

Hotspotting: An Interprofessional Education Experience in Value-Driven Healthcare

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BACKGROUND

Interprofessional Hotspotting refers to collaborative work of interprofessional teams who use local data and a person-centered approach to identify and address the root causes of high healthcare utilization and poor health outcomes for individuals with complex medical and social needs.

The **Housing First** Model provides chronically homeless individuals with permanent supportive housing and voluntary, flexible, wrap-around social services, substance abuse treatment, education, and employment.

UTAH HEALTH AND HOMES COLLABORATIVE (UHC) is an interprofessional Hotspotting Program operating in partnership with the Housing Authority of the County of Salt Lake

- Fostering the development of Interprofessional Education Collaborative (**IPEC**) **core competencies**
- Providing care coordination and community-based interventions for chronically homeless individuals living in a Housing First program

UHC addresses an immediate and community-identified need while:

- Providing authentic, longitudinal IPE with non-health sectors in the community
- Preparing students for community-based interprofessional collaborative practice
- Adding value to the health system

METHODS

Hotspotting Teams are advised by faculty from nursing, social work, pharmacy and medicine.



Academic Disciplines Participating in Hotspotting

Dentistry	Physician Assistant
Medicine	Social Work
Nursing	Geography
Nutrition	Health Society & Policy
Occupational Therapy	Kinesiology
Pharmacy	Physical Therapy

Structure: 6-month, 2-semester IPE program

- Housing First Participant Enrollment (pre-kickoff)
- Student Introduction to Hotspotting (full day kickoff)
- Hotspotting Curriculum (months 1-6)
- Hotspotting Interventions (months 1-6)
- Participant Graduation (month 6)
- Student Learning Reflection (full day wrap-up)
- Data Collection (kickoff, wrap-up & 6-months post)

Hotspotting Curriculum

CORE PHILOSOPHIES	LEARNING OUTCOMES
Harm reduction	Data-driven Decision Making
Motivational Interviewing	Social Determinants of Health
Trauma-informed Care	Community-based Collaboration
Accompaniment	Building Trusting Relationships and Resiliency

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Current situation needing change:

1. **Housing First residents (Group 1 Participants)** lack coordinated health care and the knowledge and skills to navigate the health care system. Ineffective health care utilization impedes residents' ability to achieve and maintain health and well-being.
2. **Health Professions students (Group 2 Participants)** lack community-based interprofessional education and collaborative practice experiences to develop Interprofessional Education Collaborative (IPEC) and system-based practice competencies.

Intervention:

Interprofessional student teams (**G2**) will receive education and training to provide focused and intensive Hotspotting interventions with Housing First participants (**G1**) to: 1) identify and address the drivers of health and health care utilization and 2) effectively navigate and coordinate health care and social services.

Research Question(s):

For **Housing First Participants (G1)** what is the effect of a 6 month interprofessional student Hotspotting team intervention (**I**) on measures of health, well-being and total cost of health care (**O**) compared to 6 months pre-intervention, immediately post-intervention and 6 months post-intervention (**T**)?

For **Health Professions Students (G2)** what is the effect of participating in a two-semester interprofessional education Hotspotting team (**I**) on measures of IPEC competencies, including new measures of population health and systems-based practice(**O**) compared to pre-participation (**T**)?

Ecological Data/Variables:

Rapidly evolving local and state initiatives to address the homelessness. Changes in our University IPE curriculum and programs of study. Other factors will include: team composition, students' previous dose of IPE, the didactic IPE Hotspotting curriculum and orientation, client case managers, negotiating time with client and full team, physical and mental health changes of clients, client cooperation and perceived benefit, interpersonal dynamics, faculty guidance, weather, clinician cooperation.

G1 Outcomes:

1. Increased patient report of health (RAND SF-36)
2. Decreased total cost of care (cost and charge data)

G2 Outcomes:

1. Interprofessional Attitudes Scale (IPAS)
Retrospective pre-test/post-test

Triple Aim Outcomes Addressed:

1. Improve the experience of health care for Housing First Participants (G1)
2. Improve health outcomes of Housing First Participants (G1)
3. Reduce total costs of health care for Housing First Participants (G1) and health care delivery systems.

Study Design:

1. **G1 outcomes** measures will be collected using a time series design:
 - A. Measures of patient health and well-being will be compared pre-intervention, immediately following the six-month intervention and at six-month post-intervention.
 - B. Total costs of care will be compared across three time periods: during the six-months previous to intervention, across the six-month intervention, and during the six-months immediately post-intervention.
2. **G2 outcomes** measures will be collected via a retrospective pre and post validated survey instrument administered immediately following the six-month student Hotspotting team experience.

AUTHOR AFFILIATIONS

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