The University of San Francisco

USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

Master's Projects and Capstones

Theses, Dissertations, Capstones and Projects

Fall 12-11-2020

An Innovative Contest: A Team Approach to Improving Patient Satisfaction Scores for Medication Side Effects

Jennifer Natsch-Jensen University of San Francisco, jenjnsn@icloud.com

Follow this and additional works at: https://repository.usfca.edu/capstone

Part of the Other Nursing Commons

Recommended Citation

Natsch-Jensen, Jennifer, "An Innovative Contest: A Team Approach to Improving Patient Satisfaction Scores for Medication Side Effects" (2020). *Master's Projects and Capstones*. 1099. https://repository.usfca.edu/capstone/1099

This Project/Capstone is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.



An Innovative Contest: A Team Approach to Improving Patient Satisfaction Scores for

Medication Side Effects

Jennifer Natsch-Jensen

University of San Francisco

Fall 2020

Table of Contents

Abstract	
Introduction	
Problem Description	7
Available Knowledge	9
Recall	
Learning Readiness	
Teach-Back	
Timing	
Staff Engagement	
Rationale	
Specific Aim	
Context	
Cost Benefit Analysis	
Methods	
Intervention	
Study of the Intervention	
Measures	
Ethical Considerations	
Outcome Measure Results	
Tracer Visits	
Team Engagement	
Survey	
SAC Insights	
Removing Barriers	
Question 14	
Summary	
Crisis Management and Caring Moments	
Limitations	
Future	
Conclusions	
References	
Appendices	
Appendix A: Medication Side Effect Tool – sample page	
Appendix B: Project Charter	
Appendix C: Cost-Benefit Analysis	
Appendix D: Evaluation Table	
Appendix E: SWOT Analysis	

58
61
65
71
72
76

Abstract

Problem The Home Healthcare Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) survey question 14 regarding providers discussing possible side effects is below the organizational goal of 74.1 linear mean in this home health microsystem.

Context According to the Agency for Healthcare Quality and Research (AHRQ), nearly 20% of patients discharged home from the hospital had an adverse event within the first few weeks of discharge and most are related to medications (AHRQ, 2019).

Interventions An innovative contest was introduced to promote engagement and to use teachback best practices, including planned discussions with the patient and caregivers regarding name of medication, purpose, and potential side effects.

Measures Four measures were incorporated for evaluation: Percentage of field staff introduced to HHCAHPS question 14 with rationale; Percentage of the monthly supervisor tracer visits identifying use of the medication side effect education (MSE) tool; Percentage of patients and caregivers recalling if side effects were discussed in a previous visit; Number of contest entries and clinician participation to monitor staff engagement.

Results One hundred percent of the staff were educated on the rationale and importance of HHCAHPS question 14 in the first month of implementation. Usage of MSE tool improved from 31% in May to 100% by September. Patient recollection of side effect discussed improved from 31% to 100% in September. Contest entries increased by 57% from 103 (June) to 182 (September). Individual clinician participation increased from 18% to 55%. Over four months question 14's monthly score varied from 79.2 in April to 73.5 in July 2020, raising the performance year-to-date linear mean from 69.2 in April to 70.4 (July).

Conclusions In the home health setting, the introduction of an innovative contest to stimulate interdisciplinary team participation led to overall improvement in both patient and

organizational outcomes. The Clinical Nurse Leader facilitated a culture of learning, safety, and improvement to optimize HHCAHPS outcomes. Furthermore, despite the occurrence of an ongoing pandemic, the staff teams remained enthusiastic and engaged with support of all levels of home health management and leadership.

Keywords: medication side effects, teach-back, innovative contest, HHCAHPS outcomes, team engagement, clinical nurse leader

Introduction

Patient safety issues were thrust into the public spotlight when the Institute of Medicine (IOM) released the report *To Err is Human* stating that 98,000 deaths per year were due to medical errors (1999). Currently, medical error deaths are estimated at 251,000 annually and the third leading cause of death in the United States (Makaray & Daniel, 2016). Furthermore, the Agency for Health Care Research and Quality (AHRQ) identified an estimated 1 in 5 patients as having an adverse event within the first few weeks of hospital discharge. Most errors are related to medications (AHRQ, 2019). The AHRQ identifies adverse safety events are a result of increasing access to medications, and these events are the most common adverse safety event (2019). In addition, The Joint Commission (TJC) has identified medication safety as a National Patient Safety Goal for home health (TJC, 2020). National surveillance of adverse drug events in outpatients settings accounts for more than 3.5 million physician office visits, one million emergency department visits, and 125,000 hospital admissions yearly (U.S. Department of Health and Human Services, 2020).

A home health Clinical Nurse Leader (CNL) is in a unique position to transform the microsystem by leading improvement efforts to address patient safety. According to the Institute for Health Improvement (IHI), transition points between the hospital and home may present an increased risk for adverse events (IHI, 2020b). One of the three questions pertaining to medications has consistently scored lower on the Home Health Care Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) survey for the agency. Question 14 of the survey is as follows: "In the last two months of care, did home health providers from this agency talk to you about the side effects of your medications?" (Centers for Medicare & Medicaid, 2020).

Engagement and satisfaction affect both staff and patients in any healthcare setting. In the past year, the home health staff have persevered through the implementation of a new electronic health record system, the coronavirus pandemic, and regional civil unrest. These factors also contribute to a reduction of joy in work. Employee engagement and contentment correlates with improvement in patient satisfaction, error reduction, and quality outcomes (Perlo et.al., 2017). Re-engaging the staff after these stressful events remains a priority for the organization and will help to further a sense of psychological safety and culture of continuous improvement. The patient voice is captured through the HHCAHPS survey, which is mailed to the patient's home after the second or third home health visit. Incorporating best practices such as assessing patient's readiness to learn, using teach-backs to assess for understanding, and giving smaller "doses" of information to the patient will facilitate patient engagement.

Agency-specific quality ratings are a reflection of the care received, and they impact the reputation of this integrated delivery managed care organization. The home health quality rating has dropped from 3 stars to 2 stars while California and national averages have remained constant at 3.5 stars (Medicare, 2020). The star ratings also influence membership, attraction and retention, organizational credibility, status, and revenue for the area.

Problem Description

Home health is a unique, complex, multidisciplinary system. This department is composed of field clinicians, office staff, and management who work together to accomplish the shared goal to provide excellent care for health plan members. The skill mix includes registered nurses (RN), licensed vocational nurses (LVN), medical social workers (MSW), home health aides (HHA), and physical (PT), occupational (OT), and speech therapists (ST) who meet the patients in their homes to provide home health care. Both the clerical and the management staff work

AN INNOVATIVE CONTEST

together to ensure clinicians are completing timely documentation, revising documentation when necessary, and performing all the other behind the scene tasks required for CMS transmission and billing. The clerical and office staff are virtually invisible to the field staff, but essential for business operations. There is a part-time pharmacist on staff who has 20% work effort for the agency whose primary responsibility is to review the medication regime of physical and speech therapy initial home health visits when nursing is not involved. The pharmacy review ensures a double check of medications and interactions for safety. The pharmacist does not review nursing cases routinely but is available for consultation to nursing staff as needed.

The agency services a large area and is geographically dispersed within the northern California region. This area is divided into teams to improve efficiency by reducing the distance traveled in a single day. The patients reside in different settings, including private homes, residential care (board and care) homes, and assisted living facilities. These home settings vary widely from higher socioeconomic well-kept homes to lower socioeconomic and untenable living conditions including the homeless who may live under a bridge or in subsidized housing. Furthermore, there is a range of education levels among caregivers and patients who receive services in addition to the staff who deliver care.

This home health agency's patient population consists of members from birth to more than 100 years old, with varied primary diagnoses. The census for this home health agency varies between 350 to 400 patients per month, most of which have Medicare as their primary insurer. Commercial insurance accounts for 30% and indigent care is about 1%.

Change is constant in healthcare and specifically in this department with more than 100 employees. Over the past three years, this home health agency has experienced leadership turnover, an influx of new employees, and the implementation of a new electronic health record (EHR). The EHR systems are evolving to include better workflows and processes to streamline the documentation required for the field staff. However, the learning curve for the EHR is steep. In terms of medication reconciliation, this task continues to be confusing and labor-intensive for the team.

The performance year begins October 1st; however, new goals are not shared until the end of the first quarter, compressing any performance opportunities into three quarters or less. In October 2019, the organization's regional team rolled out a medication program to address the medication side effect issue. The regional tool embedded consistent language with relevant medication instruction and discussion of the name, purpose, and side effects. In addition, this new MSE process were also implemented in hospitals, clinics, and home health to improve medication safety across these transition points.

Available Knowledge

The PICOT (population, intervention, comparison, outcome, timeframe) question led to the comprehensive literature search and identification of best practices. The PICOT question: For home health staff (P), does using the MSE tool (I) compared to current practice (C) positively impact the patient's understanding of medication side effects as measured by the HHCAHPS score on question 14 (O) by the end of September 2020 (T)?

The MSE tool (Appendix A) is an evidence-based tool created at the regional level for improving patient's understanding of side effects. This patient education material has

medications listed with common side effects in easy to understand language. HHCAHPS question 14 measures the patient or caregiver's recollection of medication side effect discussion depending on who answers the survey. However, the answers to the purpose and when to take medications is answered favorably. The question was posed to the Staff Advisory Committee (SAC) regarding this identified discrepancy. For an unknown reason, patients are positively answering questions related to name and purpose, but negatively answering about side effects. The SAC proposed that the original rollout was rushed and there was not sufficient education surrounding the reason for using the MSE tool leading to missed opportunities for patient discussions.

Recall

McGuire (1996) identifies that recalling information from a medical appointment is essential for the patient's health. McGuire's study found only 11.4 to 24.6% of verbal information was recollected. During immediate recall, the patients only remember about 25% of what is taught, and a month later recollection decreased to the range of 11.4 % to 13.2 (McGuire, 1996). The limited recall component must be conveyed and planned for in the discussions about side effects. This finding of diminished recall immediately and further diminished in a month supports the intervention for targeted ongoing discussions.

The ability of medical information recall is reduced when the patient is anxious or nervous (Kessels, 2003). Therefore, it is crucial to motivate caregivers to listen to this information. Prochnow et al. (2018), demonstrates that caregivers understand more education than their patients. By applying evidence-based practices found in the literature review, the decision to utilize planned discussions every visit was employed to maximize patient and caregiver learning. Additionally, involving the caregiver and family when possible was encouraged.

Discussing medication names, purpose, and side effects at every visit with patients and caregivers, when clinically appropriate, was a key design element for this improvement project.

Learning Readiness

Knowing when the patient and caregiver are ready to learn is also vital for setting up a successful education plan for the patient. Performing learning needs assessments to identify gaps in understanding information and readiness to learn are essential principles for adult-learning. Flanders (2018) asserts that effective teaching techniques such as teach-back, learning assessments, return demonstration, and clarification increases patients' knowledge of their health. This concept allows the patients to be active partners in their healthcare journey.

Teach-Back

Four research articles agree that the teach-back methodology is evidence-based for improving patient understanding of information imparted by healthcare professionals (Almkuist, 2017; Antrum, et al., 2019; Jones & Coke, 2016; Nickles et al., 2020). Explaining a concept in the patient's own words confirms that the patient grasps the information and can describe their understanding back to the provider. This teach-back method can be used for a myriad of explanations in the clinical setting. Hospital HCAHPS scores are positively affected by the perceived improved nurse communication when the teach-back method is used as best practice (Antrum, 2019; Jones & Coke, 2016).

Timing

The discovery that side effect discussions were usually performed at the beginning of the home health care episode and not reinforced throughout the episode was identified. The initial

AN INNOVATIVE CONTEST

home health visit is overwhelming for patients due to the amount of information presented. A folder with home health agency information is left in the home along with the MSE tool. Medications are reconciled using the discharge instructions, referral to home health, and medication bottles in the home. The clinician begins to utilize the MSE tool during the second visit, by highlighting the medications the patient is currently taking and discussing the name, purpose, and possible side effects. Home health patients have numerous medications which can create an overwhelmed patient and caregiver. Therefore, one or two medications are discussed each visit to allow for teach-back and comprehension of the information. Clinician judgement is utilized to determine when discussions begin and end. According to McGuire (1996) only 25% is retained during immediate recall and even less information is retained 30 days later. Furthermore, a more frequent "bite sized" approach was used to eliminate overwhelming the patient and caregiver with too much information.

Staff Engagement

Increasing staff engagement and re-energizing the staff are ongoing issues facing the department due to the recent implementation of a new EHR, leadership turnover, regional civil unrest, and frequently changing infection control recommendations due to the coronavirus pandemic. Staff engagement is imperative for successful implementation because the staff is providing the direct patient care. Keyko et al. (2016) conducted a systematic review of the literature to identify themes and factors needed for nursing staff engagement, which identified many influencing factors such as organizational climate, job, professional, and personal resources, job demands, and demographic variables. Other engagement themes from Keyko's study (2016) include performance, care outcomes, personal, and professional outcomes. The connection of the clinicians' work to the organizational goal is imperative to staff engagement.

Ideas were elicited from the SAC to gain insight about promoting staff engagement. A brainstorming session was conducted and the idea of a contest to engage staff emerged. This contest was developed with a two-fold purpose. Getting the staff excited about the project and obtaining data from participating clinicians. Data collection methods were considered owing to home health's remote workforce and historical difficulty in obtaining data.

Rationale

The IHI Model for Improvement (MFI) along with Jean Watson's caring science are the conceptual frameworks chosen to guide the implementation of this project. The IHI MFI provides a roadmap for implementing change. The MFI begins with having an idea to change, forming a team, identifying a specific aim, establishing measures, selecting changes, testing, implementing, evaluating, and spreading these changes if successful (IHI, 2020a). Testing the changes occur in Plan-Do-Study-Act (PDSA) cycles and applying the learnings to future PDSA tests of change (Appendix B).

Additionally, interwoven throughout this project are the principles of caring science. The practice of utilizing caring moments at the beginning of meetings to center and focus the group was emphasized. Allowing for a check in with the group before delving into the heart of the meeting was also practiced. Being cognizant of implementing change in the middle of a pandemic was acknowledged. Openly talking about aspects that are difficult in daily work, listening authentically, and encouraging staff to take care of themselves before they can take care of others was reinforced. All the above was supported by senior leaders during this time of change and is practiced in other meetings besides the SAC.

Specific Aim

The SAC identified the following specific aim for this improvement project. By October 2020, the HHCAHPS score question 14 will increase from an average of 56.7 linear mean to a 74.1linear mean meeting the departmental goal for the year.

Context

The Home Health Care Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) score for question 14 in this home health agency is beneath the 2020 performance year goal of 74.1 linear mean. According to the AHRQ (2019), approximately 20% of those discharged home from the hospital had an adverse event within the first few weeks of discharge, and most are related to medications. The CNL is in a unique position to lead the improvement effort to improve patient and caregiver understanding of their possible side effects. To positively impact this goal, the staff must be engaged and willing to change their daily practice which required targeted interventions.

Medication reconciliation is completed at the beginning of every home health episode by the first clinician, at resumption after hospitalization, on recertification for ongoing home health needs, and weekly to capture any medication changes. Medication reconciliation includes comparing the medication list from the referral, the discharge instructions, and to the bottles in the home looking at medication names, doses, frequency, and expiration dates. The pharmacist does a drug regimen review (DRR) for the therapists after reviewing their findings in the home, usually within a few days of the initial visit. Although medication reconciliation process is labor intensive, it is essential for patient safety. Moreover, The Joint Commission (TJC) identified medication reconciliation as a National Patient Safety Goal (NPSG) since 2005 (TJC, 2020). The transition point between discharge to home health provides an opportunity to detect and reconcile medication issues before problems arise.

AN INNOVATIVE CONTEST

Information overload is common among patients and caregivers at discharge from the hospital when medication changes are discussed and contributes to inadequate comprehension. There is a flurry of activity surrounding the discharge and commonly, the patient or caregiver verbalizes understanding to the changed medication regime to be discharged quickly while there is little understanding. In addition, the caregiver may be distracted by logistical concerns in caring for their loved one and unable to grasp the medication discussion. Kessels (2003) asserts, approximately 40-80% of medical information explained by clinicians is forgotten instantly. Home health is in a unique position to identify and resolve these medication issues during this transition.

As a patient advocate and educator, the CNL recognizes the importance of understanding possible side effects and actions to take by both the patients and their caregivers. These actions must include early identification and reporting of side effects to a healthcare provider for early intervention. Early recognition and reporting of undesirable side effects to healthcare providers may reduce emergency room visits and hospitalizations. Furthermore, according to the Centers for Disease Control and Prevention (CDC) older adults (65 and older) are seven times more likely to require hospitalization from adverse drug events (2017).

Cost Benefit Analysis

Adverse drug events contribute to readmissions. Nationally, adverse drug events account for one million emergency department visits per year (U.S. Department of Health and Human Services, 2020). The national cost for a single readmission is \$14,400 (Bailey et al., 2019). Locally, home heath readmissions are averaging 16% per year above the goal of 8%. However, not all readmissions can be attributed to adverse drug events. One study found adverse drug events accounted for 13% of all 30-day hospital readmissions (Dalleur et al., 2017). A

15

conservative estimate of reducing readmissions by 12% or 12 cases per year was utilized to illustrate this point in the cost benefit table (Appendix C). If the home health agency succeeds in reducing the readmission rate by 12 cases per year, the net benefit to the organization could be \$172,400 annually.

Methods

A microsystem assessment was performed as the first step in understanding the of home health department and the processes impacted by the project. This assessment was initially conducted in February of 2020 and re-examined in April 2020 when the project pivoted due to organizational priorities. There are one hundred forty-six staff members in this setting, including field staff (nursing staff, rehabilitation therapists, social workers, and home health aides). The field staff comprises the majority of the staff at 76.8 full-time equivalents (FTE). The office staff support staff, including the quality and the management team, comprises 25.2 FTEs. The quality director, hospital application lead (HAL), and administrative manager are shared equally with hospice and each are 0.5 FTE for this department. The home health medical director and pharmacist are 0.2 FTE. The average census varies depending on the number of referrals received and has fluctuated between 350 to 400 internal patients. There is a partnership with diverting agencies to take on referrals above what can be internalized. The current divert census is approximately 900 patients. The divert agencies provide the same home health services as this home health agency, except taking the very complex referrals that include tracheostomies and ventilator dependence. Home health referrals are from two central hospitals, numerous clinics, many skilled nursing facilities, and a small number of other hospitals.

Due to the large service area, the areas are subdivided into smaller geographic territories called teams. Each of the nursing supervisors is a leader of a smaller geographic team. Before

the pandemic, the staff meets monthly at the home health main office for the monthly staff meeting and meeting locally in their respective teams the first and third Wednesdays. During the pandemic, the regular in-person meetings shifted to virtual meetings using the Teams platform.

An electronic literature review was conducted in April 2020 in CINAHL, PubMed and Cochrane libraries by using the various combinations of the following search criteria: education, side effects, engagement, teams, and teach back. Article limits used are peer-reviewed, research articles, English language, and publication date from 2015-2020. The search yielded 76 articles. The years were narrowed to 2017-2020 which narrowed down the articles to 43. Articles were reviewed for relevance to this medication side effects, patient, family, nurse engagement, and best practices such as teach-back. Nine articles were selected (Appendix D). Additional articles were found by looking at the references of articles reviewed and reviewing the IHI website specifically regarding teach-back methodology.

The established SAC was chosen due to the necessity of improving the agency's MSE process with a multifaceted, interdisciplinary approach. In early April, a brainstorming session was held to discuss reasons for MSE substandard score from the original introduction in October. The data was shared with the SAC regarding HHCAHPS question 14 results which was interpreted as patients who fill out the survey were not informed of medication side effects. The SAC expressed the idea to relaunch MSE with clearly identified rationale incorporating patient safety at a staff meeting. The SAC identified an insufficient rationale for MSE and lack of connection to patient safety. The interdisciplinary SAC agreed to improve the MSE process.

A project charter was developed in partnership with the SAC including a driver diagram and a timeline as shown in Appendix B. The ideas on the driver diagram came directly from the SAC's brainstorming session. A SWOT analysis (Appendix E) was conducted to identify strengths, weaknesses, opportunities, and threats to the MSE project plan. A discussion was conducted with the SAC surrounding staff engagement, and an idea for a contest emerged. Once the charter was finalized, a statement of determination (Appendix F) was completed and signed by the faculty to identify this as a quality improvement project instead of a research project.

The communication strategy encompassed monthly discussions at staff meetings and twice monthly at team meetings. This communication strategy targets the staff weekly on the first, third, and fourth Wednesdays of the month, keeping the staff informed of the ongoing process change. The SAC suggested smaller meetings such as team meetings to answer questions pertaining to the process change. This communication style was supported by the SAC champions of change on each team and the Clinical Supervisors (CS). HHCAHPS scores, contest winners, and team participation updates were shared monthly during these all-staff meetings throughout implementation. Additional information is shared with the teams via emails, secure text messaging (cortexts), and phone calls.

In assessing the process for data collection, the CNL identified a gap on the clinical supervisor home visit tracer tool. The CNL met with the Quality Director (QD) to modify the home visit tracer tool for the CS in order to capture the use of the MSE tool on every tracer. The QD charged the Quality Analyst with updating these tools before the May staff meeting. The project lead educated the CS of the change to the home visit forms and reminded them when tracers were submitted on old forms. Additionally, the CNL met with the Administrative Services Manager to enlist a clerical staff's help to enter the contest data into an excel

spreadsheet. An agreement formed and the contest information will be emailed to the project lead on the Monday of the staff meeting week. This allows the project lead to prepare the staff meeting's presentation and prepare for the contest winner announcement.

Language is vital for SAC because of the interdisciplinary nature of the team. Common language is crucial for team collaboration to ensure team members understand the meaning of specific words (Harris, Roussel, & Thomas, 2018). Therapy staff represented on the SAC expressed inability to educate about side effects because it is outside of their scope, however nursing staff teaches. Therefore, an agreed-upon consistent language was employed that would satisfy the SAC interdisciplinary team. The agreed-upon language was to use the word discuss when referencing the patient's possible side effects. Additionally, utilizing consistent language during visits will reinforce the message to the patient.

Intervention

An innovative contest was created to spark the competitive spirit to engage the staff in utilizing the MSE tool. A secure text messaging technology (cortext) that our clinicians already use was leveraged to create the contest. The expectation was conveyed for each nursing or therapy visit, the clinician will discuss the name, purpose, and possible side effect of one to two medications and submit a picture through cortext to a generic mailbox as shown in Appendix G. One medication reviewed equals one entry into the contest. This data is tabulated by an office clerk into an excel spreadsheet and emailed on the Monday before the staff meeting. The participant's names are entered into a drawing each month. The winners were announced every staff meeting from June through September. The contest prizes budget is less than twenty–five dollars and purchased from the brand store. Four prizes per month from June through September equated to four hundred dollars as shown in Appendix C.

During the May 2020 staff meeting, the reintroduction of MSE tool occurred by reviewing the tool's purpose, explaining the rationale, showing baseline data (Appendix B), introducing the contest verbally, and incorporating a standard question into practice: "Do you have any new medications because I'd like to point out their possible side effects?" The decision was made to implement a standing agenda item for MSE at team meetings, which occur the first and third Wednesdays of the month for the reinforcement in smaller groups and the opportunity to ask questions. This would allow for frequent communication points for the staff as questions arise, implementation progresses, and sharing results.

A survey with questions previously created by the SAC was delivered to the staff immediately following the May staff meeting. This was originally planned as a survey used through the Teams platform, but this survey function did not work due to a large number of participants (over 120) at the May staff meeting. The results of the survey are shown in Appendix H and were shared with the staff advisory group via email in advance of sharing at the June staff meeting.

During the June SAC meeting, the committee reviewed the relaunch process and questions were asked regarding ways to keep the momentum going for the contest, ways to address staff concerns, and ways to overcome those that do not want to participate in the contest. SAC champions of change presented this tip sheet at the team meetings with CS support. During the staff meeting, the contest results displayed over teams with the first four winners announced and

20

the survey results presented. Additionally, highlighter markers and MSE forms were sent to all the remote worksites in the service area in response to the survey.

A SAC sub-committee was formed to develop a tip sheet for the staff to take a picture for Cortext (Appendix G) and create a sample MSE tool filled out for the contest picture (Appendix I). This sub-committee consisted of four staff advisory members, including one RN, one MSW, one OT, and one PT who shared their information with the larger SAC and gained their input on how to disseminate this information. The SAC decided to review this tip sheet at the 2nd team meeting in June and again at the staff meeting in June 2020.

Furthermore, the SAC wanted to reinforce the process of using the MSE cortext to enter the contest at the August staff meeting. Two SAC representatives (one for therapy and one for nursing) reinforced the contest and the process. An idea emerged during the discussion that included making the contest entry address a favorite in cortext. The SAC's assumption of adding the contest address as a favorite removed the barrier of remembering the address for the entry. The staff were encouraged to take a picture and submit an entry during this practice. These entries will be counted in the contest because it reinforced the contest entry process.

Study of the Intervention

The study of the intervention for the contest occurred monthly at the SAC meetings where the contest results were shared, examined, and next cycle of PDSA formulated. Each member of the SAC had the opportunity to evaluate the contest and discuss future PDSA cycles. The introduction of the contest with the rationale including the relaunch of MSE tool was completed in the first PDSA. In the first month, the SAC did not have an expectation for the number of contest entries, but the SAC instinctively knew to keep communication flowing. Successive PDSA's included providing the staff with a written contest tip sheet designed by a SAC member (Appendix G), reinforcing the contest process in team meetings twice monthly, using teachback best practice with the MSE tool, addressing time concerns, sharing survey results with actions directly responding to the survey, and using reminder cortexts to participate in the contest. The consistent messaging by the SAC and Clinical Supervisors was pivotal in reinforcing the contest. Clear and concise communication was identified to be key throughout implementation.

The existing interdisciplinary Staff Advisory Committee (SAC) 's infrastructure component was instrumental in the implementation of these multifaceted interventions. The committee met the second Tuesday of every month with interdisciplinary representation from all four clinical teams. These disciplines included one clerical staff, one occupational therapist, one medical social worker, three physical therapists, and four registered nurses are on the team (three field nurses and one intake nurse). The nature of distributed SAC members between teams contributed to the consistent messaging throughout implementation. The SAC members were the true champions of change.

Initially, the SAC was hesitant to try the MSE tool and stated that it would "take too much time" in their already lengthy patient visits amidst the coronavirus pandemic. However, management instituted several strategies after considering the project goals and responding to team concerns. The interventions and tactics used were reassuring the ability to exercise clinical judgement, assessing the patient's learning readiness, limiting medication side-effect discussion to one or two medications per visit, and utilizing teach-back method. The SAC recommended a refresher for clinicians after examining the data presented in July. The number of clinicians participating in the contest declined in July and brainstorming sessions resumed noting that July is a popular vacation month. Ideas were discussed and a new PDSA cycle began in reminding the staff via cortext about the MSE tool. A cortext from an administrative account was sent out to the staff, reminding them to enter the MSE contest to keep it fresh in their minds. This reminder cortext was executed in an off communication week. This practice was abandoned after one attempt due to the negative feedback it received.

In September, the SAC debriefed on the progress they made in the August staff meeting. The committee was excited to learn 31 entries were counted on staff meeting day for the contest entrance demonstration. The SAC continued to develop ideas to make using MSE tool a sustained practice among the clinicians. Some of the SAC express the desire to continue with this project to hardwire into the daily practice while others have asked when the MSE project will be complete. During the September staff meeting, the results of the contest were announced with outcome data through June. Although June's monthly data decreased slightly, the team was not discouraged as there is progress toward improving the overall outcome measure.

Measures

The outcome measure is to improve HHCAHPS question 14 from the baseline of 56.7 to 74.1linear mean by September 30, 2020, which coincides with the end of the performance year. Due to the HHCAHPS reporting delay of three months, process measures were instituted to gather more relevant and timely data. These measures were developed with input from the SAC and Senior Leaders. The process measures included staff training on the rationale for this project, monthly monitoring of the tracer visits specifically validating that the MSE tool was in the home and utilized, and if the patient or caregiver recalled if side effects were discussed. Monthly tracking of the contest participation was conducted to assess staff engagement. The balancing measure of overtime was monitored year over year for the same time period.

Tracer visits are home health visits with a CS, performed monthly, alongside the staff to observe their clinical practice. During these home visits, the clinical supervisor asked to see the MSE tool to look for evidence of use and asked the patient and caregiver if there was instruction on possible side effects of their medications. The CS are expected to conduct at least three tracers each per month with two more expected from the site leader or designee equating to 20 for the department. However, due to the ongoing coronavirus pandemic, in-person tracer visits were not conducted in all months of the implementation. Instead, telephonic tracers were performed in combination with clinician trunk inspections.

The monthly contest tracking was initially thought of as a way to gather data from a remote workforce, but the SAC asked analysis questions after the first month of data collection requesting additional evaluation of contest entries. Therefore, contest entry data was analyzed and tracked regarding team participation. The SAC requested further analysis to identify the number of distinct clinicians participating per team. Adjustments to data reporting were made, and this information was shared with the department throughout implementation at the monthly staff meetings.

Ethical Considerations

There are not any ethical conflicts for informing patients about the possible side effects of medications or the implementation of this project. However, the patient has a right to autonomy and self-determination in making decisions. The clinician should present the side effect information in a non-judgmental way and allow the patient or family to ask questions should they choose to engage. The patient has a right to refuse to listen and this could create an ethical issue for the clinician considering the clinician wants the best for the patient. According to the American Nurse Association Code of Ethics, the nurse must have respect for patient decisions even though the nurse may disagree (ANA, 2015). While important to the clinician, knowledge of side effects may not be the most pressing issue for the patient. Active listening should be exercised in these situations. Listening for underlying themes may assist the clinician in understanding the patient's viewpoint. Establishing a trusting and caring relationship with the patient may cultivate future information sharing (Strandås & Bondas, 2018). However, the clinician must meet the patient where they are. The clinician must recognize that the patient has a choice to listen or to ignore the information presented. The clinician must remain open, nonjudgmental, and avoid paternalistic methods or undermine the patient's right for selfdetermination because this is the patient's healthcare journey.

The University of San Francisco approved this project as an evidence-based improvement venture which did not require an Institutional Review Board (IRB) review as outlined in Appendix F. This endeavor aims to improve the quality of care of the patient and improve staff engagement despite the COVID-19 pandemic. Informing patients about their medications, including the possible side effects, demonstrates the principles of beneficence and nonmaleficence for the patient.

25

Outcome Measure Results

One hundred percent of working staff were educated within the first month of implementation. Every staff meeting from May through September, an update on the HHCAHPS score was presented in a run chart (Appendix K) format to show forward progress toward the outcome measure. As the project evolved, the SAC expressed additional analysis of the data for team participation and number of participating individuals. The results are shown in Appendix J. The contest entries increased from 103 entries in June to 182 entries in September. Clinician participation started at 18% in June and improved to 55% in September. While 95% of participation was not achieved, an upward trend in participation was observed throughout the teams. The balancing measure of overtime was monitored year over year for the same time period without a notable increase. Overall engagement from the staff increased, and the SAC identified methods for sustainability into the next performance year.

Tracer Visits

The CS tracer visits' baseline data was only aimed at whether the patient, family, or caregiver verbally acknowledged that side effects were discussed in visits. Prior to implementation, the supervisory tracer tool, was updated by the quality analyst to include verbiage that MSE tool was highlighted. In May, 31% of patients, families, and caregivers were able to identify if side effects had been taught, and MSE tools were inconsistently found in the home. However, after May's reintroduction, the side effects tracer question was answered 100% of the time. The MSE tool usage started at 31% in May and improved to 100% compliance in September exceeding the desired result of 95%. During monthly data analysis, one-third of the CS were discovered documenting tracer visits on a previous version of the form. Targeted interventions of providing the updated tracer forms both electronically and on paper,

26

encouraging replacing older versions with newer ones, and discussion with those using incorrect forms were completed. These targeted interventions improved the documentation of the use of the MSE tool.

Team Engagement

The SAC was pivotal in promoting the contest and acted as champions of change for this initiative. Overall participation increased in each team (Appendix J). Concurrent feedback from the SAC during the four month implementation period indicates that the evidence-based rationale, intensive planning, ongoing communication, and progress updates further reinforced the importance of this organizational infrastructure to sustain effective partnerships.

Survey

An all-staff survey was utilized to gather data after the staff meeting in May 2020 regarding the barriers to using the MSE tool. The SAC analyzed the responses to these questions, which helped drive interventions such as getting more highlighters and forms to this service area's remote work sites. Before the intervention, the MSE tool was used 42% weekly , 29% every visit, 18% when the clinician remembered, and 11% once every 60 days. This information highlights the need for planned, ongoing conversations with staff. Time was a theme that emerged with this survey, and upon examining the written materials, lack of time to discuss the side effects was discovered.

SAC Insights

The SAC wanted to identify the percentage of contest month engagement by teams instead of the originally proposed discipline identification. The SAC thought this would engage more people without finger-pointing and make it more acceptable and less threatening to those resistant to this change. The results for June indicated that 16 different clinicians entered the contest for 103 total entries. Team one had 3 participants accounting for 19% of the entries, team two had 3 participants for 8% of the entries, team three had five participants for 56% of the entries, and team four had 5 participants for 13% of the entries. In the first month, team three had one highly engaged participant for 31 out of their 58 entries. The following month, there were 89 entries into the contest and 24 distinct participants. Although there were fewer entries during this month, the SAC deemed the contest successful due to high incidence of vacations. There was a delay in receiving the contest prizes in July, however this did not discourage participation in the following months and the winners were notified when the prizes arrived. In August, the contest update of 146 contest entries and 22 individuals was shared. Three of the geographic teams experienced the same or improved clinician engagement. Team one dropped in distinct clinician participation from seven in July to four in August but rebounded to 8 participants for September. In September contest participation increased to 47 distinct clinicians accounting for 55% of eligible staff and all teams saw an increase in clinician participation. Additionally, there was a 57% improvement in the number of contest entries since the launch.

Removing Barriers

The SAC decided upon a reminder cortext to participate in the contest. This cortext was sent to the clinicians due to the competing interests and the COVID-19 pandemic. After one reminder, this intervention was abandoned due to negative staff feedback. In addition, the SAC decided to address the barrier of recalling the exact cortext address to enter the contest. During the August staff meeting, one of the SAC members informed the staff how to make the contest address a cortext favorite alleviating the memory factor. A different SAC member talked about the process of taking a cortext picture and using the favorite cortext address. Thirty-one responses during the August staff meeting were recorded that day. The SAC is hoping to achieve more contest participation by removing the recall barrier. In September, the contest had the highest level of entries (182) and participants (47).

Question 14

The outcome measure of question 14 in the HHCAHPS survey improved from the baseline of 56.7 linear mean in October 2019. The desired result of 74.1 by the end of September 2020 remains unknown at this time due to reporting delay. However, an overall improvement in question 14 was achieved through July's data. Although the overall performance year target of 74.1 linear mean was not attained, the positive trajectory as demonstrated on the run chart in Appendix K indicates the team's success.

Summary

The MSE project required significant planning, careful dissection, understanding staff engagement principles, and incorporating best practices of utilizing an evidence-based tool. Team engagement is essential when conducting an improvement project within the microsystem. The coordination, collaboration, and partnership with the SAC, the quality team, the other supervisors to implement this project were essential and intense during the coronavirus pandemic. Meetings were changed from in-person to virtual for planning and discussion. Other avenues of discussion were email, text, phone calls, and smaller work groups of SAC members. Despite the pandemic circumstances, the staff advisory group mobilized to create this change because they understood the value to both patients and the organization. Utilizing peers to implement and explain the rationale behind the project, followed by reinforcement of the leadership team, was also crucial to this project's success. Consistent, clear, and concise communication was necessary during implementation. Listening to the SAC identify ideas and finding the evidence to support them was satisfying to both the project leads and the committee. Utilizing evidence-based literature and progress updates during presentations served to reinforce the rationale for improvement as critical for patient safety and organizational credibility.

Crisis Management and Caring Moments

Understanding the team's psychological impact during the COVID-19 pandemic was also crucial throughout project planning, implementation, and evaluation. Addressing fears related to the virus with facts and disseminating accurate information was crucial for credibility and creating a caring culture. Today, the leadership team continues with "centering moments" at the beginning of meetings or identifying and voicing gratitude. This centering and grateful practice has improved the feelings of caring for one another in the central office and field staff. Some field staff have shared that they genuinely feel cared for, which translates to better patient experience and staff retention. As the famous comedienne Lucille Ball said, "Love yourself first, and everything else falls in line. You really have to love yourself to get anything done in this world" (AZ Quotes, n.d.). To care for others, one must feel cared for first and taking the time for centering and caring pays dividends for morale, which contributes to the organization's mission.

Limitations

The interdisciplinary contest results may have been skewed in September by demonstrating how to make the cortext address a favorite and encouraging entries. However, when reanalyzing the 31 entries made on this day, the contest for September remained successful with 151 contest entries exceeding the previous month by nine entries. Seventeen of the 31 entries did not make another contest entry for September, however, six of the 17 entries were from office staff and not expected to enter again.

Future

The culture of caring that was modeled throughout this project implementation is an essential dimension for a high functioning team. To establish a culture of caring and sustain that culture, the tools for mindfulness, centering, gratitude, and the emphasis on caring for oneself must be employed. This healthcare organization took an early position in the COVID-19 pandemic, offering an application named "CALM" free of charge for the first 90 days. Many staff have enjoyed this application. The self-care evaluation, originally planned at the beginning, middle, and end of the project, was delayed due to the COVID-19 pandemic. However, it would be beneficial for future studies. This pandemic has underscored the importance of caring for oneself to provide excellent care for our members.

Additionally, the PDSA for using the dot phrase in the alert section of the documentation system was not addressed in this implementation due to the perceived information overload owing to the COVID-19 pandemic. The SAC postponed this intervention during this implementation after listening to their peers' concerns. This would be an excellent intervention for future PDSA cycles to improve communication between the interdisciplinary team members and identify a standardized EHR documentation approach.

Conclusions

Discussing the patient's medications name, purpose, and possible side effects in small increments allow for significant learning and comprehension. The increased knowledge allows the patient to partner with the healthcare team and have an ongoing conversation about improving patient outcomes, which may improve scores in HHCAHPS and may reduce readmissions from adverse drug events.

The best practice of teach-back was utilized to assess the patient or caregiver understanding of potential side effects. Taking the time to impart this vital information using this evidencebased tool empowers members in this agency to engage in their care by becoming active participants. Creating a true partnership between patients, families, staff, management, and a culture of caring with continuous improvement has led to sustainable patient and organizational outcomes. The combined use of an interdisciplinary team and contest accentuates the significance of an engaged team committed to improving the patient and caregiver knowledge of medication side effects and organizational outcomes.

References

- Agency for Healthcare Research and Quality. (2019, September). *Readmissions and adverse* events after discharge. <u>https://psnet.ahrq.gov/primer/readmissions-and-adverse-events-after-</u> <u>discharge</u>.
- Almkuist, K. D. (2017). Using teach-back method to prevent 30-day readmissions in patients with heart failure: A systematic review. *MedSurg Nursing*, *26*(5), 309-351.
- American Nurses Association. (2015). Code of ethics for nurses with interpretive statements. American Nurses Publishing. ISBN-13: 978-1558105997
- Antrum, V., Catanzaro, A., Zewe, J., Skalski, E, & Haygood, S. (2019). The teach-back method to improve patients' perception of nurse communication. *Medsurg Matters*, 28(5), 4-7.

AZ Quotes' (n.d.). https://www.azquotes.com/author/846-Lucille_Ball

- Bailey, M. K., Weiss, A. J., Barrett, M. L., & Jiang, H. J. (2019). *Characteristics of 30-day all-cause hospital readmissions*, 2010-2016. (HCUP Statistical Brief No. 248). Agency for
 Healthcare Research and Quality. <u>https://www.hcup-us.ahrq.gov/reports/statbriefs/sb248-</u> Hospital-Readmissions-2010-2016.jsp
- Centers for Disease Control and Prevention. (2017). *Adverse drug events in adults*. https://www.cdc.gov/medicationsafety/adult_adversedrugevents.html
- Centers for Medicare & Medicaid Services. (2020). *Home health consumer assessment of healthcare providers and systems*. <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/CAHPS/HHCAHPS</u>
- Dalleur, O., Beeler, P. E., Schnipper, J. L., & Donze, J. (2017). 30-Day potentially avoidable readmissions due to adverse drug events. *Journal of Patient Safety*, 10.1097/PTS.0000000000346. Advance online publication. https://doi.org/10.1097/PTS.00000000000346

- Flanders, S. (2018). Effective patient education: Evidence and common sense. *Medsurg Matters*, 27(1), 55-58.
- Harris, J. L., Roussel, L. A., & Thomas, P. L. (2018). *Initiating and sustaining the clinical nurse leader role: A practical guide* (3rd ed.). Jones & Bartlett Publishers.
- Institute for Health Improvement. (2020a). *Reconcile medications at all transition points*. <u>http://www.ihi.org/resources/Pages/Changes/ReconcileMedicationsatAllTransitionPoints.as</u> <u>px</u>
- Institute for Health Improvement. (2020b). *Science of improvement: How to improve*. <u>http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.a</u> <u>spx</u>
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. The National Academies Press. <u>https://www.nap.edu/catalog/9728/to-err-is-human-building-a-safer-health-system</u>
- Jones, T. R., & Coke, L. (2016). Impact of standardized new medication education program on post-discharge patients' knowledge and satisfaction. *The Journal of Nursing Administration* 46(10), 535-540. https://doi.org/10.1097/NNA.00000000000398
- Kessels R. P. (2003). Patients' memory for medical information. *Journal of the Royal Society of Medicine*, 96(5), 219–222. <u>https://doi.org/10.1258/jrsm.96.5.219</u>
- Keyko, K., Cummings, G. G., Yonge, O., & Wong, C.A. (2016). Work engagement in professional nursing practice: A systematic review. *International Journal of Nursing Studies*, 61(6), 142-164.
- King, C. R., Gerard, S. O., & Rapp, C. G. (2019). Essential knowledge for CNL and APRN nurse leaders. Springer Publishing Company.

- Makaray, M. A. & Daniel, M. (2016) Medical error The third leading cause of death in the US. *British Medical Journal*, 353:i2139. doi: <u>https://doi.org/10.1136/bmj.i2139</u>
- McGuire L. C. (1996). Remembering what the doctor said: Organization and adults' memory for medical information. *Experimental aging research*, 22(4), 403–428. https://doi.org/10.1080/03610739608254020
- Nickles, D., Dolansky, M., Marek, J., & Burke, K. (2020). Nursing students use of teach-back to improve patients' knowledge and satisfaction: A quality improvement project. *Journal of Professional Nursing 36*, 70-76.
- Perlo, J., Balik, B., Swensen, S., Kabcenell, A., Landsman, J., Feeley, D. (2017). *IHI framework for improving joy in work*. IHI White Paper. Institute for Healthcare Improvement http://www.ihi.org/resources/Pages/IHIWhitePapers/Framework-Improving-Joy-in-Work.aspx
- Prochnow, J.A., Meiers, S.J., Scheckel, M.M. (2018). Improving patient and caregiver new medication education using an innovative teach-back toolkit. *Journal of Nursing Care Quality 34*(2), 101-106. https://doi.org/10.1097/NCQ.00000000000342
- Strandås, M. & Bondas, T. (2018). The nurse patient relationship as a story of health enhancement in community care: A meta-ethnography. *Journal of Advanced Nursing 74*, 11-22.

The Permanente Medical Group. (2018). Common medications and side effects. [Brochure].

U.S. Department of Health and Human Services. (2020) Adverse Drug Events. *Health.gov* https://health.gov/our-work/health-care-quality/adverse-drug-events

Appendices

Appendix A

Medication Side Effect Tool – sample page

Why am I being prescribed this medication?	What's the name of the medication?	What are possible side effects?		Why am I being prescribed this medication?	What's the name of the medication?	What are possible side effects?		
Blood pressure control & heart failure treatment	trol & heart • Atenolol (Tenormin)	Low blood pressure, drowsiness, dizziness, headache Cough (Lisinopril) Lower heart rate		Cancer treatment & supportive medications	 Epoetin (Epogen, Procrit) Filgrastim (Neupogen) 	Itching, rash, fever, headache, nausea, vomiting, fatigue		
		(Carevelliol/Labetalol/ Metoprolol) Leg swelling (Amlodipine/Diltiazem)		Cholesterol reduction	 Atorvastatin (Lipitor) Ezetimibe (Zetia) Lovastatin (Mevacor) Pravastatin (Pravachol) 	Muscle pain, upset stomach, headache, abdominal pain		
Breathing relief (asthma/COPD)	 Albuterol (Proair/Proventil/Ventolin) Beclomethasone (Qvar) Ciclesonide (Alvesco) Fluticasone/salmeterol (Advair) Ipratropium/albuterol (Atrovent/Combivent/DuoNeb) Tiotropium (Spiriva) 	Dizziness, heart pounding, blurred vision, inflammation of nose and throat, headache, thrush		Albuterol Dizziness, heart (Proair/Proventil/Ventolin) pounding, blurred Beclomethasone (Qvar) vision, inflammation of Ciclesonide (Alvesco) nose and throat, Huticasone/salmeterol (Advair) headache, thrush Ipratropium/albuterol (Atrovent/Combivent/DuoNeb)		Constipation	 Bisacodyl (Dulcolax) Docusate (Colace) Lactulose (Constulose) Magnesium Hydroxide (Milk of Magnesia) Polyethylene glycol 3350 (Miralax, CoLyte, GoLytely) Sennosides (Senokot/Senna) Sodium phosphate (Fleet Enema) 	Diarrhea, abdominal cramps, bloating, nausea
Cancer treatment & supportive medications	 Anastrozole (Arimidex) Tamoxifen (Nolvadex) Megestrol (Megace) 	Increased blood pressure (hypertension), nausea, vomiting, diarrhea, fatigue, rash, hot flashes, flushing, increased sweating,		Diarrhea	Loperamide (Imodium A-D)	Constipation		

The Permanente Medical Group (2018)

Appendix B

Project Charter

Project Charter: Medication side effects: A team approach to improving HHCAHPS scores **Global Aim:** To create a culture of caring and sustain excellence in patient centered services, this home care agency will achieve the 95th percentile in the HHCAHPS survey question 14 by September 2021.

Specific Aim: By September 30, 2020, the HHCAHPS score question 14 will increase from 56.7 linear mean to a 74.1linear mean meeting the departmental goal for the year.

Background

Patient safety issues were thrust into the public spotlight when the Institute of Medicine (IOM) released the report *To Err is Human*. According to this report, The IOM (1999) suggested that 98,000 deaths per year were due to medical errors. Nearly twenty years later, the Agency for Health Care Research and Quality (AHRQ) identifies nearly 1 in 5 patients as having an adverse event within the first few weeks of hospital discharge and most are related to medications (AHRQ 2019). Additionally, the AHRQ reports that adverse safety events are common due to the abundant access to medications, and these errors are the most common preventable adverse safety event (2019). Finally, The Joint Commission (TJC) has identified medication safety as one of the National Patient Safety Goals.

A home health Clinical Nurse Leader is in a unique position to transform this microsystem by leading improvement efforts to address this patient safety issue. Transition points between the hospital and home present an increased risk for medication errors. In this microsystem, one of the questions related to medications has consistently scored low on the Home Health Care

Consumer Assessment of Healthcare Providers and Systems (HHCAHPS) surveys even though related questions about medications are scored more positively. For this project, the focus will be on raising the linear mean to the acceptable goal of 74.1 by end of implementation. Question 14 is as follows: "In the last 2 months of care, did home health providers from this agency talk to you about the side effects of your medications?"(Centers for Medicare & Medicaid, 2020).

Engagement and satisfaction affect both staff and patients in any healthcare setting. In the past year, the home health staff have persevered through an implementation of a new electronic health record, the coronavirus pandemic, and civil unrest. These factors also contribute to a reduction of joy in work which has been correlated with improvement in patient satisfaction, error reduction, and quality outcomes. Re-engaging the staff after these stressful events remains a priority for the organization and will help to further improvement efforts. The patient voice is captured through the HHCAHPS survey which is mailed to the patient's home after the second home health visit. Best practice of assessing patient's readiness to learn, using teach-backs to assess for understanding, and giving smaller doses of information to the patient will help to improve patient engagement.

Our quality ratings are a reflection of the care received and impact the reputation of the organization. Our quality rating has dropped from 3 stars to 2 stars while the California and National averages have remained constant at 3.5 stars (Medicare, 2020). The star ratings also influence membership, reputation, and revenue for the area.

38

Goals for the Project

The main goal for this project is to increase patient's understanding about their medication side effects. Another goal of this project is to re-engage and re-energize the team to improve the quality of care as part of an ongoing improvement culture.

Family of Measures

Outcome: Increase patient understanding as measured by question 14 of the monthly HHCAHPS score from 56.7 to 74.1 linear mean.

Process measures:

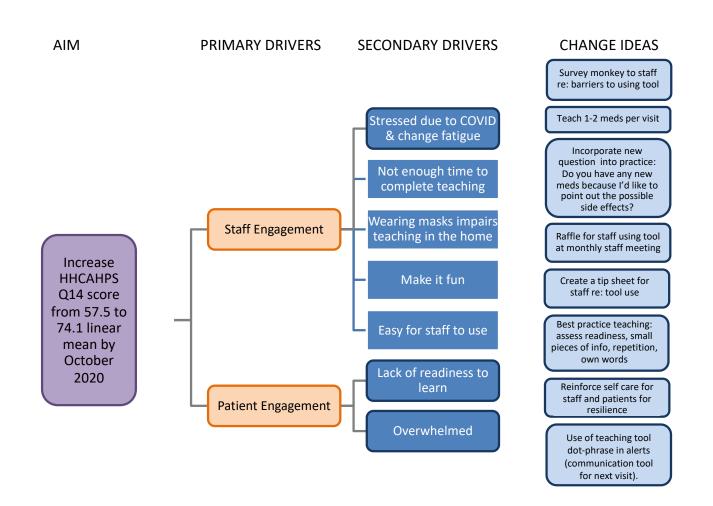
- 1. Reintroduce and reinforce use of medication side effect (MSE) tool by Staff Advisory during staff meetings from kick-off to end of project (May September 2020).
- 2. Supervisors to check for medication side effect tool use on tracer visits/calls.
- During tracer visits/calls, supervisors asked if patients recall discussion of side effects in prior visits.
- 4. Contest for MSE Tool use as engagement for staff.

Balancing measure: Monitor for increase in overtime over baseline.

Team: The team included the interdisciplinary staff advisory committee, project leads, home health site director, quality director, quality analyst, administrative manager, and clerk.

Sponsor: The sponsor included the continuum administrator, service director, preceptor, and practicum instructor.

Driver Diagram



Measurement Strategy

Population Criteria: Agency X Home Health patients- specific geographic area served by this home care agency.

Definitions

Staff Advisory Committee (SAC): interdisciplinary group of home health staff who are engaged and eager to facilitate change processes to improve outcomes.

Tracer visits: visits or telephonic calls made to members to inquire about their care and use of

MSE tool.

Measure Descriptions

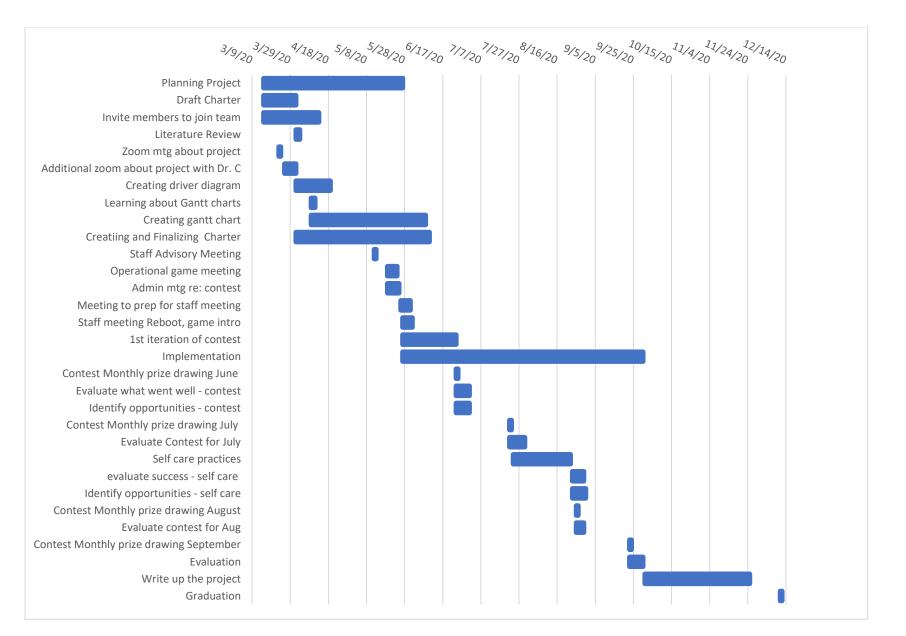
Measure	Measure Definition	Data Collection Source	Goal
Outcome Measure			
Q14 on HHCAHPS	Answers to Q14 will be yes	Monthly linear mean	74.1 linear mean or better
Process Measures			
Re-introduce & Reinforce of use of Tool: MSE every visit at staff meeting	RNs, PTs, OTs, STs, LVNs will be educated on expectation	Staff meeting attendance on teams.	100% of working staff within 4 weeks of rollout 5/27/2020.
Patient tracer calls using Pandemic Tracer tool	N= # yes answers to do you have the medication tool in the home highlighted? D= # of tracers completed in a month	Manual calls or tracers to 20 patients per month (June-Sept 2020)	95%
Contest for staff engagement in using the MSE tool	N = # staff who used in a month	Clerk to monitor cortext entries and log into excel spreadsheet every 2 weeks.	95% of eligible staff

	D= RNs, PTs, OTs, STs, LVNs		
Balancing Measure			
Overtime	Overtime will not increase over baseline from same time period in 2019.	Monthly data collected	overtime will be = or < baseline number.

Changes to Test (PDSA cycles)

- 1. Update tracer tool to include MSE tool trigger question.
- Re-introduce of use of MSE tool and standard question incorporation during every home health visit. (staff meeting, team meetings)
 - a. Start with overview in May Staff meeting –show data, why behind, introduce contest, incorporate standard question into practice – "ask if the member has any new meds because I'd like to point out their side effects."
 - b. Staff advisory subcommittee to create tip sheet with expectation.
 - c. Reinforce at team meetings $(1^{st} \text{ and } 3^{rd} \text{ Wed})$ throughout implementation.
 - d. Reinforce at staff meetings monthly throughout implementation.
 - e. Best practices for learning: assess readiness, small pieces of information, repetition, use own words to explain back learning.
- 3. Survey to gain their staff perspective of barriers to use of this tool because tool has been in use since October 2019.
- Create a contest for use of MSE tool with use of cortext, picture of tool, incentive for staff – drawing of prizes 4 per month.
- 5. Date/initial the MSE tool each time teaching is done in the home for patient to reference.
- 6. Reinforce self-care practices for resilience during the COVID pandemic and civil unrest.

- 7. Clinician to use teaching tool dotphrase in alerts to document med and understanding and clinician can use to prep for next visits based on understanding.
- 8. Contact other areas to see how they improved their HHCAHPS scores.



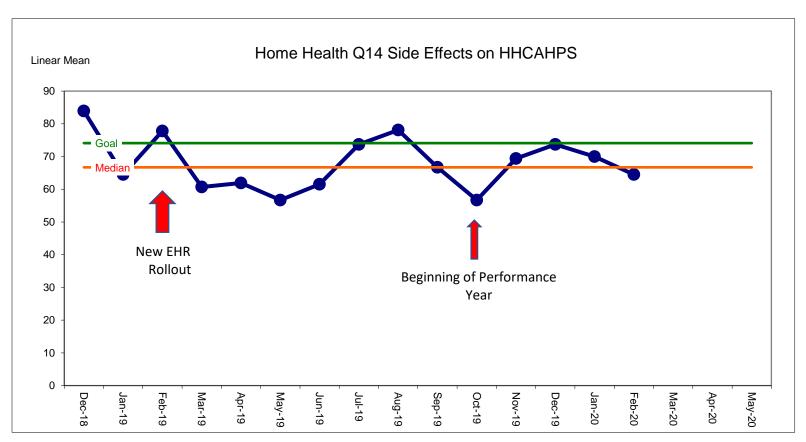
Lessons Learned:

- 1. This is a collaborative team effort that includes stakeholders and engaged team members that are all onboard with this project.
- 2. The coronavirus pandemic halted in person meetings to discuss the project which resulted in leveraging technology to launch this improvement project remotely.
- 3. There is a definite need for adequate planning, research, and time to implement the project including a SWOT analysis with adjustments made for unexpected challenges.
- 4. The timeline is essential to this process of planning a project.
- Consistent, clear, concise communication is necessary for every step of this project and needs to include the "why" and rationale for each stakeholder group, especially the patient.
- 6. The plan will change and the CNL needs to be flexible in order to adapt to this change.
- The team needs to use evidence-based practices to guide best practice interventions.

CNL Competencies:

- 1. The CNL as a systems analyst/risk anticipator is able to assess and review systems to improve client care delivery while anticipating risks to members to improve patient safety (King et al., 2019).
- 2. The CNL as outcomes manager will identify patterns and trends in quantitative and qualitative data within the microsystem and compare to internal and external benchmarks (King et al., 2019).

- 3. The CNL as a client advocate will incorporate the patient into the improvement project to enhance patient centered care (King et al., 2019).
- The CNL as a member of the profession will collaborate with other team members to plan, implement, and evaluate an improvement to this microsystem and spread to other units/systems to improve the patient experience (King et al., 2019).



Baseline Data

Appendix C

Cost-Benefit Analysis

Adverse drug events contribute to readmissions. According to Bailey et al. (2006) the national cost for a hospital readmission is \$14,400. Over the past year, this home health agency has experienced a 16% readmission rate which is double the goal of 8%. There are many reasons for readmissions and one of them may be an adverse drug event (ADE). In one study, an ADE accounted for 13% of 30-day hospital readmissions (Dalleur et al., 2017). If home health can reduce the readmission rate by one readmission per month through education about possible medication side effects to prevent an adverse drug event, the net benefit to the organization could be \$172,400 annually.

Readmission Statistics

# Annual HH	# Annual	%	Readmission Rate
Readmissions	Discharges	Readmission Rate	Goal
100	625	16%	8%

Values	Estimated Costs	Definition
Total Costs of project	\$400	Prize cost for contest during project implementation (June – Sept) without additional staff cost due to using already established meetings.
Total Benefits	\$172,800	Savings of 1 readmission per month x 12 months
Net Benefits	\$172,400	Total costs minus total benefit costs
Benefit/Cost Ratio	\$432	For every \$1 spent there is a \$432 benefit.

Project Cost Benefit Analysis

Appendix D

Evaluation Table

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Almkuist, K.D. (2017). Using teach-back method to prevent 30- day readmissions in patients with heart failure: A systematic review. <i>MedSurg</i> <i>nursing</i> 26 (5) 309- 351.	None	Systematic review of literature between 2011-2016 using PubMed, CINAHL, Scopus for terms including teach- back, hospital readmissions, heart failure, patient education. Limits included articles in English and patients over the age of 18.	5 articles reviewed. One meta-analysis was included due to teach-back methods used. 2 articles focused on readmission reduction using teach back in heart failure patients 2 articles focused on teach-back for those with a chronic condition.	None	Identification of lessons learned.	Statistical significance	Meta-analysis – found inconsistent evidence related to reducing readmissions when teach - back was used, however there were general positive effects of improved self-care, better medication adherence, and increased disease specific knowledge. Lessons learned include using teach-back to improve patient education. Teach-backs are perceived positively by patients. Teach-back is useful when	Teach- backs are useful to assess patient knowledge, are evidence based, and are perceived well by the patients. Teach- backs when combined with other readmission intervention s may impact quality of care and ensure understandi ng of complex patient understandi ng. JHNEBP: III, C

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Antonio V. Cotonomo A	EQCUE	Quesi	These and have			Theat	new knowledge is being taught. Teach-back is evidence based and can be performed with minimal cost to the organization. Teach-back and readmission reduction did not correlate.	Tuch had
Antrum, V., Catanzaro, A., Zewe, J., Skalski, E, & Haygood, S. (2019). The teach-back method to improve patients' perception of nurse communication. <i>Medsurg matters</i> 28(5), 4-7.	FOCUS PDCA	Quasi- experimental approach for retrospective evaluation of de- identified summarized data from HHCAHPS relating to medication.	Three medsurg units at a 186 bed rural community hospital in Orlean, NY.	A competency demonstrating teach-back method of communication	Data collection tool was created in Microsoft Excel. Completion of online learning program. Competency completion. Reports from Press Ganey's database re: nurse communication by domain, facility, and unit for pre and post	T-test analysis used to identify significant differences between pre and post intervention Analysis of Variance (ANOVA) was employed between 3 units on the questions surrounding communica	Over half of the staff targeted for the intervention were nurses. ANOVA found there were not significant variances between the 3 units or 3 questions that compose the communication domain. However, repeated measures ANOVA demonstrated a significant	Teach-back may improve the patient perception of nurse communica tion and may translate into improved HCAHPS scores. JHNEBP: II, B.

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
					intervention periods.	tion on HCAHPS. SYSTAT statistical software was used to determine the mean score for nurse communica tion domain for each unit.	difference between 2 nd and 4 th quarters. Paired t-test showed statistically significant increase in positive feedback from the 2 nd quarter to the 4 th quarter with 95% confidence interval.	
Flanders, S. (2018). Effective patient education: Evidence and common sense. <i>Medsurg matters</i> 27(1), 55-58.	Model for Improvemen t	Learning Needs Assessment for patients	None	None	None	None	Describes use of a patient education process including a learning needs assessment, patient preferences, gaps in knowledge, using teachable moments, identifying not all teaching is planned, use of plain language, learning occurs over time, and evaluate by using teach- back method.	Evidence based practices for patient education. JHNEBP: V,B

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
Jones, T.R., & Coke, L. (2016). Impact of standardized new medication education program on post- discharge patients' knowledge and satisfaction. <i>The</i> <i>journal of nursing</i> <i>administration 46</i> (10), 535-540. https://doi.org/10.1097 /NNA.00000000000000000000000000000000000	Model for Improvemen t	Literature review	2 med surg units in 1 hospital implemented a new medication education program Mean daily census of 47, mean length of stay 3.7 days	None	1 hour didactic nursing training module and post-test Periodic random teach- back competency assessments HCAHPS score pre and post interventions	Mean test scores, percent completion	 100% completion for 94% mean test score. 31 nurses observed for teach back, but all except 1 scored 90% or higher. Purpose decreased post- intervention while side effects increased as did the composite score 	Teach back improved the patient's ability to recall med side effects. JHNEBP: V, B
Kessels R. P. (2003). Patients' memory for medical information. Journal of the royal society of medicine, 96(5), 219– 222. https://doi.org/10.1258 /jrsm.96.5.219	None listed	Literature review	None	None	None	None	Aging interferes with information storage especially if it contradicts personal beliefs. Memory fades faster with aging. Anxiety interferes with absorbing information.	Memory for medical information is often poor and inaccurate. Be specific with patient education. Written/vis ual handouts are helpful to reinforce

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
							Specific instructions are remembered better than generalizations. Written/visual information is remembered better than spoken instructions.	verbal discussion.
Keyko, K., Cummings, G.G., Yonge, O., & Wong, C.A. (2016). Work engagement in professional nursing practice: A systematic review.	None listed	Systematic Review	113 manuscripts with a full text review.	None	Identification of themes which were synthesized into 6 influencing factors and 3 work engagement themes.	 77 Influencing factors categorized into 6 themes. Influencing factor (IF)1: organizatio nal climate IF2: job resources IF3: professional resources IF4: personal resources IF5: job demands 	Based on this extensive literature review, they adapted the Job Demand - Resources Model for work engagement and developed the Nursing Job Demand Resources (NJRD)Model for engagement.	There are many factor influencing nurses' work- engagement Positive outcomes are valuable to both the individual and their personal performanc e. The NJRD model serves to engage nurses further.

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
						IF6: demographi c variables 17 outcomes of work engagement categorized into 3 themes: T1: performanc e and care outcomes T2: professional outcomes. T3: personal outcomes		JHNEBP: III, A
McGuire L. C. (1996). Remembering what the doctor said: organization and adults' memory for medical information. <i>Experime</i> <i>ntal aging</i> <i>research</i> , 22(4), 403– 428. <u>https://doi.org/10.1080</u> /03610739608254020	None Listed	Single site randomly control trial.	72 participants: 27 males, 45 female's ability to recall information from a video presentation and recall at a week and one month	Organized video presentation vs unorganized video presentation	Free recall limited to 10 min after video Questionnaire follow -up @ 1week & 1 month interval.	Analysis of Variance (ANOVA) used on recall information Pearson correlation of potential covariates	Younger adults recalled more target information than older adults during immediate recall. As length of time increases from explanation to decision,	Repeating information may reduce forgetting. Explaining information close to time of decision is crucial for patient memory.

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
							memory is worse.	
Nickles, D., Dolansky, M., Marek, J., & Burke, K. (2020). Nursing students use of teach- back to improve patients' knowledge and satisfaction: A quality improvement project. Journal of professional nursing 36, 70-76.	Model for Improvemen t and Plan- Do-Study- Act (PDSA)		A 37-bed medical geriatric unit in a non-profit hospital in New Jersey within a 3 month period.	Increase nursing students use of teach-back with patient encounters. Increase patients surveyed can state the name, purpose, and side effects of their medications.	Teach-back observation tool Nursing student perception of teach-back effectiveness survey. Patient satisfaction by one minute evaluation to be 80% HCAHPS survey medication question	Summation of # yes vs. # no answers. Likert scale0-4 used and tabulated. Survey tabulated results. Compare to benchmark goal of 52.3%	 80% nursing competence with tool. 55% easy to use; 65% patients needed repeating instructions, 45% found patients able to understand the purpose and side effects of medications. 100% satisfied patients. Came up to 50% by end of project. 	Teach-back methodolog y is an effective evidence - based practice to improve patient knowledge and satisfaction. JHNEBP: V, B
Prochnow, J.A., Meiers, S.J., Scheckel, M.M. (2018). Improving patient and caregiver new medication education using an innovative teach-back toolkit. <i>Journal of</i> <i>nursing care quality</i> <i>34</i> (2), 101-106. <u>https://doi.org/10.1097</u>	Ottawa Model of Research Use	Pre and post education design	18 bed unit in a large midwestern level 1 trauma hospital	Patient/Caregive r memory re: purpose of medications and their side effects. Nurses: conviction and importance, confidence, and frequency of using teach back	25 Nursing observations and surveys in confidence/con viction in teach back method before and after education. Patient/caregiv ers knowledge was assessed via post	Post discharge interviews with patients re: med purpose and at least 1 side effect.	Patient recall of med purpose 97% and side effects 66%. Caregiver recall of med purpose (100%) and side effects (84%). Nurses had increased	Caregivers should be included in the education because their retention was higher re: side effects.

Citation	Conceptual Framework	Design/Method	Sample/Setting	Variables Studied and Definitions	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice
<u>/NCQ.000000000000000000000000000000000000</u>				education strategy	discharge call and asked to state the purpose of a new medication and at least one side effect.		confidence(4.51 inear mean [lm]), conviction (6.4 lm), and teach- back (1.6 lm) after the improvement project. 20 Nurses reported they were satisfied or extremely satisfied with education/traini ng.	JHNEBP: V, B

Appendix E

SWOT Analysis

Strengths

Engaged Staff Advisory Committee (SAC) Staff are adaptable to ongoing changes MSE tool developed regionally is evidence based Creative ideas & cohesive group Weaknesses Low HHCAHPS scores Low quality rating Overwhelmed with change (change fatigue) Data is viewed negatively Resistance to change by staff

Threats COVID-19 pandemic Regional civil unrest Competing priorities Staff burnout Overwhelmed patients Staff belief there is no reason to change Potential payor penalties from increased readmissions Potential organizational revenue loss from unnecessary readmissions

Opportunities Increasing staff engagement Increasing member engagement Improve partnership with members Use of evidence-based practice to guide change process Cost savings from preventing readmissions

Appendix F

IRB Exemption for Non-Research Statement of Determination Form



CNL Project: Statement of Non-Research Determination Form

Student Name: Jennifer Natsch-Jensen

Title of Project:

Medication Side Effects: A team approach to improving HHCAHPS scores

Briaf Description of Project: The score for HHCAHPS question 14 is lower than the organization goal despite a kick-off for using a new medication side effect tool beginning in October 2019. This Improvement project will help engage the staff and patients in reviewing possible side effects of medications as demonstrated by improving the linear mean score to the acceptable level by end of the performance year 2020.

A) Aim Statement: By October 2020, the HHCAHPS score for question 14 will increase from 57.5 linear mean to 74.1 linear mean meeting the department goal for the performance year.

B) Description of Intervention: The interdisciplinary staff advisory group will inform the staff in the monthly staff meeting about the problem and evidence-based practice solutions which include increasing staff engagement, assessing patient's readiness to learn, use principles of adult learning (why they need to know and how does it apply). A survey monkey was conducted to identify barriers to using the tool in addition to how often the staff was using the current side effect education tool. A contest was initiated to get as a way to engage staff participation with ongoing prize drawings. Use of the tool developed by region to teach 1-2 medications each visit to impart knowledge to the member in small doses to avoid overwhelming the patient. The use of teach-back to assess the patient's level of understanding. The staff will be engaged with the help of the contest and the focus on the staff well-being as the community emerges from the pandemic.

Because the outcome measure is delayed by 3 months, the process measures will be:

 Education at staff meeting about project will be 100% within the first four weeks of roll out for RNs, PTs, OTs, STs, and LVNs.

 Supervisors will conduct tracer visits or calls to at least 20 per month (June - Oct) specifically looking for use of the My meds matter side effect tool in the home.
 Expected goal is 95% of tracers will have highlighted use of My Meds Matter tool in the home.



UNIVERSITY OF | School of Nursing and SAN FRANCISCO Health Professions

3. Contest for staff engagement using this tool will be measured by monthly by number of responses to My meds Matter cortext mailbox divided by the number of eligible staff with a goal of 95% of eligible staff participating.

C) How will this intervention change practice? The use of small "chunks" of education frequently and use of teach-backs will positively influence the patient's recollection of whether or not the clinician discussed their possible side effects. The staff will incorporate consistent and standard language in every visit as well as pulling out the tool every visit to discuss 1-2 medications.

D) Outcome measurements: The HHCAHPS score on Question 14 for the performance year ending September 30, 2020 will be at least 74.1 linear mean.

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

X This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title: Medication Side Effects: A team approach to improving HHCAHPS scores	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	x	
The specific aim is to improve performance on a specific service or program and is a part of usual care. ALL participants will receive standard of care	x	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	x	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to	x	

UNIVERSITY OF	School of Nursing and
SAN FRANCISCO	Health Professions

ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	x
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	x
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	x
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	x
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: "This project was undertaken as an Evidence- based change of practice project at Home Health Agency and as such was not formally supervised by the Institutional Review Board."	x

ANSWER KEY: If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. IRB review is not required. Keep a copy of this checklist in your files. If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME: Jennifer Natsch-Jensen

Signature of Student: ser DATE 6/17/2020

SUPERVISING FACULTY MEMBER NAME: Dr. Cathy Coleman Signature of Supervising Faculty Member

Hucoleman 2020 DATE

5-17

.

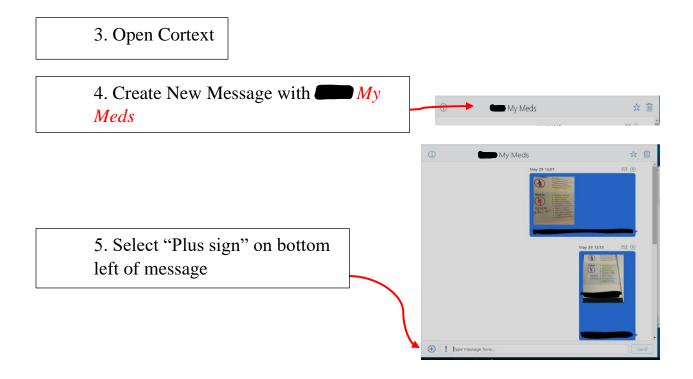
Appendix G

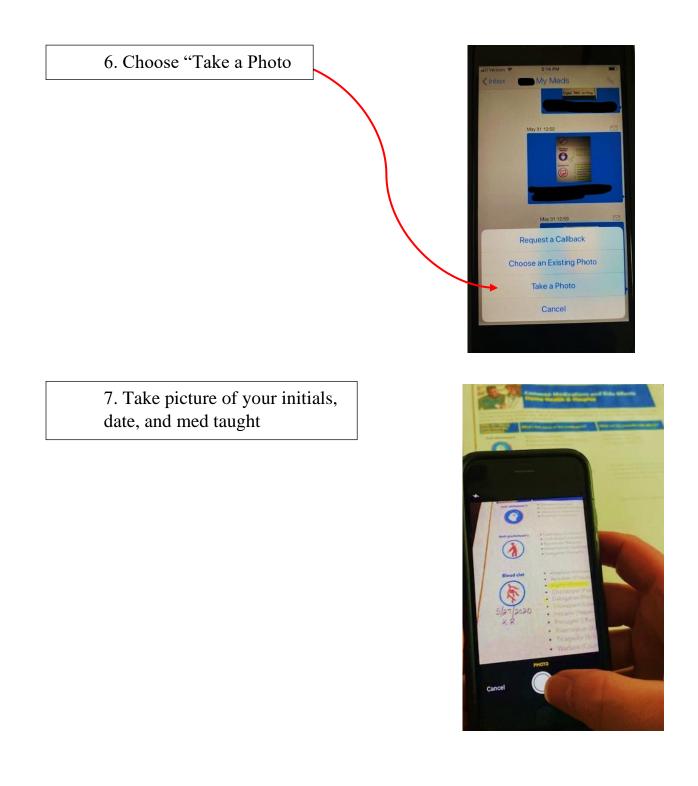
Contest Implementation Tip Sheet

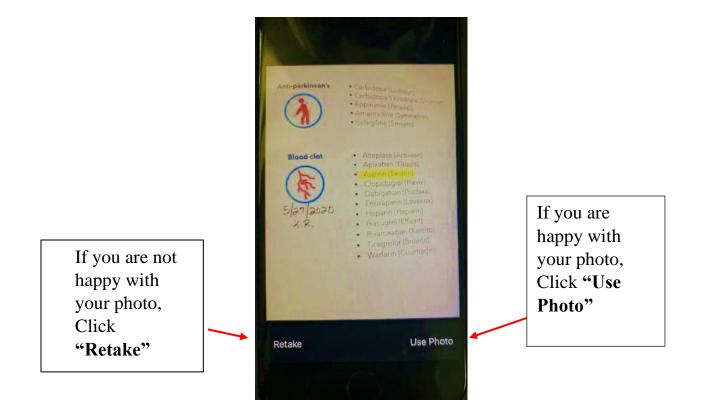
1. Review
Name of
Medication
and Reason Pt is
taking

2. Initial MSE
-Initial and Date MSE on left column



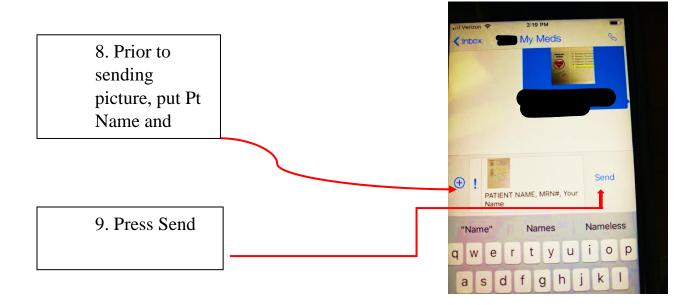




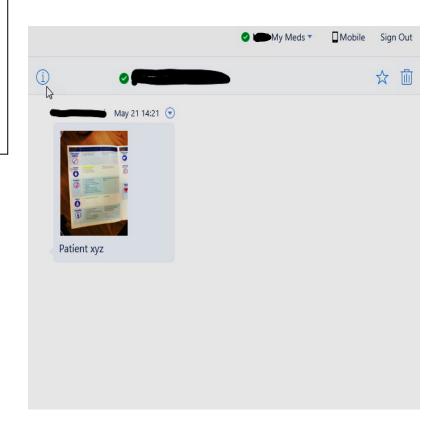


Once you are happy with photo and you have pressed Use Photo, the next screen will look like this





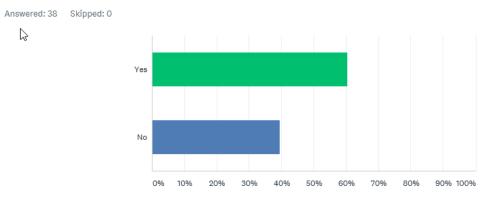
This is what it looks like when the My Meds is viewed in the office



Appendix H

Pre-Implementation Staff Survey Results

Q1

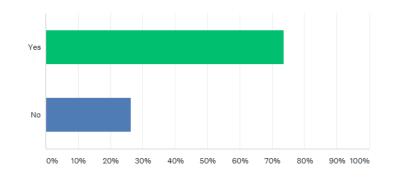


Do you have extra medication side effect forms in your car?

ANSWER CHOICES	RESPONSES	•
✓ Yes	60.53%	23
▼ No	39.47%	15
TOTAL		38

Q2

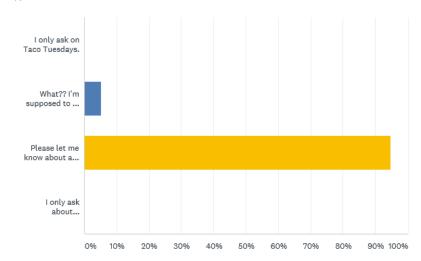
Do you have highlighters?



ANSWER CHOICES	RESPONSES	•
▼ Yes	73.68%	28
▼ No	26.32%	10
TOTAL		38

Q3

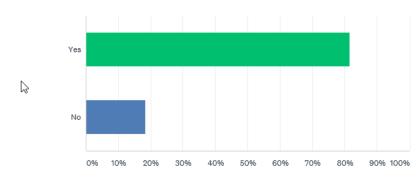
How do you talk to your patients about new medications?



ANSWER CHOICES		RESPONSES 💌	
✓ I only ask on Taco Tuesdays.		0.00%	0
 What?? I'm supposed to ask about new medications? 		5.26%	2
 Please let me know about any new medications you are taking because I'd like to point out their side effects. 		94.74%	36
 I only ask about medications when I'm on a tracer visit. 		0.00%	0
TOTAL			38

Q4

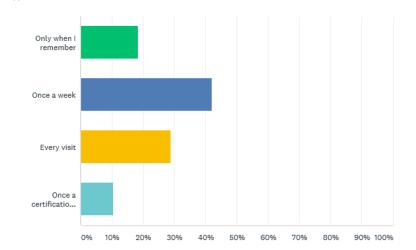
Do you know how to take a picture through cortext?



ANSWER CHOICES	RESPONSES	•
✓ Yes	81.58%	31
✓ No	18.42%	7
TOTAL		38

Q5

How often are you using the medication side effect tool?



ANSWER CHOICES	•	RESPONSES	•
Only when I remember		18.42%	7
✓ Once a week		42.11%	16
✓ Every visit		28.95%	11
 Once a certification period 		10.53%	4
TOTAL			38

Q6 What makes it hard for you to point out the side effects?

Nothing know Time listed side effects meds sometimes medication hard patient

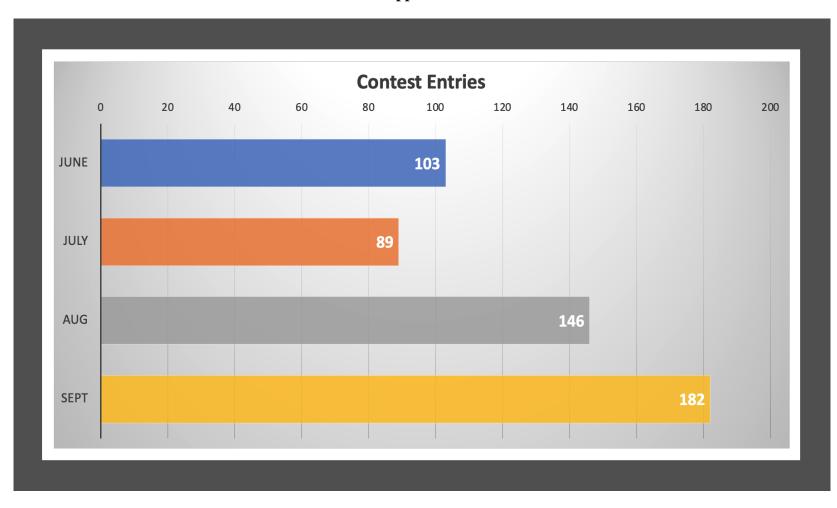
Appendix I

Sample Contest Entry

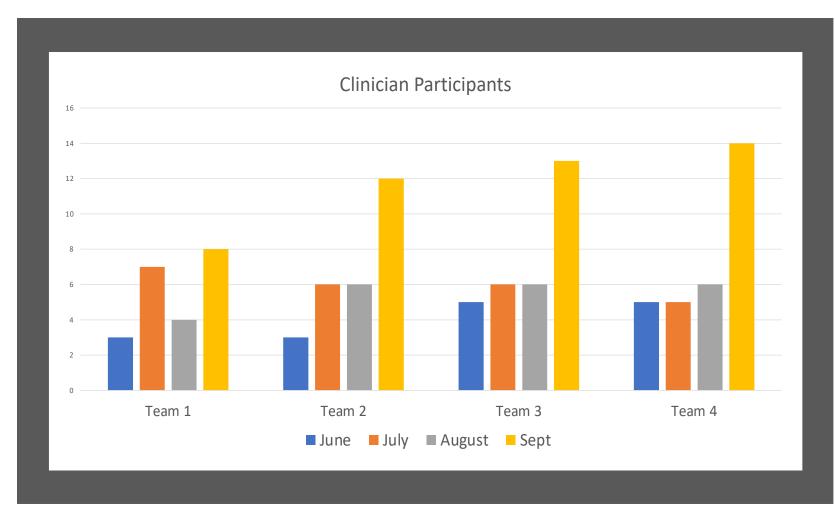


This handout lists possible side effects of some medications you may be taking at home. You may or may not experience any of these side effects. If you have any questions or concerns about these medications please consult your doctor or pharmacist.

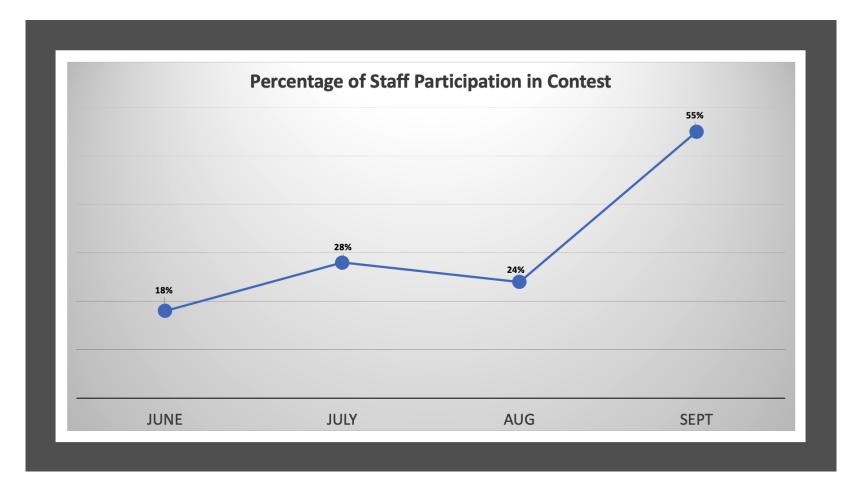
Why am I being prescribed this medication?	What's the name of the medication?	What are the possible side effects?		
Anti-alzheimer's	 Donepezil (Aricept) Galantamine (Nivalin,Razadyne) Memantine (Namenda) Rivastigmine (Exelon) 	Headache, nausea, restlessness, irritability, constipation, diarrhea		
Anti-parkinson's	 Carbidopa (Lodosyn) Carbidopa/Levodopa (Sinemet) Ropinirole (Requip) Amantadine (Symmetrel) Selegiline (Emsam) 	Nausea, constipation, uncontrolled movements, diarrhea, mood changes, drowsiness or dizziness, low blood pressure upon standing		
Blood clot 5/27/2020 K.R.	 Alteplase (Activase) Apixaban (Eliquis) Aspirin (Exotrin) Clopidogrel (Plavix) Dabigatran (Pradaxa) Enoxaparin (Lovenox) Heparin (Heparin) Prasugrel (Effient) Rivaroxaban (Xarelto) Ticagrelor (Brilinta) Warfarin (Coumadin) 	Upset stomach, bleeding, bruising		

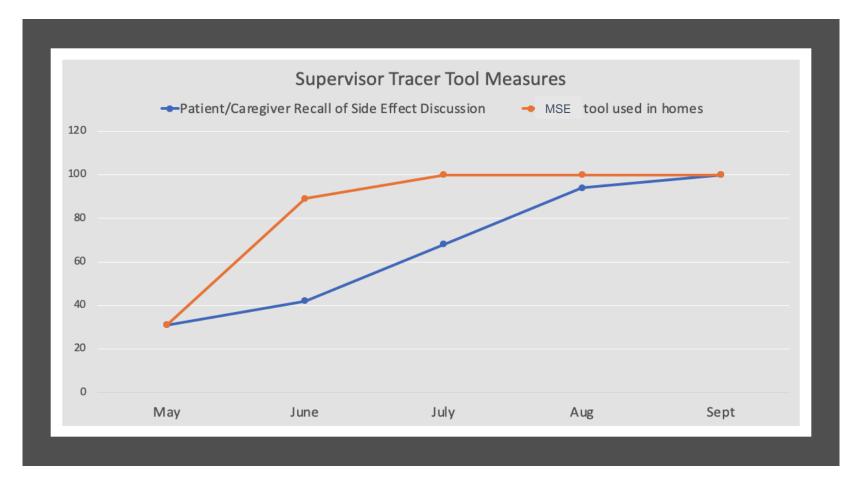


Appendix J: Results

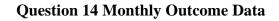


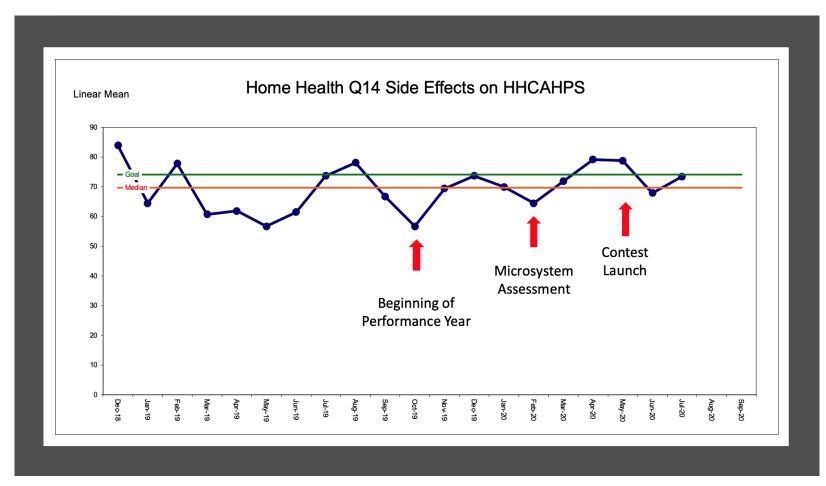
Note: Teams are interdisciplinary and based on a smaller geographic area varying in size between 20-30 clinicians.





Appendix K





Data available through July 2020 as of October 28, 2020.

Note: Question 14 is a gated question. If the response to question 11 is no, then question 14 is skipped.