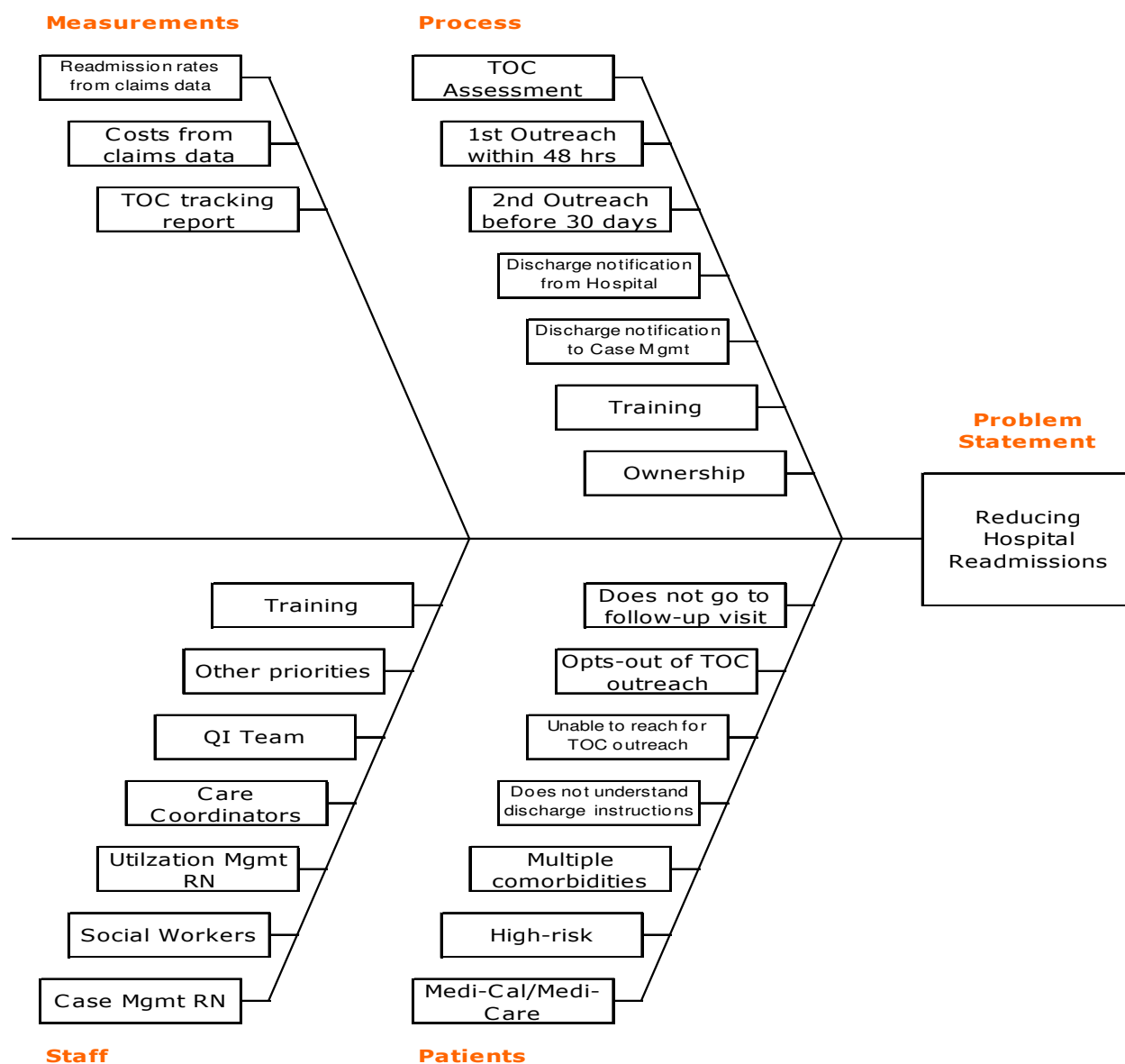


Kotter's 8-Step Process for Leading Change is used to develop the improvements for the TOC process. Kotter model provides a process that drives practice improvement change, starting with creating a sense of urgency, then building a guiding coalition, forming a strategic vision and initiatives, enlisting a volunteer army, enable action by removing barriers, generating short-term wins, sustaining acceleration, and finally, instituting change (Kotter, 2020).

Some barriers identified during the microsystem assessment and by the CMRNs were the delay in receiving discharge notifications (see Figure 4) and needing to update the TOC assessment to include free-text fields to input information about the member's follow-up appointment and a narrative to describe whether the discharge instructions were understood.

Management would help to remove these barriers by working with the facilities to ensure they notified the HP's UM department within 24 hours of a member's discharge and to ensure the UM department notified the RNCM within 24 hours of receipt to prevent any interruptions in the TOC workflow.

Figure 4 Fishbone Diagram: Cause and Effect



The first PDSA cycle will include making timelier outreach to newly discharged members, specifically within 48 business hours of discharge notification (see Appendix K). Currently, the TOC process states outreach should be made within three business days of receiving discharge notification. However, the assigned TOC RNCMs report they have up to one week. Under the new changes proposed, telephone outreach will be made within two business days from discharge notification. This will be done by shifting the current duties of the two RNCMs assigned to TOC outreach. Currently, their duties include telephone outreach and individualized care plan creation for two populations – newly eligible members of the HP and TOC members, or those recently discharged from the hospital. This project proposes to have the two RNCMs focus solely on the TOC cases, which would be cost-effective as there would be no need to hire additional staff. Their newly eligible cases would be evenly distributed among the other nine RNCMs, which would not greatly impact their current workload. This PDSA will take priority over the other three cycles as it involves direct contact with the newly discharged members at a critical point in time that will have the most impact on readmission. Also, as previously mentioned, the literature supports post-discharge communication within 48 hours as key to reducing readmissions.

The second PDSA cycle will be to provide the RNCM with the discharge notification within 24 hours of receipt from the discharging facility (see Appendix K). This will be done by designating a UM coordinator and UM RN to notify the TOC RNCMs of the discharge report within 24 hours of receipt from the hospital. Notification would be made via email.

The third PDSA cycle will be updating the TOC Assessment tool to include detailed documentation on the member's follow-up appointment as well as "teach back" information regarding the discharge instructions (see Appendix H). Currently, the tool only requires a yes or

no answers to the questions “Do you have a follow-up appointment with your doctor scheduled?” and “When you left the [hospital/skilled nursing facility], you should have been given some paperwork with instructions with what to do after you get home, as well as a list of your medications, and any follow-up doctor appointments. Do you understand the information that was given to you?” The modifications would include individual free-text fields for each question where the RN can document the date, time and provider for the follow-up visit and a “teach back” summary of the discharge instructions and signs and symptoms to be aware of that require medical attention. This interaction would validate that the member has a post-discharge visit scheduled, preferably within seven days of the discharge date, and their understanding of the discharge instructions.

The fourth PDSA includes creating an additional outreach task to the TOC process, which would be for the RNCM to call the member after the scheduled post-discharge follow-up appointment and before the 30-day mark to review their status and inquire if the member has additional care coordination needs.

Measurements

The goals of this project are to reduce readmission rates by 1.5% through two post-discharge follow-ups within 48 hours and 30 days of notification and improved care coordination and support through validating and documenting the patient’s understanding of the discharge instructions and signs and symptoms related to the admitting diagnosis. The System of Measures from IHI’s “How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations,” (Rutherford et al., 2013) will be used as a guide to evaluate the success of the interventions and the goals.

Measurement Strategy

The outcome measure for this project is: 30-Day Readmission Rate (see Table 1). This is a reliable source of data because it will capture specific the number of readmissions within a 30-day time period at each hospital, which can be easily tracked and compared against previous data to determine whether the interventions have been effective in reducing readmission rates.

The process measures include: TOC follow-up within 48 hours of discharge notification, TOC follow-up within 30 days of discharge notification, Timely Handover, and Post-Hospital Care Follow-up (see Table 1). These will helpful in determining whether patients have been contacted in a timely manner and received critical information, such whether a post-discharge visit was scheduled and discharge summary was provided, which will facilitate self-management of their condition. The balance measure (see Table 1) is to track whether there has been an increase in new admissions compared to the previous year's data.

The outcome, process, and balance measures will be built into the reporting tools developed by the QI team. Additionally, a report created by the QI and/or Information Technology department will be created to track the timing of the post-discharge outreach calls and if they were completed within 48 hours and 30 days.

Table 1 Family of Measures

Measure	Description	Data Collection Strategy	Target
Outcome Measures			
30 Day Readmission Rate	Percent of members readmitted within 30 days (readmissions/admissions)	QI to review claims data	MC: 8.3% CMC: 8.87%
Process Measures			
TOC follow-up within 48 hours of discharge notification	Percent of members discharged who received TOC call within 48 hours	CM and Information Technology (automated data source)	100%
TOC follow-up within 30 days of discharge notification	Percent of members discharged who received TOC call within 30 days	CM and Information Technology (automated data source)	100%
Timely Handover	Notification of discharge from UM to CM within 24 hours	UM, CM and Information Technology (automated data source)	100%
Post-Hospital Care: Follow-up visit	Percent of patients discharged who had a follow-up visit scheduled	CM and Information Technology (automated data source)	100%
Post-Hospital Care: Discharge instruction comprehension	Percent of patients discharged who verbalized they received and understood their discharge instructions	CM and Information Technology (automated data source)	100%
Balancing Measure			
New Admissions	Number of new admissions per month to not exceed same month total of previous year	QI to review claims data	0%

Budget

The initial startup costs for this project can be estimated as follows: 8 one-hour QI meetings and one two-hour in-service training for the nurses. The QI meetings would include three directors (average salary of \$83/hour), one medical director (average salary of \$100/hour), and one QI nurse (average salary of \$50/hour). The QI meetings would cost \$3,180. The in-

service training would cost \$1,100 for 11 nurses. The estimated costs for the first year of implementation would be \$4,280 (see Table 1).

Table 1 Estimated Improvement Costs

Estimated Improvement Costs for the First and Second Years		
Labor	First Year Costs	Second Year Costs
8 one-hour QI meetings	\$3,180	\$0
1 two-hour in-service trainings	\$1,100	\$0
Total	\$4,280	\$0

Specific data on the costs of readmissions for the HP is not available. However, this project will base the estimated costs of readmission on the medical group located in a large western state in the U.S. where Baldwin, Zook and Sanford (2018) performed their prospective cohort study. In fiscal year 2015, this medical group's estimated cost of readmissions was \$7,156,800 and the 30-day all-cause readmission rate was 12.3% (Baldwin, Zook & Sanford, 2018). If the improvements from this project have an estimated impact in reducing readmissions at 1.5%, annual net savings would be \$107,352 (see Table 2). For every dollar spent on this project, we estimate saving at least \$49.

Table 2 Estimated Savings

Estimated Savings for First and Second Years		
Costs	First Year	Second Year
Total Annual Savings	\$107,352	\$107,352
Total Improvement Costs	\$4,280	\$0
Net Savings	\$103,072	\$107,352

Team & Sponsors

The departments involved in this project are UM, CM, and QI, and they are overseen by two Medical Directors. UM consists of four Discharge Planning and Inpatient Review RNs, two Prior Authorization RNs, one RN Manager, one Director, and 10 remaining staff consisting of care coordinators and their supervisor. CM has is comprised of 11 RNCMs (six full-time and five temporary employees), six Social Workers, one RN supervisor, one Nurse Manager, one RN Director and 17 care coordinators. QI has two QI RNs, two Managers, and one Director.

Appendix N

Figure N1 IRB Non-research Determination Form

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

STUDENT NAME: Karen Calura Bayan

DATE: 7/31/2020

SUPERVISING FACULTY: _____.

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 a part of usual care . ALL participants will receive standard of care.	X	
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.	X	
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.	X	
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.	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 NO 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., not 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.