

Building ConnectedNest: a Digital Social Care Referral Platform for Patients Diagnosed with Cancer

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Background

Approximately 50% (over 8 million) of cancer survivors in the United States face health related social needs (HRSN) factors such as financial burden, housing instability, and food insecurity that affect their healthcare access and costs. Failure to address these factors adversely impacts oncologic care utilization and survivorship. Patients diagnosed with cancer are commonly prescribed a combination of surgery, radiotherapy, and chemotherapy, but those with non-medical needs are less likely to adhere to treatment, which reduces survivorship. There is a critical need to develop, implement, and evaluate interventions that address non-medical needs in a coordinated way.

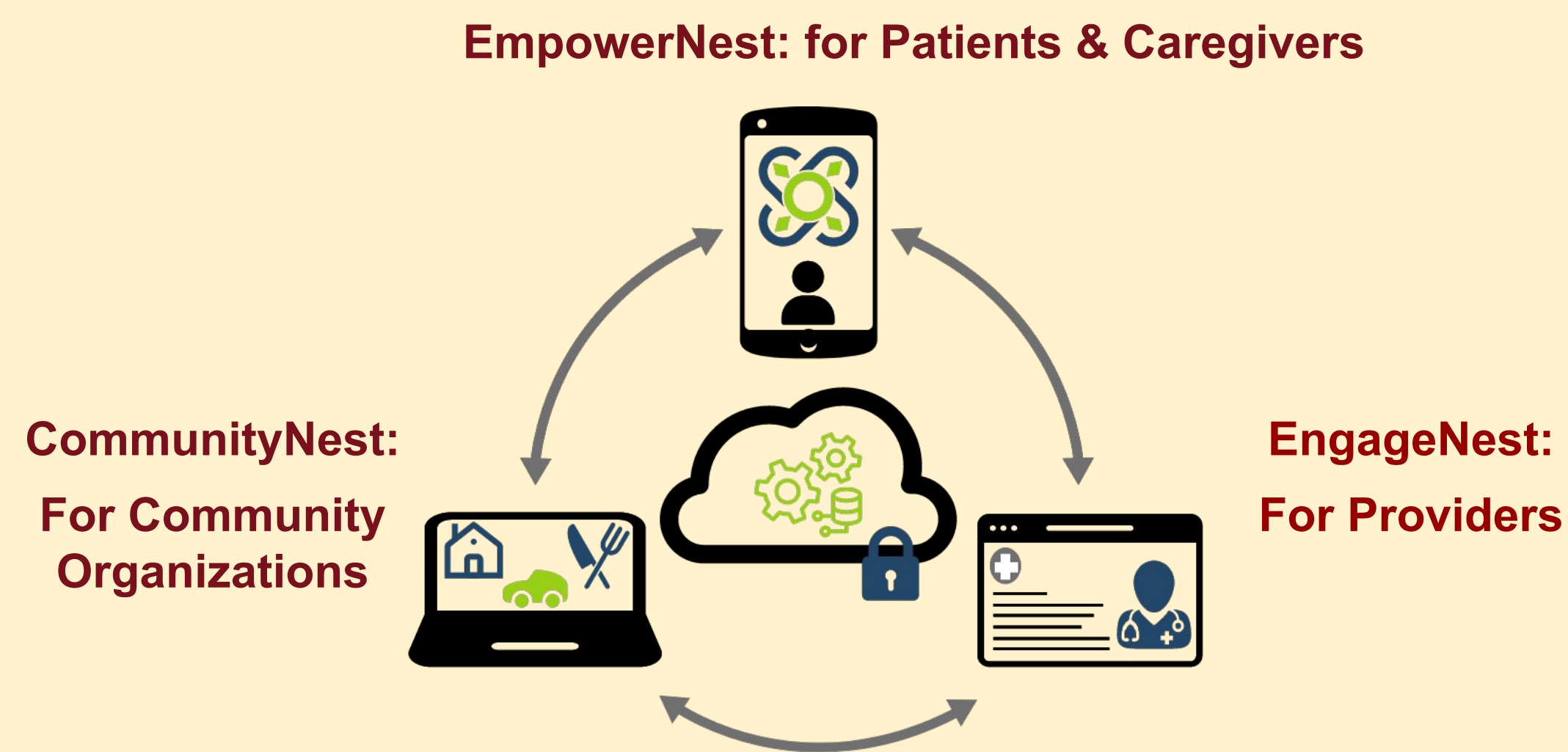


Fig 1. Diagram of the ConnectedNest Social Care Referral Platform

Methods

We conducted a 3-month pilot test of the ConnectedNest technology with 51 cancer survivors and 12 CBO partners providing cancer-focused services. Both survivors and CBO partners were recruited from the MN Cancer Alliance. Participants completed a HRSN screening tool and connected with programs matching their needs.

Data Collection

1. SDOH assessment uses Accountable Health Communities
2. Usability surveys (1 and 2 months post enrollment)

Data Analysis

Quantitative: User statistics on the app, Self - Report Survey results

Qualitative: Thematic analysis of interview transcripts.

Results – Non-Medical Needs and Connections to Resources

Average participant-identified needs	5.16 needs per user
Average assessment Identified needs	4.76 needs per user
Participant-CBO connections	18 total
Participant-Program connections	14 total

Table 1. Participant Needs & Connections Statistics

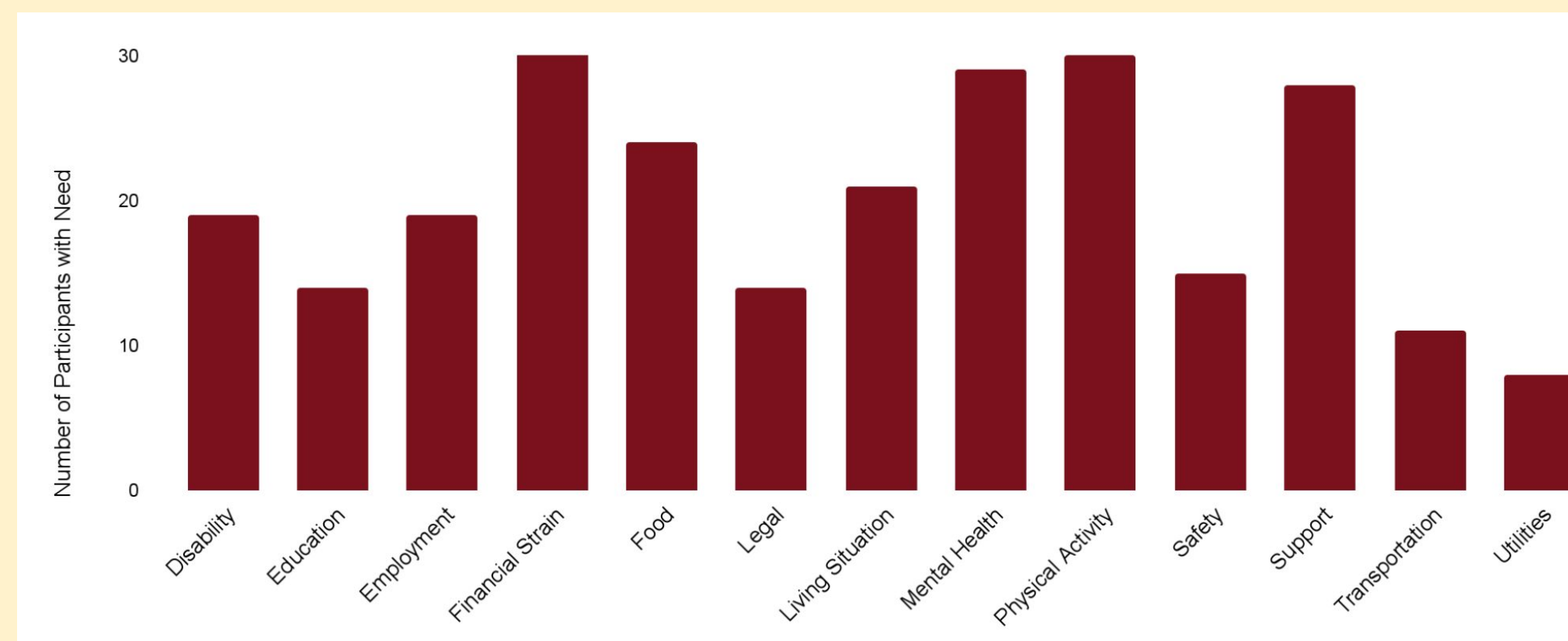


Fig 2. Number of Participant SDOH Needs by Category

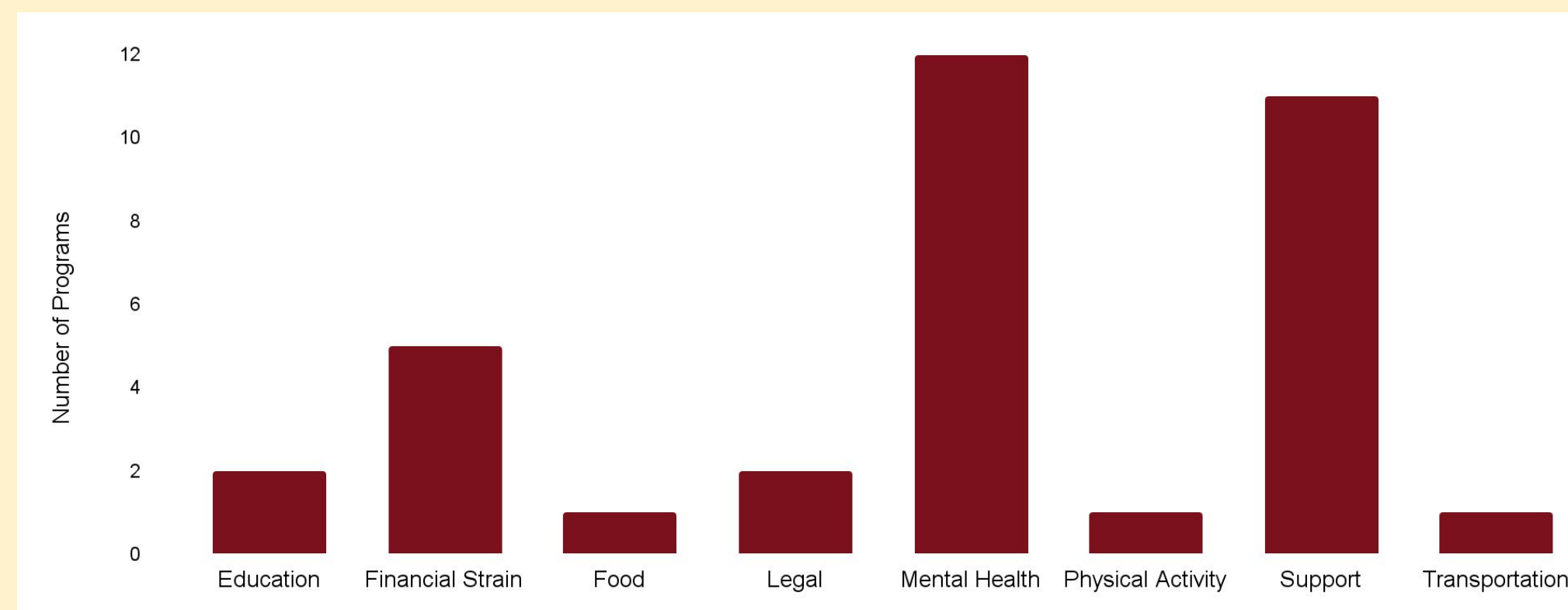


Fig 3. Number of CBO Service Programs Available by SDOH Category

Discussion

1. Patients with cancer and their caregivers face a number of challenges outside of health care during and after survivorship. Developing user-friendly digital interfaces may help patients navigate through overwhelming circumstances.
2. The ConnectedNest technology is largely acceptable to this population and the organizations serving them.
3. SDOH screening assessments may help patients better understand their nonmedical needs.

Clinical Trial

Completing a clinical trial with 400 adults randomized to treatment and control from two healthcare systems in Minnesota. The trial will assess ConnectedNest's efficacy in connecting individuals with community services, improving quality of life, and influencing factors such as ease of care, emergency department utilization, and patient engagement.

Disclosures: PKM and DH serve in an executive position and hold equity in XanthosHealth, which developed ConnectedNest. These interests have been reviewed and managed by the University of Minnesota in accordance with its Conflict of Interest policies.

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Results – Usability of the technology

“I liked the way it led me through the assessment step by step. Not only could I see where my greatest need was by myself, I could see where my diagnosis had impact on my life...”

- Quote from a cancer survivor



“This is a fabulous innovation that will provide a great service.... I'm glad I could be part of this.”

- Quote from a cancer survivor

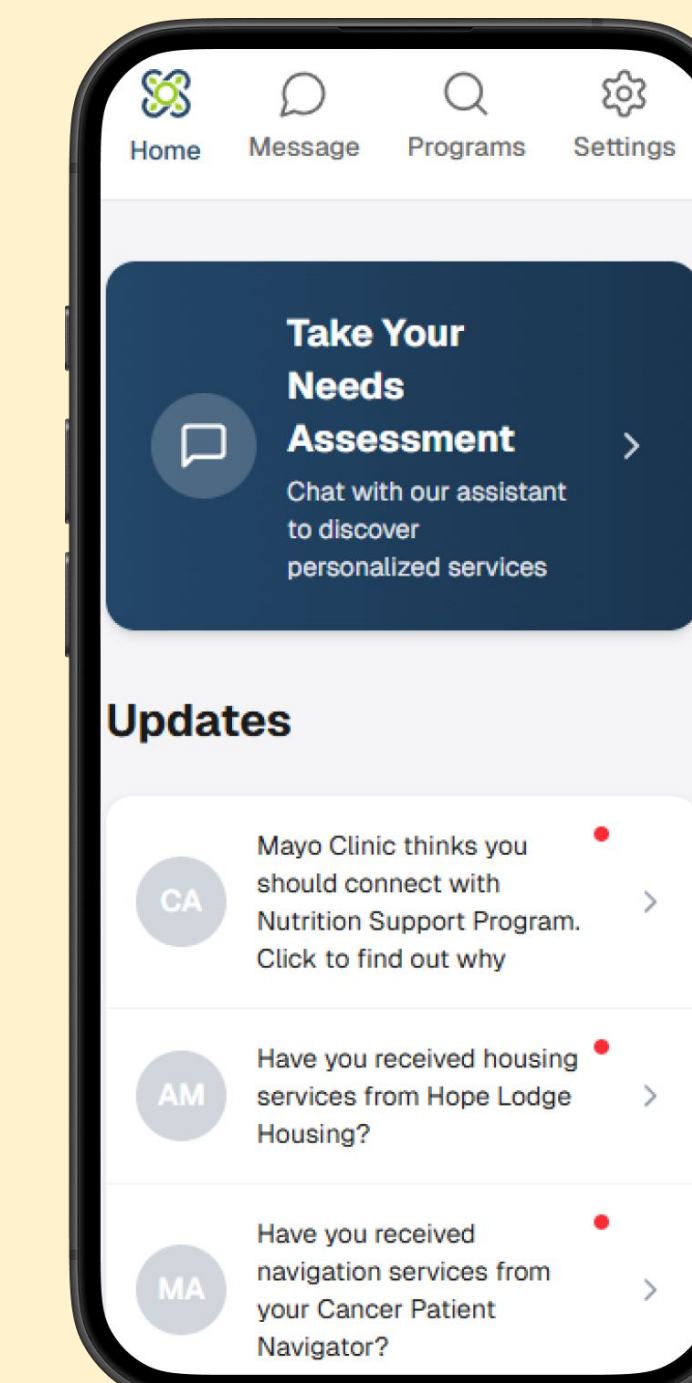


Fig 4. ConnectedNest in the App Stores

	Positive Responses	Negative Responses
Platform is easy to use	Very Easy & Easy 30(67%)	Difficult 4(8%)
Overall experience	Favorable 41(91%)	Unfavorable 4(9%)
Frequency of use	Daily/Weekly 30(67%)	Rarely 15(33%)
Able to connect with CBO	Yes 30(67%)	No 15(33%)

Table 2. Self-Reported Usability Statistics After 1 Month of Enrollment