Lebanon Mobile Integrated Health (MIH) Program

Two Year Program Report
June 2021-June 2023

Mobile Integrated Health
Healthcare in the comfort of your home
Dartmouth Health

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Introduction:

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 medical direction and oversight of DHMC Emergency and Primary Care physicians, in collaboration with DHMC providers.

The pandemic severely stressed the US health system, highlighting the financial fragility of our fee-for-service system and under-resourced public health infrastructure. Harsh disparities in COVID-19 mortality rates between races, incomes, and occupations starkly illustrated the consequences of historic political and economic injustices. Our country, one of the richest in the world with the largest economy, suffered COVID-19 and excess all-cause mortality rates far greater than other peer countries. The pandemic forced our systems of health care to reckon with the fact that the status quo will not keep us safe.

Rural populations are historically older, sicker, and die earlier compared to urban counterparts and the disparities in health outcomes between urban and rural populations has continued to increase over the last decade. The pandemic exacerbated long-standing threats to the health of rural communities including, decreasing access to care due to rural hospital closures, an increasing maternal and obstetric crisis, the substance use epidemic, and an inadequate supply of rural health care workforce. These challenges are acutely applicable to the communities served by Dartmouth Health and have driven health teams and community organizations to think differently and to work more closely.

In 2020, Dartmouth Health and the City of Lebanon came together to explore the merits of a new program to meet health needs of our population, a Mobile Integrated Health (MIH) program. Under the direction of the Chief of the Lebanon Fire Department, funding supports a Community Paramedic and up to 40 hours/week of Community Nursing services. The initial term of the MIH program extends from January 1, 2021, until December 31, 2023.

In the ensuing months since January 2021, a multidisciplinary team has met on a weekly basis to design and implement the Lebanon MIH program. The team includes Lebanon Fire Chief and paramedic, Dartmouth Health (DH) Emergency Medicine and Primary Care providers, population health staff, and many ad hoc members including Lebanon community nurses, DH data analysts, DH hospitalists and others. The program has focused on achieving improvements across the quadruple aim—better care, better patient experience, lower costs, and improved workforce satisfaction.

The following report provides details of program design and outcomes. What may not be apparent in the stories and the data is the depth of the partnership that has developed between DH clinicians and staff and the City of Lebanon team. This partnership is an example of how our city, our region, our rural communities need to move forward to meet the challenges of the future. Together, we can provide the right care, to the right patient, in the right place, at the right time.

Dr. Sally Kraft and Dr. Tom Trimarco

Patient Story: Polly B.

The patient is a 77-year-old female who lives alone at Roger's House. She was referred to the Mobile Integrated Health (MIH) program and Lebanon Community Nurses in March 2022 by the Lebanon Fire Department Paramedics. She had recently experienced the sudden death of her 50-year-old son, which was especially difficult for her to manage. She has a medical history of tachycardia/bradycardia syndrome and atrial fibrillation with rapid ventricular rate. The patient was frequently calling 911, directly calling the Lebanon Fire Station, and driving herself to the emergency department for symptoms of rapid heart rate, for which she was requiring cardioversion.

When the Community Nurses connected with the patient in March of 2022, she was frequently missing her doctor's appointments. When asked about this, she said she was overwhelmed, and felt she could not possibly handle her medical needs while she was grieving from the loss of her son. She felt safe in her home and was receiving Meals on Wheels from the Grafton County Senior Center, but she needed help navigating the healthcare system. The Community Nurses contacted her Primary Care Office Case Manager to help clarify her plan of care and placed referrals to the Aging Resource Center and Bayada for grief support. With these interventions in place, and with improved coordination of care, the patient was able to start participating in her own care.

The patient still required a pacemaker placement and was unable to have the procedure due to poor dentition. She had the procedure for dental extractions scheduled at D-H Same Day Program, however, did not have a ride or someone to stay with her. The Community Nurses were able to communicate with the Case Manager, who found her a ride there, and stay with her during the procedure, allowing it not to be cancelled, and providing continuity of care during the post-operative phase of care. The patient was admitted for 24-hour observation and discharged home without incident. Due to having the extractions completed, the next time she was in the emergency department for atrial fibrillation with rapid ventricular rate, she was able to have her pacemaker placed. The patient had the Visiting Nurse and Hospice of NH post-hospital discharge, and then they signed off to the MIH team to resume care.

The patient was displaced to her sister's house during the Roger's House fire, which the MIH team was able to alert her primary care team to. The MIH also identified that she was not taking her blood pressure medication as prescribed and had an inaccurate home blood pressure cuff. The team was able to provide medication education and obtain a new blood pressure cuff for her from her Primary Care office Case Manager. She was also struggling with proper nutrition, given her dental extractions and diabetes, which she was scheduled a nutrition consult for. The patient is now an active participant in her own healthcare, she states that she feels well, and she is no longer frequently accessing emergency services for primary care needs.

State of New Hampshire Letter of Support

State of New Hampshire
Department of Safety

Division of Fire Standards and Training & Emergency Medical Services
98 Smokey Bear Boulevard, Concord, New Hampshire
Mailing Address: 33 Hazen Drive, Concord, New Hampshire 03305-0002
Business: (603) 223-4200 Fax: (603) 271-1091

Robert L. Quinn
Commissioner

Justin A. Cutting
Director

July 21, 2023

Dartmouth Hitchcock Medical Center
One Medical Center Drive
Lebanon, NH 03755

To whom it may concern,

It is my pleasure to write this letter of support for the Lebanon Fire Department – Dartmouth Hitchcock Medical Center Mobile Integrated Healthcare (LFD-DHMC MIH) project. Over the past two and a half years, the program and its staff have been a significant resource to their local community providing exceptional mobile integrated healthcare (MIH) to the residents of New Hampshire. In addition, the program has been instrumental in the further development of MIH programs throughout the State. The LFD-DHMC MIH team has assisted by:

- Providing advocacy and advisement.
- Generously sharing their charter and application.
- Educating on their goals, scope of practice, educational resources, quality improvement plan, and operational standards.

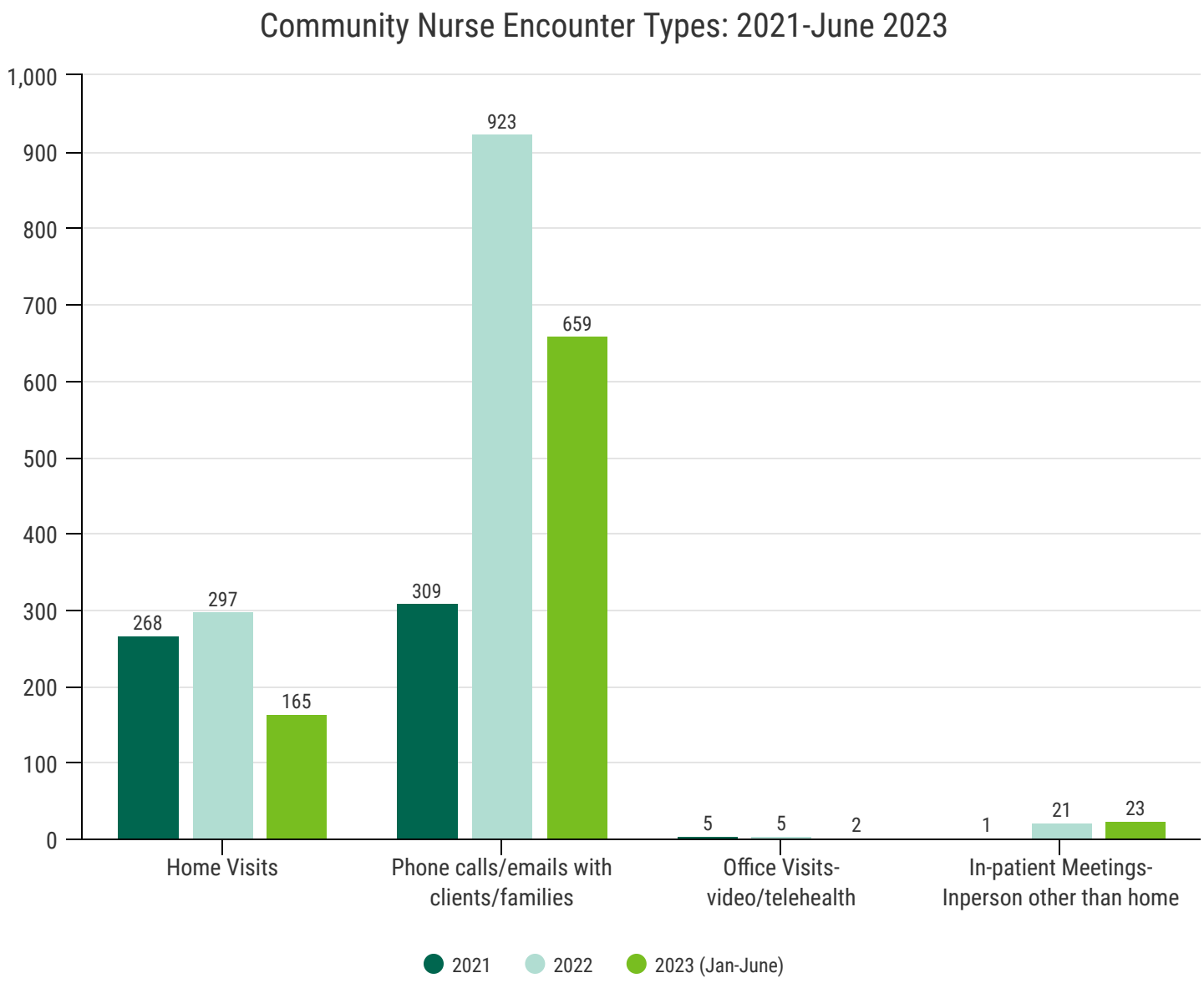
The LFD-DHMC MIH team has also provided substantial contributions to the MIH work of the state of NH, participating at NH Bureau of EMS quarterly MIH meetings, and presenting to the NH Legislative Commission on the Interdisciplinary Primary Care Workforce.

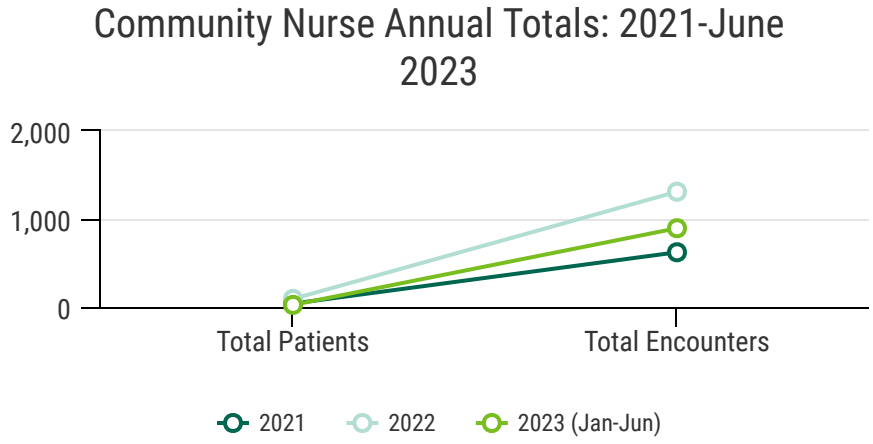
It is clear that the LFD-DHMC MIH project team has provided a substantial contribution to the development and ongoing successes of mobile integrated healthcare program throughout New Hampshire. I strongly encourage the continued funding of this program and look forward to continuing our work with the staff in the future to better the care of patients throughout the state.

Sincerely,

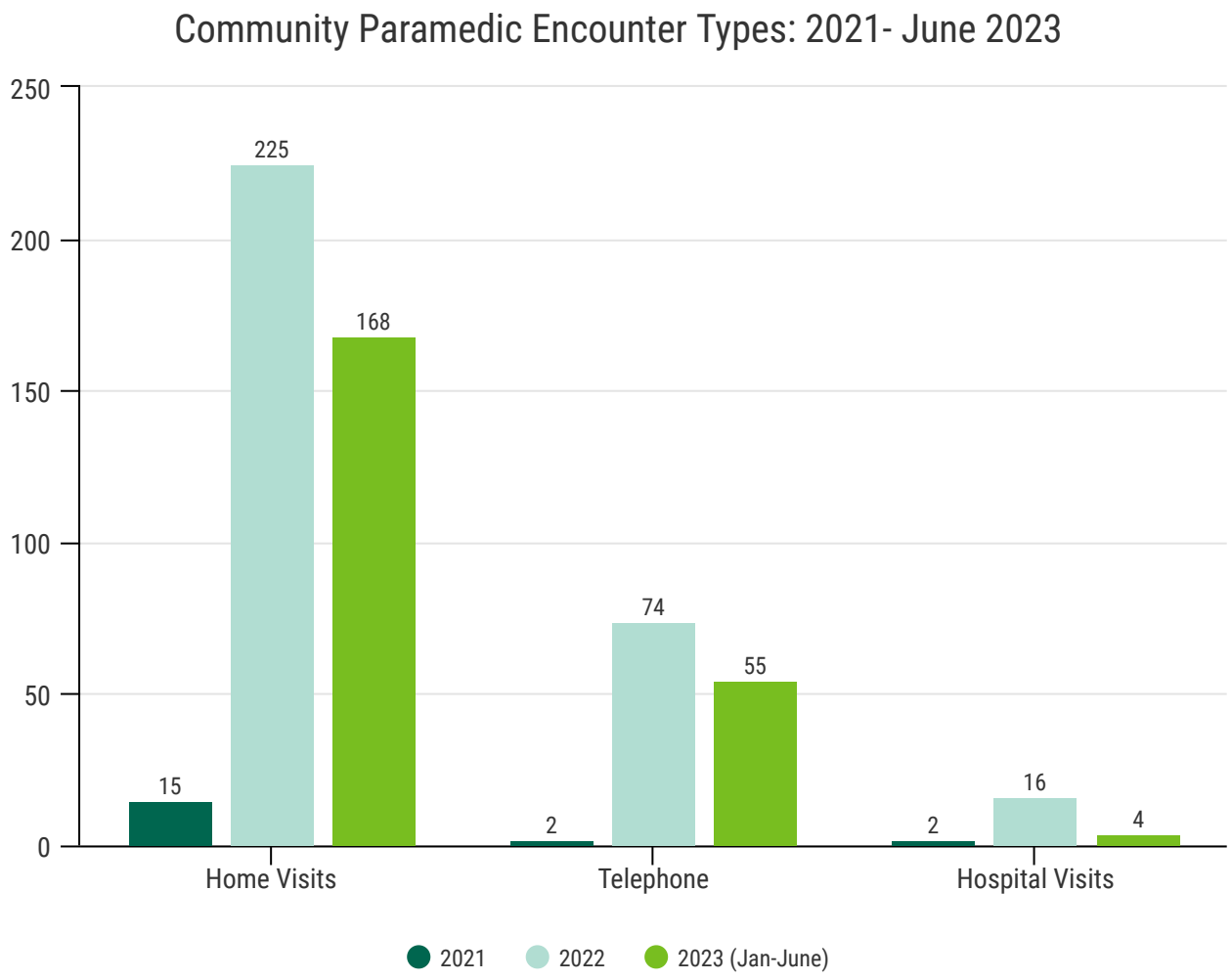
Justin Romanello
Chief, Bureau of EMS
NH DOS/FSTEMS/BEMS

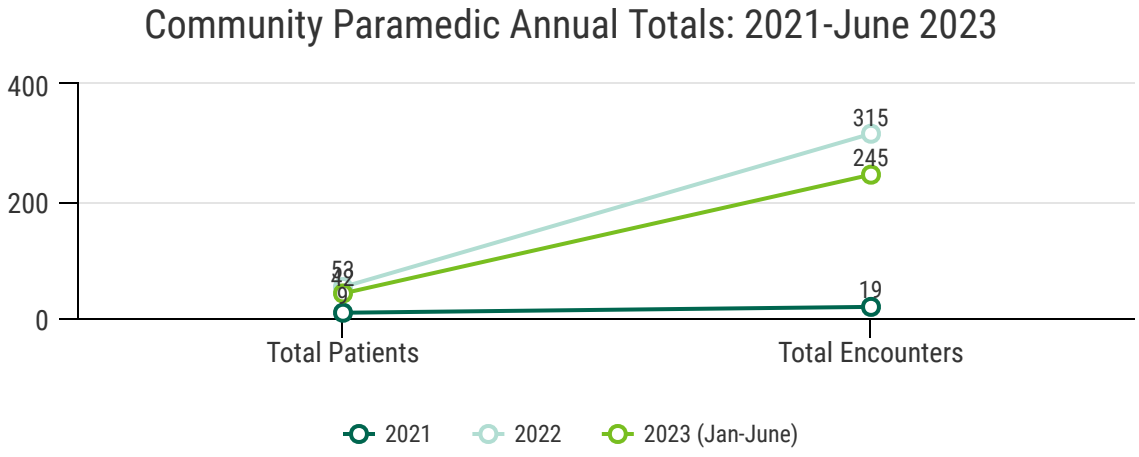
Process Measures: Community Nurses





Process Measures: Community Paramedic

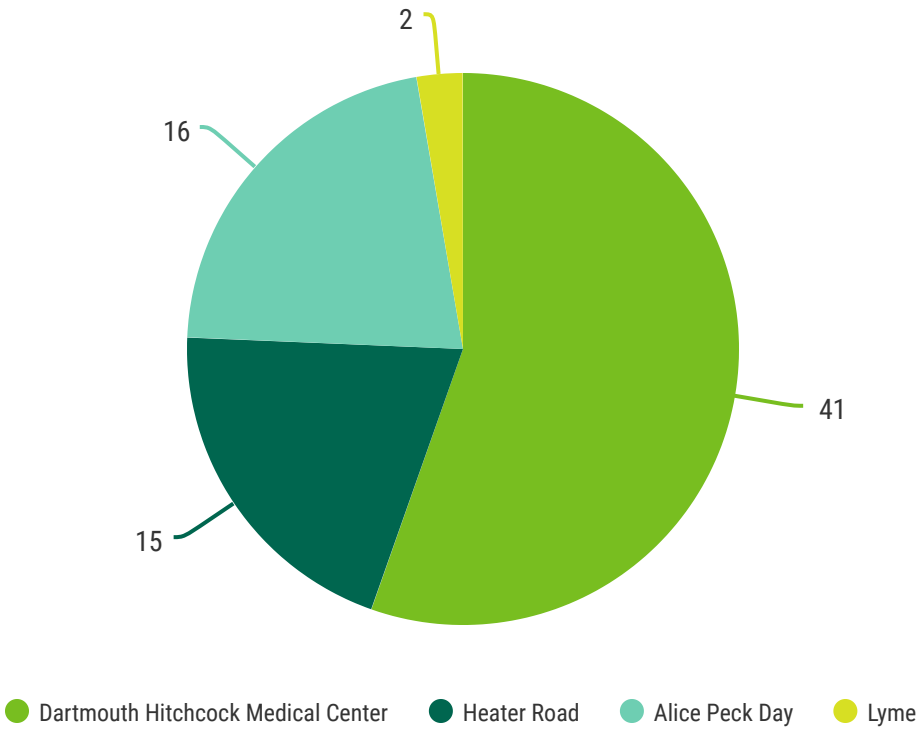




2021 numbers reflect a soft roll out of the program that began in September 2021

Process Measures: Community Paramedic

Community Paramedic Referrals by Facility 2021-June 2023



2021 numbers reflect a soft roll out of the program that began in September 2021

29

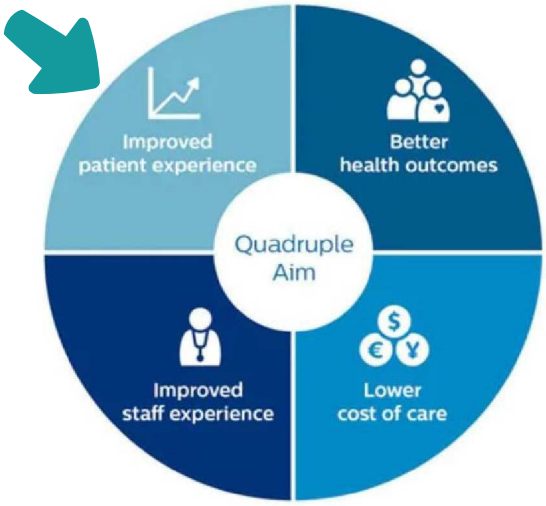
combined visits with Community Paramedic and Community Nurse January-June 2023

189

care coordination encounters January-June 2023

From January 1, 2023-June 30, 2023 the Community Paramedic also responded to **70** emergencies with the Lebanon Fire Department in addition to MIH work

Improved Patient Experience:



Patient Satisfaction Survey Data:

"great response and VERY CARING!"

"listened and answered my questions"

"great knowledge and perfect delivery"

"prompt and informative"

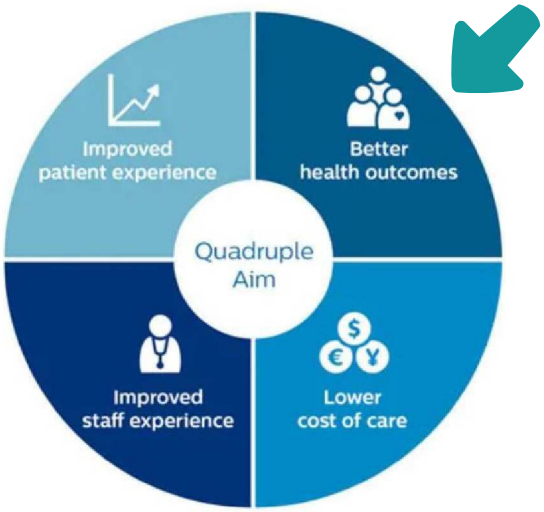
"very good job"

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

80%

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

Better Health Outcomes:

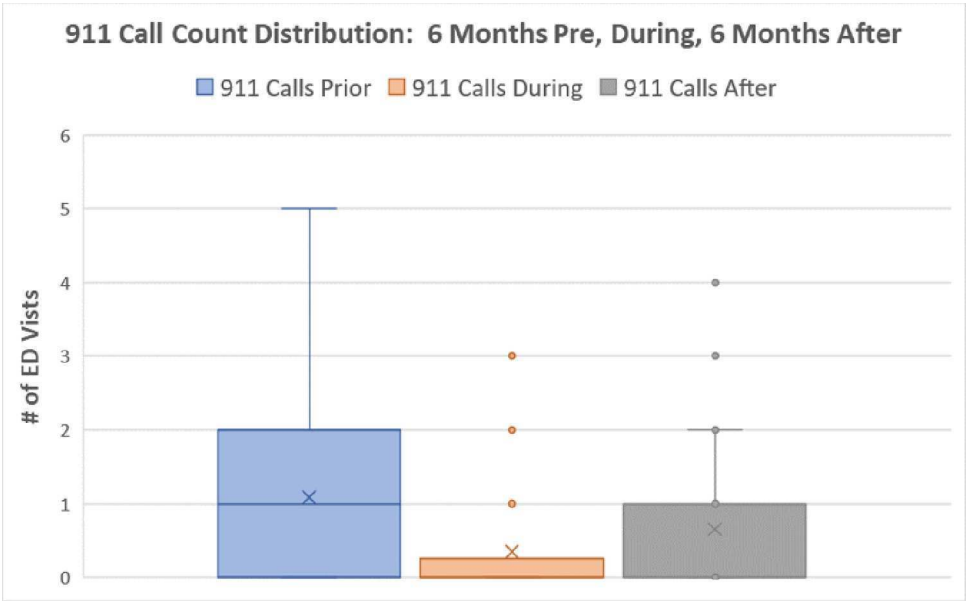


Metric: ED Visits Pre- Post-MIH Intake
Directional Change of ED Visit Count Post Intake
September 2021-June 2023

	Pre- Post-MIH Intake Time Horizon	
	3 Months	6 Months
# of Eligible MIH Episodes	64	51
# of ED Visits Pre-MIH Intake	39	51
# of ED Visits Post-MIH Intake	29	44
Directional Change (# of MIH Episodes)		
Fewer ED Visits Post-Intake	16	14
More ED Visits Post-Intake	12	12
Same Number of ED Visits Post-Intake	4	2
No ED Visits	32	23

Lower Cost of Care:

Metric: 911 Calls Pre- Post-MIH Episode
Distribution of 911 Calls per Episode
September 2021-June 2023



	911 Calls Prior	911 Calls During	911 Calls After
Episode Count	46	46	46
911 Count	**50**	**16**	**30**
Max per Episode	5	3	4
Min per Episode	0	0	0
Mean	1.09	0.35	0.65
Median	1	0	0
Number with 1+ 911	25	11	18

Lower Cost of Care:

While post discharge referrals are frequent, this measures cases where the MIH visit was within 7 days of discharge. A goal for the upcoming years is to apply some focus to this area and attempt to reduce all cause readmissions.

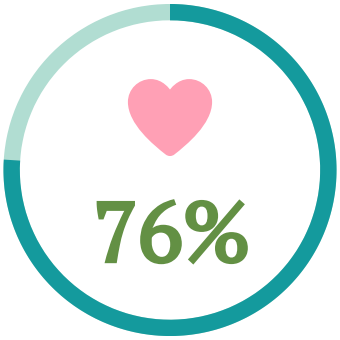
Metric: IP Readmissions- September 2021- June 2023

	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	
2022	310	57	18.4%	3	1	33.3%
2023	168	17	10.1%	0	0	
Total	581	98	16.9%	3	1	33.3%

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:



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

of providers would refer additional patients to the MIH program.

"Jeremy and the Lebanon Community Paramedic Program are tremendous assets to the GIM team. Jeremy has gone above and beyond for all he does for our patients."

"This is an excellent program as well as the community nurse program. Keep up the great work, you are SO valuable!"

"This is so wonderful. I hope to see this program grow"

"Thank you for providing such an important service!"

Lebanon Fire Department Satisfaction Survey Data:

69%

agree or strongly agree that the MIH program has reduced nonemergent requests for assistance to the fire department.

92%

agree or strongly agree that the MIH program has positively impacted the departments readiness for emergency response.

77%

agree or strongly agree that the MIH program has improved the overall health of the community.

Clinical: Lebanon MIH Blood Pressure Clinics 2022-2023

44

total people attended clinics

	Location	Total People Seen
Lebanon Housing Authority- 34 total		
	Rogers House	10
	Maple Manor	7
	Towers	10
	Heater Landing	7
LISTEN Community Services- 10 total		
	Food Pantry	1
	Cricket Mobile Event	9

Notes: Enrolled one patient from Roger's House who called community nurse after she fell (instead of calling 911), was evaluated by community paramedic and recommended to go to DH ED. Upon exam she had cervical fracture and recent MI. During admission at DH she had another MI; if she had been at home it may have been fatal. This is one of the most concrete examples of public health outreach preventing mortality.

Education and Outreach:

Educational Presentations:

The Lebanon Fire Department (LFD) -Dartmouth Hitchcock Medical Center (DHMC) Mobile Integrated Health (MIH) team has presented the program and its capabilities to a diverse group of healthcare, governmental, and community support organizations.

These organizations include:

- NH Governors Council on Primary Care Workforce
- New England Rural Health Association
- NH Bureau of EMS
- New England Infusion Center
- White River Family Practice
- Care Management at DHMC and Heater Road
- APD Geriatrics
- General Internal Medicine Care Management
- Laconia NH Fire Department
- Gilford NH Fire Department
- Barre Town VT EMS
- Barre City VT Fire Department
- LISTEN

Dr. Trimarco & Jeremy Thibeault at the New England Rural Health Association Conference 2022

Standing collaborations / regularly attended meetings:

- DH Readmissions Task Force
- DH Weaving the Safety Net Project
- GEDI Network
- NH Department of Safety
- Division of Fire Standards and Training and Emergency Medical Services
- MIH Stake Holders Roundtable
- UV Service Coordinator Roundtable
- Elder Forum

MIH Webpage Analytics- June 2022-June 2023

552 total pageviews

Total click events for the following PDF files linked on webpage:

2022-mih-annual-report.pdf: **4**
mobile-integrated-health-semiannual-report-2022-jan-jun.pdf: **18**
mobile-integrated-health-annual-report-2021.pdf: **14**
mobile-integrated-health-toolkit-2022.pdf: **29**

MIH Webpage

Mobile Integrated Health Community Advisory Committee Member List:

Amanda St. Ivany City of Lebanon, Lebanon Community Nurse	Kappy Coppettone Grafton County Senior Citizens Council, Case Manager
Barbara Farnsworth Dartmouth Health, Community Health	Kristin Barnum Community Nurse Connection, Executive Director
Brian Lombardo, MD Alice Peck Day, Primary Care	Laurie Harding Community Member
Carla Richters Community member/patient representative	Lisa Paquette White River Family Practice
Cory Howarth, APRN Dartmouth Health, Heater Road, Primary Care	Lynne Goodwin City of Lebanon, Human Services
Daniela I. Bridgwater Dartmouth Health, Accountable Care Org	Margaret Georgia, Kathleen O'Brien Dartmouth Health, Care Management
Deb Goodrum Dartmouth Health, Geriatric ED	Pattie Beek Quail Hollow, Manager
Ditha Alonso Lebanon Housing Executive Director	Rachael McMillan City of Lebanon, Lebanon Community Nurse
Ellen Flaherty Dartmouth Health, Geriatric Center of Excellence	Richard Norris City of Lebanon, Police Department
Hilary Schuler Dartmouth Health, Community Health	Roger Osmun West Central Behavioral Health, CEO
Chief James Wheatley City of Lebanon, Fire Department	Sally Kraft, MD Dartmouth Health, Population Health
Janet Lowell Community Nurse Connection	Stacie Deiner (Anesthesiology) Dartmouth Health, Surgical Services
Jim Culhane Lake Sunapee VNA, Executive Director	Tom Trimarco, MD Dartmouth Health, Emergency Department
Johanna L. Beliveau Visiting Nurse and Hospice for VT and NH, CEO	

Financial:

	CY2021	CY2022	CY2023
DHMC PILOT Funding	**312,900**	**198,372**	**204,008**
Expenses			
LFD staff expense (wage and benefits) Community Paramedic	120,000	123,600	127,308
LFD staff expense (wage and benefits) Community Nurses	62,400	64,272	66,200
Travel	1,500	1,500	1,500
Training & Equipment	125,000	5,000	5,000
Training	4,000	4,000	4,000
Total Expenses	**312,900**	**198,372**	**204,008**

Assessment: HRSA Community Paramedicine Evaluation Tool

A framework to assess Community Paramedicine programs based on their own specific health status benchmarks and performance indicators. The data collected from the tool is used to guide existing and future performance and evaluation. The evaluation period was from January 2021 to February 2023. A focus group was completed on March 28, 2023. Each participant in the focus group reviewed each question through a digital polling tool, selected a score 0-5, and then a discussion was held to reach a consensus on a final score.

101.1 Indicator

There is a description of illnesses and injuries within the community paramedicine service area including the distribution by geographic area, high-risk populations (pediatric, elder, distinct cultural/ethnic, rural, and others), incidence, prevalence, contributing factors, determinants, morbidity, and patient distribution using any or all of the following: vital statistics, emergency department (ED) data, EMS data, hospital discharge data, State police data (those from law enforcement agencies), medical examiner data, and other data sources. The description is updated at regular intervals.

Final Score:

3 = One or more population-based data sources and one or more clinical data sources are used to describe illness and injury within the jurisdiction.

We are currently using one or more population-based and clinical data sources, not multiple. When it comes to clinical data sources, we're not particularly using or gathering it very well.

ACTION ITEM: Document our data sources to describe illness and injury.

101.2 Indicator

Collaboration exists between the community paramedicine program, public health officials, and health system leaders to complete risk assessments

Final Score:

4 = Public health officials along with health care and community paramedicine participants, assist with the design and analysis of illness/injury risk assessments.

The population health team serves as public health officials for the project; therefore, the group assists with the design and analysis of illness/injury risk assessments.

ACTION ITEM: Create documentation of illness/injury assessments.

102.2 Indicator

The community paramedicine program has completed a gap analysis based on the inventories of internal and external system resources as well as system resource standards.

Final Score:

2 = The community paramedicine advisory committee has begun to develop resource standards so that a gap analysis can be completed.

We have not completed a gap analysis based on the internal and external resources.

ACTION ITEM: Need to establish our resource standards, develop a standard gap analysis tool, and create a schedule for gap analysis.

Assessment: HRSA Community Paramedicine Evaluation Tool

102.3 Indicator
There has been an initial assessment (and periodic reassessment) of overall program effectiveness.

Final Score:
4 = There is an ongoing program assessment and formal reports are published annually and distributed to all stakeholders including: patients/clients, oversight bodies, funding sources, and the general public.

When it comes to initial assessment and periodic reassessments, our program has ongoing data collection (process measures) and formal reports are published annually and distributed to all stakeholders. Our yearly report has gone out to all stakeholders including external, senior leadership, the city of Lebanon, it's published, and it's on our website/available to the general public. However, we need to do a better job at showing program effectiveness.

ACTION ITEM: Identify what effectiveness means for our program and develop appropriate reporting methods reflecting effectiveness.

103.1 Indicator
The benefits of the community paramedicine program, in terms of cost savings, decreased EMS transports, decreased hospital visits, improved health/wellness, and so on, are described.

Final Score:
3 = Additional sources of data, in terms of other economic and quality of life measures, (e.g., reduction in return hospital visits / readmissions, fewer 911 calls, shorter return to work interval, etc.) are available.

Regarding the benefits of the community paramedicine program the additional sources of data are available to us, but we have not analyzed it.

ACTION ITEM: Hospital readmissions and quality of life measures need to be included in a report to DH leadership by July 15, 2023

103.2 Indicator
Cases that document the societal benefit are reported on so the community sees and hears the benefit of the community paramedicine program while simultaneously protecting patient privacy.

Final Score:
4 = Cases concerning dramatic improvements in wellness and return to a quality life are on file (at a system level) and are reported to the press.

We have completed a semi-annual report (fact sheet) that we given to the press, we have completed multiple press stories, and each time we present at stakeholder meetings we do a case study. We are not a score 5 because our information fact sheets do not document the cost- benefit of the community paramedicine program.

ACTION ITEM: Include cost benefits in annual reports.

Assessment: HRSA Community Paramedicine Evaluation Tool

103.5 Indicator

An assessment of the needs of the general medical community, including physicians, nurses, prehospital care providers, and others, concerning community paramedicine program information has been conducted and communications mechanism developed based on the results of the assessment.

Final Score:

4 = Information resources for the general medical community have been developed based on the stated needs of the general medical community; general medical community representatives are included in community paramedicine informational events.

When we started the program, we presented the program to each department and asked what benchmarks they need documented and what key points need to be identified within the patients record. But we have not formalized a tool filled with information resources to elicit information from the broader medical community.

ACTION ITEM: Develop an annual plan to get input from the general medical community on what kind of information they would like from the community paramedicine program.

201.1 Indicator

Community paramedicine activities are allowable/supportable within EMS regulations, licensure, certification, and scope of practice.

Final Score:

5 = Specific statutes, rules, and regulations govern community paramedicine programs statewide.

Within the state of NH, the MIH program follows the well defined and clear path of prerequisite protocols (EMS regulations, licensure, certification, and scope of practice).

NO ACTION ITEM

202.1 Indicator

The program leaders have developed and implemented a multidisciplinary, multi-agency advisory committee to provide overall guidance to the community paramedicine planning and implementation strategies. The committee meets regularly and is in compliance with local or state open- meeting or transparency regulations and protects patient privacy.

Final Score:

5 = There is a community-wide multidisciplinary, multi-agency advisory committee with well-defined goals and responsibilities relative to the development and oversight of the community paramedicine program that meets regularly. The committee routinely provides guidance and assistance to the community paramedicine program on system and program issues. There is strong evidence of consensus building among system participants. The committee is in compliance with all open meeting or transparency regulations and protects patient privacy.

The multidisciplinary advisory committee meets regularly, they attend meetings, and there's collaboration and consensus concerning the roles and direction.

NO ACTION ITEM

Assessment: HRSA Community Paramedicine Evaluation Tool

202.4 Indicator
The community paramedicine program has comprehensive protocols that guide personnel to ensure consistency of care delivered, to decrease unwarranted variation in care, and to ensure patient care activities remain within scope of practice boundaries.

Final Score:
3 = Specific protocols for community paramedicine activities that are outside of the general emergency care response activities of the agency are being drafted.

We do not have our specific protocols for community paramedicine activities drafted and written, once this has been adopted, we will become a score 5.

ACTION ITEM: Document our standard operating procedures and protocols.

203.1 Indicator
Community paramedicine program, in concert with a multidisciplinary, multi-agency advisory committee, has adopted a community paramedicine program plan.

Final Score:
2 = There is no community paramedicine program plan, although some individuals or groups have begun meeting to discuss the development of a community paramedicine program plan.

There is no community paramedicine program plan of action items.

ACTION ITEM: As we establish our program goals annually, we will write a plan to support these goals. Create a plan to support goals for the second half of 2023.

204.2 Indicator
Financial resources exist that support the planning, implementation, and ongoing management of the administrative and clinical care components of the community paramedicine program.

Final Score:
3 = There is current funding for the development of the community paramedicine program within the sponsoring agency organization consistent with the community paramedicine program plan, but costs to support clinical care support services have not been identified (transportation, communication, uncompensated care, standby fees, and others). No ongoing commitment of funding has been secured.

We have funding for the program through December 2023.

ACTION ITEM: Reapply to DH leadership in July 2023 for an additional 3 years. Continue to evaluate billable opportunities for services.

Assessment: HRSA Community Paramedicine Evaluation Tool

205.3 Indicator
Community paramedicine leaders, including the multidisciplinary, multi- agency advisory committee, regularly review system performance reports and system compliance information to monitor community paramedicine program performance and to determine the need for program modifications.

Final Score:
4 = The community paramedicine program community-wide multidisciplinary, multi- agency advisory committee meets regularly and routinely assesses reports from community paramedicine data to determine program compliance and operational issue needing attention.

We currently meet regularly by looking at program compliance, operational issues, and improving our numbers, but not the bigger and more difficult to measure issues like patient outcomes.

ACTION ITEM: Our goals are to include patient outcomes during advisory council meetings, May 2023 onward.

301.2 Indicator
Community paramedicine care providers collect patient care and administrative data for each episode of care and provide these data to the community paramedicine program which is evaluated including monitoring trends and identifying outliers.

Final Score:
4 = The community paramedicine patient data system is integrated into the community paramedicine EIS and is used by community paramedicine and other health care personnel to review and evaluate community paramedicine system performance.

Our community paramedic will continue to collaborate and provide information with related public health and healthcare providers as they improve their capacity to exchange data.

ACTION ITEM: To evaluate how we could use community health needs assessment data to help monitor our community health needs.

302.1 Indicator
Cost data are collected and provided to the community paramedicine program EIS for each major component of the program.

Final Score:
2 = Administrative and program cost data are collected and included in the annual community paramedicine program report.

We currently know about the administrative cost data, but do not include the cost data in the annual report.

ACTION ITEM: Going forward we should report the annual costs in the annual report.

Assessment: HRSA Community Paramedicine Evaluation Tool

301.3 Indicator
There is authority for a community paramedicine medical director and a clear job description, including requisite education, training, and certification, for this position.

Final Score:
3 = There is authority for a community paramedicine program medical director, a job description, and expectations have been developed. This individual may or may not also serve as the EMS agency medical director.

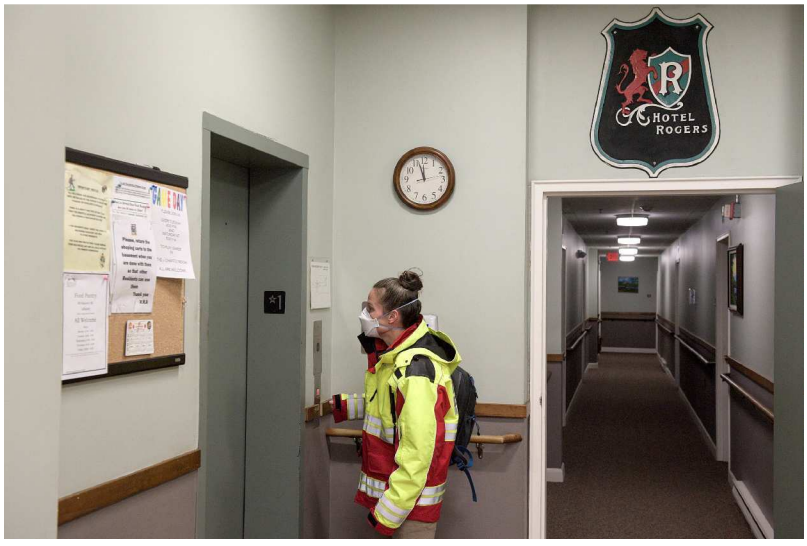
Dr. Trimarco has a job description for Dartmouth Health and as an EMS medical director, but not necessarily for the MIH program.

ACTION ITEM: Develop job descriptions for the community paramedicine medical director(s).

Focus Group Participants:

Jeremy Thibeault, MPA, Firefighter/Paramedic, Lebanon Fire Department
Jeffrey Libbey, Assistant Fire Chief, Lebanon Fire Department
Sally Kraft, MD, MPH, Vice President Population Health, Dartmouth Health
Thomas Trimarco, MD, EMS Medical Director, DHMC, APD and New London Hospital
Jim Wheatley, Firefighter/Paramedic, Fire Chief, Lebanon Fire Department
Cory Howarth, APRN, Dartmouth Hitchcock Clinics, Heater Road
Rachael McMillan, RN, MPH, Lebanon Community Nurse
Amanda St. Ivany, RN, PhD, Lebanon Community Nurse
Kathleen O'Brien, RN, Clinical Nurse Supervisor Primary Care, DHMC

Barbara Farnsworth, MS, Director, Community Health Partnerships, DHMC (Focus Group Facilitator)
Hilary Schuler, Community Health Partnership Coordinator, DHMC (Technology & Evaluation Polling)
Bridget Monahan, Northeastern University MPH Student (Notetaker)



Lebanon Mobile Integrated Health (MIH) Program

Two Year Program Report
June 2021-June 2023

Appendix

Mobile Integrated Health (MIH)
2021 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 medical direction and oversight of DHMC Emergency and Primary Care physicians, in collaboration with DHMC providers.

"'The right care, at the right time, and the right place by the right person is a mantra we've been using at Dartmouth Health for years,' says Population Health Vice President Sally Kraft, MD, MPH. When the right place for care is a patient's home, the right person to deliver that care might be a community paramedic."

Year 1 (2021) Program Objectives

- ✓ Obtain approval for Lebanon Fire MIH
- ✓ State licensing and certification
  Hire and train the community paramedic
- ✓ Identify and meet with prospective referral sources for program launch
- ✓ Identify advisory council members from the community
- ⊗ Hold initial advisory council meeting
- ✓ Integration of community nurses into LebFire/MIH program
- ✓ Enroll initial cohort of patients into Community Paramedic program
- ✓ Establish infrastructure to run the program
  - Governance structure
  - Education and Training
  - Initiate data collection and reporting structure
  - Established Referral processes, DHMC ED, Geri ED, and Primary Care, APD ED and Primary Care, DHMC CHF and Wound Care Clinics
  - Transitional care management; partnership with the 2021 Levi Project
  - Documentation and record keeping (eD-H)
  - Establish initial communication plan across DHMC and APD
  - Obtain required equipment for Community Paramedic and Lebanon Nursing programs

Healthcare in the comfort of your home

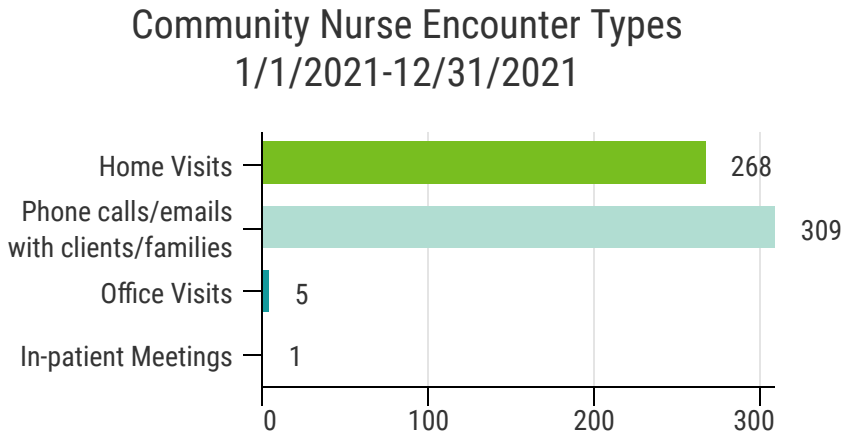
CITY OF LEBANON NEW HAMPSHIRE FIRE DEPARTMENT

Dartmouth Health

Year 1 Timeline

1/4/2021-2/10/2021 Qualitative needs assessment conducted
1/5/2021 MIH working group established, set weekly meeting schedule
1/8/2021 Lebanon MIH application approved by the state
6/7/2021 Community paramedic hired
9/2/2021 Community paramedic starts seeing patients
10/16/2021 Community paramedic gains eDH access
11/9/2021 Community Nurse joins Lebanon Fire Department
12/6/2021 Second Community Nurse joins the Lebanon Fire Department

Year 1 Data

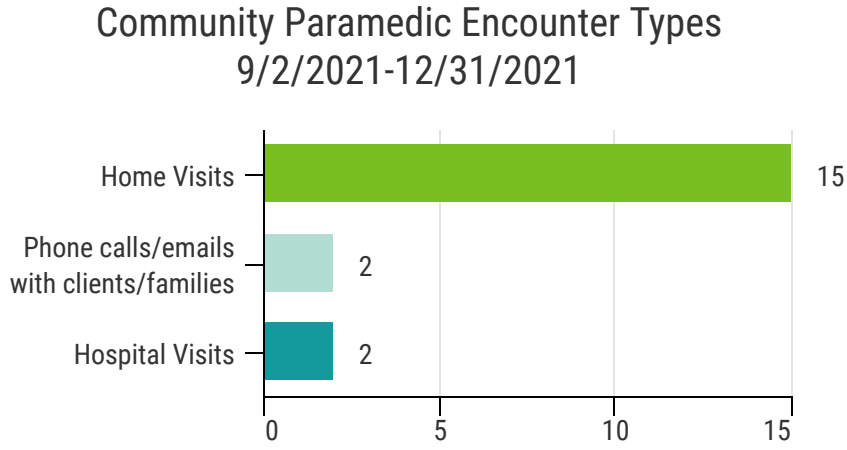


Community Nurse

1/1/2021-12/31/2021

Total Patients- 39

Total Visits- 622



Community Paramedic

***9/2/2021-12/31/2021**

Total Patients- 9

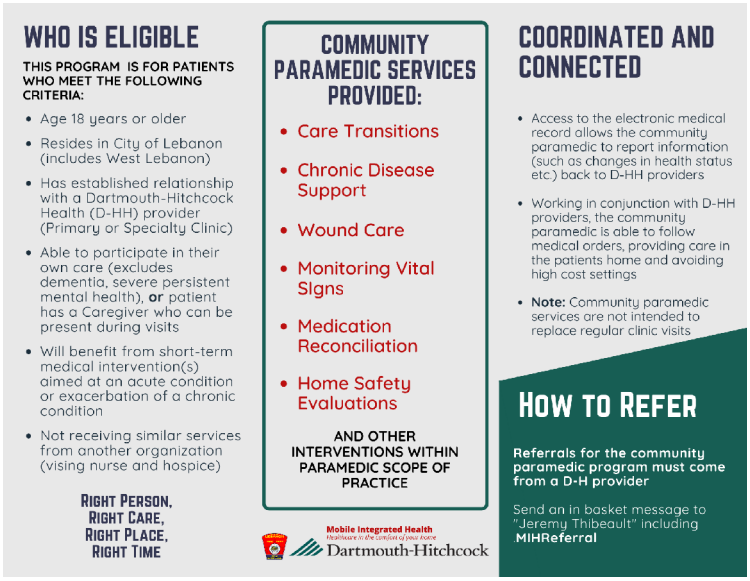
Total Visits- 19

***soft roll out of Community Paramedic began September 2021.**

Dartmouth Health

MIH Communications 2021

Program Trifold-



Patient Rack Card-

2021 Project Team

Barbara Farnsworth, MS, Director Community Health Partnerships, DHMC
Bryan L'Heureux, MPH, Community Health Partnership Coordinator, DHMC
Jeremy Thibeault, Firefighter/Paramedic, Lebanon Fire Department
Jim Wheatley, Firefighter/Paramedic, Captain at Lebanon Fire Department
Sally Kraft, MD, MPH ,Vice President Population Health DH
Tim Burdick, MD, MBA, Heather Road, DHMC
Tom Trimarco, MD, Emergency Medicine, DHMC

Mobile Integrated Health (MIH) 2022 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 medical direction and oversight of DHMC Emergency and Primary Care physicians, in collaboration with DHMC providers.

Quotes from Patient Satisfaction Survey

"Service is very helpful and informative."

"Great knowledge and perfect delivery."

"Easy to talk to and listens to me."

"Great job! Jeremy was extremely efficient."

Healthcare in the comfort of your home

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

Year 2 (2022) Program Objectives

- [x] 1. Increase volume of patients served over the first year
- [x] 2. Increase the number of appropriate referral sources over the first year
- [x] 3. Evaluate and respond to feedback collected in patient/provider feedback
- [x] 4. "Commit to continuous improvement through evaluation of patient and provider feedback"
- [x] 5. Consolidating lessons learned and create a toolkit to capture learning and disseminate to others
- [x] 6. Hold three advisory council meetings

2022 Project Team

Barbara Farnsworth, MS, Director Community Health Partnerships, DHMC
Cory Howarth, MSN, APRN, Heather Road, DHMC
Hilary Schuler, Community Health Partnership Coordinator, DHMC
Jeremy Thibeault, Firefighter/Paramedic, Lebanon Fire Department
Jim Wheatley, Chief at Lebanon Fire Department
Sally Kraft, MD, MPH ,Vice President Population Health DH
Tom Trimarco, MD, Emergency Medicine, DHMC

Dartmouth Health

Welcome Rachael!

Rachael McMillan joined the Mobile Integrated Health Team as a Lebanon Community Nurse in November 2022. Prior to accepting the position with the Lebanon Fire Department, Rachael completed her internship launching the Upper Valley LGBTQ+ Health Clinic, a program of Good Neighbor Health Clinic. She recently graduated with her Master of Public Health from SNHU in October, 2022. Having obtained her Bachelor of Science in Nursing in 2004, Rachael worked in inpatient nursing for 16 years, both at Dartmouth Hitchcock Medical Center and as a travel nurse, specializing in neuroscience nursing. As a resident of the Lebanon community, she's excited to join the team, and grateful for the opportunity to help improve population health in the area. When not keeping busy professionally, Rachael can be found spending time with family and friends, snowboarding, motorcycling, trail running and biking.

Lebanon Housing Authority Mobile Health Clinics

Lebanon Fire Department (LFD), the Lebanon Housing Authority, and the Dartmouth Health Aging Resource Center joined together to offer free blood pressure and blood sugar screenings at several Lebanon Housing Authority Locations. In addition to the screening, the goal of the program was for the LFD Mobile Integrated Health (MIH) team to identify any patients that could benefit from the program.

- 27 people were seen over 5 clinics.
- 2 were identified for community nurse services.
- 2 were identified to have needs that required rapid attention.

Through eDH and the relationships MIH staff has made we were able to contact the patient's providers and get them seen quickly.

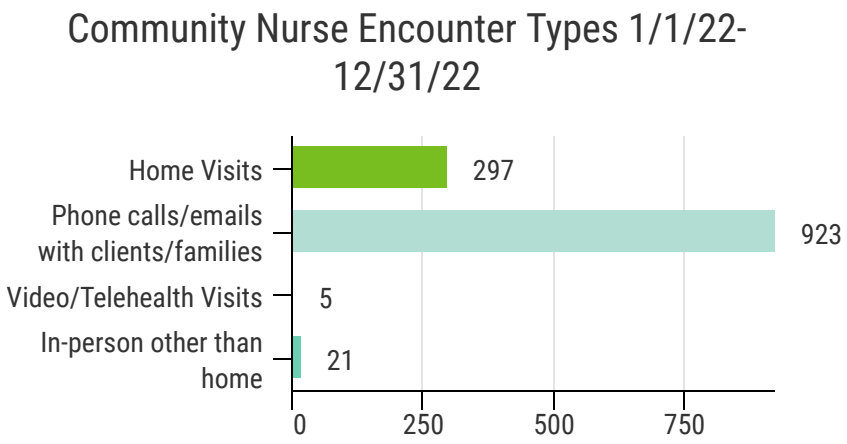
2022 Educational Presentations

In 2022, the Lebanon Fire Department (LFD) - Dartmouth Hitchcock Medical Center (DHMC) Mobile Integrated Health (MIH) team presented the program and its capabilities to a diverse group of healthcare, governmental, and community support organizations.

These organizations include the NH Governors Council on Primary Care Workforce, the New England Rural Health Association, the NH Bureau of EMS, the New England Infusion Center, NH and VT Elder Forum, White River Family Practice, Care Management at DHMC and Heater Road, APD Geriatrics, and General Internal Medicine Care Management.

Dr. Trimarco & Jeremy Thibeault at the New England Rural Health Association Conference

January-December 2022 Data

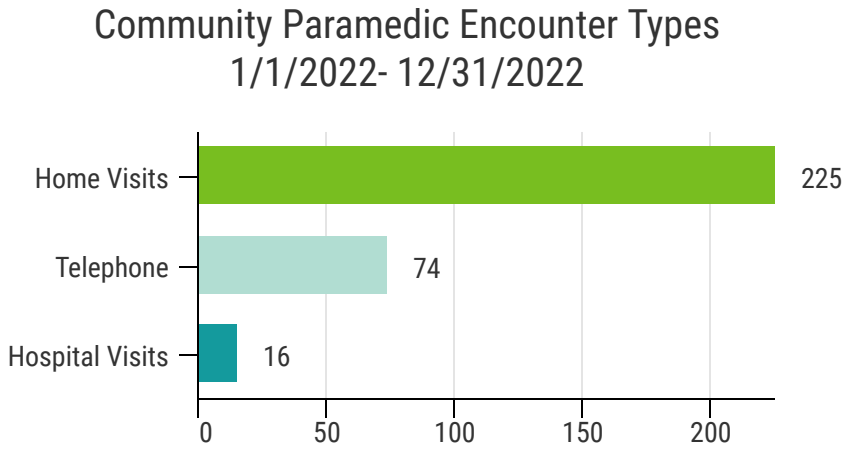


Community Nurse

1/1/2022-12/31/2022

Unique Patients- 92

Total Encounters- 1310



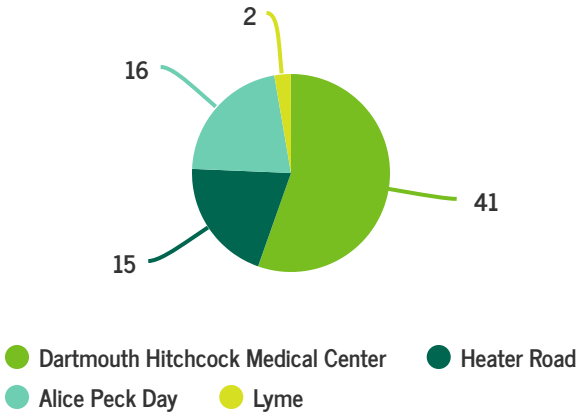
Community Paramedic

1/1/2022-12/31/2022

Unique Patients-53

Total Encounters- 315

Referrals by Facility 1/1/2022-12/31/2022



Referrals by Department 1/1/2022-12/31/2022