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Transitional Care Services: A Nurse-Led Quality Improvement Project

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Transitional Care Services:
A Nurse-Led Quality Improvement Project
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Section I

Abstract

With the implementation of the Patient Protection and Affordable Care Act of 2010 (PPACA) and a national requirement for health care providers and systems to deliver care that is safe, outcome driven, and cost effective, Dignity Health (DH) as part of the hospital engagement network (HEN) launched an initiative called the “No Harm” campaign to reduce all-cause avoidable hospital readmissions. The project, led by a Doctorate of Nursing Practice (DNP) student and readmission team, sought to achieve a 20% reduction in preventable readmissions by December 2014. After having achieved initial success in implementing transitional care services for patients with heart failure and subsequently decreasing rehospitalizations by 30%, the DNP student and readmission team plan to expand evidence-based practices and interventions to all high-risk patients admitted to St. Mary’s Medical Center, a DH member. Such practices will include four key transitional care interventions: enhanced assessment of post-hospital needs, effective teaching and facilitated coaching (learning), post-hospital care follow-up, and provision of real-time handover to the next provider(s) to reduce avoidable rehospitalizations and improve outcomes.

Keywords: transitional care, hospital readmissions, evidence-based practices

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Section II

Transitional Care Services:

A Nurse-Led Quality Improvement Project

More than a decade has passed since the Institute of Medicine published its landmark reports, *To Err Is Human: Building a Safer Health System* (Kohn, Corrigan, & Donaldson, 2000) and *Crossing the Quality Chasm: A New Health System for the 21st Century* (Institute of Medicine, 2001), yet the quality of health care in the United States remains suboptimal and fragmented. These shortcomings particularly affect chronically ill people who experience frequent changes in health status accompanied by multiple transitions between settings and providers (Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011; Dartmouth Atlas Project & Perry Udem Research and Communication, 2013). Transitions, or “handovers,” are vulnerable exchange points that contribute to unnecessarily high rates of health service use, health care spending, and the exposure of chronically ill people to lapses in quality and safety (Anderson, 2004; Thorpe & Howard, 2006). Transitions have also been associated with increased rates of potentially avoidable hospitalizations.

In 2012, Dignity Health (DH), as a member of the Hospital Engagement Network (HEN), established by the Centers for Medicare and Medicaid Services (CMS), launched an initiative called the “No Harm” campaign to address such vulnerabilities in transitional care. This campaign chose as its goal a reduction in all-cause avoidable hospital readmissions. Under the leadership of a Doctorate of Nursing Practice (DNP) student and a readmission team, the project specifically aimed to implement evidence-based care-transition strategies for high-risk patients admitted to St Mary’s Medical Center, a DH member, in order to reduce preventable readmissions by 20%. A target of December 2014 was selected to meet the organizational “No Harm” campaign goal of a fiscal year (FY) 2014 all-cause readmission rate of 5.86%. This paper

provides a description and analysis of all facets of the campaign as well as a discussion of next-step interventions.

Background Knowledge

Traditional health care does not have dependable mechanisms for coordinating care across settings; are all ensconced in “silos” that generally keep the focus within individual venues (Coleman, Fox, & HMO Workgroup on Care Management, 2004). Lack of coordination blurs the lines of responsibility for patients in the period between discharge from one location and admission to another, leaving them confused about whom to contact for care, especially if symptoms worsen (Coleman & Berenson, 2004; Snow et al., 2009). Gaps in coordination are not surprising given the complexity of the U.S. health care system and the often remarkable number of physicians caring for an individual patient (Bonner, Schneider, & Weissman, 2010). Medicare beneficiaries see an average of two primary care physicians and five specialists during a two-year period; patients with chronic conditions may see up to 16 physicians in one year (Pham, Schrag, O’Malley, Wu, & Bach, 2007). Areas that need improvement include communication between providers, patient education about medications and treatments, monitoring of medication adherence and complications, follow-up of pending tests and procedures after discharge, and outpatient follow-up soon after discharge (Forster, Murff, Peterson, Gandhi, & Bates, 2003; Roy et al., 2005; Moore, McGinn, & Halm, 2007).

Jencks, Williams, and Coleman (2009) reported that approximately 20% of Medicare beneficiaries discharged from hospitals were rehospitalized within 30 days, and nearly 13% experienced three or more provider transfers. This movement of patients from hospitals to the community and back again accounts for an estimated \$17 billion in annual Medicare spending (Medicare Payment Advisory Commission [MedPAC], 2007). A recent national report from the Robert Wood Johnson (RWJ) Foundation termed this phenomenon *the revolving door*

(Dartmouth Atlas Project, 2013). Typical failures in transitions include ineffective patient and caregiver education, discharge summaries that are incomplete or not communicated to the patient or the next care setting provider, lack of follow-up with primary care providers, and poor patient social support (Rutherford, Nielsen, Taylor, Bradke, & Coleman, 2012; Forster et al., 2003; Moore et al., 2007). Innovative solutions, referred to as *transitional care*, have emerged to interrupt this pattern. In addition, section 3026 of the Patient Protection and Affordable Care Act (PPACA, 2010) established the Community Based Care Transitions program in which health systems and community organizations receive funding to provide at least one transitional care intervention to high-risk Medicare beneficiaries.

Transitional care is defined as a broad range of time-limited services designed to ensure the coordination and continuity of health care. These services are intended to prevent poor outcomes (including rehospitalizations among at-risk populations) and promote safe and timely transfer of patients as they move from one level of care to another, among multiple providers and across settings (Coleman & Boulton, 2003; Naylor, 2011). In a systematic review, Naylor et al. (2011) identified nine studies demonstrating positive effects of transitional care on readmissions. All of the studies included multicomponent interventions that focused on comprehensive discharge planning with timely continued follow-up. Effective interventions included comprehensive discharge planning, home visits, coaching, disease management, self-care education, support, and telehealth. In a national study, Bradley and colleagues (2012) found that although hospitals were aware of evidence-based practices to reduce readmissions, on average hospitals used 4.8 of 10 key practices and fewer than 3% of hospitals utilized all 10 practices. In addition, relevant to nursing, Naylor et al. (2011) identified 18 randomized controlled trials (RCT) designating a nurse as the transitional care clinical leader or manager.

Leading national organizations such as the Institute of Healthcare Improvement (IHI), the Agency for Healthcare Research and Quality (AHRQ), and the National Quality Forum endorse transitional care models as preferred practices for high-risk patients. Moreover, the California Quality Collaborative recommends the Care Transition Program (Coleman, 2003), Project RED (Jack, 2013), Better Outcomes for Older Adults Through Safe Transitions (BOOST), the Transitional Care Model (Naylor, 2011), and Transforming Care at the Bedside (IHI & RWJ, 2003) as models with effective strategies that reduce readmissions.

Readmission rates are viewed as a measure of the quality of care delivered during hospitalization, and reducing avoidable readmissions has become a national priority under the Patient Protection and Affordable Care Act (2010) (PPACA). Furthermore, the Hospital Quality Alliance, a consortium of payers, health care organizations, and regulators, includes readmission rates for select inpatient conditions as measures of quality (Consumer Assessment of Healthcare Providers and Systems, 2014). In addition, Medicare readmission rates are publicly reported by the Hospital Compare website (<http://www.medicare.gov/hospitalcompare/search.html>), and in 2012, the Centers for Medicare and Medicaid Services began reducing reimbursements to hospitals with high readmission rates.

Although readmission rates in the United States have been high for many years, Jencks, Williams, and Coleman brought this issue to the forefront with their landmark 2009 article. Analyzing 2003–2004 claims data, they demonstrated that 19.6% of Medicare beneficiaries were readmitted to the hospital within 30 days of discharge, and 34.0% were readmitted within 90 days. Medical and surgical patients were both affected, although medical patients had a higher readmission rate (21.1% versus 15.6% among surgical patients at 30 days) and accounted for 77.1% of the rehospitalizations. The highest 30-day readmission rates were observed for patients with heart failure (26.9%), psychoses (24.6%), recent vascular surgery (23.9%), chronic

obstructive pulmonary disease (22.6%), and pneumonia (20.1%). During the past decade, risk-adjusted 30-day readmission rates among Medicare beneficiaries have remained relatively constant (Joynt & Jha, 2012).

Readmission rates have been documented in other populations as well. For example, in Veterans Affairs hospitals, the 30-day all-cause readmission rate was 15.2% in 2009–2010 (Kaboli et al., 2012). In 2007, the 30-day readmission rate among non-elderly adults (ages 21–64, excluding obstetric admissions) was 10.7% for patients with Medicaid and 6.3% for patients with private insurance (Jiang & Wier, 2010). Despite some recent progress, improving care transitions remains a national challenge. As the United States health system evolves from a fee-for-service financial model to payment-for-value, it is especially important that health care providers improve care for patients by optimizing care transitions (Gabow et al., 2012).

Starting in October 2012, more than 2,000 hospitals nationwide were penalized by the Centers for Medicare and Medicaid Services (CMS) because patients were readmitted within 30 days after discharge (Hostetter & Klein, 2012). In the fiscal year FY 2012 final rule, CMS defined a readmission as an admission to a hospital within 30 days of a discharge from the same or another hospital (CMS, 2012a). The CMS levies penalties when patients are readmitted with an index post-discharge diagnosis of pneumonia (PNA), acute myocardial infarction (AMI), heart failure (HF), or any other cause within 30 days. In 2014, CMS added diagnoses of chronic lung disease, elective knee, and hip replacements as additional conditions that are subject to penalties for excess readmissions. The penalties, authorized by the PPACA, range from 0.1%-1% of Medicare reimbursements. The maximum penalty increased to 2% of payments starting October 2013, then to 3% in 2014. Approximately \$280 million or 0.3% of the total amount hospitals are paid by Medicare will be lost (CMS, 2012a).

In May 2014, CMS issued new guidelines for assessing whether hospitals are in compliance with the CMS Discharge Planning Conditions of Participation (COPs). Processes such as actively engaging the patient/family/caregivers in discharge planning, providing customized education using teach-back, arranging for post-hospital services, and developing a discharge plan that can be realistically implemented are what should be delivered for all patients, not only those at high risk of readmission.

There are many reasons to improve transitional care for all patients. First is the regulatory compliance rationale: The 2013 CMS COPs make it clear that improved processes are required for all patients. Since public payers typically make up a majority of safety-net hospitals' payer mix, the efficient response to this requirement is to improve care systematically. Second is the clinical quality rationale: Each patient, regardless of admission diagnosis, payer, or presence of comorbidities/complexities, should have a safe and effective transition out of the hospital and into the next care setting. Third is the clinical impact and clinical efficiency rationale: It is more effective and efficient to improve standard care for all patients than to rely on incomplete and time-intensive methods to identify a subset of patients for whom to improve these basic elements of hospital-based care (Agency for Healthcare Research and Quality [AHRQ], 2014a).

In the past, the organization has addressed similar transitional care issues. It had an established Gordon and Betty Moore grant-funded heart failure (HF) team comprised of two registered nurses (a DNP student and a telemetry charge nurse). The team exceeded the grant goal of reducing the 30-day all-cause rehospitalization rate for patients with HF by implementing evidence-based transitional care interventions as described in the IHI's *How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations* (Rutherford et al., 2012). The goal was to reduce by 30% the readmission rate for patients with a primary diagnosis of heart failure from a FY 2012 baseline rate of 20% to a FY 2013 rate of

14%. In addition, the team decreased the readmission rate for the Medicare population, as reported by Dignity Health, from a FY 2012 baseline rate of 22% to FY 2013 rate of 14%. Finally, the team exceeded the goal for the 90-day rehospitalization rate. The goal was to reduce the FY 2012 baseline rate of 33% to 29%, and the team achieved a FY 2013 rate of 24% for patients with a primary diagnosis of heart failure (see Appendix A for final Moore grant report).

Local Problem

Dignity Health (DH) is a hospital engagement network (HEN) that has a contract with two CMS-funded transition programs, Community-based Care Transitions Program (CCTP) and the Partnerships for Patients Program (P4P). The goals of the HEN are to improve transitions of Medicare beneficiaries from the inpatient hospital setting to other care settings, to improve quality of care, to reduce avoidable readmissions for high-risk beneficiaries, and to document measurable savings to the Medicare program. The DH system goal for the “No Harm” HEN campaign is a 20% reduction in all-cause readmissions from a FY 2012 baseline rate of 7.33% to a system goal FY 2014 rate of 5.86%. St. Mary’s Medical Center target rate for all-cause readmissions is 5.86% for FY 2014 with a FY 2013 rate of 6.55%. Equally important, CMS under the PPACA implemented the hospital value-based purchasing program (VBP) initiative in which hospitals receive rewards based on the quality of care provided to Medicare patients, their close adherence to best clinical practices, and their enhancement of the patients’ experiences of care. The patient experience of care domain is scored by the results of the national Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. In 2013, three care transition questions were added to the survey (CMS, 2013), signaling that these answers will factor into the VBP equation.

In addition, St. Mary’s Medical Center is participating in the San Francisco Community-Based Transitional Care Program (SFCCTP). The program is sponsored by CMS as part of the

Readmissions Reduction Program (CMS, 2012b). The Community-Based Care Transitions Program (CCTP), created by Section 3026 of the PPACA, tests models for improving care transitions from the hospital to other settings. The goals of the CCTP are to improve transitions of beneficiaries from the inpatient hospital setting to other care settings, to improve quality of care, to reduce readmissions for high-risk beneficiaries, and to document measurable savings to the Medicare program. This free program is a benefit to Medicare patients living in San Francisco.

Intended Improvement

The aim of the project was to implement evidence-based care-transition strategies for high-risk patients admitted to St. Mary's Medical Center in order to reduce preventable readmissions by 20% by December 2014, thereby meeting the organizational "No Harm" campaign goal of a FY 2014 all-cause readmission rate of 5.86%. These practices emphasize four key areas: enhanced assessment of post-hospital needs, effective teaching and facilitated coaching (learning), post-hospital care follow-up, and provision of real-time handover to the next provider(s) to reduce avoidable rehospitalizations and improve outcomes. After a review of the literature, the team decided to continue to utilize the IHI's *How-to Guide: Improving Transitions from the Hospital to Community Settings to Reduce Avoidable Rehospitalizations* (Rutherford et al., 2012) as a roadmap for spreading interventions to high-risk patients. Furthermore, embedded in the *How-to Guide* are various evidence-based practice transition models to be tested and adapted by organizations to improve transitions from hospital to home or community.

The first step as outlined in the guide is to perform an enhanced assessment of post-hospital needs. The involvement of the patient, family caregivers, and/or community providers as full partners in assessing post-hospital needs is vital to a safe transition back into the community. Too often this fundamental step is incomplete or unrealistic and not communicated to key

stakeholders (Rutherford et al., 2012). Without a thorough needs assessment and cross-continuum communication, it is impossible to develop a customized discharge plan. Typical system or process failures include identifying those at high risk, incomplete medication reconciliation and polypharmacy that lacks a thorough assessment of functional ability, physical and cognitive health status, and social concerns. Other gaps in the assessment include the failure to facilitate self-care management, to address palliative care, and to attend to end-of-life issues (Rutherford et al., 2012).

The second step is to provide effective education and facilitate learning through the use of the teach-back method (Agency for Healthcare Research and Quality, 2001) throughout the hospital stay to assess the patient's understanding of discharge instructions and ability to perform self-care. The teach-back method utilizes health literacy principles by using plain language, limiting information to three to five key points, and being specific and concrete in teaching patients what they need to do. Patients are asked to restate or teach back information that has been presented to them. The technique allows the educator to check for gaps in understanding, reinforce and tailor messages, engage in open dialogue (Iowa Health System Literacy Collaborative, 2013), and provide closed-loop communication.

The third step is to ensure post-hospital care follow-up. An analysis by Medicare found that 50% of patients readmitted within 30 days had no physician visit between discharge and readmission (Kansagara et al., 2011). Scheduling a follow-up physician appointment prior to discharge and implementing post-hospital follow-up phone calls and home health referrals have demonstrated effectiveness in reducing readmissions and improving outcomes (Rutherford et al., 2012).

The fourth strategy in reducing readmissions according to the IHI roadmap is to provide real-time handover communication to the next provider(s). The patient should be given a post-

hospital care plan that is patient-centered and includes a clear reconciled medication list. Next, provider(s) should be identified, receive critical written information, and for high-risk patients receive real-time verbal handover communication.

Review of the Evidence

A comprehensive literature review was conducted using the following keywords as individual terms and in combination: hospital readmissions, readmission risk assessment, teach back, and care transition models. Using PubMed, CINAHL Plus with full text, AHRQ evidence reports, and Cochrane databases, as well as government health care and other websites, a number of articles were retrieved. Publication date was initially limited to the last five years but expanded to 15 years as key recommended evidenced-based models of transitional care were published beyond five years.

Applying the Johns Hopkins Nursing Evidence-Based Practice Appraisal (JHNEBP) summary tool (Newhouse, Dearholt, Poe, Pugh, & White, 2007), three RCT and three best practice care transition models were selected, as evidenced by their quality and rigor, evaluated, and summarized into a table (see Appendix B for evidence table). The quality of evidence was graded using the JHNEBP quality-rating scientific-evidence appraisal scale: A = High quality, B = Good quality, and C = Low quality. Articles were rated on strength of evidence using the hierarchy of evidence in Melnyk and Fineout-Overholt (2011, p. 12). Finally, for the purpose of this critical appraisal of the existing literature, articles have been summarized as they apply to transitional care models, enhanced assessment of post-hospital needs, effective teaching and facilitated learning, post-hospital care and follow-up, and provision of real-time handover to the next provider(s) (Boutwell, Griffin, Hwu, & Shannon, 2011; Coleman, Parry, Chalmers, & Min, 2006; Hansen et al., 2013; Jack et al., 2009; Naylor et al., 2004).

Transitional care models. Evidence-based models include the Transitional Care Model (TCM) (University of Pennsylvania, 2013), Care Transitions Intervention (CTI) (Coleman et al., 2006), a Reengineered Hospital Discharge Program (Project Red) (Jack, 2013), Better Outcomes by Optimizing Safe Transitions (BOOST) (Society of Hospital Medicine, 2014), State Action on Avoidable Rehospitalizations (STAAR, 2014), and INTERACT (Florida Atlantic University, 2011). These models seek to improve patient outcomes and reduce avoidable rehospitalizations with interventions aimed at care transitions. Selected for review are several of these multicomponent transitional care interventions, tested in randomized controlled trials, followed by a discussion of promising practices.

Naylor et al.'s (2004) Transitional Care Model (TCM) utilizes an advanced practice nurse (APN) that meets with the patient and caregiver in the hospital, performs a structured needs assessment, and provides comprehensive discharge planning which includes education and coordination of post-discharge services. Post-discharge telephone follow-up includes reinforcement of education, monitoring of symptoms and progress, and adjustment of the care plan as needed. In an RCT, the TCM model reduced readmissions for heart failure patients. In addition, a more intensive form of the TCM intervention that included APN home visits was also effective in reducing rehospitalization among high-risk elderly patients (Naylor et al., 1999).

The Care Transitions Intervention (CTI), developed by Coleman et al. (2006), utilizes a nurse transition coach that educates and empowers patients to better navigate their own care. The nurse coach meets the patient in the hospital, visits the patient at home 48-72 hours after discharge, and performs three follow-up telephone calls. The CTI emphasizes four "pillars": medication self-management, a patient-owned health record, follow-up with a primary care provider or specialist, and awareness of "red flags." The intervention lowered 30- and 90-day readmission rates in an RCT and also reduced readmissions in a real-world effectiveness

study (Voss et al., 2011).

Project Reengineering Discharge (RED), developed by Jack and colleagues (2009), addresses both the system and patient's navigation of the discharge process through 12 mutually reinforcing components. Interventions include patient education, scheduled follow-up appointments prior to discharge, reconciliation of the medication list and discharge plan, delivering discharge summaries to the next providers, and performing telephone follow-up. When implemented in an urban university hospital by nurse discharge advocates, participants randomized to the intervention group had a lower rate of 30-day hospital utilization (emergency department visits and rehospitalizations) (Greenwald, Denham & Jack, 2007).

Promising practices. Three other promising interventions being tested are Project BOOST (Better Outcomes by Optimizing Safe Transitions), the STAAR initiative (State Action on Avoidable Rehospitalizations), and INTERACT (Interventions to Reduce Acute Care Transfers) (Florida Atlantic University, 2011). These three interventions are important approaches to improving transitions of care and/or reducing avoidable hospitalization. However, further studies such as RCT's, larger cohorts, or more rigorous outcome data are needed to validate the approaches and to be able to generalize to larger populations (Boutwell et al., 2009).

Project BOOST (Better Outcomes by Optimizing Safe Transitions) is a national initiative developed by the Society of Hospital Medicine to standardize and optimize the care of patients discharged from hospital to home (Society of Hospital Medicine, 2014). The program includes evidence-based clinical interventions that can be adopted by any hospital. The intervention goals are as follows: identifying patients at high risk on admission, targeting risk-specific situations, improving information flow between inpatient and outpatient providers, improving patient and caregiver education by using the teach-back method, and achieving timely follow-up after discharge. The program includes a year of technical support provided by a physician mentor.

Preliminary results from pilot sites showed a 14% reduction in 30-day readmission rates in units using BOOST compared with control units in the same hospital (Hansen et al., 2013).

The STAAR initiative (State Action on Avoidable Rehospitalizations) was launched in 2009 by the IHI as a four-year community-level program with the goal of reducing avoidable readmissions in the states of Massachusetts, Michigan, and Washington. Hospital teams focus on improving assessment of needs after hospital discharge, teaching and learning real-time hand-off communication, providing timely follow-up after hospital discharge, and forming cross-continuum teams, both internally and externally. In an interim report, Boutwell et al. (2011) recommended to policy makers, providers, leaders, and funders that any efforts to reduce rehospitalizations must include three important strategies. First, organizations must go beyond the hospital walls and partner with community-based providers. Second, state leaders who are setting health care quality and cost improvements across multiple settings of care should consider forming state-level multi-stakeholder entities, all with a common aim. Finally, incentives and updated payment policies are needed to support the investments required to deliver coordinated transitional care across settings (Boutwell et al., 2011).

A substantial proportion of patients cared for in the hospital require subsequent treatment in either a skilled nursing or rehabilitation facility. Among patients >65 years of age, discharges to post-acute care (PAC) facilities account for 28% of all hospital discharges (Kripalani, Theobald, Anctil, & Vasilevskis, 2013). Among Medicare beneficiaries discharged to a PAC facility in 2006, nearly 25% of patients were readmitted within 30 days at a cost of \$4.34 billion (Mor, Intrator, Feng, & Grabowski, 2010). Interventions to Reduce Acute Care Transfers (INTERACT) is a quality-improvement initiative for skilled nursing facilities and nursing homes, designed to facilitate early identification, evaluation, documentation, and communication of changes in the status of residents to potentially avoid hospital admissions. The intervention

includes three key tools for providers: care paths, communication tools, and advanced care planning tools. A six-month study in 25 nursing homes showed a 17% reduction in self-reported hospital admissions with this program compared with the same period the previous year (Ouslander et al., 2011).

Overall, the literature demonstrates that single interventions, i.e., patient education or scheduling follow-up, are not likely to reduce readmissions or improve patient care. However, the evidence suggests multifaceted, bundled interventions are likely necessary for substantial improvements in readmission rates (Coleman, 2006; Hansen et al., 2011; Jack et al., 2009; Naylor et al., 1999). Although the selected models differ in approach, they all bridge the hospital and post-discharge periods with dedicated transitional care personnel, patient-centered discharge instructions, and telephone follow-up. The models, however, do share certain features, such as helpful tools for professionals, promotion of patient-centered care, reduced hospital readmissions, and overall reduced health care costs. Additionally, the hospital-to-home models all utilize discharge planning with written discharge instructions, medication information, and patient education. While there are no comparative studies to demonstrate effectiveness of one model over the other, organizations have used bundles of interventions and customized them based on local workflow, resources, and culture (Kripalani et al., 2013). St. Mary's Medical Center's evidence-based model is a combination of Project Red (Jack et al., 2009) for in-hospital transitional care services and the Care Transition Model (Coleman et al., 2006) in association with San Francisco Transitional Care Program (SFTCC) to address post-discharge follow-up care.

Burke, Kripalani, Vasilevskis, and Schnipper (2013) propose a framework of 10 domains, which they term the Ideal Transition in Care (see Appendix CC for framework). The domains provide a structure for organizations to evaluate their readmissions and to determine the extent to

which the transition process approaches the ideal to move beyond regulatory penalties to providing quality care. The domains act as structural supports of the “bridge” patients must cross from one care environment to another during a care transition. It also implies that the more the structural supports are missing, the less safe the “bridge” or transition is. Those domains that take place prior to discharge are placed closer to the “hospital side” of the bridge; those that take place after discharge are placed closer to the “community side” of the bridge; while those that take place both prior to and after discharge are in the middle.

Hospital domains include discharge planning, complete communication of information, medication safety, patient education to promote self-management, and enlistment of social and community supports. The Advance Care Planning domain may begin in the hospital or outpatient setting, and involves establishing goals of care and health care proxies, as well as engaging with palliative care or hospice services, if appropriate. The community side domains include coordinating care among team members to synchronize efforts across settings and providers, monitoring and managing symptoms after discharge, and following up with outpatients’ post-discharge providers.

In an updated systematic review, Burke, Guo, and Misky (2013) mapped care interventions to the 10-component Ideal Transition in Care framework. They included 61 interventions, 42 of which have been studied in RCTs. The number of components included in prior interventions ranged from 1 to 8, with an average of 3.5. The most common components included were patient education (with an emphasis on promoting self-management), medication safety, and coordination of care.

Just under half (47.5%) of interventions demonstrated a statistically significant reduction in readmissions (Burke et al., 2013). Consistent with prior reviews, no single intervention component significantly reduced readmissions, although a trend was present for patient

education and engaging social and community supports ($p = 0.06$ for each). The only significant predictor of success in reducing readmissions was the number of domains included in the intervention ($p = 0.002$). Others have also recently shown that the number of strategies employed by hospitals is significantly associated with 30-day risk-standardized readmission rates (Bradley et al., 2013). Although a number of risk-assessment tools are reported in the literature, there are inconsistencies regarding which characteristics and/or variables are most predictive of patients who are at risk for rehospitalization.

Enhanced assessment of post-hospital needs: Risk-assessment tools. Many risk factors have been found to be associated with a heightened likelihood of readmission, including patient-specific factors (Van Walraven et al., 2010), quality of in-hospital care (Lindenauer et al., 2010; Ashton, Del Junco, Soucek, Wray, & Mansyur, 1997; Hansen, Williams, & Singer, 2011), and the quality and adequacy of discharge planning and follow-up care (Jencks et al., 2009; Marcantonio et al., 2010; Ghali et al., 2010).

In a systematic review of risk prediction models for hospital readmission, Kansagara and colleagues (2011) found that readmission-risk prediction models, whether designed for comparative or clinical purposes, perform poorly. The objective of the review was to summarize validated readmission-risk prediction models, describe their performance, and assess their suitability for clinical or administrative use. Characteristics of ideal models, according to the authors, should include reliable data that are easily obtained and deployable in large populations; they should also use variables clinically related to and validated in the target population and be of good predictive value. Clinical applications of the model would provide relevant stratification of readmission risk (high to low) and give information early enough during the hospitalization to trigger a transitional care intervention, many of which involve discharge planning.

Of 7,843 citations reviewed, 30 studies of 26 unique models met the inclusion criteria

(Kansagara et al., 2011). The most common outcome used was 30-day readmission; only one model specifically addressed preventable readmissions. Fourteen models that relied on retrospective administrative data could be potentially used to risk-adjust readmission rates for hospital comparison; of these, nine were tested in large U.S. populations and had poor discriminative ability (*c* statistic range: 0.55-0.65). The *c* statistic is defined as the proportion of times the model correctly discriminates a pair of high- and low-risk individuals. A *c* statistic of 0.50 indicates that the model performs no better than chance; a *c* statistic of 0.70 to 0.80 indicates modest or acceptable discriminative ability; and a *c* statistic of greater than 0.80 indicates good discriminative ability (Kansagara et al., 2011). Seven models could potentially be used to identify high-risk patients for intervention early during a hospitalization (*c* statistic range: 0.56-0.72), and five could be used at hospital discharge (*c* statistic range: 0.68-0.83).

Most models were categorized into two groups: those that rely on retrospective or real-time administrative data and those that use primary data, either survey or chart review in real time or retrospectively (Kansagara et al., 2011). Factors such as inpatient care quality, patient comorbidities, social supports, and post-discharge care have been investigated. However, the authors found few models have examined social determinant variables, such as illness severity, mental health and substance use, overall health and function, socioeconomic status, social support, access to care, health literacy, numeracy, and self-management skills. They concluded that in certain settings such risk-prediction models may prove beneficial, and as their use becomes more widespread, efforts should be made to improve their performance. Strengths of the systematic review include a comprehensive reproducible search strategy, defined inclusion and exclusion criteria, and quality assessment of articles retrieved (University of Iowa Hospitals & Clinics, 2010).

As reported by Kansagara et al. (2011), very few risk-assessment models incorporated

clinically actionable data that could be used to triage patients to different types of interventions. For example, marginally housed patients, or those struggling with substance abuse, might require unique discharge services. Relatively simple, practical models that use real-time clinically actionable data, such as the Better Outcomes for Older Adults (BOOST) model, have been created, but their performance has not yet been rigorously validated.

Given that numerous risk factors have been identified in the literature as being associated with increased risk for adverse events after discharge, including unplanned readmissions, the BOOST tool aims to “risk identify” rather than “risk stratify”; that is, the tool uses the 8Ps Risk Assessment for determining if the patient has a risk factor and then targets interventions to mitigate that risk. The 8Ps Risk Assessment is not intended to be a score, but a checklist of risks that should be identified and addressed for all hospitalized patients. While many of these risk factors have been described in the literature, the BOOST checklist provides sample definitions:

1. Problems with medications: Patients with polypharmacy — i.e., ≥ 7 routine medications or who are on high-risk medications, including anticoagulants (e.g., warfarin, heparin, Factor Xa, or thrombin inhibitors), antiplatelet agents in combination (e.g., aspirin and clopidogrel), insulin, oral hypoglycemic agents, digoxin, and narcotics.
2. Psychological: Patients who screen positive for depression or who have a history of depression. Providers may also choose to include anxiety and substance abuse in this screening.
3. Principal diagnosis: Patients with a principal diagnosis or reason for hospitalization related to cancer, stroke, diabetic complications, COPD, or heart failure.
4. Physical limitations: Patients with frailty, deconditioning, or other physical limitations that impair or limit their ability to significantly participate in their own care (e.g., perform activities of daily living, medication administration, and participation in post-hospital

care).

5. Poor health literacy: Patients who are unable to demonstrate adequate understanding of their care plan as demonstrated by their inability to complete “teach-back” successfully.
6. Poor social support: The absence of a reliable caregiver to assist with the discharge process and to assist with care after the patient is discharged. This P also captures the concept of social isolation.
7. Prior hospitalization: Unplanned hospitalization in the six months prior to this hospitalization.
8. Palliative care: When thinking about this patient, would the providers be surprised if the patient died within a year? Does this patient have an advanced or progressive serious illness? This risk factor would be triggered if answered *no* to the first or *yes* to the second question.

Effective teaching and facilitated learning. The 2007 MedPAC Report notes that patient adherence with discharge instructions affects the rate of rehospitalization. However, the ability of patients to follow instructions provided at discharge is hindered by the complexities of medical issues, jargon used in the health care setting, and the stress associated with hospitalization. During the acute care hospitalization, only essential education is recommended (Rutherford et al., 2012).

Research shows that one of the most effective ways to improve understanding of self-care instructions while simultaneously addressing health literacy is the “teach-back” method (Kripalani, Bengtzen, Henderson, & Jacobson, 2008; Kemp, Floyd, McCord-Duncan, & Lang, 2008; Schillinger et al., 2003; White, Garbez, Carroll, Brinker, & Howie-Esquivel, 2013). In the randomized controlled study, Kripalani et al. demonstrated that teach-back was an effective method to assess retention of informed consent of low-literacy adults. Kemp et al., as well as

Schillinger et al., used the teach-back method as a means of “closing the loop” in communication and found having patients teach back information helpful in assessing patients’ understanding of instructions and improving outcomes.

In a prospective cohort study, White and colleagues (2013) used the teach-back method to determine if hospitalized patients with heart failure, educated with the teach-back method, retained self-care educational information and had lower readmissions. The authors concluded that teach-back was an effective method to educate and assess learning, but it was not associated with lower readmission rates in this cohort. In all of these studies, the authors suggested the use of teach-back as a feasible and generalizable approach that could be adopted to other research studies to help assess comprehension.

Teach-back requires patients to explain in their own words what they need to know or do (Iowa Health Collaborative, 2013). The method utilizes clear communication principles by using plain language, limiting information to three to five key points, and being specific and concrete in teaching patients what they need to do. It creates an opportunity for the clinician to check for understanding and, if necessary, re-teach the information (Iowa Health Collaborative, 2013).

Post-hospital care and follow-up. A high percentage of rehospitalizations occur in the immediate days or weeks following discharge (Jencks et al., 2009; Rutherford et al., 2012). A national Medicare analysis found 50% of patients who were rehospitalized within 30 days had no intervening physician visit between discharge and rehospitalization (Kansagara et al., 2011). Intervening by scheduling a physician appointment prior to hospital discharge is a best practice strategy (Jack et al., 2009; Naylor, 2004; Rutherford et al., 2012). Additional recommended evidence-based interventions in post-hospital care include initiation of clinical and social services as indicated from the assessment of post-hospital needs and the capabilities of patients and family caregivers. Such services include home visits, telephone calls, and referrals to

community resources.

Provision of real-time handover to the next provider(s). Patients and families are better able to participate in next steps after hospitalization when they have clear, specific, easy-to-read written discharge information, including a clear medication list (Jack et al., 2009; Naylor, 2004; Rutherford et al., 2012). Tools are available to assist in providing clear discharge instructions (IHI, 2012, p. 109). Inadequate transfer of information (the handover) during care transitions plays a significant role in the problems of quality and safety for patients, contributing to duplication of tests and greater use of acute care services (Institute of Medicine, 2001; Rutherford et al., 2012). All patients need complete and timely discharge summaries, preferably at time of discharge, to be sent to and received by the next care providers prior to their scheduled post-hospital office visit. Additionally, direct verbal communication is needed for those assessed as high-risk. The telephone call can allow for dialogue about the patient's clinical status as well as opportunities for inquiry and clarification about the plan of care (Rutherford et al., 2012; Jack et al., 2009).

Conceptual and Theoretical Frameworks

Several related theoretical and conceptual frameworks informed this project: Diffusion of Innovation Theory (Rogers, 2003), Donabedian's model (Donabedian, 1988), and the IHI evidence-based model using the Plan Do Study Act (PDSA) model (Langley et al., 2009). These frameworks work together in organizational change and transitional care because they encourage new behaviors, as Rogers' theory explains.

The key to adoption, according to Rogers' (2003) theory, is for the person or system to perceive the idea or behavior as new or innovative. When promoting change, leaders must understand the characteristics of the five established adopter categories and the strategies used to appeal to different adopters. For example, *innovators* are the people who try new things and are

risk takers; they become the unit champions of new care transition strategies. *Early adopters* are those who are in leadership roles and embrace change and are comfortable with new ideas. This group supports the effort and celebrates each success. The *early majority* group consists of those who need evidence that the innovation works before they are willing to adopt; they need the data. *Late adopters* are skeptical and will only try something new after the majority has. They need information on how many others have been successful. Finally, there are the *laggards*, who are bound by tradition and don't adopt easily but may feel pressure from the other groups to do so.

Rogers (2003) similarly outlined five steps that people take when adapting to a new idea or innovation: knowledge, persuasion, decision, implementation, and confirmation. To achieve the aim of reducing readmissions and improving care, people from the frontline to the executive organizational leadership need to perceive providing transitional care services as providing better care, better patient experience, and lower costs (CMS, Partnership for Patients, 2014a).

The Donabedian Paradigm (Donabedian, 1966) of structure, process, and outcome has been used in health care quality research. First, structures of health care are defined as the physical and organizational aspects of care settings (e.g., facilities, equipment, personnel, operational and financial processes supporting medical care, etc.). Second, the processes of patient care rely on the structures to provide resources and mechanisms for participants to carry out patient care activities. In addition, processes are performed in order to improve patient health in terms of promoting recovery, functional restoration, survival, and “transition” from the hospital to home or community (McDonald et al., 2007).

Organizational quality improvement models. The IHI quality improvement (IHI-QI) approach is grounded in the work of Edward Deming. The model draws a fundamental distinction between the system to be improved and the techniques and methods used to improve it. The model is based on the idea that theories and techniques from other disciplines can be

applied to a health care system, and that under certain conditions and with belief, desired predictable improvements can be achieved. Success requires the will, moral engagement, and action to improve ideas for changes that can be tested, adapted, and implemented. In the execution of changes, the theories and techniques translate into improvements. Deming terms this idea as “Profound Knowledge” or the knowledge that builds will, generates ideas, and guides execution (Scoville & Little, 2014). One of the core elements of IHI-QI is the Model for Improvement, which poses three questions: 1) What are we trying to accomplish? 2) How will we know a change is an improvement? and 3) What changes can we make that will result in improvement? In Plan Do Study Act (PDSA) cycles, improvements can be achieved (Langley et al., 2009).

St. Mary’s Medical Center also uses the PDSA performance improvement model in conjunction with the IHI-QI model (Langley et al., 2009; Scoville & Little, 2014) to improve organizational performance. A collaborative, multidisciplinary approach is fostered by creating a culture focused on improvements in both individual performance and systematic organizational planning. Processes are developed by multidisciplinary teams to meet key performance objectives. Improvements are prioritized based on volume, risk level, problem areas, cost, and dimensions of care, including patient safety. Reducing readmissions and improving care transitions constitute a strategic performance improvement project in line with DH and St. Mary’s Medical Center’s “No Harm” campaign.

Lean approach to quality improvement. In a 2014 IHI white paper, Scoville and Little (2014) describe Lean “as an approach to quality improvement using the integrated principles, methods, and tools that have developed from the Toyota Production System (TPS) to optimize the performance and management of value-producing systems” (Scoville and Little, 2014, p. 5). The ideal “production” system is based on outcomes. A systems output is defect free, the service

is tailored and delivered in response to need, the response is immediate, and work is done safely and without waste. The term *Lean* acknowledges the drive to eliminate waste from the system, and thus produce maximum value at minimum cost. When applied to health care, *Lean* is “an organization's cultural commitment to applying the scientific method to designing, performing, and continuously improving the work delivered by teams of people, leading to measurably better value for patients and other stakeholders” (Toussaint & Berry, 2013, p. 75). *Lean* is an operating system composed of six principles: attitude of continuous improvement, value-creation, unity of purpose, respect for people who do the work, visual information displays, and flexibility. *Lean thinking* promotes employee participation in process improvement, so that the staff actually doing the work figures out ways to improve it. In this way improvement becomes integrated into the daily functions of all staff. *Lean* is a cultural transformation that changes how an organization works (Toussaint & Berry, 2013). St. Mary’s Medical Center’s structure, process, quality improvement model, and Transformational Care (TC) and *lean thinking*, leadership and change model allow for successful implementation of transitional care services.

Section III

Methods

Through the ethical principles of beneficence, nurses act to provide care that ensures the maximum benefit and least amount of harm to the patient. The advanced practice nurse (APN) has a greater moral responsibility because of his/her expanded practice and leadership role (Grace, 2009). Providing transitional care services through assessing patient needs, providing education for self-care, and collaborating with other professionals to meet the needs of the patient are ways in which this fulfills the nurse’s primary commitment to the patient in meeting needs across the continuum of care (American Nurses Association, 2001).

The aim of this project was to implement evidence-based care-transition strategies to improve the quality of care for patients admitted to St. Mary's Medical Center and decrease readmissions. Improvement activities are changes that meet the requirements of a quality improvement project, rather than a research project. There is no intention of using any data obtained for research purposes. Approval as a quality improvement project was obtained from USF (see Appendix C for IRB approval exemption). There are no identifiable ethical issues or conflicts of interest noted for this project.

Setting

St. Mary's Medical Center, a member of Dignity Health (DH), is an integrated non-profit Catholic hospital located in San Francisco, California. The Sisters of Mercy opened St. Mary's in 1857, and it was the first Catholic hospital on the Pacific coast of the United States. Today, it is a vibrant 300-bed teaching community hospital that serves a culturally diverse population of adults. The mission of the organization is to deliver high-quality, affordable health care services in a compassionate environment that meets each patient's physical, mental, and spiritual needs, upholding the core values of dignity, justice, stewardship, collaboration, and excellence (Dignity Health, 2014a). St. Mary's medical services include emergency, cardiology, orthopedics, acute rehabilitation, comprehensive cancer care, and bariatric surgery.

In 2013, there were 6,152 discharges and 395 readmissions with an equivalent readmission rate of 6.42% (Dignity Health, 2014b). The California Office of Statewide Health Planning & Development (2014) reported organizational demographic characteristics as 62% over the age of 50 and non-Hispanic (85%). The top three payer sources are Medicare (54%), private coverage (28.4%), and Medi-Cal (11.8%). The principal diagnosis groups are cardiovascular and musculoskeletal. Approximately 74% of patients are discharged to home and

22% to a skilled nursing facility or long-term care facility. The remaining 4% leave against medical advice or are transferred to another acute hospital or expire.

The medical center staff includes over 500 physicians, of which 12 are hospitalists (S. Kim, personal communication, April 10, 2014, Hospitalist, St. Mary's Medical Center). There are 400 registered nurses, 16 case managers, and four medical social workers. The combined average daily census on the two focused medical surgical units is 50, with an average of 15 discharges daily (D.Thakkar, personal communication, June 30, 2014, Director Transformational Care, St. Mary's Medical Center).

In 2010, Dignity Health introduced the Transformational Care (TC) model of leadership and organizational change. This type of leadership framework demonstrates elements of both loose coupling and tight coupling. *Loose coupling* is exhibited though TC teams in which participants are capable of semiautonomous actions and frontline staff are encouraged to lead the team. These voluntary multidisciplinary teams create continuous process flow to bring problems to the surface, find solutions to quality issues within organizational systems, and focus on process, learning, and action. TC teams display characteristics of *tight coupling* as they are stable accountable partnerships (Nelson, Batalden, & Godfrey, 2007).

The primary objective of the TC model is to improve the quality of care delivered while optimizing patient flow and financial sustainability (Dignity Health, 2010). A second objective is to provide teams with new tools in *lean thinking* to inform their daily work and guide performance improvement activities. The final objective of TC is to develop the organizational infrastructure and capabilities such that the hospitals can sustain improvements.

Successful organizational change achieved by TC teams included moving patients post-percutaneous coronary intervention (PCI) to the telemetry unit as opposed to the intensive care unit. The organizational change decreased the average start delay time of surgeries by 10% and

decreased 30-day readmission rates for HF patients by 20%. The DNP student led the Readmission TC team and joined the Hospitalist/Resident Realignment TC team in March 2014.

Planning the Intervention

For the purposes of this project, knowledge acquisition was established when the DNP student was able to demonstrate to the organizational leadership the effectiveness of evidence-based care transitions strategies with the HF population in reducing readmissions and identified similar gaps in care transitions for other patient populations admitted to the organization. The success of the grant-funded HF Team project convinced the leadership to expand the scope and role of the team. The team decided to continue to use the IHI *How-to Guide* (Rutherford et al., 2012) as the overall roadmap for change. Embedded in the document are the previously described evidence-based Care Transition models and other evidence-based strategies. The four transition interventions planned are as follows: enhanced assessment of post-hospital needs, effective teaching and facilitated learning, post-hospital care and follow-up, and provision of real-time handover to the next provider(s). The implementation began in February 2014 with the newly established Care Transition RN role (CTN) (see Appendix D for Care Transition RN job description) and a multidisciplinary team composed of physicians, nurses, and the directors of transformational care and case management.

Enhanced assessment of post-hospital needs: Risk assessment. To identify patients at risk for readmission, DH in March 2013 implemented a new tool embedded in the Adult Admission Form. The tool was adapted from eQHealth Solutions, the Quality Improvement Organization (QIO) for Louisiana, under contract 500-99-LA02 with the Centers for Medicare and Medicaid Services (CMS) (see Appendix E for DH Readmission Risk Tool).

The DH readmission-risk scoring consists of 15 questions, including evidence-based assessments that have been demonstrated in the literature to increase risk, such as polypharmacy,

health literacy, and functional and cognitive capabilities on five separate sections of the Adult Admission History Form. A *yes* response for any of the questions assigns 1 point to the patient's readmission-risk score. The tally of the score stratifies patients as low, moderate, or high risk for readmission. Patient-specific interventions follow scoring, depending on the area of readmission risk—for example, polypharmacy, medication management, and multiple hospital admissions or emergency department visits. An electronic alert is sent to the case manager (CM) for all high- and moderate-risk patients, and the results are shared with the team at the daily plan-of-care huddles.

Implementation and evaluation: Risk assessment. The DNP student collaborated with the medical-surgical nursing staff and provided instruction on the use of the risk-assessment tool, performed random audits for completion of the tool on admission, and assessed data entered for accuracy. Analysis (N = 50) revealed the tool was completed 100% of the time; but in half of those reviewed, there were inaccurate patient assessments, particularly in the areas of polypharmacy, end-stage disease, recent hospitalizations or ED visits, and health literacy. After two months of monitoring, nursing staff were reeducated one-on-one on how to complete the readmission-risk tool accurately (see Appendix F for Nursing Staff Re-education Risk Assessment). Even when the tool was completed accurately, the DH tool performed poorly. All results were reported internally to leadership and externally to the DH Readmissions collaborative.

In the Fall of 2013, the team's lead hospitalist developed a modified BOOST risk-assessment tool to be utilized by hospitalists. An internal study and a test of change were performed. Using retrospective chart reviews of 107 readmitted patients, two physicians scored patients using the modified BOOST tool. Outcomes revealed the modified BOOST score was more predictive than the DH tool (66% vs. 22%). Results of the study were shared with DH

leadership, although to date no action has been taken to potentially change the readmission-risk tool. However, with the reinforced education of nursing staff and continued monitoring, more patients are assessed as moderate or high risk, and the care team is implementing appropriate interventions.

Effective teaching and facilitated learning: Teach-back. St. Mary's nurses were familiar with the teach-back technique, but as revealed in a nurse focus group conducted in the summer of 2013, it was evident a refresh was needed. Staff also requested additional patient-education materials that were teacher and learner friendly. The DNP student in collaboration with bedside nurses developed key educational topic handouts for St. Mary's Medical Center's high-volume clinical conditions (IHI, 2012 , p. 101) (see Appendix G for Example of Handouts: Sepsis).

Implementation and evaluation: Teach-back. In the fall of 2013, the DNP student developed and delivered an online module titled *Teach Back* (see Appendix H for *Teach Back* online module). In addition, a live simulated teach-back session was facilitated at the annual mandatory Nursing Skills Day over a four-day period (see Appendix I for Teach Back simulated experience). A total of 419 nurses viewed the online module and participated in the simulated experience. Evaluative feedback reported by the nurse educator indicated a positive learning experience. Comments by nurses included the following: "I learned how to ask open-ended questions, I learned to be more responsive to what the patient needs to know and Teach Back was fun, I liked the debriefing" (P. Willems, personal communication, November 3, 2013, Nurse Educator, St. Mary's Medical Center). Following the educational sessions, the DNP student performed observations of nurses and patients/families performing teach-back. Of the 40 random observations, 90% of nurses used teach-back to assess learner understanding.

The focus for the expanded phase of care transitions implementation strategies was to lead practice change by improving the discharge process and improving community partnerships. Confirmation has been accomplished in two of the four steps as described by Rutherford et al. (2013). Assessment of post-hospital needs has been demonstrated by the fact that the risk assessment is completed by the RN 100% of the time on admission. Accuracy has also been demonstrated as more patients are now assessed as moderate-to-high risk for readmission. Teach-back, focusing on diagnosis, warning signs or “red flags,” patient actions, medication use and side effects, follow-up appointments, and ongoing health maintenance, has become the standard method of patient education. Nursing staff have incorporated all of these strategies into their daily practice as evidenced by direct observations and the DNP student asking patients upon discharge.

Planning Next-Step Interventions

The areas of focus in the next phase of providing transitional care services to those admitted to the organization are improving the discharge process with a goal of a safe, timely discharge and improved handover communication and follow-up through community partnerships. Using the IHI Model for Improvement, the IHI *How-to Guide*, Project Red, and Donabedian’s framework, the team developed an aim, determined measurements, and discussed what changes could be made that would result in an improvement. The DNP student provided leadership for improving the discharge process through the following means: launch of the “There’s No Place Like Home” campaign, collaboration in revising the depart or discharge instructions to allow for real-time handover, consultative interprofessional teamwork to provide timely discharge summaries to next providers, and the establishment of community partnerships with Kindred Healthcare and Walgreens.

Post-hospital care and follow-up. Discharge. Planning originated with the Hospitalist

and Resident Realignment Team in developing the aim, which was that 75% of the patients on 7 west and 8 west will be discharged by noon (DBN). The team engaged in brainstorming sessions to discuss the structure and processes needed to achieve the aim. Accountable key stakeholders in the process were identified as physicians, nursing leaders, bedside nurses, case managers, Care Transition Nurse (CTN), patients, and families. Discharge rounds began in April 2014. These 15-minute huddles attended by hospitalists, case managers, charge nurses, and CTN were devised to identify anticipated next-day discharges. Physicians in attendance stated the discharge diagnosis, any pending needs, and/or barriers to DBN.

In July 2014, bedside and charge nurse volunteers from each unit and each shift joined in the effort as champions of the new organizational discharge process, “There’s No Place Like Home” campaign. Leads from each discipline also volunteered. Weekly team meetings were conducted to develop a process, and a launch date was selected (see Appendix J for “There’s No Place Like Home” process flyer). Communication of the planned process was accomplished by formal and informal presentations, flyers, organizational newsletter articles (see Appendix K for newsletter article), and daily unit huddles with bedside nurses. A *Know Your Discharge Plan* sign was posted in each patient room, and discharge was discussed daily with the patient and family by physicians, case managers, nurses, and CTN (see Appendix L for *Know Your Discharge Plan* sign). The anticipated date of discharge was written on the care board in the patient’s room by the physician.

Simultaneously, the lead hospitalist revised the discharge summary template, educated physicians in its use, and performed audits of compliance. The new expectation was that physician-telephone handover to the next provider(s) was to be the standard care (see Appendix M for accepted proposal Discharge Summaries).

Performance measures were defined as the percent of discharge orders initiated by 10:30 a.m. and the number of patient DBN. Performance outcomes would be posted on the units and emailed weekly to those involved in the process (see Appendix N for example of Discharge Performance). The top performing nursing unit would receive an individualized reward and *thank you*.

Provision of real-time handover to the next provider(s). Community. The DNP student and organization had been building in-hospital and community partnerships as they related to readmissions and HF patients, but broadened the target group to include all admitted patients. The team's lead social worker organized and conducted quarterly meetings with representatives from home health agencies, skilled nursing facilities, nursing homes, and the San Francisco Care Transitions Program (SFTCP). In addition, the team communicated via email and, as needed, by telephone when a patient was readmitted. The DNP student had made on-site visits and provided staff education on teach-back and care transitions to five facilities, the Sister Philippa Clinic, and two home care agencies. In addition, the DNP student had participated in "ride alongs" with a home care nurse. The aim of the collaboration has been to work together as a cross-continuum team to share and communicate information, processes, and outcomes to provide a smooth transition and decrease hospital readmissions. Two newly solidified partnerships were Kindred Healthcare and Walgreens.

Kindred Healthcare is a national provider with long-term acute care facilities, skilled nursing facilities, and long-term care facilities. In San Francisco, St. Mary's Medical Center discharges or "transitions" patients to two Kindred facilities, Lawton Transitional Healthcare Center and Tunnell Rehabilitation. In July 2014, nursing and case management leadership from both facilities and St Mary's CTN convened the first meeting on quality concerns. Readmission outcomes were discussed and analyzed for opportunities in shared improvements. The

collaborative agreed to meet formally each quarter, but have since established an open communicative relationship and are available to each other as needed.

In August 2014, St. Mary's hospitalists group became staff physicians at both facilities. The physicians are on site Monday through Friday, 8 a.m.-5 p.m., and are working to improve both process and outcomes within the facilities. The goal of the hospitalist team is to provide quality transitional care along the continuum.

Walgreens. Through a Gap Analysis, the team identified medication management as the major reason for readmission. Team leaders shared the results of the findings with executive leadership and the director of pharmacy in the summer of 2013. The Readmission Team convened meetings to discuss the need of patients to be seen by a pharmacist for discharge medication reconciliation, education, and follow-up. The organization's pharmacy department, however, did not have the resources or processes to provide such services.

To find a possible solution to fill the gap, the DNP student researched best practice methods within the literature and community for providing medication management post-hospital discharge and discovered the Walgreens Well Transitions program and bedside medication delivery program. St. Mary's Medical Center executive leadership eventually agreed to invest in a partnership with Walgreens. The Readmission Team was charged with developing the process to refer patients to the program, test, study, and evaluate the processes, and collect and disseminate results (see Appendix O for process map). Negotiations began in the fall of 2013 with the planned implementation target date of August 2014.

Cost-benefit analysis. Direct costs for implementing the project involved the addition of a 1.0 full-time equivalent (FTE) CTN at a cost of \$189,000 (including benefits and replacement costs). An additional cost was incurred due to the partnership with Walgreens. A Walgreens pharmacy technician (0.5 FTE) is on site Monday-Friday at a cost of \$15,000/year. The total cost

of 395 readmissions in 2013 was \$3,752,500. Assuming St. Mary's Medical Center successfully improves transitional hospital-based care meeting the "No Harm" campaign goal of a 20% reduction in all-cause readmissions and thus averting 79 readmissions, the savings would be \$750,500. Moreover, assuming the organization also reaches out to the community to provide follow-up care and social support, saving another \$750,500, the combined strategies could theoretically net a savings of \$1,297,000 (see Appendix P for Annual Budget).

There are potential additional cost benefits from improved Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPS) scores, VBP, and reduced CMS readmission penalties. As CMS penalties continue to rise, three-quarters of hospitals subject to the Hospital Readmissions Reduction Program are being penalized. From October 1, 2014 through September 30, 2015, penalized hospitals will receive 3% lower payments for every Medicare patient stay, if their risk-adjusted readmission rate is higher than expected, not just for those patients who are readmitted. Over the course of the year, the national fines are estimated to be \$428 million (Rau, 2014). Fifty-four percent of St. Mary's Medical Center admissions are Medicare patients, and last year 213 Medicare patients were readmitted at a cost of \$2,023,500 (see Appendix P for Annual Budget). Assuming Medicare readmissions in particular were reduced 20% thereby averting 43 readmissions, the in-hospital savings could total \$200,700. The reduction would also avoid the 3% reimbursement penalty imposed on all Medicare readmissions. In short, the investment in both the CTN and the Walgreens pharmacy technician well outweighs the costs of readmissions to St. Mary's.

Responsibility and communication plan. The communication and responsibility structure and plan were developed by the teams for both the "There's No Place Like Home" campaign and the Walgreens bedside medication delivery and Well Transitions program (see Appendix Q for communication and responsibility matrix). Physicians, bedside nurses, case

managers, CTN, and patients/families were identified as those responsible for a safe, timely discharge. Key responsible persons involved in the Walgreens partnership were bedside nurses, physicians, case managers, CTN, and the Walgreens technician.

Implementation of Project

“There’s No Place Like Home” campaign. Unit champions and bedside nurses, patients, TC director, case management director, case managers, hospitalist and resident physicians, CTNs, and unit directors were the key stakeholders involved in implementing the campaign. Communication about the campaign was accomplished prior to the launch date. On the day of launch, key organizational team leaders made rounds on each shift, and each unit dressed in red ruby shoes, with carts of food and drinks, and special gifts speaking to each bedside nurse about the goals of discharge. The staff was engaged and eager to be the best performers.

Walgreens bedside medication delivery and Well Transitions program. Walgreens provides free bedside delivery of discharge medications and/or a follow-up Well Transitions program in which patients receive 24-hour access to a pharmacist and follow-up telephone calls beginning 48 hours post-discharge and continuing at scheduled intervals for 30 days or more to assist in medication management. The rollout of the program was two-fold. First, formal presentations were delivered to the Management Council, Nursing Leadership Council, Hospitalists, Residents, and case managers (see Appendix R for brief formal presentation). Second, all bedside nurses on each unit attended a 30-minute in-service in which the overall goal of the Walgreens program was discussed. In addition, the nurses were taught how to enter the patient’s preferred pharmacy into the electronic medical record and were given guidance on how to ask the patient if they were interested in either service (see Appendix S for rollout staff training schedule).

Planning the Study of the Intervention

The overall effectiveness of transitional care service implementation was assessed by readmission rates and patient satisfaction via the HCAPS scores. St. Mary's receives both readmission rates and HCAPS results externally from DH and CMS. However, for each internally implemented transitional care strategy, PDSA cycles were used to track process metrics.

Gap analysis. In planning for the study of providing transitional care services, the CTN interviewed all readmitted patients to assess gaps in care transitions. Utilizing the Avoiding Readmissions Through Collaboration (ARC) interview tools (ARC, 2013) (see Appendix T for ARC tools), root cause analyses (RCA) were performed on 40 patients. The analysis revealed the top five readmission diagnoses as sepsis, pneumonia, gastrointestinal bleed, chronic obstructive pulmonary disease, and heart failure. Consistent with the literature and the analysis findings, the top reasons these patients were readmitted were as follows: issues with medications, self-care management, ability to recognize symptoms to watch for and act (unable to teach-back), timely scheduled post-hospital physician follow-up, palliative care needs, and social issues (Coleman et al., 2006; Hansen et al., 2013; Jack et al. 2009; Naylor et al., 2004; Rutherford et al., 2012).

Process issues were encountered pertaining to educational opportunities for patients and families, home health, and skilled nursing facilities. Issues with medications included medication safety, medication reconciliation, patient's ability to obtain and self-manage medications, and inconsistent physician follow-up. Provider opportunities for improvement included improved medication reconciliation, awareness of patient deterioration and increased referrals to palliative care, increased communication with in-hospital staff, increased capacity of home health and

skilled nursing facilities through better hand off, and increased training (see Appendix U for Gap Analysis charts).

Discharge: “There’s No Place Like Home” campaign. The process structure was comprised of physician, unit charge nurse, case manager, bedside nurse, and CTN. The new process begins the day before final discharge. The physician communicates the final anticipated discharge date and time to the patient and then to the care team at the 3:45 p.m. discharge rounds. The evening and night shift bedside nurses confirm transportation home and reinforce teaching of diagnosis and symptoms to watch for post hospitalization. On the day of discharge, the bedside nurse and CTN use teach-back to teach the patient final discharge medications and assist with what is needed to have the patient discharged by noon (DBN). Follow-up appointments are scheduled with patients prior to discharging home, when feasible. Physicians and bedside nurses perform verbal handover to the next provider(s). In addition, written discharge instructions, a reconciled medication list, and a transfer-of-care summary are given to the patient or facility at discharge.

Walgreens: Bedside medication delivery and Well Transitions program. Ideally on admission (or as soon as possible), the bedside nurse obtains the patient’s preferred pharmacy, enters the information into the electronic medical record, informs the patient of the services bedside discharge medication delivery and follow-up Well Transitions program, and seeks interest. The nurse then places a *W* on the nurse station white board to visually alert staff that patient is interested in the Walgreens programs. The case manager, CTN, or physician may also begin the process. The pharmacy technician sees the patient and obtains consent; upon discharge, the patient then receives the medication at bedside and, if desired, is enrolled in the Well Transitions follow-up program (see Appendix V for Walgreens process).

Timeline. In December 2013, when the HF grant ended, the organization decided to fund and continue the quality improvement work to decrease all-cause 30-day readmissions for every admitted patient by implementing transitional care strategies. Consistent with the literature, the team began implementation of multifaceted interventions broadly encompassing patient education, medication safety, and coordination of care within the hospital system and through the continuum of care (Coleman et al., 2006; Jack et al., 2009). In February 2014, the organizational leadership developed a new nursing role, Care Transition Nurse (CTN). In March 2014, the CTN was invited to participate in the Hospitalist/Realignment TC team to collaborate on discharging patients safely and timely. Afternoon discharge rounds began in April 2014. The “There’s No Place like Home” campaign was launched, and in August 2014, Walgreens went live. Communication about the project plan, progress of implementation, and timeline were documented in the Gantt Chart along with the significant milestones (see Appendix W for Gantt Chart).

Methods of Evaluation

The main bases used for evaluation were 30-day all-cause readmission rates and HCAPS score. However, for each process and practice change, key quantitative outcome metrics were developed by the teams to meet the objectives of transitional care interventions: enhanced assessment of post-hospital needs, effective teaching and learning, post-hospital care and follow-up, and provision of real-time handover to the next provider to improve the transition from hospital to home or community.

Process metrics include the percentage of readmission risk assessments completed accurately, the percentage of patients who are able to teach back at discharge, the percentage of accurate medication reconciliations at discharge, the percentage of patients with a verbal and

written handover to next provider, and the percentage of patients with a scheduled follow-up appointment prior to hospital discharge.

For the two current initiatives, “There’s No Place Like Home” and Walgreens, the outcome measures were defined by team members and discussed with each provider involved in the change process. The metrics were as follows: the percentage of patients discharged by noon, the number of patients who received bedside delivery of discharge medications, and the number of patients enrolled in the Well Transitions Walgreens follow-up program.

Monday through Friday, the CTN rounds on both units, discussing planned discharges for the day with the charge nurse, bedside nurse, physician, and patient. The CTN coaches and coordinates the process to meet the goal of DBN. The CTN is thus evolving into a discharge advocate (DA), as described by Jack et al. (2009) in Project Red, and performs many discharges. Any variances or barriers to a timely discharge are discussed in real time with appropriate providers.

The daily progress to goal, with barriers, is tracked via an Excel spreadsheet. Data input is twofold. First, the CTN inputs patient name, anticipated discharge time from previous day’s discharge rounds, ability to teach-back, follow-up appointment prior to discharge, and any barriers to the timely discharge. Second, the TC director tabulates results via electronic stamped discharge order time and discharge time. Outcomes are reported weekly to team members, directors of each unit, and staff.

As for the Walgreens initiative, the goal is to ask every patient if interested in either bedside delivery of discharge medications or the Well Transitions program or both. The Walgreens technician collects data on each measure. The team did not set a benchmark for number of patients who receive either service, but the numbers of each are reported biweekly to

the TC director, case management director, and CTN. The results are shared with the teams and staff of each unit.

SWOT. A strengths, weaknesses, opportunities, and threats analysis was performed prior to project implementation to assess environment, people, and processes for the purpose of identifying internal and external forces that may have positively or negatively affected the project (see Appendix X for SWOT).

Budgetary return on investment plan. St. Mary's Medical Center baseline FY 2013 all-cause readmission rate as reported by DH was 6.55%. There were 6,152 discharges and 395 readmissions. Using 2013 data, assuming St. Mary's Medical Center successfully improves both transitional hospital-based care and community provider follow-up, reducing 395 all-cause readmissions by 20% would avert 79 readmissions, saving \$1,297,000. The total estimated rate of readmissions after successful implementation of both strategies by December 2014 would be 5.1%, meeting the DH "No Harm" campaign goal of 5.86%. For calendar year 2014 January through July, there have been 3077 discharges and 177 readmissions, with a rate of 5.75%, well below the July 2013 rate of 6.55% and the DH 2014 target of 5.86%.

Furthermore, HCAPS scores are tied to both patient satisfaction and VBP. The baseline HCAPS composite top box performance score for discharge was 82.80 (October 2012-March 2013) and has increased to 93.52 as of July 2014. The HCAPS scores for the survey's transition questions are in the 94% range, demonstrating the effect of changed processes and the dedicated team. Even with the projected annual costs of both the CTN and pharmacy technician of \$204,000, both the short-term and long-term benefits of the project outweigh the costs, as evidenced by the continued drop in the all-cause readmission rate to the most current available rate of 5.75% (July 2014) (see Appendix Y for ROI calculator for potential decreased readmission rates and costs).

Analysis

Overall quantitative analysis of the project's success in implementing transitional care services reveals a decrease in avoidable readmissions rates. Qualitative evaluation included daily discussions between-- and with-- the multidisciplinary team, frontline staff, patients, and leadership to determine opportunities to improve processes.

Real-time analysis of the DBN process and Walgreens partnership was discussed daily with those involved in the process and weekly at the readmission and Hospitalist/Resident team meetings. Data collection of both initiatives was accomplished by the CTN, TC directors, and the pharmacy technician. The CTN entered real-time day-of-discharge patient data, including comments as to any barriers to a timely planned discharge, such as change in patient condition, into a spreadsheet. The TC director time stamped, physician order and discharge time from the electronic medical record. The pharmacy technician collected and entered data into an electronic database pertaining to the number of patients with discharge medications delivered and number of patients who opted into the follow-up Well Transitions program.

Barriers to a timely discharge were categorized by the team with possible solutions addressed, if the delay was avoidable. Common delays were due to late physician orders and patient transportation problems.

Section IV

Results

Program Evaluation/Outcomes

The objective of the project was to implement transitional care practices to decrease all-cause readmissions by 20% from an organizational FY 2013 baseline rate of 6.55% to a rate of 5.86%. St. Mary's Medical Center readmission rate has dropped from a rate of 7.61% (January

2013) to the most current available rate of 5.75% (July 2014), exceeding the objective's goal. (see Appendix AA for St. Mary's Medical Center, No Harm readmission rate).

The project was planned to implement evidence-based transitional care interventions to reduce avoidable readmissions and improve the quality of care to all patients admitted to the organization, similar to implementation strategies utilized in the HF population. The setting was conducive to implementing the project as reducing readmissions was a strategic goal of the organization and DH as part of the "No Harm" campaign. Furthermore, the organization was committed to providing patient-centered care and improving the patient experience. Providing individualized Transitional Care services and enhancing community partnerships also align with the mission of the organization. The readmission and HF team, moreover, had gained local leadership support to sustain the momentum of the work as evidenced by the development of a new nursing role, the Care Transition Nurse (CTN).

With increased awareness, education, communication, and collaboration, in-hospital care process changes have achieved the following results: 80% of patients can teach-back self-care plans and actions, the discharge medication list is reconciled 80% of the time without the nurse calling the physician to clarify, and 50% of patients discharged to home have a scheduled follow-up appointment prior to discharge (see Appendix Z for outcome data transitional care processes).

From August 4 to September 30, 2014, 132 patients received bedside delivery of their discharge medications and 109 were enrolled in the follow-up Walgreens Well Transitions program. Palliative care consults increased and were more timely. In addition, 50% of patients discharged were contacted on the first 48-hour telephone call, and 100% of discharge summaries were faxed to the next provider(s) within 24-48 hours. Additionally, community transitions of care changes have resulted in improved communication, shared information, and collaboration,

while referrals to both home health care and the San Francisco Community Based Transitional Care Program (SFCCTP) have increased.

The project evolved over time, especially in working in collaboration with the Hospitalist/Resident Realignment team and the Senior Director of Nursing Operations, with the team sharing additional responsibility of meeting an organizational discharge time goal of 12 noon. The early results from July-September indicated that the new process has shaved 30 minutes from the baseline average discharge time of 2:30 p.m. to a current average discharge time of 2:00 p.m.; however, the goal of 75% of patients discharged by 12 noon has not yet been met. The team continues to discuss ways to achieve the aim but has also discussed the possibility that the arbitrary goal of 75% of patients discharged by 12 noon may be unrealistic, as many barriers outside the team's control affect discharging patients early in the day. In a study by Wertheimer et al. (2013), using similar DBN interventions as St. Mary's, the authors demonstrated that the goal was achievable over the 13-month study, moving the average discharge time 1 hour and 30 minutes and achieving the 30% of patients discharge-by-noon goal. Within three months, St. Mary's has achieved a rate of 16% of patients discharged by 12 noon. Given more time, the new process may potentially achieve the 75% goal.

The strengths of the project lie in the realized results within the HF population of increased patient satisfaction and decreased readmissions by using strategies and interventions as outlined by the IHI as well as by other evidence-based literature. The project aligned with the strategic goals of St. Mary's Medical Center and DH, gaining leadership support. The organization had established an active interdisciplinary readmission team composed of a hospitalist, case manager, pharmacist, social worker, quality director, transformational care director, data analyst, palliative care nurse, unit charge nurse, and patients to work on system processes and interventions to achieve a safe transition from the hospital for all patients.

In addition, the team continues to establish relationships with community partners to create cross-continuum collaboration to shift from site-specific care to patient-centered care. In February 2014, the DNP student was invited to become a member of the TC Hospitalist Residents/Realignment Team to support their efforts and the organization in improving the discharge process, allowing for increased efficiency, patient throughput, and decreased length of stay (LOS). The weaknesses of the project were the organizational culture and frontline staff buy-in. However, over time, as each of the new transitional care processes has become hardwired into the system, staff has become more participatory in the process, and transformational changes have occurred.

Section V

Discussion

Summary

Results demonstrated that when institutions use evidence-based, multifaceted transitional care interventions, there is a positive effect on avoidable readmission rates and improvement in patient satisfaction. Key to this project's success was the multidisciplinary team members whose efforts were acknowledged by the administrative leadership as well as by frontline staff nurses and patients.

The quality improvement project allowed the DNP student to advance professionally as a nursing leader within the organization and the community. As a change agent, the DNP student learned how to articulate the vision and context of Transitional Care to stakeholders, from frontline staff to administrative leaders. As a result of the DNP student's efforts, St Mary's is one of only fourteen hospitals in the nation that offers the Walgreens Well Transitions follow-up program and the only DH hospital with the service.

By reaching out to the community and creating a cross-continuum team, St. Mary's Medical Center has increased its reputation as an innovative and cooperative organization. Aligning the vision with the strategic goals of the "No Harm" campaign, the DNP student gained key support from persons within the complex system. The DNP student and advanced practice nurse (APN) leader recognized the personal responsibility and commitment needed in bringing evidence-based care to the bedside, while balancing quality with outcomes, resources, and costs (Porter-O'Grady & Malloch, 2011).

Although implementation of multifaceted interventions requires substantial resources, the investment in, and success of, the DNP-led quality improvement project demonstrates the benefits outweigh the costs.

Relation to Other Evidence

In recent years, there have been many transitional care studies (Coleman et al., 2006; Jack et al., 2009; Naylor et al., 2004) and promising practices (Hansen et al., 2013; State Action on Avoidable Rehospitalizations, 2009) analyzing the effects of multicomponent strategies to reduce avoidable readmissions, prompted by the increased awareness of the prevalence of readmissions as well as new financial penalties linked to readmission rates. Furthermore, nationally, the all-cause 30-day readmission rate among Medicare beneficiaries held constant at 19% from 2007-2011, until the PPACA reforms focusing on reducing readmissions began to be implemented. In 2012, the readmission rate nationally decreased to 18.5% (Gerhardt et al., 2013), demonstrating the positive effects of transitional care. The results of this quality improvement project are consistent with the multicomponent interventions utilized in Jack et al.'s (2009) Project Red model, Coleman et al.'s (2006) model, and the Care Transitions Model (Naylor et al., 2004). Elements from the models' domains and other best-care practices have been

adapted and implemented within St. Mary's Medical Center and the connected community (see Appendix BB for Transition bundle domains and project implementation comparison chart).

Additionally, similar cost-benefit results as achieved by this project have been reported in the literature. First, Jack et al.'s (2009) Project Red with a dedicated nurse discharge advocate (DA) achieved a \$385,759 lower cost in the RED patient group due to 32% lower use of the hospital. Second, Coleman et al. (2006) anticipated a cost savings of \$296,000 for 350 chronically ill patients, using a nurse transition coach. Finally, Naylor et al.'s (2004) APN Care Transition Model achieved a 50% reduction in total overall health care costs (\$3,630 vs. \$6,661) at six months thereby demonstrating the effect on the population of high-risk elderly patients (Boutwell et al., 2009).

Barriers to Implementation/Limitations

The project had several barriers. First, the DNP student was unsure of continued support for the project expansion once the grant-funded HF project was completed. Through meetings, the directors of transformational care and case management persuaded the organizational executive leadership to expand transitional care services to all patients admitted to St. Mary's. A formal job description was created by the directors of transformational care and case management, in collaboration with the DNP student, guaranteeing the project expansion and sustainability.

Second, the DNP student was a novice in working with teams of people at the macro level but over time has gained experience and built relationships at every level of the organization. Third, some of the frontline staff was resistant to the process change in discharging patients by 12 noon. They did not see or understand the complexity of how late-in-the-day discharges affect the entire hospital and the patient experience as they move through the organization. With continued daily coaching and support, the frontline staff learned to appreciate

discharging patients earlier in the day, as it allows them time to prepare for new admissions.

Finally, since the effect of interventions on readmission rates is related to the number of components implemented (Bradley et al., 2013; Kripalani et al., 2013; Hansen et al. 2011), applying many changes concurrently was challenging. The DNP student, as a new organizational leader, found that daily continuous listening, conversing, and exploring what was going well, and what was not, helped overcome the challenge, and helped to continue the efforts in doing things differently. Key lessons learned included the fact that solving complex problems requires multidimensional solutions, and that change is needed in structures, processes, and health professionals' roles and relationships to each other and the people they serve. In addition, it became clear that overcoming inertia often requires substantial force and perseverance.

Interpretation and Implications

The evidence-based transitional care interventions implemented in the quality improvement project have affected the readmission rate and patient satisfaction in a positive way. The results of the project are similar to other studies in comparable organizations (Coleman et al., 2006; Jack et al., 2009; Naylor, 2004). This project is an ongoing endeavor within the organization and DH. The proposed DH 2015 goals in the preventable readmission reduction initiative are as follows: 1) implementation of a chronic care/disease management strategy, 2) launching of a hospital readmissions awareness campaign, and 3) fostering greater physician engagement and accountability. In the new era of health care reform, methods such as these will continue to be vital in improving patient outcomes and decreasing costs. The DNP as the translator of evidence will be key in leading and sustaining success.

The project has the potential to continue to reduce readmissions, improve the quality of care, and reduce costs for patients admitted to St. Mary's Medical Center and other DH hospitals as well as other organizations. The nation is in its third year of the PPACA's CMS Hospital

Readmission Reduction Program, with penalties increasing to 3% for excess risk-adjusted readmission rates. For FY 2015, two additional conditions-- total joints (both hip and total knee replacements) and chronic obstructive pulmonary disease (COPD) exacerbation-- have been added to list of conditions subject to CMS penalties for excess readmission rates. The estimated national total reduction in CMS Medicare payments is 428 million dollars (CMS 2014). The DNP student's and collaborative multidisciplinary team's work on transitional care will continue to be important to the organization's quality of care, patient satisfaction, and the bottom line. The success of the DNP project also demonstrates the expanded role nurses can play in bridging the gaps in care as well as implementing systemic change not only to improve the care of populations and decrease costs but also to cross the quality chasm.

Conclusions

The success of this project and the positive feedback from the Hospitalist/Resident and readmission teams, frontline staff, organizational leaders, community partners, and patients exemplified the effectiveness of providing transitional care services. Furthermore, DH's mission is to be a leader in health care delivery, dedicating resources to delivering compassionate, high-quality, affordable health services and partnering with others in the community to improve the quality of life. Of utmost importance to the local organization is improving the patient experience. Care coordination by a transitional care team is an example of the organization's commitment to the patients it serves .

The DNP student's work on transitional care has enabled professional growth and an opportunity to disseminate and share successes and lessons learned. For example, working in transitional care and using the Project Red model successfully has led to an interview of the student by a representative of AHRQ. Additionally, the work has allowed the DNP student as a Moore Foundation former grantee to contribute to an innovative project to build a website for

sharing transitional care experiences with others. The DNP nurse leader is in a unique position to provide transformative change: at the bedside; “at the table” with macro-level leaders; and in the community to change systems and provide evidence-based care to patients, families, and populations.

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Appendix A

Annual Report

Moore Foundation Grant to Reduce 30-day and 90-Day All-Cause Readmission Rates for Patients with Heart Failure

Summary of accomplishments

A lead team of dedicated nurses have successfully decreased readmission rates for patients with heart failure (HF) by using evidence based transitional care practices, focusing on four areas: enhanced assessment of post hospital needs, effective patient (family and caregiver) education, timely post hospital follow-up and engagement of community partners. We have gained leadership support and have established an active interdisciplinary readmission team. Key stakeholders collaborate and communicate to achieve a safe transition from hospital to home for heart failure patients.

Specific improvements include: readmission risk assessment on admission, individualized one on one self care education, daily case manager/social worker huddles, daily plan of care huddles, follow-up physician appointment scheduled prior to discharge, and 48 hour post hospital follow-up telephone calls. The team telephones patients to ensure attendance at their follow up appointment and continues telephone follow up as needed. To increase communication we have implemented “ warm handover ” or telephone report to the next care providers (physicians, home care, community residences). We have increased referrals to appropriate in-hospital and community resources (palliative care, social services, home care, Skilled Nursing and Long Term Care facilities, a disease management program Congestive Heart Active Management Program (CHAMP), and San Francisco Transitional Care program (SFTCP). The team has made a home visit, provided in-services to Long Term Care and Skilled Nursing facilities, the Sister Phillipa clinic, and a home care agency. In addition the nurses provide a free monthly multidisciplinary seminar for patients living with heart failure.

Working in collaboration with the Transformational Care director the HF Team nurse’s role has expanded (June, 2013) to include all readmitted patients. Currently the nurses interview all readmitted patients, identify cause of readmission, reinforce/provide education, and communicate findings of patient needs to appropriate disciplines. To date the team is working on spreading key best practice interventions: medication reconciliation, scheduled follow up appointment prior to discharge, communication to PCP (revised discharge summary template, completed in 24-48 hrs. faxed to PCP), improving the discharge instructions and education (after hospital care plan, use of teach back), and engaging pharmacists (internal/external) for all patients admitted to St Mary’s.

The HF team nurses are active members of Dignity Health readmission collaborative, Avoiding Readmissions Collaborative (ARC) and have read and attended conferences and webinars related to transitions work. The team has networked and communicated with colleagues working on transitions, in the bay area and beyond. Results are reported to Quality Council and at each readmission team meeting. Evaluation is measured by heart failure readmission rates.

Analysis

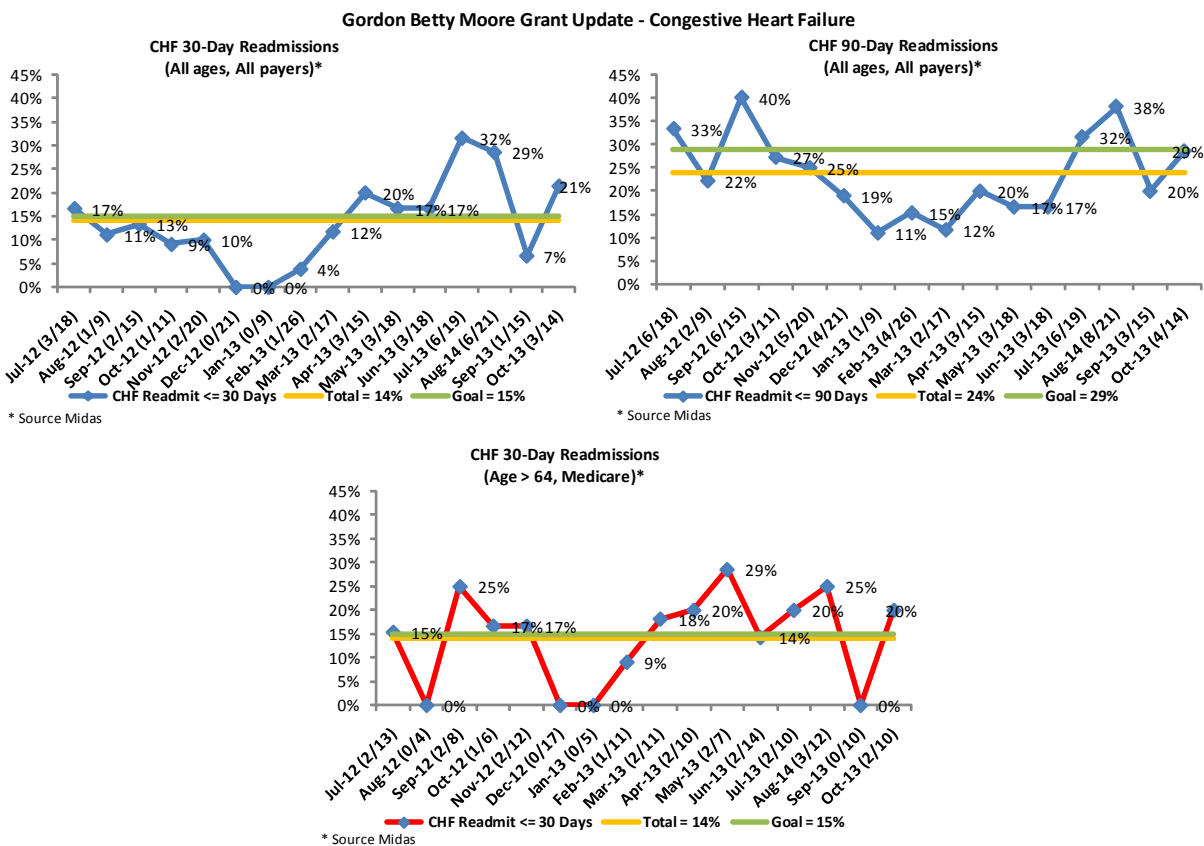
Thirty day all cause readmissions for patients with Heart Failure

The team has exceeded the goal of reducing the thirty-day all cause re-hospitalization rate. The goal was to reduce by 30% the readmission rate for patients with a primary diagnosis of heart failure from a FY12 baseline rate of 20% to a rate of 15%. The current average rate for all cause, all ages, all payers for patients with heart failure is 14%.

In addition, we have decreased the readmission rate for the Medicare population, as reported by Dignity Health, from a FY12 baseline rate of 22% to a rate of 14%.

Ninety day all cause readmissions for patients with Heart Failure

The team exceeded the goal for the ninety-day re-hospitalization rate. The goal was to reduce the FY12 baseline rate of 33% to 29%. The current average ninety-day readmission rate for patients with a primary diagnosis of heart failure is 24%.



Sustainability Plan

The HF nurses grant funded reducing readmissions project work has resulted in decreasing the all ages, all payers, all cause HF readmission rate from FY12 baseline rate of 20% to a current rate of 14%. In addition, we have decreased the readmission rate for the Medicare population, as reported by Dignity Health, from a FY12 baseline rate of 22% to a current rate of 14%. These results were attained by implementing evidence based practice strategies that provide patient, family, and caregiver education, post hospitalization follow-up care and

engagement and relationship building with community partners to meet patient needs once discharged.

The team's efforts are aligned with both organizational and Dignity Health's "No Harm" Campaign strategic goals to use evidence-based practice to decrease readmissions, increase patient satisfaction and increase reimbursement savings. The campaign goes one step further by working to decrease readmission rates for all patients. The goal is a 20% reduction in all cause readmissions from FY11 baseline (7.33%) to a system goal of 5.8%. St. Mary's organizational target rate for all cause readmissions is 5.86%. We anticipate the team's readmission work will continue to decrease readmission rates for heart failure patients. By spreading and hardwiring best practice processes to all patients, all cause readmission rates will decrease and achieve the organizational target. In addition, the teams' work has the potential to impact value based purchasing scores, specifically in the areas of patient experience (HCAHPS), outcome and efficiency achievement scores.

A business case will be developed and presented to the organizational leadership. The proposed solution is to fund 1.0 FTE RN team position to lead the organizational efforts to implement processes for improving transitions and decreasing readmissions. Responsibilities will include: interviewing readmitted patients and completing a deep dive analysis, one on one education to reinforce teaching of self-care and post hospital follow-up care plan to patients stratified as high risk, 48 hour follow-up telephone calls to high risk patients, continue communication and collaboration with internal and external colleagues and coordinate care. The values of the proposal are key stakeholder support, increased reimbursement savings, increased patient satisfaction and quality process improvements. Additional justifications include: Dignity Health strategic goal, national focus on Transitional Care (Affordable Care Act), CMS penalties, and value based purchasing.

Outcomes will be evaluated using multifaceted statistical data on patient readmission rates for CMS AMI, CHF, PNA and all readmissions. In addition, the clinical care monthly operating report (MOR) and the value based purchasing report data will be used to evaluate the effect of the work. The Transition Team nurses will gather information and report monthly to key stakeholders.

Appendix B**Table of Evidence***Table of Evidence: JHEBP Summary Care Transition Intervention Models*

Author, Date, Title Model	Evidence Type	Sample, Sample Size & Setting	Findings & Implications for Practice	Limitations	Evidence Strength, Level & Quality
Naylor et al. (2004). Transitional care of older adults hospitalized with heart failure: A randomized controlled trial. Model: Transitional Care Model (TCM)	RCT Randomized assignment Intervention: A transitional care nurse (advanced practice nurse - APN) provides comprehensive in-hospital planning and home follow-up care coordination for patients with Heart Failure (HF).	Hospital to home. Sample: $n = 239$ Intervention group: $n = 118$ Control group: $n = 121$ Patients age greater than 65, admitted to hospital from home with diagnosis of HF and not end-stage renal disease. English speaking, alert when admitted and has a telephone. Setting: 6 academic & community hospitals in Philadelphia.	17% fewer 180-day rehospitalizations in intervention group (37% vs. 20%). Trial found significantly fewer rehospitalizations and emergency room visits at one year among patients who received the intervention than usual care patients ($p < 0.05$) An APN guided comprehensive individualized transitional care intervention for elders with HF reduced the total number of readmissions, increased the time between	Limited to HF population limiting generalizability. Patient satisfaction tool was not validated.	Level II Quality: A

			<p>hospital admission or death, decreased costs, and improved overall quality of life and satisfaction with care.</p> <p>Cost Benefit</p> <ul style="list-style-type: none"> • 50% reduction in total health care costs (\$3k vs. \$6k) at 6 months • \$5k cost savings per patient at 1 year (\$7,600 vs. \$12,400) 		
<p>Coleman et al. (2006). The care transitions</p> <p>Model: Care Transitions Intervention (CTI)</p>	<p>RCT Randomized assignment</p> <p>Intervention: A nurse “transition coach” provides tools and teaches self management and communication skills to patients and their caregivers so they can coordinate their care, and follows up with a home visit and telephone calls.</p>	<p>Hospital to home. Sample: <i>n</i>=750 Intervention group: <i>n</i>=379 Control group: <i>n</i>=371 Community-dwelling adults 65 years or older admitted to the study hospital with 1 of 11 selected conditions.</p> <p>Setting: large integrated health system in Colorado.</p>	<p>Decreased rehospitalization overall: 30 days = 8% (vs. 12% control) 90 days = 17% (vs. 23%) 180 days = 26% (vs. 31%) Decreased rehospitalization for same diagnosis 30 days = 3% (vs. 5%) 90 days = 5% (vs. 10%) 180 days = 9% (vs. 14%). Cost effective.</p> <p>Coaching chronically ill</p>	<p>Limitations of the study not clearly discussed. Authors compared findings with other published studies.</p>	<p>Level II Quality: A</p>

			<p>older patients and their caregivers to ensure that their needs are met during care transitions may reduce the rates of subsequent rehospitalization.</p> <p>Cost benefit: A formal cost analysis was not conducted by the investigators but they have estimated cost savings of \$296k for 350 chronically ill adults over 1 year.</p>		
<p>Jack et al. (2009) A reengineered hospital discharge program to decrease rehospitalization: A randomized trial. Model: Project Red</p>	<p>RCT Randomized assignment</p> <p>Intervention: A specially trained nurse discharge advocate (DA) provides: patient education; medication reconciliation and education; instruction about red flags; teach-back learning process; coordination of physician appointments and follow-up testing; evidence-based written discharge plan shared with patient and all</p>	<p>Hospital to home.</p> <p>Sample: $n = 749$ Intervention group: $n=370$ Control: $n=368$ Age 18 or older hospitalized from home, English speaking, has a telephone, plans to be discharged to home.</p> <p>Setting: large urban hospital that serves</p>	<p>30% decrease in hospital utilization (ED or hospitalization) in 30-day follow-up. Reduced costs per subject enrolled. A package of discharge interventions reduced hospital utilization within 30 days of discharge.</p> <p>Cost benefit: \$386,759 lower cost in RED group due to 32% lower use of hospital</p>	<p>Limitations : The study was a single site study. Outcome assessments were sometimes relied on by participant report. The study sample were younger and had fewer comorbid conditions than those in other studies thereby results may not be generalizable to all patient groups.</p>	<p>Level II Quality: A</p>

	providers. A clinical pharmacist telephoned participants 2 days post hospital discharge.	low-income, ethnically diverse population.			
Hansen et al. (2013). Project BOOST: Effectiveness of a multihospital effort to reduce rehospitalization Model : Better Outcomes for Older adults through Safe Transitions (BOOST)	<p>Semi-controlled pre –post study Prospective cohort</p> <p>Intervention: Hospitals implemented 6 Project BOOST-recommended tools supported by an external quality improvement physician mentor. Two major sequential processes planning and implementation. Focus on risk assessment discharge process, education using teach-back, communication between providers within and outside hospital.</p>	<p>Volunteer sample of 11 hospitals varying in geography, size, and academic affiliation.</p> <p>Pre-post changes in readmission rates and length of stay within BOOST units, and between BOOST units and site-designated control units.</p>	<p>The average rate of 30-day rehospitalization in BOOST units was 14.7% prior to implementation and 12.7% 12 months later (P=0.010), reflecting an absolute reduction of 2% and a relative reduction of 13.6%.. Tools well received by healthcare team.</p> <p>Hospital and primary care provider communication and collaboration improved.</p>	<p>Voluntary online survey of hospitals. Intervention units selected by each hospital had unmeasured unit and patient characteristics. Data submission limited by local implementation design. Varying tool implementation mean average of 3.5. All sites implemented at least 2 tools. No measure of use of sixth tool creation of written individualized discharge instructions.</p>	<p>Level IV Quality: B</p>
State Action on Avoidable Re-hospitalizations (STAAR)	<p>Case Report Descriptive study</p> <p>Intervention: Aim of initiative is to reduce rehospitalizations by mobilizing state level leadership to improve</p>	<p>Hospital: during first 2 years of the quality improvement initiative $n=148$ hospitals and more than $n= 500$ cross-continuum teams partners in 4 states</p>	<p>Insights into common challenges among providers, understanding the financial impacts of readmissions on hospitals, and aligning incentives for change.</p>	<p>A case report</p> <p>Second year of a four year project</p> <p>Availability and analysis of statewide readmission data at</p>	<p>Level VII Quality; B</p>

<p>Interventions to Reduce Acute</p>	<p>transitions in care. The goal of the model is to form community and regional relationships among providers so they could more effectively share the care of patients over time and across settings. Two primary interventions: 1. To form Hospital-Based Cross-Continuum Teams (hospitals partnering with home care agencies, nursing facilities, office practices, community-based support services and patients to share best practices in transitions. 2. To form multistakeholders state-level steering committees composed of hospital associations, government payers, providers groups, private payers, business groups. and employers.</p> <p>Case Report Descriptive study of a</p>	<p>were participating.</p> <p>State level steering committees >300</p> <p>Technical assistance for population based data acquisition.</p> <p>Setting: Massachusetts, Michigan, Washington. (Ohio joined initiative 2010)</p> <p>Care pathways, communication, and</p>	<p>Universal adoption of establishing cross continuum teams. (90% of STARR participants). Partnerships enable sustained momentum.</p> <p>Enhanced technical assistance by being in STARR program.</p> <p>Post-acute care facilities (PAC) using tools</p>	<p>report's publication incomplete, although authors' state has not prevented teams from working across settings.</p> <p>Small sample $n=25$ In the case report by</p>	<p>Level VII</p>
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<p>Care Transfers (INTERACT)</p>	<p>Quality Improvement program</p>	<p>advanced care planning tools.</p> <p>Setting: 25 skilled nursing and nursing homes in Florida.</p>	<p>decreased hospital transfers by 17%.</p>	<p>Ouslander et al. (2011) results were evaluated and reported by an expert panel which could lead to bias.</p>	<p>Quality C</p>
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Appendix C

IRB Exemption

To:

Debra Conroy-McCue
Terence Patterson, IRB Chair

Subject: Protocol #329

Date: 07/15/2014

The protocol **329. Improving Transitions from the Hospital to Reduce Avoidable Rehospitalizations : A nurse led Quality Improvement Project** has been reviewed by the IRB chair and found not to require further IRB review or oversight.

Quality Improvement projects do not require IRB approval. Please see attached SONHP IRB Policy from July 2013.

Sincerely,

Terence Patterson,
Chair, Institutional Review Board for the Protection of Human Subjects
IRBPHS - Univeristy of San Francisco
IRBPHS@usfca.edu

Appendix D

Job Description Care Transition RN

Job Description									
Job Classification Title & Job Code: Special Projects Nurse Coordinator : Care Transitions RN									
Job Description Development Date: August 2014									
Department: Nursing									
Reports to: Senior Director, Nursing							Cost Center:		
Director Signature:					Date:				
					Date:				
					Date:				
Position Appraisal Information									
Employee Name:					XX Annual Performance Appraisal				
Evaluator:					From:		To:		
Performance Appraisal Guidelines									
1 = Does Not Meet Standards: Performance does not meet standards and is not acceptable.									
2 = Needs Improvement: Performance is below average and does not meet standards									
3 = Meets Standards: Performance is acceptable and meets standards									
4 = Above Average: Performance is above average									
5 = Outstanding: Performance exceeds standards.									
Section I - Performance based on essential duties and specific position competencies (45% of total score)									
Section II - Personal performance (25% of total score)									
Section III - Mission and Core Values (30% of total score)									
Section IV - Position requirements: Education, Compliance, Licensure (Met or Unmet)									
<p>Position Summary: REQUIREMENTS This leadership position is responsible for the development and evaluation of care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences, as well as organizational and economic sciences. As needed the coordinator will utilize analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice, direct and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. California license as a RN required MSN or CNS Preferred. Must have at least three (3) years of clinical experience. Acute care hospital experience required. BLS certification (AHA-approved) required. Ability to work in multidisciplinary teams. Computer skills including Cerner EHR, Midas, Microsoft Office products. Ability to analyze complex data. Leadership skills, systems thinking, creative. Applies nursing and team processes. Knowledge of readmission reduction strategies. Knowledge of healthcare delivery system. Knowledge of community resources. Knowledge of regulatory requirements for discharge. Demonstration of effective problem-solving techniques including conflict management skills. Demonstration of excellent oral and written communication skills to include report writing. Knowledge of CQI and QA methodologies and computer skills.</p>									

Appendix E

DH Readmission Risk Assessment Tool

Readmission Risk Screening Added to Cerner Adult Admission History

Dignity Health is a Hospital Engagement Network for CMS. With our No Harm Campaign we have committed to:

- Reducing a 20% reduction of avoidable 30-day readmissions using evidence-based strategies by December 2015.
- Assessing all inpatients on admission for the risk of readmission using the Dignity Health standard risk assessment tool.
- Utilizing the Teach-Back method to educate both patient and caregivers regarding at-home status and care plan.

Re-hospitalization within 30-day frequently results from failure in safely transitioning patients to the outpatient setting.

Readmissions shortly after a prior admission are often viewed as an indicator of poor quality and source of unnecessary care.

Readmissions are often expensive adverse events for patients and are a focus for CMS to improve the care for Medicare beneficiaries.

- 20% of Medicare patients have unplanned returns to the hospital within 30 days of discharge. If national rates can be lowered to the same level as top performing hospitals, \$1.9 billion healthcare dollars could be saved. Better care means lower costs.
- Higher than expected readmission rates will result in Medicare payment reductions during payment year 2012 which started Oct 1, 2012.


To identify patients at risk for readmission, a new tool is now embedded in the Adult Admission Form. The purpose of readmission risk scoring is to identify patients who are likely to return to the hospital and alert the healthcare team so they can take appropriate steps to minimize that likely hood and provide the patient with additional resources if needed.

Readmission Risk scoring consists of:

- 18 questions on 8 separate sections of the Adult Admission History Form
- A yes response for any of the questions assigns 1 point to the patient's readmission risk score
- Patients with a total score of 3 or more are considered high admission risk
- Patients with a total score of 2 or less are considered moderate readmission risk
- Patients with a total score of 1 or less are considered a low readmission risk
- Each question is a required field but allows the for an "unable to obtain" response
- A task fires 24 hours after documenting any of the 18 questions as "unable to obtain". The task is intended to remind the care team to follow up on the information that could not be obtained at admission. Updating the form completes the task
- The reminder task will fire every 24 hours until no more "unable to obtain" responses remain
- Attached to the task is a Readmission Risk Follow Up Form used to collect this information. All 18 fields on this form and the last documented information into the form.
- The care team also receives tasks alerting them to patients who score high or medium risk
- If 2 to 4 risk factors are "Yes", then a task will fire to the Case Managers that the patient is at Moderate risk for a 30-day readmission.
- If 5 or more risk factors are "Yes", then a task will fire to the Case Managers that the patient is at High risk for a 30-day readmission.




General Information section



New question: Is this an End Stage Condition? Blue text are examples of end stage conditions. A Yes answer adds 1 point to Readmission Risk Score

New question for Readmission Risk Score. Blue text clarifies the answers. Repeat hospitalizations should only include acute care inpatient admissions. Selecting Repeat Hospitalizations or Repeat ED visits adds a point to the Readmission Risk Score. Unable to obtain answer will trigger a task for care team to follow up in 24 hours



General Information section continued

New question for Readmission Risk Score. Blue text defines Health Literacy Deficit. A Yes answer adds a point to the Readmission Risk Score, also informs team that the patient may need additional resources and teach-back education. A Unable to obtain answer will trigger a task for care team to follow up in 24 hours.

Health History Section

New Readmission Risk question added to the Health History Section. History of mental illness means patient has been treated or takes medications within last year. A Yes answer adds 1 point to the Readmission Risk Score. Unable to obtain answer will trigger a task for care team to follow up on this question.

Environmental and Functional Assessment Section

Option added to Living situation: "Lives at home-limited or no community support" blue text above question is to help admitting nurse with answering this question. Selecting this option adds a point to the readmission risk score.

New Readmission Risk Question: "Requires assistance in management of Oxygen and/or nebulizer" Selecting "Yes" adds a point to the readmission risk score. Unable to Obtain fires a task for care team to follow up within 24hrs

New Options for Sensory Deficit: "Selecting Cognitive Deficit" adds a point to the readmission risk score. Select Cognitive deficit if gt has any problems with orientation to person, place, time and current events, any head trauma or prior CVA.

Selecting "Unable to Obtain" fires a task for care team to follow up within 24hrs

Environmental and Functional Assessment Section continued

Functional Status: Selecting any option in the with 1 person assist/ or 2 person assist should prompt nurse to answer YES to the next question. Readmission Risk question for Requires Assistance with ADL's/IADL's (need help bathing, dressing, eating etc.) is mapped to this question. A yes answer adds a point to the readmission risk score. If Unable to obtain is selected, a task is triggered for the care team to follow up on this question within 24 hours.

Appendix F

Risk for Readmission (Additional Reference Points) Nursing Staff Re-education

- Lives at home with limited or no community support (inquire about family, friends, neighbors, senior center, or church affiliation)
- Requires assistance with medication management (inquire how pt organizes meds, know when to take PRN meds, can afford medication, who manages their meds)
- Polypharmacy (greater than 7 medications)
- History of mental illness (been treated or take meds for anxiety or depression within last year)
- Issues with health literacy (can they describe their disease in lay terms, tell you what meds are for why they take them)
- Requires assistance with ADL's/IADL's (need help bathing, dressing, eating, etc.)
- Cognitive impairment (any problems with orientation to person, place, time, and current events...any head trauma, or prior CVA)
- End-stage condition (ESRD/ESLD, HF, COPD, etc.) (Poor response to optimal treatment)
- Diagnosis of CHF/COPD/DM/HIV or AIDS (check H&P)
- Incontinent (loss of control of bladder or bowels, leak when coughing, sneezing, laughing.
- Acute/Chronic wound or pressure ulcer (inquire about past or current skin breakdown)
- History of falls (if yes, how many times and over what length of time; inquire about use of ambulatory assistive devices)
- Decreased adherence to treatment plan (inquire about glucose monitoring, outpatient dialysis, high sodium or poor nutritional choices or any additional non-adherence to their prescribed regimen and why can't maintain)
- Repeat hospitalizations/ED visits (inquire if patient has been to other hospitals or ED's over the last 30 days)
- Requires assistance in management of Oxygen and/or Nebulizer (inquire about their equipment, does it work, can they self-administer?)

Score = Total numbers checked_____

- | | |
|-----------|---|
| Score >5 | This patient is at high risk for Rehospitalization: refer as appropriate |
| Score 2-4 | This patient is a moderate risk for rehospitalization: refer as appropriate |
| Score <2 | This patient is at low risk for rehospitalization: discharge home |

Appendix G

Example of High-Volume Patient Teaching Handouts: Sepsis

<h1>Sepsis</h1>	
<p>Patient should explain in their own words diagnosis and health problems for which they need care.</p> <ul style="list-style-type: none"> • General understanding of disease process and self-care & identify reason for hospitalization and current medical diagnosis 	<div style="border: 1px solid black; padding: 2px; text-align: center;">Teaching Topics</div> <p>Do you know what happens when you have sepsis?</p>
<p>Patient should explain warning signs what signs and symptoms to watch for.</p> <ul style="list-style-type: none"> • Who would you call if...? 	<p>Any symptoms that was having before being admitted to the hospital?</p> <p>Call doctor right away whom?</p>
<p>Patient should explain what to do if warning signs or symptoms occur.</p> <ul style="list-style-type: none"> • What is the call to action (what to watch for)? • What would you do if they occur? • When would you call...? • What would you do if...? • Name three warning signs indicating the need to call your doctor? 911? 	<p>Fever, chills or shaking, confusion or disorientation, dizziness, decreased urination, rapid heartbeat or rapid breathing</p>
<p>Patient should explain key medications for principal diagnosis.</p> <ul style="list-style-type: none"> • Tell me what you know about... • Can you tell me your medication schedule? 	<p>Why is it important to take your medicines?</p>
<p>Patient should explain follow-up appointments.</p> <ul style="list-style-type: none"> • Importance of filling prescription • Importance of scheduled follow-up appointments. 	<p>Why is it important to keep your follow up appointments?</p>
<p>Prevention</p>	<p>If you have had sepsis once and you notice signs of it happening again do not wait to see if you get better call doctor right away.</p>


Sepsis Zones Know Your Zone: Green, Yellow,


<p>Green Zone: All Clear</p> <ul style="list-style-type: none"> • You are able to drink liquids and eat normally • You are feeling better • Temperature below 100 • Urinating as usual • No chest pain, rapid heartbeat or shortness of breath 	<p>Green Zone Means</p> <ul style="list-style-type: none"> • Your infection is being treated • The medications are working that helps fight the infection • Increase your activities slowly; it may take several weeks before you feel normal. • Make sure to go to your doctor as directed
<p>Yellow Zone: Caution</p> <ul style="list-style-type: none"> • You are not feeling good • You have a loss of appetite and/or not taking in liquids • Feeling more tired than when you were in the hospital • Fever and/or chills • You have decreased urination 	<p>Yellow Zone Means: Warning</p> <ul style="list-style-type: none"> • You may need to adjust your medications • Call your doctor to discuss your symptoms <p>Doctor: _____ Phone: _____</p> <p>Call your Home Care Nurse 24 hour number _____</p>
<p>RED ZONE: MEDICAL ALERT</p> <ul style="list-style-type: none"> • You are short of breath • You have a rapid heart beat • Having chest pain • Feeling confused or having trouble thinking 	<p>RED ZONE Means: Emergency</p> <ul style="list-style-type: none"> • You need to be seen by a doctor NOW! • Call 911 or go to the nearest Emergency room.

Appendix H

Teach Back Online Module


TEACH BACK



 **Saint Mary's**
A Dignity Health Member

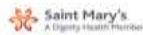
Objectives

- Define health literacy
- Describe patient centered care
- Explain the "Teach Back" process
- Identify ways to incorporate the use of "Teach Back" when caring for patients and families
- Demonstrate the "Teach Back" process through simulation

 Saint Mary's
A Dignity Health Member

Patient and Family Centered Care

- Patient and family centered care is a partnership among practitioners, patients, and their families (when appropriate) to ensure that decisions respect patients wants, needs, and preferences.
- Principles:
 - Dignity, respect
 - Priorities and choices of **PATIENTS DRIVE** the delivery of healthcare.
 - Share information with patients.
 - Patients are active participants in all aspects of their care.
 - Ensure that patients have the **education and support** they need to make decisions and participate in their own care.



Source: Institute For Clinical Systems Improvement, 2013

3

Patient Engagement

- Assessing patients needs and concerns related to their health and self care.
- Active Listening
- Coaching
- Teach back
- Shared Decision Making

Patient Activation

- An "individual's" knowledge, skill, and confidence for managing his/her own health and health care
- Engaged in more disease specific self-management behaviors



Source: Institute For Clinical Systems Improvement, 2013

4

Health Literacy

Defined as the ability to read, understand and act on health care information.

According to the IOM nearly half of all 90 million American adults have difficulty understanding and using health information.

Research shows that patients remember and understand less than half of what clinicians explain to them.

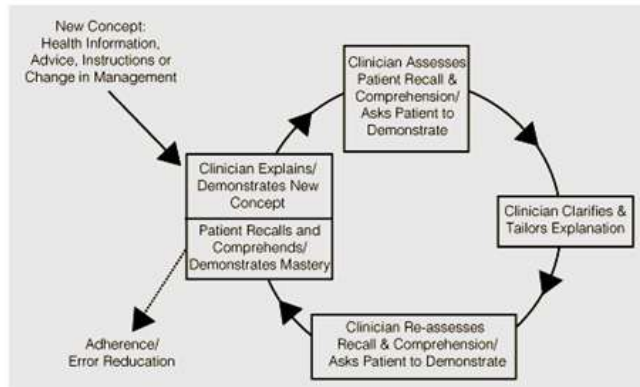
Limited health literacy is associated with medication errors, increased health care costs, and inadequate knowledge and care for chronic health conditions.



What is Teach-back?

- A method for ensuring understanding.
- Asking patients to **explain in their own words** what they need to know or do.
- An indication of how well **YOU** communicated the information.
- A chance to check for understanding and, if necessary, re-teach the information.
- **DO NOT** ask "Do you understand"? Use open ended questions rather than yes/no questions.
- An evidence-based approach to improving patient-provider communication and patient health outcomes.
- Asking that patients recall and restate what they have been told is one of the top 11 patient safety practices based on the strength of scientific evidence.

Teach Back Process



Source: Schilling D, Rette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Groiz K, Castro C, Bindman A. Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy. Arch Intern Med. 163, Jan 13, 2003.



8

Open Ended Questions to Assess Understanding

- **Can you tell me how you take this medication?**
-
- **How would you explain that to your (wife, family)?**
-
- **How would you know when to call the doctor/nurse...)?**
-
- **Show me how you would...(take this medication, use your inhaler)?**
-
- **Who would you call if...(you have a fever, your arm swells)?**
-
- **What questions do you have?**
-



9

Examples of Teach Back

"I want to be sure I explained everything clearly. Can you please explain it back to me so I can be sure I did?"

"What will you tell your husband about the changes we made to your blood pressure medicines today?"

'We've gone over a lot of information. In your own words, please review with me what we talked about.'

"Can you tell me how you take each medicine?"

"When do you take these medicines?"

"How much or how many do you take?"
Can you name two side effects to watch for?"



Questions to Consider

What are specific topics or directions you commonly discuss with your patients that you can use the teach-back method with?

Ideas:

- Medications & side effects
- Selfcare
- Chronic Disease management
- Discharge Instructions
- Signs or symptoms to watch for
- Reasons to call the doctor.

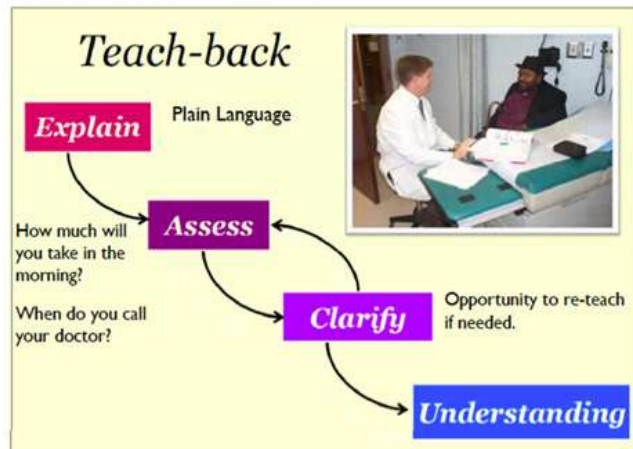


All Patients “ Need to know”



1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

Teach Back Summary



Teach Back Review Before Discharge

- Diagnosis
- Medications and side effects
- Warning signs
- Actions who to call
- Importance of attending follow up appointment

References

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- The Iowa Health System Literacy Collaborative Teach-back a health literacy tool to ensure patient understanding accessed online IHI
- The Teach-back toolkit teachbacktraining.com

Appendix I

Simulated Experience

TEACH BACK

Teach-back should be used with all patients, by every clinician, with every encounter, to ensure that they understand information and instructions.

It is having patients demonstrate they understand what they need to do, in their own words, related to their life

This is a way for us to validate their understanding and identify areas of need.

KEY POINTS

- Begin on day of admission; continue throughout stay to transition to home.
- Ask your patients to repeat in their own words what they need to do when they leave the hospital.
- Let the patient know that you will be asking them questions after you review the information with them (they will pay more attention).

Use phrase like: "I want to be sure that I did a good job explaining."

Open Ended Teach Back Questions to ASSESS UNDERSTANDING

Can you tell me how you take this medication?

How would you explain that to your (wife, family)?

How would you know when to call the doctor/nurse...)?

Show me how you would...(take this medication, use your inhaler)?

Who would you call if...(you have a fever, your arm swells)?

What questions do you have?

Case Scenario #1Situation

Maryanne is 75 y/o female s/p fall ORIF right hip post op-day 3
Expected LOS 5 days

Background: Hx diabetes Lives at home with husband independent in ADL's

Assessment: Alert and oriented, VSS, progressing with PT ambulated 150 ft. with walker. Pain management has been problematic she doesn't want to take pain meds.

Recommendations: Patient education: Loretab

Practice Teach Back to teach your patient about**Lortab (Hydrocodone/acetaminophen)****Teaching example**

Loretab: *"This is your pain medication, you will have a prescription to take home with you. You should have it filled right away as you may still have pain when you are home.*

Take one tablet every 4 hours when you need it for pain.

Don't take more than six pills a day or drink alcohol when taking this.

Most people don't have side effects but 3 common side effects are

1. Drowsiness
2. Upset Stomach
3. Constipation

"If you do have any side effects you should call Dr _____ right away"

Case Scenario #2Situation

James is an 82 y/o with community-acquired pneumonia.
Expected LOS 4 days

Background: Hx HTN AFIB lives alone daughter near by, independent in ADL's
Sees PCP regularly was not feeling well for a week prior to admission.

Assessment: Alert and oriented, VSS, O2 at 2 liters denies SOB, able to ambulate
inside room only, receiving antibiotics, appetite poor taking adequate fluids.

Recommendations: Patient education signs to watch for and actions when at
home.

**Practice Teach Back Method to teach your patient about
Signs to watch for and actions: pneumonia****Teaching example****Warning Signs to watch for and what you should do:**

*“ You have pneumonia you are recovering but it takes time, things
(warning signs) you should watch out for at home are:*

1. fever
2. coughing so much you cant sleep,
- 3.coughing up yellow, green red, stuff (phlegm)

“If you have any of these warning signs you should call Dr __right away

Facilitators

Welcome

Introduce self

Facillator

Review Poster - 3 minutes stress teach back open ended questions

Facilitator we will practice using 2 scenarios

(1 medication 1 signs to watch for)

Practice in pairs one nurse / one patient (educator/ learner)

Read to them scenario 1

Instruct them they have 3 minutes to practice teach back scenario 1

(call time)

Debrief

Facilitator Read scenario 2

Instruct they have 3 minutes practice scenario 2

(Observe Teach back process of communication

Can you tell me in your own words, how would you take ___?

What are 2 warning signs to watch for at home?)

Debrief

What went well? (Feedback participants)

How did you feel being (educator/ learner)?

What did you learn that you didn't already know?

How do plan to use Teach Back in your daily practice?

Wednesday 10-23	Thursday 10-24	Tuesday 11-5	Wednesday 11-6
Gloria	Deb	Deb	Deb
Deb	Gloria		Gloria

Thank you for participating!

Appendix J

"There's No Place Like Home" Campaign Flyer



“There’s No Place Like Home.”



Patients **THANK YOU** for showing them the road!

DAY BEFORE DC
 9:30 AM POC:
 discuss plan for the day/ stay with team

Day RN:
 communicate & confirm plan with patient

3:45 PM Discharge Rounds:
 schedule discharge plan with team

PM and Night RN:
 confirm transportation with patient
 print, deliver & reinforce teaching on
 diagnosis & symptoms to look out for

DAY OF DC
 Day RN & Care Transitions RN:
 teach patient their meds
 help patients get HOME BY
 NOON

Go-live: Monday, July 7th

Goal: 75% of discharges by noon

Let's see who's the greatest Wizard of all! 7W or 8W?

Weekly prizes for top performers!

Appendix K

Hospital Newsletter

St. Mary's Launches "There's No Place Like Home" Discharge Campaign

By Deepa Thakkar a, Department of Performance Excellence

On July 7, the *There's No Place Like Home* campaign was launched on 8W (Telemetry) and 7W (Med-Surg) units. The goal is to get our patients home by noon on the day of discharge. Through proper and timely care coordination between the interdisciplinary care team, starting at the time of admission, we aim to meet the noon discharge target for our patients.

Members of the Hospitalist/Resident alignment team along with the Care Transitions nurses rounded on the 7th and 8th floors to discuss details of this initiative. A roadmap of activities that help the care team prepare our patients for a safe and timely discharge was shared with staff. This includes morning Plan of Care huddles at 9:30 a.m., discharge rounds at 3:45 p.m., post-discharge rounds follow-through and discharge orders by 10:30 a.m. on the day of discharge.

The team has put up "Know Your Discharge" signs in patients' rooms encouraging them to ask the care team questions regarding their plan of care, discharge medications, signs and symptoms, and logistics for getting home. With the help of the Care Transition nurses, the care team will prepare the patient for the road home through communicating and confirming the discharge plan with the patient, confirming transportation, teaching on diagnosis, symptoms to look out for, and their medications. With good planning, the care team can help their patients toward a smooth recovery at home - because there is truly no place like home!

Appendix L

Know Your Discharge Plan (Sign Posted in Patient Rooms)

Know Your Discharge Plan

All of your caregivers at St. Mary's want to make sure that you and your loved ones understand your discharge plan.

We know there is no place like home. Please ask us:

- H** What **help** will I need at home? **How** will I get home?
- O** What **outpatient** follow-up appointments do I need?
- M** What **medications** will I need at home?
- E** What should I **expect** while I continue my recovery at home? What should I look out for?

Appendix M

Improving Timeliness and Quality of Discharge Summaries

Background/Need:

Transitions of care from the inpatient to outpatient setting are imperative to patient safety and reducing readmissions. The current Discharge Summary model is cumbersome, redundant, and does not succinctly communicate the most relevant parts of the hospitalization for primary care physicians (PCP's). Under the current model, housestaff often copy and paste directly from the hospitalist Admission History and Physical (H&P) such that the majority of the Discharge Summary is exactly the same as the Admission H&P. I propose a revised template which avoids most redundancy and instead focuses on the hospital course and follow-up.

In addition, we are not meeting our goal to have all Discharge Summaries dictated within 48 hours of discharge. Interns and residents are responsible for dictating all summaries, but are often delinquent for weeks or longer on completing them. I propose a BAHA-sponsored housestaff incentive initiative to improve the timeliness of these documents.

Project Description:

- 1) To implement a new Revised Discharge Summary Template effective immediately, which is attached separately. (*Please note that this template has already been approved by Alice Wong, Director of Health Information Management, who confirmed that no other third parties need to review the document prior to widespread use.*)
- 2) Housestaff will be randomly audited on their adherence to the new template at least 3 times per week.
- 3) Housestaff will receive direct feedback on their adherence to the new template, and overall completeness of their Discharge Summaries.
- 4) Housestaff will also be randomly audited at least 3 times per week for Discharge Summaries that are dictated after the 48-hour deadline.
- 5) Housestaff will receive direct feedback on the timeliness of their dictations, or lack thereof.
- 6) Bay Area Hospitalist Associates, Inc. (BAHA) will sponsor a housestaff incentives program as follows:
 - a. Each hospitalist ward team per rotation block, consisting of two interns and one resident, will compete to be the winning team with the lowest percentage of delinquent Discharge Summaries per block (i.e., the lowest percentage of summaries dictated after 48 hours following discharge).
 - b. The winning team will receive a \$50 Visa gift card for each individual intern or resident.

Timeline

Once the Revised Discharge Summary Templates are rolled out, auditing and feedback will commence immediately. This will be done irrespective of the housestaff incentives program.

These audits will occur during each ward team rotation block. Since residents switch rotations on the 1st of each month and interns switch rotations on the 22nd of each month, the incentivized competition would run from the 1st through the 21st of each month to maintain consistency on each team. Since I have already been conducting audits on delinquent Discharge Summaries, I can either retroactively start this competition on August 1, or alternatively start the competition on September 1.

BAHA will sponsor this competition for 3 separate blocks.

Evaluation

I will continue to work with Stephanie Perry on compiling an updated list of delinquent Discharge Summaries several times per week. I will conduct all audits myself 3 or more times per week. Housestaff, hospitalist attendings, and the chief resident will continue to receive direct feedback from each of these audits. Stephanie and I will keep an updated tally when the housestaff competition dates are selected. We will announce the winning team following each block.

Dr S. Kim

Appendix N

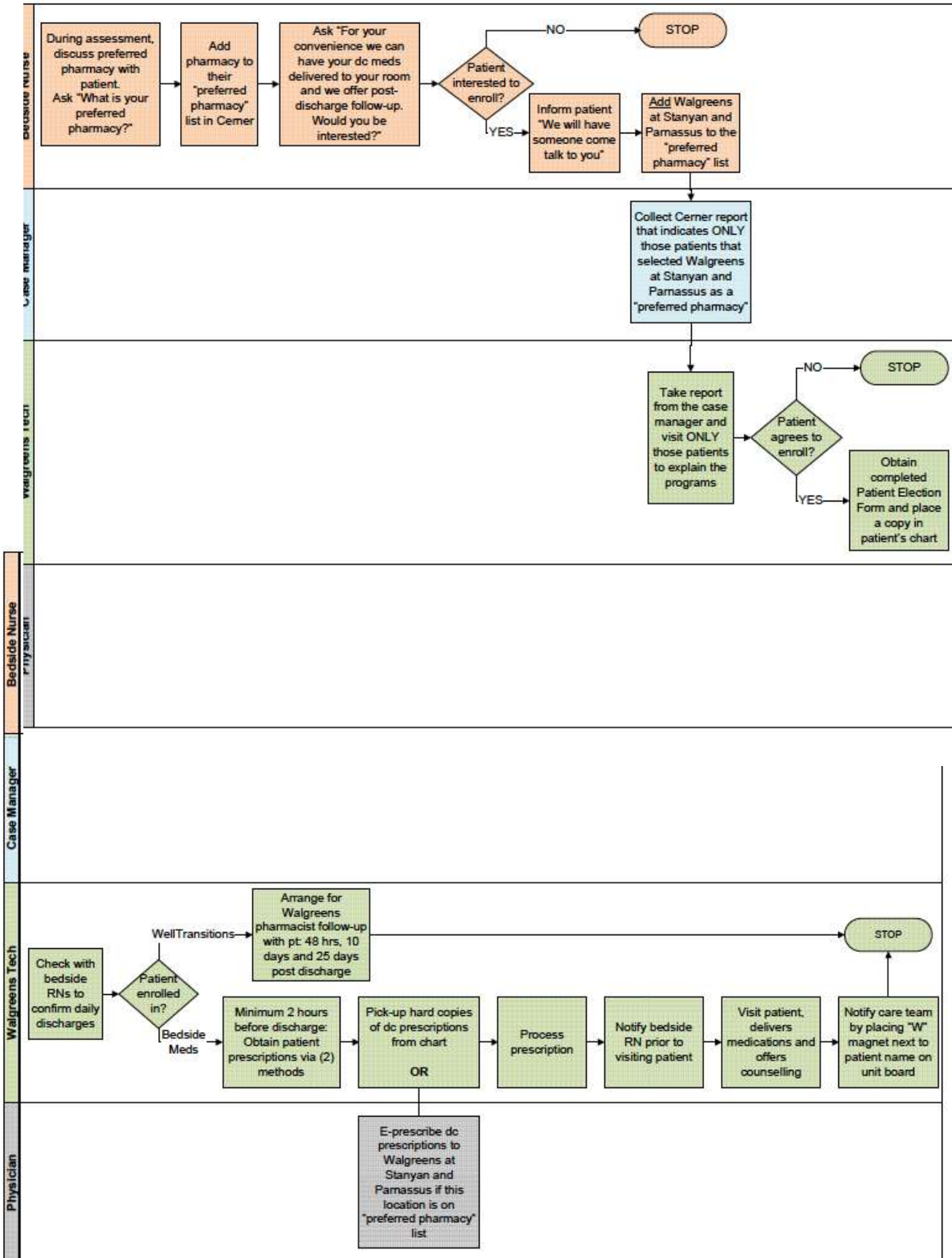
Discharge Performance

How are we doing with discharge?														
	7 WEST						8 WEST							
Date	Case Mgrs	PM CN	Night CN	Day CN	#DC orders			Case Mgrs	PM CN	Night CN	Day CN	#DC orders		
					by 10:30 AM	by Noon	by Noon					by 10:30 AM	by Noon	by Noon
14-Jul					2	0	0%					1	0	0%
15-Jul					2	0	0%					2	2	100%
16-Jul					2	1	50%					2	1	50%
17-Jul					4	5	125%					3	1	33%

Appendix O

Bedside Meds and Well Transitions – Admission Process

Bedside Meds and WellTransitions – Admission Process



Appendix P

Annual Budget

Transitional Care Services St. Mary's Medical Center

Annual Budget

Readmission Costs

395 readmitted patients in 2013 \$3,752,500

213 of total were Medicare patients \$2,023,500

Cost of Implementing Readmission Reduction Strategies

Care Transition Nurse (APN)
(1.0 FTE) \$189,000.00

Walgreens Pharmacy Technician
(0.5 FTE Monday -Friday) \$15,000.00

Total Costs \$204,000

Estimated Total Readmissions Avoided 20% (based on 2013) 79

Total Estimated Savings of Implementing Reduction Strategies

1. Improved hospital- based care \$750,500

2. Community follow-up and social support \$750,500

Total Estimated Savings of Strategies 1+2 \$1,501,000

Costs \$204,000

Net Savings 1,297,000

Appendix Q

Responsibility and Communication Matrix

“There’s No Place Like Home” Campaign

Task	DNP (c) CTN	Charge RN	Bedside RN’s	Hospitalists	Case managers	Patients	Direc- tors
Assesses discharge needs	R	S	R	R	R	R	S
Discharge rounds	R	R		R	R		S
Reinforce discharge teaching	R		R	R	S	R	
Medication reconciliation	S		S	R		S	
Initiate discharge orders				R			
Patient discharged by noon	S		R			R	
Data collection, reporting, evaluation	R		R	R	R		S

R=Responsible
S=Supports/assists

Walgreens Bedside Medication Delivery & Well Transitions Program

Task	DNP (c) CTN	Bedside RN's	Hospitalists	Case managers	Walgreens Tech
Explain service on admission. Ask, "Would you be interested?"	R	R	R	R	
Places red "W" on unit white board	R	R	R	R	
Enrolls patient Medication Delivery/ Well Transitions Program					R
Medications delivered					R
Well Transitions follow-up					R
Data collection, reporting, evaluation	R	S	S		R

R=Responsible
S=Supports/assists

Appendix R

Brief Formal Presentation
(Management Council, Nursing Leadership Council,
Hospitalists, Residents, and Case Managers)

Walgreens Bedside Medications Delivery and WellTransitions

Barbara Brownell, Director, Case Management
Deepa Thakkar, Director, Performance Excellence
Ronda Lowe, Walgreens District Pharmacy Supervisor
Debra Conroy-McCue RN



Did You Know?

- 82% of American adults take at least 1 medicine; 29% take 5 or more.
- 700,000 emergency department visits and 120,000 hospitalizations annually are due to medicine problems
- Nearly 3 out of 4 Americans report they do not always take their medicines as directed. This leads to more than 1/3 of medicine related hospitalizations.



“There’s No Place Like Home” Campaign

Know Your Discharge Plan

All of your caregivers at St. Mary’s want to make sure that you and your loved ones understand your discharge plan.

We know there is no place like home. Please ask us:

- H** What **help** will I need at home? **How** will I get home?
- O** What **outpatient** follow-up appointments do I need?
- M** What **medications** will I need at home?
- E** What should I **expect** while I continue my recovery at home? What should I look out for?



3

Readmissions Root Cause Analysis






Medication management is the top concerns for patients, caregivers and the care team.

1. **97% are on high risk medications.**
 This increases the chance of patients having problems with their medication regimen and untoward health outcomes.
2. **20% primary/ secondary reason for readmission is due to medications.**
 This includes medications not being filled, patients not understanding their medications and side-effects or medication reconciliation issues.
3. **38% cannot teach-back.**
 This includes medications, discharge instructions and warning signs.



4

WellTransitions – Pharmacy Care From Hospital to Home

During hospital stay		After discharge		
 <p>Medication review Thorough pharmacist review of current medications.</p>	 <p>Bedside delivery* Delivery of newly prescribed medications upon discharge—includes review and counseling</p>	 <p>Follow-up calls Walgreens pharmacist checks progress: • 48 hours after discharge • 10 days after discharge • 25 days after discharge</p>	 <p>Refills Convenient refills at your local Walgreens or other pharmacy of choice</p>	 <p>24/7 support Around-the-clock medication support and counseling via phone</p>

Features and benefits of WellTransitions*

- Voluntary program, no cost to patient
- Helps ongoing recovery through better medication understanding and pharmacy support

Bedside Medications Delivery and WellTransitions

Bedside RN Responsibilities

1. Ask patient their preferred pharmacy and assign in Cerner
2. Ask patient if they are interested in bedside meds delivery or post-discharge follow-up
 - a. Assign **Walgreens at Stanyan and Parnassus** in Cerner
 - b. Let patient know that someone will speak with them about the programs
 - c. Write a **'W'** on nursing unit board next to patient name

Bedside Medications Delivery and WellTransitions

Case Manager Responsibilities

1. Note all patients with a 'W' on nursing unit board
2. For those with a 'W', confirm pharmacy is listed in Cerner as **Walgreens at Stanyan and Parnassus**
3. Assist tech with face sheet and any questions as needed
4. Discuss at POC to remind care team



Bedside Medications Delivery and WellTransitions

Walgreens Tech Responsibilities

1. Note all patients with a 'W' on nursing unit board
2. For those with a 'W', obtain face sheet from chart
3. Meet with patient to discuss delivery and follow-up programs and confirm enrollment
4. Obtain prescriptions
5. Coordinate delivery of medications and offer counseling
6. Cross-out 'W' to alert staff that meds are delivered



Appendix S

Walgreens Rollout Training

Walgreens Bedside Meds Delivery/ WellTransitions Roll-out

	Date	Time	Meeting	Location
Leadership Meetings	Tuesday, July 15, 2014	2:00 PM	Management Council	Morrissey Hall
	?	?	Nursing Leadership	?
Staff Training	Monday, July 14, 2014	7:00 AM	Nursing Huddle	8W
		3:00 PM	Nursing Huddle	8W
		3:45 PM	Discharge Rounds	8E
	Wednesday, July 16, 2014	7:00 AM	Nursing Huddle	7W
		9:00 AM	Case Management Huddle	6W
		3:00 PM	Nursing Huddle	7W
	Friday, July 18, 2014	7:00 AM	Nursing Huddle	8W
		3:00 PM	Nursing Huddle	8W
		3:45 PM	Discharge Rounds	8E
	Monday, July 21, 2014	7:00 AM	Nursing Huddle	7W
		3:00 PM	Nursing Huddle	7W
		3:45 PM	Discharge Rounds	8E
	Wednesday, July 23, 2014	7:00 AM	Nursing Huddle	8W
		3:00 PM	Nursing Huddle	8W
		3:45 PM	Discharge Rounds	8E
Friday, July 25, 2014	7:00 AM	Nursing Huddle	7W	
	9:00 AM	Case Management Huddle	6W	
	3:00 PM	Nursing Huddle	7W	

Appendix T

ARC Readmission Interview Tools

Questions Patient	Pt./Care Giver Name	Pt./Care Giver Name	Pt./Care Giver Name	Pt./Care Giver Name	Pt./Care Giver Name
Number of days since the last discharge?					
How do you think you became sick enough to come back to the hospital?					
Physician Questions - Did you go to your doctor's office before you came back to the hospital? If yes, who is your doctor? If not, why not? Did you have any problems getting to see your doctor?					
Medication Questions - Has anything gotten in the way of you taking your medicines? How do you take your medicines and set up your pills each day? Can you tell me which medications you are supposed to take each day?					
Dietary Questions - Tell me about the kinds of meals you typically eat each day.					
Why do you think you were readmitted to the hospital?					
What do you think needs to happen for you to be able to stay healthy enough to stay at home?					
What did you learn from the Pts./Caregivers?					

<p>Process Questions</p>	<p>List and review any policies and procedures or forms related to this process? Are any changes needed?</p>	<p>Review training materials for involved individuals? Any changes needed?</p>	<p>Observation actual practice through: chart review, staff interview, Pt. interview or unit observation. Were desired practices evident on at least three separate occasions?</p>	<p>Describe any monitoring that is performed regarding the process. What measures are collected? How frequently? Who collects and aggregates these data? Where do the findings go?</p>
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Enhanced Admission Assessment

<p>Enhanced Admission - Do you routinely ask the Pt./Caregiver upon admission: “Who takes care of you at home? Who helps you with your medications? Who goes to the doctor’s appointment with you?”</p>				
<p>Is there a white board or some other method to communicate this information to other providers? Is it complete and up-to-date?</p>				

Teaching and Coaching Processes

<p>Who receives teaching? When and how often is this performed? How is understanding demonstrated? Can your patients/families reliably teach back to you an adequate understanding of their conditions, medications, discharge follow up needs, etc? Do you use teach back? How do you evaluate staff competency to perform teach back? Do you include all of the following types of teach back questions throughout the patient’s stay; knowledge of medications, diet, etc., attitude – why</p>				
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<p>Process Questions</p>	<p>List and review any policies and procedures or forms related to this process? Are any changes needed?</p>	<p>Review training materials for involved individuals? Any changes needed?</p>	<p>Observation actual practice through: chart review, staff interview, Pt. interview or unit observation. Were desired practices evident on at least three separate occasions?</p>	<p>Describe any monitoring that is performed regarding the process. What measures are collected? How frequently? Who collects and aggregates these data? Where do the findings go?</p>
<p>these are important, behavior questions – how will you remember, organize, etc. ?</p> <p>Are written training materials appropriate for the languages and reading level of your patients?</p>				
<p>Does your coaching model work to transfer self-management skills to the patient/care giver? How do you know it is effective?</p>				
<p>Handover Processes</p>				
<p>Does your patient reliably leave your organization with a clear patient health/transitions record which includes a clear list of medications to take upon discharge?</p>				
<p>Is there a plan to obtain the medications if they are not provided by the organization?</p>				
<p>Does your organization reliably communicate key information to the next providers of care? Are discharge summaries completed and sent to the PCP within 24 hours of discharge?</p>				

Process Questions	List and review any policies and procedures or forms related to this process? Are any changes needed?	Review training materials for involved individuals? Any changes needed?	Observation actual practice through: chart review, staff interview, Pt. interview or unit observation. Were desired practices evident on at least three separate occasions?	Describe any monitoring that is performed regarding the process. What measures are collected? How frequently? Who collects and aggregates these data? Where do the findings go?
Is there a standardized method of communicating to other organizations such as SNFs? Does the method meet the patient's needs?				
Post Acute-Care Follow-Up Processes				
Does your patient have adequate and reliable follow-up? Is a follow-up appointment scheduled prior to discharge? Is there a process in place to check to see if the patient made it to the appointment and an intervention if he/she did not?				
Do you have a process in place for post discharge follow-up calls or telehealth monitoring?				
Do you have specific strategies in place for high risk patients? How do you determine which patients are high risk?				

Questions	Pt. Name	Pt. Name	Pt. Name	Pt. Name	Pt. Name
Number of days since the last discharge?					
Were you aware of the patient's last discharge from the hospital?					
Did you receive timely follow-up information from the hospital about your patient's condition and any changes to his/her medications?					
Did you provide any follow-up visits with the patient since his/her discharge and this readmission?					
Why do you think the patient needed to be readmitted? (The goal here is not to collect a clinical diagnosis; rather, it is to uncover the reason why the patient's clinical condition deteriorated.)					
What do you think needs to happen for your patient to be able to stay healthy enough to stay out of the hospital?					
What did you learn from the providers?					

Appendix U

Gap Analysis

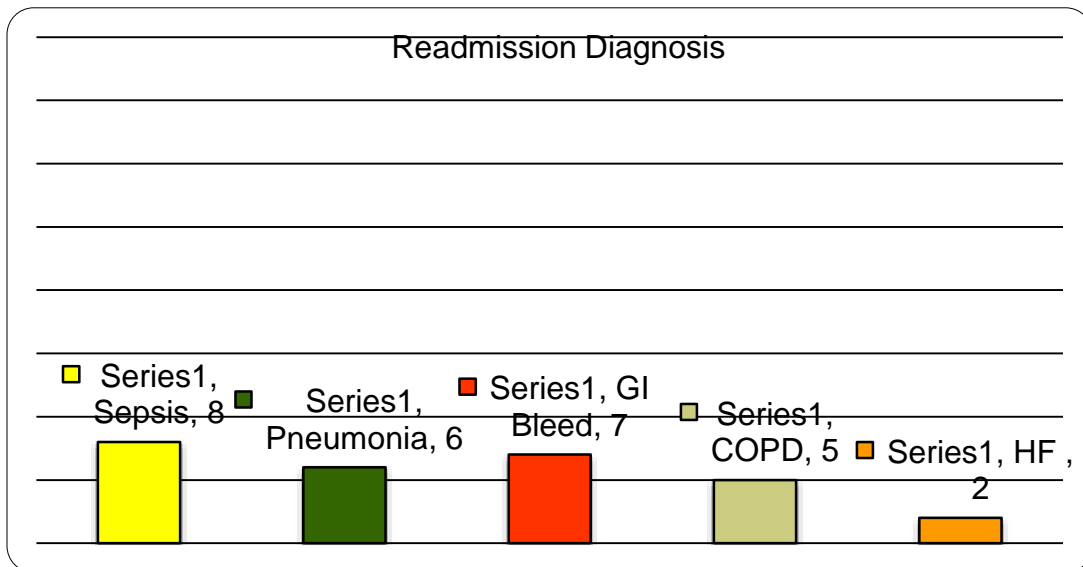


Chart reviews 40 readmitted patients

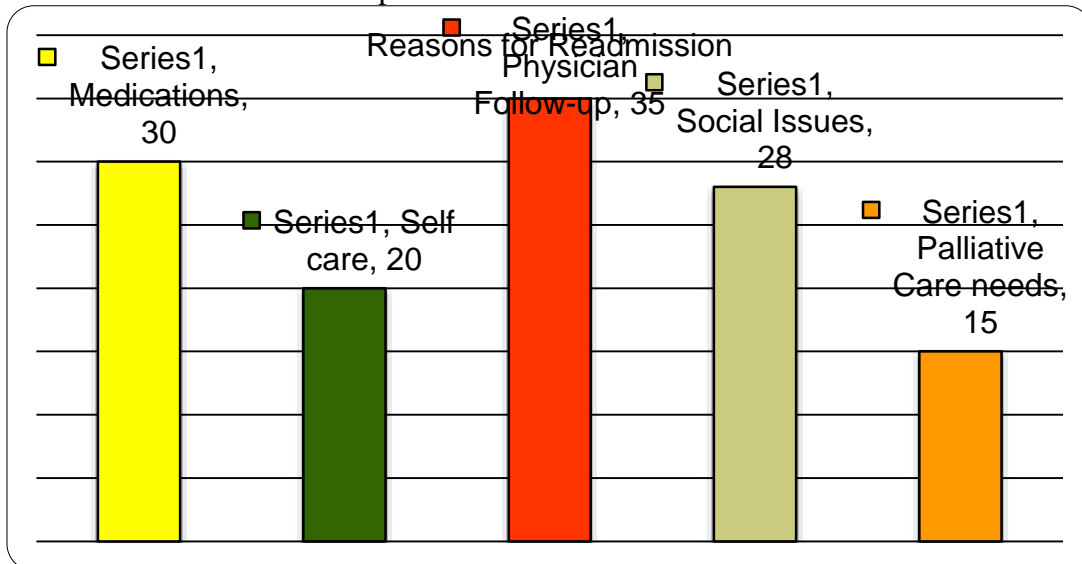


Chart reviews 40 readmitted patients

Patients may have more than one reason for readmission

Appendix V

Walgreens Process

Programs: Bedside Medications Delivery and WellTransitions

Patients may choose to enroll in either/ both/ none.

Process:

1. **On admission** ask patient if interested (DO NOT wait till day of discharge)
2. **Write W on board** at nurses station if interested and add 199 Parnassus (Walgreens) to preferred pharmacy list
3. Tech visits patient and gets consent
4. **Physicians by 10 AM** on day of discharge, complete prescriptions, sign, print and place in front of chart or e-prescribe
5. Tech fills prescriptions, delivers and arranges for consult (if needed)


Appendix W

Gantt Chart

Project: Care Transitions Services

Date: June 2013- December 2014 Monday-Friday Length: 18 months St. Marys Medical Center 5.F

Level	Task	Responsibility	Q1	Q2	Q3	Q4	Q5	Q6
1	Culture & Workflow		June-Aug 2013	Sept-Nov 2013	Dec 2013-Feb 2014	March-May 2014	Jun-Aug 2014	Sep-Nov 2014
1.1	Communicate to all stakeholders (internally/community) Readmission Team (RT)	DNPc, RT	♦					
1.2	Bi weekly meetings Interdisciplinary Readmission Team (RT)	DNPc, RT						
1.3	Bi weekly meetings Hospitalist/Resident Realignment Team (HRT)	DNPc, HRT				♦		
1.4	Participate in monthly Dignity Health Readmissions Calls	DNPc						
1.5	Ad Hoc Organizational & Nursing Leadership meetings	DNPc						
1.6	Casemangers, Frontline RNs daily, Physicians	DNPc						
1.7	New role Care Transition Nurse (Feb 2014)	DNP-E and CN WW (1.8 FTE)			♦			
2	Priority Processes							
2.1	Risk Assessment	Lead Hospitalist, DNPc, staff RNs						
2.2	Medication reconciliation Lead Hospitalist (LH)	LH		♦				
2.3	Training hospitalist, housestaff med rec	LH, Housestaff, Lead Physician Trainer		♦				
2.4	Oversee by hospitalists of med rec completed by housestaff	hospitalist		♦				
2.5	Teach Back refresh Online Module, Live Simulation	DNPc, Care Transition Nurse		♦				
2.6	Discharge Summaries to next provider (24-48 hrs) telephone handover at discharge	Hospitalists			♦			
2.7	M-F 3:45 pm Afternoon discharge rounds	DNPc, Hospitalist, Interns/Residents, CM, Unit charge nurses				♦		
2.8	Launch "Theres No Place like Home Campaign" 7-7-14	DNPc, organizational leaders, nurses, case managers					♦	
2.9	Go live Partnership with Community Partner Walgreens 8-4-14	TC Director, CH Director, DNP-E					♦	
2.5	Observations, Auditing, Data collection	DNPc, TC Director, TC Analyst, LH						
3	Weekly data collection Transitions activities							
3.1	Bi-weekly report to Organizational RT, Hospitalist/Resident Team	DNPc, TC Director, TC analyst						
3.2	Monthly Report to executive leadership	TC Director, CH Director, DNP-E						
4	Evaluation							
4.1	Evaluate project & process weekly	DNPc, Leadership, RT and Hospitalist						
4.2	Outcomes: Readmission rate, HCAPS, VBP	DNPc, Leadership, RT Hospitalist						

- Milestone 
- Q1 Readmission team priority issues identified
 - Q2 Risk assessment, teach back
 - Q3 Dc summaries revised , sent to post hospital providers with in 24-48 hrs,
 - Q3 New role Care Transition Nurse / Special Projects Coordinator
 - Q4 Invited team member Hospitalist/Resident Realignment Team
 - Q4 daily dc rounds 3:45 attended by CTN, MDs Case managers and both 7 west & 8west unit charge nurses
 - Q5 Launch "Theres no place like home" (July 7, 2014)Walgreens medside med delivery and followup program Well Transitions
 - Q5 Walgreens medside med delivery and followup program Well Transitions

Appendix X

SWOT

<p>S</p> <p>Strengths</p> <ul style="list-style-type: none"> •Dignity Health strategic goal to decrease readmissions by 20% •Transitional care best practices successfully implemented with heart failure tient population •Leadership support •Hospitalist/Resident physician support •Transformational Care Director and analyst support •Case manager director support 	<p>W</p> <p>Weaknesses</p> <ul style="list-style-type: none"> • Frontline staff buy-in • Organizational Culture • One lead nurse on the project diff keep momentum of improvements nurse off/ill
<p>O</p> <p>Opportunities</p> <ul style="list-style-type: none"> •A national study (Bradley et al., 2012) found that although hospitals were aware of evidence-based practices to reduce readmissions, on average hospitals used 4.8 of 10 key practices and fewer than 3% of hospitals utilized all 10 practices • Dignity Health hospitals do not consistently utilize best practices for transitional care and discharge •Reduction in Readmissions/Increase VBP 	<p>T</p> <p>Threats</p> <ul style="list-style-type: none"> •Value-based purchasing (VBP) • CMS decrease in payments for readmissions •ROI cost benefit of Care Transition Process Improvement Nurse Coordi

Appendix Y

ROI Calculator

St Marys Medical Center "No Harm" Campaign
ROI

		Total	Medicare	Medicaid	Source of Data
BASIC DATA					
A	Number of (non-OB, adult) discharges, past year (#)	6152	3322	676	Input your data
B	Number of (non-OB, adult) readmissions, past year (#)	395	213	74	Input your data
C	(non-OB, adult) readmission rate (calculation)	6.4%	6.4%	10.0%	Calculate: B/A
D	Average cost (reimbursement) per (non-OB, adult) admission (\$)	\$ 9,500	\$ 9,500	\$ 9,500	your data
E	Total cost of readmissions, past year (calculation)	\$ 3,752,500	\$ 2,023,500	\$ 703,000	Calculate: BxD
IMPACT OF READMISSION REDUCTION STRATEGIE(S)					
<i>Strategy 1: (example) Improve Transitional Hospital Based Care for All</i>					
G	Target population strategy 1 will serve (#)	ALL	ALL	ALL	Based on your strategy
H	Number of admissions strategy 1 will serve (#)	6,152	3322	676	Input your data
I	Readmission rate among target population (%)	6.4%	6.4%	10.0%	Input your data
J	Readmissions among target population (calculation)	395	213	74	Calculate: HxI
K	Estimated impact of strategy 1 in reducing readmissions (%)	20%	20%	20%	Based on your estimation
L	Number of readmissions averted (calculation)	79	43	15	Calculate: JxK
M	Estimated savings of strategy 1 (\$, calculation)	\$ 750,500	\$ 404,700	\$ 140,600	Calculate: LxD
<i>Strategy 2: (example) Follow-up: community providers, social support</i>					
N	Target population strategy 2 will serve (#)	6,152	3322	676	Based on your strategy
O	Number of admissions strategy 2 will serve (#)	6152	3322	676	Input your data
P	Readmission rate among target population (%)	6%	6%	10%	Input your data
Q	Readmissions among target population (#, calculation)	395	213	74	Calculate: OxP
R	Estimated impact of strategy 2 in reducing readmissions (%)	20%	20%	20%	Based on your estimation
S	Number of readmissions averted (calculation)	79	43	15	Calculate: QxR
T	Estimated savings strategy 2 (\$, calculation)	\$ 750,500	\$ 404,700	\$ 140,600	Calculate: SxD
TOTAL STRATEGY IMPACT					
U	Total estimated readmissions avoided of strategies 1 + 2 (calculation)	79	85	30	Calculate: L+S
V	Readmission rate after strategies 1+2 implemented (calculation)	5.1%	3.8%	6.6%	Calculate: (B-U)/A
W	Total estimated savings of strategies 1+2	\$ 1,501,000	\$ 809,400	\$ 281,200	Calculate: M+T
COST OF READMISSION REDUCTION STRATEGIES					
X	Estimated cost of implementing strategy 1	\$ 102,000	\$ 50,000	\$ 50,000	Based on your budget
Y	Estimated cost of implementing strategy 2	\$ 102,000	\$ 55,079	\$ 11,208	Based on your budget
Z	Total cost of implementing strategies 1+2	\$ 204,000	\$ 105,079	\$ 61,208	Calculate: X+Y
NET SAVINGS & READMISSION REDUCTION					
	Net savings	\$ 1,297,000	\$ 704,321	\$ 219,992	Calculate: W-Z
	Total readmission reduction	20%	40%	40%	Calculate: U/B

Source:

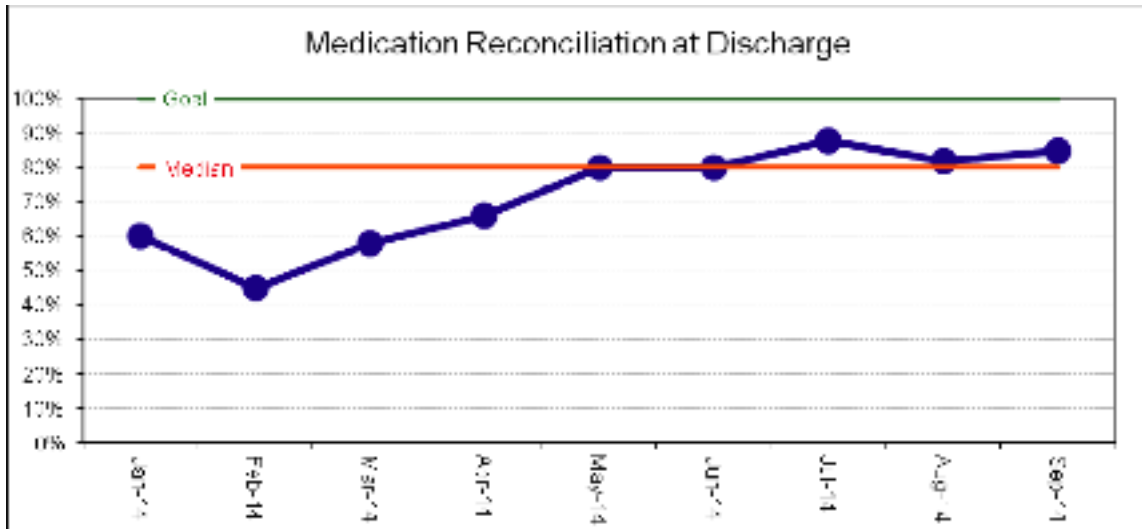
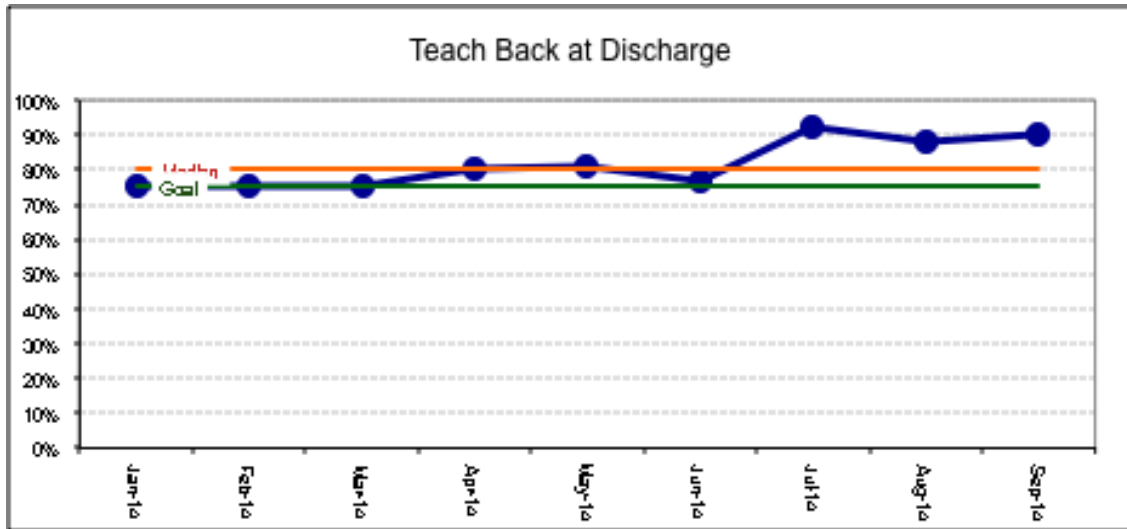
Hospital Guide to Reducing Medicaid Readmissions: Tool 8: Readmission Reduction Impact and Financial Analysis Tool. August 2014. Agency for Healthcare Research and Quality Data: Data Dignity Health "No Harm Campaign", Office of Statewide Health Planning & Development, CMS

Note:

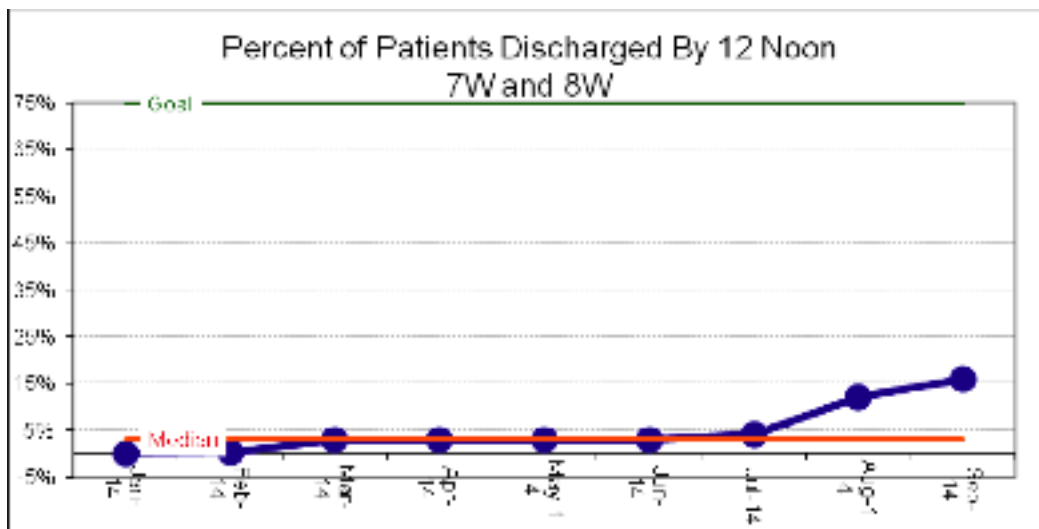
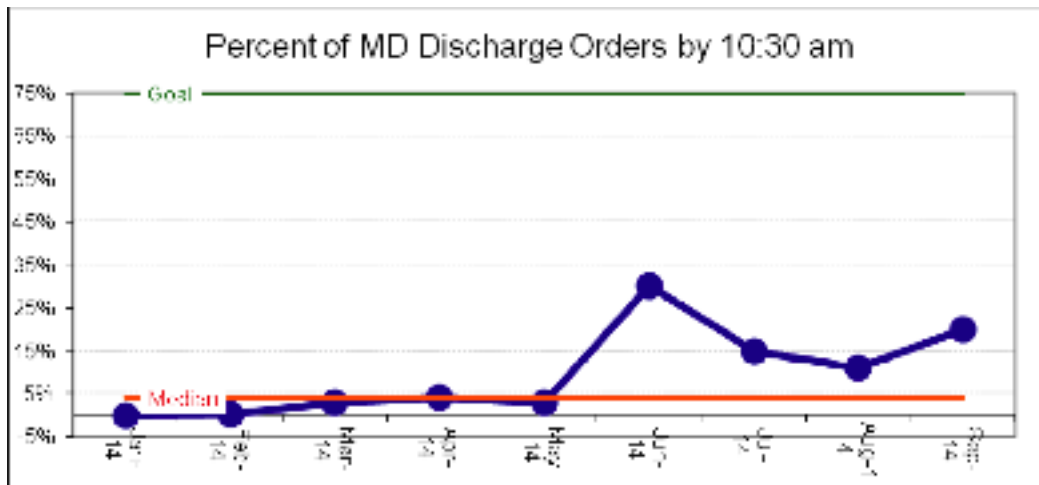
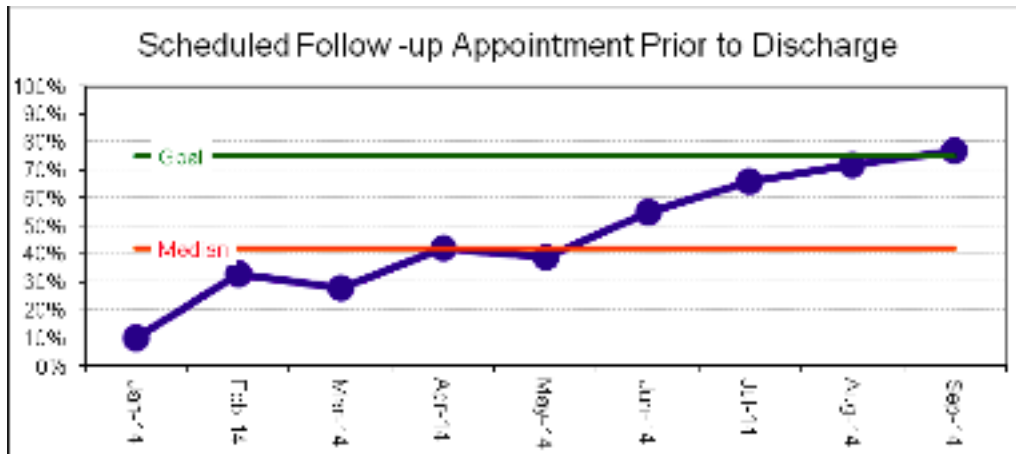
Some calculations are not exact due to rounding
"Total cost of implementing strategies" is based on assumption of CTN as driver of change 1FTE salary and benefits per/yr.
Walgreens Pharmacy Technician (0.5 FTE) M-F

Appendix Z

Outcome Data Transitional Care Processes

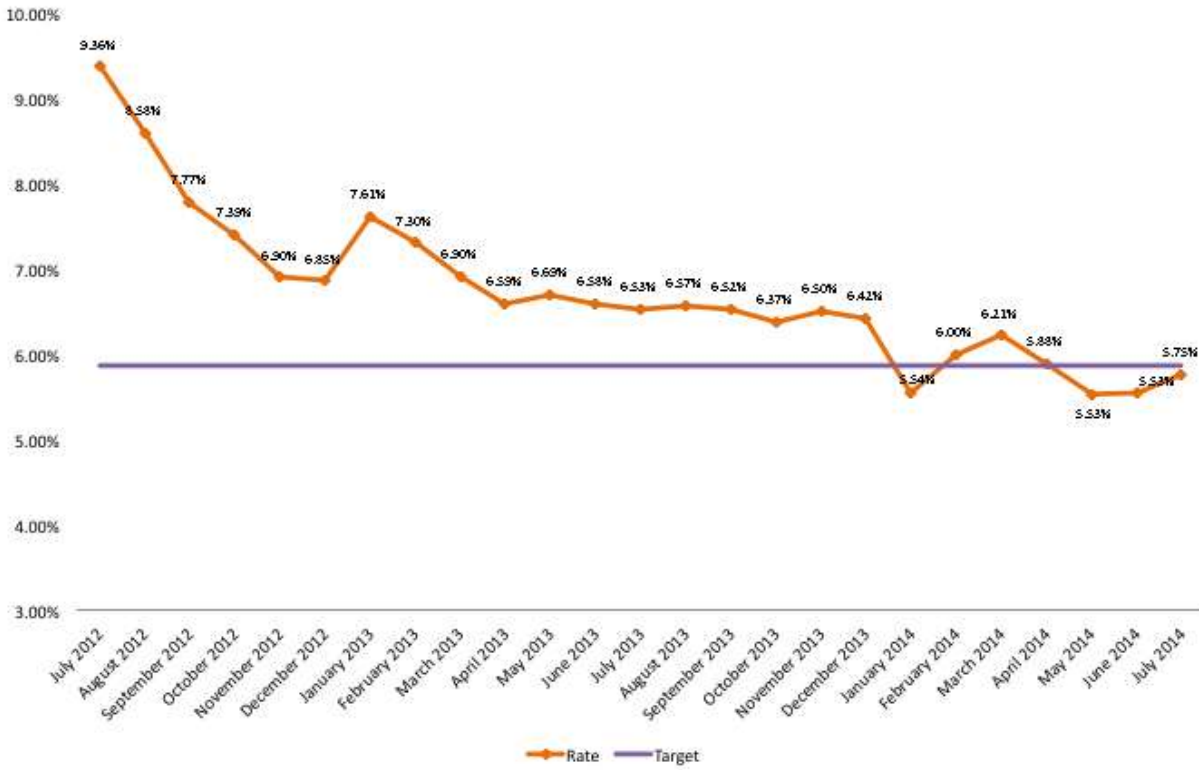


% Completed by Physician with 100% accuracy without nurse calling to clarify



Appendix AA

SMMC No Harm Campaign 30-Day, All-Cause Readmission Rate



Appendix BB

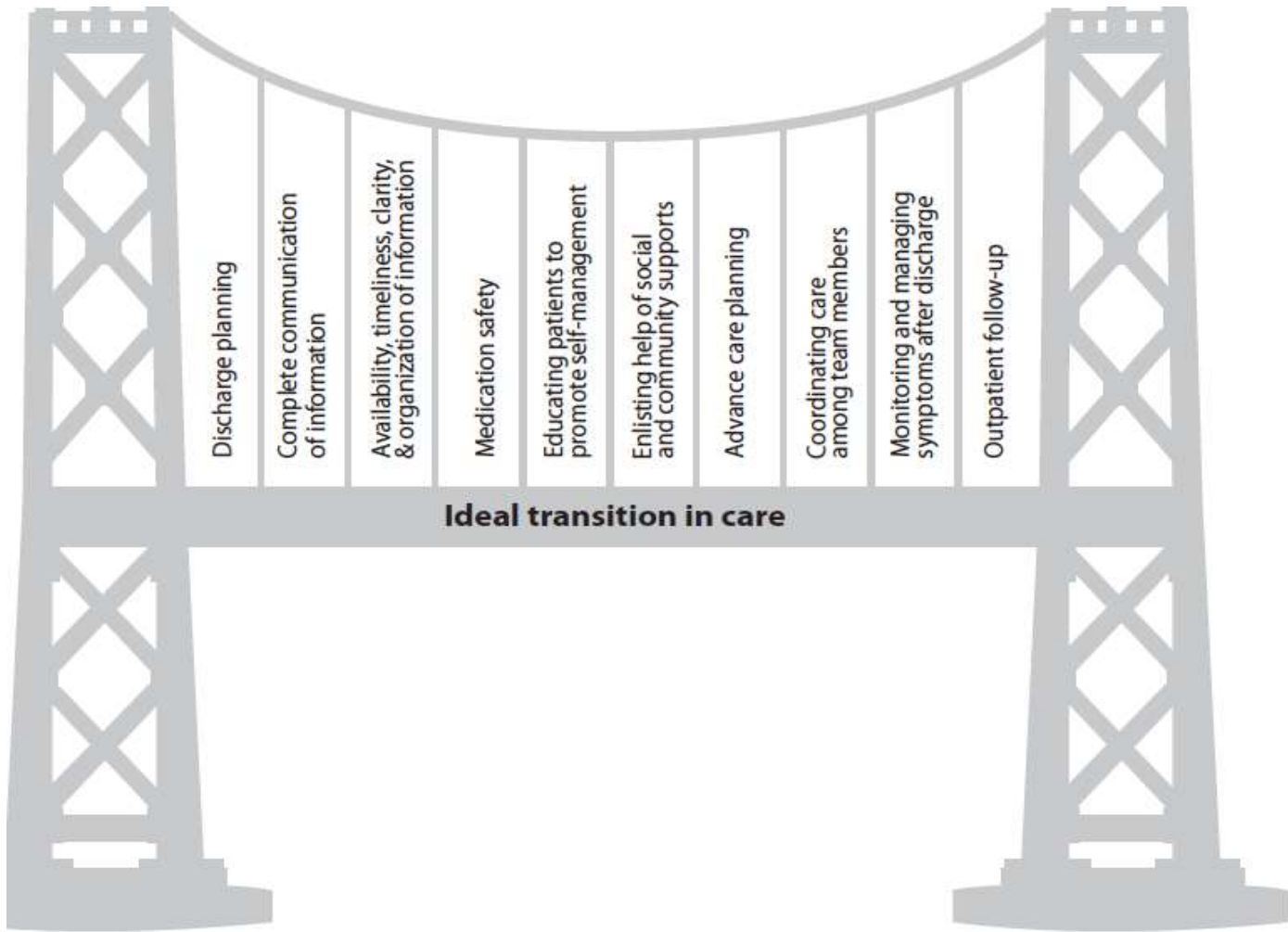
Transition Bundle Domains

The table below illustrates the different domains of the transitional care process that are addressed in TCM, CTM, RED, BOOST, STAAR, and the CMS COPs and Project Implementation at St. Mary's Medical Center

Best Practice	TCM	CTM	RED	BOOST	STARR IHI	CMS COPs	St. Mary's Medical Center Project
Assess needs Risk assessment Discharge planning	X	X		X	X	X	X
Engage & educate patients & caregivers using Teach Back	X	X	X	X	X	X	X
Medication Safety: Med reconciliation, medication access & management	X	X	X	X	X	X	X
Provide and share customized information among: patients, hospital team, and post-hospital providers	X	X	X	X	X	X	X
Advanced Care Planning				X	X		X
Arrange follow-up: calls, appointments, community services Monitoring & managing symptoms after discharge	X	X	X		X	X	X
Engage and build Cross-Continuum Teams Outpatient follow-up		X			X	X	X

Appendix CC

Ideal Transition in Care



(Burke et al., 2013)