CIRT 2022 Continuation Projects – Letter of Intent Template

CIRT scientists requesting an extension of 2021 projects can provide a 1-page description of anyproposed changes to the study plan, and justification for the changes and timeline extension. In the Fall we will request additional information, specifically a description of additional resources necessary to execute the new or extended aims, which should be within the $50-$100k range.

STUDY TITLE & INVESTIGATOR: Improving care transitions and reducing readmissions (RE Scientists: Huong Q. Nguyen, PhD, RN; Bing Han, PhD)**;** SCAL Readmissions Reduction Steering Committee (Co-Leads: Dr. Dan Huynh/Heather Watson) and Medicare Strategy (Annet Arakelian, PharmD; Jaime Akiyama-Ciganek)

PROJECT SUMMARY: The SCAL Readmissions Reduction Steering Committee (RRSC) needs ongoing analytical support for data-driven decision making on the provision of care transition services and interventions for the 150K annual discharges from KFH hospitals. Since 30-day readmission rates affect Medicare 5-star ratings and financial penalties, reducing avoidable readmission without causing patient harm is high priority for the organization. We propose to continue our research/evaluation efforts to help guide the RRSC and other operational stakeholders on promising approaches to improve care transition and outcomes for members.

Patients with heart failure (HF) have persistently high 30-day readmission rates (18%) and account for a large majority of potentially avoidable admissions (n~50,000 observation stay or inpatient admission each year). Few if any care transition interventions have been effective in modifying the trajectory for this clinical population (Baeker et al, 2020 JAMA Network Open). We propose to take advantage of a natural experiment that has been underway since January 1, 2021 with KPSC's offering of a supplemental meal benefit to Medicare patients hospitalized for a principal discharge diagnosis of heart failure and discharged to home, with the goal of demonstrating a return on investment through reductions in 30-day readmission. Patients are provided two meals per day for four weeks and are only eligible for this benefit once in a calendar year (base benefit). A subset of patients covered by selected employer groups are able to participate in a buy-up program wherein they receive three meals per day for four weeks. The findings from this evaluation effort could inform the health plan's decision to continue to offer the benefit and/or expand it in future years.

STUDY AIMS

1. Compare the effects of receiving a meal benefit for patients with a principal discharge diagnosis of HF and those with heart failure was a secondary diagnosis on 30-day observation stays and inpatient readmission and days alive and at home (excludes ED, observation, and inpatient days).
   Note: We will take advantage of an implementation glitch during the first 6 months where patients with a secondary diagnosis of HF were inadvertently offered the meals benefit
2. Compare difference-in-difference effects of the base vs. buy-up meal benefit on 30-day readmission and days a home.
3. Describe the uptake of the meal benefit and experience of patients/caregivers with the meals to inform changes or improvements to the program.

TIMELINE

- Work with meal benefit operational leaders and vendor to identify data sources and plan for data linkage efforts (Jan-Mar 2022)
- Conduct survey and qualitative interviews of members/family caregivers of those who have received the meal benefit and those who were offered the benefit but declined (Apr-Jun 2022); Analyze interview data (Jun-Jul 2022)
- Construct prelim analytical data set for initial data exploration and code refinement (Apr-Aug 2022)
- Refresh analytical data set through end of Oct 2022 for final analyses from Nov-Dec 2022
- Share findings with RRSC and Medicare Strategy leaders (Dec 2022)

*Depending on the preliminary data, we might consider applying for external funding to support a longer-term evaluation and building in a cost-effectiveness component