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Transitions of Care: Raising Awareness and Improving Identification of the Social Determinants of Health

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Abstract

Problem: Hospital readmission rates have steadily climbed in the United States and the cost of unplanned readmissions can be detrimental. It has been identified that greater discharge preparation and quality care coordination greatly impacts the patient's plan of care and reduces the risk of unplanned 30-day readmissions. Transition programs help reduce the psychosocial barriers that prevent patients from being able to self-manage their conditions outside the acute setting and help patients effectively navigate the through the continuum of care.

Context: Research has shown that when the social determinants of health (SDOH) barriers are identified appropriately and early-on, this can decrease a patient's risk of unplanned readmission. Audit results show opportunities for improvement in the program through development of a screening tool that will help clinicians appropriately identify psychosocial issues and increase educational awareness of the Transition Program (TP) as well as SDOH.

Interventions: Several interventions were done to help increase low-elevated transitional support level referrals to TP: development of a psychosocial assessment tool, in-service meeting to review the referral process of the TP, and staff education to raise awareness and importance of identifying SDOH in patient care outcomes.

Measures: Using HealthConnect and EPIC data to track weekly number of referral cases. Monitor if the development and implementation of the tool has increased the number of low-elevated TSL referrals to the Transition Program.

Results: There was a 25% increase in low TSL referrals. Clinicians reported increased awareness and knowledge about SDOH and Transition Program interventions.

Conclusions: Readmission and identifying SDOH barriers is a complex challenge to healthcare and requires interdisciplinary team collaboration and multimodal interventions.

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Problem Description

Nationwide, over 3.3 million hospital readmissions cost approximately $41.3 billion in

2011 (NEJM Catalyst, 2018). Medicare launched the Hospital Readmissions Reduction

Program (HRRP) in which hospitals now undergo severe financial penalties for high rates of

30-day readmissions. As of 2014 the third year since the launch of HRRP, Medicare further

increased the maximum penalty for hospitals and expanded the number of conditions that

underwent evaluation. The conditions now include six conditions: heart attack, heart failure,

pneumonia, chronic obstructive pulmonary disease (COPD), elective hip and knee

replacement, and coronary artery bypass graft (CABG) (NEJM Catalyst, 2018). Hospitals

could now lose up to 3% of their Medicare payments (Rau, 2016). Hospital readmissions

pose a significant financial loss for hospitals. And the cost is still rising. A recent 2015 study

by the Agency of Healthcare Research and Quality found the average cost of readmission for

a Medicare patient of 65 years and older averaged to be $13,800 (AHRQ, 2015). Besides this

loss for the hospital, 30-day readmissions also pose a detrimental effect on patient care as it

widens the gap in the care continuum, is associated with increased mortality rates, and adds

to patients' stress of returning to the hospital instead of healing in a place of comfort at home

(Stephen, Mark, & Eric, 2009).

With the rising penalties comes higher scrutiny into the additional factors that impact

readmission for patients. It has been recently recognized that social determinants of health

(SDOH) such as food insecurity and transportation can also significantly impact patient

outcomes, as much as 40% (Thomas-Henkel, & Schulman, 2019). These determinants,

specifically social determinants, are conditions that influence the health of both individuals and the community as a whole (Centers for Disease Control and Prevention, 2014). Many complex care programs are emerging with the primary goal to tackle these social, economic, and environmental factors that lead to poorer health outcomes. Some of the ways organizations are looking into to tackle the barriers of care is using data to develop psychosocial concerns assessment tools and tracking referrals to community or outpatient resources.

Rates of readmission may also serve as a key quality metric for hospitals as high rates may be an indication of inappropriate discharge planning and care coordination (National Committee for Quality Assurance, 2019). Given the complex nature of hospital readmissions, there are strategies that hospitals can utilize to lower the rate of unplanned readmissions. Proper discharge preparation and greater quality care coordination can greatly impact the patient's plan of care and reduce the risk of unplanned readmissions.

The organization in its effort to reduce hospital readmission rates and improve the delivery of care, it has developed transition in care programs that consist of various elements such as risk stratification, standardization of discharge summary, medication reconciliation, a post-discharge call, and timely physician follow-up (Tuso et al., 2013). It has been refocusing its efforts on reducing readmission through transition programs in the region that are designed to tackle the challenge of addressing social determinants of health (SDOH).

Transition of care programs can serve a pivotal role in reducing gaps in communication between inpatient and outpatient providers. These outreach programs focus directly on the barriers that prevent patients from being able to self-manage their conditions outside the

acute setting and help patients navigate the transition from the acute setting to home by providing post-discharge 30-60 day case management follow-up.

Available Knowledge

There is a growing number of evidence in literature supporting that SDOH has a large influence on a patient's risk of readmission and their health outcomes. These social determinants represent the health inequity found in individual and population health. They impact one's opportunity of equal access to health care (Centers for Disease Control and Prevention, 2014). However there is a gap in research knowledge on the best evidence-based practices for identifying these issues in the patient population. This project will aid in addressing this gap in knowledge.

A PICO statement was used to conduct the literature review to support this quality improvement project. The PICO search questions: For adult patients being discharged from the hospital (P) how can additional interventions such as assessment checklists/tools that identify psychosocial issues, educating staff on the social determinants of health, and referrals to community resources such as transition programs (I) as opposed to just using the standard discharge process for patients (C) help reduce readmission rates and improve patient outcomes post discharge (O)?

This literature review and PICO statement was used to review the impact of the social determinants of health on patient readmissions, how transition programs can help in identifying the psychosocial issues, and interventions that can be implemented to reduce hospital readmissions. The PICO statement guided further research in the electronic databases of CINAHL and PubMed. The keywords "readmission", "transition program", "social determinants of health", and "psychosocial factors" were used to help filter for peer-reviewed

journal articles. Five peer-reviewed articles ranging from 2010 to 2019 were selected for review.

The article by Jencks, Williams, and Coleman (2009) explores the patterns and processes that surround patient rehospitalization with the goal to better understand the nature of why rehospitalizations occur. The study addressed three key components: the frequency of unplanned and planned 30-day readmission, the timeframe in which the patients are at elevated risk for readmission, and the frequency of follow-up care once the patient has been discharged from the hospital. The Cox proportional-hazards model was used to assess the patient-level predictors of rehospitalization. The study found the top 10 reasons for readmission included heart failure, pneumonia, COPD, psychoses, GI problems, cardiac stent placement (circulatory diagnoses), major hip/knee surgery, vascular surgery such as amputation, major bowel surgery, and respiratory or ventilation issues. Study analysis shows that the risk of rehospitalization post-discharge still persists over time. It was additionally found that more than half of the patients with a medical condition who had been readmitted within 30 days had not been seen by a physician for a post-discharge follow up care. The patterns identified in this research helps my quality improvement project in proving the need for interventions that make sure the patients discharged receive the appropriate follow-up care in a timely manner in order to reduce their risk of rehospitalization.

Leppin et al. (2014) conducted a systematic review and metanalysis of randomized trials in order to synthesize the effectiveness of interventions on 30-day patient readmissions. The interventions were activity-based and ranged from telephone follow-up, medication reconciliation, home visits, caregiver education and telemonitoring. The interventions studied also include coordinated care between inpatient and outpatient settings. Study findings

revealed a consistent and beneficial effect from the interventions implemented on reducing the risk of 30-day readmissions. These interventions rose in effectiveness the more complex and supportive they were, meaning direct face-to-face patient engagement that involved both patients and their caregivers in forming the plan of care proved to be more effective. Comprehensive interventions that took in the patient's capacity for self-care during their transition out of the acute setting also were noted to be of increased benefit in the long term for patients as it considers their healthcare capabilities at the moment of discharge and gives the patient their autonomy in planning their care. The interventions highlighted in this study to be of increased effectiveness are all interventions that the TP can provide to clients who are at risk of readmission. The study strengthens the claim that effective interventions are not linear in nature and need a multidisciplinary approach in order to fully meet the patients' needs.

Kansagara et al. (2011) conducted a systematic review of validated readmission risk prediction models and their performance in accurately predicting readmission risk. It is acknowledged that transitional care interventions can reduce readmissions and that the use of readmission risk assessment could greatly aid in directing resource-intensive interventions to those in the population with the highest risk of readmission. The use of readmission assessment models are ideal as both a quality metric and a trigger for transitional care planning early during hospitalization. 26 readmission risk prediction models were found to be in use in clinical, research, and administrative settings. About half of the models were designs mainly to calculate readmission risk for hospital comparison purposes and the other half to identify high-risk patients who would benefit from transitional care. Most of the 26 models utilized patient-level factors such as general demographic data and medical comorbidities however these models were found to still have poor predictive abilities. Instead, the authors suggest that the

main factors for readmission may not lie at the patient-level, but at the hospital and health-system level. Factors such as timely post-discharge follow up, care coordination with the patient's primary care provider and the outpatient team, and medication reconciliation may have higher association on a patient's risk for readmission. The study calls for the need to assess the contributions of psychosocial factors in readmission risk prediction as they could aid in triaging the level of interventions being given to patients. This risk stratification model that prioritizes resource depending on patient population is something that needs to be further explored. This study connects to my project in the call for a better approach in developing more inclusive readmission risk models with higher predictive abilities. But the article also highlights the limits of my project in acknowledging that the development of any standardized predictive tool is a complex endeavor and will require the investment of time and cost to develop.

Thorsteinsdottir et al. (2016) aimed to compare the effectiveness of an integrated care transition program (CTP) on the outcomes of 30-day readmission. The authors conducted a retrospective cohort study in which patients at high risk for readmission were assigned to a CTP follow-up by a multidisciplinary team. The interventions consisted of but were not limited to an initial home visit by a nurse practitioner, medication reconciliation, an assessment of cognitive and functional status and environmental safety, and creation of an action plan as well as goals of care moving forward. A reduction in the 30-day rehospitalization rate was observed among patients enrolled in the CTP in comparison to the control who were not enrolled. However it was also noted that the 30-day reduction rate was not sustained consistently when observed alongside the 180-day rehospitalization rate. The study points out that advanced care planning is critical in lowering a patient's risk of

rehospitalization however there needs to be further studies on what are the best predictors and factors of sustaining the low rates of readmission. This finding connects to my quality improvement project as it identifies the critical role that transition programs have in improving patient outcomes of care. The diverse interventions that CTPs implement tie further into the idea that transitional care interventions are complex and need collaborative efforts from the interdisciplinary team in order to reduce the risk of readmission.

Flythe, Hilbert, Kshirsagar, and Gilet (2017) conducted a prospective study on the association between 30-day hospital readmission among dialysis patients and their psychosocial factors of hospital-assessed depression, health literacy, social support, and self-rated health. Factors such as limited health literacy, depression, and poor social support have been linked to higher readmission odds in the general population as they contribute to lower quality of life and treatment noncompliance. The psychosocial screening utilized multiple screening instruments including the Center for Epidemiologic Studies Short Depression Scale (CES-D-10), the Medical Outcomes Study (MOS) Social Support Survey, the Rapid Assessment of Adult Literacy in Medicine (REALM), and the Short-Form 12 Health Survey. Screening results found that patients with positive screening for the psychosocial factors of depression, low health literacy, and poor social support were significantly more likely to have a 30-day unplanned readmission than those with negative screenings. While the association of psychosocial factors found in this study towards 30-day readmission does not imply causation, it does aid in proving the need to have more comprehensive and focused discharge screenings for in-patient settings. In addition, conducting such psychosocial screenings would allow inpatient case management to collect data on where to redirect hospital resources towards. The study also raises the question of when would be the optimal time for psychosocial screening

(admission v. discharge). This research helps my quality improvement project in that it highlights the potential importance of using select psychosocial factors in identifying vulnerable patient populations that need targeted discharge and transition services.

Rationale

In 2015, Gabriel Escobar and a team of researchers demonstrated the effectiveness of using predictive models when planning for patient discharge and improving quality of care through evidence-based testing (Escobar, 2015). The development of the score-based risk adjustment score serves as an early-warning system that provided clinicians with a severity of illness score and co-morbidity score in real time. The score allows clinicians to track the rate of readmission within seven to 30 days. Currently, the score from this predictive model is imbedded into the electronic health care record (EHR) for the organization of the TP. The risk assessment generates a risk score and the higher the score the more likely the patient would be readmitted within 30 days if they did not receive the help they needed after discharge. Once a score is generated, patients would be assigned a Transitional Support Level (TSL) by a clinician. However upon further research, it came to light that while the risk score served well as an early-warning medical system for clinicians, it did not take into account any SDOH barriers that could prevent patients from receiving the care they needed to stay out of the hospital. The risk score was and is still medical condition based and the TSL score assigned is based on clinical judgement that may vary from clinician to clinician.

Healthcare is perpetually undergoing changes in policy and clinical practices that aim to deliver more effective and efficient quality care. This quality improvement project focuses on addressing that absence of the SDOH in the risk score. But to

undergo such changes, organizations must adapt their operations and workflow in order to meet the standards set by the new policies and reform. One of the vital factors in making sure the implemented changes are sustained is organization readiness for implementing change (ORIC). Prior to implementing any successful improvement changes in the system be it at the unit level or organization level, one must examine the psychological, structural, and environmental factors surrounding the setting of change (Sharma et al., 2018).

This quality improvement project utilizes Kotter's 8-Step Process for Leading Change as the framework for creating a culture of change inside the Transition Program (Appendix G). The 8-Step Process Model developed by Dr. John Kotter outlines how to implement a successful and sustained organizational change in a way that minimizes resistance to that change. Each step of the process builds upon the previous and serves as the basis for why the intervention was expected to work.

The first step of the model was to create a sense of urgency by identifying the gaps in care and opportunities for improvement changes in the system. This was done through creating a data report of patients being discharged from the hospital and presenting this report to the department managers as well as the staff during staff meetings. The data presented brought to light the need to review the referral process and the gap among clinicians in knowledge regarding the five psychosocial concerns that were recently added to the readmission risk criteria. In addition the data collected was used to compare the rate of case referrals at this TP location to other locations and subsequently highlight the negative impact of the extremely low number of low elevated TSL referral cases at this particular TP. The second step of the process is to build a guiding coalition. This meant assembling a team that could support and

lead the change effort. The coalition for this project consisted of the department managers, medical social workers, Directors of Continuum of Care Department, and myself. The third step is to develop a change vision that will guide the strategies for achieving that vision and direct the change effort. The fourth step is enlist a volunteer army who will drive the change. The group enlisted are the patient care coordinators who work directly with patients. The fifth step is to enable action by removing the barriers to change. This was done by identifying and analyzing the inefficient processes and structures that undermined the vision. These obstacles were addressed during staff meetings and nontraditional ideas and actions were encouraged to be discussed. The sixth step is to generate short-term wins by planning for ways to show visible performance improvements and recognizing and rewarding those involved in making the change. The small wins in my project were achieved by generating a tool and tracking progress improvements in the number of weekly case referrals. These wins were recognized and communicated to the transition team and in-patient Patient Care Coordinators (PCCs). The seventh step is to sustain acceleration. This was done by continually discussing what further changes could be done to identify and more efficiently capture low-elevated TSL patients. The eighth final step is instituting a change that will stay long after the initial implementation. The interventions will help to strengthen inter-departmental collaboration and build a bigger multidisciplinary team. Kotter's framework for leading a sustainable change guided the interventions and helped support why the changes were necessary and successful.

Specific Project Aim

One of the unique aspects of this referral-based transition program in the region is that it is fully equipped to handle complex psychosocial patients because it employs the highest number of social workers and pharmacists. The risk score developed by Dr. Escobar was

meant to serve as a predictive model that identified risk factors and patterns that increased a patient's likelihood of a non-elective readmission. However since its implementation in the organization, it was deemed lacking in that when generating a risk score it did not take into account any psychosocial barriers that could prevent patients from receiving the post-discharge care they needed. It only took into account medical conditions that could be marked in the charting. Once a risk score was automatically generated per the electronic health record (EHR) system, patients would be assigned a Transitional Support Level (otherwise commonly known as TSL) accordingly by a clinician. Only patients who scored Low-elevated, Medium or High TSL in the EHR would be automatically referred to the transition program. To elevate a low TSL, it was determined by the organization at the upper regional management level, that at least one of five psychosocial concerns had to be met: transportation, caregiver support, homelessness, meal insecurity, and or housing insecurity. These are known as the five psychosocial concerns (5Ps).

The purpose of this quality improvement project is to improve the referral rates of low-elevated TSL patients in the Transition Program (TP) through various interventions. The microsystem assessment revealed that there was no standard consistent assessment that clinicians used in identifying psychosocial concerns during discharge assessment and low-elevated referrals were determined using clinical judgement per each clinician. While in-patient medical social workers (MSWs) would be ideal in assessing for the psychosocial concerns, workflow observation revealed that in-patient Patient Care Coordinators (PCCs) were the only clinician required to meet and speak with all patients prior to discharge. MSWs only met patients on a referral basis by the PCCs. PCCs were also the ones responsible for TP referral of psychosocial complex patients through elevation of the

TSL. However due to the complex nature of identifying psychosocial issues and the absence of a standard process of assessment for such issues, there was lack of clarity among in-patient PCCs surrounding the automated referral process, how to elevate a TSL score, what defined the 5Ps, and what would make a patient eligible to meet the 5Ps.

The project interventions include the development of an assessment tool that will help in-patient PCCs identify psychosocial concerns that place patients at higher risk for rehospitalization, appropriately refer patients to the appropriate services post-discharge, and provide educational reference material that will help clarify the psychosocial concerns as well as the process of automated referrals. The screening tool developed by our transition program team, needed to take into account that the in-patient PCCs are registered nurses and not medical social workers. This meant that it had to be comprehensive enough to screen for the 5Ps but not so complex that it fell outside the PCCs' scope of clinical practice and impede upon their current workflow. These project interventions will help to capture a vulnerable patient population that has recently been difficult to reach and provide services for due to recent changes in the readmission risk score index criteria. By recapturing this population, we will be able to help in reducing the rates of rehospitalization within the organization.

My aim statement is: To develop and implement a process that assesses all patients discharging from the hospital for potential social determinant of health barriers that may impact their ability to self-manage post-discharge and provide them with support during the transition of care. We aim to improve interdepartmental workflow efficiency and effective collaboration between the Transitions Program and the Coordination of Care Department (COCD), thus improving outcomes for patients who are at risk for 30-day readmission due to specific SDOH

barriers. Specifically, by the end of 2019, we aim to increase the number of low elevated risk score patients referred to the TP for care by 5%.

The process begins with developing a work aid or tool that assists in identifying patient at potential risk readmission due to specific SDOH and then sharing this tool with the COCD PCCs. The process ends with the patients being referred to the TP at discharge when specific SDOH issues have been identified. By working on the process, we expect (1) an increase of appropriate referrals to the TP, (2) increase in patient satisfaction, (3) reported increase in coordination care management between departments, (4) and to educate staff on how to identify the psychosocial conditions that puts patients at risk for readmission and the necessary interventions needed to address them. It is important to work on this now because (1) lack of tools to identify patients with specific SDOH places these patient at risk of unplanned hospital readmission, (2) unplanned readmission pose a significant risk of financial loss to hospitals and psychological burden on patients and their families, (3) the TP is designed to facilitate the transition of these patient from hospital to the community, and (4) the improvement of interdisciplinary team communication and coordination between these departments.

<div align="center">**Context**</div>

A microsystem assessment was performed in TP to determine the implications for an effectively functioning microsystem. This was done through identifying the purpose, patients, professionals, processes, and patterns in the microsystem. The Transitions Program is an intensive short-term, case management and care coordination program that is designed to help patients discharging from the hospital with no other follow-up care assigned with Home Health or Hospice. The Transitions program lies under the Continuum of Care which is made up of six departments: Community Care Program, Home Health, Hospice Services,

Palliative Care, Skilled Nursing Facilities, and Transitions Program. The goal of the program is to ensure members are receiving the right care, at the right place, at the right time.

The clients are a select group of people who are discharged to either home or other care facilities who have been identified to have potential risk of readmission due to barriers that hinder their ability to effectively provide self-care. These barriers can range from complex chronic physical and or psychosocial conditions such as heart failure or dementia to socioeconomic disadvantages. Clients in the program must be admitted through referrals only. They must be above 18 years of age and reachable by phone. They must voluntarily agree to enroll and engage in the program. The main patient subpopulations consist of Transition Support (TSL Score Referred) patients, Medical Health Home Program, Administrative Exceptions, and High ED or clinic utilizers. Patient exclusions are those receiving Home Health, Hospice, or are discharged to a skilled nursing facility (SNF). Due to the high risk of readmission, patients getting discharged from acute care settings are the most commonly referred patients introduced to the program.

The Transition Program consists of an interdisciplinary team of registered nurses, medical social workers, pharmacists, and psychiatric social workers. The program currently employs 4 social workers (3.8 FTE's), one registered nurse care coordinator (1 FTE), one psychiatric social worker (1FTE), 3 pharmacists (1.2 FTE's), one program manager, and one associate public affairs representative. Also overlooking the program under the Continuum of Care is the senior vice president and area manager, an executive assistant, a continuum administrator, and operations specialist. The unique aspect of this Transitions Program is that it utilizes program based pharmacists and all members of the team take part in home visits to patients.

The workflow for the TP is to reach out to the client upon the referral request within 48 hours, complete an initial intake assessment to see if the patient is eligible and agreeable to participate in the program, and to schedule follow-up appointments with the TP team within five to seven days of reaching them. TP follows the patients generally between a minimum of 30 to 60 days. One of the goals during initial assessment is to assess patients for medication management issues and refer to the TP pharmacist if deemed necessary. This Transitions program is unique in the aspect that the team spends time both in office and in conducting home visits.

The Transitions team meets weekly on Mondays to discuss cases and any clinical related issues. Staff meetings are held on a monthly basis. These interdisciplinary meetings go over department issues and also provide opportunities for in-services from different community organizations. The in-services are held to educate the team on the plethora of resources found though both external organizations and internal departments with the goal that the staff can then utilize these resources with TP patients when appropriate. In addition, the department manager also uses these opportunities to raise awareness on any discrepancies in care that they have assessed and ensures that all clinicians are aware of any changes in processes on the unit.

A SWOT (Strengths, Weaknesses, Opportunities, Threats) was used to determine what the potential factors that could affect the success of this process improvement project (Appendix E). Strengths included forming a shared interdepartmental vision and goal, having a clear intake process for referrals on TP end, presence of a strong TP interdisciplinary team and strong central staff supporting patient transition, and staff motivation. Weaknesses include a knowledge deficit on referral process at point of discharge, lack of clearly defined and documented interventions for specific patient needs, fragmented and insufficient interdepartmental team communication,

and limited data resources – which all may form barriers in implementing a new tool that affects the in-patient discharge process. Opportunities include improved patient assessment, staff education on SDOH and TP referral process, increased teamwork and collaboration, stronger coordination of care, and improved workflow efficiency. Threats that could impede on the change process include staff non-compliance to new changes, in-patient hospital clinicians feeling overwhelmed with multiple change projects, competing priorities with other initiatives, and gaps in clear communication for appropriate referral processing between in-patient and out-patient clinicians.

The ROI (Return on Investment) is projected to be positive. With the implementation of a new assessment tool and the education on identifying the psychosocial concerns in patients, there is an expected increase in the number of case referrals to the TP. The post-discharge process will be improved in helping make sure patients are linked up to the appropriate services they need once they leave the acute care setting. Clinicians will also become more aware in addressing psychosocial concerns that negatively impact patient outcomes and increase their chances of readmission. As previously shared, the cost of unplanned readmission and Medicare financial reimbursement penalties may be reduced.

Effective communication is key towards achieving the project goals. The identification of the psychosocial concerns and development of the tool were completed mainly through weekly interdisciplinary meetings, weekly focused meetings with department managers in both the in-patient and out-patient units, in-service educational training, and email communication.

Intervention

The Institute for Healthcare Improvement (IHI) Model for Improvement was used as a guide for improvement (Appendix J). The following interventions were implemented

through the Plan-Do-Study-Act (PDSA) cycle (Appendix D). The process improvement team (PI) for TP determined the need for raised awareness on SDOH barriers and education on the TP referral process. Internal chart review from 3/05/19 to 9/09/19 showed that out of 339 cases only 37 were low-elevated TSLs, approximately 11%. Further breakdown of what factors contributed to the cases becoming low-elevated were reviewed (Appendix H). Concerns among TP staff was noted that while complex psychosocial needs and complex medication management are frequently documented in the EHR these do not trigger the automated referral to TP as they do not fall under the 5Ps.

The manager of TP conducted an analysis of the Health Connect data that has shown that the number of referrals in this service area branch of the TP are significantly lower than the other regional counterparts. In addition to this data, my further analysis has shown low-elevated referrals to be at a significantly consistent lower level compared to previous years prior to the implementation of the readmission risk score scale. Interdisciplinary team discussions were held to determine the possible factors contributing to the low number of referrals and to review the discharge process. It was identified that further clarification was needed in the 5 psychosocial factors that elevated the TSL, TP interventions, and the process of automatic referrals during discharge. These meetings were held from August to October and took place during scheduled appointments and weekly staff meetings. Findings of the discussions were then presented to the monthly staff meeting of the TP. Together with the PI team, I was able to begin development of a tool that in-patient Patient Care Coordinators may be able to use during their discharge assessment to identify low-elevated risk patients and refer them to TP services.

After reviewing the findings and development of the tool, meetings were scheduled and held between the Director of the COCD, the Patient Care Coordinators of the hospital, and myself. These meetings introduced the new assessment tool to the COCD Director and looked to see how and when the new tool could be utilized in the in-patient setting. In addition a department staff in-service session was held to introduce the tool as well as educate on the new changes to the automated referral process in the system. Educational material on the 5 psychosocial concerns was also given to help raise awareness on the importance of identifying the 5Ps prior to discharging the patient. Paper copies of the new screening tool and a post in-service survey based on the five-point Likert scale were distributed during the in-service PCC presentation (Appendix K).

Measures

The outcome measure for this project is to increase the number of low elevated TSL referrals to the Transition program. This is measured by a run chart showing the number of low-elevated cases admitted to the TP within the set time period of project implementation (Appendix L). This outcome was chosen because while the initial global goal of this project was to potentially decrease hospital readmission rates, due to the time constraints of the project implementation it will require the use of a smaller scale outcome measure. The Health Connect auto-discharge report was developed in partnership with the department manager as it auto generates a weekly list of patient cases who were admitted into the program. The subsequent data was charted on the run chart. The report also classifies the risk score the patient received.

Process measures are the specific steps in the process that drive the project towards the outcome metric. The process measures for this project include identifying and clarifying the 5 psychosocial concerns, the development of a psychosocial needs assessment tool, and the testing and utilization of the tool in the patient care setting. These measures were chosen as they all significantly impact the number of case referrals to the TP.

The balancing measures for this project, or measures that need to be identified as they may negatively impact the outcome of the project, include the impact on staff satisfaction and resistance to a change in the workflow with the implementation of a new tool along with the possibility that the increased amount of referrals to the TP may increase staff case workloads overwhelmingly. To measure this, staff surveys and open discussion between the department managers and directors were held to address any concerns and complaints about the new tool.

Ethical Considerations

The ethical challenges of this project lies in maintaining client privacy to their medical information as well as conflicting departmental interests and priorities. When conducting chart audits from EPIC and creating the auto-discharge report to generate data from Health Connect, there were huge concerns for patient confidentiality. To help address this issue on the reports generated, we developed the report to only use the MRN number for patient cases and not names. When presenting the data during interdisciplinary team meetings, patient names and MRNs were completely removed from the presentation data. In addition, when working remotely, the data with MRNs could only be accessed through a drive folder limited to the work issued laptop which required

security clearance access. For the departmental conflicts, there were some significant issues that delayed much of the project implementation. This particular project relies heavily on collaboration between two departments: the Transition Program (outpatient) and the Continuum of Care Department (inpatient). In the past a similar project was launched but immediately turned down by the previous COCD director and received heavy resistance from the inpatient patient care coordinators. However both TP and the COCD have experienced a large internal management turnover and we were able to meet with both managers and directors on both sides to cautiously introduce the project. The turnover, that while delayed implementation, created a new environment of opportunity that was much more open in reception to the idea of strengthening collaboration between departments and improving upon the discharge workflow.

Results

The quality improvement project to increase referral rates and education on the social determinants of health (SDOH) began in August of 2019 and lasted until November of 2019. In late September 2019, staff meetings were held with the TP to discuss the project goals, timeline, and brainstorm the interventions to be done. Preliminary data on the population of low TSL patients were presented at the meetings in order to better aid in visualizing the problems with capturing this specific population. The development of the screening tool began in October 2019. Preliminary research for the tool was conducted through case reviews and meetings with TP social workers to figure out the interventions that the TP focused on and what were the common concerns patients had post discharge that would make them eligible to be referred to the TP. This data was then organized and presented to the staff and manager of the TP as well as the in-patient Director of the Continuum of Care Department where the interventions and screening question

were discussed. Weekly and daily referral rates were monitored from October 2019 to November 2019. Additional data regarding the discharge process from the in-patient Patient Care Coordinators (PCCs) were also collected during this time. These new findings regarding the in-patient workflow were also discussed with the TP clinicians and an educational presentation was developed as an additional intervention.

The initial development of the screening tool was completed in early November 2019. Preliminary testing was performed prior to the educational in-service session. The tool was then presented at the educational in-service session to the in-patient PCCs during their monthly staff meeting. Copies of the tool were distributed to the PCCs for feedback and for reference as they tested it in the inpatient setting.

The preliminary testing of the tool revealed that the next focus of the tool would be to shift the focus from patients in the acute setting with low TSL level prior to discharge, onto patients who were referred to Home Health (HH) upon discharge. Patients who were referred to and go home with HH are usually not referred to Transition Program post discharge, even if they may have some psychosocial concerns that would be appropriate for TP to follow up with. However due to time constraints for the project, this would be the next step in the PDSA cycle of further developing the screening tool moving forward. After the in-service session and presentation of the screening tool, we found that there was a 25% increase in the number of low-elevated referrals to TP. However this result had to take into account that due to time constraints and previous unavailability of a referral rate tracking process, there is extremely limited baseline data to be monitoring and comparing to prior to the launch of the project. The in-service session was well received, with over 75% of the staff attending reporting that they felt a raise in confidence of knowledge and felt the tool applicable to their daily clinical practice.

There were multiple obstacles in the implementation of the tool. One of the biggest barriers to the project was time. The TP is a referral based program so the process of increasing referrals begins at the point of discharge in the acute setting. However this meant that the project would need the support of not only one but two departments. While the development of the tool and focus on SDOH came at a time of urgent need by the TP, it was not viewed as urgently needed by the in-patient Care Coordination department. This led to a slow buy-in and delay in tool implementation. Additionally, actively changing leadership in both departments during the time of tool implementation meant further delaying the launch date of the tool and scheduling the in-service as it required time for the new leadership to get up to speed and on board with the project. But our team was able to push through and with multiple smaller meetings with the new Director of COCD and the PCCs, we were able to create a greater sense of urgency within the department. In addition, there was also initial resistance by PCCs on identifying SDOH because it was seen as outside their scope of focus. With conflicting priorities, SDOH identification was seen as within the realm of the medical social workers. However our research findings in the discharge workflow showed that while MSWs would be the ideal clinician to assess for psychosocial concerns with patients, they did not see all patients and were only consulted on a referral basis. PCCs on the other hand, reached out to all patients up for discharge and had the ability to elevate the TSL that would make patients eligible for TP support. Other issues included the fact that a screening tool focusing on identifying SDOH is still a rather new subject of focus in healthcare.

While there are various pilot screening tools undergoing testing in various organizations, the absence of a standardized tool meant that this screening tool is also in its early stages of development for only one location and has yet to undergo consistent testing in different care

settings. To work through all the issues, the focus was on team communication and collaboration. We analyzed our findings and presented the data to all clinicians, held open discussions for feedback on the interventions, and reinforced the need for changes during interdisciplinary team meetings. Overall, the implementation of the tool and raising the conversation of the importance of identifying SDOH barriers prior to discharge in patients had a significant initial impact and the data collected will vital to the TP and COCD moving forward.

Summary

In summary, the project interventions are still in the early stages of implementation. Despite the time constraints of implementation, the slight increase in referral rates within the TP are a good indication that there is potential in the interventions that were implemented. This potential of the tool to be further refined and adapted for other departments and care settings could also have an impact in decreasing rehospitalization rates as identifying SDOH and its barriers become a priority in upstream readmission prevention and discharge planning. Collecting data is time consuming, especially for data that is not clearly documented and recorded in charts. Continuing to improve data collection on all measures through evaluation of the collection methods will be critical in sustaining the project achievements as well as measuring its progress. Proceeding with PDSA cycles and continuing to involve the interdisciplinary team will also help to strengthen collaboration between departments as well as help in sustaining the motivation for change. Reinforcing the new workflow and processes such as the automated referrals and elevation of the TSL through in-services and procedure manual would also be important to sustain this change in clinical practice.

Conclusion

Readmission is a complex issue that requires a multimodal approach to tackle it. This quality improvement project addresses a few of the many factors that influence a patient's risk of readmission. The data gathered from this project will hopefully serve as a guiding point for the organization going forward. With the increasing spotlight on the social determinants of health and its impact on readmissions, the development of a SDOH screening tool comes at a crucial time in healthcare. CNL-led quality improvement projects such as this project will help in raising the awareness on the urgent need to address psychosocial concerns as the nation strives to deliver increasingly high quality care and achieving global health equity.

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Appendix A

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

STUDENT NAME: Stephanie Le

DATE: July 25, 2019   .

SUPERVISING FACULTY: Tara O'Connor (Preceptor)**.**

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: *"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."*	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.

Appendix B

Evaluation Table

PICOT Question: For adult patients being discharged from the hospital (P) how can additional interventions such as assessment checklists/tools that identify psychosocial issues, educating staff on the social determinants of health, and referrals to community resources such as transition programs (I) as opposed to just using the standard discharge process for patients (C) help reduce readmission rates and improve patient outcomes post discharge (O)?

Citation	Conceptual Framework	Design / Method	Sample / Setting	Variable studied and their definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to practice
Jencks, Williams, and Coleman (2009)	Exploratory research	Systemic review of Medicare claims data from 2003–2004.	Data extracted from the Medicare Provider Analysis and Review (MEDPAR) file from October 1, 2003, through December 31, 2004	Analyzed patterns of rehospitalization and relation of rehospitalization to demographic characteristics of patients and hospitals	Defined the rate of rehospitalizatio: # of patients discharged from acute care hospital and readmitted to any acute care hospital within 30 days divided by total number of people who were discharged alive from acute care hospitals	Cox proportional-hazards model to assess patient-level predictors of rehospitalization	19.6% of 11,855,702 Medicare beneficiaries discharged from a hospital rehospitalized within 30 days, 34.0% were rehospitalized within 90 days; 67.1% discharged with medical conditions and 51.5% discharged after surgical procedures were rehospitalized or died within the first year after discharge	Study shows risk of rehospitalization over time will not decrease, supports the use of predicting readmission risk through demographic factors but some stronger possible factors to use may be related to diagnosis-related factors (DRG)
Leppin et al. (2014)	Exploratory research	Systemic review and meta-analysis of 47 randomized control trials	47 RCT's from 46 reports from 1990-2012; adults admitted for medical or surgical cause for 24< hours and discharged to home; cases reviewed from multiple countries	The effectiveness of multiple interventions and effect on all-cause or unplanned readmissions within 30 days of discharge	Early all-cause or unplanned readmission with or without out-of-hospital death	Random effects meta-analysis used to estimate pooled risk ratio and 95% confidence interval for 30-day readmission	For interventions to be effective, complex interventions that are patient accessible are needed. More recent studies shown interventions to be less effective. Findings consistent with CUCOM that comprehensive and cultural sensitive interventions that support patients reduces risk of readmission.	Strong methods used and supports the need for comprehensive patient-centered complex interventions to improve patient outcomes
Kansagara et al. (2011)	Exploratory research	Systemic review of 30 studies	30 studies out of 7843 citations reviewed from	Studied model performance and assess suitability for clinical or administrative use	Review models by: population characteristics, setting, number of patients in the	Qualitatively synthesized study result focusing on: model discrimination, the	Only 26 models met inclusion criteria; only 1 **model** specifically addressed	Shows most current readmission risk prediction models that were designed for either

			databases of Medline, CINAHL, Cochchrane Library		derivation and validation cohorts, timeframe of readmission outcome, readmission rate, range of readmission rates according to predicted risk, and model discrimination	populations in which the model has been tested, practical aspects of model implementation, and types of variables included in each model	preventable **readmissions**, 9 tested in large US populations and had poor discriminative ability	comparative or clinical purposes perform poorly
Thorsteinsdottir et al. (2016)	Exploratory research	Systemic review of short-term (30day) and long-term (180day) utilization of participants enrolled in a care transitions program versus matched cohort of eligible but not enrolled; determine effect of baseline characteristics and core interventions objectives on primary outcome of 30 day readmission	365 patients discharged Jan 1, 2011 to Jun 30, 2013 in primary care academic practice	Assessed demographics, baseline characteristics, comorbid illness, medications (number, changes and class), completion and timing of program process measures and healthcare utilization	Patients at high risk for hospital readmission, an elder risk assessment score over 16 and age (>60) were assigned to CTP follow up by a multidisciplinary team and primary outcomes of 30,90, and 180 readmissions observed	Cox-proportional hazard models using propensity score matching were used to assess rehospitalization. Predictors analyzed using time to event with censoring at death, palliative care, lost to follow up.	CTP patients exhibited lower 30-day rehospitalization rate;12.4% (95%CI8.9–15.7) versus 20.1%(95%CI15.8–24.1%), respectively (P=0.002). At 180-days, no difference seen. Significant predictors of lower rehospitalization included completion of advance care planning	Proves that post discharge intervention by care transitions program significantly reduces 30-day readmission, but interventions were not maintained beyond that and effects on readmission were not sustained at 180 days.
Flythe, Hilbert, Kshirsagar, and Gilet (2017)	Exploratory research	Systemic review of 30-day hospital readmission and psychosocial factors among patients	154 patients recruited from University of North Carolina Hospitals, 2014-2016	Assessed validated depression, health literacy, social support, and self-rated health screening instruments were administered during index hospitalizations	Study associations between hospital-assessed depression, health literacy, social support, and self-rated health (separately) and 30-day hospital readmission among dialysis patients	Multivariable logistic regression models with 30-day readmission as the dependent outcome were used to examine readmission risk factors	Of the 154 participants, 58 (37.7%) had a 30-day hospital readmission; adjusted OR (95% CI) 2.33 (1.02-5.15) for positive depressive symptoms and 2.57 (1.10-5.91) for poorer social support	While limited to dialysis patients, the study findings prove strong suggestion that hospital-based assessments of certain psychosocial factors can significantly improve readmission risk prediction

Appendix C

Charter

Project Charter: Transitions of Care: Raising Awareness and Improving Identification of the Social Determinants

Global Aim: To develop and implement a process that assesses all patients discharging from the hospital for potential social determinant of health barriers that may impact their ability to self-manage post-discharge and provide them with support during the transition of care.

We aim to improve interdepartmental workflow efficiency and effective collaboration between the Transitions Program (TP) and the Coordination of Care Department (COCD), thus improving outcomes for patients who are at risk for 30-day readmission due to specific Social Determinants of Health (SDOH).

Specific Aim: To increase the number of low elevated risk score patients referred to the TP for care by 5% by the end of 2019. The process begins with developing a work aid or tool that assists in identifying patient at potential risk readmission due to specific SDOH and then sharing this tool with the COCD patient care coordinators (PCC's). The process ends with the patients being referred to the appropriate community resources such as the Transition Program at discharge when specific SDOH issues have been identified. By working on the process, we expect (1) an increase of appropriate referrals to the Transition Program, (2) increase in patient satisfaction, (3) reported increase in coordination care management between departments, (4) and to educate staff on how to identify the psychosocial conditions that puts patients at risk for readmission and the necessary interventions needed to address them. It is important to work on this now because (1) lack of tools to identify patients with specific SDOH places these patient at risk of unplanned hospital readmission, (2) unplanned readmission pose a significant risk of financial loss to hospitals and psychological burden on patients and their families, (3) the Transition Program is designed to facilitate the transition of these patient from hospital to the community, and (4) the improvement of interdisciplinary team communication and coordination between these departments.

Background:

Nationwide, over 3.3 million hospital readmissions cost approximately $41.3 billion in 2011 (NEJM Catalyst, 2018). Medicare's Hospital Readmissions Reduction Program (HRRP) incentivizes hospitals to prevent avoidable readmissions; hospitals now undergo severe penalties for high rates of 30-day readmissions. As of 2014 the third year since the launch of HRRP, Medicare further increased the maximum penalty for hospitals and expanded the number of conditions that underwent evaluation. The conditions now include six conditions: heart attack, heart failure, pneumonia, chronic obstructive pulmonary disease (COPD), elective hip and knee replacement, and coronary artery bypass graft (CABG) (NEJM Catalyst, 2018). Hospitals could now lose up to 3% of their Medicare payments (Rau, 2016). Hospital readmissions pose a

significant financial loss for hospitals. Besides this loss for the hospital, readmissions also pose a significant burden on patients and their families. Given the complex nature of hospital readmissions, there are strategies that hospitals can utilize to lower such rate. Proper discharge preparation and quality care coordination can greatly impact the patient's plan of care and reduce the risk of unplanned readmissions. Transition programs are essential in reducing gaps in communication between inpatient and outpatient providers. These outreach programs focus directly on removing the barriers that prevent patients from being able to self-manage their conditions outside the acute setting and help patients navigate the transition from the acute setting to home.

Goals

The goal of this performance improvement (PI) project is to assist in improving the discharge planning process for patient with SDOH issues that potentially place them at risk of readmission and to increase the efficiency and number of "Low-Elevated" referrals to the TP. It is also to ensure that a greater number of patients get to benefit from the service and support of the TP after hospital discharge. These goals will be achieved by:

- Education of inpatient PCC's on the automated referral process for Low-Elevated referrals to the TP.
- Developing a way of efficiently and effectively identifying patients who have a psychosocial concern that potentially places them at greater risk of readmission.
- Testing work aid or tool developed for effectiveness.

Sponsors

Transitions Program Manager	Jill Jarvie
COCD Director	Marie (Rochelle) Arenas

Team

CNL Intern	Stephanie Le
CNL Preceptor	Tara O'Connor
Clinicians: TP MSW Champions	Karla Ferrufino Ana Abaunza
Inpatient Patient Care Coordinator	Janina De La Torre
Data Collector Champion	Keilani Luu

Measures

Measure	Measure	Data Source	Target
Outcome:	Increase # of Low-Elevated referrals to TP	Transitions Program dashboard in Health Connect	Increase of 5% by end of 2019
Process:	Provide in-service to PCC's re: "How to place automated Low-elevated referral"	Health Connect	70% of PCC's receive training
	Develop psychosocial needs assessment tool/ work aid	Chart audit	Tool able to identify appropriate referrals per majority of TP MSW's
Balancing:	Impact on staff satisfaction and workflow during intervention implementation	Staff survey about the new changes and discussion over any concerns	100%

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https://khn.org/news/a-guide-to-medicare-readmissions-penalties-and-data/

Measurement Strategy:

Population Criteria: Low readmission risk score patients from the hospital who have psychosocial factors that may potentially impact their health

Data Collection Method: Data will be obtained through HealthConnect chart reviews and EPIC reports. EPIC generates a weekly list of active cases referred to TSL and the TSL level.

Data Definitions

Data Element	Definition
Transition Program	Intensive short-term, case management and care coordination program that is designed to help patients discharging from the hospital with no other follow-up care assigned with Home Health or Hospice.

30-day readmission	Patients who have been discharged from an acute setting and are readmitted within span of 30 days post discharge to the acute setting
Specific SDOH per Regional policy that indicated need to elevate a Low readmission risk score	Homeless, Housing insecurities, Transportation, Meals, and Caregiver Support
LOW- ELEVATED TSL	Patient who are at low risk per regional readmission predictive model but score is elevated to Medium Readmission Risk due to the presence of specific SDOH

Measure Description

Measure	Measure Definition	Data Collection Source	Goal
Referral	N = Number of appropriate referrals done D = number of active cases opened	HealthConnect	90%
Using assessment tool	Number of times tool was utilized	HealthConnect	90%
Impact on staff satisfaction and workflow during intervention implementation	N = number of staff showing signs of hesitation D = number of staff involved in the implemented changes	Observation and staff survey about the new changes and discussion over any concerns	100%

Driver Diagram

<u>Aim</u>   <u>Primary Drivers</u>   <u>Secondary Drivers</u>   <u>Change Concepts</u>

We aim to improve team workflow efficiency and effective collaboration between TP and coordination of care services, thus improving outcomes for patients who are at risk for 30-day readmission, through the development and implementation of an educational model and tool that will increase the number of low elevated risk score patients referred to the TP for care by 5% within a 3-month time frame.

Identify patients at low-risk for readmission with psychosocial needs

Coordination of referral information along care continuum

Effective risk assessment

Improved discharge process

Promote utilization of TP program to clinicians by engaging multidisciplinary team

Educate all clinicians on automated referral process

Accurate and timely documentation of referral

Develop a needs assessment checklist tool

Develop interventions that match the psychosocial need identified

Provide clear reference material for the interventions

Train clinicians on the automated referral process

Provide clear reference material for community agencies clinicians can refer patients too

Make goal of starting referral process prior to discharge from hospital

Timeline

Events	April	July	Sept	Oct	Nov	Dec
Preliminary Research	▨	▨	▨	▨		
Data Collection	▨	▨	▨	▨	▨	
Creation of Psychosocial Checklist Tool			▨			
Readmission report audits			▨	▨	▨	
Implementation of checklist tool				▨	▨	
Staff Education / Training				▨	▨	
Staff satisfaction evaluation					▨	▨
Finalize charter; prepare presentation					▨	▨
Final poster presentation						▨

Appendix D

PDSA Cycle

Plan
- Perform preliminary research and determine possible reasons of low elevated referral rates to TP and rates of readmission
- Collect data by performing audits.
- Synthesize and analyze data and use the information to determine your next steps.
- Determine the opportunities for intervention that can be implemented
- Gather the needed tools and educational materials needed for this project

Do
- Provide education to staff at an interdisciplinary team meeting on a small scale
- Collaborate with patient care team with the clinical managers as the driver for change and will serve as a resource to clinicians during implementation

Study
- Evaluate patients charts and review the feedback from clinicians to make the necessary changes

Act
- Continue monitoring rates of referral and readmission.
- Maintain the need for change and prepare for implementaion on a larger scale until the change can become standardized.

Appendix E

SWOT Analysis

STRENGTHS	**WEAKNESSES**
• Transition staff motivation • Strong central staff supporting patient transition • Strong TP interdisciplinary team • Shared vision and goal between clinicians and patients • Clear intake process for referrals on TP end	• Knowledge deficit on referral process at point of discharge • Lack of clearly defined and documented interventions for specific patient needs • Interdepartmental team communication • Limited data resources
OPPORTUNITIES	**THREATS**
• Improved patient assessment and outcome • Staff education • Increased teamwork and collaboration • Stronger coordination of care • Improved workflow efficiency	• Staff non-compliance to new changes • In-patient hospital clinicians feeling of being overwhelmed with multiple change projects • Competing priorities with other initiatives • Gaps in clear communication for appropriate referral processing

Appendix F

Cost Benefit Analysis

❖ Costs of a patient being rehospitalized

Cost of hospital Readmission	$13,800 (per AHRQ)
Average number of patients readmitted per month	5
Monthly cost of readmission	$69,000

❖ Cost of a CNL QI Project

Item	Cost
Total costs to hire a CNL for 220 hours ($70 an hour)	$15,400
TP Staff Meetings (4)	$2,240
Education Materials	$0
In-Patient Inservice Patient Care Coordinator Session ($32 an hour)	$480
Total costs of a CNL project	$18,120

Appendix G

Kotter's 8-Step Process for Leading Change Theory

CREATE
a sense of urgency

INSTITUTE
change

BUILD
a guiding coalition

the big opportunity

SUSTAIN
acceleration

FORM
a strategic vision
and initiatives

GENERATE
short-term wins

ENLIST
a volunteer army

ENABLE
action by
removing barriers

Appendix H

Chart Review Results of Low-Elevated TSL

Psychosocial Transition Concern	% out of 37 low-elevated TSL cases*
Complex Psychosocial needs	41
Caregiver Support	27
Meal Insecurity	16
Housing Insecurity	19
Complex Medication Management	19
Homeless	27
Transportation	22

*Percentages do not equate to 100% due to cases having multiple concerns

Appendix I

5 Psychosocial Concerns Assessment Tool

Psychosocial Concerns Eligible for Elevated Transitional Support	Suggested Question: When leaving the hospital what is your biggest challenge or concern in relation to your daily transportation, housing, meals, and or caregiver? *Is the patient at risk for or currently experiencing*	Does the patient have 1 or more of the listed concerns
Transportation	☐ Lives alone and unable to go to medical appointments (i.e. follow-ups) or non-medical appointments due to no ride support ☐ Functional or cognitive changes that render patient unable to safely use transportation independently ☐ Loss of driver's license	If **YES** • Please refer to in-patient MSW if time permits • Check Transitions Concerns as patient is eligible for automated referred to the Transition Program
Caregiver Support	☐ Patient caregiver is show signs of burnout or in need of respite ☐ Assess for need of caregiver (patient currently has no caregiver support) ☐ May suspect patient abuse or caregiver neglect ☐ Sudden loss of primary support (i.e. intimate partner or spouse) ☐ Lives alone with a cognitive or sensory impairment and has no caregiver support ☐ No caregiver and lives alone in unsafe home environment (i.e. clutter, pests) ☐ Is an administration exception case	
Homeless	☐ Lack of stable housing ☐ Lives in shelter or couch surfing ☐ Refuses to seek help from shelter ☐ Lives in vehicle or is inappropriately using services of Emergency Department	
Meal Insecurity	☐ No utility access (i.e. no refrigerator, stove, microwave) ☐ Unable to safely and or financially buy/prepare/store fresh food on weekly basis ☐ Has diet restrictions that patient is unable to comply to (due to financial status)	
	☐ Lack of stable housing ☐ In process of being evicted	

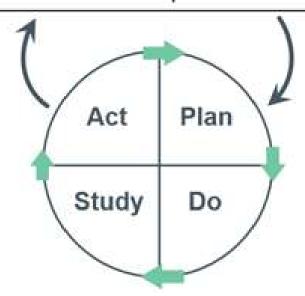| **Housing Insecurity** | ☐ Increasing inability to pay rent (i.e. loss of income)
 ☐ No access to hot water or heating
 ☐ Recent change in functional status making patient home inaccessible (i.e. stairs)
 ☐ Unsafe home environment due to physical or psychological abuse secondary to domestic/intimate partner violence | |

Appendix J

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act   Plan

Study   Do

Appendix K

Post Presentation Evaluation
November 15, 2019

Please rate the degree to which you agree with the statements below:	Rating Scale: 1 = Strongly Disagree 5 = Strongly Agree
Appropriate for my education, experience, and licensure level	1 2 3 4 5
I am able to identify which psychosocial concerns that elevate the TSL	1 2 3 4 5
I feel comfortable with the automated referral process	1 2 3 4 5
Expanded my knowledge on Transition Program interventions	1 2 3 4 5
Suggested tool interventions and information are relevant to my practice	1 2 3 4 5

1. Was this presentation effective in clarifying the 5 psychosocial concerns?
2. Was there any information you would have liked to be presented?
3. Any additional questions or comments:

Appendix L