

BACKGROUND

The U.S. is facing a growing aging population, the complications of malnutrition among hospitalized older adults are becoming increasingly significant, affecting their quality of life (QoL), mortality, hospital readmission rates, and ability to stay in their homes. Challenges in addressing this issue are the lack of continuity in nutrition care from hospital to home, and the limited availability of Registered Dietitian Nutritionists (RDNs) in the community setting.

To address this gap, the Academy of Nutrition and Dietetics designed a novel referral model aimed at ensuring continuous nutrition care for malnourished older adults transitioning home post hospital discharge. The referral model is a coordinated approach involving hospital electronic health record data exchange via the Academy's Health Informatics Infrastructure to RDNs in the community setting to facilitate data-driven medical nutrition therapy (MNT) and meal provision in the community.

STUDY OBJECTIVES

The study objectives are to:



evaluate the feasibility of the referral model, including patient identification, cross-referral, and data transfer;



2 increase the percent of patients ≥60 years with malnutrition receiving MNT and meal provision in the community setting;



improve QoL, food security, and measures of malnutrition characteristics in older patients diagnosed with malnutrition.

STUDY DESIGN

This feasibility study will use a stepped wedge cluster-randomized trial design in eight acute care hospitals and community meal provision organization pairs. The goal is to enroll 1,120 patients in meal services across all eight research pairs over 35 months.

Sequence	Site Pairs	Period 1 7 months	Period 2 7 months	Period 3 7 months	Period 4 7 months	Period 5 7 months
1	1	Usual Care	Intervention	Intervention	Intervention	Intervention
	2	Usual Care	Intervention	Intervention	Intervention	Intervention
2	3	Usual Care	Usual Care	Intervention	Intervention	Intervention
	4	Usual Care	Usual Care	Intervention	Intervention	Intervention
3	5	Usual Care	Usual Care	Usual Care	Intervention	Intervention
	6	Usual Care	Usual Care	Usual Care	Intervention	Intervention
4	7	Usual Care	Usual Care	Usual Care	Usual Care	Intervention
	8	Usual Care	Usual Care	Usual Care	Usual Care	Intervention

Table 1. Stepped-wedge randomized Control Trial Design

A Feasibility Trial Evaluating How Improved Referrals from the Hospital to **Community Meal Provision Organizations Can Impact Malnutrition in Older Adults**

Erin Lamers-Johnson, MS, RDN¹; Lindsay Woodcock, MS, RDN¹; Jenica K. Abram, MPH, RDN, LDN¹; Alison Steiber, PhD, RDN¹; Elizabeth Yakes Jimenez, PhD, RDN³; Constantina Papoutsakis, PhD, RDN¹

¹Academy of Nutrition and Dietetics; ²George Washington University School of Public Health; ³University of New Mexico College of Population Health

SITE INCLUSION CRITERIA

- Hospital must use Epic as electronic healt record.
- Community organization must provide congregate or home-delivered meals to o adults.

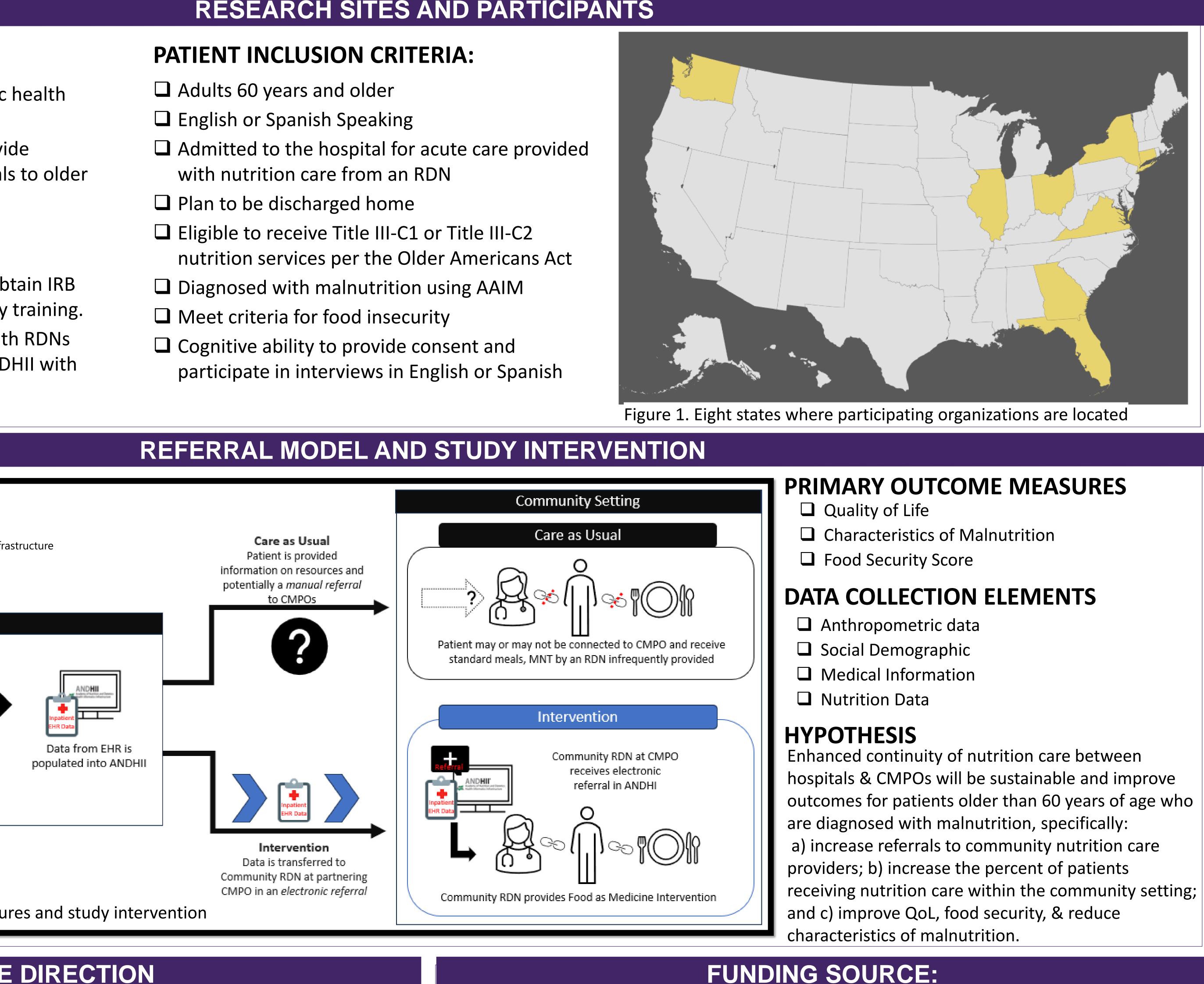
SITE ONBOARDING

- Sites complete legal agreements, obtain approval and complete online study train
- Hospital researchers collaborate with RDN and IT Departments to connect ANDHII w the Epic electronic health record.

RDN: Registered Dietitian Nutritionist MNT: Medical Nutrition Therapy EHR: Electronic Health Record ANDHII: Academy of Nutrition and Dietetics Health Informatic Infrastructure CMPO: Community Meal Provision Organization

Hospital Setting





Clinical RDN provides MNT to malnourished patient

Clinical RDN authorizes an automatic transfer of data from EHR to ANDHII

Figure 2. Study flow diagram of study procedures and study intervention

FUTURE DIRECTION

Results from this study could support adoption of the new referral model, leading to improved continuity of nutrition care, greater utilization of community meal provision, and improved QoL in older adults. Additionally, the results could show of the efficacy of community RDN care and provide the evidence needed to expand RDN care in the community setting.

1. Fávaro-Moreira NC, Krausch-Hofmann S, Matthys C, et al. Risk Factors for Malnutrition in Older Adults: A Systematic Review of the Literature Based on Longitudinal Data. Adv Nutr. 2016;7(3):507-522. 2. Saunders J, Smith T. Malnutrition: causes and consequences. Clin Med (Lond). 2010;10(6):624-627. 3. Goodwin JS. Continuity of Care Matters in All Health Care Settings. JAMA Network Open. 2021;4(3):e213842-e213842 4. Papoutsakis C, Sundar C, Woodcock L, Abram JK, Lamers-Johnson E. Translating malnutrition care from the hospital to the community setting. Nutr Clin Pract. 2024 Aug 6. doi: 10.1002/ncp.11197. Epub ahead of print. PMID: 39105676. 5. Jimenez, Elizabeth Yakes, Erin Lamers-Johnson, Julie M. Long, George McCabe, Xingya Ma, Lindsay Woodcock, Courtney Bliss, Jenica K. Abram, and Alison L. Steiber. "Predictive Validity of the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition Indicators to Diagnose Malnutrition Tool in Hospitalized Adults: A Cohort Study." The American Journal of Clinical Nutrition 119, no. 3 (March 2024): 779–87. https://doi.org/10.1016/j.ajcnut.2023.12.012. 6. Lee, Jung Sun, Mary Ann Johnson, Arvine Brown, and Mark Nord. "Food Security of Older Adults Requesting Older Adults *Journal of Nutrition* 141, no. 7 (July 2011): 1362–68. <u>https://doi.org/10.3945/jn.111.139378</u>.

	RESEARCH SITES AND PARTICIPAN	
	PATIENT INCLUSION CRITERIA:	
th	Adults 60 years and older English or Spanish Speaking	
older	Admitted to the hospital for acute care provided with nutrition care from an RDN	
	 Plan to be discharged home Eligible to receive Title III-C1 or Title III-C2 nutrition services per the Older Americans Act 	
IRB ning. Ns vith	 Diagnosed with malnutrition using AAIM Meet criteria for food insecurity Cognitive ability to provide consent and participate in interviews in English or Spanish 	
	participate in interviews in English of Spanish	

Funding Source: This project is supported by the Administration for Community Living (ACL), U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$3.99 million with 75% funded by ACL/HHS and 25% funded by the Academy of Nutrition and Dietetics. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by ACL/HHS, or the U.S. Government.

REFENCES:

