

Introduction to Community Paramedicine and Mobile Integrated Healthcare Delivery

As healthcare costs continue to rise well above general inflation rates, new solutions to providing better and more affordable care are a national priority. To help address this concern, community-based ambulance services across the country are redefining their role in the healthcare system. Traditionally a health care resource used for the stabilization and transportation of the acutely sick and injured, specially trained EMTs and paramedics are now working proactively with patients in their community to help *reduce* the likelihood of needing emergency medical services. This new model for using EMS personnel, known as Community Paramedicine and Mobile Integrated Healthcare Delivery was pioneered in Pittsburgh over the last decade, and is quickly spreading throughout the Commonwealth and the country. This paper will briefly describe components of this new movement, how these practitioners interact with traditional medical services and how legislative support can help reduce the cost of healthcare in the most vulnerable patients in our communities.

Defining the Problem

According to the Pennsylvania Healthcare Cost Containment Council, more than \$500 million was spent in Pennsylvania alone for Medicare and Medicaid patients who were readmitted to the hospital within 30 days of their hospital stay. As one of the major health care cost drivers in the Commonwealth, relying solely on traditional solutions to avoid readmissions does not seem to be an effective strategy for mitigating these rising costs. (Pennsylvania Health Care Cost Containment Council, 2013)

Misaligned Incentives in Traditional EMS

Unlike most healthcare providers, who get paid treating patients, ambulance services are defined by most insurance plans as strictly a medical transportation benefit. That means that if a paramedic successfully treats an asthma attack, diabetes patient or drug overdose in the field and the patient refuses to go to the emergency department because they are feeling better, the ambulance service cannot recover the cost of delivering that care to the patient. Similarly, EMS agencies are only reimbursed if they transport a patient to an Emergency Department, as opposed to a less costly care setting. A recent article in *Health Affairs* estimated that allowing EMS agencies to transport to alternative facilities could save Medicare alone between \$283- \$560 million per year. That savings could double, the authors argue, if private insurance companies followed suit (Alpert A, 2013).

Integration with Existing Home Health Care Services

In addition to tackling practices that increase the cost of care without necessarily increasing the quality of care, the Affordable Care Act has created a need for expanded, community-based services to supplement the traditional medical workforce. Mounting evidence demonstrates the need to better support for patients once they are discharged home from the hospital. Traditional home nursing services, while incredibly helpful for certain patients, are only available to provide skilled care to patients who are home-bound. Unfortunately, as evidenced by high readmission rates to hospitals, these services have missed large populations of patients who may not need skilled care or may not be home-bound, but for whom additional support is clearly needed.

EMS providers are trusted, community-based healthcare workers that are located in nearly every community in Pennsylvania. More than 50,000 EMTs and Paramedics are certified in Pennsylvania, providing a substantial workforce that when appropriately trained, could help reach these vulnerable patients throughout the Commonwealth.

Each community has unique healthcare needs and therefore requires its own solutions. PEHSC recognizes growing utilization of EMS providers to fill gaps in communities and stresses the first step of a community paramedicine program is to identify unmet needs in a community's health care system. The community needs assessment required of not-for-profit healthcare systems is an ideal venue for this. If a local EMS agency is not part of the process, it should work with its local health system to integrate into their area's next study cycle.

Many locales are finding as hospital reimbursements and lengths of stay are decreasing, readmissions to hospital are a growing concern. As the average age of the nursing workforce is increasing (Health Resources and Services Administration, 2013) and EMS agencies are looking to work with health systems to fill this community gap. Other "community EMS" projects have met targeted needs in the past: public outreach and education, such as the Prom Promise DUI awareness program, car safety seat inspections and CPR education. As additional unmet community needs continue to be uncovered, community ambulances have strong potential to collaborate with traditional providers to solve community and individual healthcare needs.

Examples of Community Paramedic and Mobile Integrated Healthcare Programs

EMS providers trained in this new role have performed a variety of preventive services, including biometric screenings, immunizations, disease management programs for asthmatics and congestive heart failure patients and care transitions interventions (Agency for Healthcare Quality and Research, 2014). Mobile Integrated Healthcare Delivery programs throughout the country have also integrated traditional nurse advice lines into 911 centers to send the most appropriate resource to the call. EMS providers have worked as extensions of primary care offices in Colorado and Minnesota, and have worked closely with hospice agencies in Texas to ensure that 911 responses honor the wishes of the patient. All told, hundreds of new programs have been designed to provide better primary and preventive care and to reduce the number of patients who are readmitted to the hospital for reasons that could have been prevented. Community Paramedics are trained to assess a number of social determinants, non-medical factors that can influence a patient's health. They serve as patient navigators to help identify social services that the patient may be eligible to receive and they act as patient advocates to help patients successfully enroll in the programs that could help improve their health while remaining in the community. Examples of programs throughout Pennsylvania and across the country are listed in the attachment.

Legislative Support

Existing legislation already recognizes the potential for the new role for EMS providers. Here are the relevant sections of the EMS Act which regulates ambulance services in the Commonwealth.

1. The emergency medical services system is regulated in Pennsylvania by the Emergency Medical Services System Act of 2009, Title 35, Chapter 81 and its associated regulations, 28 PA Code, Chapters 1001-1033.

2. In §8102, the Pennsylvania Legislature envisioned the future of EMS will extend beyond that which has traditionally focused on stabilization and medically necessary transportation by declaring:
 - It serves the public interest if the emergency medical services system is able to quickly adapt and evolve to meet the needs of the residents of this Commonwealth for emergency and urgent medical care and to reduce their illness and injury risks.
 - It serves the public interest if the emergency medical services system provides community-based health promotion services that are integrated with the overall health care system.
 - Emergency medical services should be acknowledged, promoted and supported as an essential public service.
 - The Department of Health should continually assess and, as needed, revise the functions of emergency medical services agencies and providers and other components of the emergency medical services system that it regulates under this chapter, to... adapt to changing needs of the residents of this Commonwealth.
 - The emergency medical services system should be fully integrated with the overall health care system, and in particular with the public health system, to identify, modify and manage illness and injury and illness and injury risks.

Requests for Consideration

1. PEHSC requests that the EMS community have representation on all healthcare reform and payment advisory committees sponsored by the Commonwealth to determine ways that our community ambulance providers can help reduce healthcare expenses while improving the quality of care in their communities.
2. PEHSC also requests that the Pennsylvania Medicaid system sponsors pilot programs in collaboration with the Bureau of EMS within the Department of Health to determine the effectiveness of using community paramedics and mobile integrated healthcare delivery systems on superutilizers and the vulnerable patients currently enrolled in the Medicaid.

References

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Examples of Community Paramedicine and Mobile Integrated Healthcare Delivery Programs in Pennsylvania and the United States.

PITTSBURGH, PENNSYLVANIA

Name of Program: Emed Health

Active Dates: 2003 – Present

Funding: University Health Plan, 3rd party payers

Core Activities: Emed Health promotes prevention and disease management using emergency medical service (EMS) agencies and their personnel to deliver community, emergency department and home-based prevention and disease management services. Community paramedics have immunized more than 50,000 people since start and have recently begun biometric screening. Trained paramedics have conducted those screenings on employees at university and other large employers with 30-40,000 screenings to date. They also have asthma prevention and fall prevention programs. A very successful component includes the Safe Landing program where community paramedics are sent out to homes to work with patients who have been discharged from the hospital. This occurs within 48 hours of discharge and community paramedics ensure that the patients understand discharge instructions and connect with their primary care provider to prevent readmission.

PITTSBURGH, PENNSYLVANIA

Name of Program: CONNECT

Active Dates: 2013- Present

Funding: Highmark and UPMC

Core Activities: Paramedics will be trained to care for people with chronic diseases in their homes as part of a plan to curb unnecessary hospitalizations and better coordinate medical care. Care will be provided to residents of the City of Pittsburgh and three dozen neighboring communities as part of a two-year pilot project. The University of Pittsburgh's Congress of Neighboring Communities, Highmark, UPMC, Allegheny County EMS Council and the Center for Emergency Medicine of Western Pennsylvania are the partners.

CRANBERRY, PENNSYLVANIA

Name of Program: Safe Landing & Community Wellness Check – Cranberry Twp. EMS

Active Dates: 2013 – Present

Funding: Fee for Service

Core Activities: The Safe Landing program involves community paramedics or emergency medical technicians making four home visits to new parents. The program focuses on proper car seat installation, conducting home safety checks and showing parents the safe way for infants to sleep.

In Community Wellness Check program, community paramedics make weekly one-hour visits to area homes to provide a variety of services including tracking vital signs, reviewing medications, performing a home safety check and answering medical questions.

LANCASTER, PENNSYLVANIA

Name of Program: New Parent Program - Lancaster Emergency Medical Services Association

Active Dates: 2013 – Present

Funding: Fee for Service

Core Activities: Lancaster EMS has created a new program specifically focused on the new mother and father. The program answers parents' questions about the health and safety of their newborn. In addition, they provide education on "safe sleep" practices, Child/Infant CPR, SIDS, febrile seizures and other common medical emergencies. The community paramedic will also provide general information about calling 9-1-1, how to quickly communicate the problem, what to do while waiting for the ambulance to arrive and what information is needed when interfacing with EMS providers in an emergency situation.

As of June 2013, Lancaster EMS partnered with Lancaster General Health providing Lancaster General Hospital's Care Connection Department with EMTs and Paramedics that function as Patient Care Navigators.

Care Connections is an innovative, intensive, interdisciplinary, transitional primary care home which launched in August 2013 for Lancaster General Health to showcase how we are transforming healthcare. The program provides quality care with a customized experience, while lowering overall healthcare costs. Care Connections is aimed to serve patients with three or more medical problems plus behavioral health issues, who have been admitted to the hospital multiple times in the past year. The goal of the program is to decrease barriers that impact health, empower patients to advocate for themselves within the health care system, and inform the healthcare community regarding opportunities for system redesign that lower costs and improve quality.

Services:

Outpatient care provided by a dedicated board-certified medical team, supported by:

- Patient care navigators (paramedics, EMTs, LPNs)
- Social workers
- Behavioral healthcare services
- Clinical pharmacist
- RN Case Manager
- Nurse Practitioner
- Physicians

Program Goals:

- Analyze populations of patients to identify the high-risk segments and examine their utilization patterns and costs
- Understand how these patients navigate the community and healthcare systems today
- Identify the barriers to care and inform federal, state and local policy stakeholders
- Develop a new care model that optimally addresses patient needs while improving quality and outcomes while concurrently reducing costs.
- Develop a business model that aligns incentives in support of the care model addressing considerations such as payment, risk, and regulatory considerations
- Secure outside sources of funding to help support our innovations

HARRISBURG, PENNSYLVANIA

Name of Program: Pinnacle Health System – Community LifeTeam EMS

Active Dates: 2013 – Present

Funding: Pinnacle Health System

Core Activities: Community LifeTeam works in conjunction with Pinnacle Health System, its parent organization, to provide post discharge follow up for patients in selected categories. Referrals are provided by the health system’s nurse navigators and the community paramedics have direct access to the patient’s electronic medical record. The community paramedic provides a variety of services including prescription medication review, vital signs and communicates additional patient needs to the nurse navigator.

FORT WORTH, TEXAS

Name of Program: MedStar Community Health Program

Active Dates: 2009 – Present

Funding: Cost savings in reducing unnecessary 9-1-1 responses

Core Activities: The goal of the Community Health Program is to reduce the unneeded 9-1-1 calls and EMS transports that put strain on an already overloaded emergency system, provide the patient more appropriate health care (as opposed to the emergency room), as well as reducing overall healthcare costs. Since its' inception, it is estimated that the program has saved more than \$1.3 million in emergency room charges, and reduced 9-1-1 use by these patients by nearly 50 percent, saving nearly \$1 million in EMS charges.

SCOTT COUNTY, MINNESOTA

Name of Program: Scott County Community Paramedicine

Active Dates: 2008 – 2010; 2011 – Present

Funding: Grants and 3rd party payers

Core Activities: Free fixed and mobile clinics to reduce inappropriate use of 9-1-1 resources. Community paramedics have been primarily used in the mobile clinic. They’ve seen between 300-400 patients who have visited the clinic for various reasons. The community paramedics have also done clinical work with the physician medical director and other providers. The program underwent a one year hiatus in the absence of funding. Minnesota recently passed legislation that will allow community paramedic programs to bill for their services.

VAIL, COLORADO

Name of Program: Western Eagle County Ambulance District – Community Paramedicine

Active Dates: 2009 – 2010; 2011 – Present

Funding: Grant funds

Core Activities: Patients are referred to emergency medical services personnel by their primary care physician to receive services in the home, including hospital discharge follow-up, blood draws, medication reconciliation and wound care. The program will initially operate with two specially trained community paramedics who will coordinate with the referring physician to ensure quality of care and appropriate oversight. In addition, paramedics will work with Eagle County's Public Health Department to provide preventative services throughout the community.