

Mobile Integrated Health (MIH) 2024 Annual Report

Program Overview

Lebanon Fire Department Mobile Integrated Health Program is a collaboration with Dartmouth Hitchcock Medical Center (DHMC), the Lebanon Fire Department and Lebanon Community Nurse programs.

This program operates under the dual medical direction and oversight of a DHMC Emergency and Primary Care physician and Primary Care Nurse Practitioner, in collaboration with DHMC providers.



Lebanon Mobile Integrated Health Team: Amanda, St. Ivany, Community Nurse, Jeremy Thibeault, Community Paramedic, and Rachael McMillan, Community Nurse

Community Paramedic Year 4 (2024) Program Objectives

- ✓ 1. Increase number of patients served by community paramedic by 20% - by December 31, 2024
- ✓ 2. Engage with all referral sources to the community paramedic by July 1, 2024
- ✓ 3. Continue to develop workflow in eDH for telehealth assistance referral by December 31, 2024

Community Nurse Year 4 (2024) Program Objectives

- ✗ 1. Provide telehealth assistance to one patient in each community served - by December 31, 2024
- ✗ 2. Obtain 2 neurology referrals - by December 31, 2024
- ✗ 3. Increase the number of patients who have medication inventories conducted by 20% - by December 31, 2024

Healthcare in the comfort of your home



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Patient Story:

Randall is an 89-year-old widow living in a senior apartment in Grantham. His medical history includes congestive heart failure, aortic valve stenosis, diabetes, chronic kidney disease, and depression. He has supportive, but limited family in the area. Randall doesn't drive and relies on family and neighbors for transportation.

Mobile Integrated Health received a referral for Randall to assist with home safety and medication management. Randall is on thirteen medications and fills his own pills planners weekly. He uses a walker for mobility and lives on the second floor of his apartment complex. Randall suffered a closed fracture of his right humerus over the summer and was placed into a rehab facility. While in the facility, it was noted by his family that his overall wellness improved, and he suffered from fewer episodes of dizziness. It was thought this may be due to improved nutrition, activity level, and decreased isolation.

Once Randall was out of his sling and able to ambulate independently, insurance stopped covering his rehab stay and he was discharged back to his apartment. Initially Randall qualified for home health care, but once he was discharged from these services, Mobile Integrated Health was able to resume visits with Randall to continue to check his medications, encourage nutrition, and help maintain his mobility. Randall has now been able to move to a first-floor apartment and continues to be able to live independently, despite multiple potential barriers. Mobile Integrated Health is frequently able to fill gaps in care, especially in the elderly population.

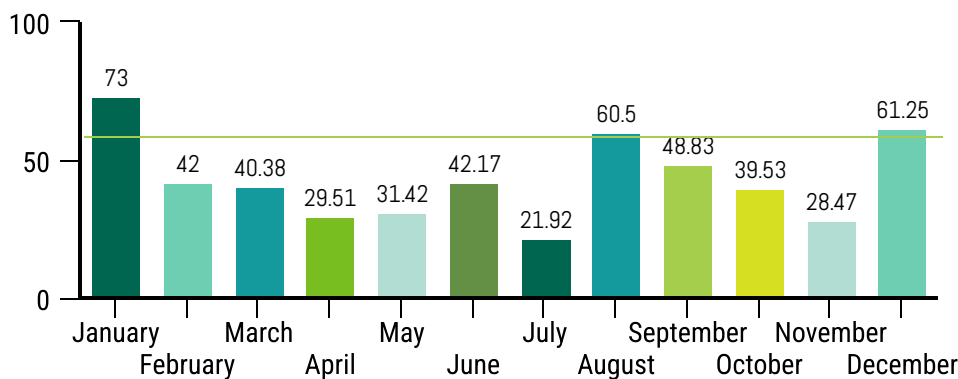
Community Paramedic
responded to 146



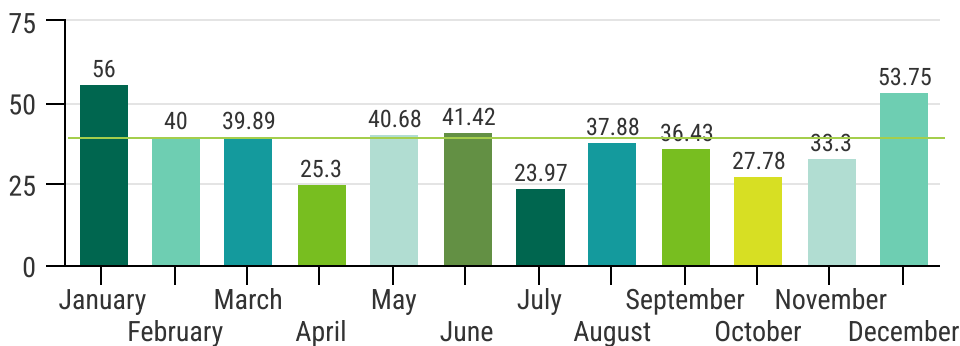
calls in 2024 in addition to
Community Paramedic work.



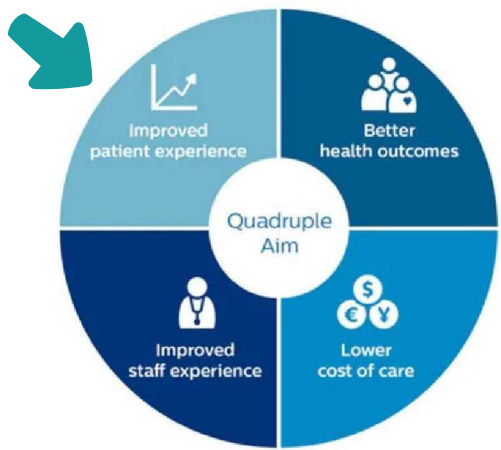
2024 Grantham Community Nurse Hours



2024 Enfield Mobile Integrated Health Hours



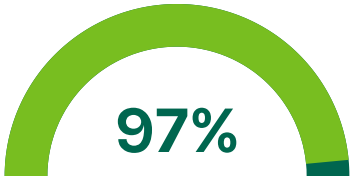
Improved Patient Experience:



Patient Satisfaction Survey Data: n=4

"The care was outstanding. He was very polite and did his very best."

"Very professional and helpful answered all questions."



of patients are very likely to recommend this program to a friend or family member.

97%

of patients were very satisfied with the services provided by the MIH program.



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Better Health Outcomes:

For patients enrolled in the MIH program we evaluated the number of visits to the Emergency Department for 6 months prior to their enrollment and for 6 months after their enrollment. There may be many reasons why this data does not follow a clean trend of more involvement yields less ED visits, but it does appear that MIH program enrollment either with a paramedic or nurse reduce the number of times a patient will visit the ED for three months post discharge.



Community Paramedic

Metric: ED Visits Pre- Post-MIH Intake

Directional Change of ED Visit Count Post Intake

Community Paramedic Intake Dates September 2021- December 31, 2024

	Pre- Post-MIH Intake Time Horizon	
	<u>3 Months</u>	<u>6 Months</u>
#of Eligible MIH Episodes	103	103
#of ED Visits Pre-MIH Intake	61	98
#of ED Visits Post-MIH Intake	39	80
<u>Directional Change (# of MIH Episodes)</u>		
Fewer ED Visits Post-Intake	24	27
More ED Visits Post-Intake	12	20
Same Number of ED Visits Post-Intake	7	5
No ED Visits	60	51

Community Nurse

Metric: ED Visits Pre- Post-MIH Intake

Directional Change of ED Visit Count Post Intake

Community Nurse Intake Dates September 2021- December 31, 2024

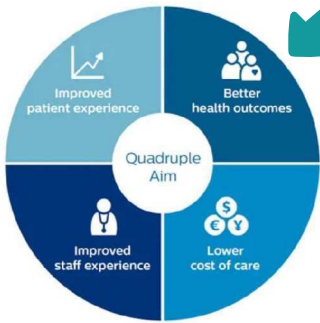
	Pre- Post-Nurse Intake Time Horizon	
	<u>3 Months</u>	<u>6 Months</u>
#of Eligible Nurse Episodes	54	54
#of ED Visits Pre-Nurse Intake	8	11
#of ED Visits Post-Nurse Intake	7	15
<u>Directional Change (# of Nurse Episodes)</u>		
Fewer ED Visits Post-Intake	5	6
More ED Visits Post-Intake	5	10
Same Number of ED Visits Post-Intake	1	1
No ED Visits	43	37



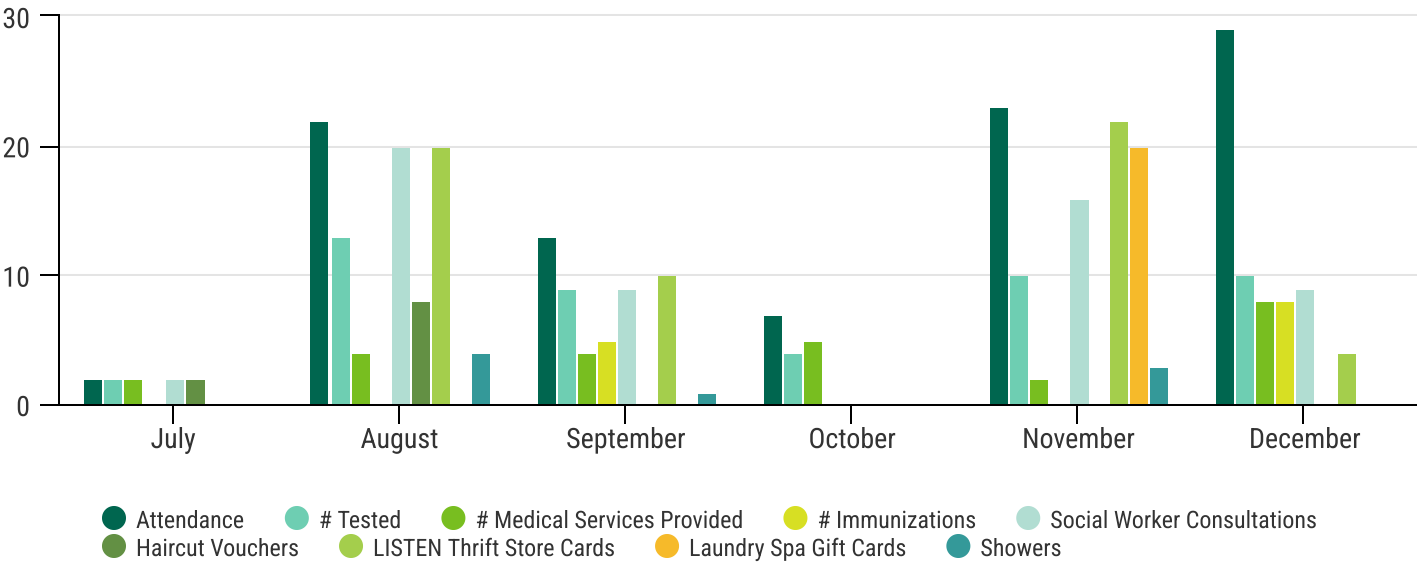
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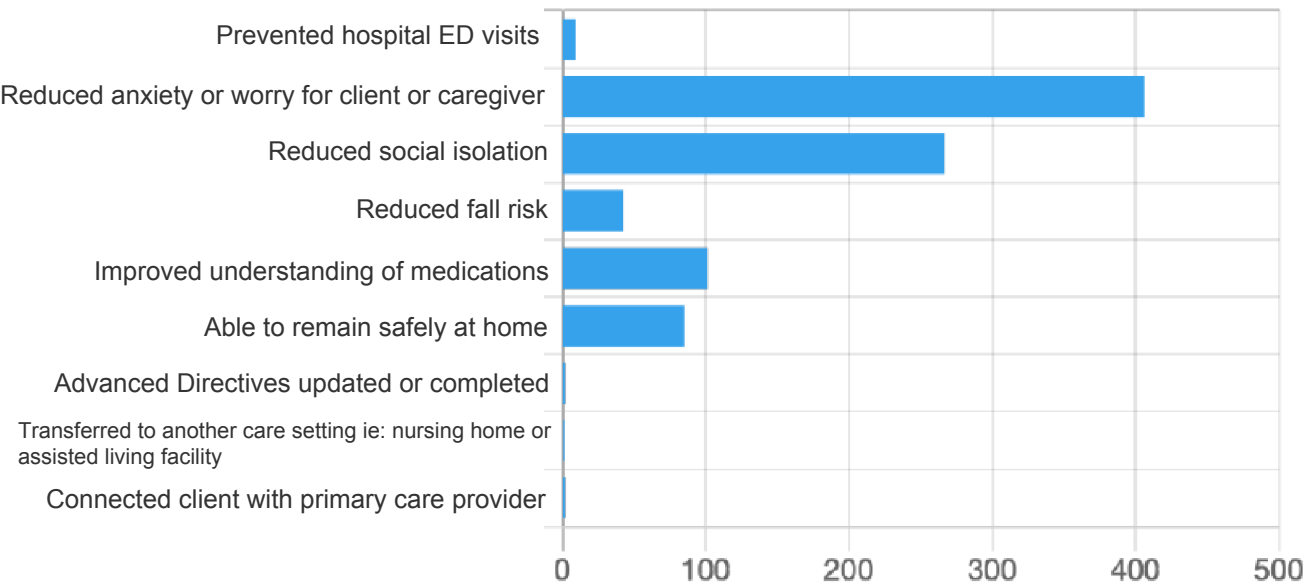
Better Health Outcomes:



2024 Pop-up Clinics



Community Nurse Health Outcomes- Lebanon 2024



Data collected and reported by Community Nurse Connection



Lower Cost of Care:

This same trend, while not statistically significant can be seen in 911 calls for patients enrolled in the MIH program. With a slight decrease in their utilization of EMS after discharge



Community Paramedic

Metric: 911 Calls Pre- Post-MIH Episode
Distribution of 911 Calls per Episode
September 2021-December 31, 2024

	911 Calls Prior to MIH Enrollment	911 Calls During MIH Enrollment	911 Calls After MIH Enrollment
911 Count	118	46	78
Max per Episode	10	13	4
Min per Episode	0	0	0
Mean	1.16	0.45	0.76
Median	1	0	0
Number with 1+911	58	24	40

Community Nurse

Metric: 911 Calls Pre- Post-MIH Episode
Distribution of 911 Calls per Episode
September 2021-December 31, 2024

	911 Calls Prior to MIH Enrollment	911 Calls During MIH Enrollment	911 Calls After MIH Enrollment
911 Count	53	47	18
Max per Episode	5	18	4
Min per Episode	0	0	0
Mean	0.98	0.87	0.33
Median	1	0	0
Number with 1+911	27	15	12



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Lower Cost of Care:

For the paramedic portion of the MIH program there is no visible trend regarding the reduction of In-patient readmissions. However, this is only evaluating fourteen patients enrolled in the MIH program with index admissions. On the Nurse portion of the program the numbers are even smaller with only two enrolled patients having index admissions, but it is worth noting that neither of these patients readmitted.



While post discharge referrals are frequent, this measures cases where the MIH visit was within 7 days of discharge.

An "index admission" is a term used to describe the first admission of a patient to a hospital with a principal diagnosis of a specified condition.

Community Paramedic

**Metric: Inpatient (IP) Readmissions
Community Paramedic
September 2021-December 2024**

	Lebanon Residents			MIH Patients		
Index Discharge Year	Index Admits	IP Readmits	Readmit Rate	Index Admits	IP Readmits	Readmit Rate
2021	103	24	23.3%	0	0	0.0%
2022	312	58	18.6%	3	1	33.3%
2023	318	55	17.3%	3	2	66.7%
2024	315	60	19.0%	1	0	0.0%
Total	1048	197	18.8%	7	3	42.9%

Community Nurse

**Metric: Inpatient (IP) Readmissions
Community Nurse
September 2021-December 2024**

	Lebanon Residents			Nurse Patients		
Index Discharge Year	Index Admits	IP Readmits	Readmit Rate	Index Admits	IP Readmits	Readmit Rate
2021	284	52	18.3%	0	0	0.0%
2022	304	55	18.1%	0	0	0.0%
2023	316	55	17.4%	0	0	0.0%
2024	331	66	19.9%	1	0	0.0%
Total	1235	228	18.5%	1	0	0.0%

Note: Readmissions include IP admissions at any D-H system hospital on eDH (i.e. DHMC, APD, NLH and Cheshire Medical Center)



Improved Staff Experience:



Provider Satisfaction Survey Data:

n=2



of providers said the care provided by the Community Paramedic met their expectations

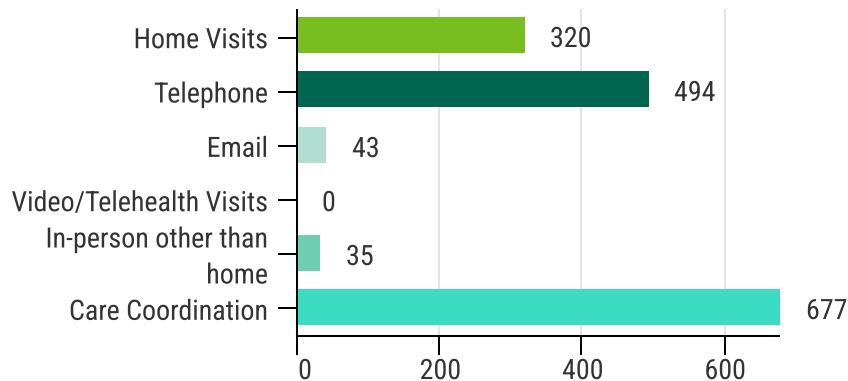


of providers would refer additional patients to the MIH program.

"We were thrilled that Jeremy and Amanda were able to work with our client to offer wound care. They provided care for a person who would not have gotten care if they had not been available since our client would not be willing to go to a medical center or doctor's office. Thank you!"

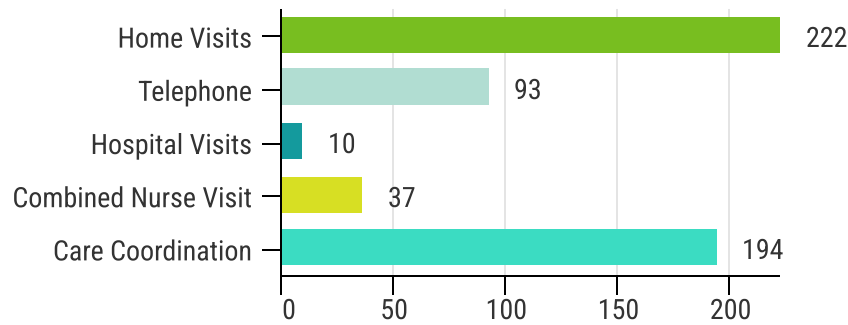
January- December 2024 Data

Community Nurse Encounter Types
1/1/2024- 12/31/2024



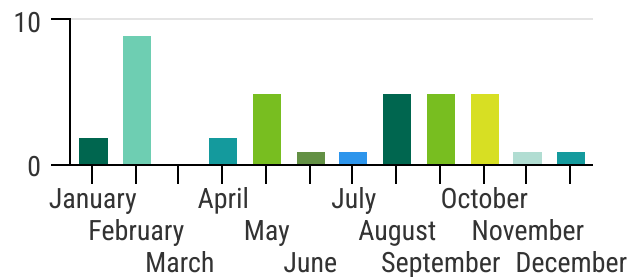
Community Nurse
1/1/2024-12/31/2024
Unique Patients-
Enfield 33
Grantham 23
Lebanon 144
Total Encounters- 976

Community Paramedic Encounter Types
1/1/2024- 12/31/2024



Community Paramedic
1/1/2024-12/31/2024
Unique Patients- 83
Enfield 1
Lebanon 82
Total Encounters- 340

Combined Community Nurse & Paramedic Visits 1/1/2024- 12/31/2024



Community Paramedic Monthly Referrals

