ASSESSING COMMUNITY PERSPECTIVES TO INFORM THE DESIGN AND IMPLEMENTATION OF A NOVEL HOSPITAL-LEVEL MOBILE MEDICINE MOBILE MEDICAL UNIT IN RURAL NORTH CAROLINA

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BACKGROUND

PROBLEM: Rural communities in the US face persistent barriers to accessing quality healthcare that have not been addressed through traditional brick-and-mortar care models. Community perspectives surrounding the optimal design and implementation of a novel mobile care delivery platform (MMU) capable of hospital-level care in rural areas are unknown.

GOAL: Assess community readiness in rural North Carolina to inform the design and implementation of a novel mobile MMU using a mixed methods approach shaped by the Community Readiness Model (CRM).

METHODS

- Conducted qualitative semi-structured interviews with members of a Community Advisory Board (CAB; n=10) and focus groups with community members (n=26). Summarized results using rapid thematic analysis.
- Distributed a community survey (11 items; n=96) and summarized results using descriptive statistics and brief content summarization.
- Participants of the above activities included residents from 20 counties in North Carolina between the ages of 18 and 84 (with 38% of participants age 65+).
- Assessed organizational readiness of participating health system using modified version of the PRISM Pragmatic Contextual Screening Instrument (PCSI).

WHAT WE LEARNED

PROXIMITY TO CARE

There is a need and a desire in the community for greater access to high-quality hospital-level care close to home.

66% of survey respondents expressed they would feel better about getting some of their care in a MMU if they could get x-rays or blood tests on the van instead of going to the main hospital.

60% of survey respondents expressed they would feel better about getting some of their care in a MMU if they knew help would come fast in an emergency.

"I think it's an excellent idea and there is a need for it. I think it would help our community to improve its healthcare." (Focus Group)

"People have a different level of confidence on home turf. They have a sense of agency, where they are more comfortable asking questions and accepting their own kind of power." (CAB Interview)

"Most people don't have transportation… They have no other way of getting [to the hospital] so they won't go. This takes a load off because you don't have to worry about 'how am I going to get there'… You don't have to plan … and struggle so much to make it happen." (Focus Group)

TRUST

Trust depends on early community exposure to the MMU, patient testimonials, and communicating through trusted local messengers (e.g. PCPs).

69% of survey respondents expressed they would feel better about receiving chemotherapy on a MMU if their physician recommended it.

63% of survey respondents expressed they would feel better about getting some of their care in a MMU if the MMU worked with a hospital they knew and trusted.

"Patients will do what their provider says. They will ask their provider if this program is the right thing to do… If they say they are in support, that makes a huge difference." (CAB Interview)

"I would want to experience it and hear feedback from people who have also experienced it." (Focus Group)

DIFFERING READINESS

The home hospital use case is more readily acceptable by both clinicians and patients than the oncology use case.

70% of health system survey respondents were aware of the home hospital MMU program and 73% agreed that it fits with their site's priorities.

5/12 infusion nurse respondents did not feel that the oncology MMU program would positively impact patient care, linked to concerns for patients safety in the delivery of chemotherapy on the MMU.

"I would imagine that there may be more questions… for the people getting oncology care… [they] would need more assurance from their doctor." (CAB Interview)

"In my community, people don't like to disclose that they have cancer. I don't know what it is, but you will find out they have cancer when they are almost dead or dead. If there was some kind of logo on [the MMU], they are not going to use it. They do not talk about their health, especially cancer. It is very hush hush." (Focus Group)

"You should gain trust or it won't work. Trust is the most important thing for a rural community."



Early design sketch of the MMU

THE NOVEL MOBILE MEDICAL UNIT (MMU)

Two types of hospital-level care will be provided on the MMU: acute care and oncology care. Both models will be staffed by a single clinician and supported remotely by specialists back in the brick-and-mortar hospital.

ACUTE CARE: The MMU will expand a home hospital program. The MMU will allow patients who live far from the hospital to become eligible for home hospital. The MMU will serve as a pharmacy and supply depot and is capable of advanced imaging. It will be staffed by a paramedic.

ONCOLOGY CARE: The MMU will substitute for services performed at a hospital-level infusion center, including lab work, imaging, provider visit, and chemotherapy infusion and monitoring. It will be staffed by a nurse.

LEARN MORE ABOUT HOME HOSPITAL

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