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An Innovative Discharge Intervention: A Quality Improvement Project

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An Innovative Discharge Intervention: A Quality Improvement Project

Yvonne Swain, BSN, RN

University of San Francisco
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Abstract

**Problem:** This project aims to decrease the discharge time of a patient from the hospital once the discharge order has been written. Current discharge times are averaging over 3 hours, leading to a breakdown in the patient throughput process. A patient survey was conducted to determine the reason for prolonged discharge times. The survey revealed that patients are not aware of their day of discharge, which may lead them to being discharged without transportation home. Many studies conclude that there are improvement opportunities around discharge planning and communication.

**Context:** This quality improvement initiative takes place in a 26-bed, medical-surgical/telemetry hospital department. The patient population is between the ages of 51 and 75 years, with a primary diagnosis of congestive heart failure. The improvement team consists of a CNL student, nurse manager, 2 assistant nurse managers, 2 members of nursing executive leadership, project manager, and 5 RN champions.

**Intervention:** The intervention is a patient discharge checklist placed within view of the patient on the wall of their room. It was developed by the team, with input from frontline RNs. The nurses will complete the discharge checklist, with patient and family involvement, at the beginning and end of every shift during nurse knowledge exchange (NKE). The discharge checklist will continue to be used during all shifts as RNs check off portions of the care plan as they are met. The RNs will receive an in-service presentation, which includes how to use the checklist focusing on involvement of the patient.

**Measures:** Measures include discharge times for non-conditional discharge orders from the time the discharge is written to the time the patient discharges, RN and patient survey questions, and HCAHPS scores for two nurse-driven questions.
Results: There was a slight decrease, with less variation, on discharge times. Discharge times decreased from an average of 2 hours and 28 minutes to an average of 2 hours and 11 minutes, a reduction of 17 minutes/patient. There was a variation of 2 hours and 33 minutes to 1 hour and 31 minutes. An unexpected, positive result is readmissions for Department 335 have dropped 3.34% in July and 2.24% in August.

Conclusions: This project did not meet the target of 2 hours; however, there was a reduction from 2 hours and 38 minutes to 2 hours and 11 minutes (a reduction of 17 minutes/patient), improved HCAHPS scores, and a reduction in readmissions. There is more communication between nurses at NKE, patients and family members are more involved with their care, and discharge instructions are better understood. A change in workflow is not easily accepted. By engaging frontline RNs as champions and having them be more involved with their peers for teaching and compliance measures was a successful strategy that had a positive impact.
Section II: Introduction

Patient throughput in acute care settings is a priority. When patient throughput is not flowing efficiently, it causes bottlenecks, effects quality of care, leads to a negative budgetary impact, and can result in inadequate resources to care for patients (Walker, Kappus, & Hall, 2016). When a patient has a discharge order, but is still occupying a bed on the floor, there is a patient in the emergency department (ED) who cannot be transferred to the floor to receive the care that is needed.

Problem Description

Department 335 is a 26-bed medical-surgical telemetry department within a northern California 327-bed hospital. The primary population is patients with congestive heart failure (CHF) and includes other patients from every medical-surgical service. A microsystem assessment was conducted using the Dartmouth Microsystem Assessment Tool (Dartmouth Institute, 2005), which revealed that discharge communication between the registered nurse (RN) and the patient is a metric needing improvement.

In Department 335, the average discharge time once the discharge order is written is over three hours, with most discharges occurring between 3:00 p.m. and 4:00 p.m. As a result, the department stays full until late afternoon, which obstructs timely throughput of patients, rushes discharges resulting in reduced quality of care, decreases patient satisfaction, and puts added strain on the environmental services to effectively clean the rooms quickly (Bozorghadad et al., 2015).

A discharge execution team was formed and tasked with delving further into the problem of prolonged discharges. For one week, the team conducted an in-person patient survey of 100 patients on the day of discharge. The survey results indicated that the primary barrier to timely
discharge is transportation, due to the patient and/or family not knowing they were being discharged (see Appendix F). A second barrier identified was a gap in consistent communication about the discharge plan between nurses at change of shift. Studies show that nurses do not receive adequate information around discharge when they are engaged in hand-off communication, which is not an anomaly (Joint Commission, 2017).

**PICO Question**

How does the utilization of an interactive patient care board (I) compared to with no intervention (C) improve communication for discharge day (O) on a medical surgical unit (P)?

**Available Knowledge**

Improved discharge planning is a national health care problem. The available literature suggests that there is need for improvement in discharge planning. Using the PICO question, an electronic search was conducted in the CINHAL database, reviewing evidence centered on discharge from acute care hospitals. Six articles were chosen and rated using the Johns Hopkins Nursing Evidenced-Based Practice Appraisal Tool to support the hypothesis of this project (see Appendix B).

Hand-off communication is a transference of patient care from one person to another detailing their plan of care (Joint Commission, 2017). In a consensus statement rated Level IV, the Joint Commission (2017) stated that hand-off communication needs improvement. Exchange of inadequate, incorrect, untimely, or incomplete patient information puts patients at a greater risk for harm. The Joint Commission Center for Transforming Healthcare’s Hand-off Communication Project included 10 hospitals that used a systematic approach, known as robust process improvement, to pinpoint reasons for the inadequate hand-off and potential solutions. It
was found that 69% of teaching hospitals did not implement a standardized hand-off 
communication process (Joint Commission, 2017).

Communication around discharge planning involves transitions of care. Kamermayer, 
Leasure, and Anderson (2017) found evidence-based transitions of care interventions reduced 
preventable readmissions. In a systematic review rated Level III, 222,978 records were reviewed, 
which revealed that evidence-based protocols can enhance the discharge planning process and 
support patient family engagement, reducing the risk of readmission (Kamermayer et al., 2017). 
Patient throughput initiatives, such as utilization of Lean Six Sigma, support and buy-in from 
leadership, and establishment of a centralized patient placement department are the 
recommendations from a systematic review rated Level III conducted by Walker et al. (2016).

Early prediction of when the patient will be discharged home is a critical factor in an 
effective discharge planning process (De Grood, Blades, & Pendharakar, 2016). In a literature 
review of 12 articles rated Level V, De Grood et al. (2016) found that the literature on discharge 
prediction generally lacks the descriptive detail that would be useful to parties considering or 
planning a discharge prediction initiative. Discharge planning rounds traditionally occur in a 
conference room without involvement from the patient or family.

Wrobleski, Joswiak, Dunn, Maxson, and Holland (2014) conducted a cross sectional 
survey with 120 patients. The results showed that discharge planning rounds conducted at the 
bedside took no longer than rounds held in a conference room. Not only was this a positive, 
patient-centered method, but this may lessen the need for patients to utilize further care resources 
once discharged.

Support from leadership will be crucial in the development and success of creating a 
discharge process. Changes will need to be implemented at the frontline of care. Garon (2012)
conducted a qualitative study with 33 RNs, which supported the importance of the manager in setting the culture for change. Garon asserted that a unit culture with open communication provides better patient outcomes.

**Rationale**

Lewin’s change model will be applied for this improvement project. Lewin’s change model concentrates on changing the behavior of others (Finkelman, 2016). To make a change successful, people must accept the change, as change leads to a disruption of the daily routine. For them to accept the change, they need to know what the change is and why the change is occurring.

The first stage is unfreezing. In this stage the staff know that a change is coming. Clear communication is imperative at this point. The staff will be more likely to accept the change knowing that they are involved in the process. The second stage is the change stage or moving stage. During this phase, the staff will adhere to the new process of a discharge checklist. The third and final stage is known as the refreeze stage. It is in this stage that the staff will try to revert to their old habits (Finkelman, 2016). It is important to keep the new process in place, so it becomes the new habit.

A strengths, weakness, opportunities, and threats (SWOT) analysis of the microsystem identified areas for improvement (see Appendix G). Lack of consistent, clear communication around day and time of discharge was a weakness. Improving hand-off communication regarding plan of care was found to be an opportunity. Threats identified were a lack of positive unit nursing leadership and engagement, as well as staff being open and accepting of a change in workflow.
The discharge checklist will be a tool used by all disciplines of the care team. It will provide an opportunity for the patient and family to be further involved in the plan of care on a day-to-day basis. The discharge checklist will foster communication between the patient, family, and care team, leading to higher patient satisfaction regarding communication (Garon, 2012).

**Specific Project Aim**

To decrease non-conditional order to discharge time in Department 335 from an average of two hours and 28 minutes to two hours by implementing a discharge checklist by November 2018.
Section III. Methods

Context

Department 335 has a team of nurses (40 full-time employees who work 12-hour shifts, 20 day shifts and 20 overnight shifts); patient care technicians (eight full-time employees, four day shifts, two evening shifts, two night shifts); unit assistants (five full-time employees, two day shifts, two evening shifts, one overnight shift); three assistant nurse managers (three full-time employees, one currently unfilled); and a nurse manager. Social workers, patient care coordinators (PCCs), and one clinical nurse specialist are shared throughout the hospital. There are no dedicated full-time physicians in the department. Physicians are placed in teams that are assigned to specific patient populations throughout the hospital. Discharge planning rounds are occurring in a conference room prior to rounding with the patients, which does not allow for the patient to be fully involved (Wrobleski et al., 2014).

Sixty percent of the patient population is between the ages of 51 and 75 years. Seventy-five percent of patients are admitted through the ED, primarily diagnosed with CHF, with fluid overload requiring IV Lasix for diuresis.

Effective, positive leadership is crucial to implementing a new tool to the workflow, which is this project’s intervention. There is currently one nurse manager, two day assistant nurse managers, and one night assistant nurse manager. This leaves two assistant nurse manager positions vacant. The lead physician for the department is supportive of any initiatives to improve patient care and works with the staff on projects. Having the lead physician supporting the frontline staff proves to have a positive effect on morale. This will be beneficial, as lack of positive unit nursing leadership and engagement was revealed as a threat on the SWOT analysis.
The discharge checklist was developed with frontline staff from Department 335, along with nursing staff and management from other nursing departments. The goal was to have input and buy-in from the nurses who provide care at the bedside, as the SWOT revealed resistance from frontline staff as a weakness. Throughout the PDSAs, changes were made to the checklist according to patient and RN feedback.

To mitigate these obstacles, department management, this author, and leadership will round during nurse knowledge exchange (NKE) and offer support and guidance for use of the checklist, attend physician and Department 335 staff meetings to talk about the discharge checklist, explain the use and benefits, and answer questions. Patient care coordinators are newly unionized, resulting in turmoil in the department. The director for the PCCs will meet with the team in the future to discuss the use of the checklist.

A financial analysis was completed using data obtained from the business and finance department (see Appendix H). A cost avoidance of $36,092.56 per year was calculated using the cost of patient diversion to other local hospitals. When a discharged patient is occupying a bed, the ED cannot admit patients, which creates boarders in the ED. When the ED has too many patients, they must begin diverting ambulances to other hospitals. A second financial analysis was completed in the same manner. A patient readmitted to the hospital 30 days after discharge costs the medical facility approximately $3,000 per day. A 10% reduction in readmissions for one department would have a cost avoidance of approximately $95,982.56 per year.

**Intervention**

The Institute for Healthcare Improvement (IHI, 2018) recommends placing a white board near the patient that states the time and date of discharge, which will remind the patient and the family of the expected time to leave the hospital. Patients and their caregivers need to be
involved, well informed, and understand the discharge process (Hesselink et al., 2014). This not only reminds patients and their families of the upcoming discharge date, but also provides a visual reminder of what is needed for the transition in care (Kamermayer et al., 2017).

The discharge checklist is expected to decrease the discharge time in Department 335 and increase patient satisfaction scores for nurse communication and discharge communication. Sections of the checklist include a patient to do list, with the care plan and milestones that need to be met prior to discharge; the initial day of admission nursing assessment; a section on preparing for discharge, which is identified in the chart by the PCC, along with who is taking the patient home; an education and teaching section, with a teach back column to be marked off as it is completed; and a day of discharge section that includes follow-up care appointments (see Appendix J). The nurses will complete the discharge checklist, with patient and family involvement, at the beginning and end of every shift during NKE. The discharge checklist will continue to be used during all shifts, as RNs check off portions of the care plan as they are met. The discharge checklist team will round on the unit, ensuring that the checklist is being filled in, and survey the patients and the nurses with a set of questions to measure the use of the checklist and the usefulness of the checklist.

**Study of the Intervention**

A measurement strategy was developed and includes survey results from patients and RNs, as well as weekly discharge times. Discharge times will be tracked weekly by this author. Patient and RN surveys will be conducted by department management and this author and entered in an electronic survey daily. If the project is a success, the discharge time will decrease. There is a chance that discharge times do not decrease; however, if patient satisfaction scores improve around nurse communication and discharge communication, this will result in a
successful project, as well. Data definitions and measurement strategies will be discussed with
the department champions and shared with frontline staff (see Appendix C).

This author, as the project manager, will be directly responsible for monitoring data
collection and compiling the data. The survey questions will be for RN staff and patients on the
usefulness of the checklist. The surveys will be completed electronically and in real time to
ensure accuracy and compliance. Excluded from the survey will be patients discharging to
another acute care facility or skilled nursing facility.

The PDSA cycles will begin on April 16th and commence for 120 days (see Appendix I).
During this time, meetings will be held weekly with the team to discuss possible changes to the
checklist. These changes will be suggestions made from RN staff and patients.

**Measures**

Measures for this improvement project were chosen by the team. The outcome measure
for the project is a decrease in non-conditional order to discharge time from two hours and 28
minutes to two hours. There are two process measures: (a) valuable and user-friendly tool, which
will be measured by an electronic survey, and (b) RN compliance to using the discharge
checklist, which will be measured daily with an audit tool conducted by department management
and this author. The balancing measure is HCAHPS scores in RN communication and discharge
information. The balancing measures evaluate unintended consequences of the project. If these
scores decrease, it is an unintended consequence.

Reduction in discharge time is the focus of this improvement project. The balancing
measure will be HCAHPS scores for RN communication and discharge information. If these
scores decrease, then this project will not be a success.
Ethical Considerations

For this project, the hospital area compliance officer was consulted during the creation of the discharge checklist to ensure there would be no Health Insurance Portability and Accountability Act (HIPPA) violations. Surveys were conducted using an electronic tool that did not ask for any personal information. This project has been approved as a quality improvement (QI) project by faculty using QI review guidelines and does not require IRB approval.
Section IV. Results

Discharge times for Department 335 were tracked for 120 days. The average discharge time decreased from two hours and 28 minutes to two hours and 11 minutes (see Appendix K). For the process measure valuable/user-friendly tool, 297 patients were surveyed and asked if the discharge checklist was helpful in preparing them for discharge; 64% found the discharge checklist helpful, 12% were neutral, 11% stated it was somewhat helpful, and 13% found it to be not helpful (see Appendix L). Of the 196 RNs surveyed and asked how useful the discharge checklist was during NKE, 49% found the discharge checklist helpful during NKE, 16% were neutral, 15% stated the checklist was somewhat helpful, and 15% found the checklist was not helpful. When the 196 RNs were asked if the checklist was helpful in preparing their patient for discharge, 47% found the checklist helpful for preparation to discharge, 17% were neutral, 13% stated the checklist was somewhat helpful, and 23% found it not helpful (see Appendix M).
Section V: Discussion

Summary

The reduction of discharge time from the time the discharge order is written to the time the patient leaves the hospital was the aim of this project. The PDSAs were conducted for 120 days, with data review occurring daily and weekly. Discharge response time for Department 335 continues to fluctuate; however, there is a reduction in the amount of time variation. Baseline discharge time was two hours and 28 minutes, current average is two hours and 11 minutes, with variation of two hours and 33 minutes to one hour and 31 minutes. Data from the patient survey reveal the following: discharge checklist is useful for the patient, helps prepare the patient for discharge, and there is an improved understanding of the discharge instructions. In the beginning of the project, results from nursing surveys revealed that the nurses did not feel there was any usefulness to the checklist, but perceptions changed as the project continued. The most current results of the RN survey reveal that 64% feel the checklist to be a useful tool.

Resistance by nursing staff to integrating the discharge checklist into their practice with patients was anticipated at the beginning of the project. Engaging frontline RNs as champions and having them be more involved with their peers for teaching and compliance measures was a successful strategy that had a positive impact. Use of the discharge checklist is now standardized and a reliable tool being spread. The HCAHPS scores were used as the balancing measure, and those scores initially dipped, but are increasing (see Appendix N). All the results were expected; however, an unexpected positive result has been a decline in readmissions of patients discharged from Department 335 (see Appendix O). Readmissions for Department 335 decreased 3.34% in July, and 2.24% in August. There were no readmissions in September.
This project was presented to the Member Patient Advisory Council (MPAC) on two separate occasions—once during the first PDSA cycle and then at the end of the project. The MPAC is a committee formed by members/patients, as well as leaders from the facility, who meet once a month to improve patient care and experience. Feedback from the committee was positive, and they have requested further updates during spread of the checklist to other departments.

A sustainability plan to ensure the standardization of this process has been developed. This will keep Department 335 from drifting back to old habits by keeping the RN champions engaged with frontline RNs, along with the nurse manager and assistant nurse managers. They will continue to conduct spot audits for completion of the discharge checklist and engage patients as to its usefulness. Discharge times, HCAHPS, and readmission rates will continue to be gathered weekly and displayed on visual huddle boards in the department.

Spread of the discharge checklist is being conducted in two phases, with three departments in each phase. The RN champions from Department 335 have been engaged to design the education, and videos have been filmed for use during spread.

**Conclusion**

Although this project did not meet the target of two hours, there was a reduction from two hours and 38 minutes to two hours and 11 minutes, a reduction of 17 minutes/patient. There were unanticipated outcomes from the project that include a decrease in readmission rates. The discharge checklist intervention appears to be a useful tool to improve many aspects of the discharge process. Because of these results, the intervention is being introduced to other units within the hospital. The positive feedback from patients, HCAHPS trending in a positive
direction, readmission rates decreasing, and less variation in discharge times led to the decision to spread.

The CNL, acting as advocate, educator, outcomes manager, and team manager, can design, implement, and evaluate the project at a clinical level. This assures that patient care remains in focus and the health care team strives for improved patient outcomes. Improved patient outcomes, higher HCAHPS scores, and a reduction in readmissions are what the CNL role can accomplish.
Section VI: References


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VII. Appendices
### Title of Project:

Patient Discharge Checklist

### Brief Description of Project:

**A) Aim Statement:**

To decrease non-conditional order to discharge time in department 335 from an average of 2:28 hours/minutes to 2 hours by implementing a discharge check list by November 2018.

**B) Description of Intervention:**

Discharge checklist to be used at nurse knowledge exchange and throughout all shifts with patient and careers. The discharge checklist will be a white board near the patient bed that is removable to allow for easy access and legibility for the patient.

**C) How will this intervention change practice?**

This intervention will allow for open communication throughout all disciplines of care as well as patient and family regarding the plan of care and the plan for discharge.

**D) Outcome measurements:**

Decrease in discharge response time in department 335. RN compliance to completing discharge checklist. RN communication and discharge information scores from HCAPS.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:  
(http://answers.hhs.gov/ohrp/categories/1569)
## Appendix B. Evaluation Table

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kamermayer et al. (2017)</td>
<td>Systematic review</td>
<td>220,978 records</td>
<td>May support that evidence-based transitions of care interventions reduce preventable readmissions. In addition, evidence-based protocols can enhance the discharge planning process and support patient family engagement that reduce the risk of readmission.</td>
<td>III A</td>
</tr>
<tr>
<td>De Grood et al. (2016)</td>
<td>Literature review</td>
<td>12 articles</td>
<td>The literature on discharge prediction generally lacks the descriptive detail that would be useful to parties considering or planning a discharge prediction initiative. Further study is required to determine how best to integrate these prediction tools into acute care hospitals.</td>
<td>V A</td>
</tr>
<tr>
<td>Garon (2012)</td>
<td>Qualitative</td>
<td>33 RNs</td>
<td>Supported the importance of the manager in setting the culture of open communication, which provides better patient outcomes.</td>
<td>III A</td>
</tr>
<tr>
<td>Wrobleski et al. (2014)</td>
<td>Non-experimental descriptive using cross sectional survey method</td>
<td>120 patients</td>
<td>No more time was needed to conduct rounds at the bedside than to hold rounds in a conference room.</td>
<td>III A</td>
</tr>
</tbody>
</table>
Appendix C. Project Charter

**Project Charter**: Patient Discharge Checklist

**Global Aim**: To decrease discharge time and receive discharge orders earlier by implementing a patient discharge checklist utilized by all care team members.

**Specific Aim**: To decrease non-conditional order to discharge time in Department 335 from an average of 2:28 hours/minutes to 2 hours by implementing a discharge checklist by December 2018.

**Background**:  
A large northern California hospital is plagued with late discharges. The average discharge time is over 3 hours, with the majority occurring between 3:00 p.m. and 4:00 p.m. This results in a bottleneck, obstructs timely throughput of patients, and rushes discharges, resulting in reduced quality of care, decrease in patient satisfaction, and puts added strain on the Environmental Services (EVS) to effectively clean the rooms quickly (Bozorghadad et al., 2015).

Upon further investigation, the number one discharge barrier is transportation, due to the patient and/or family not knowing they were being discharged. The recommendation from the Institute for Healthcare Improvement (IHI, 2018) is to place a white board near the patient that states the time and date of discharge, this will remind the patient and family of the expected time to leave the hospital. Patients and their caregivers need to be involved, well informed, and understand the discharge process (Hesselink et al., 2014).

**Sponsors**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<tbody>
<tr>
<td>Chief Nursing Executive</td>
<td>L.A.</td>
</tr>
<tr>
<td>Continuum Administrator</td>
<td>P.V.</td>
</tr>
</tbody>
</table>

**Goals**:  
To provide communication throughout all disciplines of care, as well as patient and family, regarding the plan of care and the plan for discharge. The discharge checklist will be used at Nurse Knowledge Exchange (NKE) when nurses are handing off to the next shift, which involves the patient and family, medical disciplinary rounds (MDRs) involving physician, nurse, and patient care coordinator, as well as the patient and/or family to ensure that discharge information is understood by the patient or caregiver.
### Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Source</th>
<th>Target</th>
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</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
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<td></td>
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<tr>
<td>Decrease in discharge response time in Department 335</td>
<td>Weekly report from area finance department</td>
<td>2 hours</td>
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<tr>
<td><strong>Process</strong></td>
<td></td>
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<tr>
<td>RN compliance to completing discharge checklist</td>
<td>Daily audits</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Valuable/user-friendly tool?</strong></td>
<td>Daily survey</td>
<td></td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN communication</td>
<td>Weekly report; care experience</td>
<td>≥ 91.5%</td>
</tr>
<tr>
<td>Discharge information</td>
<td>Weekly report; care experience</td>
<td>≥ 88.6%</td>
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</tbody>
</table>

### Team

<table>
<thead>
<tr>
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<th>Name</th>
</tr>
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<tbody>
<tr>
<td>RN Co Lead</td>
<td>Y. S.</td>
</tr>
<tr>
<td>RN Director Co Lead</td>
<td>V. S.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>N. A.</td>
</tr>
<tr>
<td>RN Champion</td>
<td>A. M.</td>
</tr>
<tr>
<td>Staff Nurse Champions</td>
<td>C. P., K. S.</td>
</tr>
<tr>
<td>MD champions</td>
<td>M. Y.</td>
</tr>
<tr>
<td>Project Oversight</td>
<td>Patient Progression Council</td>
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</table>
Appendix D. Project Driver Diagram
## Appendix E. Gantt Chart: Timeline

<table>
<thead>
<tr>
<th>CAP Phases and Steps</th>
<th>Responsible Party(ies)</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Status</th>
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<td><strong>Discovery/Assessment Phase</strong></td>
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<td></td>
<td>Completed</td>
</tr>
<tr>
<td>Meet with Discharge Execution Team</td>
<td>YS/Advisor</td>
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<td></td>
<td>Completed</td>
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<tr>
<td>Conduct gap analysis (patient survey)</td>
<td>YS/Advisor</td>
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<td>Completed</td>
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<tr>
<td>Begin lit review</td>
<td>YS</td>
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Survey completed for two weeks to ascertain reason for delayed discharges.
Appendix G. Microsystem SWOT Analysis of Department 335

**SWOT Analysis**

**Strengths**
- Daily rounds
- Supportive upper leadership and engagement
- Increase patient satisfaction
- Increase patient and family participation
- Increase bed turn around time
- Transparency with communication

**Weaknesses**
- Resistance from front line staff
- Lack of physician and patient care coordinator co-operation with use
- Use of check list but lack of patient involvement

**Opportunities**
- Reduce calls to physician for discharge clarification
- Reduce wait time for ride
- Reduce boarding time in Emergency Department
- Improve handoff communication regarding plan of care

**Threats**
- Nurses view as repetitive
- Nurses view as extra work
- Lack of positive unit nursing leadership and engagement
- Staff accepting change
Appendix H. Project Budget

### CNL Project Budget: Diversion

<table>
<thead>
<tr>
<th>Item</th>
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<th>Quantity</th>
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<td>$15.00/each</td>
<td>26 Beds</td>
<td>$390.00</td>
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<td>$19.53/each</td>
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<td>Hooks</td>
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<td>RN</td>
<td>$97.50/hour</td>
<td>40</td>
<td>$3,900.00</td>
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**Total Project Cost Annually:** $6,017.44

Cost of Divert per day (RMC) $21,055 per divert

Reduction of 2 Annually ($42,110.00)

**Cost Avoidance Year One:** $36,092.56

### CNL Project Budget: Readmission

<table>
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<th>Quantity</th>
<th>Total</th>
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<tr>
<td>RN</td>
<td>$97.50/hour</td>
<td>40</td>
<td>$3,900.00</td>
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**Total Project Cost Annually:** $6,017.44

Cost Readmission per day $3,000

Reduction of 10% Annually (Estimate 34 Days) ($102,000.00)

**Cost Avoidance Year One:** $95,982.56
### Appendix I. PDSA Cycles

## What Changes Lead to Improvement?

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<th>PDSAs</th>
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## Appendix J. Discharge Checklist

**Kaiser Permanente**

**Patient Discharge Checklist**

During your stay, your doctor and the staff will work with you to plan for your discharge. You and your caregiver (family member or friend who may be helping you) are important members of the planning team. You and your caregiver can use this checklist to prepare for your discharge.

<table>
<thead>
<tr>
<th>Name</th>
<th>Estimated Date of Discharge</th>
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### Patient To Do List

**Complete Care Path**

- □ Tolerate Diet
- □ Max Mobility
- □ Incentive Spirometer
- □ Able to Void/Bowel Movement
- □ Arrange Transportation Home Day Prior to Discharge
- □ Caregiver Present for Teaching
- □ Verbal Confirmation and Understanding of Teaching
- □ Personal Belongings

**Day of Admission**

- □ Initial Nursing Assessment

**Preparing for Discharge**

- □ Multidisciplinary Rounds
- □ Pain Management
- □ Evaluations/Consults
- □ Vital Signs Stable/Road Test
- □ Life Care Planning
- □ Discontinue Health Care Companion 24 hrs. Prior to Discharge (SNF, BCC, ALO Patients)
- □ Follow-up Diagnostic Procedures & Labs (X-Ray, Colonoscopy, EGD, etc.)
- □ Meet Requirements for Conditional Discharge Order
- □ Medical Equipment Needed?
- □ Delivered to Bedside
- □ Delivered to Home

**Education/Teaching**

- □ Teach Back
- □ Teach Back

**Medications**

- □ New/Changed/Stop
- □ Side Effects
- □ Vaccines
- □ HOME INFUSION
- □ IV Medications
- □ CADD Pump or ON-Q Pump

**Teaching**

- □ PICC Lines
- □ Wound Care/Dressing Changes
- □ Drains
- □ Nutrition/Diet
- □ Respiratory
- □ Glucometer

**Day of Discharge**

- □ Follow-up Appointments Scheduled?
- □ Specialty Paperwork Completed (FMLA, Workers Comp, VOT)
Appendix K. Discharge Timeline
April 9 – August 27, 2018

Weekly discharge times for medical/surgery and telemetry departments.

**Exclusions:** Skilled nursing facility and acute transfers not included.
Appendix L. Patient Survey
April 9 – August 27, 2018

Patient Survey
Please Rate How Useful the Patient Discharge Checklist Was in Helping You Prepare for Discharge

Results
- Helpful: 64%
- Neutral: 12%
- Somewhat: 11%
- Not Helpful at ALL: 13%

297 Patient’s Perception
Appendix M. RN Survey
April 9 – August 27, 2018

RN Survey
Please Rate How Useful the Patient Discharge Checklist Was During NKE

196 RN’s Perception

Results

Helpful Neutral Somewhat Not Helpful at ALL

49% 16% 15% 20%

RN Survey
Please Rate How Useful the Patient Discharge Checklist Was in Helping You Prepare Your Patient for Discharge

196 RN’s Perception

Results

Helpful Neutral Somewhat Not Helpful at ALL

47% 17% 19% 23%
Appendix N. HCAHPS
April 9 – August 27, 2018

HCHAPS: Discharge Information
Department 335
Jan - Aug 2018

HCAHPS: RN Communication
Department 335
Jan-Aug 2018
Appendix O. 30 Day Readmissions
April 9 – August 27, 2018

30 Day Readmission Rate: Department 335

Jan - Sep 2018

0.00%  2.00%  4.00%  6.00%  8.00%  10.00%  12.00%  14.00%  16.00%  18.00%

Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep

7.20%  11.37%  12.09%  12.55%  9.75%  9.80%  5.67%  0.48%  0.00%

Implement Discharge Checklist