# Mobile Integrated Healthcare / Community Paramedicine Program in Vermont

# Final Report

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# Table of Contents

## Introduction and Project Summary

The Vermont Department of Health contracted with All Clear Emergency Management Group in August 2016 to assess the feasibility of a Mobile Integrated Healthcare / Community Paramedicine (MIH-CP) program in Vermont.  There were two main components of this project:

1. Conduct a baseline situation analysis of the current state of work being done in community paramedicine, mobile integrated health, and other non-traditional roles for EMS providers.

2. Conduct a gap analysis of program implementation and provide input on how to address the gaps within Vermont.

This report contains the baseline situation analysis, gap analysis, and recommendations for the Vermont Department of Health.

## Part I: Baseline Situation Analysis

To understand the baseline situation, the All Clear team conducted thorough research on existing healthcare statistics in Vermont and the gaps in the healthcare system within the state. Research included internet searches and data collection.

### Health in Vermont – A Snapshot

To understand the possibility of creating a MIH-CP in Vermont, All Clear stated with general research on some of the gaps in the current healthcare system in Vermont. Baseline statistics were gathered from state and federal websites.

The Health Resources and Services Administration (HRSA) established guidelines to assign Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs). See the HRSA MUA and MUP website for specifics. Here are the MUA and MUP in Vermont.
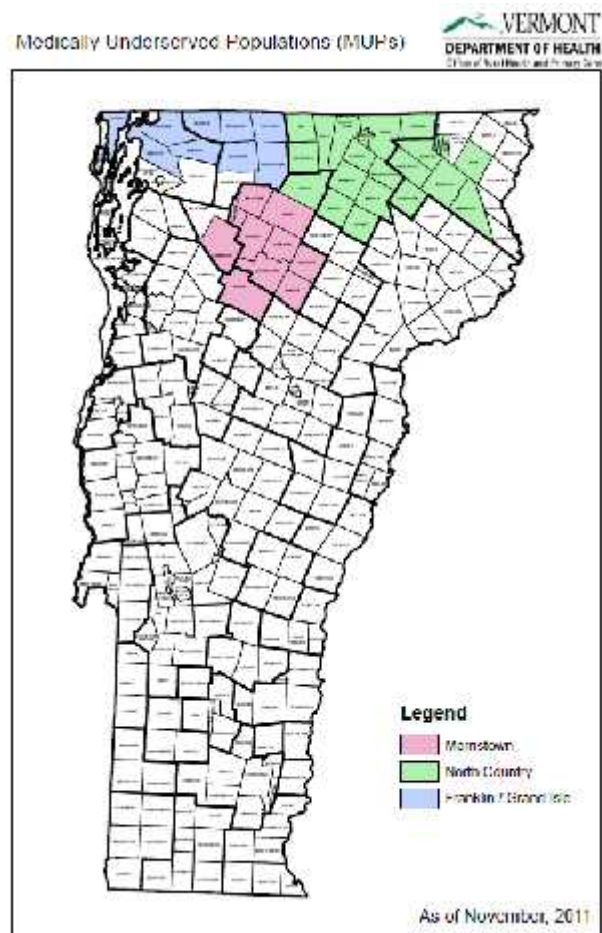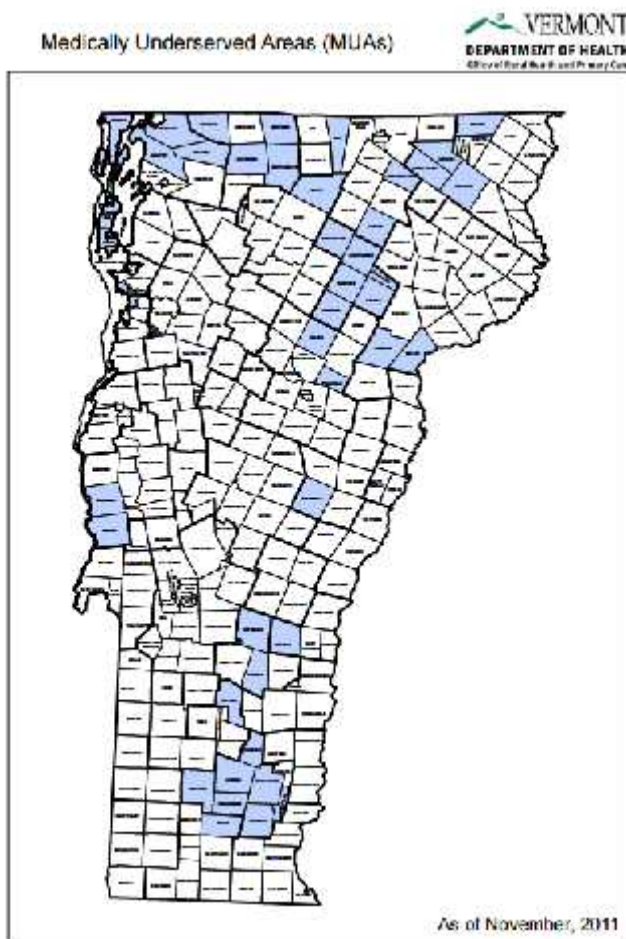
Exceptional Medically Underserved Populations (eMUP) are areas that may score more than 62.0 but have "unusual local conditions which are a barrier to access to or the availability of person health services." Areas like this can be assigned as eMUPs by the state Governor.

http://healthvermont.gov/rural/maps.aspx#snp
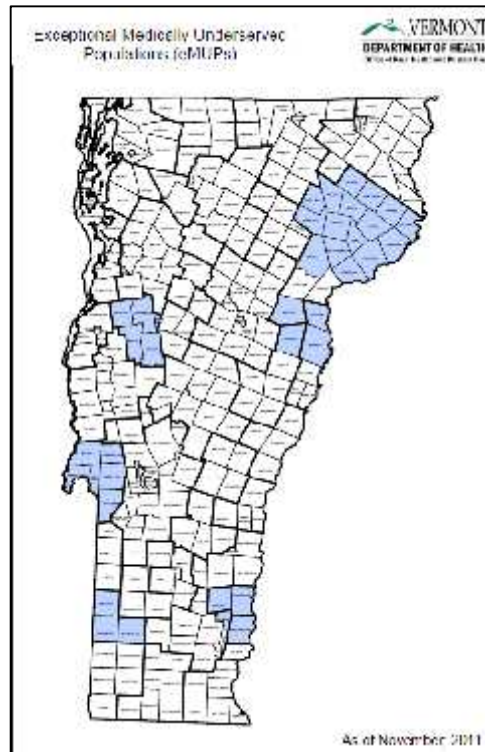
HRSA also defines areas that are Health Professional Shortage Areas (HPSAs) as areas with shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), population (e.g. low income), or facilities (e.g. Federally Qualified Health Centers). More about HRSA Shortage Designation.
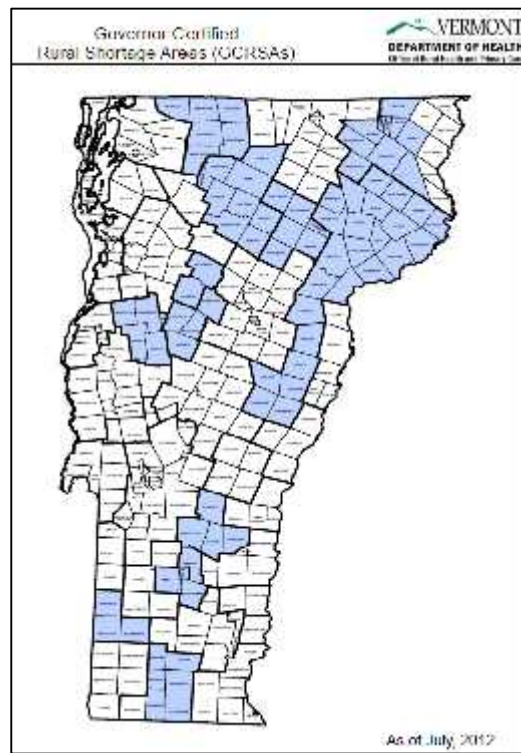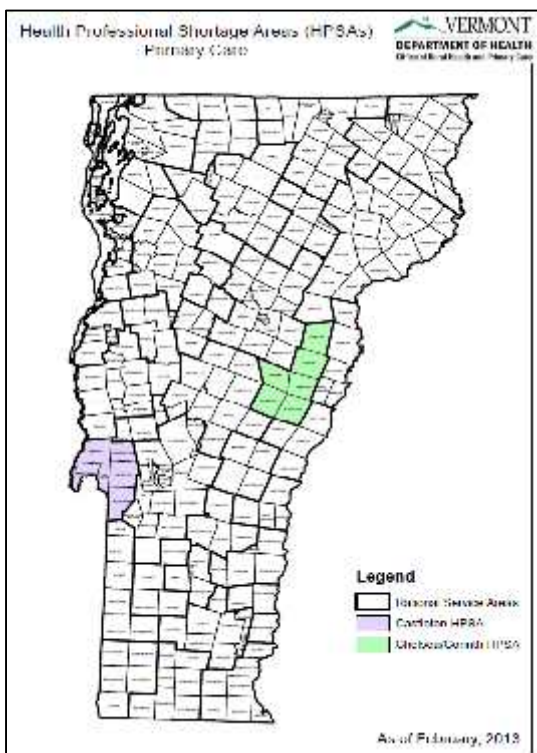
In addition to the HRSA definitions, it is important to understand the locations of health care facilities within the state. The map was created to show the locations of the FQHCs, MUA/MUP designations, and Rural Health Clinics. Hospitals were added as another layer.



2014 FQHC
Service Area Coverage
and MUA/P Designation
and Rural Health Clinic
(RHC) Locations[1]

(all have Facility-based Health Professional
Shortage Area (HPSA) designations)

Rural Health Clinics (total:12 sites)
● Battenkill Valley Health Center (1 Site)
● Community Health Centers of Burlington (5 Sites)
○ Community Health Centers of the Rutland Region (8 Sites)
○ Community Health Services of Lamoille Valley (4 Sites)
● Gifford Health Care (6 Sites)
● The Health Center (3 Sites) [3]
● Indian Stream Health Center (1 Site)
● Little Rivers Health Care (3 Sites)
● Mountain Health Center (1 Site)
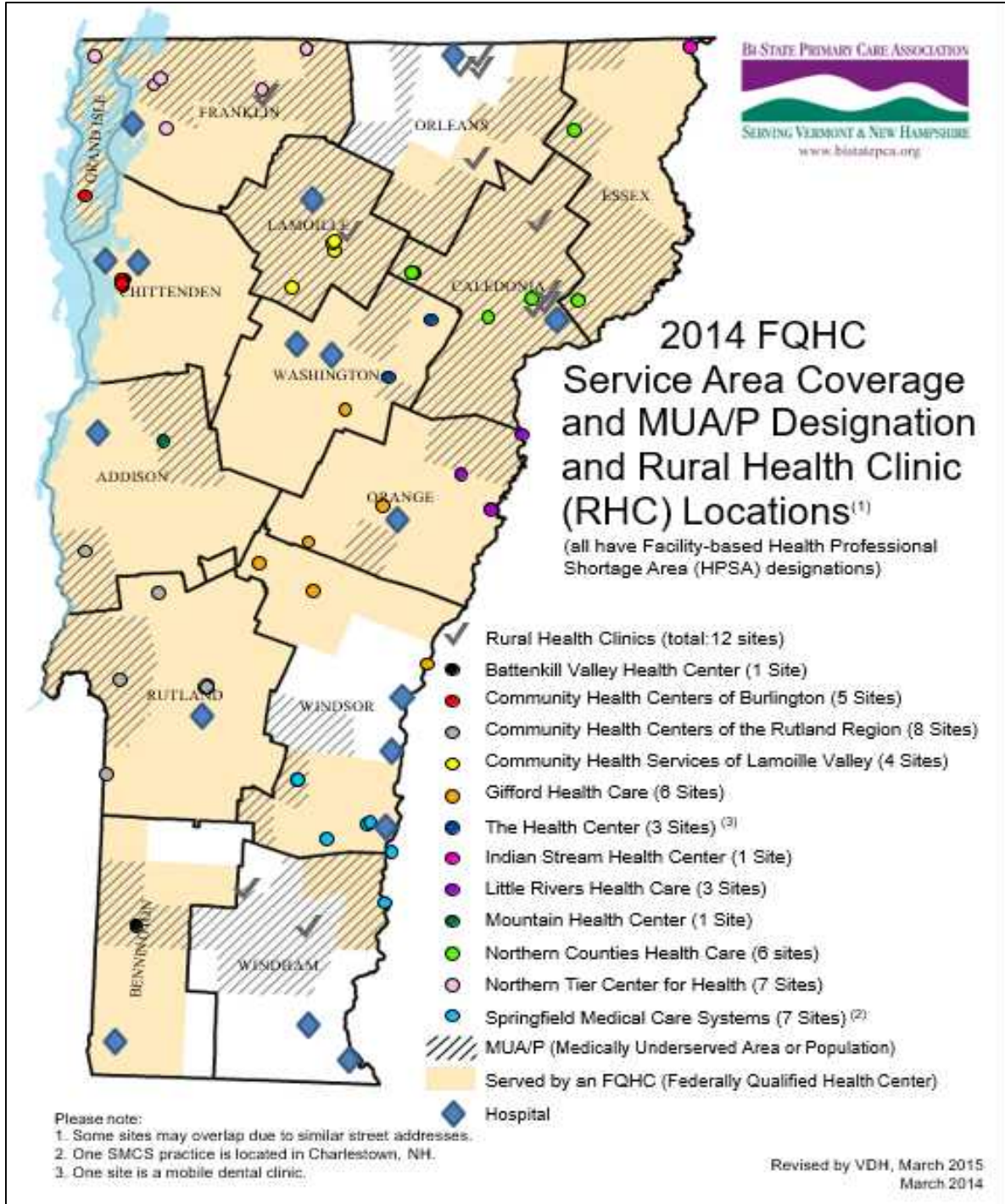○ Northern Counties Health Care (6 sites)
○ Northern Tier Center for Health (7 Sites)
○ Springfield Medical Care Systems (7 Sites) [2]
/// MUA/P (Medically Underserved Area or Population)
Served by an FQHC (Federally Qualified Health Center)
◆ Hospital

Please note:
1. Some sites may overlap due to similar street addresses.
2. One SMCS practice is located in Charlestown, NH.
3. One site is a mobile dental clinic.

Revised by VDH, March 2015
March 2014

http://healthvermont.gov/rural/documents/FQHC_map.pdf

The Social Vulnerability Index was also consulted as a baseline statistic on health in Vermont. The Overall Vulnerability is a combination of four themes: Socioeconomic Theme, Household Composition/Disability Theme, Minority Status/Language Theme, and Hosing/Transportation Theme.  See more about the Social Vulnerability Index (SVI).
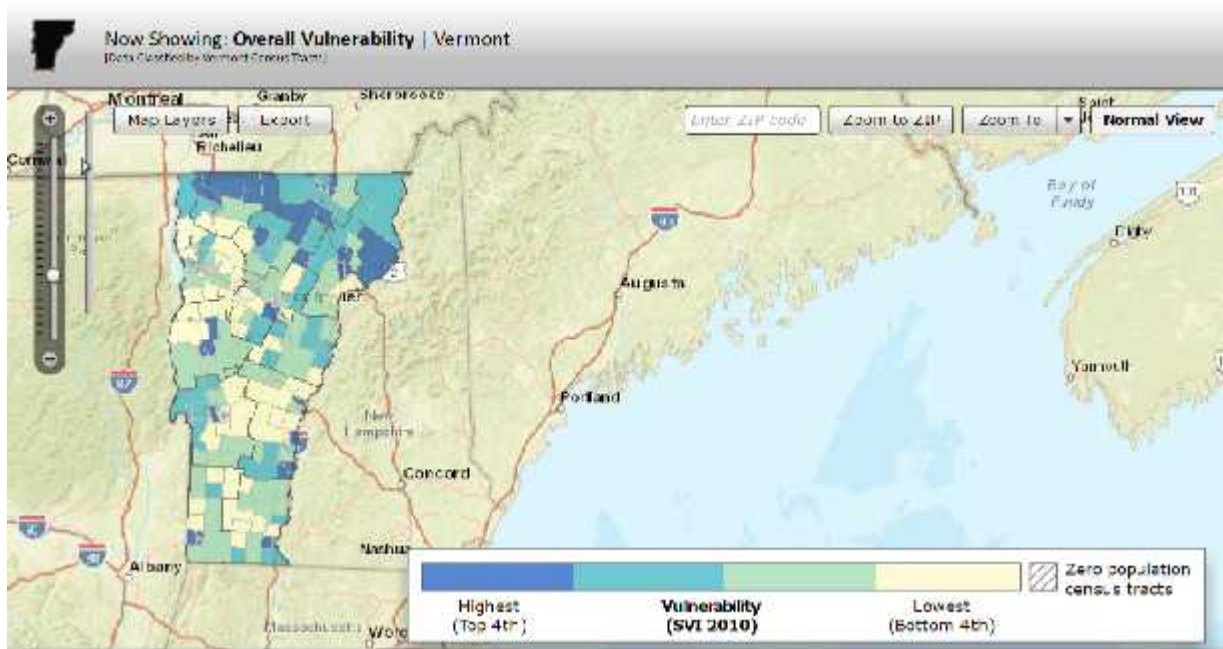


The Household Composition/Disability Theme for Vermont is shown below.  This index includes households that self-identify as over 65 years of age, under 17 years of age, or with a disability.
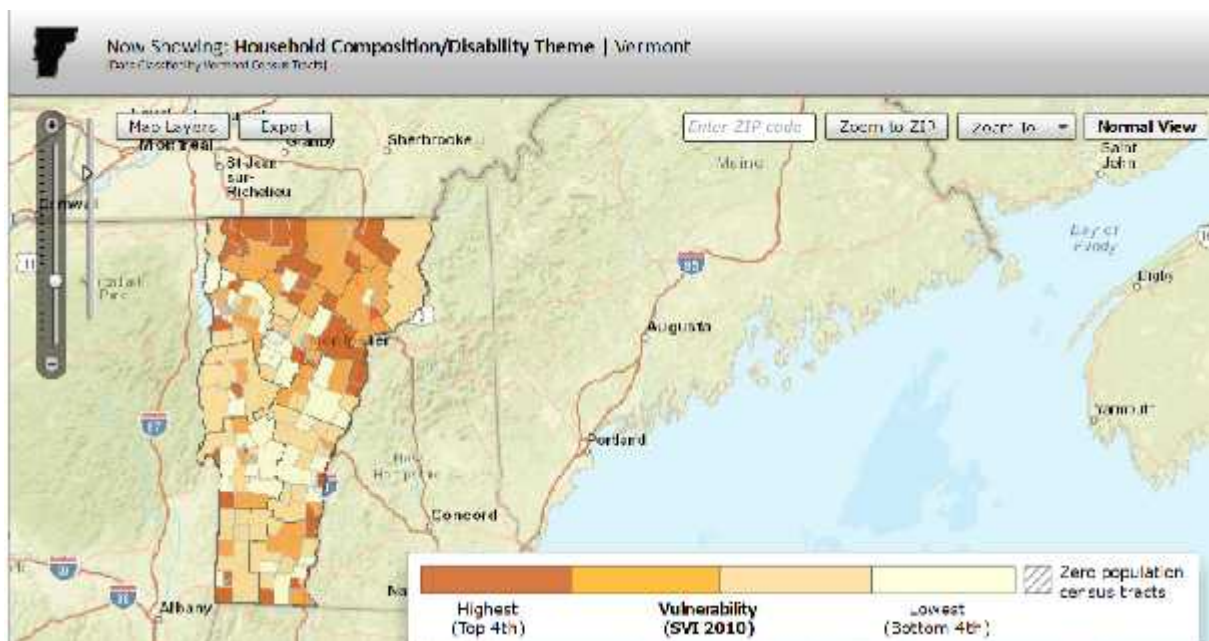
## Training / Focus Group Responses

After sharing some of the above graphs, the training/focus groups were asked to describe gaps in the healthcare system in their community. They reported:

- Access issue for much of the state: disability, travel distance and geography, lack of physicians, lack of appointments. Specialties are only in Burlington and difficult for much of the state to access. "Doc in a box" options have been the only source of healthcare. When patient leaves the hospital, they have to be seen by primary care but primary care services are at capacity.
- Vermont has many healthcare systems (acute care, hospice, mental health, specialty systems) that are not integrated and overlap. Most are not for profit.
- Mental health (from depression to addiction) is one of the biggest needs across the state.
- Access to primary care for preventative appointments and for post-discharge follow-up. Patients can wait a long time for an appointment.
- Information sharing in the "healthcare system" is a gap. Communication, data collection, sharing patient records and real time data with MDs.
- Demographics – people getting older and need for services is changing.
- Gaps in care for certain populations: veterans, transient/homeless, farm workers, non-English speaking/limited English speaking populations.
- Staffing challenges in already stressed system – limited capabilities, recruitment problems for all providers and clinicians, credentialing causes problems, regulations and training requirements.
- Hospitals are trying more "transitions of care programs" to have VNA or other nurses' follow-up with patients to prevent readmission.
- Healthcare Literacy – patients don't know the system, what resources they can access, or how to access them. Many patients don't comply or don't understand instructions for new medications.
- Social services in some communities are very disjointed.

The training/focus groups were then asked to describe gaps in the current EMS system. They reported:
- About the system:
  - 365 paramedics, 600+ EMTs statewide (ratio in each agency varies).
  - 80 – 90 ambulance services in the state (3-4 private, for profit).
  - Full-time paid staff and volunteer responders.
  - Different levels of care response, patient may get any level of care and it may not be the right level.
- "Finite number of resources for a potentially infinite number of requests/calls. EMS can't preplan."
- Dispatch is not centralized (Shelburne dispatch dispatches 55 agencies with one person) which can cause a delay in response. Too many agencies being dispatched from one place – difficulties with getting the right address in the right city. Currently, dispatch service is free.

- EMS doesn't know the role of the Visiting Nurses/Home Health and what services they provide or can provide.
- EMS responds to calls each day that are "inappropriate" but there is nobody else.
  - Patients don't have transportation, so the call 911.
  - Patients rely on EMS so they can be seen (cheaper for ambulance ride than for taxi).
  - Non-emergency calls but cannot transport the patient to another medical provider so they do to the ED.
  - Lift assist calls.
  - Patient can't get a primary care appointment so they call 911.
- EMS providers are ground zero but lack of ability and tools to provide to people in homes. EMS is one answer in the continuum to address gaps in healthcare.
- Staffing and recruitment of EMS providers: limited number, pay and benefits are not sufficient, training requirements are difficult to attend and maintain skills. Many EMS providers work on more than one service. Volunteerism is decreasing, but is vital to response.
- Difficult to effectively manage mental health patients. Limited options so EMS transports to ED.
- Liability of EMS – who is willing to take on the risk to say you don't need to go to the hospital?
- Revenue, costs, and reimbursement. Typically, EMS is not reimbursed if they do not transport. There is a difference in the cost of materials vs. reimbursement. Small town EMS is struggling to be financially viable so they look for ways to generate revenue in downtime to be less reliant on taxpayer funds. Call volume is right on the edge of financial viability for small agencies.
- Business model needs to change – revenues for fee for service.
- Shortage of medical control staff and knowledge of Vermont protocols.

## Summary

A general analysis of the maps and data above paint an interesting picture of the current healthcare system in Vermont and provides some idea of how a MIH-CP program can help fill the gaps in community health. Primarily, the northern part of the state has been designated as a MUA/MUP, a HPSA, and is listed as the "highest vulnerability" in the Social Vulnerability Index. The central and southern parts of the state do not report as highly vulnerable. In addition, the Governor of Vermont has identified several areas of the state outside of the northern part as eMUP and Rural Shortage Areas.

There were also some themes brought out in the training/focus group discussion. Specifically, limited access to primary care, staffing shortages, and transportation issues were mentioned in all sessions. Additionally, EMS systems across the state face day-to-day challenges with staffing and recruitment, non-emergent calls that tie up resources, and the constant threat of financial viability (especially in the smaller services).

# Part II: Gap Analysis

With a baseline understanding of the healthcare system in Vermont and the potential gaps, All Clear could move to the next phase of the project: a broad-spectrum search for current MIH-CP programs and ways that other models could be applied in Vermont.  After this research, four models were selected to present to each of the training/focus groups.

## Mobile Integrated Healthcare – Community Paramedicine Resources

The All Clear team did extensive research on current MIH-CP programs that are currently operating within the United States and in other countries.  Below is a select number of resources about the creation and the benefit of a MIH-CP program.  See Appendix 1: Works Cited for full citations.

1. ***Rural and Frontier Emergency Medical Services: Agenda for the Future* from the National Rural Health Association (2004)**

   "The Vision: The rural/frontier emergency medical service (EMS) system of the future will assure a rapid response with basic and advanced levels of care as appropriate to each emergency, and will serve as a formal community resource for prevention, evaluation, care, triage, referral and advice. Its foundation will be a dynamic mix of volunteer and aid professionals at all levels, for and determined by its community."

2. ***State Perspective's Discussion Paper on Development of Community Paramedic Programs* from the Joint Committee on Rural Emergency Care (December 2010)**

   The concept of community paramedicine represents one of the most progressive and historically-based evolutions available to community-based healthcare and to the Emergency Medical Services arena. By utilizing Emergency Medical Service providers in an expanded role, community paramedicine increases patient access to primary and preventative care, provides wellness interventions within the medical home model, decreases emergency department utilization, saves healthcare dollars and improves patient outcomes. As the Community Paramedicine model continues to be adopted across the country, states and local communities need assistance in identifying common opportunities and overcoming challenges. This discussion paper offers insight into the historical perspective and future considerations for Community Paramedicine programs. As well, it advocates for the development of an implementation guide for states.

3. ***The Evidence for Community Paramedicine in Rural Areas: State and Local Findings and the Role of the State Flex Program* from the Flex Monitoring Team at the University of Minnesota, University of North Carolina at Chapel Hill, and the University of Southern Maine.  (February 2014).**

   Community paramedicine is a quickly evolving field in both rural and urban areas as Emergency Medical Services (EMS) providers look to reduce the use of EMS services for non-emergent 911 calls, overcrowding of emergency departments, and healthcare costs.

In rural areas, community paramedics help fill gaps in the local delivery system due to shortages of primary care physicians and long travel times to the nearest hospital or clinic.

This study examined the evidence base for community paramedicine in rural communities, the role of community paramedics in rural healthcare delivery systems, the challenges faced by states in implementing community paramedicine programs, and the role of the state Flex programs in supporting development of community paramedicine programs. Additionally, this briefing paper provides a snapshot of community paramedicine programs currently being developed and/or implemented in rural areas.

4. *Fire Based Mobile Integrated Healthcare and Community Paramedicine – Data and Resources* **from the National Fire Protection Association (May 2016)**

The concept of Mobile Integrated Healthcare and Community Paramedicine (MIH & CP) has been existing for quite some time, but more prevalent in other countries around the world than in the United States. The primary purpose of MIH & CP programs is to provide more healthcare services directly to patients on location and to minimize trips to the hospitals. Ever since the existence of the Fire departments, they have been attending the medical emergencies along with their role in emergency responses. Many EMS services rely on Fire departments in order to easily reach out to the communities. The main objective of this project is to show where mobile integrated healthcare and community paramedicine (MIH & CP) is being used in the USA, what information is available from those communities, and document a report so as to help NFPA technical committee of EMS-AAA develop a document relating to Fire based MIH & CP systems. Information about this value based healthcare practice with a focus on Fire department based programs are collected and reported based on a thorough literature review.

5. *Mobile Integrated Healthcare and Community Paramedicine* **from the National Association of Emergency Medical Technicians (2015)**

Over the past several years, two new types of patient care offered by EMS agencies have generated tremendous interest within EMS and the wider health care community. Called mobile integrated healthcare and community paramedicine (MIH-CP), many believe these innovations have the potential to transform EMS from a strictly emergency care service to a value-based mobile healthcare provider that is fully integrated with an array of healthcare and social services partners to improve the health of the community.

This report gives insights on the development and characteristics of these innovative healthcare initiatives and shares data from a national survey in 2014 of programs currently operating in the United States.

## The Training / Focus Groups

As a deliverable for this project, five training/focus groups were conducted (four in person and one virtually) to gather input from critical stakeholders within the state about a MIH-CP program in Vermont.  Locations were chosen around the state to ensure a wide array of attendees from all areas.

| Location | Date | Number of Participants |
|---|---|---|
| Essex | August 9, 2016 | 14 |
| Newport | August 10, 2016 | 8 |
| Rutland | August 11, 2016 | 8 |
| Brattleboro | August 12, 2016 | 4 |
| Virtual Meeting | August 16, 2016 | 11 |
| | TOTAL: | 45 |

To begin, the training/focus groups began with a discussion of the current gaps in healthcare and EMS system in Vermont (noted above).  The second portion of the s was to discuss four case studies of actual MIH-CP programs that are operating and the pros and cons for each.  The case studies were chosen were chosen because they are established programs, have target areas that are common to many MIH-CP programs, and have different methods in place to make their programs a success.  Finally, each group was asked to rank target areas with specific attributes.

## Case Study 1: Eagle County, Colorado

Eagle County, Colorado began their Community Paramedic program in 2009 with grant funding.  When the program started, the rural county reported 30% of their population was uninsured, while 54% of the population was uninsured for ambulance rides.  In addition, there were limited social services, especially for the elderly and for mental health.  From this, a partnership was formed with Eagle County Health Department to use paramedics to target these underserved populations.  Their approach was two-fold: 1) provide primary care services in the patient's home (with a physician's order) and 2) provide preventative services in conjunction with the local health department (vaccinations, disease investigations, etc.).

Based on a curriculum from the North Central EMS Institute, Eagle County Paramedics Services attended a 12-week course to learn about primary care, disease management, prevention and wellness, and oral and mental health.  Eagle County only uses Paramedics in their program.

See the Eagle County Paramedics website for more on their program or the Western Eagle County Community Paramedic Program Handbook for more details.

## Case Study 2: MedStar in Fort Worth, Texas

MedStar is the EMS provider for Fort Worth, TX and 14 surrounding communities.  In this urban area, there was an abundance of 911 calls from a small group of frequent callers and a prevalence of calling EMS as a safety net.  In 2009, they began a program that used Mobile Healthcare Providers (MHPs) to contact these frequent callers and create a specific care plan for each of them.  Patients in the program receive regularly scheduled home visits from the MHP to provide a medical assessment, ensure the patient is taking medications properly, and refer the patient to other services as needed.

From here, the MHP program grew to include several programs to address gaps in the healthcare community.

- Nurse Triage Line:  Low acuity callers are re-routed to a nurse to find the correct resources for their medical issue.

- "EMS Loyalty" Program: Frequent 911 callers are enrolled in a program to have MHP visit them on a regular basis.

- Re-Admission Avoidance: patients at risk for readmission are referred to the MHP program to assist the patient and family on care management.

- Hospice Revocation Avoidance: Hospice agencies identify patients and families that may be at risk for hospice revocation for an emergent ED visit.

- Observation Admission Avoidance: MHPs work with physicians to identify patients that may be admitted to "observation" status.  MHPs can do an overnight home visit and coordinate the transition of care back to the patient's PCP the next day.

- Home Health Partnership:  Collaboration with the agency for effective, after-hours care if an agency patient calls 911.  The MHP and the agency on-call nurse can work together to ensure the patient gets the right care.

For more about the MedStar model, see their Mobile Healthcare website.

## Case Study 3: Abbeville County, SC

Abbeville County is a rural county in South Carolina.  By using paramedics in an expanded role but within their current scope of practice, Abbeville County is providing non-emergency, low-acuity care consistent with the Medical Home model.  There are three main goals of the program in Abbeville:

- Strengthen Primary Health Care delivery system

- Implement Change in patient outcomes and reduce healthcare costs by reducing non-emergent 911 calls, reduce non-emergent ED visits, and reducing hospital re-admissions

- Meet Unmet Healthcare Needs

The program began with grant funding and includes partnerships from Abbeville EMS, Abbeville Medical Center, the South Carolina Office of Rural Health, the Duke Endowment, and the South Carolina Department of Health and Environmental Control.   The three community paramedics in Abbeville are paramedics and work their regular EMS shifts on top of their CP role.  Each has attended a 12-week course (the same course that Eagle County attended).

See the Abbeville Blueprint for more details.

## Case Study 4: St. Cloud, MN

CentraCare is the predominant healthcare system in central Minnesota, covering many rural counties with hospitals, clinics, and other healthcare services.  In 2013, CentraCare hired a community paramedic as a pilot program to work within their system.  To begin, CentraCare identified the top 25 frequent users of the ED, all of whom had behavioral health and/or substance abuse problems that brought them to the ED.  The first task of the community paramedic was to work with these patients to reduce their use of the ED.  Part II of their CP's role was to use the CP to visit patients at risk for re-admission, specifically with chronic diseases like COPD and diabetes.  As an employee of the system and based in a primary care clinic, the CP is part of the care team and has a direct link to the physicians and to the patient.  The CP also works daily in the clinic and receives referrals from the physician for patient visits.

## Three Target Areas: The Pros and Cons

Based on these models and research of other MIH-CP programs, three target areas emerged as common threads:

1. Improve access to care (primary and preventative care)

2. High 911 Users

3. Patients at risk for Re-Admission/ Post-Discharge follow-up

Each training/focus group discussed these target areas, the pros and cons to each, and how a MIH-CP program could address the gaps in the healthcare system.  The minutes and attendees for each group are added in the Appendices. The information below is a summarization of comments from all groups.

1. Improve Access to Care

| PROS | CONS |
|---|---|
| • Matches right care with right patient. Helps patient manage their own health (chronic disease, age in place) in their own space.<br>• Address the delay in referrals.<br>• Could possibly fill home health gap if patients don't qualify or decline. EMS may be able to visit before the RN.<br>• More integrated healthcare system at all levels of healthcare: EMS, PCP, hospitals, VNA, and public health.<br>• Can be customized to local gaps.<br>• Could be used like Fire prevention = EMS prevention<br>• Could identify other issues in the home or spouse at the same time. Referral to social services.<br>• Build patient relationships. Psychological first aid and to show someone cares.<br>• Educate patients on access to healthcare system and services.<br>• Lower healthcare costs.<br>• Better resource management – right resource at the right place.<br>• Prevent readmission and address acute concerns before they get too bad.<br>• Job creation for EMS<br>• Gain staff experience<br>• PH: This would assist us in epi, can quickly identify diseases for reporting | • Have to staff more positions in a service that is already understaffed (EMS).<br>• Financial concerns<br>   ○ Start up and sustainability costs<br>   ○ Expanding access costs more – personnel, vehicles, supplies.<br>   ○ Reimbursement – Medicare/Medicaid vs. private insurance coverage.<br>   ○ Fewer transports means less reimbursement for EMS.<br>• Potential duplication of services.<br>• Training is needed – EMS could walk into a situation they are not prepared for.<br>• Can this actually make a measurable difference? How many visits can MIH-CP make in a larger area?<br>• How does this support the mission of EMS?<br>• Need physician oversight/medical control.<br>• Liability of physicians in charge of the patient.<br>• Need a data collection and sharing patient information process for all providers.<br>• Communication across the services – VNA knows about the patient, but EMS may not, no continuity of care – care coordination needed.<br>• Marketing of the program – making it available to the right people, education.<br>• Egos – you cannot play in my sandbox, jurisdictional boundaries; EMS services, VNA, stakeholders for funding.<br>• Legislation and understanding the scope of practice. |

2. High 911 Users

| PROS | CONS |
|---|---|
| • Get patients the right care in the right place (the ED is not always the right place). <br> • Big impact for hospitals/EDs. <br> • Nurse Triage line is a great idea. <br> • Reduce number of non-emergent 911 calls so EMS resources can be used more appropriately (less use of mutual aid). <br> • Patient satisfaction – care right in the home. <br> • With training, EMS can hand out/describe other resources are available to patients. <br> • Increasing the linkages between home health, mental health, ED, PCPs, and EMS. <br> • Build relationships with patients. <br> • Most are frequent fliers because there is another social gap. Find this and refer services. <br> • Saving resources for the real emergencies. <br> • More staff training/access to skills/practice. | • It takes the right employee to do this job. Can we find them? <br> • Reimbursement/payment if there is no transport for this visit. <br> • Information sharing – what is the record keeping process? Role of the EMR? <br> • Who holds the liability? <br> • Patient compliance. Patient still needs to take action to take referral to services. <br> • Some people just want to go to the ED. <br> • Business competition. <br> • Threat of misdiagnosis and liability. <br> • Would need more personnel. <br> • Is there abuse of the CP? If short staffed today, use the CP as our back up. Will they get to CP duties? |

3. Patients At-Risk for re-Admission / Post-Discharge Follow-up

| PROS | CONS |
|---|---|
| • Families/Patients can have clear resource for questions after discharge. <br> • Good for patients that may not qualify or decline VNA. Or after VNA visits end. <br> • Managed care and accountable care benefit for hospitals. Hospital could be a source for funding for MIH-CP programs. <br> • Some of these items are the "simplest" services and don't expand the scope of what they do currently. <br> • Could identify other issues going on and make referral to home care or other services. <br> • Could be a victory for both home care and EMS. <br> • Hospitals never have enough bed space. Seem to discharge patients "sicker". <br> • Patient and family benefits - don't have to go back to hospital/clinic. <br> • Decreased healthcare costs. <br> • Decreased trips to the hospital – EMS transport. <br> • Hospital benefits. <br> • Help with patient education and resources. | • EMS can't currently bill for the small services, but saves the readmission on hospital side. <br> • Cost – how do you make this billable service? <br> • Rules changes needed from Vermont EMS office – administrative changes to allow EMS to change scope of practice. <br> • Corporate liability. <br> • Each organization would need to combine lobbyists to get this through the legislature. <br> • Regulation would need to change (state vs. federal regulation) <br> • Increased liability <br> • Good documentation needed, patient sign a release <br> • Need sharing of information to make this workable <br> • Abuse of the system – not getting appropriate level of care <br> • How do you keep the CP current in training? <br> • Who is going to provide the medical control? |

| BENEFITS OF MIH-CP PROGRAM | CHALLENGES IN CREATING MIH-CP PROGRAM |
|---|---|
| <ul><li>Improve community health.</li><li>Improving patient care and satisfaction, reducing cost, and unnecessary ambulance transports. Decreasing burden on emergency departments.</li><li>Provide education and ability for patients to provide care for themselves.</li><li>Enhance a trusted agency rural communities.</li><li>Better access to care, reduction of overall healthcare costs.</li><li>Help people who are in need of better access to care. Help link people to care. Provide care to those w/o other services.</li><li>Gap services. Addressing the needs of the community.</li><li>Lower cost of healthcare delivery.</li><li>Patient education, better use of resources.</li><li>Access to care for folks who are not covered by home health or other services.</li><li>Team approach to improve healthcare in our community.</li><li>Alleviate the large gap that is consistent between providers of all levels and different resources.</li><li>Beginning of addressing MIH-CP issue in VT.</li><li>Collaboration of efforts and resources.</li><li>EMS is already responding to many of the folks this would benefit. Maybe this would and participating job satisfaction etc. maybe this is the right fit for the aging EMS providers or light duty providers.</li></ul> | <ul><li>Redundancy and training - trying to make paramedics into primary care providers when VNA services in place.</li><li>Funding and buy in from other agencies.</li><li>Funding and staffing. Working alongside with agencies. Not stepping on toes-have health - agencies already doing some of this.</li><li>Getting everyone together to play well in the sandbox. Getting the proper training. Getting appropriate funding.</li><li>Payment. Avoiding duplication of services.</li><li>Cost, training, manpower, relationships with other agencies. (E.G. VNA)</li><li>EMS workforce not consistent. Heavily relies upon volunteers so assuring reasonable expectations along with clear and consistent communication and governance are critical.</li><li>Addressing social determinants of health. Payment, resources - human; equipment.</li><li>Cost. Burden to physicians. Communications. Risk of duplication of service. Blurring of scope of practice.</li><li>Cost and communication.</li><li>Regulations, available staff on all levels to do and money!</li><li>Finances. Reimbursement vs. funding.</li></ul> |

## The Training / Focus Group Observations

As each training/focus group concluded, participants were asked to share their observations from the session.

- This was a good first step at looking a model. Everyone is interested in it, but scared and insecure. This is a big project and we leadership and champions.
- Be cautious and realistic of education requirements to help recruit staff to be a part of this program. What are the other alternatives? What is available in Vermont?
- State level leadership needed on information sharing – don't know anything on the hospital side of patient health records, not good at information exchange; primary care is not connected.
- VDH needs to create framework for MIH-CP program:

- o Protocol with a minimum for standards, information sharing, reporting data, recording data
  - o Define medical control (not typical EMS medical control, but from primary care, cardiology, etc.)
  - o Stipulate education requirements for all EMS levels to be a part of this program
  - o Leave it open for local programs individual needs
  - o Promote coordination with local hospital and other services – mental health, home health, primary care
  - o VDH/EMS needs to integrate with other state agencies – include sister departments
- Glad VNA is here, worried about duplicating services.
- Glad to find out that Vermont EMS is looking at different models and not trying to implement a model from top down. Allowing for local flexibility.
- This program going forward as a huge collaboration between all the agencies, mobile healthcare club, fairly centralized working in close collaboration with ER, home health, hospice, EMS to take care of our patients in the entire county. Not an individual agency project, a group project.
- Primary care and others need to be involved – planning and implementation phase is going to be significant. Turn it on in baby steps and not all at once.
- Need to collect data before we even start and through the process. Don't know what the data is yet, but there is a need and very important.
- Potential to align hospital quality measures and other regulatory requirements.
- More information on reimbursement rates and financial information.
- Nationally this is the movement – Vermont shouldn't ignore it.
- Everybody realizes every region is different; some communities collaborate better than others.
- EMS is really inexpensive for our level of training. Can we sell ourselves as a low cost solution with good ROI?
- We need to make this sustainable to keep it going.
- Professional development to make the certification a national curriculum.
- We would have some staff interested – it is not across the board; It's all about people. How do we identify people to serve as CPs?

## Summary

After a comprehensive research process was completed, four current MIH-CP models were chosen to be included in the training/focus groups. These four programs provided a different way of addressing specific gaps within their community's healthcare system, and each model used EMS in a different way to address those gaps.

As the pros and cons of each were deliberated during the training/focus groups, a few commonalities appeared across the groups.

- Training/focus groups were all very interested in the idea of a MIH-CP program and how it could help address healthcare gaps in their community.

- There cannot be a "one size fits all" MIH-CP program in Vermont.  There are enough differences between regions that will prevent the success of a standard program.

- Program finances and sustainability were concerns raised by all groups.  This needs to be part of the early program development.

- All groups were cautious of duplication of services and having an impact on another agency's business.  By understanding and targeting specific community health gaps, there is a possibility to create an MIH-CP program that doesn't duplicate services.

- Attendees all appreciated the training/focus groups and the ability to give input in the beginning stages of this project.  They recognize that this will take work and time, but they are all interested to see how Vermont can move forward with a MIH-CP program.

## Part III: Recommendations

Based on the work during this project, All Clear would like to offer some suggestions for future planning efforts and projects.

1. Continue to gather more stakeholder input in the early stages of MIH-CP development. Specifically, reach out to:

   - Primary care practices, especially in rural areas.
   - Hospital representatives and ED case workers across the state. Include specific invitations to hospital within larger systems.
   - Interview patients to include the patient perspective on gaps in healthcare and their challenges.
   - Other sister agencies in the state.

2. Find champions from primary care, hospitals, and EMS to create a "Steering Committee" for MIH-CP implementation and advocacy across the state.

3. VDH needs to create a state framework for the creation and implementation of the MIH-CP program.

   - Acknowledge the program may be different across the state and should be tailored to fit community needs.
   - Engage other state agencies for integration and support.
   - Set a protocol for minimum standards of education/training, information sharing, and collecting and reporting data.
   - Define medical control.
   - Promote coordination with local hospitals, clinics, home health, mental health, and all areas of healthcare.
   - Determine the process for funding and reimbursement of an MIH-CP program.
   - Create and implement legislation as needed to support MIH-CP program.

4. Create a series of MIH-CP pilot programs in various locations across the state. Look at programs in California and Maine as programs to evaluate and potentially emulate.

5. Use the Evaluation Tool provided by HRSA to determine status benchmarks and performance indicators for each MIH-CP program. The tool also addresses a variety of community health and public health interventions to improve the overall health of the community.

# Appendices

## Appendix 1: Works Cited

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## Appendix 2: Meeting Minutes from Essex

**Community Paramedicine / Mobile Integrated Healthcare Training / Focus Groups**
**August 9, 2016 – Essex**
**Minutes**

Attendees:
Dan Batsie – VDH
Jim Bundis – VNA of Chittendon
Stephanie Busch – VDH
Jared Grenon – Burlington FD
Maureen Hoague – Colchester Rescue
Chris LaMonda – Barre Town EMS
Dan Manz – Essex Rescue
Clay O'Dell – Upper Valley
Mike O'Keefe – Essex Rescue
Clement Roger – AmCare Ambulance
Stephen Sandborn – Upper Valley
Leo Wermer – South Burlington/Essex
Laura Werner – VDH
Monica White – DAIL
Michael Wright – CALEX Ambulance

Facilitated by Jenny Schmitz and Ginny Schwartzer

I.  Introduction
    a.  Project Overview
    b.  Goal and Objectives
    c.  Definitions
    d.  Snapshot of Health in Vermont
    e.  Community Health Needs
        -   Few hospitals and a few physician offices in the north part of VT. Chittenden county is the richest healthcare resources in the state. Disparity in access across the state.
        -   Access issue for much of the state: disability, travel distance, lack of physicians, lack of appointments. Patients rely on EMS so they can be seen (cheaper for ambulance ride than for taxi). Specialties are in Burlington only and difficult for much of the state to access.
        -   Vermont has many healthcare systems (acute care, hospice, mental health, specialty systems) that are not integrated and overlap.
        -   EMS providers are ground zero but lack of ability and tools to provide to people in homes.
        -   Home health covers all these areas. Vermont has designated agencies provide a web of services. Medicare and Medicaid qualify for home health services.
        -   Mental health (from depression to addiction) is one of the biggest need across the state. Lack of services, boarding patients in the ED, and patient non-compliance with medications or don't take care of themselves.

    Gaps in the EMS System
        -   About the system:
            -   365 paramedics, 600+ EMTs statewide (ration in each agency varies)

- 80 – 90 ambulance services in the state (3-4 private, for profit)
- Full-time paid staff and volunteer responders
- Different levels of care response – you may get any level
  - Ability to effectively manage mental health patients. Limited options so EMS transports to ED.
  - Staffing and hiring challenges – all agencies fight for the same pool of people
  - Dispatch is not centralized (Shelburne dispatch dispatches 55 agencies with one person) which can cause a delay in response.
  - Mutual aid program is strong (agencies help each other out)
  - EMS responds to calls each day that they are not right for but there is nobody else.
  - Patients don't always know what social services are available to them or how to access. Some patients are unwilling to take the step to reach out for help or comply with healthcare programs.
  - Role of Law Enforcement: Laws haven't been updated to help out law enforcement; pt isn't incapacitated but should seek medical care but they won't. Dr wants to see the patient, police can't take them into custody.
  - Liability of EMS – who is willing to take on the risk to say you don't need to go to the hospital

Gaps in healthcare system
  - Transportation
  - Lack of PCPs, pediatricians, specialties in rural areas (especially the North)
  - Healthcare Literacy – patients don't know the system, what resources they can access, or how to access them.
  - Role of Visiting Nurses is not understood in EMS
    - Patients have to qualify for Home Health
    - Doctor orders home health but patients can decline. They could get home, change their mind, and call 911 for help.
    - Starting December 1, OneCare (ACO) to provide post hospital discharge visits for medication reconciliation (waiver from Medicare)
    - EMS doesn't know much about Home Health. Colchester Rescue has a form in their clipboard for VNA referral.
    - All VNA is not-for-profit in Vermont
  - Funding –
    - Risk taking on new service
    - Revenue stream
    - Typically, only get money for transport, not for a response with not transport
    - Materials, flyers, additional training costs/time
    - Already have extremely stressed systems, can't find enough volunteers, employees, burnout
    - High deductible insurance programs
  - Utilization of resources – overuse of hospitals; underuse of urgent care
  - Lack of paramedic education programs in Vermont
  - Shortage of healthcare providers at all levels
  - Transient Care

II. Case Studies
   a. Eagle County, CO
   b. Fort Worth, TX
   c. Abbeville County, SC

    d. St. Cloud, MN

- What about the roles of PAs/NPs? There is a way to create a MIH-CP program using all levels of care without expanding scope of service.
- How much is saved in Medicare per state? Patient satisfaction? Morbidity/Mortality? MedStar and Abbeville have great stats to share with the group.

III. Evaluation of Target Areas
    a. Pros and Cons
    b. Barriers to Implementation
    c. Ranking

Target Area 1: Improve Access to Care
Pros:
- Matches right care with right patient
- Referrals to Social services
- Helps patient manage their own health (chronic disease, age in place)
- Could possibly fill home health gap, visiting nurses cost more
- Increase cooperation between home health and EMS
- Could be used like Fire prevention = EMS prevention
- Need to be specific and define roles, requirements, and governance but let locals develop a program for their needs (VDH should develop a framework)

Cons:
- Would need to increase staffing
- Draining personnel from an area that is hard to recruit
- Expanding access costs more – personnel, vehicles, supplies, training, liability insurance
- Reimbursement – Medicare/Medicaid vs. private insurance coverage
- Taking income away from EMS without reducing operating costs
- Could cause a divide in healthcare providers
- Potential duplication of services (home health vs. EMS)
- Taking business away from nonprofit to municipalities
- Could just be that they know they can call VNA and that would address the gap
- Training is needed – staff could walk into a situation they are not prepared for (liability)
- How much of a difference will this make? How many visits can MIH-CP make?
- How does this support the mission of EMS?

Target 2: High 911 Use
Pros:
- Get patients the right care in the right place (the ED is not always the right place; what is the role of Urgent Care?).
- Big impact for hospitals/EDs
- Very expensive care. This could help allocate resources better and save money.
- Nurse Triage line is a great idea
- Reduce number of non-emergent 911 calls so EMS resources can be used more appropriately (less use of mutual aid)
- Patient satisfaction – care right in the home, right resource available
- With training, EMS can hand out/describe other resources are available to patients
- Allow patients to feel better about themselves and getting help
- Increasing the linkages between home health, mental health, ED and EMS
- Build relationships with patients

Cons:
- Takes the right employee to do this job
- Reimbursement/payment if there is no transport for this visit
- Information sharing – what is the record keeping process?  Role of the EMR?
- Who holds the liability?

Target 3: Patients At-Risk for Readmission
Pros:
- Patients get support at home
- Families/Patients can have resource for questions after discharge
- Good for patients that may not qualify for home health
- Managed care and accountable care benefit for hospitals.  Hospital could be a source for funding for MIH-CP programs if we can shoe benefit.
- Some of these items are the "simplest" services and don't expand the scope of what they do currently

Cons:
- EMS can't currently bill for the small services, but saves the readmission on hospital side

IV.     Group Observations
- Franklin County could use Target 1, everyone could use Target 2, Target 3 has more impact to the hospitals.
- Orange County – work with a PCP for Target 3 (identify certain pts over the short term to get them back to status quo).  Look at using Target 1.  For Target 2, not many of these patients.
- Essex – 2 is best, 3 is behind that, 1 is not that important.
- S Burlington – 3 is the biggest problem, 2 some.  Stress community education, go out and make visits to individuals (frequent flyer), what patients do we see on the highest frequency, touch base once a week, work with the patient to set up appointments.
- Promote Healthcare Literacy in creative ways: educate high school students on how to handle medications; hospitals are losing money right now and they could provide money to promote this program.
- State level leadership needed on information sharing – don't know anything on the hospital side of patient health records, not good at information exchange; primary care is not connected.
- Be cautious and realistic of education requirements to help recruit staff to be a part of this program.  What are the other alternatives? What is available in Vermont?
- VDH needs to create framework for MIH-CP program:
  - Protocol with a minimum for standards, information sharing, reporting data, recording data
  - Define medical control (not typical EMS medical control, but from primary care, cardiology, etc.)
  - Stipulate education requirements for all EMS levels to be a part of this program
  - Leave it open for local programs individual needs
  - Promote coordination with local hospital and other services – mental health, home health, primary care
  - Coordination/partnership with other state agencies

V.      Wrap-Up and Adjourn
- Everyone is interested in it, but scared, insecure.  This is a big project and leadership/champions are needed.
- Good first step at looking a model

- If we can figure out – how to not duplicate services, reduce costs

Insights
- Glad VNA is here, worried about duplicating services
- Glad to find out that Vermont EMS is looking at different models and not trying to implement a model from top down. Allowing for local flexibility.

What did you like:
- Open forum
- Multiple agencies
- Different ways
- Different areas
- Involved in development
- Good to hear about challenges facing EMS
- Connections with people on how to work better as a community
- VDH/EMS needs to integrate with other state agencies – include sister departments
- EMS is coming out of her shell
- Quality of discussion was great, right people in the room

What can be better?
- Tight timeline
- Involve UVM and CMVC in virtual session; any hospital that has ED needs to be a part of the conversation.

## Appendix 3: Meeting Minutes from Newport

**Community Paramedicine / Mobile Integrated Healthcare Training / Focus Groups**
**August 10 – Newport**
**MINUTES**

Attendees:
Dan Batsie – VDH
Stephanie Busch – VDH
Avril Cochran – North County Hospital
Alissa Fontaine – MVAS
Diane Hamilton – VNA
Rose Mary Mayhew – Bel-Aire, Genesis Health Care
Jen Piette – MVAS
Lindy Perry –North Country Hospital
Sue Rivera – VPQHC
Jay Wood – Newport EMS

Facilitated by Jenny Schmitz and Ginny Schwartzer

I.  Introduction
    a.  Project Overview
    b.  Goal and Objectives
    c.  Definitions
    d.  Snapshot of Health in Vermont
    e.  Community Health Needs
    -  Describe the healthcare system in your community:
        o  When patient leaves the hospital, they have to be seen by primary care but primary care services are at capacity.  "Doc in a box" options have been the only source of healthcare.
        o  EMS responds to non-emergency calls but cannot transport the patient to another medical provider.
        o  Hospital is looking at creating an urgent care center, but still looking to connect the patient with primary care for post-hospital care.
        o  VNA has to be homebound for Medicare.  Waiver begins 2017 to allow one home visit.  VNA provides many services already and are 24/7.
        o  Information sharing in the "healthcare system" is a gap.  Communication, data collection, sharing patient records and real time data with MDs.
        o  EMS is one answer in the continuum to address gaps in healthcare.
        o  Staffing challenges for all – limited capabilities, recruitment problems, credentialing causes problems, regulations and training requirements.
        o  Cautious of EMS, hospice, hospital, VNA and duplication of services while not addressing the gaps.
    -  Gaps in local EMS
        o  Staffing – 90% of staff employed on 2 or more services.  Can't recruit or hire qualified people.  All competing for the same pool of people.  Pay is low and no benefits.
        o  Cost of the things that we use vs. what we get paid for using them
        o  Business model needs to change – revenues for fee for service
        o  Not enough paramedics – frequently borrow from other division 10: 40
        o  AEMTs are now expanding their scope of practice.  ED physicians are not likely to support an EMT-A in the community paramedicine role

- o There are a number of different models available to different levels of EMS – don't limit the model potentials
- o Recent shortages in getting a patient transfer from acute care setting to SNF – makes the patient stay in expensive bed, EMS staffing shortage, rig shortage,
- o Shortage of medical control staff and they don't always know the Vermont protocols
- o Distances that are needed to travel; weather issues
- o Dispatching – lots of gaps, too many agencies being dispatched; Right address, right city; radio gaps; Takes a lot more effort and delays in care; Getting the dispatching service for free currently
- o There are clinical disparities; not every rescue squad is the same, clinical abilities are different; MIH-CP may be able to smooth out the differences – could be a shared resource and come together more, more collaboration; Would have the patient sign a release so that patient information can be shared
- o EMS has to do a lot of lift assists – not appropriate use of resources.

II. Case Studies
- a. Eagle County, CO
- b. Fort Worth, TX
- c. Abbeville County, SC
- d. St. Cloud, MN
- Would love a pathway of care for the frequent fliers?
- Linking EMS and crisis teams may not be the answer; EMS has restraints and chemical restraints

III. Evaluation of Target Areas
- a. Pros and Cons

Access:

Pros:
- Different areas in Vermont had different wishes; access will likely be number one.
- Appropriate referrals – right care for right patient
- Cooperation
- Some people don't meet criteria or deny home care – this could fill that gap. VNA tries to get to everyone within 24 hours, but EMS may be able to see patient sooner.
- Could address delay in referral from provider
- Would keep patients in place, less disruption in their recovery and address transportation/weather issues
- SNF would be able to treat CHF in their facility without transport
- Could identify other issues in the home or spouse at the same time. Referral to social services.
- Psychological first aid to make them feel better
- Pathway to access the medical system
- Could address patients just needing to know someone cares; provides touchpoints to patients.


Cons:
- Money – program must be supported by funds from somewhere
- Lack of resources – people and money and time to fill current positions (challenge to add more)
- Primary care is already overwhelmed with phone calls 17,000 in a month and this would need a physician to do that medical oversight
- Liability of physicians in charge of the patient
- Data collection and sharing process (Vital may be doing some collection)

Frequent Fliers
Pros:
- Driving down the cost of healthcare, cluttering up the ED for non-emergent visit
- Most are frequent fliers because there is another social gap – case management is very helpful
- Saving resources for the real emergencies

Cons:
- Patient still needs to take action to take referral to services
- Patient compliance
- SNF can't always get paid to admit patient

Patient at risk of re-admission
Pros:
- Would address the "in between" patients, the ones not qualified for home health or deny home health
- Home health would only have the patient for the first week then there is a gap
- Could identify other issues going on and make referral to home care
- SNF is seeing higher acuity than it used to (patients are discharged sicker)
- Could be a victory for both home care and EMS
Cons:
- Cost – how do you make this a billable service?
- Rules changes needed from Vermont EMS office – administrative changes to allow EMS to change scope of practice
- Could be slow legislation, whole new legislature coming
- Corporate liability
- Each organization would need to combine lobbyists to get this through the legislature
- Regulation would need to change
- State vs federal regulation.

Could do an education payback program to get more EMS and nurses to the area – loan forgiveness program

IV. Group Observations
Likes:
- Gears are turning
- In my head I see this program going forward as a huge collaboration between all the agencies, mobile healthcare club, fairly centralized working in close collaboration with ER, home health, hospice, EMS to take care of our patients in the entire county.  Before I saw it as an individual agency project, not a group project.
- Small enough community that we all know each other, strengths and challenges, communication improved
- Great to see the agreement about our issues
- Focus on first – Money, access to care
- Great start as a discussion – Fallscape was 8 meetings, and this will need more
- Primary care and other need to be involved – planning and implementation phase is going to be significant, turning it on is baby steps, a little bit then see how it works, not do it all at once
- Acknowledge that the program will be different place to place
- Need to collect data before we even start. Don't know what the data is yet, but there is a need and very important.
- Hospital is responsible for quality measures – want to align measures across disciplines

- Regulatory piece is huge for SNF and home health
- Liked the format
- Lacking primary care representative
- Patient training/focus group recommendation
- More information on reimbursement rates and financial information
- Amazed that there are parts of the country that allow for billing of private insurances

Summary Statement:
- Discussed the needs healthcare needs of four areas and discussed potential solutions and challenges with each of us

V.    Wrap-Up and Adjourn

## Appendix 4: Meeting Minutes from Rutland

**Community Paramedicine / Mobile Integrated Healthcare Training / Focus Groups**
**August 11, 2016 – Rutland**
**MINUTES**

Attendees:
Dan Batsie – VDH
Kandis Charlton – Regional Ambulance
Ron Cioffi – VNA and Hospice of Southwest Region
Jim Finger – Regional Ambulance
Wendi FitzGerald – Chittendon Fire Response
William Mapes – Regional Ambulance
Mark Podgwaite – Lyndon Rescue
Scott Richardson – Springfield Fire
Paul Stagher – Springfield Fire

Facilitated by Jenny Schmitz and Ginny Schwartzer

I.   Introduction
   a. Project Overview
   b. Goal and Objectives
   c. Definitions
   d. Snapshot of Health in Vermont
   e. Community Health Needs
   - Describe the healthcare system in your community:
      o Staffing shortage and lack of physicians – hard to attract them to this area
      o Access in getting in an appropriate time manner and making connection with PCP
      o Most major providers are not for profit
      o A lot of integration with the healthcare providers – hospital, mental health
      o Patients first instead of profit in a not for profit setting
      o Demographics – people getting older and need for services is changing
      o Couldn't put together an EMT class in this area; can't pay, won't volunteer
      o A lot of EMS works in more than one service
      o Transportation limitations – distances, availability, surge in 911 calls for ambulance to get to their appointment
      o VNA have designated agencies – home health and mental health, have to guarantee to provide certain services to a particular area to the state
      o Busy hospital – 45,000 ED visits a year
      o Transitions of care program – working with VNA, 2 nurses embedded in the hospital, patient discharged to home – nurse will call to check on them, hoping to reduce readmissions
   - Gaps with EMS
      o Finite number of resources for a potentially infinite number of requests – you can't preplan
      o Calls vary: non-emergent calls that take services vs. severe/acute calls because no availability at primary care
      o Staffing shortages, lack of specialty doctors, mental health resources
      o Have ambulance services that can't be staffed during the day
      o RAS using volunteers for first response
      o Dispatch is done by state police dispatch and may not work for triage questions.

   o Municipality funding is key.

II. Case Studies
   a. Eagle County, CO
   b. Fort Worth, TX
   c. Abbeville County, SC
   d. St. Cloud, MN

- VNA:  There is a way to work together, but right now this is a duplication of services.  Staffing shortages lead to use travel nurses and therapists.
- Success comes when there is an all payer model and a regional budget that we control in this community.  Then we can control the patient healthcare.
- Gap comes in the "low hanging fruit" that VNA has not been assigned to yet: drug abuse, mental health, frequent ED visits, discharged too early, patients that don't meet the qualifications for VNA/deny VNA/don't do the legwork to get VNA. CP could check in on a patient before the VNA can get in there.
- Goal needs to be to save the healthcare system money goal – not a job creator
- There is a population of low literacy and homeless population that could be focused on.
- Community paramedic has to have special training, not just anyone.

III. Evaluation of Target Areas
   a. Pros and Cons

Access to care:
Pros:
- Healthier patients
- Lower healthcare costs
- Better resource management
- More integrated healthcare system
- Possible reduction in admission and readmission
- Being able to interact with patients when you aren't under the gun
- Preventing pts from getting acutely ill
- Less stress on the people on the system

Cons:
- Willingness to do it, from providers and the patients
- Decreasing call volume decreases revenue for EMS – non-reimbursable services
- Overall cost for startup and sustainability
- Potential duplication of services
- Long term viability
- People aren't educated on who to call, what services are available – confusion on who to call, complicating of adding another service
- Patient didn't want ambulance to come help them for Fallscape – you're the ambulance, not education
   o Need to build rapport with patient before
   o Patient perception, pride
- Communication across the services – VNA knows about the patient, but EMS may not, no continuity of care – care coordination needed
- VNA has the capacity to do this but they don't have a payment source
- Marketing of the program – making it available to the right people, education

- Would be useful in this community

High 911 Use
Pros:
- Identify what their barriers are – why are they calling all the time?  Literacy, mental health, housing, don't have mental capacity to make the link
    o Unclear definition of "emergency" and when exactly to call 911
- Increase collaboration with the physician – physician doesn't know their patient is calling 911 frequently
- Setting them up with PCP – getting them into the system
- Applying the correct resource to the right issue
- Could get a referral to other services
- Patients get to stay home rather than go to hospital
- In patient discharges have case managers, not necessarily the ED discharges.  Target this group.
- Calls by family members for patients that are on hospice or palliative care, education of families as well

Cons:
- There is a population that you will never change
- Takes effort on the patient side
- Some people just want to go to the ER

Patients for Readmission
Pros:
- Hospitals never have enough bed space.  Seem to discharge patients "sicker"
- Patient would benefit – don't have to go back to hospital and families benefit
- Decreased healthcare costs
- Decreased trips to the hospital – EMS transport

Cons:
- Increased liability
    o Good documentation needed, patient sign a release
- Need sharing of information to make this workable

IV. Group Observations
- Could see a need for CP to visit other care centers (not skilled nursing)
- Continue down the path
- Nationally this is the movement – Vermont shouldn't ignore it
- VNA – great to hear what EMS does, appreciate the work they do, we share the same issues – staffing, sustainability, funding
- Everybody realizes every region is different; some communities collaborate better than others, we are fortunate here in Rutland
- Beneficial session – preliminary conversation

Next steps:
- Involve the healthcare systems, health insurance
- Collaborative effort to look at how to communicate service to service – information sharing
- Task force then pilot programs
- Potential resource would be professional firefighters of Vermont union

V. Wrap-Up and Adjourn

## Appendix 5: Meeting Minutes from Brattleboro

**Community Paramedicine / Mobile Integrated Healthcare Training / Focus Groups**
**August 12, 2016 – Brattleboro**
**MINUTES**

Attendees:
Paul Miller – Middlebury Regional EMS
Jeff LeBlanc – VDH
David Palmer - SRRS
Alan Beede – Hartford Fire

Facilitated by Jenny Schmitz and Ginny Schwartzer

I.  Introduction
    a.  Project Overview
    b.  Goal and Objectives
    c.  Definitions
    d.  Snapshot of Health in Vermont
    e.  Community Health Needs
    -   What does healthcare look like?
        o  Addison County – Middlebury has critical access hospital, hospital and EMS having financial problems, is this a potential future for us? Very strong VNA
        o  Hartford – EMS brings a lot of BS calls to the hospital, they don't need the ED, they need to just see a doctor, this could free up some space in the hospital
        o  South Royalton – not many crap calls
        o  Public Health – Hospitals are seeing readmission rates going up; if we had a CP program, we could reduce the hospital costs to the patient and the hospital; PH has clinics all over the place; Many pts just need blood pressure check;
        o  People call the PCP and can't get in for a week, so they are told to call the ambulance
        o  This program could boost EMS as a whole
        o  Gaps: what about veterans?  Transient, homeless, farm workers, language issues
    -   EMS System
        o  Unnecessary calls
        o  Financial issues
        o  Small town EMS has to find a way to generate revenue during downtime to become less reliant on taxpayer funds
        o  Call volume is right on the edge for financial issues
        o  EMS working as Med Techs in the ED if the hospital was slammed.  That fell apart.
        o  Medical director is very involved and likes to do education and come out and play
        o  Spoke and hub system – we support 10 towns, 8 of the 10 have a first response squad – works well for the geography that we have
        o  Staffing issues – down a paramedic
        o  Can't pay staff enough, no benefits
        o  Volunteerism is decreasing; First response squad lost 5 people this year alone
        o  We are a full time service with benefits so staffing isn't as much of a problem for us
        o  We have social services but they are disconnected.
        o  Discussion about:  visiting nurses, social services referrals, hospice.

II.     Case Studies
        a.  Eagle County, CO
        b.  Fort Worth, TX
        c.  Abbeville County, SC
        d.  St. Cloud, MN

How does the state address scope of practice in case studies?

III.    Evaluation of Target Areas
        a.  Pros and Cons

Access
Pros:
-   Increase in the number of pre-hospital providers, job creation
-   Start preventative care before it gets too bad
-   Finding care earlier
-   Determine destinations – right resource at the right place
-   Reducing bogging down ED
-   Familiarity and comfort of the patient/provider – relationship
-   Increased communications amongst providers – PH has mobile clinics, connecting potential patients
    o   PH clinic – nurse, social worker, dietitian, epi nurse
-   Referrals to social services
-   Gain staff experience
-   PH:  This would assist us in epi, can quickly identify diseases for reporting

Cons:
-   Egos – you cannot play in my sandbox, jurisdictional boundaries; EMS services, VNA, stakeholders for funding
-   Education and communication
-   Legislation
-   Funding
-   CP may have delay in healthcare – emergency need
-   Patient record sharing – how is it captured?

Frequent Flyer
Pros:
-   Helps the hospitals, beds are frequently tied up
-   Better serves the underserved
-   Good public relations
-   More services provided
-   Better use of your resources
-   Validate your existence
-   More staff training/access to skills/practice
-   Would it promote regionalization?  - Could you regionally staff based on the demographics?

Cons:
-   Business competition
-   Misdiagnosis
-   Liability of re-triaging BLS, ALS

- Would need more personnel
- Is there abuse of the CP?  We're short staffed today let's use the CP as our back up.

Re-Admission
Pros:
- Hospital benefits
- Pt can have better care – non educated patients

Cons:
- Abuse of the system – not getting appropriate level of care
- Liability
- Scope of practice, training
- How do you keep the CP current in training?
- Who is going to provide the oversight?  Medical control…. Is it Dr. Chen or at the hospital?

IV.     Group Observations
- Financing is key.
- I think it's a great thing, just the implementation.
- EMS is really inexpensive for our level of training.  Can we sell ourselves as a low cost solution with good ROI?
- Medical direction, legislation, protocols – all of this is complicated
- Marketing to funnel socials services together
- Healthcare literacy – people don't know the system, educating people
- Educating the EMS community
- How to make it sustainable – financial and knowledge sharing, traction to keep the process going
- Biggest issues – COPD and CHF, Diabetes
- Professional development to make the certification a national curriculum
- We would have some staff interested – it is not across the board; It's all about people.  How do we identify people to serve as CPs?
- Determining the QA/QI data
- Program needs to be able to be flexible and fluid
- *** Hartford Police Department – Social Worker through VDH

V.     Wrap-Up and Adjourn

**Appendix 6: Meeting Minutes from Virtual Meeting**

**Community Paramedicine / Mobile Integrated Healthcare Training / Focus Groups**
**August 17, 2016 – Virtual**
**Minutes**

Attendees:
Linda Kuban
Lyman Tefft - DVR
Stephen West-Fisher, CALEX and CIO of NCHC and CHHCH
Bill Watkins – 45th Parallel Ambulance
Elizabeth Preston
Mike Conti – UVM HealthNet Transport
      (with Mark Flowers, Sean Muniz, Danielle Goodrich, Stewart Hall, and Jason Jull)
Sarah Lamb – Richmond Rescue
Michael Chiarella
Laura Werner – VDH
Bobby Maynard
Carl Matteson – Ludlow Ambulance Services

Facilitated by Jenny Schmitz and Ginny Schwartzer

I. Introduction
    a. Project Overview
    b. Goal and Objectives
    c. Definitions
    d. Gaps in Healthcare
        i. Access to healthcare: nearest pharmacy is more than 20 miles from some of our patients. No health care office within 30 min. No care after 5pm or on weekend.
        ii. Very few volunteer providers.
        iii. Mental health services, transportation, no urgent care, affordability of health care
        iv. Elderly having access to blood pressure checks etc. without having to make an appointment with a Doctor, PA, NP or nurse visit.
        v. Trying to ID the patients who need assurance after hospital discharge before VNA can help
        vi. Access and education to healthcare system by Burlington refugees
        vii. Elderly living alone and having access to healthcare
        viii. general follow-up with patients to check if they are following medication instructions
    e. Gaps in EMS
        i. Staffing
        ii. Lack of consistent Paramedic coverage
        iii. Inability to find career paramedics
        iv. lack of volunteers
        v. Staffing, both paid and volunteer
        vi. lack of centralized dispatching
        vii. Money!
        viii. Low call volume leading to stagnation of seldom used skills
        ix. distance. # of volunteers. huge time commitment for volunteers. no cell service. Spotty.
        x. short staffing at times and utilizing staff during down times effectively.

           xi.   Unstable funding and reimbursements
          xii.   pay back is always need bottom line.

II.    Case Studies
    a.   Eagle County, CO
        PROS
- No transportation required for patients
- reduce patient readmissions from incidents like falls or unable to get routine vaccinations
- Expanded scope of practice for the Medics,
- more care for the elderly and better home health care
- Patient assessment is really what we need to focus on to short cut the patient from being or becoming acute.
- Reduce unnecessary ambulance trips. Better compliance from patient. Less pressure on the systems. Ability to stay at home instead of assisted living.

        CONS
- Lack of Medics
- Already thinly staffed
- Who pays?
- providers. cost. abuse of this system too.
- Potential integration into other systems/services
- With staffing such an issue now, how could more services be provided?
- Acceptance by the VNA groups is very key right out of the gate
- Pushback from other groups of providers like VNA
- Distances. Training money
- convincing the town people of the need
- limited staffing, equipment, and need additional vehicles to keep ambulances in service
- How is this a different goal than the VNA?
- VNAs for the most part only visit 'eligible' patients, this would be an expansion of the patient population.

    b.   Fort Worth, TX
        PROS
- reduces drain on EMS system caused by frequent/repeat callers
- less call on the on call crew
- The gaps are there gaining access to the patients, medical records and permission to treat the patient can only be a positive.
- probably too rural, not enough volume to work in Strafford. also ambulance already 30-45 min away. this might delay needed response.  For patient that refuse VNA.
- Seems good for an urban system, but not too many Pro's for our rural area.
- The ability to send in the level of care needed, some things EMTs can do.

        CONS
- Lack of staff, lack of money....2 unfortunate common themes
- time consuming to go from home to home in rural areas
- Local medical control willingness to work with the community programs
- lack of train personnel and resources
- lack of centralized dispatch in VT makes logistics challenging

- It would difficult to manage this type of program based on Medicaid rates alone
- Primary Care Physician interaction

c. Abbeville County, SC

PROS

- keep medics busy in low call volume areas
- Providers are "on-duty" and can field 911 calls if needed.  No "special personnel"
- no extra personnel requirements
- Proactive care to reduce 911 calls and hospital visits
- This seems to be a good management of staffing and can really help the acute or near acute patient
- less hospital visit for the chronic patient

CONS

- Use only Paramedics
- In general, long training commitment
- missing the home visits if you have a lot of calls for a few days
- Will physicians lose revenue if EMS is taking on a primary care role?
- using the on duty crew to do home visits can pull them away from central response area- long responses back for 911 calls
- Familiarity w patients. predictable care needs for chronic patients. volunteers we are busy enough. 911 operators have trouble enough in VT relaying calls
- they don't need more choices to make.

d. St. Cloud, MN

PROS

- Employee is part of health system, and interaction with PCP's, record keeping system.
- Primary care providers are as hard or harder to find as paramedics - this could help FQHC staffing and encounters as well.
- takes medic out of the EMS System
- could be any level of healthcare provider
- Ability to generate revenue
- serves a very rural, sparse area
- Provider is dedicated to the program,

CONS

- one community paramedic
- Hospital/clinic/medical office buy in
- We are not a one company town, so many people would not be touched.
- multiple hospitals in the state, not all are part of one major system
- medical direction
- not really an EMS program just uses paramedics as providers

III. Group Observations

- These are all issues in the NEK
- Maybe a mixture of Colorado and Minnesota
- Access to care most important. fewer people so fewer frequent fliers than many, ditto readmissions
- chronic disease care
- All are very important and should be addressed/accepted by the local ED and PCPs
- Preventing readmissions save hospital money

- funding, staffing
- follow-up education/training of parents or caretakers of patients- many do not know how to administer emergency medications properly
- Next steps:
- What is the State's path for moving forward from here?
- Identifying how we can fund it
- NVRH, NCHC including our Home Health have a long history of cooperation and I believe that we could be a good model for other areas.
- I believe that coordination of the various facilities should be the first step.

What did you like?  What did you learn?
- There are obviously shortfalls in the greater healthcare system, and we may be able to fill some of those gaps, while providing services that are greatly needed to others
- Online session is much more concise that in person meetings when people can ramble on.
- some good ideas, issues alike all over
- It is great to see VT is addressing this issue as the aging population is growing.
- really good option to capture as many people as possible.

IV.    Wrap-Up and Adjourn