Essential Connections: How improved referrals from hospital to community meal provision can impact malnutrition outcomes in older adults

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Study Aim: To Implement a new referral system to help connect adult patients 60 years who are hospitalized with nutrition care in the community setting after discharge.

Objective 1) To test the feasibility of patient identification, cross-referral, data reporting, and data transfer from an acute care hospital to a community meal provision organization.

Objective 1a) To identify barriers to and facilitators for implementation as well as the cost of the new model of continuity of nutrition care across settings.

Objective 2) To increase the rate of patients older than 60 years of age with malnutrition receiving care medical nutrition therapy in the community setting.

Objective 3) To improve food security, determinants of malnutrition, and quality of life in persons older than 60 years of age discharged from the hospital with a diagnosis of malnutrition.

Where: Eight hospitals across the United States. Each hospital will be paired with a community site who will serve as the meal provision organization (Title III-CI orC2)

Study Design: Step-wedge randomized control trial.

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<th>Sequence</th>
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<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
<th>Period 5</th>
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Sites will be randomly assigned to a sequence, and this will determine the number of usual care vs intervention periods that are completed at the site.

Usual Care Periods: Adults participants are enrolled when in the hospital and baseline nutrition and medical data will be collected. At the end of the study, about three months after discharge, the participants will receive a nutrition assessment at their home from an RDN and endpoint data will be collected.

Intervention Periods: In addition to the usual care study activities, the participants will be referred to a community meal provision center at discharge. The participant will receive meals through the community center and each month, for three months, the participant will have a full nutrition assessment and consultation with a RDN in the community setting.

Periods are 7 months long
Timeline, Requirements, and Benefits for Participating Sites

**Year 1: Onboarding Phase**

Study onboarding steps will take about 1 year. Three types of institutional agreements are needed before study activities can start:

1. Execution of the Academy Site Agreement
2. Research Approval
3. Hospital Technology Department review and approval of study activities

The Academy study team will work closely with the Hospital Technology Department to allow data transfer from the Electronic Health Record (EHR) to the Academy of Nutrition and Dietetics Health Informatics Infrastructure (ANDHII, www.andhii.org), for the purposes of this study.

**Years 2 - 4: Data Collection**

**Time:** 35 months – 5 periods that last 7 months each.

**Enrollment goal:** 140 patients enrolled at the clinical site, which breaks down to 28 patients per period.

**Hours per week:** 1.25 to 1.5 FTE per week, divided among many study team members

**Study Team Members:**

- **Research RDN:** *Paid contract position that is funded by the study.* There is study funding to support a .50 FTE for approximately three years at ~$38/hr. This is a limited term position with the possibility of extension, contingent upon study progress, work performance and funding availability.

- **Clinical RDN(s):** Hospital staff dietitian(s) will assist the Research RDN in completing study activities at the hospital. The time commitment will be ~2-5 hr/wk during the first 4 months of each period. $5,000 per site for entire study, $1000 upon successful completion of a period

- **Community RDN:** *Paid contract position that is funded by the study.* There is study funding to support a .25 FTE for approximately three years at ~$38/hr. This is a limited term position with the possibility of extension, contingent upon study progress, work performance and funding availability.

**Training:** Research Ethics Training and Study Training is required. Study training is free and RDNs can earn a minimum of 5 CPEs, with opportunities to earn more.

**Requirements and Responsibilities for Clinical Sites:**

- Must use EPIC as the EHR
- Must meet the study’s technical requirements to allow for transfer of data to ANDHII from EHR
- Assist the Academy Research Team with communication to set up the referral infrastructure
- A hospital staff member must be willing and able to serve as the local principal investigator for the study and will assist with research approval submission
- Allow at least one clinical RDN to assist with research activities.

**Requirements and Responsibilities for Community Sites:**

- Able and willing to provide meal provision services to 140 adults over the course of the study.
- Collaborate with Community RDN will be hired to provide MNT to the study participants.
- Provide structured feedback (barriers, facilitators, and sustainability) of the new referral model.