PROJECT PERFORMANCE REPORT

FINAL REPORT TO THE STATE OFFICE OF RURAL HEALTH

Recipient:	Mercy Memorial Hospital (Mercy Health - Urbana Hospital) 904 Scioto Street Urbana, OH 43078
Program Name:	Community Paramedicine Rural Pilot Program
Project Number:	01130011CR0322
Period of Performance:	September 1, 2019 - August 31, 2022
Report Date:	August 31, 2022

MODEL BREAKDOWN

With funds awarded through the State Office of Rural Health, Mercy Health - Urbana Hospital was able to implement a uniquely conceived Community Paramedicine Program in partnership with the Urbana Fire Division and Champaign Health District. In its program, Mercy Health - Urbana Hospital identified for the role of the community paramedic a Registered Nurse (RN), with previous experience in the Emergency Department of Mercy Health - Urbana Hospital. The community paramedic was also a licensed paramedic through the Ohio Division of Emergency Medical Services. The community paramedic was thus ideally positioned to act as a knowledgeable and trusted intermediary between local health care providers and EMS (the program partners understood early in the implementation process that a successful effort would require a breaking down of those traditional silos that contribute to a fragmented health landscape both locally and nationwide). The benefits of an RN in the role of the community paramedic also allowed for more flexibility with patient education such as in foley catheter care, medication adherence, and diabetes management.

Scheduled Home Visits

The community paramedic originally worked solely with Urbana Fire Division. However, the program quickly drew additional attention and interest from other local fire and rescue divisions (with the program ultimately adding six additional EMS districts within Champaign County). Each EMS district signed a memorandum of agreement (MOA) with Mercy Health, where EMS agreed to accompany the community paramedic on every home visit. Once on the scene, and it was determined that the patient had no emergent needs (and the community paramedic was safe), the fire department unit was released from the scene. The home visit was scheduled in advance with the corresponding department and on the day of the visit, dispatch created a run for the corresponding department. Dispatch would then provide scheduled checks on the community paramedic throughout the visit. This ensured the safety of the patient and the community paramedic. Once the visit had ended, the run was then closed.

Program Goals

There are three main goals to the Community Paramedicine Program. The first goal was to stabilize the patient. On the home visit, the community paramedic assessed the patient for any emergent needs. If the patient was not stable, the run would be turned over to EMS at the scene for treatment and transport. The second goal was to evaluate. The community paramedic would assess the needs of the patient across various domains (physical, psychological, social, and environmental). The community paramedic would then identify available community resources that would allow the patient to stay safe and healthy in their home environment. The third and final goal was patient growth. The Community Paramedicine Program ultimately sought to increase the number of informed and activated patients who would utilize health promotion and self-management skills to improve individual health outcomes and their overall quality of life.

Program Leadership

To guide the program, a workgroup of the program stakeholders was created that would meet monthly in order to discuss program successes, challenges, and available resources. Members of this workgroup included a representative from the Champaign Health District; a victim advocate; a Mercy Health community educator; the chief of the Urbana Fire Division; the director of the Mental Health, Drug, and Alcohol Services Board; the coordinator from Champaign Hope4Good (faith-based coalition); the medical director for the Community Paramedicine Program; the care coordinator from Graceworks Housing Services (senior housing); and two managers from Mercy Health.

PARTNERSHIPS

A successful community paramedicine program begins with forming partnerships throughout the community (patients referred into a community paramedicine program will typically present with an array of service needs across multiple life domains that no single agency or provider can address). For Mercy Health - Urbana Hospital and its community paramedicine program, these partnerships began with the local EMS districts (with ultimately seven EMS partners, who represented all of the EMS districts within Champaign County). The Champaign Health District (public health) was another early important partner, particularly in the context of COVID-19, where the Community Paramedicine Program aligned itself with public health in providing the population with actionable information for self-protection, symptom identification, and guidance for treatment seeking (and later the coordination of vaccine access). The local Mental Health, Drug, and Alcohol Services Board was another important partner, particularly in addressing the mental health needs of the program's service population.

Looking beyond local health services providers, Mercy Health - Urbana Hospital also sought to engage local non-profit agencies. This included Caring Kitchen, a local emergency shelter, which provided emergency essentials (such as food and clothing) for those patients with an identified need. Also engaged was Champaign Hope4Good, a faith-based coalition formed of local area churches, which organized volunteers to assist in structural improvements to patient households (such as adding a wheelchair ramp to a patient's home).

SUCCESSES
The program has achieved a number of successes that extend beyond changes in ED utilization patterns (and related community health expenditures). The program has helped create new local momentum for collaboration and coordination between different agencies and groups. The program has also helped drive improvements in patient quality of life, this includes reducing experiences of social isolation for many of the individuals referred into the program, as well as addressing the various unmet needs that affected patients and their ability to live independently and perform instrumental activities of daily living.

BARRIERS
Important barriers to note:

(1) COVID-19 presented a serious challenge. At the start of the pandemic, Mercy Health was compelled to furlough most of its support staff, which contributed to program delays in implementation. Other partner agencies were similarly affected, and some continue to be affected (in terms of workforce shortages), which contributes to service delays or excessive caseloads.

(2) Legal barriers and challenges arose regularly over the funded grant period. Some of these challenges involved questions regarding the program's activities and the interpretation of beneficiary inducement. It was also necessary to enter into a separate legal agreement with each EMS districts (seven in total) regarding their participation in the Community Paramedicine Program. The execution of each agreement was an often lengthier process than was anticipated.

(3) Non-compliance is another challenge. Most patients identified and referred into the program had a history of non-compliance (which contributed to their overutilization of the ED and chronic disease exacerbations). However, some patients in the program may remain non-compliant (continuing to have frequent EMS runs and ED visits), despite the best efforts of the intervention and the creation of individual care plans. Motivation to change has thus become an important consideration for the program (including assessments and survey instrument for evaluating patient readiness to change).

(4) Data collection was an additional challenge. Patients that were transferred to long-term care facilities for rehabilitation could be difficult to track. Data was also often difficult to obtain from the individual EMS districts in a timely manner owing to differences in each district's recordkeeping and information systems.

BASIC DEMOGRAPHICS OF CLIENT BASE (AGE RANGE, RACE, PAYOR BREAKDOWN, ETC.)

Age range

75 and over	44%
65-74	28%
55-64	18%
45-54	5%
35-44	3%
25-34	1%
18-24	1%

Gender

Male	67%
Female	33%

Race

White / Caucasian	91%
Black / African American	4%
American Indian / Alaska Native	0%
Asian	0%
Native Hawaiian / Pacific Islander	0%
More than one race	0%
Other	0%
No answer	0%
Not Collected	3%

Payor Breakdown

Medicaid	23%
Medicare	59%
Commercial-Employee Based	3%
Health Savings / High Deductible	0%
Unknown	3%
None	0%
Not Collected	12%

Comorbidities

Asthma	4%
CHF	9%
COPD	27%
Diabetes Type I	1%
Diabetes Type II	35%
Heart Disease	41%

High Blood Pressure	67%
Mental Illness	6%
Substance use Disorder	2%

METRICS OVERVIEW

Process Metrics

- There were 159 referrals made into the program between February 1, 2021, and July 31, 2022. Approximately 48 percent of the referrals came from within the Mercy Health system. The remaining 52 percent came from outside resources such as community referrals, self-referrals, law enforcement, and community leaders.
- Approximately 62 percent of the referrals "graduated" the program (improved knowledge and skills in disease self-management, improved adherence to medication and dietary regimens, improved social support). At the time of this report there are 59 active participants in the Community Paramedicine Program
- The stakeholder's workgroup began to meet in March 2020. Meetings have been held monthly. To date there have been 29 workgroup meetings.

Outcome Metrics

- On average, there was one participant per quarter that did not have a primary care physician (PCP) prior to the program.
- 10 percent of program participants established a new relationship with a behavioral health professional.
- 12 percent of program participants established a new relationship with a case manager.
- There were 88 referrals made to community resources for needs including transportation, mental health, food disparities, and home health needs.
- On average, EMS has reduced their repeat runs on program participants by 82 percent over the total program period.

SUSTAINABILITY PLAN

Mercy Health - Urbana Hospital has budgeted the program through the remainder of 2022. The ultimate sustainability of the program remains a challenge. Mercy Health is attempting to develop policy recommendations based on the outcomes data (including policy briefs to be shared with local government agencies elected officials, and community influencers) that might be used to secure long-term community support for the program. In the interim, Mercy Health is exploring additional grant funding opportunities, including those through the Federal Office of Rural Health Policy.

HOW YOUR PROGRAM IS DIFFERENT THAN WAS ORIGINALLY PLANNED AND WHY?

COVID-19 was an obviously unanticipated event. The pandemic severely strained the local health services environment and contributed to extended delays (as successive waves and new

variants impacted the community) in the implementation of the program. The need to resolve potential legal concerns among different parties also proved a lengthier process than what was perhaps originally anticipated.

HOW DO YOU SEE THE FUTURE OF COMMUNITY PARAMEDICE AT YOUR AGENCY?
From Cheryl Wears, BSN, RN, EMT-P, Community Paramedic: I see the role of Community Paramedic expanding in several ways. Expanding the team to add another RN to help with the program. Reducing isolation of patients by expanding the possibilities of telehealth, allowing those that cannot leave their home access to care. Finally expanding the program into other counties to assist other health care providers.

ADVICE YOU WOULD GIVE TO SOMEONE STARTING A COMMUNITY PARAMEDICE PROGRAM
For those interested in starting their own community paramedicine effort, we would offer this advice: (1) Be responsive to the needs of the community (integrate a holistic approach into the program, respond to public health emergencies); (2) Be flexible (recognize the differences in people and places that exist even within a single county area, combine protocol-guided care with the development of individualized pathways to care); and (3) Collaborate (engage community partners and stakeholders, develop and maintain a shared-decision making structure, leverage the knowledge and resources of each partner).