

4.2 Development of the Community Paramedic Program

Background:

- At the December 10, 2013 meeting, the Board directed staff to modify the Strategic Initiative regarding EMS so that the county can continue to pursue assistance for the start-up costs of a Community Paramedic Program. The strategic initiative was modified and approved at the January 21, 2014 meeting.
- On April 3, 2014 the County, in conjunction with the National Association of Counties, hosted the Leon County Community Dialogue on Improving County Health to discuss access to medical care in the community. At that meeting community leaders identified a need to improve chronic care management and services for “high utilizers” that cycle in and out of the hospital and a need to close gaps in preventive care, follow-up, and ongoing outpatient treatment for the chronically ill.
- At the September 2, 2014 meeting, the Board accepted a Florida Department of Health Matching Grant in the amount of \$57,735 to help support the implementation of the Community Paramedic Program. The grant requires a local match of \$19,245 providing for a total project budget of \$76,980 which is currently included in the FY16 Budget.
- At the September 2, 2014 meeting, the Board approved an Agreement for consulting services with MedStar Mobile Healthcare, the ambulance authority for the metropolitan Fort Worth, Texas area that initiated a successful Community Paramedic Program in 2009.
- The Community Paramedic Program is being developed to improve healthcare for Leon County citizens. Emergency rooms are often the first and only access point to the healthcare system for many citizens, leading to overcrowded ERs with non-emergent patients that could either receive care on the scene, be referred to local medical clinics, physicians, or other resources, or, in the future, be attended to by a physician through a telemedicine connection.
- Greater utilization of existing local medical resources and decreasing the load on emergency rooms so they can focus on emergency cases is the goal. Community paramedic services are more cost effective and provide an opportunity to educate the patient on the availability of local resources that can better deal with their ongoing medical issues. If patients have their medical needs met with appropriate treatment, arranged visits with physicians, arranged and scheduled transportation, and other issues related to medical care, they would not call 911 with non-emergent problems.
- The EMS Division has a social services referral program in place which is designed to identify and connect patients with specific needs to human service organizations and programs already in place in the community. The EMS program has been successful in meeting the individual patient’s needs and decreasing their reliance on emergency services.
- Other communities across the County have adopted Community Paramedic Programs that successfully meet the needs of their community. The County intends to adopt and integrate best practices from these programs into the Leon County Community Paramedic Program.

Current Issues:

- In March 2015 the County met with local hospital representatives to discuss the possibility of implementing a Community Paramedic Program.
- On November 6, 2015, the County hosted a meeting with local healthcare stakeholders to evaluate healthcare gaps within the community and to explore how a Community Paramedic program may help fill those gaps and provide positive outcomes for patients.
- Staff continues to engage healthcare stakeholders on the benefits of a Community Paramedic Program and to develop program parameters and financial support models. Staff has identified a strategy that can be expanded to include additional services, including telemedicine services, should the need be identified and outside funding become available for these expanded services.

- Upon the commencement of the Community Paramedic Program staff anticipates three main services being offered.
 - High User Group - The first group of patients that would be targeted is a high-use group that includes both chronic illness patients and system abusers. Many times these patients have minor issues that could be taken care of with other resources than emergency department visits.
 - Readmission Patients - The second group of patients that would be targeted are at high risk of readmission to the hospital once they have been discharged. These patients have legitimate medical conditions that must be followed closely or negative outcomes will result.
 - Hospice Patients - The third group of patients that will be targeted are hospice patients. Many patients that are at the end of life and have been referred into the hospice system and are placed back into the hospital system when it is not the intended healthcare path.

Near Term Issues:

- Identify program parameters and associated costs.
- Solidify potential partnerships and identify funding models to sustain the program.
- Present program parameters and funding models to the Board for consideration during the FY17 budget process.
- Develop operational protocols and medical directives for all aspects of the program.
- Develop training modules for the program based on program parameters.

Long Term Issues:

- Overall Community Paramedic funding for a sustainable program that is able to grow to meet the ongoing needs within the community.
- Develop healthcare strategies to meet changes in healthcare delivery and to meet government and other third party payer requirements for new payment models.
- Develop and implement tracking mechanisms to monitor improvements in patient outcomes and changes in the local healthcare delivery system.
- Continue to advocate for the use of telemedicine as a component of the Community Paramedic Program as a way to connect patients directly with physicians for immediate medical intervention.

Current Strategic Priorities:

- Quality of Life – To be a provider of essential services in our continuous efforts to make Leon County a place where people are healthy, safe, and connected to their community.
 - (Q2) – Provide essential public safety infrastructure and services which ensure the safety of the entire community (2012).
 - (Q3) – Maintain and further develop programs and partnerships necessary to support and promote a healthier community, including: access to health care and community-based human services. (rev. 2013)

Current Strategic Initiatives:

- (Q2, Q3) – Implement strategies to improve medical outcomes and survival rates, and to prevent injuries, including: continue to pursue funding for community paramedic telemedicine (2012)(rev. 2014)

Potential New FY 2016 Strategic Initiatives, for Board Consideration:

- (Q2, Q3) – Engage vested community partners in the development of a Community Paramedic Program that includes program parameters designed to meet local needs and a sustainable economic model to be presented for consideration during the FY 2017 budget process (2012) (rev.2016)

Attachments:

1. Leon County Community Dialogue; Improving County Health; April 3, 2014
2. Presentation from November 6, 2015 meeting – Innovative Partnerships for Healthcare 2.0
3. Summary of November 6, 2015 Stakeholder Meeting
4. Mobile Integrated Healthcare and Community Paramedicine (MIH-CP)
5. Innovation Opportunities for Emergency Medical Services
6. Health Care Pinch Hitting
7. Integrated Healthcare Delivery; Building a Better Community Medic



Leon County Community Dialogue

IMPROVING COUNTY HEALTH • APRIL 3 2014

THE NATIONAL ASSOCIATION OF COUNTIES

The National Association of Counties (NACo) assists America's counties in pursuing excellence in public service by advancing sound public policies, promoting peer learning and accountability, fostering intergovernmental and public-private collaboration and providing value-added services to save counties and taxpayers money. The National Association of Counties (NACo) is the only national organization that represents county governments in the United States. Founded in 1935, NACo provides the elected and appointed leaders from the nation's 3,069 counties with the knowledge, skills and tools necessary to advance fiscally responsible, quality-driven and results-oriented policies and services to build healthy, vibrant, safe and fiscally resilient counties.

WHAT ARE THE COMMUNITY DIALOGUES?

The National Association of Counties (NACo), in partnership with the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute (UWPHI) is conducting community dialogues in six counties across the country. The NACo Community Dialogue to Improve County Health sessions are intended to assist counties in assessing, planning, and strategizing current efforts toward coordinating health initiatives to improve the overall health of residents in these counties. These sessions are a part of NACo's Elected County Officials' Guide to County Health Rankings & Roadmaps project which aims to bring together public and private partners to share innovative ideas and strategize about how to resolve various challenges counties face.



LEON COUNTY COMMUNITY DIALOGUE

Community healthcare leaders in Leon County gathered together to discuss access to care in the county. Participants included members of the County Commission, the County Administrator and staff, the Florida Department of Health in Leon County Interim Administrator, and representatives from the Florida State University (FSU) College of Medicine, Big Bend Cares, Neighborhood Medical Center, Apalachee Center, Bond Community Health Center, Capital Medical Society Foundation, North Florida Medical Centers, Tallahassee Memorial HealthCare, Florida A&M University (FAMU) College of Pharmacy and Pharmaceutical Sciences, and the United Way of the Big Bend.

Leon County staff led participants in identifying the strengths and assets of the current healthcare system, the gaps and barriers to collaboration, ideas and solutions to addressing those gaps and barriers, and next steps to achieving the goals.

County Commission Chair Kristin Dozier opened the Community Dialogue by noting the main outcome for the discussion would focus on how to improve access to care in Leon County through greater collaboration and increased partnerships. She stated the county wants to be the catalyst that drives these types of partnerships forward. County Administrator Vincent Long highlighted the goals of the discussion, including a conversation on where the county and its partners should go next in improving access to care. Leon County staff emphasized the dialogue was intended to provide a forum for an honest look at where the community is and how the strengths can be enhanced and the gaps can be filled to improve access to care.

This report provides a narrative summarization of the Community Dialogue. The report is organized by area of discussion and not the exact order of conversation as it occurred on April 3, 2014. The report does not include every comment made throughout the day, but serves to highlight the ideas discussed in their respective sections.



IDENTIFYING STRENGTHS AND ASSETS

WHAT ARE THE STRENGTHS AND ASSETS OF THE HEALTHCARE SYSTEM IN LEON COUNTY AND HOW CAN THE COMMUNITY BUILD ON WHAT IS WORKING WELL?

Participants spent a majority of the first session discussing the strengths of the healthcare system in Leon County. There were a number of comments that emphasized the strength and dedication of the safety net providers in the community, including the We Care Network coordinated by the Capital Medical Society Foundation, Bond Community Health Center, and Neighborhood Medical Center. This group of providers, known as the CareNet program, is supported by other healthcare partners such as the Florida State University (FSU) College of Medicine, the Florida A&M University (FAMU) College of Pharmacy, and Tallahassee Memorial HealthCare.

In Leon County, partners share in the mission to serve indigent populations, in particular both Bond Community Health Center and Neighborhood Medical Center have a long history and depth of experience serving the uninsured and underserved in Leon and surrounding counties. Others have

“One of the things that is more unique about Tallahassee than most communities is... the large majority of health concerns and health programs are managed and directed by this community and through people in this community... When you have healthcare decisions made from afar, there isn't a sense of ownership... I think the way that this community makes decisions around healthcare and the fact that a large majority are made locally is highly important.”

— Mark O'Bryant
President and Chief Executive Officer
Tallahassee Memorial HealthCare

also developed innovative methods of improving access for underserved populations. Tallahassee Memorial HealthCare, in collaboration with the FSU College of Medicine and Capital Health Plan, has established the Transition Center. The Center helps connect patients who are uninsured or underserved with safety net providers and primary care providers to ensure a continuity of care and lower readmissions to the hospitals.

Leon County is home to two major universities, Florida State University and Florida A&M University. The FSU College of Medicine and

the FAMU College of Pharmacy serve important roles by attracting students and faculty who are interested in serving the underserved, supporting TMH's residency programs, and embedding faculty in local healthcare organizations who serve the uninsured and underserved. As Florida's state capital, Tallahassee and Leon County are in a unique position to influence state policy.

The county has partnered with the City of Tallahassee and the United Way of the Big Bend to develop the Community Human Services Partnership, which invests over \$4 million in social services, including healthcare, to improve the quality of life for our local citizens. The Florida Department of Health in Leon County operates a pediatric dental program. In partnership with Leon County Schools, it is piloting a sealant program for second graders.

WHAT IS OR SHOULD BE THE COUNTY'S ROLE IN IMPROVING ACCESS TO CARE?

The final portion of the morning session centered on the role the county could play to improve access to care. A number of partners discussed the county moving toward operating in a more outcome-driven fashion, consistent with nationwide healthcare trends. The county was identified as the most appropriate partner to facilitate a discussion on a healthcare system that is more heavily focused on achieving

improved outcomes. This would include facilitating discussions to establish certain health benchmarks and supporting providers to reach identified goals.

The county was also identified as having an important role in taking the lead on key health issues that impact the community. This includes pursuing innovative health technologies, such as telehealth and telemedicine, through policy development at the local and state level. Regarding mental health, initiatives to reduce stigmas associated with seeking mental health treatment were discussed and the county was identified as playing an important role in educating the public and promoting the importance of treatment for mental health and substance use disorders.

One of the issues we have in general is a level of public prejudice and stigma, not only about severe and persistent mental health issues... but with mild mental health issues... A lot of that has to do with both a reluctance to seek treatment and a reluctance to admit that there are interventions needed, and with the unavailability... of milder or more moderate forms of treatment, and that takes not just providers, but it takes a change in the culture of the community... I think that is a place where the county, with the partnership of the current providers, can take the lead and say we want to make this the healthiest county we can, both in terms of physical, but also in terms of behavioral health."

— Jay Reeve
President and Chief Executive Officer
Apalachee Center

PUBLIC COMMENT PERIOD

At the end of this section of the dialogue, citizens were given an opportunity to make comments. Public comments included concern that the failure to expand Medicaid in Florida would have a dramatic impact on the uninsured, particularly in the African American population. Concern was expressed over the health disparities within the community and that the need for care in the underserved population is not met by the current system of care. Concern was also mentioned regarding the difficulty that high need patients have in navigating the healthcare system.

GAPS AND CURRENT BARRIERS TO COLLABORATION

WHAT ARE THE GAPS IN SERVICES IN THE COMMUNITY?

As the dialogue shifted from discussion of strengths and assets of the healthcare system, partners talked about the gaps in services they see as barriers. Although many partners highlighted the high quality of care provided by physicians, it was noted that some specialties suffer from a shortage of providers and additional physicians are needed to match the health needs of the community.

There was a discussion about gaps in services for the chronically ill. The current CareNet system has provided a strong safety net, but the system does not address funding of chronic disease treatment. There is an acute need to improve chronic care management and services for “high utilizers” that cycle in and out of the hospital.

Many partners highlighted the need to put increased focus on prevention efforts, particularly among high need populations. Finally, there was discussion around a gap in acute ongoing behavioral health services, although this stems more from a statewide funding lapse. Conversation among the partners highlighted the quality of services delivered and focused most of the discussion on gaps in access to care.

WHAT ARE THE GAPS IN ACCESS TO CARE IN THE COMMUNITY?

The partners discussed a number of critical gaps in access to care. The county has high quality health-care services and well-trained physicians; however, the partners discussed the lack of a full continuum of services. It is difficult for uninsured and underinsured patients to connect to needed services in the system due to fragmented providers and a lack of follow-up services available to them. It was noted that many patients stop seeking services when confronted with the difficulty of navigating the system. In particular, investments need to be made to close gaps in preventive care, follow-up, and ongoing outpatient treatment for the chronically ill.

For those uninsured populations gaining access to health coverage through the Affordable Care Act, accessing a fragmented system of care will be particularly difficult as many of them are gaining insurance for the first time or after a long

gap in coverage. The partners expressed concerns about gaps in coverage for those purchasing high-deductible plans on the Federal Health Insurance Marketplace.

Some providers have found it difficult to share patient health information. As information sharing is a critical component to a system that provides a strong continuity and continuum of care, partners expressed concern and a desire to move forward on improving capacity for information and health

“Our system is still very provider-centered rather than patient-centered and we expect patients to know how to navigate so many different systems to get all of the pieces [of care] that they need.”

— Lauren Faison
Administrator for Population Health and Regional Development
Tallahassee Memorial HealthCare

record sharing. Multiple partners discussed the current status of health information exchanges, which offer significant potential for improving the community healthcare system, but are still in the development stage or have yet to be adopted universally. Part of the slow adoption of health information exchanges has to do with the complex issues surrounding the Health Insurance Portability and Accountability Act (HIPAA) and other privacy requirements and the cost-prohibitive nature of connecting medical records systems to health information exchanges.

Healthcare delivery is provider-centered, which is a contributing factor to the continuum of care gap discussed earlier in the dialogue. Many partners discussed the need to shift towards a patient-centered model of healthcare delivery.

At this point in the dialogue discussion shifted to an issue within the primary care provider system for the uninsured and underserved population. Due to the timing of federal funding decisions, the gathering of these key partners served as an important opportunity to address this critical community partnership.

PUBLIC COMMENT PERIOD

No members of the public offered comments for this section of the dialogue.

REMOVING BARRIERS TO COLLABORATION

WHAT ARE SOME OPPORTUNITIES TO ADDRESS GAPS IN THE COMMUNITY?

At the start of this session on how to address gaps in the healthcare system, partners were led in a short discussion of what gaps had been identified earlier in the day. They were also prompted to consider the healthcare system as a whole and where each of the partners fit into solving some of these key gaps in the community.

The Center for Health Equity at Florida A&M University (FAMU) will engage in an agreement with both community health centers to implement an outcome-driven model addressing diabetes. The pilot program will take a baseline assessment of patients and put them through a structured system of care that eliminates barriers such as transportation, mental health, substance abuse, and follow-up care. The baseline assessment measures will be monitored and outcomes reported on a quarterly basis to view improvement. This type of model would address continuum of care issues discussed in the earlier segment on gaps.

The partners discussed both the process and the types of community outcomes that should be addressed. There was discussion of anchoring any community shared vision on improving health to a national standard that is recognized by both leaders and the public (e.g. Healthy People 2020). There was broad agreement that any outcome data should be based on data already collected by providers, as they are all faced with a number of data collection requirements already.

Many partners weighed in on the process of filling community gaps with a broad census focused on developing a committee or community health council that would develop a shared community vision or community-based plan that addresses agreed upon priorities. The United Way of the Big Bend operates a community health council that spans across community sectors. The county currently has

Participants discussed additional partners that should be included in the development of a community-based plan that impacts health but were not included in the Community Dialogue. Suggestions included:

- » Law enforcement
- » Leon County School District
- » City of Tallahassee
- » County commissioners from surrounding counties
- » Faith-based organizations
- » Patients/clients
- » County and city planners
- » Leon County Emergency Medical Services (EMS)
- » Transportation leaders
- » Business leaders

a Community Health Coordinating Committee and it could be utilized as a vehicle for community partners and the county to move community health priorities forward. There was discussion of engaging county leaders from surrounding counties to gauge the utilization of healthcare services in Leon County from individuals residing in those counties. Other suggestions included the development of a multi-year strategic plan that includes an annual plan incorporating community health priorities.

Improving health literacy in the community was suggested as an opportunity to address access to care issues. One solution offered was to develop a focus group or survey of Leon County citizens to gauge their current understanding of health and then undertaking a public education effort to fill the needed gaps identified. Another suggestion was to provide services that would guide people through the healthcare system. There is a shortage of support staff throughout the healthcare system in the community that can provide those types of services to improve access and health literacy. Providing this type of support staff for patients ensures they receive needed care.

PUBLIC COMMENT PERIOD

Comments included concern over the high rates of infant mortality in Leon County. Income inequality and poverty were also identified as barriers to accessing care in the community, which also impacts low income citizens ability to provide or get transportation to gain access to healthcare. Some commenters agreed with ideas discussed by the partners such as consolidated medical records to provide for consistency of care across providers, the concept of case management, and a shift to patient-centered care. Community goals would be shared with the public to ensure transparency.

NEXT STEPS: WHAT WILL EACH PARTNER COMMIT TO MOVING FORWARD?

County Administrator Long opened this section of the dialogue by drawing on comments earlier in the day that focused on moving toward a more outcome-driven approach. He noted that county contracts have been focused on getting people into a primary care home, but this could be a pivot point to shift toward outcome-driven contracts with providers. This would allow the county to focus on moving the needle on specific health care needs in the community identified by partners. Multiple partners indicated that the community needs to first assess the health issues and develop a community-based plan to address them, and then potentially address how the county contracts with providers.

The United Way of the Big Bend expressed willingness to take the lead on being the catalyst for the community health council to pool resources and contribute to a discussion of a community-wide shared vision. Many other partners stated that they were willing to devote time and resources to a community health council.

A number of partners, including the FAMU College of Pharmacy and the Tallahassee Memorial Health-Care Transition Center said they would focus on sharing information and tools with all the partners to improve knowledge of the needs of the community. Dr. Thompson from FAMU offered to compile health statistics for the area, including in subgroups of the community, to help understand the health issues of the community. The Transition Center will share its patient-by-patient identifier and GIS mapping tools that provide data on the neediest populations in the community.



NACo COMMUNITY DIALOGUE SERIES

Leon County Community Dialogue

IMPROVING COUNTY HEALTH • APRIL 3 2014



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Innovative Partnerships for Healthcare 2.0



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What we're gonna do...

- Build on the work started in April 2014
- Learn the “Why” MIH is so popular now
 - Analyze the current state of the US Healthcare system
 - Hospital issues
 - Physician issues
 - Hospice issues
 - Home health issues
- The “How”
 - Insight into new “EMS” model
 - How would that fit in *your* world?
- The “What”
 - What the heck y’all doing over there in Ft. Worth...?
 - ... And in other communities in the U.S.



About MedStar...

- Governmental agency (PUM) serving Ft. Worth and 14 Cities
 - Self-Operated
 - 980,000 residents, 421 Sq. miles
 - Exclusive provider - emergency and non emergency
- 125,000 responses annually
- 460 employees
- \$40 million budget
- Fully deployed system status management
- Medical Control from 14 member Emergency Physician's Advisory Board (EPAB)
 - Physician Medical Directors from all emergency departments in service area + 5 Tarrant County Medical Society reps



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It is difficult for uninsured and underinsured patients to connect to needed services in the system due to fragmented providers and a lack of follow-up services available to them.

It was noted that many patients stop seeking services when confronted with the difficulty of navigating the system.

In particular, investments need to be made to close gaps in preventive care, follow-up, and ongoing outpatient treatment for the chronically ill.”

“Healthcare delivery is provider-centered, which is a contributing factor to the continuum of care gap discussed earlier in the dialogue. Many partners discussed the need to shift towards a patient-centered model of healthcare delivery.”





Why yes, I'm a bit stressed.
Why do you ask?



Our World is Changing:



Attention Please!

- \$9,695 per capita health expenditures!!
 - Due in large part to **quantity-based** payments



<http://www.usatoday.com/story/news/nation/2015/07/28/cms-report-shows-health-spending-growth-faster-than-recent-years/30790253/>



Health survey ranks U.S. last among rich peers

Michael Winter

June 16, 2014



For the fifth time in a decade, the United States is the sick man of the rich world. But recent health reforms and increased health technology spending may provide a cure in the coming years.

That's according to the latest Commonwealth Fund survey of 11 nations, which ranked the world's most expensive health care system dead last on measures of "efficiency, equity, and outcomes." So too in 2010, 2007, 2006 and 2004.

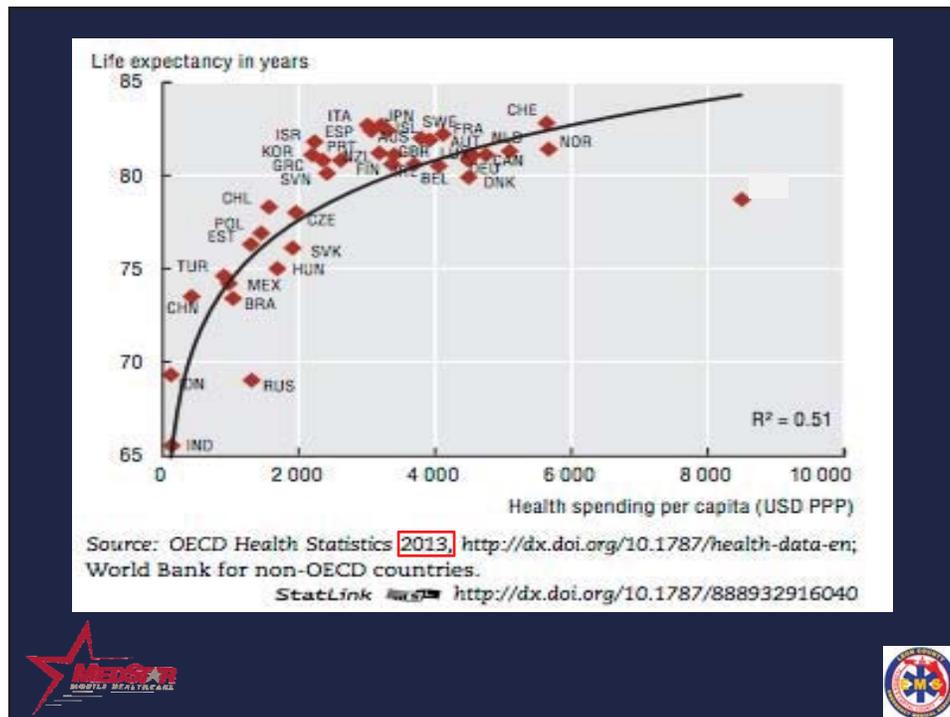
The other eight countries surveyed were Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway and Sweden.

What do the healthier cousins have that the United States does not? Universal health care, the Commonwealth Fund points out.



<http://www.usatoday.com/story/news/nation/2014/06/16/health-survey-us-last/10638811/>





Overkill

An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it?

By Atul Gawande

May 11, 2015

MEDCITY News

THE NEW YORKER

Writing in the New Yorker, Gawande, a general surgeon at Brigham and Women's Hospital in Boston, author and MacArthur Foundation "genius grant" recipient, painstakingly explains the "epidemic of unnecessary care" that bears much of the blame for the country's runaway healthcare costs and preventable deaths.

As Gawande noted, the Institute of Medicine reported in 2010 that 30 percent of healthcare spending, or \$750 billion a year, was wasteful. "The report found that higher prices, administrative expenses, and fraud accounted for almost half of this waste. Bigger than any of those, however, was the amount spent on unnecessary healthcare services," Gawande noted.

Gawande also looked at strategies for combat the problem, and found, to the surprise of nobody in the healthcare industry, that moving away from fee-for-service toward accountable, outcomes-based care is absolutely necessary. He just had no idea just how effective an incentive shift could be until he took a deeper look at the evidence.

<http://medcitynews.com/2015/05/gawande-looks-costly-problem-wasteful-care/>

Return Visits to the Emergency Department: The Patient Perspective

Sep 2, 2014
Source: ACEP

Annals of Emergency Medicine
An International Journal

Conclusion

Post-discharge factors, including perceived inability to access timely follow-up care and uncertainty and fear about disease progression, are primary motivators for return to the ED. Many patients prefer hospital-based care because of increased convenience and timely results. Further work is needed to develop alternative pathways for patients to ask questions and seek guidance when and where they want.



[http://www.annemergmed.com/article/S0196-0644\(14\)00622-2/fulltext](http://www.annemergmed.com/article/S0196-0644(14)00622-2/fulltext)



Heart-Attack Patients More Likely To Die After Ambulances Are Diverted

By Barbara Feder Ostrov
August 31, 2015

KHN
KAISER HEALTH NEWS

Heart-attack patients whose ambulances were diverted from crowded emergency rooms to hospitals farther away were more likely to be dead a year later than patients who weren't diverted, according to a recent study published in the journal Health Affairs.

Some hospitals see diversion as a necessary safety valve for full-up emergency rooms. But emergency care experts say they push the crowding problem to nearby hospitals and can compromise patient care, especially in life-threatening cases.

The researchers found that heart-attack patients whose ambulances had been diverted to an emergency room farther away were nearly 10 percent more likely to be dead one year later than those whose ambulances were not diverted.

"It still boils down to lack of resources to meet the demand," Elliott said.

B.J. Bartleson, vice president of nursing and clinical services for the California Hospital Association, said the state's hospitals are working with local EMS agencies to make sure patients get to the right hospital at the right time.



<http://khn.org/news/heart-attack-patients-more-likely-to-die-after-ambulances-are-diverted/>

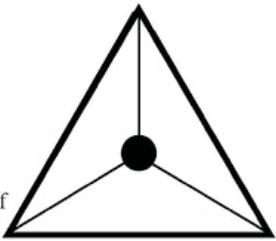




Institute for Healthcare Improvement

IHI Triple Aim Initiative
Better Care for Individuals, Better Health for Populations, and Lower Per Capita Costs

Health of a Population



Experience of Care

- Safe
- Effective
- Patient centered
- Efficient
- Timely
- Equitable

Per Capita Cost

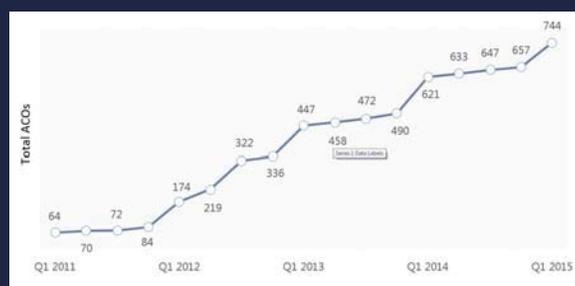
The IHI Triple Aim

Better care for individuals, better health for populations, lower per capita costs




Healthcare Economics 3.0

- ACOs
 - **744** as of March 2015
 - **23.5 million** covered lives
- Steroid Injection = ACA



<http://healthaffairs.org/blog/2015/03/31/growth-and-dispersion-of-accountable-care-organizations-in-2015-2/>





FLAACOS RESOURCES CONTACT



ABOUT FLAACOS

FLAACOS is the premier professional organization for Accountable Care Organizations (ACOs) throughout Florida. ACOs are designed to incentivize providers to work together to increase quality of care delivered to patients while significantly lowering medical costs overall. New shared savings payment arrangements are being developed by both government and private sector payers that are encouraging the fast growth of these Accountable Care models.

FLAACOS members are organized in a vibrant network of state affiliate groups that share FLAACOS goals in working on behalf of ACO professionals. FLAACOS encourages the exchange of diverse opinions and to further discussion, dialogue, and reflection of particular topics relevant to FLAACOS. Stay up-to-date with industry trends with the FLAACOS Newsletter. Receive the latest research based ideas to inspire and inform your service options. FLAACOS provides an opportunity to network with physicians and other ACO leaders from around the State of Florida. Participate in discussions throughout the year, join one of the FLAACOS committees and attend the FLAACOS Annual Conference. Educate yourself with member only meetings.

Get reduced rates for conferences and professional networking and development opportunities where you'll rub shoulders with leading luminaries in healthcare reform. Click the registration button to join and/or renew your FLAACOS membership.

<http://www.flaacos.com/about-flaacos.html>



FLORIDA ACO DIRECTORY

MEDICARE SHARED SAVINGS

- Accountable Care Coalition Of Central Georgia
- Accountable Care Coalition Of North Central Florida LLC
- Accountable Care Coalition Of Northwest Florida LLC
- Accountable Care Coalition Of The Mississippi Gulf Coast LLC
- Accountable Care Medical Group of Florida Inc/ACMG
- Accountable Care Options LLC
- Accountable Care Partners LLC
- Alkerm Oryxone LLC ACO
- American Health Alliance
- Barona Health Systems
- Barona Health Partners
- Breward Guardian LLC
- Breward Health ACO
- Central Florida Physicians Trust
- First Coast Health Alliance LLC
- Florida Medical Clinic ACO LLC
- Florida Physicians Trust LLC ACO
- FPJ Healthcare LLC ACO
- Health Choice Care LLC
- Health Point ACO LLC
- Holy Cross Physician Partners ACO LLC
- Integr8 Healthcare LLC
- JSA Medical Group ACO
- MCM Accountable Care Organization LLC
- Medical Practitioners For Affordable Care LLC
- Midwestern Accountable Care Organization
- Nature Coast ACO LLC
- Northeast Florida Accountable Care (Orange ACO)
- Orange Accountable Care of South Florida LLC
- Orlando Health
- Palm Beach Accountable Care Organization LLC
- Physician First ACO
- Physicians Collaborative Trust ACO LLC
- PKM Premier Medical Associates
- PrimerMD ACO LLC
- Primary Care Alliance LLC
- Primary Partners
- Primary Partners LLC ACO
- ProCare Med LLC
- Reliance Healthcare Management Solutions LLC ACO
- Sarred Heart Health System
- South Florida ACO LLC
- Southwestern Integrated Medical
- St Vincent's Accountable Care Organization LLC
- West Florida ACO LLC

COMMERCIAL

- Skyline Physician Partners ACO LLC
- Cigna - BayCare Health System ACO
- Cigna - Broadview Health ACO
- Cigna - Holy Cross Physician Partners ACO
- Cigna - Orlando Health Physician Partners ACO
- Cigna - Primary Partners ACO
- Cleveland Clinic Regional
- Florida Blue - Baptist Health Care Corporation ACO
- Florida Blue - Baptist Health South Florida Advanced Medical Specialists ACO
- Florida Blue - First Coast Health Alliance ACO
- Florida Blue - Health Management Associates (HMA) ACO
- Florida Blue - Holy Cross Hospital ACO
- Florida Blue - Holy Cross Physician Partners ACO
- Florida Blue - Medical Specialists of Palm Beach ACO
- Florida Blue - Memorial Healthcare System ACO
- Florida Blue - Moffitt Cancer Center ACO
- Florida Blue - NCH Healthcare ACO
- Florida Blue - Orlando Health Physician Group ACO
- Florida Blue - Tappan Healthcare ACO
- Florida Physicians Trust ACO
- Frontier Alliance ACO
- UnitedHealthCare - The Villages ACO

67!

Healthcare Economics 3.0

- Payment based on **OUTCOMES**
- Bundled payments based on episode of care
- Push to Managed Medicare/Medicaid
- MSPB calculations = **2015**
 - Medicare Spending Per Beneficiary
 - Hospital accountable for some outpatient post acute costs
- Merger & Acquisition Frenzy



CMS announces additional participants in pilot project to improve care and reduce costs for Medicare

Over 2,100 participants in performance period of Bundled Payments for Care Improvement initiative

Date 2015-08-13
Title CMS announces additional participants in pilot project to improve care and reduce costs for Medicare
Contact go.cms.gov/media

"We are excited that thousands of providers in the Bundled Payments for Care Improvement initiative have joined us in changing the health care system to pay for quality over quantity - spending our dollars more wisely and improving care for Medicare beneficiaries," said Patrick Conway, M.D., CMS acting principal deputy administrator and chief medical officer. ***"By focusing on outcomes for an episode of care, rather than separate procedures in care delivery, we are incentivizing hospitals, doctors and other providers to work together to provide high quality, coordinated care for patients."***

Bundling payment for services that patients receive across a single episode of care is one way to encourage doctors, hospitals and other health care providers to work together to better coordinate care for patients, both when they are in the hospital and after they are discharged. Through the Bundled Payments for Care Improvement initiative, CMS is testing how bundled payments for clinical episodes can result in better care, smarter spending, and healthier people.

Today's announcement means several hundred providers are advancing into a program that rewards them for increasing quality and reducing costs while also penalizing them if costs exceed a set amount.



<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2015-Press-releases-items/2015-08-13.html>



HHS Pledges To Quicken Pace Toward Quality-Based Medicare Payments

By Jordan Rau January 26, 2015



The Obama administration Monday announced a goal of accelerating changes to Medicare so that **within four years, half of the program's traditional spending will go to doctors, hospitals and other providers that coordinate their patient care, stressing quality and frugality.**

The announcement by Health and Human Services Secretary Sylvia Burwell is intended to spur efforts ***to supplant Medicare's traditional fee-for-service medicine, in which doctors, hospitals and other medical providers are paid for each case or service without regard to how the patient fares.*** Since the passage of the federal health law in 2010, the administration has been designing new programs and underwriting experiments to come up with alternate payment models.

The administration also wants Medicare spending with any quality component, such as bonuses and penalties on top of traditional fee-for-service payments, to increase, so that by the end of 2018, 90 percent of Medicare spending has some sort of link to quality.

"For the first time we're actually going to set clear goals and establish a clear timeline for moving from volume to value in the Medicare system," Burwell said



<http://kaiserhealthnews.org/news/hhs-pledges-to-quicken-pace-toward-quality-based-medicare-payments/>



Anthem to Buy Cigna Amid Wave of Insurance Mergers

By CHAD BRAY

July 24, 2015

The New York Times

The health insurer Anthem said on Friday that it had agreed to acquire its rival Cigna for \$48.3 billion in a deal that would further concentrate the United States market to just a few major players.

A flurry of deals are reshaping the industry. Earlier this month Aetna agreed to acquire Humana, the smallest of the big five insurers, for \$37 billion in cash and stock. If both transactions are completed, the number of major health insurers in the United States will shrink to three.

Health insurers are seeking to consolidate to gain greater scale to reduce costs and capitalize on growing opportunities in the government and individual markets.



<http://www.nytimes.com/2015/07/25/business/dealbook/anthem-cigna-health-insurance-deal.html>



Healthcare Economics 3.0

- CMS Bonuses/Penalties
 - 2013 = 2% Max
 - 2014 = 3% Max
 - 2015 = 4.5% Max
 - 2016 = 5.5% Max
- Applied to all Medicare payments



CMS Bonuses/Penalties...

- Readmissions (up to 3%)
 - 2013-2014
 - MI
 - CHF
 - Pneumonia
 - 2015
 - COPD
 - Hips/Knees
 - 2017
 - CABG



2.5k hospitals penalized by CMS for high readmissions

Written by Heather Punke
August 04, 2015

BECKER'S
Hospital Review

In the fourth year of the Hospital Readmissions Reduction Program, **2,592 hospitals will face penalties to their Medicare reimbursements for a high number of 30-day readmissions.**

The penalties will take effect from Oct. 1 through Sept. 30, 2016, and are projected to cost the hospitals a combined \$420 million.

The maximum penalty this year is a 3 percent reduction in Medicare payments, which 38 hospitals will receive this year compared to 39 hospitals last year. The average penalty this year is 0.61 percent, *KHN* reported.



<http://www.beckershospitalreview.com/quality/2-5k-hospitals-penalized-by-cms-for-high-readmissions-10-things-to-know.html>



Medicare uses the national readmission rate to help decide what appropriate rates for each hospital, so to reduce their fines from previous years or avoid them altogether, hospitals must not only reduce their readmission rates but do so better than the industry did overall.

"You have to run as fast as everyone else to just stay even," Foster said. Only 129 hospitals that were fined last year avoided a fine in this new round, the KHN analysis found.

Medicare officials, however, consider the competition good motivation for hospitals to keep on tackling readmissions and not to become complacent with their improvements.

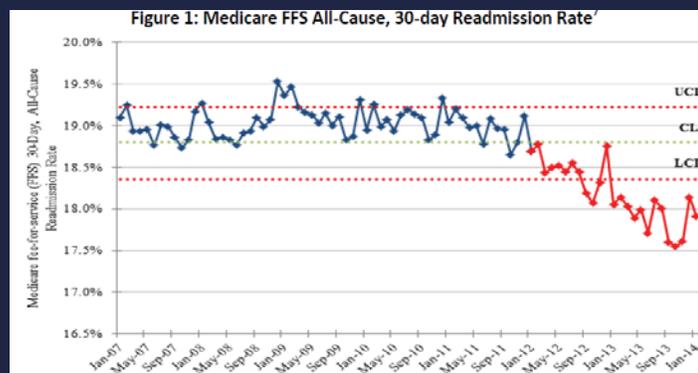


<http://www.kaiserhealthnews.org/Stories/2014/October/02/Medicare-readmissions-penalties-2015.aspx>



The all-cause 30-day hospital readmission rate among Medicare fee-for-service beneficiaries plummeted further to approximately 17.5 percent in 2013, translating into an estimated 150,000 fewer hospital readmissions between January 2012 and December 2013.

This represents an 8 percent reduction in the Medicare fee-for service all-cause 30-day readmissions rate.



<http://innovation.cms.gov/Files/reports/patient-safety-results.pdf>



These Days, We're All Paying More Attention to Care Transitions

Bill Santamour, Editor

July 14, 2015



Most of us would prefer to be cared for at home no matter how dicey our medical issues may be. Making that happen could be good for the nation's bottom line, too.

Medicare in June announced that it had saved more than \$25 million in the first year of a three-year study to determine the value of home-based primary care for frail seniors with multiple chronic illnesses.

The AP's Lauran Neergaard reports that the "humble house call" brings a doctor or nurse practitioner, sometimes accompanied by a social worker, to homebound patients whose needs are too complex for a 15-minute office visit and who might have a hard time getting to a physician's office. ***"If we can keep people as healthy as possible and at home, so they only go to the hospital or emergency room when they really need to," Neergaard quotes Patrick Conway, Medicare's chief medical officer, "that both improves quality and lowers cost."***



http://www.hhnmag.com/Magazine/2015/July/ednotes_jul15



Readmission reduction: A losing battle?

October 16, 2014

Readmissions may be "beyond a hospital's control," according to a new study published in the American Journal of Managed Care.

They gave half the patients an intervention featuring pre-discharge education and planning, post-discharge follow-up, an available hotline and "bridging" techniques such as daily symptom checks.

Linden and his coauthor, Susan W. Butterworth, Ph.D., found no statistical difference in readmissions between the two groups after both 30-day and 90-day periods, although mortality was lower in the intervention group than the control group.



<http://www.ajmc.com/publications/issue/2014/2014-vol20-n10/a-comprehensive-hospital-based-intervention-to-reduce-readmissions-for-chronically-ill-patients-a-randomized-controlled-trial/3>



Take-Away Points from the Research:

- **Our results suggest the need to continue experimenting with new interventions targeting readmissions, especially for severely ill patients.**
- Our addition of interactive voice response and motivational interviewing–based health coaching to the transitional care model did not improve outcomes.
- Our findings suggest that correcting improper use of the inhaler and increasing adherence to inhaled medications may reduce 90-day mortality for chronic obstructive pulmonary disease patients.
- **Hospitals, without collaborative relationships with community-based providers, may have limited ability to reduce readmissions, as they cannot ensure timely and continuous care for patients after discharge.**
- A challenging road lies ahead for stand-alone community hospitals seeking to decrease readmissions and avoid financial penalties.



How house calls can cut down on hospital readmissions

The Valley Hospital in New Jersey sends medical teams to patients' homes to coordinate follow-up care

By Leslie Small

April 23, 2015



The healthcare industry abounds with new ideas to reduce unplanned hospital readmissions and emergency department (ED) visits, but a New Jersey hospital has turned to a seemingly old-fashioned medical strategy--the house call.

The Valley Hospital in Ridgewood, New Jersey, launched its *Mobile Integrated Healthcare Program* in August 2014 to provide "proactive, post-discharge home check-ups" to patients with cardiopulmonary disease who are at high risk for readmission and either declined or didn't qualify for home care services, according to a statement from the hospital.

In the program, a team composed of a paramedic, an emergency medical technician and a critical care nurse conducts a physical exam of the patient, offers medication education, reinforces discharge instructions, completes a safety survey of the patient's home and confirms that the patient has made a follow-up appointment with a physician.



<http://www.fiercehealthcare.com/story/how-house-calls-can-cut-down-hospital-readmissions/2015-04-23>



Hospitals' Goal: Empty Beds

08.21.15 by Bill Santamour H&HN Editor



"IF OUR BEDS ARE FILLED, IT MEANS WE'VE FAILED."

That's the striking message in an ad I came across for Mount Sinai Hospital, and it could speak for hospitals across the nation as they transform from being strictly providers of care to promoters of health. The ad does a good job of explaining in lay terms how the new focus on population health management means that "instead of receiving care that's isolated and intermittent, patients receive care that's continuous and coordinated, much of it outside the traditional hospital setting."

*It spotlights Mount Sinai's "tremendous emphasis on wellness programs"; its **Mobile Acute Care Team**, which treats patients at home for certain conditions that otherwise would land them in the hospital; and its Preventable Admissions Care Team aimed at averting readmissions by providing both medical care and help with nonmedical factors that impact health and access to care, like housing and literacy.*

Not a lot there that hospital leaders don't already know, of course, but you've got to admit, the headline's a grabber.



<http://www.hhnmag.com/Daily/2015/August/weekly-reading-icd10-mcdonalds-xenotransplants-blog-santamour?>



ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI

Project Title: "Bundled Payment for Mobile Acute Care Team Services"

Geographic Reach: New York

Estimated Funding Amount: \$9,619,517



Summary:

The Icahn School of Medicine at Mount Sinai project will test **Mobile Acute Care Team (MACT) Services**, which will utilize the expertise of multiple providers and services already in existence in most parts of the United States but will transform their roles to address acute care needs in an outpatient setting. MACT is based on the hospital-at-home model, which has proven successful in a variety of settings. MACT will treat patients requiring hospital admission for selected conditions at home. **The core MACT team will involve physicians, nurse practitioners, registered nurses, social work, community paramedics,** care coaches, physical therapy, occupational therapy and speech therapy, and home health aides. The core MACT team will provide essential ancillary services such as community-based radiology, lab services (including point of care testing), nursing services, durable medical equipment, pharmacy and infusion services, telemedicine, and interdisciplinary post-acute care services for 30 days after admission. After 30 days, the team will ensure a safe transition back to community providers and provide referrals to appropriate services.



<http://innovation.cms.gov/initiatives/Participant/Health-Care-Innovation-Awards-Round-Two/Icahn-School-Of-Medicine-At-Mount-Sinai.html>



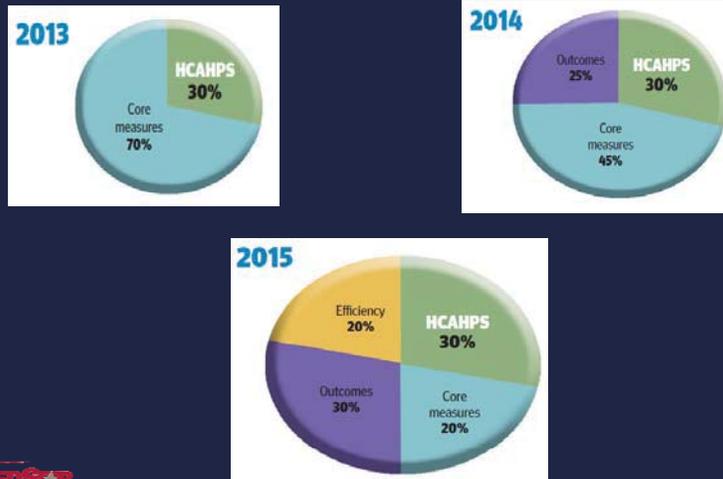
Name	City	State	FY2013 Readmission Penalty	FY2014 Readmission Penalty	FY2015 Readmission Penalty	FY2016 Readmission Penalty
CAPITAL REGIONAL	TALLAHASSEE	FL	0.69%	0.88%	0.75%	0.47%
TALLAHASSEE MEMORIAL	TALLAHASSEE	FL	0.00%	0.00%	0.00%	0.02%
JOHN D ARCHBOLD MEMORIAL	THOMASVILLE	GA	0.00%	0.00%	0.71%	0.88%
FLORIDA HOSPITAL	ORLANDO	FL	1.00%	0.78%	1.06%	1.18%
ORLANDO HEALTH	ORLANDO	FL	0.88%	0.50%	0.64%	0.48%
ST VINCENT'S MEDICAL CENTER	JACKSONVILLE	FL	0.14%	0.15%	2.86%	3.00%
BOCA RATON REGIONAL	BOCA RATON	FL	0.00%	0.00%	0.18%	0.80%
WEST BOCA MEDICAL	BOCA RATON	FL	0.14%	0.16%	0.22%	0.50%
JUPITER MEDICAL CENTER	JUPITER	FL	0.00%	0.00%	0.00%	1.07%
ST MARY'S MEDICAL	WEST PALM	FL	0.01%	0.07%	0.27%	0.49%
WELLINGTON MEDICAL CENTER	WELLINGTON	FL	0.70%	0.13%	0.98%	1.27%
JFK MEDICAL CENTER	ATLANTIS	FL	0.77%	0.63%	0.98%	1.35%
BAYLOR ALL SAINTS	FORT WORTH	TX	0.00%	0.00%	0.00%	0.00%
JPS HEALTH NETWORK	FORT WORTH	TX	0.08%	0.03%	0.03%	0.08%
PLAZA MEDICAL CENTER	FORT WORTH	TX	0.30%	0.12%	0.00%	0.00%
THR - FORT WORTH	FORT WORTH	TX	0.59%	0.32%	0.19%	0.11%
NORTH SHORE UNIVERSITY	MANHASSET	NY	1.00%	0.98%	0.55%	0.39%
DUKE HEALTH RALEIGH HOSPITAL	RALEIGH	NC	0.06%	0.00%	1.43%	1.10%
REX HOSPITAL	RALEIGH	NC	0.15%	0.08%	0.04%	0.07%
WAKEMED, RALEIGH CAMPUS	RALEIGH	NC	0.28%	0.42%	0.38%	0.00%
RENOWN REGIONAL	RENO	NV	0.31%	0.10%	0.27%	0.02%
RENOWN SOUTH MEADOW	RENO	NV	0.00%	0.00%	0.12%	0.10%
NORTHERN NEVADA MED CENTER	SPARKS	NV	0.04%	0.13%	2.11%	1.42%

CMS Bonuses/Penalties...

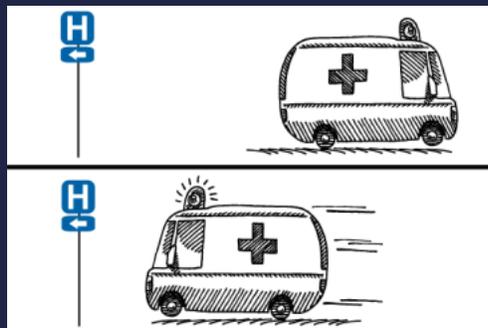
- Value-Based Purchasing (up to 1.5%)
 - Clinical process of care (12)
 - Patient experience (8)
 - Healthcare outcomes (5)
 - Efficiency (1)



Value-Based Purchasing...



Hospital	City	State	Value-Based Purchasing Oct. 2012-Sept. 2013	Value-Based Purchasing Oct. 2013-Sept. 2014	Value-Based Purchasing Oct. 2014-Sept. 2015	Readmissions Penalty Oct. 2014-Sept. 2015	Total Penalty Oct. 2014 - Sept 2015	Hospital-Acquired Conditions Penalty Oct. 2014-Sept. 2015
Capital Regional	Tallahassee	FL	0.22%	-0.12%	-0.36%	-0.75%	-1.11%	N
Tallahassee Memorial	Tallahassee	FL	0.01%	-0.26%	-0.28%	0.00%	-0.28%	N
Memorial Hospital	Jacksonville	FL	0.21%	0.03%	-0.45%	-0.81%	-1.26%	Y
St Vincent's Medical Center	Jacksonville	FL	0.16%	-0.03%	0.01%	-0.76%	-0.75%	N
St Vincent's Medical Center	Jacksonville	FL	-0.16%	0.22%	1.00%	-2.86%	-1.86%	N
Florida Hospital	Orlando	FL	-0.04%	0.32%	-0.04%	-1.06%	-1.10%	N
Orlando Regional	Orlando	FL	-0.20%	-0.27%	-0.70%	-0.64%	-1.34%	N



Efficiency Measure

Measure ID	Measure	2015 National Threshold	2015 National Benchmark
MSPB-1 NEW	Medicare Spending per Beneficiary	Median Medicare spending per beneficiary ratio across all hospitals during performance period	Mean of lowest decile of Medicare spending per beneficiary ratios across all hospitals during performance period



Hospital Name	Period		Avg Spending Per Episode (Hospital)	Avg Spending Per Episode (State)	Avg Spending Per Episode (Nation)
TALLAHASSEE MEMORIAL	1 to 3 days Prior to Index Hospital Admission	Outpatient	\$104	\$50	\$113
CAPITAL REGIONAL	1 to 3 days Prior to Index Hospital Admission	Outpatient	\$30	\$50	\$113



Experience of Care Measures

HCAHPS	2015 Floor	2015 National Threshold	2015 National Benchmark
Communication with Nurses	47.77%	76.56%	85.70%
Communication with Doctors	55.62%	79.88%	88.79%
Responsiveness of Hospital Staff	35.10%	63.17%	78.06%
Pain Management	43.58%	69.46%	78.17%
Communication about Medicines	35.48%	60.89%	71.85%
Hospital Cleanliness & Quietness	41.94%	64.07%	78.90%
Discharge Information	57.67%	83.54%	89.72%
Overall Rating of Hospital	32.82%	67.92%	83.44%



Patient Experience

- New “C-Suite” member
 - CXO – Chief Experience Officer
 - Responsible for maximizing satisfaction



Hospitals Take Cues From The Hospitality Industry

By Roni Caryn Rabin | November 4, 2014

Two years ago, Inova Health System recruited a top executive who was not a physician, had never worked in hospital administration and barely knew the difference between Medicare and Medicaid.

What Paul Westbrook specialized in was customer service. His background is in the hotel business – Marriott and The Ritz-Carlton, to be precise.

He is one of dozens of hospital executives around the country with a new charge. **Called chief patient experience officers**, their focus is on the service side of hospital care: improving communication with patients and making sure staff are attentive to their needs, whether that's more face time with nurses or quieter hallways so they can sleep.

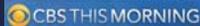
KHN
KAISER HEALTH NEWS



<http://kaiserhealthnews.org/news/hospitals-take-cues-from-the-hospitality-industry/>



Mich. hospital goes luxe: CEO explains patient-centered approach January 20, 2014

 CBS THIS MORNING

The newest innovation in health care may be the hospital itself.

Traditionally, hospitals were designed as a place for medical professionals to just do their job; they weren't often built with patients in mind. But that's not the case at one hospital near Detroit that looks and feels like a luxury hotel -- and treats patients like valued guests.

At lunchtime at the Henry Ford Hospital in West Bloomfield, Mich., don't look for day-old Jell-O served on a fiberglass tray in the cafeteria. At this hospital, it's a restaurant -- with a menu comprised of fresh and healthy foods, much of which is grown on-site in their own greenhouse.

Nancy Schlichting is chief executive officer of the Henry Ford Health System. Her goal was to build a new kind of hospital -- one that would become a go-to destination, a place people actually wanted to be.



<http://www.cbsnews.com/news/michigan-hospital-goes-luxe-ceo-explains-patient-centered-approach/>

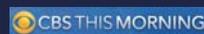


Schlichting recognized that hospitals needed an image makeover, **but she took a leap of faith by hiring an executive from Ritz-Carlton to design, and then run, the \$360 million facility. But there was only one rule: "The rule is that it's about the patient,"** Schlichting said. "We don't wake up (patients) between 9 at night and 5 in the morning . . . unless we have to."

The focus on patients begins immediately. Arriving guests are greeted by wheelchair valets in a lobby rivaling the world's finest hotels. They pass by a spa, the hair salon, and designer gift shops as they travel through an enclosed atrium to their private room.

Dr. Mark Rosenblum heads the hospital's neurosurgery department. He says the patient-focused approach speeds up the healing process.

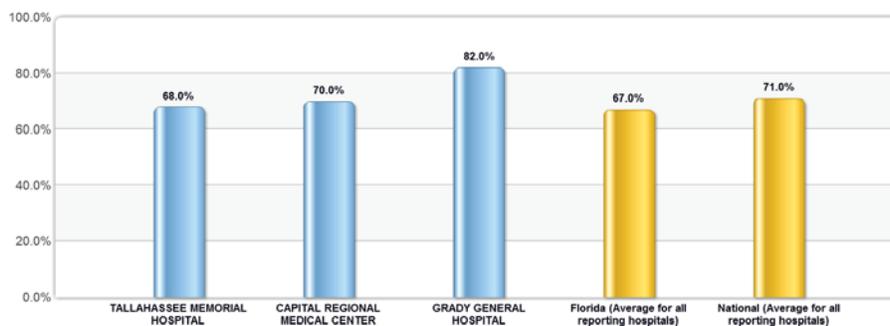
"Any patient's family can stay here anytime, night or day," Rosenblum said. "It's important for a patient's well-being and recovery to see their loved ones, to be less in a stark, uncomfortable, unusual environment. We think it helps."



Patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest)

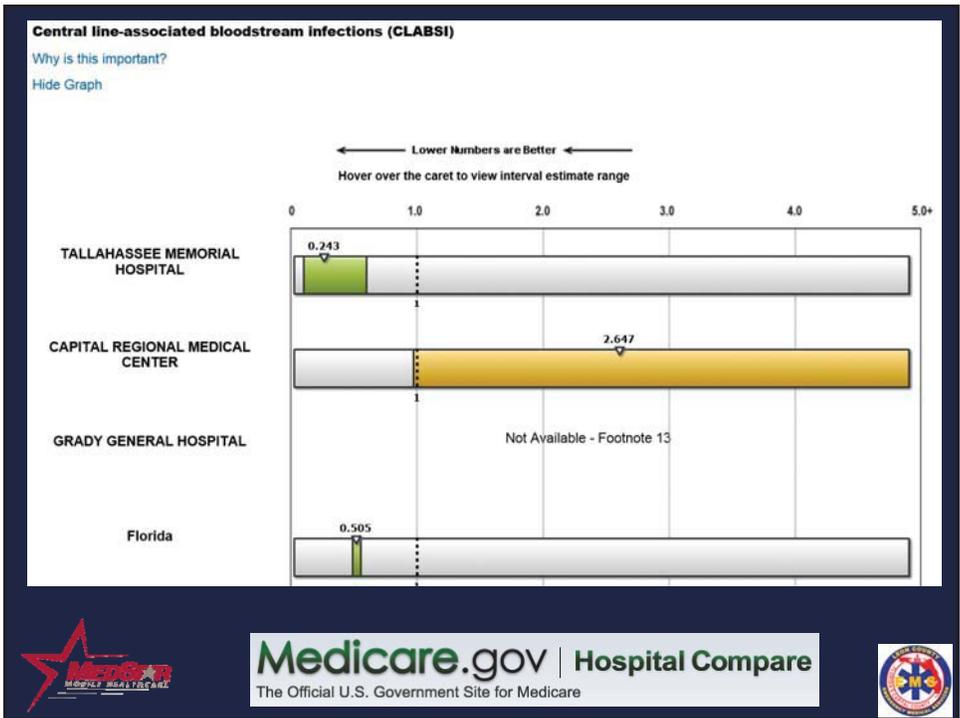
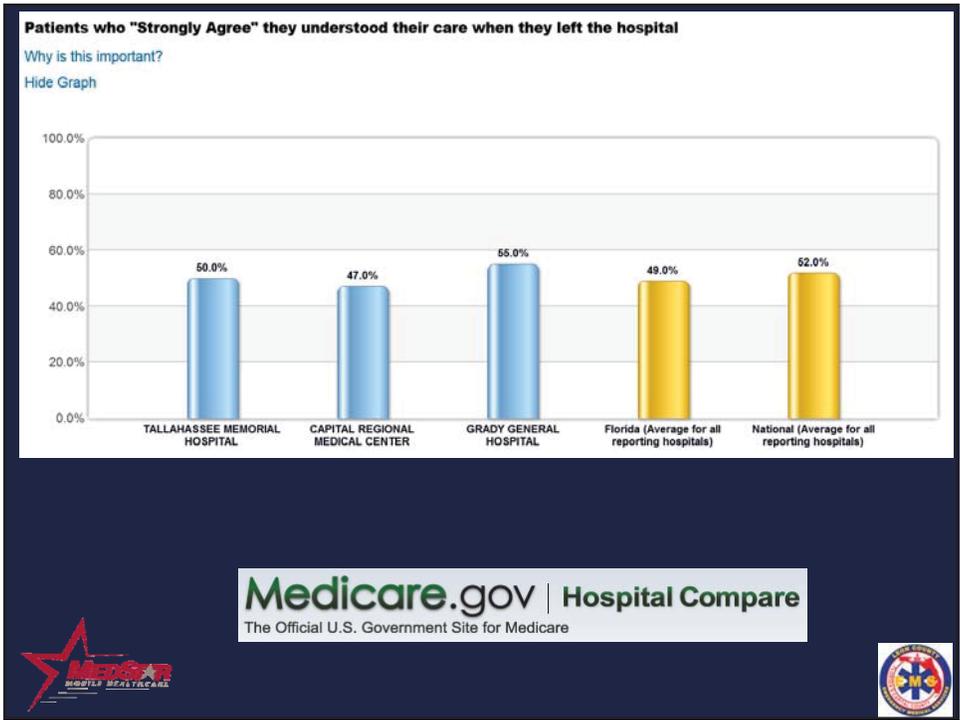
Why is this important?

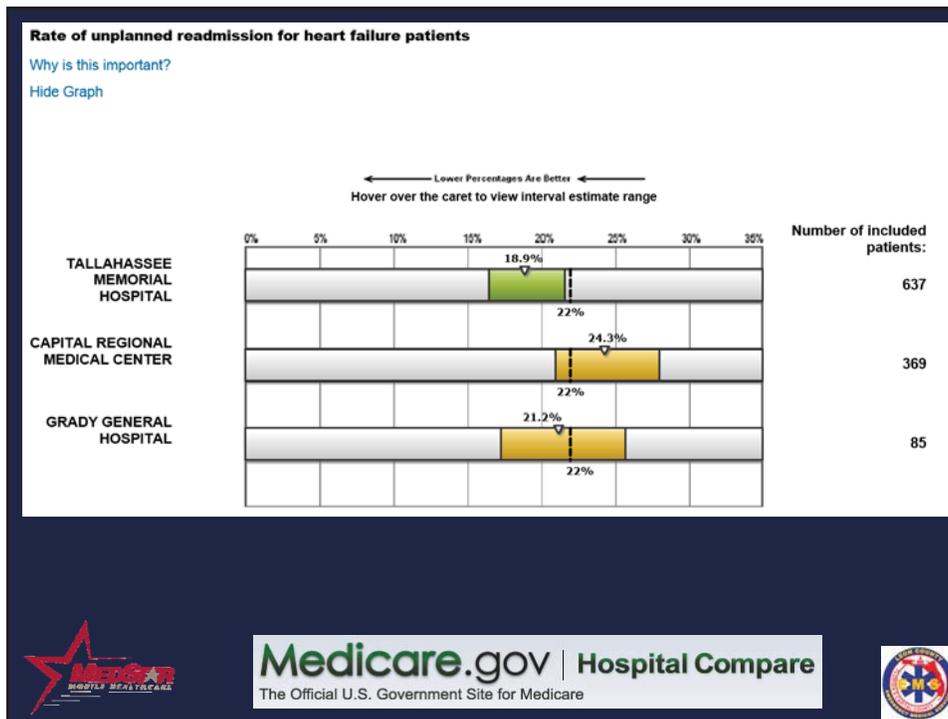
Hide Graph



Medicare.gov | Hospital Compare
The Official U.S. Government Site for Medicare







Kansas hospital to close next month

by Ayla Ellison
September 03, 2015



Chesterfield, Mo.-based Mercy health system has announced it will close Mercy Hospital Independence (Kan.) next month, according to a KTUL report.

The hospital's inpatient services, emergency department and ambulatory surgery services will close on Oct. 10. Some outpatient and clinic services will remain open past that date, but are expected to close no later than Dec. 31, according to the report.

Mercy decided to close the hospital after exploring multiple options for the facility over the past 18 months. **Declining populations and utilization patterns, challenges recruiting and keeping physicians, increasing capital improvement needs and shrinking reimbursement were all cited as factors in the decision**, according to the report.

"This was not the outcome we had sought or expected at the beginning of the discernment process, and our hearts are heavy," said Lynn Britton, Mercy president and CEO.



<http://www.beckershospitalreview.com/finance/kansas-hospital-to-close-next-month.html>



As outpatient care gains steam, one Texas hospital adopts a short-stay model

Overhauls prompt closure worries in community, but more hospitals may want to consider abandoning their traditional model

By Zack Budryk
July 27, 2015

To address an increased demand for outpatient services and a surplus of inpatient beds, one Texas hospital plans to create a short-stay center—and it's a move that other hospitals across the country may want to consider.

Despite a recent uptick in inpatient use, industry experts expect declining inpatient volumes to continue and care shifting to outpatient settings. Other factors play a part as well, including tepid elective admissions, continual pressure to keep readmissions low, care integration with an eye toward prevention and safer outpatient care due to increased technological innovation.

For these reasons, Port Arthur, Texas, Christus Southeast Texas Health System plans to abandon its traditional hospital model and convert St. Mary Hospital to a short-stay center in early September.

The hospital will retain about 251 of its 413 current staff.



<http://www.fiercehealthcare.com/story/outpatient-care-gains-steam-one-texas-hospital-adopts-short-stay-model/2015-07-27>



HCA to close Florida hospital as inpatient volumes dwindle

By Bob Herman
September 24, 2014

**Modern
Healthcare**

For-profit hospital giant HCA said Tuesday it will close one of its hospitals in Florida because of excess inpatient capacity in the region—a sign that healthcare reform continues to push patient volumes away from inpatient hospital settings and toward lower-cost outpatient facilities.

HCA will shut down Edward White Hospital in St. Petersburg, Fla., by Nov. 24. Clinical services at the hospital—which has 162 licensed beds and 110 staffed beds

The decline of inpatient utilization began several years ago during the recent recession, and has intensified as the Patient Protection and Affordable Care Act encourages providers to use less-costly, preventive measures.

A new report from consulting firm Kaufman Hall backs up those reports from health systems, ***finding that in the first half of this year, inpatient volumes were flat or fell for 68% of not-for-profit hospitals.***



<http://www.modernhealthcare.com/article/20140924/NEWS/309249963/hca-to-close-florida-hospital-as-inpatient-volumes-dwindle>





HCA buying Dallas-based urgent care company, CareNow

Oct 28, 2014

Nashville-based health care giant HCA is buying Dallas-based CareNow, which owns 24 urgent care centers in Dallas-Fort Worth.

"CareNow has a strong brand and will add an exceptional network of urgent care centers and 130 physicians that complement our hospital, emergency and outpatient services in Dallas-Fort Worth," said Sam Hazen, HCA president of operations.

"This transaction represents two trusted providers coming together to deliver a broader and more integrated level of quality health care services."

DALLAS
BUSINESS JOURNAL



<http://www.bizjournals.com/dallas/news/2014/10/28/hca-buying-dallas-based-urgent-care-company.html>



Spectrum Health is saving money by avoiding preventable readmissions. **"We understand where the world is going," Dickinson says. "We're not going to be able to continue to make money in acute care by hospitalizing people. We need to shift to take care of them."**

Michael Dickinson,
Medical Director for Heart Failure
and Heart Transplant at the
Frederik Meijer Heart & Vascular Institute



MAY 2013



http://www.hhnmag.com/display/HHN-news-article.dhtml?dcrPath=/templatedata/HF_Common/NewsArticle/data/HHN/Magazine/2013/May/0513HHN_Feature_clinical



Emergency Medical Services?



“EMS?”

- 9-1-1 safety net access for non-emergent healthcare
 - 35.6% of 9-1-1 requests
 - 12 months Priority 3 calls (44,567 (P3) / 124,925 (Total))
- Reasons people use emergency services
 - To see if they needed to
 - It’s what we’ve taught them to do
 - Because their doctors tell them to
 - It’s the only option
- 37 million house calls/year
 - 30% of these patients don’t go with us to the hospital



2012 NASEMSO Report



“EMS?”

10-year % change of overall call volume...

Call Type	% Increase
Interfacility	11.32%
Sick Person	10.37%
Falls	5.87%
Unc Person	5.20%
Assault	4.21%
Convulsions	4.16%
Psyc.	3.76%

Call Type	% Decrease
Abd Pain	2.83%
Traum Inj.	3.71%
Chest Pain	7.97%
MVA	10.38%
Breath. Prob.	10.48%





Unscheduled Medical Services!



Conundrum...

- Misaligned Incentives
 - Only paid to transport
 - “EMS” is a *transportation* benefit
 - NOT a *medical benefit*



Our Role?

“Emergency medical services (EMS) of the future will be **community-based** health management that is **fully integrated** with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and **follow-up**, and contribute to the **treatment of chronic conditions** and **community health monitoring**. This new entity will be developed from **redistribution of existing health care resources** and will be integrated with other health care providers and public health and public safety agencies. It will **improve community health** and result in more appropriate use of acute health care resources. EMS will remain the public’s emergency medical safety net.”



VIEWPOINT

JAMA
The Journal of the American Medical Association

Realigning Reimbursement Policy and Financial Incentives to Support Patient-Centered Out-of-Hospital Care

Kevin Munjal, MD, MPH

Brendan Carr, MD, MS

668 JAMA, February 20, 2013—Vol 309, No. 7



Financing Out-of-Hospital Care

National EMS expenditures from Medicare are approximately \$5.2 billion per year.⁴ Although this is less than 1% of total Medicare expenditures, there are considerable downstream health care costs associated with patients transported to emergency departments.² An average EMS agency receives 42% of its operating budget from Medicare fees, 19% from commercial insurers, 12% from Medicaid, and 4% from private pay; it requires approximately 23% in additional subsidization, most often provided by local taxes.² Thus, more than three-fourths of EMS revenue is generated from fee-for-service reimbursement, the service being transportation, not necessarily medical care.



Conclusions

Current Medicare reimbursement policies for out-of-hospital care link payment to transport to an emergency department. This provides a disincentive for EMS agencies to work to reduce avoidable visits to emergency departments, limits the role of prehospital care in the US health system, is not responsive to patients' needs, and generates downstream health care costs. Financial and delivery model reforms that address EMS payment policy may allow out-of-hospital care systems to deliver higher-quality, patient-centered, coordinated health care that could improve the public health and lower costs.



COST & PAYMENT

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The People-to-People Health
Foundation, Inc.

By Abby Alpert, Kristy G. Morganti, Gregg S. Margolis, Jeffrey Wasserman, and Arthur L. Kellermann

Giving EMS Flexibility In Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings

ABSTRACT Some Medicare beneficiaries who place 911 calls to request an ambulance might safely be cared for in settings other than the emergency department (ED) at lower cost. Using 2005–09 Medicare claims data and a validated algorithm, we estimated that 12.9–16.2 percent of Medicare-covered 911 emergency medical services (EMS) transports involved conditions that were probably nonemergent or primary care treatable. Among beneficiaries not admitted to the hospital, about 34.5 percent had a low-acuity diagnosis that might have been managed outside the ED. Annual Medicare EMS and ED payments for these patients were approximately \$1 billion per year. If Medicare had the flexibility to reimburse EMS for managing selected 911 calls in ways other than transport to an ED, we estimate that the federal government could save \$283–\$560 million or more per year, while improving the continuity of patient care. If private insurance companies followed suit, overall societal savings could be twice as large.

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Mobile Integrated Healthcare

- EMS Loyalty Program
- System Abusers
- 9-1-1 Nurse Triage
- CHF/High Risk Dx Readmissions
- Observational Admission Avoidance
- Hospice Revocation Avoidance
- Home Health Partnership



Patient Navigation vs. Primary Care



EMS Loyalty Program

- 296 Patients enrolled
 - 2013 – 2015
- 160 **graduated** patients with 12 month data pre and post enrollment as of June 30, 2015...
 - **During enrollment (30 – 90 days)**
 - 39.6% reduction in 9-1-1 to ED use
 - **Post Graduation**
 - 56.2% reduction in 9-1-1 to ED use
 - 85.2% in reduction for “System Abusers”



Expenditure Savings Analysis (1)

Based on Medicare Rates

High Utilizer Program - THR and JPS Combined

Analysis Dates: **October 1, 2011 - June 30, 2015**

Number of Patients Enrolled (2): **142**

Category	Utilization Changes		
	Base	Avoided	Savings
ED Payments (4)	\$969	-2240	(\$2,170,560)
Admission Payments (5)	\$10,500	-574	(\$6,027,000)
Hospital Expenditure Savings			(\$8,197,560)
Ambulance Payments	\$419	-2841	(\$1,190,379)
Total Expenditure Savings			\$9,387,939
Per Patient Enrolled			HUG
Payment Avoidance			\$66,112

Notes:

1. Comparison for enrolled patients based on use for 12 months prior to enrollment vs. 12 months **post program graduation.**
2. Patients with data 12 months pre and 12 months post graduation
3. Average Medicare payment from Medicare Utilization Tables
4. <http://www.cdc.gov/nchs/data/abus/abus12.pdf>
5. <http://www.hcup-us.ahrq.gov/reports/projections/2013-01.pdf>



Patient Self-Assessment of Health Status (1)
As of: 6/30/2015

	High Utilizer Group			Readmission Avoidance		
	Enrollment	Graduation	Change	Enrollment	Graduation	Change
Sample Size	55			41		
Mobility (2)	2.33	2.55	9.4%	2.37	2.41	1.7%
Self-Care (2)	2.65	2.82	6.4%	2.54	2.76	8.7%
Perform Usual Activities (2)	2.24	2.58	15.2%	2.27	2.51	10.6%
Pain and Discomfort (2)	1.98	2.52	27.3%	2.44	2.68	9.8%
Axiety/Depression (2)	2.11	2.51	19.0%	2.32	2.63	13.4%
Overall Health Status (3)	5.18	6.85	32.2%	4.88	6.78	38.9%

Notes:

1. Average scores of pre and post enrollment data from EuroQol EQ-5D-3L Assessment Questionnaire
2. Score 1 - 3 with 3 most favorable
3. Score 1 - 10 with 10 most favorable




The Real Benefits:



“Before I started this program I was sick every day; I was going to the emergency room nearly every day.”

“I have learned more in the last three months from John and you than I have ever learned from the doctors, the hospitals, or the emergency rooms.”

“Since this program, I have not had any pain medicines and have not been to the emergency room. I am keeping up with my doctor’s appointment and my MHRM appointments.”

Antoine Hall, MIH/CHP Patient
Enrolled 11/20 – 12/29/13

Used by special permission from Antoine Hall




Antoine Analysis

	Before	After	Change	Avg. Payment	Expenditure Savings
Ambulance Transports	11	0	-11	\$427	(\$4,697)
ED Visits	12	0	-12	\$774	(\$9,288)
Inpatient Admissions	4	0	-4	\$9,203	(\$36,812)
MIH Visits					22
MIH Visit Expenditure per Contact					\$75
MIH System Costs					\$1,650
Healthcare System Savings					(\$49,147)



Readmission Avoidance

- At-Risk for readmission
 - Referred by cardiac case managers
 - Routine home visits
 - **In-home education!**
 - Overall assessment, vital signs, weights, 'environment' check, baseline 12L ECG, diet compliance, med compliance
 - **Feedback to primary care physician (PCP)**
 - Non-emergency access number for episodic care
 - Decompensating?
 - Refer to PCP early
 - In-home diuresis



Readmit Program Analysis

June 2012 - June 2015 **JPS & THR Combined**
Patient Enrollments (1, 3) **119**

	30 Day ED Visits	30 Day Admissions
Count	43	33
Rate	36.1%	27.7%
Rate Reduction (2)	63.9%	72.3%
Expenditure per Admission (4)		\$ 10,500
Admissions Avoided		86
Expenditure Savings		\$ (903,000)
Admission Savings Per Patient		\$ (7,588)

Notes:

1. Patient enrollment criteria **requires a prior 30-day readmission** and the referral source **expects the patient to have a 30-day readmission**
2. **Compared to the anticipated 100% readmission rate**
3. Enrollment Period at least 30 days and less than 90 days
4. <http://www.hcup-us.ahrq.gov/reports/projections/2013-01.pdf>




Mobile Healthcare Programs

Patient Experience Summary
Through June 30, 2015

	Program		
	HUG	CHF	Overall Avg
Medic Listened?	4.98	4.86	4.92
Time to answer your questions?	4.96	4.86	4.91
Overall amount of time spent with you?	4.98	4.86	4.92
Explain things in a way you could understand?	4.98	4.92	4.95
Instructions regarding medication/follow-up care?	4.98	4.82	4.90
Thoroughness of the examination?	4.96	4.84	4.90
Advice to stay healthy?	4.96	4.92	4.94
Quality of the medical care/evaluation?	4.98	4.85	4.92
Level of Compassion	4.98	4.85	4.92
Overall satisfaction	4.92	4.85	4.89
Recommend the service to others?	97.8%	100.0%	98.9%

Select Comments:

Client states "You care more about my health than I do."
 "Keep the same compassionate, excellent people you have working for you now and your service will continue to be great! Everything was perfect, a 10!"
 "y'all have been off the charts helpful" "no complaints" "glad the hospital got it going for me"
 "Thank you very much! We couldnt have done this without you!"
 "The medics spent lots of time with me and provided very useful information. I really loved the program. They were very friendly and did an awesome job."
 "I love y'all, wonderful, Y'all 2 have been really big help and great with patience with me even though I'm a hard headed lil ol lady."




9-1-1 Nurse Triage

- Navigate low-acuity 9-1-1 calls to most appropriate resource
- Low acuity 9-1-1 calls (ALPHA & OMEGA)
 - Warm handoff to specially trained in-house RN
- Uses RN education and experience
 - With Clinical Decision Support software
- Referral eligibility determined by:
 - IAED Physician Board
 - Local Medical Control Authority



9-1-1 Nurse Triage

- Key = Referral Network
- Engaged hospital & community partners
 - Funding from hospitals
 - Know your stakeholder value proposition
- 40.0% of referred patients to alternate dispositions
- Future?
 - Physician/Hospital call services
 - Telehealth/patient monitoring
 - Rx compliance/reminders
 - Connect with payer databases?



9-1-1 Nurse Triage Patient Satisfaction

Through July 31, 2015

Please rate (2) the following: (N=279)	Score
The 9-1-1 call taking process	4.75
How the nurse handled call	4.73
If you feel the nurse understood your medical Issue	4.75
Your satisfaction with recommendation	4.59
The alternate transportation provided	4.55
<u>Did Your Medical Issue... (N=277)</u>	
Get Better	84.2%
Stay the Same	12.6%
Get Worse	3.2%
<u>Did Speaking with the Nurse Help? (N=273)</u>	
Yes	92.1%
No	7.9%
<u>Did Disposition Save Time and Money? (N=246)</u>	
Yes	94.7%
No	5.3%
<u>Should Your Call Have Been Handled Differently? (N=274)</u>	
No	85.0%
Yes	15.0%



Expenditure Savings Analysis

9-1-1 Nurse Triage Program

Based on Medicare Rates

Analysis Dates: **June 1, 2012 - July 31, 2015**

Number of Calls Referred:	3,589
% of Calls with Alternate Response	37.5%
% of Calls with Alternate Destination	31.2%

Category	Base	Avoided (4)	Savings
Ambulance Expenditure (1)	\$419	1,346	\$563,974
ED Expenditure (2)	\$969	1,119	\$1,084,311
ED Bed Hours (3)	6	1,119	6,714
Total Payment Avoidance			\$1,648,285

Per Patient Enrolled	ECNS
Payment Avoidance	\$1,225

Notes:

1. From Medicare Payment Tables
2. <http://www.cdc.gov/nchs/data/hus/hus12.pdf>
3. Provided by John Peter Smith Health Network
4. Result of EPAB approved change to allow locus of care to include ED visit by alternate transportation





Framing the Home Health Issues

- Penalized for readmissions
 - No more hospital referrals
 - CMS Penalties
- High cost of night/weekend demand services
- Don't know when their patients call 911
 - No opportunity for pre-admission care coordination
 - Reduced ability for post-discharge care coordination



Home Health Partnerships



How it Works

- Protocols established between HH agency and MedStar Medical Director
- Specialized training provided
 - HH trains MIH Providers in common procedures
 - MedStar ride outs by RNs
- HH agency registers client w/MedStar
- MedStar EMR created
- 9-1-1 CAD address flag created



How it Works

- If client calls 9-1-1
 - Appropriate units dispatched + MIH Provider
 - Comm Center notifies HH agency hotline
 - On scene MHP calls HH nurse from scene
 - Care coordination occurs
- If client calls HH agency
 - AND, HH agency wants MedStar to cover
 - HH agency calls MedStar for scene/home visit
 - MIH provider calls RN from the home for care coordination



Home Health Care Coordination Examples

Client: RoXXXX, John H – 19XX-10-07
Status: Active
Visit Date: 11/1/2015
Visit Acuity: Unscheduled Visit
Transport Resource: N/A

Program: Home Health - 911
Referring Source: Klarus
Visit Type: Home Visit
Visit Outcome: MHP Call Complete
Response Number: 151101297

Note By: Andrew Hatcher

Arrived on scene to find Mr. RoXXXX sitting upright at his dining room table, **appearing slightly tachypneic and distressed. He tells me that he has been feeling unwell since he woke up this morning around 0500.** He goes on to say that he has experienced decreased appetite for approximately one week. He has increasing weakness today as well. **He has gained 1lb in 24 hrs (117.4) I was present when the chest X-ray tech came to do imaging. The film showed the left lung with fluid at the base.**

Auscultation revealed clear breath sounds in the right upper and right upper, but severely diminished lung sounds on the upper left and upper left lung fields. There was no rales or rhonchi heard.



Istats were drawn with the following results:

Na; 135K: 4.6Cl; 104iCa; 1.11TcO2; 26Glu: 117BUN; 68Crea: 2.2HCT: 38Hb;
12.9aGap: 11

I called Beverley RN from Klarus and discussed my findings. She desires 40mg IVP Lasix, 20MEQ Potassium, and 2.5 Metolazone be administered for exacerbation of CHF. I administered 40mg Lasix in the right antecubital fossa through a 22g intravenous catheter. Beverley said she will follow up with him in the morning.

I provided a urine hat and explained how to measure his urine output to his family. They verbally understand. Intravenous access is discontinued after medication administration. I witnessed both other oral medications self administered by Mr. RoXXXX .

EENT: atraumatic; mucus membranes are moist Thorax; atraumaitc; no tenderness upon palpation-ICD in the right chest-diminished breath sounds left lung fields Lower extremities; +4 pitting edema on right leg, +3 pitting edema on the left leg upper extremities; atraumatic; no tenderness upon palpation.



Client: XXXXX, James I – 19XX-10-14
Program: Home Health
Visit Date: 9/20/2015
Visit Acuity: 911 Call

Referring Source: Klarus
Visit Type: Home Visit
Response Number: 150920215

Note By: Andrew Hatcher

Arrived on scene with Medstar unit attending to Mr. XXXX. They inform me that Mr. XXXX was walking into his house utilizing a walker assist device and become very dyspneic. This started around 1310 and lasted approximately 20min. He sat down in his chair and his symptoms ceased.

Family and private nurse on scene inform me that Mr. Perry has had a 4-5 pound gain in a three day period. They also notice bilateral ankle swelling, which is abnormal for Mr. Perry. Family also indicates that his blood pressure has been high lately.

I draw labs.

I contact Sean RN from Klarus and discuss this case. He takes 20mg Lasix 1x/day. Sean asks me to administer 40mg Lasix IVP and follow up approximately 5hrs later to re-evaluate and draw labs. Mr. XXXX does not take K+, nor is he on a fluid restriction. I advised to drink some water during this process, but no more than 1500ml total /day.

I release Medstar ambulance from scene.

Family gathers a bedside commode from a neighbor and I provide them **hat for calculation of urine output.** They will use their own scale for the follow up weight.



Client: XXXX, Clara L - 1934-03-06
Visit Date: 8/21/2015
Visit Acuity: **911 Call**
Response Number: 150821007

Program: Home Health - 911
Visit Type: Home Visit
Transport Resource: N/A

Note By: Ronald Moren

Family called 911 and stated pts BGL was 29. On EMS arrival, family had managed to give pt a few mouthfuls of honey and BGL was 32. Pt found lying in bed pt is alert to painful stimuli only. Pt is atraumatic. BBS are clear, =, bilateral with good chest rise and fall. Abd is soft and non-tender with no masses noted. Pt has a PICC line in right arm that she receives daily antibiotics from family through.

PICC line was accessed and approx 7 ml fluid withdrawn. IV D-10 was started and 250 ml was infused. Pt became A&OX4 and BGL increased to 188. Pts daughter cooked her some eggs and gave her an ensure to drink.

Pt states she feels much better and does not want to go to the ER at this time. It was explained to the patient and her family that a large decrease in blood sugar, while may be expected, should still be evaluated by a physician. Pt and family still did not want to go to the ER. **Pt and family were educated on possible problems with low BGL including falls, syncope, AMS, & seizures. Family was instructed to monitor blood glucose levels and to contact KLARUS and/or her PCP in the morning. Family was also instructed to call 911 again if pts condition changes.**

KLARUS was contacted and message left, RN (Diane) called back and confirmed message received and advised she would have somebody go out and see patient in the morning.



Program: Home Health
Visit Date: 8/6/2015
Visit Acuity: **Unscheduled Visit**
Response Number: 150806056

Referring Source: Klarus
Visit Type: Home Visit
Visit Outcome: MHP Call Complete
Note By: Brandon Pate

Note:

Lisa, RN, from Klarus called the Communications Center and requested a CCP evaluation of this client after she inadvertently removed her colostomy bag.

Upon arrival, the client is ambulatory, conscious and alert, oriented to person only; this is consistent with her baseline, per the assisted living staff. The client has no complaints of pain or symptoms; she denies having chest pain, shortness of breath, a headache, nausea, vomiting, diarrhea, weakness, dizziness, and abdominal pain. The client reports she inadvertently removed her colostomy bag.

Upon exam.....

I called Lisa and informed her of my assessment findings. She subsequently provided the procedure for a colostomy bag change. The skin around the stoma was cleansed with a skin prep solution and wipes. Stoma powder was applied. The skin around the stoma was cleansed a second time. The flange was sized and applied around the stoma, using pressure in a circular, outward motion to ensure adhesion. The stoma bag was attached to the flange without difficulty. A staff member from the assisted living facility remained at the bedside during the procedure. Following completion, the staff remained with the client. Call complete.



Note:

AOSTF 28 yo male sitting on couch. He states that he is SOB, his abdomen is distended and his legs are swollen all of this since 2000 this evening. He also reports his pump was alarming starting at 2100 and he shut it off.

Pt. requires Milrinone continuous infusion and the pump was reading a high pressure alarm. Pt. also reports a cough this evening. *In reviewing his HX he has CHF with an EF of 20-25% and CKD.* He reports he feels like he always does when he gets fluid overloaded. *Pt. also reports a 4 lb. weight gain in the last 24 hrs. Upon exam noted pt. in mild-moderate resp. distress with SPO2 in the 80's off his O2. In reviewing some old notes he does not like to wear his O2.* Pt. is A&OX4, PPTe, MAE. Pt. is mildly tachycardic, BS clear upper and crackles in bases. ST on 12-lead W/O elevation.

Abdomen appears distended though I have never seen this pt. in the past. Pt. has 3+ edema in lower ext. PICC line port being used for Milrinone infusion was occluded. PICC was flushed and infusion resumed. *Chem 8 was obtained. NA 133, K+ 3.7, Cl 97, CA 1.19, Tco2 36, Glucose 143, BUN 38, Cre 1.3, Hct 40, Hgb 13.6A Gap 5. Pt. was given Lasix 80mg SIVP and advised to double his morning potassium dose. The importance of wearing his O2 was again stressed. I discussed the plan with pt. to ensure he felt capable of staying at home and that was his preference.*

Pt. stated he had a urinal and was advised to use it and write down all of his output between now and when he sees the nurse. He was advised to call back for any issues or worsening of condition. *I also spoke with Sean at Klarus and he is good with plan. Klarus will follow up tomorrow with client.*



Utilization Outcome Summary
Home Health Partnership

As of: **Sep-15**

	#	%
Enrollments by Home Health Agency	804	100.0%
<i>9-1-1 calls by Enrolled Patients</i>	<i>537</i>	<i>66.8%</i>
9-1-1 Calls by Enrolled Patients with a CCP on-scene	245	45.6%
ED Transports when CCP on Scene	93	38.0%
Home Visits Requested by Agency	187	23.3%
ED Transports from home visits requested by Agency	9	4.8%



Framing the Hospice Issue:

- Patients & families want the patient to pass comfortably at home
- Hospice wants the patient to pass peacefully at home
- Death is scary
- When death is near....
 - 9-1-1 call challenging for EMS
- 9-1-1 usually = Hospice Revocation
 - Voluntary or involuntary



Hospice Partnerships



Economic Model

- Hospice benefit
 - Per diem from payer to agency
 - Agency pays hospice related care
 - LOS issues
 - Varies based on Dx
- MedPAC recommends increasing hospice benefit
- IHI recommends increase hospice enrollment



How it Works

- Protocols established between Hospice agency and MedStar Medical Director
- Specialized training provided
 - Hospice trains MIH Providers in common procedures
 - MedStar ride outs by RNs
- Hospice agency registers “At-Risk” client w/MedStar
- 9-1-1 CAD address flag created



How it Works

- 1 home visit by MHP
 - Reinforce hospice relationship w/MedStar backup
- If client calls 9-1-1
 - Appropriate units dispatched + MIH Provider
 - Comm Center notifies on-call nurse
 - On scene:
 - Non-hospice hospice related call = treat and transport as usual
 - Hospice related call:
 - Care coordination occurs



Special Note

- MHPs trained to have “The Conversation” with patients enrolled in other programs
 - Or POLST/MOST, etc.



Hospice Program Summary

Sept. 2013 through Sept. 2015

	#	%
Referrals (1)	249	
Enrolled (2)	168	
Deceased	116	69.0%
Active	28	16.7%
Improved	2	1.2%
Revoked (3)	24	14.3%

Activity:

EMS Calls	57	
Transports	20	35.1%

Notes:

- (1) Patients referred who are identified as at high risk for voluntary disenrollment, or involuntary revocation.
- (2) Difference results from referrals outside the MedStar service area, or patients who declined program enrollment.
- (3) Patients who either voluntary disenrolled, or had their hospice status revoked.



Home Health, Hospice and EMS Team Up to Tackle the Triple Aim

Outside the hospital, community resources can work together for better care of patients

The drive to achieve the IHG's Triple Aim has fostered the creation of many innovative partnerships. This column focuses on the synergistic relationships and integrations developing between mobile integrated healthcare (MIH) and the home healthcare industry.

One of the main goals of MIH is to navigate patients through the healthcare system, not replace healthcare system resources already available in the community. Home health and hospice are valuable links in the chain of healthcare—and, for qualifying patients, a logical care delivery model that can be enhanced through a partnership with a mobile player like the local EMS agency.

Increased Referrals
Home health increasingly is by hospitals as reduce prevent department via admissions. Pa health services multiple chron polypharmacy significant risk or hospital ad

www.



Meredith Anastasio

Meredith Anastasio is managing director at the Lincoln Healthcare Group (LHG) and leads the planning of Home Care 100 and Home Care & Hospice LINK.

J. Daniel Bruce

J. Daniel Bruce is the administrator of Klarus Home Care in Fort Worth and is responsible for the ongoing relationship with MedStar. He is a leader in the development of partnerships to create value-based services.

John Mezo

John Mezo is the general manager for VITAS Healthcare in Fort Worth, overseeing program operations, developing business opportunities, hiring and mentoring new staff and representing VITAS throughout the community.



These are just a few examples of how EMS-MIH and home health can work collaboratively together to meet the needs of the patient, and the needs of the agency. It is not a competitive relationship, but rather a cooperative relationship designed to meet the needs of the patient – a marriage made in heaven!

A more in-depth look at MIH programs and their current work with home health and hospice partners (Klarus & VITAS; Centura Health at Home) will be presented at the 2015 Home Care 100 Executive Leadership Conference. For additional information or to register, please visit www.homecare100.com. ■



EMS Healthcare and Home Care: Special Report



Funding Models

- Fee for Service
 - Patient contact fee
- Enrollment fee
 - Per enrolled patient
 - Shared risk for utilization of MIH providers
- Population-based
 - PM/PM fee for all enrolled patients
- Program Cost
 - Joint funding for specific project/outcomes



Who's Paying?

- The one who is financially 'at risk'
 - Hospitals
 - Readmissions
 - HUG patients without a payer source
 - 3rd Party payers (including Medicaid)
 - Admissions/readmissions
 - ED visits
 - Shared-Risk partnerships (ACOs, etc.)
 - Admissions/readmissions



Who's Paying?

- The one who is financially 'at risk'
 - Hospice
 - For enrolled patients
 - Home Health
 - For enrolled patients
 - Local Governments
 - ONLY if they view as valuable, or reduce spending





AHRQ HEALTH CARE INNOVATIONS EXCHANGE
Innovations and Tools to Improve Quality and Reduce Disparities

Service Delivery Innovation Profile

Trained Paramedics Provide Ongoing Support to Frequent 911 Callers, Reducing Use of Ambulance and Emergency Department Services

Snapshot

Summary

The Area Metropolitan Ambulance Authority (more commonly known as MedStar), an emergency medical service provider serving the Fort Worth, TX, area, uses community health paramedics to provide in-home and telephone-based support to patients who frequently call 911 and to other patient populations who are at risk for potentially preventable admissions or readmissions. Working as part of MedStar's Mobile Integrated Healthcare Practice, these paramedics conduct an in-depth medical assessment, develop a customized care plan based on that assessment, and periodically visit or telephone the patient and family to support them in following the plan. Support generally continues until they can manage on their own. Three additional similar programs serve individuals with congestive heart failure, patients who can be managed transitionally at home versus an overnight observational admission in the hospital, and in-home hospice patients who are at risk for hospice revocation. These programs have significantly reduced the number of 911 calls, the number of potentially preventable emergency department visits and hospital admissions, the number of overnight observational admissions, and the number of hospice revocations, leading to declines in emergency medical services and emergency department charges and costs, and freeing up capacity in area emergency departments.

See the Description section for an update on programs, identification of eligible individuals, patient assessment, and special protocols for patients with congestive heart failure; the Patient Population section for a description of patients served; the References section for two new resources; the Results section for updated data on the decline in ambulance and emergency department usage, charges, and costs, as well as results related to congestive heart failure and hospice patient admissions; the Planning and Development section for information about a hospice patient pilot test; the Resources section for updated staffing and cost data; the Funding section for updated information about program funders; and the Use by Other Organizations section for updated data on program adopters (updated January 2013).

Evidence Rating (what is this?)

Moderate: The evidence consists of pre- and post-implementation comparisons of 911 calls from program participants, along with estimates of the cost savings generated and emergency department capacity freed up as a result of the reduction in calls.




MedStar Mobile Healthcare

MOBILE INTEGRATED HEALTHCARE approach to implementation
 MedStar Mobile Healthcare

MOBILE INTEGRATED HEALTHCARE

Approach to Implementation



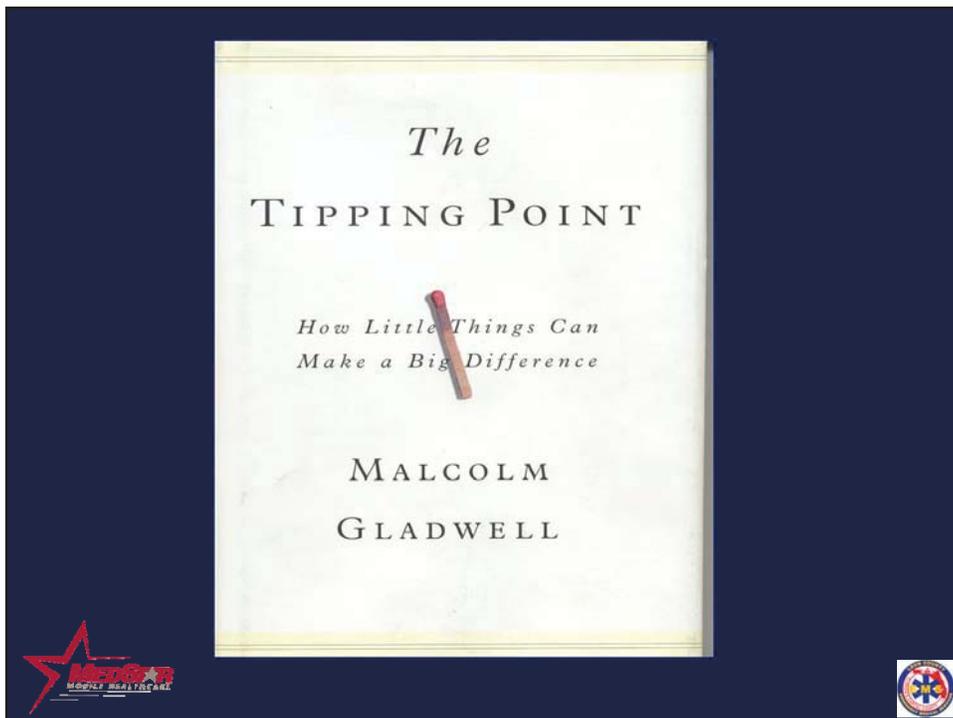



“Mobile Integrated Healthcare is an innovative and patient-centered approach to meeting the needs of patients and their families. The model does require you to “flip” your thinking about almost everything – from roles for health care providers, to what an EMT or paramedic might do to care for a patient in their home, to how we will get paid for care in the future.

*The authors teach us how to flip our thinking about using home visits to assess safety and health. They encourage us to segment patients and design new ways to relate to and support these patients. **And they urge us to use all of the assets in a community to get to better care.** This is our shared professional challenge, and it will take new models, new relationships, and new skills.”*

Maureen Bisognano
 President and CEO
 Institute for Healthcare Improvement



2009 = 4 Programs

2014 = 160 Programs

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP)



Insights on the development and characteristics of these innovative healthcare initiatives, based on national survey data

Presented by the National Association of Emergency Medical Technicians



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Samples of Other Programs

- CMS CMMI HCIA Grants
 - \$60 million in 6 programs
- REMSA (NV)
- Wake County (NC)
- UPMC (PA)
- Eagle County (CO)
- Dallas Fire/Rescue (TX)
- Mesa Fire & Medical (AZ)
- Christian Hospital EMS, St. Louis (MO)
- North Memorial Medical Center (MN)
- California Pilot Projects



Paramedics Aren't Just for Emergencies

Home visits for lab tests, IV medications and hospital follow-up

By Laura Landro

Aug. 17, 2015

THE WALL STREET JOURNAL

Paramedics, who race to emergencies and transport victims to the nearest ER, are taking on a new role: keeping patients out of the hospital.

In this new role, paramedics augment existing programs like visiting nurse services and home care. ***They also treat patients who don't meet home-nursing criteria or don't want someone in their home all the time but still have complex needs, says David Schoenwetter, an emergency physician and head of the mobile health paramedic pilot program at Geisinger Wyoming Valley Medical Center in Wilkes-Barre, Pa., part of Danville, Pa.-based Geisinger Health System.***

The programs aim to reduce the high costs of emergency room visits and inpatient hospital stays. Hospitals are facing financial penalties from Medicare and other payers when patients are readmitted to the hospital within 30 days of being discharged.

days among 704 patients who had a home visit from a paramedic, Geisinger calculates. From March 2014 to June 2015, the Geisinger mobile health team prevented 42 hospitalizations, 33 emergency department visits and 168 inpatient he case of heart-failure patients, hospital admissions and emergency-room visits were reduced by 50%, and the rate of hospital readmissions within 30 days fell by 15%. Patient satisfaction scores for the program were 100%.



<http://www.wsj.com/articles/paramedics-aren-t-just-for-emergencies-1439832074>



Paramedics work to keep patients out of the E.R.

Anna Gorman, Kaiser Health News

May 10, 2015

USA TODAY
A Hearst Company

Around the country, the role of paramedics is changing. ***In various states, they're receiving extra training to provide more primary and preventive care and to take certain patients to urgent care or mental health clinics rather than more-costly emergency rooms.*** Ramsdell and others in his program, for instance, spent 150 hours in the classroom and with clinicians learning how to provide ongoing care for patients.

Using a \$9.8 million federal grant, Gubbels' agency launched three different projects. In addition to providing paramedic home visits and offering 911 callers options besides the ER, the agency started a nurse-run health line to give people with health questions another number to call in non-emergency situations.

An early evaluation by the University of Nevada, Reno, which was based on insurance claims and hospital data, shows that the projects saved \$5.5 million in 2013 and 2014. They helped avoid 3,483 emergency department visits, 674 ambulance transports and 59 hospital re-admissions, according to the preliminary data. The federal government plans to do its own evaluation.



<http://www.usatoday.com/story/news/2015/05/10/paramedics-work-to-keep-patients-out-of-e-r/70949938/>



Change From the Inside Out – Health Care Leaders Taking the Helm

Donald M. Berwick, MD, MPP1; Derek Feeley, DBA1; Saranya Loehrer, MD, MPH1
1Institute for Healthcare Improvement, Cambridge, Massachusetts
JAMA. **March 26, 2015.**
doi:10.1001/jama.2015.2830

Even as politicians and pundits continue to debate the merits of the Affordable Care Act (ACA), it is time to look beyond it to the next phase of US health care reform.

innovations in delivery mature at a far faster pace than laws and regulations evolve, even in far less contentious political times than today's. **For example, productive new health care roles, such as community paramedics, community health workers, and resilience counselors, *emerge at a rate that legal requirements and reimbursement policies simply do not match.***



<http://jama.jamanetwork.com/article.aspx?articleid=2210910>



Triple threat: Achieve multiple goals with community paramedics

by Chrissy Wild
October 2, 2015



Many health systems embarking on population health initiatives know they need to bolster their partnerships with community resources, but don't know where to focus their efforts. **Community paramedicine is a great place to start.**

Community paramedics receive advanced training, allowing them to provide a range of in-home services, such as health coaching and home safety assessments for your rising- and high-risk patients. They can also help you reduce your ED volumes by providing in-home treatments to frequent 911 callers whose needs are not emergent, and reduce your readmission rates by performing post-discharge check-ups on at-risk patients.

How do I measure success?

Many programs compare their targeted patient population's number of 911 calls, ED visits, admissions and readmissions, and total cost of care prior to program enrollment to those metrics post-enrollment. These basic metrics serve as a barometer for the program's success and are useful in demonstrating the ROI of the program to organization leaders and private payers for reimbursement purposes.



<https://www.advisory.com/research/care-transformation-center/care-transformation-center-blog/2015/10/community-paramedicine-webcon-recap>



Key Question #2

- If you had a magic wand and could change one thing, but **ONLY 1** thing about in our community's healthcare system, what would you change?
 - money and resources are no object



Key Question #3

- What are the current barriers to change in our community's healthcare system?



Key Question #4

- Who is not at the table today who should be (either by agency, role or name)?



Key Question #5

- What are the top 3 gaps in healthcare services in our community?









Proceedings Report on Community Paramedic Gap Analysis

&

Recommendations for Leon County Community Paramedic Program



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Introduction

Leon County, Florida engaged MedStar Mobile Healthcare to provide consulting services to assist in the development of a Community Paramedic Program. MedStar is a governmental administrative agency that is responsible for providing Emergency Medical Services for fifteen cities in the Ft. Worth, Texas area that includes 980,000 residents in 421 square miles. MedStar has operated a successful Community Paramedic Program since 2009 that has a demonstrated track record of improving patient navigation within the healthcare system resulting in improved patient outcomes and economic efficiencies. MedStar's Community Paramedic Program has been recognized as a model program and has developed industry recognized best practices in the field. MedStar has provided similar assistance in the development of Community Paramedic Programs to over 160 communities across the United States.

As a part of this engagement, MedStar reviewed the current healthcare environment in the community; provided guidance to the County on the development of a Community Paramedic Program; and, facilitated a meeting of community stakeholders to identify how a Community Paramedic Program can be designed to benefit patients and the community.

In MedStar's experience, it is important to design the Community Paramedic Program to meet the needs of the community it is serving. The goal of Community Paramedic Programs should be to provide patients with the right care, at the right time, in the right place. All successful Community Paramedic Programs that we know of were designed to meet an identifiable need within the community. It should also be noted that Community Paramedic Programs are not intended to replace, supplant or compete against healthcare services already available within a community. Community Paramedic Programs work to complement the services of the other health care professionals in the current healthcare system.

The focus of this report is to provide an overview of the information obtained at a community stakeholders' meeting that was held on November 6, 2015. This report provides a brief overview of the history and development of Mobile Integrated Healthcare / Community Paramedic Programs in the United States; provides a brief background on the development of the Community Paramedic Program in Leon County; summarizes the November 6, 2015 meeting; and provides actionable recommendations for the development of a Community Paramedic Program in Leon County.

History and Development of Mobile Integrated Health/Community Paramedic

The concept of Community Paramedicine was first formally initiated in 1997 in Red River, New Mexico. However, the rapid growth of Community Paramedic programs from four in 2009 to over 200 in 2015 has been due to the changes in the economics of healthcare transitioning for traditional fee for service to pay for performance. Hospitals and other healthcare providers are now being held financially accountable for improving patient outcomes, while reducing healthcare expenditures.

Physician involvement through telemedicine and other care coordination services also continues to grow as the complexity of patients being managed increases and the technology available to support teleconnectivity becomes more reliable and cost efficient.

Leon County Background

Leon County EMS has a long history of providing innovative programs that focus on meeting the needs of the patient. EMS has had a formal social service referral program since 2005. The goal of this program is to assist patients in finding appropriate services in the community that meet the needs of the patient. EMS across the county is a safety-net provider for individuals that have unmet needs. When patients are unable to identify resources that meet their specific needs, they will often default to calling EMS for services. In many instances, the needs of these patients are better provided by other community agencies. Examples include elderly individuals that are shut-in and in need of heating or food assistance; chronically ill patients that need help with mobility and transportation; and instances where the individual's living conditions contribute towards their health problems.

The EMS program leverages community resources by partnering with 2-1-1 Big Bend and their partner organizations. Through this partnership, paramedics that identify a patient with a need gains the consent of the patient and makes a referral to 2-1-1 Big Bend. 2-1-1 Big Bend makes an assessment of the situation and then connects the patient with the appropriate community resource that can meet the need of the patient. EMS makes on average 35 referrals per year.

Leon County identified the potential impact of providing Community Paramedic services when such services were in their infancy, likely due to EMS' experience and success with the social service referral program. In 2011, the County applied for a Health Care Innovation Challenge Grant from the Center for Medicaid and Medicare Services. The County again applied for grant funding from round two of the Health Care Innovation Challenge Grant and sought grant funding from the Robert Wood Johnson Public Health Services and Systems Research Grant program.

At the December 10, 2013 meeting, the Leon County Board of County Commissioners directed staff to modify the Strategic Initiative regarding EMS so that the county can continue to pursue assistance for the start-up costs of a Community Paramedic Program. The strategic initiative was modified and approved at the January 21, 2014 meeting.

On April 3, 2014, Leon County, in cooperation with the National Association of Counties, hosted the Leon County Community Dialogue on Improving County Health. This meeting brought together community leaders and members of the healthcare community to discuss access to care in the county. Participants included members of the County Commission, the County Administrator and staff, the Florida Department of Health in Leon County, and representatives from the Florida State University College of Medicine, Big Bend Cares, Neighborhood Medical Center, Apalachee Center, Bond Community Health Center, Capital Medical Society Foundation, North Florida Medical Centers, Tallahassee Memorial HealthCare, Florida A&M University College of Pharmacy and Pharmaceutical Sciences, and the United Way of the Big Bend. The focus of this meeting was to work towards solutions that improve access to care through greater collaboration and increased partnerships.

The report contains the following relevant information,

The county was identified as the most appropriate partner to facilitate a discussion on a healthcare system that is more heavily focused on achieving improved outcomes (p. 6).

Concern was expressed over the health disparities within the community and that the need for care in the underserved population is not met by the current system of care. Concern was also mentioned regarding the difficulty that high need patients have in navigating the healthcare system (p. 6).

As the dialogue shifted from discussion of strengths and assets of the healthcare system, partners talked about the gaps in services they see as barriers...There is an acute need to improve chronic care management and services for “high utilizers” that cycle in and out of the hospital (p. 7).

The partners discussed a number of critical gaps in access to care. The county has high quality health-care services and well-trained physicians; however, the partners discussed the lack of a full continuum of services. It is difficult for uninsured and underinsured patients to connect to needed services in the system due to fragmented providers and a lack of follow-up services available to them. It was noted that many patients stop seeking services when confronted with the difficulty of navigating the system. In particular, investments need to be made to close gaps in preventive care, follow-up, and ongoing outpatient treatment for the chronically ill (p. 7).

Healthcare delivery is provider-centered, which is a contributing factor to the continuum of care gap discussed earlier in the dialogue. Many partners discussed the need to shift towards a patient-centered model of healthcare delivery (p. 8).

Another suggestion was to provide services that would guide people through the healthcare system. There is a shortage of support staff throughout the healthcare system in the community that can provide those types of services to improve access and health literacy. Providing this type of support staff for patients ensures they receive needed care (p. 9).

Leon County was successful in obtaining grant funding to support the implementation of a Community Paramedic Program through the Florida Department of Health EMS Matching Grant program. This grant provided \$57,735 of funding and requires a local match of \$19,245 for a total project budget of \$76,980. The grant was accepted by the County on September 2, 2014 and the funding is included in the fiscal year 2016 budget. Utilization of this grant funding requires the County to commit to providing expanded services for five years.

Leon County EMS has conducted a review of the requests for service received by EMS during fiscal year 2015. EMS responded to 37,765 requests for service in fiscal year 2015 an increase of 12% over the 33,367 requests for service EMS responded to in fiscal year 2014. They then identified high system utilizes or those individual patients that utilized EMS services 15 or more times during fiscal year 2015. It was found that 46 individuals utilized EMS services 15 or more times representing 1,071 requests for service or 3% of the total requests for service responded to by EMS. According to Leon County EMS, these 1,071 requests equate to an estimated expense to the county of \$559,800. Two individuals were identified as the highest EMS utilizers with 54 requests for service each; the mean was 21 requests for service and the median was 23.28 requests for service.

Currently, both hospitals in Leon County are being assessed financial penalties from Medicare for higher than national average readmission rates. Medicare is also assessing financial penalties for things like patient experience scores, clinical processes of care and patient outcomes.

The implementation of a Community Paramedic program may have a positive impact in the readmission rates and resulting penalties for readmissions and value-based purchasing measures. During the Community Paramedic Briefing on November 6th, both hospitals expressed a strong desire for assistance with improving these measures.

Leon County has taken measures to address gaps in population health. Many of these initiatives are innovative and all are collaborative endeavors with community stakeholders. Our experience is that communities that have a high-level of stakeholder collaboration are the most successful at implementing a Community Paramedic Program. The importance of these partnerships in the success of a Community Paramedic Program cannot be emphasized enough.

November 6, 2015 Community Stakeholders' Meeting

A meeting with local community healthcare partners was held on November 6, 2015 to inform the partners about the Community Paramedic Program and to assess community gaps in healthcare delivery. This is an important step in the overall development of a Community Paramedic Program as successful Community Paramedic Programs require strong partnerships and have to be designed to meet the specific needs identified in the community.

Representatives of the following organizations were invited to the meeting:

211 Big Bend	Consulate Healthcare	Leon County Dental Clinic
Ability 1st	Covenant Hospice	Leon County Health Dept
Accessibility Solutions	DCF Office of Child Welfare	Maxim Healthcare Services
Allegro	Dial A Ride	Miracle Hill
Amedisys Home Health	Director of Economic Self Sufficiency Program	Neighborhood Medical Center
American Red Cross	Elder Care Services	North Florida Medical Center
Area Agency of Aging	Faith Home Health	North Florida Women's Care
Bethel Family Counseling & Outreach	Family Resources	Office of EMS Chief
Big Bend Cares	FAMU College of Pharmacy	PATH/Apalachee Center
Big Bend Homeless Coalition	FAMU Counseling Services	Prestige Health Choice
Big Bend Hospice	FAMU Student Health Center	Refuge House
Bond Community Health Center	FL Surgeon General	Renaissance Community Center - The Shelter
Broadview	Florida Alliance for Assistive Services & Tech	Salvation Army
Brookdale Hermitage Health	Florida Blue	Seven Hills Health and Rehabilitation Center
Capital Area Community Action Agency	Florida Department of Children and Families	Southern Medical Group
Capital City Youth Services	Florida Healthy Kids	Suncrest Omni
Capital Health Plan	Florida Legal Services Prescription Clinic	Tallahassee Memorial Healthcare
Capital Home Health	FSU College of Medicine	Tallahassee Orthopedic Group
Capital Medical Society Foundation	FSU Psychology Clinic	Tallahassee Senior Center
Capital Regional Medical Center	FSU Student Health and Wellness Center	Tallahassee Urban League
Catholic Charities	Geutiva Health Services	TCC Dental Clinic
Centre Pointe	Good Samaritan Network	TCC Mental Health
Centre Pointe	Harbor Chase	The Shelter
Chamber of Commerce	HealthSouth Rehab Hospital	United Way
Cherry Laurel	Home Instead Senior Care	US VA Outpatient Clinic
Children's Home Society	Hopewell Home Care	Visiting Angels
Children's Medical Services	Interim Healthcare	Westminster Oaks
Connections Church	Jasmine Women's Center	Whole Child Leon
Consolidated Dispatch Agency	Lake Ella Manor	

The meeting on November 6, 2015 was attended by a wide representation of the Leon County healthcare community. The discussion was kicked off by Vincent S. Long, Leon County Administrator and Chad Abrams, Chief of Public Safety. The discussion was moderated by Matt Zavadsky from MedStar.

The discussion was started by reviewing the Leon County Community Dialogue on Improving County Health findings and the connection to how a Community Paramedic Program can assist in meeting the identified needs. The stakeholders were presented with a short history of recent events in healthcare in America and how it is shifting. They were then presented with potential models of what the Leon County Community Paramedic program could look like and introduced to the general concept and how the program could help their organizations and patients.

The stakeholders were asked five questions at the end of the session to gain their perspective on how they envisioned this program improving the overall conditions in the community. The following are the questions with the top three answers to each question along with the response rate.

What is the one thing about the healthcare system in our community that keeps you up at night? What is your greatest concern?

1. Healthcare affordability - 44% of responses
2. Lack of access for patients - 36% of responses
3. Overcrowded emergency rooms - 8 % of responses

If you had a magic wand and could change one thing, but only one thing in our community healthcare system, what would you change? Money and resources is no object.

1. Increase access to care - 48 % of responses
2. Appropriate hospital utilization - 15 % of responses
3. Not enough physician resources - 12 % of responses

What are the current barriers to change in our community's healthcare system?

1. Lack of collaboration of healthcare agencies/politics – 44%
2. Lack of funding – 20%
3. Lack of provider resources – 12%

Who is not at the table to day that should be? (Either by agency, role, or name)

1. CEO's, and CFO's (healthcare leadership) – 44%
2. Non-healthcare community leadership (legislators, commissioners, community leaders) – 20%
3. Law enforcement – 8%

What are the three top gaps in healthcare services in our community?

1. Mental health – 64%
2. Homeless and homeless veterans – 28%
3. Dentists – 20%

Recommendations

It is recommend that Leon County continue to work with partner organizations and community stakeholders to further define program parameters and to establish a sustainable economic model. The information we have reviewed provides support for the development of a Community Paramedic Program that initially focuses on three service lines:

1. Hospital readmission avoidance;
2. Hospice revocation avoidance; and
3. High system utilizers.

The recommendation of these three initial programs is based on the information gleaned from the Leon County Community Dialogue on Improving County Health Community as well as the Community Paramedic briefing. The stakeholders present indicated that these programs would bring significant value.

The ***Readmission Avoidance Program*** would help improve patient outcomes and experience of care, and reduce preventable readmissions. This is patient centric and helps the hospitals with Medicare penalties.

The ***Hospice Revocation Avoidance Program*** will help meet the patient's desire regarding end of life care, as well as reduce unnecessary expenditures for the hospice agencies.

The ***High System Utilizer Program*** will help improve the patient-centered aspect of Leon County's healthcare system, and reduce medical care expenditures by navigating these patients to the most appropriate setting for their healthcare needs.

It is recommend that the County consider beginning the Community Paramedic Program as a six month pilot project with 20-30 patient enrolled in the Hospital Readmission Avoidance Program. The County would fund the six month pilot project only after obtaining formal commitments from the potential funders to contribute to funding the program once it meets agreed upon goals. This will assist in developing a sustainable economic model that requires the commitment of partner organizations and stakeholders that may benefit from the results of the program.

It is further recommend that the second phase of the program, the Hospice Revocation Avoidance Program, be simultaneously implemented with the pilot project. This program has the potential to immediately provide benefits to stakeholders and patients and has an easily implemented economic model. The County should enter into agreements with hospice agencies that outline the expectations and program parameters.

Once the readmission and hospice programs are implemented, we recommend that the County begin modeling a High System Utilizer Program with the healthcare system stakeholders who are financially at-risk for these patients. This will include organization such as third party payers and hospital partners.

How a Community Paramedic meets the needs identified at the November 6, 2015 community stakeholder meeting:

What is the one thing about the healthcare system in our community that keeps you up at night? What is your greatest concern?

1. **Healthcare affordability** – The Community Paramedic Program can assist with this gap through navigation of the patient to the appropriate care can help reduce costs. Similar programs across the country have demonstrated significant potential for reduced costs to patients, providers, and third party payers by providing the right care, at the right time, in the right place.
2. **Lack of access for patients** – Provide healthcare resources for patients by Community Paramedics delivering care to them, in their homes or place of employment, anytime, anywhere. These programs also assist with patient advocacy and providing education to the patient on the most appropriate ways to manage their healthcare needs.
3. **Overcrowded emergency rooms** – The Community Paramedic Program assists with this gap by reducing the need for low-acuity patients to visit the ER and by navigating low-acuity patients to other, more appropriate healthcare resources.

If you had a magic wand and could change one thing, but only one thing in our community healthcare system, what would you change? Money and resources are no object.

1. **Increase access to care** – Providing healthcare resources to patients by Community Paramedics, brings care to them, in their homes or place of employment, anytime, anywhere. These programs also assist with patient advocacy and providing education to the patient on the most appropriate ways to manage their healthcare needs.
2. **Appropriate hospital utilization** – The Community Paramedic Program will help provide options for low acuity patients so that hospital emergency rooms can focus on more acute patients.
3. **Not enough physician resources** – The Community Paramedics can be physician extenders, both by assisting with the field implementation of a physician developed care plan, or through telemedicine solutions, to help meet patient needs and help apply community resources for the patient as needed.

What are the current barriers to change in our community's healthcare system?

1. **Lack of collaboration of healthcare agencies/politics** – The Community Paramedic Program should host a monthly Care Coordination Council to help agencies collaborate and offer appropriate services to patients when indicated. This Council could also help identify and advocate for the development of resources that are needed in the community to help these patients.
2. **Lack of funding** – The program can use current funding to reallocate resources in the system as needed to appropriately meet the needs of each patient.
3. **Lack of provider resources** – Adding Community Paramedic resources into the system will increase capacity of providers and, through the use of technology such as telemedicine, extend the reach of the current provider base. The Community Paramedic Program may also help to quantify primary care physician resources that are available to patients in the community.

Who is not at the table to day that should be? (Either by agency, role, or name)

1. **CEO's, and CFO's (healthcare leadership)** – Many were invited, but County leadership should visit them individually soon.
2. **Non-healthcare community leadership (legislators, commissioners, community leaders)** – County leadership should visit them individually soon.
3. **Law enforcement** – All law enforcement agencies should be notified and visited.

What are the three top gaps in healthcare services in our community?

1. **Mental health** – Community Paramedics will be specially trained to provide an on scene mental health assessment with possible direct admit processes to community mental health facilities.
2. **Homeless and homeless veterans** – The program could be utilized as available as a shared resource and all homeless would be directed to appropriate community care as indicated.
3. **Dentists** – The program should contact the local dental association to determine how to expand access to dental resources within the community. This may also be an early goal of the Care Coordination Council to help identify or advocate for the development of additional dental resource availability

Conclusion

After the November 6th stakeholder meeting several gaps were identified within the Leon County healthcare community. As indicated above, several of these issues could be identified, addressed and improved through a Community Paramedic Program. The proposed program has the potential to find patients in Leon County that are currently underserved due to a lack of information or understanding of how the healthcare system works or what services are available to them. Once these patients are identified, they can then be educated and referred to local resources that already exist within the community and moved to appropriate medical care that can meet their needs, help alleviate stretched healthcare resources, and reduce costs. The Community Paramedic Program will need to work collaboratively with all of the healthcare and social service resources within the community to reach these goals and to improve the overall healthcare of the citizens of Leon County. Specific initial goals or improving the health of possible readmission patients from the hospital, readmission patients from Hospice care, and high system users is achievable through a Leon County EMS Community Paramedic Program.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP)



Insights on the development and characteristics of these innovative healthcare initiatives, based on national survey data

Presented by the National Association of
Emergency Medical Technicians



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¹Meaney PA, et al. *Circulation*. 2013;128:417-35

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Hall County Director of Emergency Management / Fire Chief (ret.)

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IMAGE PROVIDED BY PINNACLEHEALTH/COMMUNITY LIFETEAM

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Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey

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.

Though still evolving, MIH and CP programs operating around the nation are providing a range of patient-centered services, including:

- ➊ Sending EMTs, paramedics or community paramedics into the homes of patients to help with chronic disease management and education, or post-hospital discharge follow-up, to prevent hospital admissions or readmissions, and to improve patients' experience of care.
- ➋ Navigating patients to destinations such as primary care, urgent care, mental health or substance abuse treatment centers instead of emergency departments to avoid costly, unnecessary hospital visits.
- ➌ Deploying telemedicine to connect patients in their homes with caregivers elsewhere.
- ➍ Providing telephone advice or other assistance to non-urgent 911 callers instead of sending an ambulance crew.

To add to the EMS profession's understanding of the development, characteristics and status of MIH-CP in the United States, NAEMT conducted a comprehensive survey in late 2014 of the nation's currently operating MIH-CP programs.

This summary analysis reports the results of that survey, and the conclusions

that can be drawn from the data. Analysis was provided by our author team, which includes several of the nation's MIH-CP thought leaders, medical directors and MIH-CP program administrators.

Survey finds much enthusiasm, significant obstacles

The survey identified more than 100 EMS agencies that have worked diligently over the past several years to determine their communities' needs, build partnerships to launch these innovative programs and contribute to solving the key issues facing American healthcare.

The promise of these programs has garnered the attention of a broad spectrum of stakeholders, ranging from hospitals to physicians groups, private insurers and the Centers for Medicare and Medicaid Services (CMS). The interest has enabled some MIH-CP programs to secure grants to cover the initial development and operation of their programs. The largest and most well publicized funding came from the CMS Innovation Center, which awarded grants to several EMS agencies and their partners beginning in 2012 to study the effectiveness of MIH-CP programs in achieving the Institute for Healthcare Improvement's Triple Aim: improving the patient experience of care, improving the health of populations and reducing the per capita cost of healthcare.

Outside of the federal grants, other EMS agencies have been successful in securing grants from foundations, or in negotiating contracts with partners such as hospitals, Medicaid managed care organizations,

home health agencies, hospice agencies and private insurers. Those contracts may include payments for MIH-CP services based on fee-for-service, a per-patient or capitated fee, or other shared savings arrangements.

Yet most EMS agencies launching MIH-CP programs have and continue to fund these programs out of their existing budgets – a sign of their dedication but worrisome from a financial perspective.

Compounding these challenges, the newness of EMTs and paramedics taking on new responsibilities, albeit ones within their scope of practice as defined by state laws and regulations, has also raised concerns among some regulators, nurses and other health professionals who question whether EMS should be permitted to offer MIH-CP.

Data provides a national snapshot

To date, the data collected by this survey and analyzed in this summary represents the only compendium of information from the nation's currently operating MIH-CP programs. Respondents, who included EMS agency directors, medical directors, and MIH-CP program managers and practitioners, represent diverse communities and provider types, from 33 states and the District of Columbia.

NAEMT would like to thank the respondents who took the time to tell us about their programs. We would also like to thank NAEMT's Mobile Integrated Healthcare-Community Paramedicine Committee for developing the survey questionnaire, and our author team for generously providing their time and insights in analyzing the data.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey



IMAGE PROVIDED BY KEVIN PIEPER/THE BAXTER BULLETIN

Community paramedics from Baxter Regional Medical Center in Arkansas provide post-discharge follow-up visits and connect patients to primary care.

of the NAEMT MIH-CP Committee and included more than 50 questions asking respondents to describe all aspects of their MIH-CP program, including program activities, partners, agency demographics, medical direction, funding, revenue, goals and data collection.

In September and October 2014, the survey was distributed to approximately 150 agencies that were either known or thought to have an MIH-CP program. During that time, NAEMT continued to do outreach to refine the list of agencies with confirmed MIH-CP programs.

As of November 2014, we received a total of 137 responses. Of those, 26 did not have MIH-CP programs; 111 did. Two did not provide any identifying information and were eliminated; two were significantly incomplete and could not be used. Four were duplicate answers from the same agency, so only one from each agency was included, for a total of 103 completed surveys.

Based on our search, we can say with confidence that this represents the vast majority of MIH-CP programs nationwide at the end of 2014.

However, it should be noted that new programs are coming on board every month, so by now there may be more. Our search also yielded many programs reportedly in the final stages of development or awaiting final grant or regulatory approval, such as the dozen programs that are part of the California pilots slated for launch in the first half of 2015 and six programs slated to launch in Michigan, also this year. These were not included.

Survey Targets

Between April and October 2014, NAEMT conducted a thorough search to identify MIH and CP programs in the United States. Sources included:

- ⊕ An earlier NAEMT MIH-CP survey widely distributed in 2013 by NAEMT and several other national EMS organizations as part of the Joint National EMS Leadership Forum.
- ⊕ Media reports and Google searches.
- ⊕ Other written materials, such as white papers and research studies, that referenced MIH or CP programs.
- ⊕ Interviews with EMS industry contacts.
- ⊕ Information provided by state EMS offices.
- ⊕ Phone calls and emails to individual EMS agencies.

To determine inclusion as an MIH-CP program, we used the definition for MIH-CP contained in the MIH-CP Vision Statement, spearheaded by NAEMT and endorsed by more than a dozen national EMS and emergency physicians' organizations in 2014. The Vision Statement defines MIH-CP as being fully integrated; collaborative; data-

driven; patient-centered and team-based. Examples of MIH-CP activities can include, but are not limited to, providing telephone advice instead of resource dispatch; providing chronic disease management, preventive care or post-discharge follow-up; or transport or referral to care beyond hospital emergency departments.

Because there is no strict definition of MIH-CP, however, we had to make judgment calls about inclusion. For example, one EMS agency in a remote mining area of Alaska indicated they utilized telemedicine to connect patients with physicians in larger cities; this agency was not included because the goal was to provide assistance with acute situations, not education, preventive care or assistance with chronic disease management. We also did not include EMS agencies that described a high level of community involvement, such as providing community education on accident or falls prevention, teaching CPR, or conducting health screenings, but did not include any of the other elements of MIH-CP.

Questionnaire covers all aspects of MIH-CP

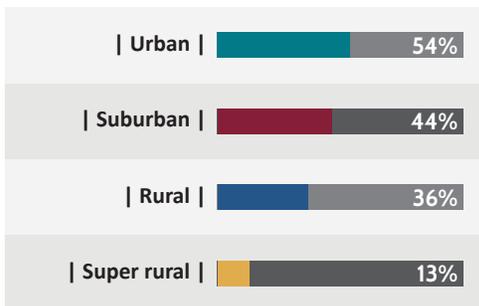
The survey was crafted with the input



100+ Agencies in 33 States, Wash., D.C. and Counting: Who's Doing MIH-CP

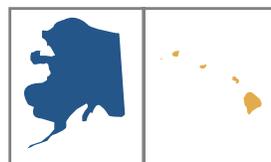
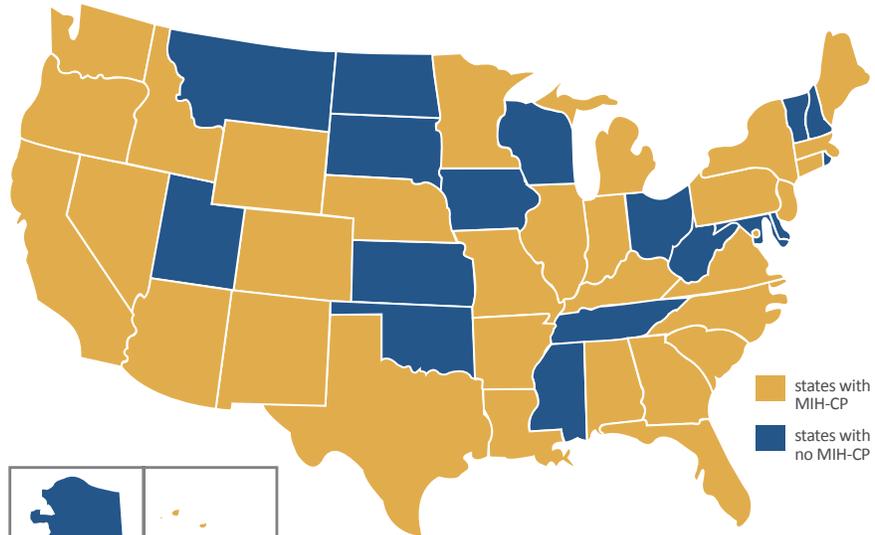
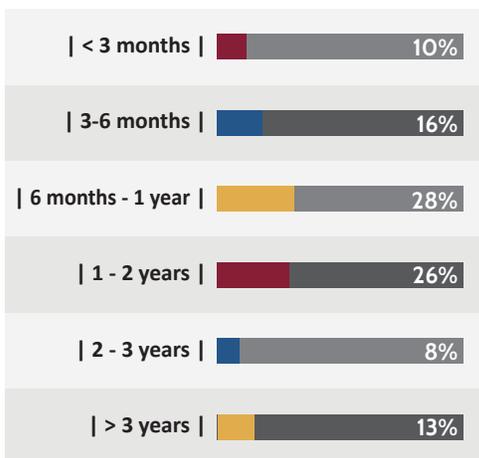
Though the concept of community paramedicine had its start in rural areas, today mobile integrated healthcare and community paramedicine programs operate in a range of community types.

[COMMUNITY TYPES]



About half (53 percent) of MIH-CP programs launched in the past year. Only 20 percent have been in operation two years or longer.

[TIME IN OPERATION]



[RESPONSES]

Total number of MIH-CP program responses: 103

**Information about MIH-CP in Alabama came in after the survey concluded.*

Agency geographic service areas range from compact cities to sprawling rural and super rural regions.

[GEOGRAPHIC AREA COVERED]



Call volume is also divided among high-volume urban and low-volume rural EMS.

[CALL VOLUME]



The Important Role of the Community Needs Assessment

There is broad consensus within EMS that MIH-CP programs are not one-size-fits-all, but should be developed to meet community needs. It's also widely accepted that MIH-CP programs should not duplicate or compete with already existing services, and instead fill gaps in existing services. The way to determine where those gaps are is through a community needs assessment as part of the MIH-CP planning process.

While that premise seems self-evident, "community needs assessment" is a term more familiar to public health professionals than first responders, and may mean many things to many people. The survey sought to describe the nature and source of community needs assessments within operating MIH-CP programs.

According to survey responses, **three in four agencies (77 percent) report conducting a community needs assessment.**

Yet when a question about conducting a community needs assessment was asked in a slightly different way – whether they agree or disagree with the statement, "Your program is based on a formal community needs assessment" – the responses were somewhat different. Only half (51 percent) agreed, 25 percent were neutral, and 21 percent disagreed. This perhaps indicates confusion over what constitutes a "formal" versus an "informal" community needs assessment.

Sources of data, stakeholder input

Of agencies that conducted a community needs assessment, the most commonly used data source is EMS data (87 percent), followed by population demographics (63 percent), hospital discharge data (55 percent), emergency department data (54 percent), public health data (41 percent), other data (12 percent), and law enforcement data (11 percent). Only 2 percent of agencies say they used no external data.

When asked to describe their community assessment, many agencies report having meetings, roundtables and establishing working groups or steering committees involving a variety of stakeholders, including hospitals, social services, mental health, law enforcement, assisted living facilities, public and private payers and public health departments.

MIH-CP programs should strive to reach patients before they become frequent users

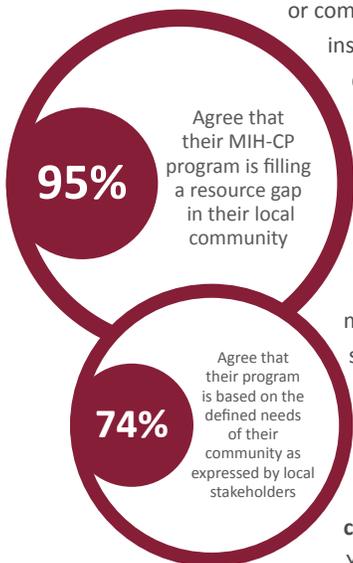
Based on this survey, EMS agencies engaged in MIH-CP rely predominantly on data from individuals who utilize EMS services or have been cared for by the hospital system. This focus may hinder the MIH-CP system from gaining a full understanding of the needs of their community, such as individuals who have not accessed the 911 or hospital system but who may have significant care needs. As MIH-CP continues to develop, a long-term goal may be to reach members of the community before their health or psychosocial issues have deteriorated to the point where they become frequent users of hospitals and EMS systems.

Programs in existence for over two years were more likely to use a wider variety of data in assessing community need.

A narrow focus on patients already on the radar of hospitals and EMS may also restrict available payer sources. While focusing on this group of patients offers the opportunity for a "cost savings" source of revenue, it misses other potentially reimbursable patient encounters from the large pool of individuals who have not been hospitalized.

To identify these patients and gain a more complete look at community needs, MIH-CP systems should strive to use as many data sources as possible to identify the needs of a much broader population within the community.

It's worth noting that programs in existence were more likely to use data other than EMS data – 86 percent used population demographics, 62 percent used public health data, 62 percent used emergency department data, 19 percent used law enforcement data, and 19 percent used other data – suggesting that longer-duration programs use a broader set of community health data when evaluating healthcare gaps in their community.





Medical Direction Involves **Multidisciplinary Collaboration**

In emergency response, the role of the physician medical director is to ensure quality patient care. Responsibilities include involvement with the design, operation, evaluation and quality improvement of the EMS system. The medical director has authority over patient care, and develops and implements medical protocols, policies and procedures.

The role of medical direction in MIH-CP is in some ways similar, with protocol development (88 percent) topping the list of responsibilities. However, because MIH-CP focuses on coordinating care over a longer period than the typical EMS call, medical direction in the MIH-CP context may include additional responsibilities, often done in collaboration with primary care or other healthcare providers outside of the EMS agency. That can include the development and approval of care plans (62 percent), phone consultations (64 percent) and telemedicine consultation (18 percent).

Others who provide medical direction and advice to MIH-CP programs

Primary care physicians (52 percent), on-call emergency physicians (29 percent) and specialty physicians (32 percent) are also called upon to provide medical direction or advice regarding MIH-CP patient care. Other sources of medical direction named by one or more respondents included other hospital physicians, physician assistants, surgical nurse practitioners, RN case managers and psychiatrists.



This collaboration is evident in the more than half (51 percent) of respondents who say that they obtained approval from partner organizations for their clinical protocols.

Breaking down silos: MIH-CP is team-based

From medical homes to care teams to accountable care organizations, the concept of collaborative, integrated, patient-centered care is a major theme of healthcare reform – and MIH-CP.

77% Agree that their program is a multidisciplinary practice of medicine overseen by physicians and other healthcare practitioners

70% Agree that their program is team-based and incorporates multiple providers, both clinical and non-clinical

96% Agree that their program is patient-centric and focused on the improvement of patient outcomes

EMS Medical Director Role

- 88%** Protocol development/ approval
- 64%** Phone consultation
- 62%** Development/approval of care plans
- 42%** Guidance on alternative destinations
- 18%** Live online telemedicine consultations

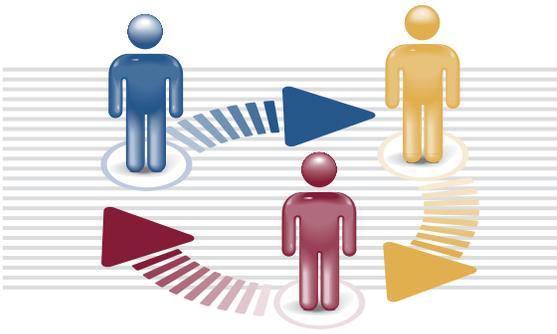
Hours of medical direction/ oversight provided per week

- Less than 10..... **79%**
- 10 to 20 **16%**
- More than 20..... **4%**

1 in 4 agencies

report using telemedicine in their MIH-CP programs. It was not specified whether that involves specific telemedicine applications or more commonplace EMS activities, such as ECG transmission.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP):
A National Survey



MIH-CP Programs Partner With an Array of Healthcare, Social Services Agencies

69%
of MIH-CP programs receive referrals from hospitals

Mobile integrated healthcare by definition integrates with all entities that impact patient care and wellness. This integration is necessary for multiple reasons.

Patients who have frequent contact with EMS and hospitals often have multiple medical problems, comorbidities and complex psychosocial circumstances. These health issues cannot be solved by a single entity, but instead require the expertise of a variety of healthcare providers, social services agencies and community resources. For EMS, these partnerships enable MIH-CP

programs to match each patient's needs with the right resource.

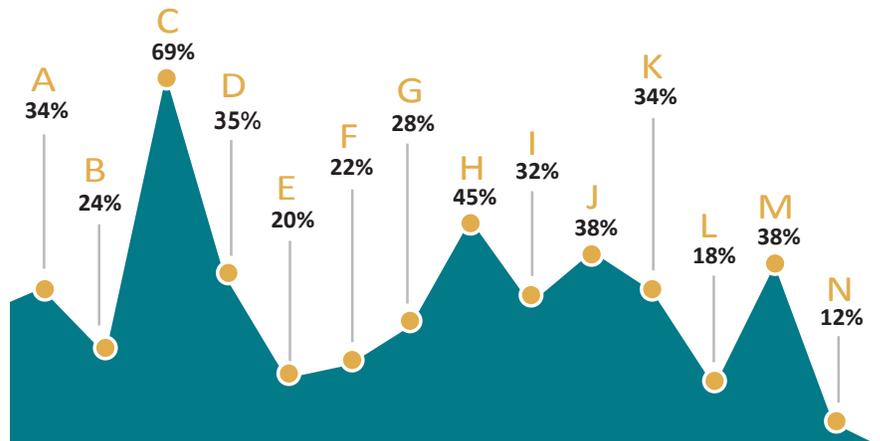
Referrals go both ways

Partnering works in two directions: the MIH-CP program can receive referrals from the partner agency, or the MIH-CP program can refer patients to the partner agency.

According to survey responses, **hospitals are the most commonly cited source of referrals to MIH-CP programs**, with 69 percent of MIH-CP programs reporting receiving referrals from hospitals, followed by

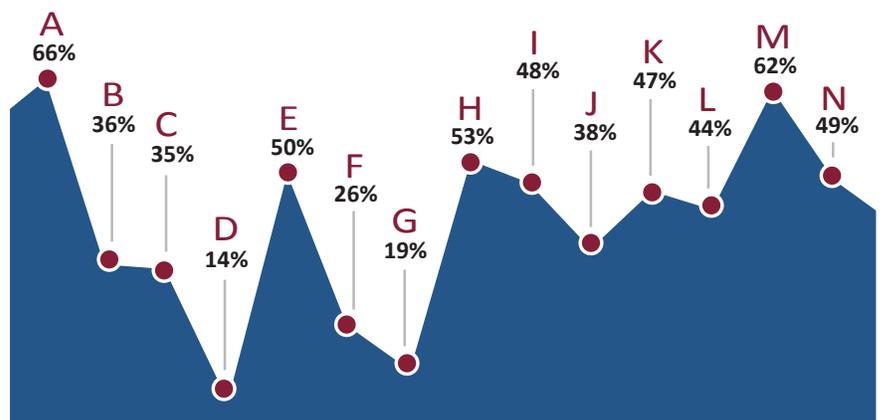
Organization Key

- A. Home Health Organizations
- B. Hospices
- C. Hospitals
- D. Law Enforcement Agencies
- E. Mental Health Care Facilities
- F. Nursing Homes
- G. Other EMS Agencies
- H. Primary Care Facilities
- I. Public Health Agencies
- J. Physician Groups
- K. Community Health Clinics
- L. Urgent Care Facilities
- M. Social Service Agencies
- N. Addiction Treatment Centers



[REFERRALS]

The partner organization refers patients to the MIH-CP program

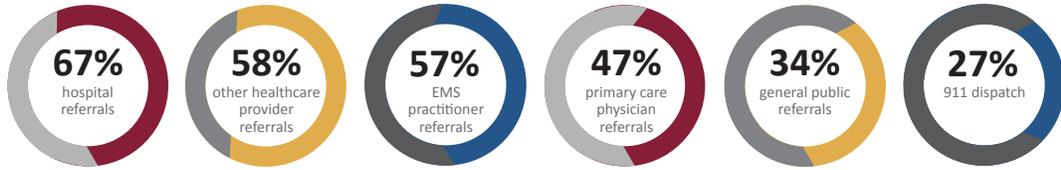


[REFERRALS]

The MIH-CP program refers patients to the partner organization



[SOURCES]
of MIH-CP program enrollment



primary care facilities (45 percent), physicians groups (38 percent), social services agencies (38 percent), law enforcement (35 percent), home health (34 percent) and community health clinics (34 percent).

66% of MIH-CP programs refer patients to home health

In seeking solutions for their patients, **MIH-CP programs are most likely to refer their patients to home health** (66 percent), followed by social service agencies (62 percent), primary care (53 percent), mental health facilities (50 percent), addiction treatment centers (49 percent), public health agencies (48 percent) and community health clinics (47 percent).

How patients come to the attention of MIH-CP programs

MIH-CP programs are made aware of prospective patients from a variety of sources. Hospital referrals are the primary portal to MIH-CP programs (67 percent), followed by referrals from other healthcare entities (hospices, home health care, mental health care and others) at 58 percent and primary care physicians (46 percent).

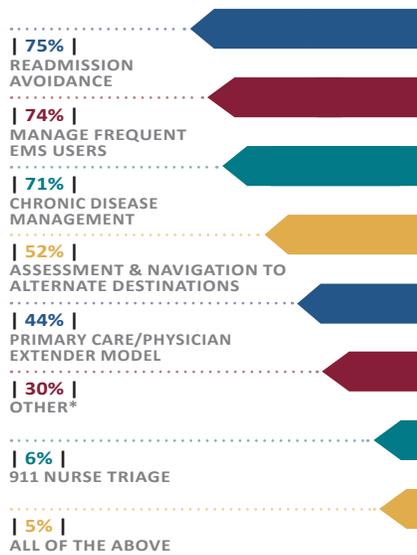
EMS sources, including referrals from fellow EMS practitioners (57 percent) and dispatch (27 percent) are also important in making MIH-CP programs aware of potential patients.

Awareness of the value of MIH-CP programs appears to grow over time

When isolating the data for programs with two or more years of experience, fellow EMS practitioners become the most likely to refer to MIH-CP programs (81 percent). While hospital referrals remain strong at 67 percent, referrals from other healthcare providers now come in at 71 percent, followed by dispatch and primary care, both at 52 percent. **The increased percentage of referrals from nearly all sources may indicate that over time, EMS practitioners and other healthcare providers accept MIH-CP and see the value it can bring.**



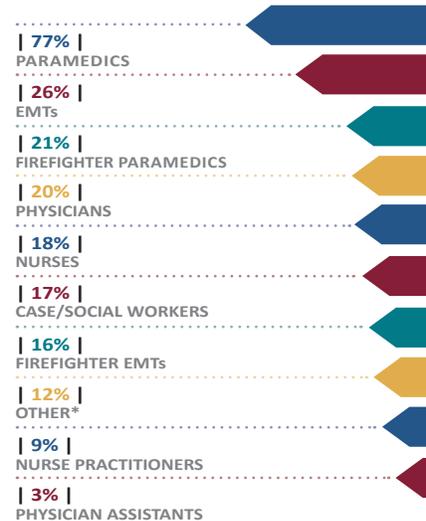
[CHARACTERISTICS OF MIH-CP PROGRAMS]



* mental health, hospice support, fall prevention

[STAFFING]

Respondents report employing or contracting with many types of practitioners for MIH-CP programs



* pharmacists, crisis counselors, patient navigators, residents, physical and occupational therapists



[MIH-CP CLINICAL STAFFING MODEL]

Some MIH-CP practitioners are dedicated full-time to MIH-CP; others split their time between MIH-CP and emergency response or other duties.

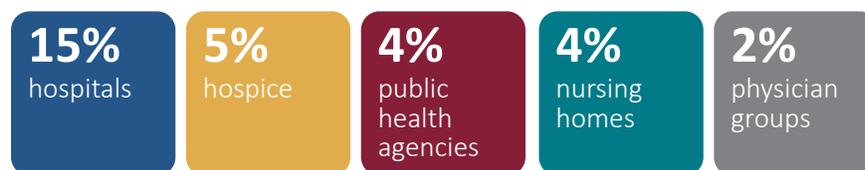
Partnerships Are About More Than Referrals

Partnering with stakeholders is not only about referrals. Some partners provide financial support, which may include direct payments for services, but can also include

assistance with staffing, supplies or other resources, while others provide oversight and direction to MIH-CP programs.

[DIRECT FINANCIAL SUPPORT]

Who provides direct payments for MIH-CP services?



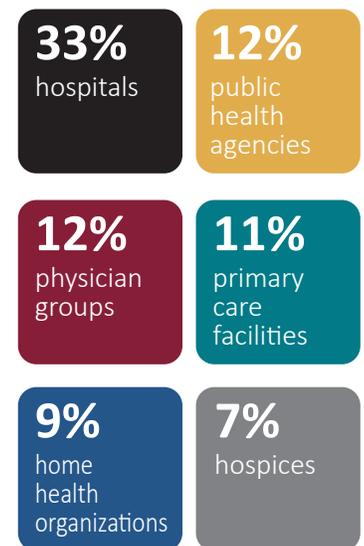
[OTHER FINANCIAL SUPPORT]

Who provides other financial support for MIH-CP services?



[OVERSIGHT/DIRECTION]

Who provides direction and oversight?



Is EMS doing everything it can to develop partnerships?

With more than half (54 percent) of respondents reporting that their programs are a year old or less, it is understandable that some may not have fully developed the necessary partners within their communities.

Still, more than half (58 percent) of respondents view their MIH-CP program as fully integrated into the healthcare system. Among programs in operation for two or more years, 66 percent agree that their program is fully integrated.

EMS agencies report challenges establishing partnerships for a variety of reasons, including:

- other healthcare providers not understanding the EMS role in an MIH-CP program
- fears among home health agencies that EMS participation in providing services in the home outside of answering 911 calls represents competition
- potential partners not seeing a clear financial incentive for partnering with EMS.

Though 34 percent of respondents agree that “opposition from other healthcare providers such as physicians, nurses or home health is a significant obstacle to sustaining or growing their MIH-CP programs,” an almost equal number (32 percent) disagree that opposition is a barrier.

And there is reason for optimism.

87% Agree that support for MIH-CP programs is growing among partners such as hospitals and other healthcare providers

96% Agree that the number of patients served by their MIH-CP program will grow in the next five years.



Experience Tops Qualifications Sought in MIH-CP Practitioners



While the medical skills performed by EMS personnel participating in MIH-CP tend to be consistent with their emergency response training and experience, the *focus* and *context* of their clinical roles are very different. The practice of EMS is focused on rapid assessment, provision of resuscitative or supportive care within a narrow set of protocols, and transport to a hospital-based emergency department. In contrast, the practice of MIH-CP is focused on longitudinal assessment, participation in an existing, multidisciplinary, interprofessional treatment plan, and communication with and referral to other members of the treatment team based on changing patient needs. Contextually, care shifts from episodic evaluation and care of patients independent of their existing medical care plan to longitudinal monitoring and adjustment of care as a part of a medical care plan.

Asked what specific training or experience qualifications are required of MIH or CP employees, field experience was most often mentioned, with about one in four respondents specifying that MIH-CP practitioners had to have between one and 10 years of field work experience (usually paramedic).

Smaller numbers mentioned communications skills, positive attitude and a customer service focus as specific candidate competencies. As for specific credentials, several stated that critical care transport paramedic training was required or preferred, while several stated other certifications were required, including EMT, registered nurse, nurse practitioner and social work.

A few require some college or a college-based community paramedic certification. About one in four answered there were no special requirements.

“Borrowed” training programs include: Eagle County Paramedic Services, Wake County EMS, MedStar Mobile Healthcare, Mesa Fire Department and FD CARES.

Training topics

Nearly all respondents require some type of additional training for their MIH-CP practitioners. Clinical topics (67 percent), patient relations/communications (66 percent), accessing community programs and social services (63 percent) and patient navigation (59 percent) topped the list.

Length of training

The length of training varied widely, as did the inclusion of clinical rotations or field training hours.

[CLASSROOM HOURS REQUIRED]



[CLINICAL ROTATIONS/FIELD TRAINING HOURS REQUIRED]



Hennepin Technical College in Brooklyn Park, Minn. and Colorado Mountain College are the two most-often mentioned college-based training programs.

Wide variations in training, education and certification requirements may jeopardize reimbursement opportunities

Overall, the survey data suggests that the majority of programs select experienced EMS practitioners for MIH-CP programs, and that they require additional training to perform these roles. However, the nature, duration and content of that training is widely variable, suggesting that the preparation, knowledge base and level of skill of EMS personnel who currently practice within MIH-CP systems is inconsistent.

This inconsistency could raise concerns among potential partners or payers about patient safety, clinical results or patient experience, and may reduce opportunities for reimbursement from payers who are more accustomed to well-defined and seemingly more clinically predictable providers of care.

EMS must continue to work toward creating consensus among stakeholders to define what MIH-CP clinical practice is, and from there create standards for skills, training, education and proof of competency.

Clinical Services Seek To Avoid Unnecessary Emergency Department Visits, Hospital Stays While Improving Patient Quality of Life

The clinical services provided by MIH-CP practitioners can be broadly grouped into three categories that may be part of an ongoing health maintenance program, or as part of a goal directed therapy or lifestyle modification.

- 1 **Assessment and evaluation**
- 2 **Post-discharge follow-up**
- 3 **Prevention and education**

Common to all is that the MIH-CP program facilitates this without the requirement for a hospital or clinic visit, although the assessment may result in a recommendation to visit a clinic or other healthcare provider. The goal is always to direct patients to the most appropriate, convenient, least costly type of healthcare or social services provider qualified to take care of their needs.

1 Assessment and evaluation

While the vast majority of MIH-CP programs indicate they assess patients, the survey does not make clear what is being done with the information gathered, including whether clinical decision-making is autonomous, based on an algorithmic process or in consultation with the EMS medical director or other healthcare provider.

Assessment and evaluation encompasses multiple service lines, including general assessment, which most often includes history and physical (89 percent) and medication reconciliation (82 percent); along with laboratory tests and disease-specific care.

In-home lab services key to MIH-CP assessment and evaluation services

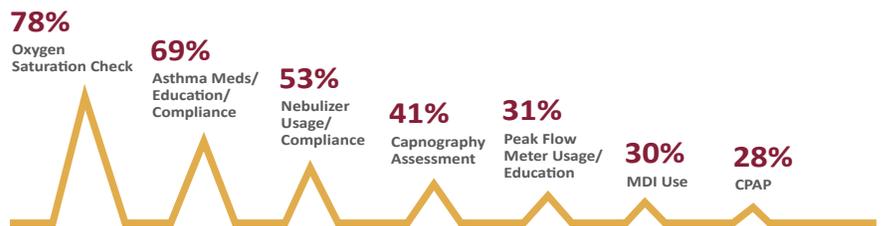
As with disease-specific care,

respondents were most likely to offer services that were already within the scope of practice of typical EMS agencies such as blood glucose measurement (70 percent) and blood draw services (41 percent). About one in five (19 percent) agencies report the addition of iSTAT (blood analysis) point of care testing. A surprising number of agencies had expanded their services to include urine collection (26 percent) stool collection (13 percent) and throat swab cultures (12 percent).

Disease-specific care relies on standard EMS equipment, skills

Disease-specific care offered by MIH-CP is most often targeted at common cardiovascular and pulmonary diseases such as congestive heart failure (CHF), chronic obstructive pulmonary disorder (COPD) and asthma. Most of these services utilize equipment and training readily available to EMS providers, such as blood pressure (85 percent), 12 lead EKG (70 percent) and oxygen saturation measurement (78 percent).

[RESPIRATORY SERVICES]



[CARDIOVASCULAR SERVICES]



[ASSESSMENT AND EVALUATION SERVICES]



[LABORATORY SERVICES]





The important role of patient navigation

While many of the clinical MIH-CP services provided seem directed at managing patients at home, the number of patients that can be meaningfully impacted and the cost effectiveness of this approach remain to be proved. Another area where MIH-CP may have significant impact on patient outcomes and costs is through improved patient navigation, or the direction of patients to the appropriate resource.

59% provide practitioners with training in patient navigation

EMS agencies should make effective use of their unique role in the healthcare system. EMS is often patients' initial contact with healthcare. Patients may not know the optimal resource for their current clinical need. Yet they do know that they can call 911 when they need help and EMS practitioners will come to their aid, quickly. These patients represent an opportunity for EMS to have meaningful impact on healthcare costs by navigating each patient to the correct resource at their initial contact with the healthcare system.

That said, it's important to note that the ultimate goal of MIH-CP is not merely to move the burden of caring for patients to other parts of the healthcare system, but to help patients get on the road to self-management, and better health and quality of life so that they need fewer healthcare resources overall.

63% of MIH-CP programs provide practitioners with training in accessing community programs and social services

Some MIH-CP programs, however, have significantly expanded their assessment and management of these disease processes beyond what EMS would typically do. For example, at least one program indicated that they offered in-home diuresis of CHF patients. For pulmonary disease, more than half of respondents indicated they offered education related to asthma medication compliance (69 percent), nebulizer use (52 percent) and peak flow meters (31 percent).

2 Post-discharge follow-up

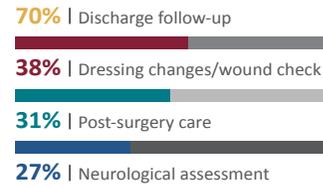
Given the financial ramifications of extended hospital stays for non-acute care and the financial penalties assessed on hospitals with high rates of readmissions, follow-up visits in the home in the hours or days after hospital discharge is a potentially important way for MIH-CP programs to show value. Still, the data suggests some uncertainty about the specifics of the services delivered – for example, 44 percent of respondents say they do stroke assessment and follow-up, while only 27 percent said they do neurologic assessments.

3 Prevention and education

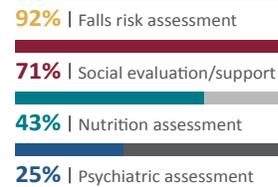
Prevention and education play an important role in preventing the next unscheduled acute care event or 911

call. MIH-CP practitioners are highly involved in providing these services to their communities.

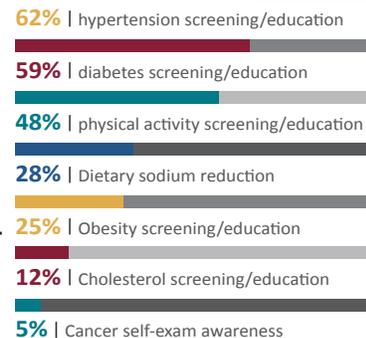
[POST-DISCHARGE FOLLOW-UP SERVICES]



[PREVENTION SERVICES]



[PATIENT EDUCATION SERVICES]



How long do patients stay enrolled in MIH-CP programs?

The goal of MIH-CP programs is typically to “graduate” patients out of the program, which is often the point where they no longer rely on frequent contact with the 911 or hospital system. Often, getting patients ready for graduation first means getting them connected with primary care, mental healthcare providers and other services best equipped to take care of complex medical and psychosocial issues.

The average time patients are seen by MIH-CP practitioners is highly individual, with respondents reporting a range of less than 30 days (41 percent), 31 to 90 days (36 percent), 91 to 180 days (14 percent) and greater than 180 days (8 percent).

22% say their MIH or CP practitioners have an advanced scope of practice
77% say their MIH or CP practitioners do not

CASE STUDY

Tri-County Health Care EMS

Rural, hospital-based ambulance provider takes referrals from physicians to reduce readmissions, improve access to care

In 2012, Minnesota became the first (and still only) state to pass legislation authorizing Medicaid reimbursement of EMS-based community paramedics.

The rate is 80 percent of a physician assistant's office visit charge, or \$17.25 per 15-minutes of patient interaction. There is no payment for drive time, fuel or supplies.

To be seen by a community paramedic, a physician has to give an order, and it must be part of a care plan established by the physician. In December 2013, community paramedics at Tri-County Health Care EMS, based in rural Wadena, Minn., began



receiving referrals from hospital physicians and primary care physicians at the hospital's five rural clinics.

"We provide post-hospital discharge visits for patients at high-risk of readmission," says Allen Smith, Tri-County Health Care emergency response manager. "We also work with primary care physicians to help prevent unnecessary ambulance trips and emergency department visits and to ensure patients are accessing all of the health resources available to them in the community."

Tri-County community paramedics also work closely with the hospital's nurse care coordinator, and function as part of the hospital's "medical home" clinical team.

Help from grants

Funding for the program came from a Minnesota Department of Health grant, which sent five paramedics to the community paramedic course at Hennepin Technical College. A three-year, \$300,000 grant from the South Country Health Alliance, a Medicaid managed care organization that serves a four-county area, covers the cost of data analysis and staffing a community paramedic 24 hours a week. The hospital also funds community paramedic staffing for 24

hours, while the remainder comes out of the EMS budget.

To achieve 24-7 community paramedicine coverage, five community paramedics also answer 911 calls during their shift.

Starting small to prove safety, effectiveness

Prior to launch, Tri-County sought input from community partners, including public health, mental health, home health and members of the public. Wanting to proceed cautiously and build confidence in their program among physicians who they rely on for referrals, they started with a limited number of patients, Smith says.

The Tri-County team also worked with the hospital's electronic medical records software experts to enable community paramedics to access and input information into patients' medical records.

"Without that connection to the electronic medical record, the information would not get back to the physician. At our rural hospital, we use almost no paper charts," says Dr. John Pate, EMS medical director and a family practice physician.

Community paramedics aim to see patients within 24 hours of referral. Enrolled patients receive a home visit and



IMAGES PROVIDED BY TRI-COUNTY



“We have to show that what we do is making an improvement in patients’ health, their ability to have a good quality of life and that they are satisfied with the care received.”

– Allen Smith, Emergency Response Manager, Tri-County Health Care EMS

assessment; a review of their care plan and education about managing chronic diseases; medication reconciliation; and any tests or treatments ordered on the care plan, such as blood draws, wound care or injections.

Patients are seen as often as daily for two to four weeks. The first visit is typically 60 to 90 minutes; subsequent visits last 30 minutes. Every two weeks, a multidisciplinary team, which includes a community paramedic, social worker and nurse care coordinator, evaluates each patient’s progress and determines if the patient is ready to graduate or needs additional help. “It’s all individualized based on the patient’s needs,” Smith says. “There is a lot of gray to this.”

In 2014, community paramedics saw 203 patients with diagnoses that include COPD, asthma, congestive heart failure and psychiatric issues. Most are elderly and need the extra support to continue to live independently, Pate says.

Other referrals come from an orthopedic surgeon, who sends community paramedics into the homes of knee and hip replacement patients to conduct falls risk assessments, and an area nursing home, which brings in community paramedics to do blood draws, tracheostomy care and feeding tube care to prevent their patients from needing to travel to a clinic or hospital.

While EMS agencies in other states have reported conflicts with home health, this is not an issue in Minnesota, he says. “We are not home health. For patients to receive home health, they must have a payer source that covers it, and they must be homebound,” Smith says. “We see patients who don’t qualify for home health. We are also affiliated with a licensed home health agency, and we also refer patients there.”

Getting on a path to financial sustainability

Even though the only available reimbursement is for the 15 percent of patients who have Medicaid, Tri-County’s community paramedics see patients regardless of their insurance status. In 2014, reimbursements from Medicaid totaled about \$10,000 – not enough to cover costs. They hope to eventually have data to share with commercial insurers so that they can negotiate shared savings arrangements.

One challenge, however, has been deciding what data to collect and what outcomes to measure. Unlike urban areas, frequent users are not a big problem for the Wadena area. They do have a few though, and estimate that their community paramedic program saved \$100,000 in ambulance transport and

emergency department charges in 2014.

“A lot of the activities our community paramedics do involve checking up on patients. They might go out and see if an oxygen generator is working properly, or if they know how to use a nebulizer machine, or whether the medicine they have is what they were supposed to get,” Pate says. “In one case a gentleman was sitting there trying to use a nebulizer but he hadn’t turned on the machine. He would have ended up back in the ER. But how do you measure the impact of that? What is the true benefit?”

One strategy they plan to try is having patients fill out a quality of life questionnaire before and after enrollment. They will have their first results in the next six months.

“Part of our hospital’s mission statement is to achieve the Triple Aim, which is improving patient health, improving the patient experience of care, and reducing costs,” Smith says. “So how do I make sure my EMS agency is of value to my hospital? How do I ensure my people have jobs in the future? It’s no longer, ‘You call, and we haul.’ We have to show that what we do is making an improvement in patients’ health, their ability to have a good quality of life and that they are satisfied with the care received.”

Tri-County’s tips for success

- 1 **Start small** and gradually build acceptance of your program among physicians and other healthcare providers who you will need to provide your program with referrals.
- 2 **Think local.** “My program wouldn’t work in Ft. Worth, or in New York City, and their program wouldn’t work here. Your program needs to fit local needs,” Smith says.

**Mobile Integrated Healthcare and Community Paramedicine (MIH-CP):
A National Survey**



MedStar Mobile Healthcare paramedics conduct post-discharge home visits with patients in Ft. Worth.

Regulatory Barriers Pose Challenges

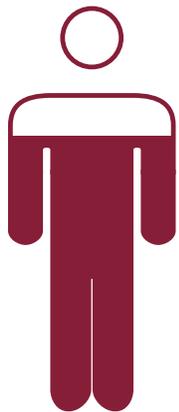
EMS is governed by laws and regulations that vary from state to state. In launching MIH-CP programs, one challenge for agencies is determining whether their state’s statutes and regulations allow or prohibit EMS from engaging in MIH-CP.

Surveys of state EMS offices by the National Association of State EMS Officials (NASEMSO) indicate that in a large number of states, laws and regulations are interpreted as permitting MIH-CP; in others, statutory and/or regulatory language is interpreted as prohibiting it; while some have not yet interpreted their statutes. Anecdotally, EMS agencies frequently report that it can be hard to discern what, if any, MIH-CP activities their local regulations or their state attorney general would permit.

It is perhaps for that reason that more

than half of respondents (57 percent) see statutory or regulatory policies as obstacles to MIH-CP.

It should be noted these responses include only the states where there



80%

Agree that their programs are legally compliant at the local, state and federal levels



57%

Agree that statutory or regulatory policies are a significant obstacle to sustaining or growing their MIH-CP program



23%

Disagree that statutory or regulatory barriers get in the way of their MIH-CP program

“Don’t give up. It’s going to be one of the most difficult things you do as an EMS agency due to all of the regulations. If you remember this is the next step in helping the citizens of your jurisdiction and you repeat that to anyone who questions the program, you will maintain a positive attitude and be a champion for your program.”

– Survey respondent

are operating MIH-CP programs. In the states where there are no MIH-CP programs, prohibitive statutes or regulations, or perceptions of those, may be a reason why programs are unable to get off the ground. Another possibility is there isn’t enough interest in MIH-CP yet.

Moving ahead with innovation despite barriers

Even in states in which regulations are seen as barriers to MIH-CP, some EMS agencies are finding ways to work within

the law to launch programs.

- In California, state law says EMS must respond “at the scene of an emergency” and must transport patients to the hospital. But another statute permits pilot programs that use healthcare personnel in new roles to study improving patient outcomes and reducing costs. In mid 2015, about a dozen California EMS agencies are slated to launch community paramedicine pilots.
- When Maine’s state EMS officials wanted to bring CP to the state, the Attorney General issued an opinion stating that the Maine EMS Board could not authorize community paramedicine because it is outside the scope of emergency response. The state legislature approved an amendment to the EMS statute authorizing 12, three-year CP pilots, which are currently underway.
- In Michigan, the state EMS office determined their state laws did not prohibit MIH-CP. After consulting with the state Bureau of Legal Affairs, the EMS office determined that EMS agencies could apply for approval of CP programs via a “special study,” three-year pilots to test new healthcare strategies. So far, at least two programs have launched and six more are approved.
- On the other end of the spectrum is Texas, a delegated practice state, meaning there is no statewide scope of practice for EMS. Instead, medical directors determine what EMS can do – perhaps one reason why Texas is considered a national leader in MIH-CP.

“Regulations must be updated to support this kind of work.”

– Survey respondent

What’s in the law that makes it difficult for EMS to take on these new roles?



While EMS is often described as being at the crossroads of public safety, public health and medicine (and so, perfectly positioned to provide MIH-CP), it is more common that EMS is more narrowly defined in law or regulation as an emergency service.

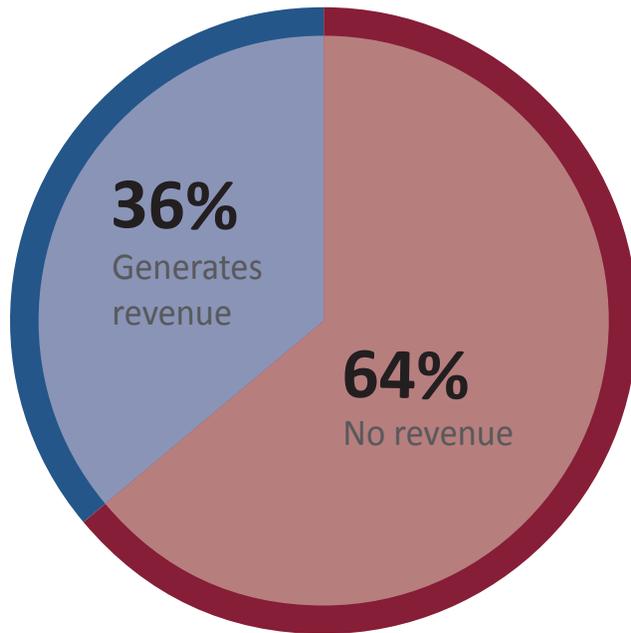
When asked to describe what legal barriers were hindering their programs, the most commonly cited issues were regulations that confine practice to 911 emergency response. Several mentioned there is no legal ability to transport patients to destinations other than the emergency department.

Home health licensing laws were also mentioned by several respondents. In conducting scheduled, in-home visits, there is the potential for MIH-CP services to be interpreted as falling under home health regulations. In Colorado, some MIH-CP programs have sought home health licenses, while one respondent from Virginia noted that the state Office of the Attorney General issued an opinion that MIH-CP programs wanting to perform in-home services should seek home health licenses.

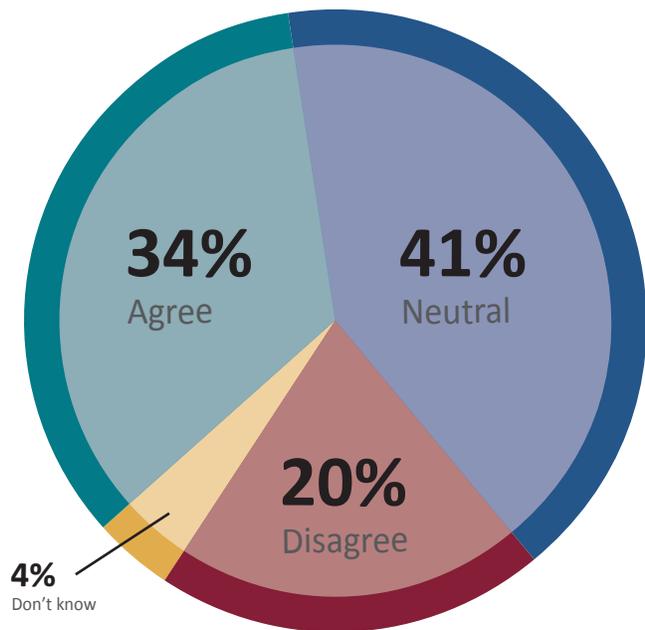
A few also mentioned the lack of clarity in the law, confusion over which regulatory body should have jurisdiction over EMS practitioners when acting outside of the 911 response capacity, difficulties working with city and state attorneys and hospital legal counsel, and questions about whether MIH-CP activities are within the paramedic/EMT scope of practice.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey

Limited Funding, Reimbursement for MIH-CP Makes Long-term Outlook Cloudy



[ARE MIH-CP PROGRAMS GENERATING REVENUE?]



[IS YOUR MIH-CP FINANCIALLY SUSTAINABLE?]

Reimbursement for transport and mileage is the bread and butter of EMS agencies. While public organizations, such as fire departments, often receive substantial tax support to fund operations, even these organizations say they are increasingly reliant on billing Medicare, Medicaid and private insurance to keep up with the increasing volume of medical calls.

When it comes to MIH-CP, however, there is only one state in which community paramedicine is a billable service, and even there it's only for patients with Medicaid. [See Tri-County Health Care Case Study]. Unable to bill for services, the vast majority of EMS agencies operating MIH-CP programs say the lack of payments and reimbursements is an obstacle.

89% Agree that reimbursement/funding is a significant obstacle

Yet respondents were not entirely pessimistic about their financial prospects. When asked if they agree or disagree with the statement "Your program is financially sustainable," the most common answer was "neutral," perhaps indicating that many are simply unsure.

Few MIH-CP programs generate substantial revenue – Yet

While many agencies fund their programs out of their own operating budgets, some have secured contracts that provide payment for MIH-CP services. **Of the 99 respondents who answered the revenue questions, 36 – about one in three – report that their program generates revenue.** For the most part, the revenue is minimal.

Seven receive under \$10,000 annually; four report earning between \$10,001 and \$25,000; and one generates between \$25,001 and \$50,000.

A few MIH-CP programs bring in considerably more. Four report earning between \$50,000 and \$100,000 annually; two bring in \$100,000 to \$150,000 annually; two receive payments of \$300,000 to \$500,000; and two generate \$500,000 or more annually.



A Wake County (N.C.) EMS advanced practice paramedic conducts outreach.

Economic model for MIH-CP payments

When asked how the MIH-CP program receives payments, the most common answer was fee-for service (15 agencies, or 15 percent). Eleven agencies indicate they receive an enrollment

50%
of respondents believe their program will continue to grow as a source of revenue for their EMS agency

fee or fee-per-patient, 12 say they operate in a shared savings model with partner organizations, and two say they receive a fee for referral. Twenty-three respondents indicated they were receiving other sources of revenue, with grants most commonly cited.

Is the financial outlook more promising than these early revenue figures suggest?

In the overall cycle of testing new business models, it is very common for innovations to take years to generate enough revenue to be considered a financial success. This is especially true in healthcare, where EMS-based MIH-CP services are still in their infancy. It is also very typical for healthcare innovations to take years to generate enough outcome data to become recognized as a valuable service line for payers to invest in. Healthcare payment policy is not often considered nimble.

For most EMS agencies, CMS (Medicare and Medicaid) represents the lion's share of revenue derived from fee-for-service transports, and making major changes in CMS payment policy literally require an act of Congress. Compounding this issue, most commercial payers generally follow CMS guidelines for payment policy. Therefore, it is not surprising that the revenue rates are so low during this time of innovation incubation.

It should also be noted that there are other potential sources of revenue outside of direct payments for services, including taxpayer support. Agencies that rely on tax revenue for a portion of their budget may have their programs funded, in whole or in part, through tax dollars if the community values the MIH-CP services or sees MIH-CP services as an overall means of cost savings.

Yet these survey findings also underscore the urgent need to prove that value – to the community, to private insurers, to CMS and to other entities that may provide payments. For insurers or other external sources of payments, demonstrating value will likely include showing a reduction in expenditures coupled with effective patient outcomes and positive surveys of patient experience.

[ANNUAL OPERATING COSTS OF MIH-CP PROGRAMS]



Mobile Integrated Healthcare and Community Paramedicine (MIH-CP):
A National Survey

CASE STUDY

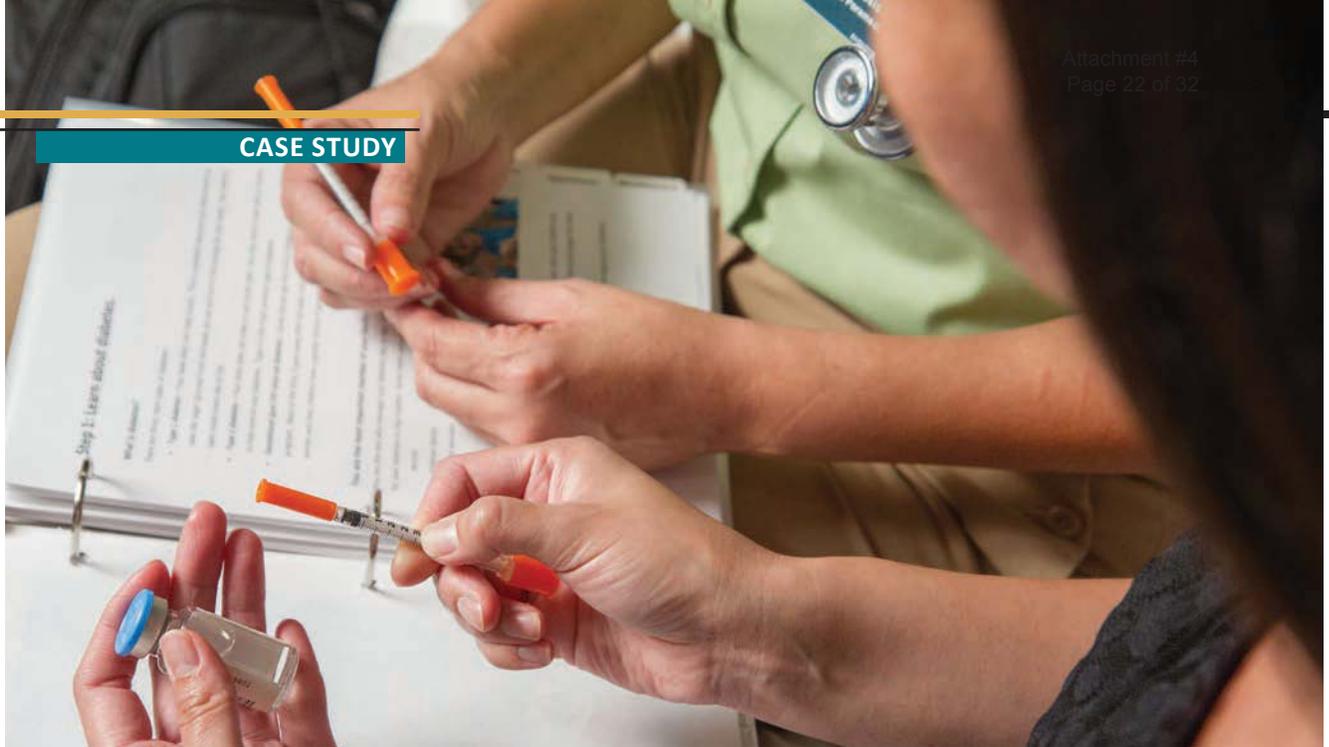


IMAGE PROVIDED BY ACADIAN

Acadian Ambulance

Private ambulance company partners with Medicaid managed care organization to improve pediatric asthma care

Acadian Ambulance, which serves 30 counties in Texas, 33 Louisiana parishes and one Mississippi county, is one of the nation's largest private ambulance providers, answering half a million calls for service annually.

In 2013, inspired by the work being done by MedStar Mobile Healthcare in Ft. Worth, Texas, Acadian decided to launch an MIH-CP program. The Acadian team started where many EMS agencies begin – by analyzing EMS data for frequent 911 users who might benefit from better navigation and a more coordinated approach to care.

Gaining experience with frequent users

Their search identified about 15 people in the Lafayette, La. area who were calling 911 at least once a week. Paramedics arranged home visits with them. Many had complex medical and mental health issues that required individualized solutions, says

Richard Belle, Acadian's mobile healthcare and continuing education manager.

For one elderly woman, medics arranged mail-order prescriptions to prevent her from calling 911 every time she ran out of her medications. They reduced trip hazards in her home, and worked with United Way to have a rotted staircase replaced and a railing installed. Another patient was a paraplegic who suffered from frequent, painful urinary tract infections but could not get in to see a urologist quickly enough, so he went to the emergency department. Acadian's medical director got involved to get him an appointment. The man no longer calls 911 with regularity.

Of those initial 15 patients, all but one has significantly curtailed their use of 911 and the emergency department, Belle says. "There is a small population of people out there who are system abusers, and many of them have substance abuse problems," he says. "But most are using 911 because they don't have a primary care provider, they don't have transportation to get to a primary care provider or to get prescriptions filled, or they just don't

know how to get plugged into community resources that are available to them."

Expanding to diabetes, pediatric asthma care

Encouraged by their success, Acadian began outreach to potential partners. The first pilot to come out of that was with a private insurer, which contracted with Acadian to do home visits with diabetic patients to cut down on emergency department visits. During the four-month pilot, Acadian medics provided education on managing diabetes, and supplied glucometers and test strips to those who didn't have them. Though early results showed patients A1C levels had improved, the insurer ended the pilot without explanation, Belle says.

About a year ago, Louisiana Healthcare Connections, a Medicaid managed care organization, began working with Acadian on a pediatric asthma intervention. Acadian's Chief Medical Officer Dr. Chuck Burnell worked with Louisiana Healthcare Connections' clinical team to develop protocols.

"Last summer, we were looking for



“After six months, we’ve seen better management of asthma for the children in this program. Their emergency room utilization has decreased and their medication compliance has improved.”

– Lani Roussell, Quality Improvement Manager, Louisiana Healthcare Connections

a way to help our young members with asthma, which is particularly problematic due to environmental factors in our state. Asthma causes more hospitalizations than any other childhood disease and is the number one cause of school absences from a chronic illness,” says Lani Roussell, Louisiana Healthcare Connections quality improvement manager. “Because of their reputation for quality service and technological innovation, we partnered with Acadian Ambulance on a pilot program to bring mobile healthcare to New Orleans area children with asthma. The mobile healthcare program identifies Louisiana Healthcare Connections members who have pediatric asthma and are at a high risk of emergency room utilization. Then over the course of four weeks, Acadian Ambulance’s trained paramedics visit the member at home to conduct preventive screenings, perform an in-home risk assessment, and provide personalized health coaching on managing asthma.”

Program set to expand further

Acadian has received referrals for 362 children. An unexpected challenge was that a high number (133) were unreachable; either the address and phone on record with the insurance company were incorrect, or the family didn’t return calls, Belle says.

Thirty families refused to participate; 107 are considered “inactive” because the family expressed interest in participating and received one or more home visits but then became unresponsive. As of March 2015, 33 families had completed the program and graduated.

“After six months, we’ve seen better management of asthma for the children in this program. Their emergency room utilization has decreased and their medication compliance has improved,”

Roussell says. “Together, Louisiana Healthcare Connections and Acadian Ambulance are developing innovative ways to address pediatric asthma and making a lifelong difference in the health, education and happiness of Louisiana’s children.”

Today, 19 families are enrolled in the program; 14 have a first visit scheduled and 23 have expressed interest. Among participating families, the response has been overwhelmingly positive, Belle says.

Some of the “fixes” are relatively easy, such as explaining to one family that their asthmatic toddler should not sleep in a crib with two cats. Others are more difficult. Some families live in substandard housing with mold and pest infestations. “We do very little clinical care. Most of what we do is education and navigation of patients, getting them to understand that when their child starts to feel bad,

they need to contact the child’s physician. Don’t wait and then go to the emergency department,” Belle says.

Moving toward financial viability

Acadian medics receive a fee per visit from the managed care organization. But it still costs Acadian more to administer the program than it recoups, Belle says. With the program slated to run until the end of 2015, next steps will be re-negotiating their fee with the managed care organization, adding more patient groups, and sharing their positive results with other potential partners.

“This program will be revenue generating for Acadian in the coming months,” Belle says. “We are going to take these results to other hospital systems, and public and private payers as a proof of concept, and show them how much money they can save by doing this.”

Acadian’s tips for success

- 1 **Frequent user programs** are a good place for EMS agencies to start developing an MIH-CP program. The agency can use internal data, and can use any successes to demonstrate effectiveness to potential partners.
- 2 **Tap into your local community health worker network.** Community health workers, who may be volunteer or paid workers, typically have little medical training, but instead conduct outreach, provide social support, do informal health behavior counseling and provide basic health education or screenings to members of the community. In Louisiana, the community health workers network shared valuable information about community resources such as social services, non-profits and charitable organizations. Acadian mobile healthcare paramedics also attend community health worker monthly meetings.
- 3 **Understand that every patient group has different needs.** The children in the Medicaid pediatric asthma group, for example, had a pediatrician. So one goal was to get the family to rely on the primary care provider instead of the emergency department. In a frequent user group, however, many patients are likely to lack primary care access, posing a different challenge for the mobile healthcare team.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey

Measuring Outcomes and Patient Satisfaction to Show Value

With healthcare entities increasingly expected to show that treatments and interventions are worth the price, developing systems of collecting and analyzing data is a high priority across the healthcare spectrum.

Traditionally, EMS hasn't been expected to collect or report performance data, with the exception of response times and resource deployment. But it's only a matter of time before major payers such as CMS and private insurers will expect EMS to transition, along with the rest of healthcare, away from strictly fee-for-service reimbursement and toward reimbursement that takes into account costs and outcomes – in other words, value.

90% of respondents say their MIH-CP program collects data

In the MIH-CP context, collecting and reporting data internally and to healthcare stakeholders is beneficial for two major reasons. First, data can prove to the EMS agency and partners that the program is having the desired impact. Second, if the program is not achieving the desired outcome, the data serves as the foundation for developing, testing and comparing alternate models and strategies.

Consistent with the importance of partnerships and collaboration in MIH-CP, 65 percent of respondents indicate that they share data with their MIH-CP partners. Fewer but still sizable numbers

64% collect pre-MIH-CP enrollment healthcare utilization, while 56% collect post-enrollment usage too

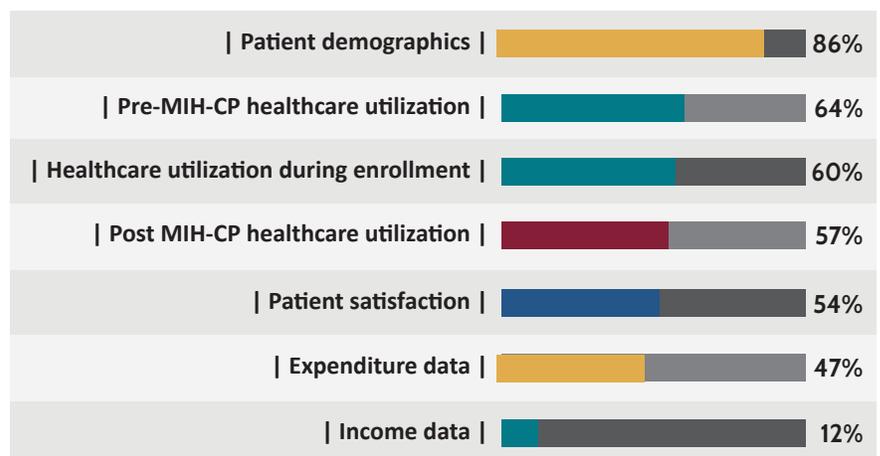
share with other entities, including local government or other local stakeholders (36 percent), their state Medicare/Medicaid office (21 percent), state public health department (20 percent), insurance companies (15 percent) and CMS (12 percent). Only 7 percent say they don't share data.

MIH-CP must grapple with what to measure and how to measure it

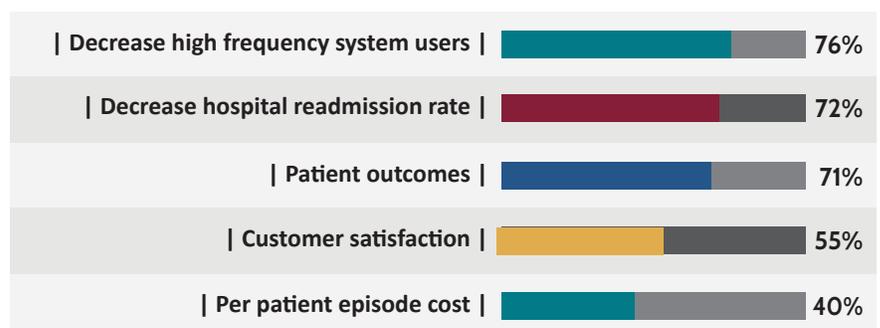
That so many respondents indicate they collect and analyze data for both MIH-CP program development and outcome measurement is very encouraging. This means that the basic infrastructure and commitment to tracking and reporting data is in place, a key step in demonstrating the value proposition that payers may want to see as a condition of widespread payments or reimbursement for MIH-CP services.

But determining the most important data to collect, the most feasible way to collect it and how to share it brings up complex questions that all of healthcare is grappling with – MIH-CP included.

[DATA COLLECTED BY MIH-CP PROGRAMS]



[OUTCOMES MEASURED BY MIH-CP PROGRAMS]





Community paramedics from North Memorial Ambulance Services in Robbinsdale, Minn. seek to prevent 911 calls.
IMAGE PROVIDED BY DAVID JOLLES/MINNEAPOLIS STAR TRIBUNE

In this survey, only one agency reports collecting and reporting patient health status as a core measure. Though the specifics of data collection may vary from agency to agency, the patient’s assessment of their health status upon enrollment and at graduation is a key measure that should be used by all EMS agencies conducting MIH-CP programs.

In addition to challenges in determining which outcomes to measure, there are also technological obstacles, including the dismaying inability of many electronic patient care reporting (EPCR) systems used by EMS to fully integrate with the data systems of hospitals and other partners, and vice versa. Another issue is that many EPCR systems used by EMS are not designed to collect longitudinal data. The incompatibility of various data systems and barriers to health information exchange is hardly exclusive to EMS or MIH-CP, but is an area that needs attention to make possible the bi-directional flow of information between the multi-disciplinary teams involved in MIH-CP.

EMS agencies describe strong early successes in reducing reliance on 911 and emergency departments

With the majority of programs in operation for a year or less, it’s not surprising that one in four respondents say that it’s too soon to tell how much success they are having in key areas such as reducing costs, reliance on 911, the emergency department and 30-day readmissions. Yet a sizable percentage say they are seeing success in a variety of areas.

54% Rate their program as highly or somewhat successful in showing cost savings for a defined group of patients

60% Rate their program as highly or somewhat successful in reducing 911 utilization among specific patient groups

59% Rate their program as highly or somewhat successful in reducing reliance on the emergency department for a defined group of patients

81%
of programs in operation for two years or longer report success in reducing costs, 911 use and emergency department visits for defined groups of patients

46% Rate their program as highly or somewhat successful in reducing 30-day readmissions for specific patient groups

62% Rate their program as highly or

somewhat successful in achieving patient satisfaction

With which groups of patients do MIH-CP programs report success?

MIH-CP programs are most likely to report success with frequent 911 users – 54 percent say they are highly or somewhat successful in improving outcomes for this group while 51 percent say they are highly or somewhat successful in reducing per patient healthcare costs.

One patient group that seems to be particularly challenging for MIH-CP programs is patients referred because of substance abuse or alcoholism. About 26 percent of MIH-CP programs report improving outcomes for this group, while 18 percent report lowered healthcare costs.

[MIH-CP Programs Report Improved Outcomes for Various Patient Groups.]

	Improved Outcomes	Too Soon To Tell	Not Applicable
Frequent 911 users	54%	0	16%
COPD, asthma, diabetes	54%	25%	17%
Congestive heart failure	37%	25%	30%
Substance abuse/alcoholism	26%	20%	35%
Hospice/terminal illness	26%	19%	44%

[MIH-CP Programs Report Lowered Costs for Various Patient Groups.]

	Lowered Costs	Too Soon To Tell	Not Applicable
Frequent 911 users	51%	29%	14%
COPD, asthma, diabetes	42%	33%	21%
Congestive heart failure	33%	33%	28%
Substance abuse/alcoholism	18%	31%	32%
Hospice/terminal illness	18%	29%	41%

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey

CASE STUDY

Colorado Springs Fire Department

Partnering with hospitals, Medicaid care coordination organization to reduce 911 calls

With medical 911 calls increasing by about 8 percent annually and data showing that about 50 percent of 911 responses are for non-urgent situations, Colorado Springs Fire Department, which answers 60,000 calls annually, wanted to find ways to redirect some of those callers to resources other than the emergency department.

As a first step, in 2012, the fire department, in partnership with University of Colorado Health-Memorial Hospital and Centura Health System's Penrose-St. Francis Hospital, set out to study the reasons underlying the overuse of 911 and emergency departments. Teams made up of a physician and an EMT or paramedic went into the homes of frequent 911 users to assess the patient and their home environment. The hospitals covered the

cost of the physician time, while a Kaiser Permanente grant covered data analysis.

"We told them to look, listen and connect," says Jefferson Martin, Colorado Springs Fire Department's community and public health administrator. "We quickly came to the determination that there was nothing acute medically that we needed to do during those visits." Instead, patients needed education about managing chronic diseases, lacked transportation to pharmacies or doctor's offices, or were in need of resources to assist with psychosocial or economic issues. "The easy button was 911. That system couldn't turn them away," he says.

Three months into their investigation, they determined that a physician wasn't needed for the assessments. Instead, they sent an EMT or paramedic with a nurse

or nurse practitioner, and eventually, only EMTs and paramedics.

Three in four have mental health issues

Over a one-year period, the teams visited 200 homes. Their analysis showed that three in four (77 percent) patients had mental health issues, often with other chronic medical conditions.

Calling their program CARES (Community Assistance Referral and Education Services), a name coined by Battalion Chief Mitch Snyder of Kent Fire Department in Washington, they launched a program in which EMTs and paramedics would continue the home visits, providing assistance with education and navigating patients to mental health or other community resources.

"This is about delivering the right care, at the right time, in the right place," says Dr. Robin Johnson, an emergency physician at Memorial Hospital who has since become a deputy medical director for CARES. "It is never about saying no to care, but about redirecting to the best healthcare for the patient."

With funding from Penrose-St. Francis Hospital, the fire department hired a licensed clinical social worker/behavioral health specialist to provide guidance and case management. The fire department also shifted the responsibilities of a nurse practitioner, already on staff as the fire department's quality assurance officer, to assist.

"In EMS, we are fixers," Martin says. "We don't think in terms of long-term behavioral modification, so it's great to have an expert to come in and help us. One thing we've been taught by the behavioral health specialist is that we don't want to enable or reward negative behaviors, so we are not supposed to do everything for patients. Instead, we set health goals that include steps they can take, and steps we can do for them. Our patients may have 10 issues that are contributing to the way they are accessing the system, but we try not to overwhelm



IMAGE PROVIDED BY COLORADO SPRINGS FD



them. We have to prioritize.”

Patients are seen at home up to five times. They are also given the phone number for a mental health crisis line that’s answered 24-7, and a number for non-urgent problems, which goes directly to voice mail. There’s a reason behind not having a live person answering those calls, Martin says. “Our behavioral health clinician has said we need to teach them how to plan ahead. The lesson is, ‘We will still help you, but not in 8 minutes or less,’” he says.

In 2013, the CARES program saw 200 patients. In 2014, they upped that to 500 patients – and are seeing results. Among two-thirds of patients, 911 use dropped by 50 percent.

“We think this is a really great way of bringing hospitals, emergency services, a payer source and others together to address community needs, and that there will be payers in addition to Medicaid that will be interested in this.”

– Kelley Vivian, Community Strategies Director, Colorado Medicaid Regional Care Collaborative Organization

The other third have been harder to reach, he says. “These patients are incredibly complex. For them it’s not about access to primary care, or education, or transport. Those are issues we can solve,” he says. “The patients we’ve been less successful in moving the needle on are those with medical, behavioral, mental health and substance abuse issues.” As a last resort, the CARES team will enlist the help of the legal system, including law enforcement and the court system, to compel a psychiatric evaluation or commitment.

Medicaid Regional Care Collaborative gets involved

Seeking a strategy to reduce costs among frequent emergency department users, the next organization to get involved with the CARES program was the Colorado Medicaid Regional Care Collaborative Organization, or RCCO, a non-profit made up of multiple area healthcare entities that

agree to work together to improve care coordination for Medicaid patients. The RCCO pays the fire department \$1,000 per patient for a 90-day intervention, with a total of \$100,000 budgeted, and also covers the cost of a pharmacist to assist with medication reconciliation.

A pilot involving 13 patients found a 75 percent decrease in hospital readmissions during the three months post-intervention, an estimated cost savings of \$145,000 in Medicaid claims, says Kelley Vivian, the RCCO’s community strategies director.

“The CARES program is a wonderful way to interact with our clients that we refer to as super-utilizers – the well-known faces in the 911 system, the emergency department

and even in their doctor’s office,” Vivian says. “These are patients that need that extra level of interaction, to help them become more proactive in their health and so they can take better care of their health.”

Program expands to include other teams

The next step for the fire department was expanding the program to include two additional units – a mobile urgent care unit, which includes a paramedic or EMT paired

with a nurse practitioner who respond to low-acuity (Alpha or Bravo) calls, and a Community Response Team, which includes a paramedic, behavioral health clinician and law enforcement officer who respond to 911 calls that are psychiatric in nature.

The state Office of Behavioral Health provided funding, while the medical directors of the fire department, emergency department and a psychiatric facility worked together to develop protocols that enable the team to do the exam, blood draws and toxicology screening necessary to medically clear patients in the field, without needing transport to an emergency department. Launched Dec. 1, 2014, the first call came in 8 minutes later, Martin says.

Other additions to the program include one full-time and three part-time nurse navigators, whose salaries are paid for through a combination of the fire department budget; grants from Aspen Point, a behavioral health organization, and Kaiser Permanente.

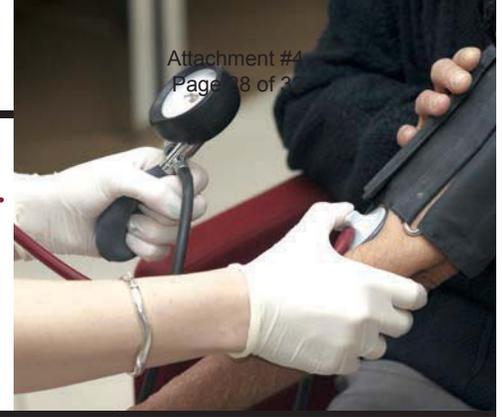
With so many healthcare and community entities seeing value in the CARES program, the RCCO, Vivian says, is considering increased funding for CARES next year.

“We think there are more clients who can be served. Firefighters are trusted, thorough and they do a good job of explaining what is going on in the home back into the system of care,” Vivian says. “We think this is a really great way of bringing hospitals, emergency services, a payer source and others together to address community needs, and that there will be payers in addition to Medicaid that will be interested in this.”

Colorado Springs Fire Department’s tips for success

- 1 **Conduct a thorough community needs assessment**, for your own information and to present to partners. “Anecdotes are not enough,” Martin says.
- 2 **Collaborate and seek guidance from pharmacists**, licensed clinical social workers/behavior specialists and other healthcare specialties.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP): A National Survey



Lessons Learned - Tips from the experts

One of the most revealing questions in the survey relates to lessons learned and advice respondents offered to other EMS agencies seeking to launch MIH-CP programs. The answers of the 86 respondents who offered their input can be summarized in seven themes.

1 Collaborate, don't compete.

MIH-CP programs work in partnership with other healthcare stakeholders to fill gaps in healthcare delivery, not replace services already available within the community. The most oft-cited recommendation was to involve stakeholders early in the planning process.

"Early identification of stakeholders is essential ... make sure they are at the table from the beginning." – Survey respondent

"Develop a community stakeholders list and begin to have regular informative meetings." – Survey respondent

The purpose of early stakeholder consultation is to inform potential partners about MIH-CP, to share agency plans, to ensure the regulatory environment is understood at the outset, to allay fears of competition and to secure buy-in, according to respondents.

"Help stakeholders see that EMS is committed to better outcomes of population health and better stewardship of healthcare dollars." – Survey respondent

"Rather than view EMS as merely the 'ambulance drivers' that deluge a hospital, EMS should be seen as the critical link that is driving the dissolution of barriers to coordinated care." – Survey respondent

2 Do a community needs/gap analysis. Prior to launch, learn the resources that are available within the community, determine where there are gaps and find out if your EMS agency can have a role in filling those gaps.

"As every community is different, the most important component of program development is focusing on the specific needs of the population served and designing a program around them."

– Survey respondent

"Although various programs may have common principles, the key to success is creating one that's right for your community's needs." – Survey respondent

3 Start small and build on success.

Another common piece of advice was to start with a limited number of patients and build upon experience. Several also urged EMS agencies to avoid trying to address all needs simultaneously. They also encouraged patience and perseverance, saying that getting programs up and running always seems to take longer than planned.

4 Focus on the patient. Several respondents reminded EMS agencies to above all, keep the patient at the center of the program design.

"Always view this type of initiative in light of what is best for the patient, your community and then your organization. The incentives to begin these programs shouldn't be money as a primary factor. Collaborate, innovate, execute, retool, re-execute."

– Survey respondent

5 Integrate. Integration with the existing healthcare system includes the gap and resource analysis highlighted above, as well as other integrations in health information technology, referral processes and patient navigation to the most appropriate care.

"We work closely with patient navigation to address non-medical, access, insurance, behavioral health and social needs."

– Survey respondent

"Develop the network of resources you will need for the patients enrolled in the program." – Survey respondent

6 Collect Data. Another common theme was encouraging MIH-CP programs to collect data relevant to measuring patient outcomes, patient experience and impact on patient costs. Some emphasized the need to integrate with local, regional or state electronic health information exchanges (HIE).

"Join or create local HIE and share your data and interpret its significance for your patients, your system and primary healthcare and services providers."

– Survey respondent

7 Learn from other MIH-CP programs. Multiple respondents also recommended consulting with established MIH-CP programs.

"Do not reinvent the wheel. There are a lot of resources available to study and emulate. Replicate best practices and learn from the agencies that have been running programs to help avoid potholes." – Survey respondent

Conclusion: What Will It Take for MIH-CP to Become a Success?

The growing movement to compel more efficient healthcare spending and the widely acknowledged need for integration and collaboration to solve complex patient issues represents an enormous opportunity for EMS to cement its future in a changing healthcare world.

This survey shows that through MIH-CP, many agencies are proactively redefining the role of EMS, from one associated mainly with emergency response to one involved with prevention, patient education and effective navigation. This is no small feat, given obstacles such as opposition from other healthcare entities; confusing and sometimes prohibitive legislative or regulatory barriers; and limited reimbursement.

Those obstacles are perhaps one reason why, out of an estimated 17,000 EMS agencies nationwide, only 100 or so have launched MIH-CP programs. And many of those agencies, despite their enthusiasm and strong belief that they are doing what’s right for their communities and their patients, admit their long-term sustainability is by no means guaranteed.

How to define success?

Defining “success” for a healthcare program such as MIH-CP can be considered from multiple angles. For individual patients or groups of patients, success is defined by impact and costs, and measuring it is dependent on collecting and analyzing the sort of clinical and outcomes data discussed earlier in this summary analysis.

Success can also be considered from the EMS agency perspective, and could include



factors such as whether an MIH-CP program is revenue generating or self-sustaining; how the program impacts the EMS agency’s relationships and reputation within the community; whether MIH-CP provides opportunities for professional growth for the EMS workforce; and the extent to which MIH-CP enables the agency to achieve its mission of serving its community.

A third way to look at success is at the macro level – that is, to what extent can MIH-CP impact patient outcomes and achieve sustainability on a large scale, nationwide? Although answering that question is premature, what can be discussed are the key factors that will contribute to the ability of MIH-CP programs to become firmly established as cost-effective, value-added healthcare service providers in the months and years to come.

Three key factors

1 State level statutory and regulatory change – Today, many state laws and regulations expressly limit EMS agencies to emergency or 911 response and limit their activities to providing medical care only at the scene of an emergency.



Through MIH-CP, many agencies are proactively redefining the role of EMS, from one associated mainly with emergency response to one involved with prevention, patient education and effective navigation.

Mobile Integrated Healthcare and Community Paramedicine (MIH-CP):
 A National Survey

Conclusion: What Will It Take for MIH-CP to Become a Success?

MIH-CP should be included in healthcare policy change and reimbursement reform that transition EMS into a value-based health services provider that is adequately funded to continue its vital role in safeguarding the health and well-being of our nation's population.



IMAGE PROVIDED BY MEDSTAR MOBILE HEALTHCARE

In practice, EMS practitioners know many 911 calls are not life threatening, and instead are patients who could be better served by less expensive resources, such as primary or urgent care. Moreover, the narrow view of EMS as emergency-only represents an outdated, siloed view of the provision of patient care that is rapidly falling by the wayside elsewhere in the healthcare system. The findings of this survey, along with the case studies, suggest that the narrow view of EMS is beginning to change among other healthcare providers as well.

2 Data proving value – The most powerful case for convincing payers or healthcare partners to invest in MIH-CP programs is to provide proof that the programs achieve the Triple Aim of improved patient experience of care, improved population health and reduced per capita cost of care.

Some MIH-CP programs have already secured contracts with hospitals, home health, hospice, nursing homes, Medicaid care coordination and managed care organizations, and even a state department of behavioral health. But to turn that trickle into a flood, EMS agencies need to engage in collecting, analyzing and reporting data.

In a positive sign, many MIH-CP programs say they collect data and are showing positive results. Yet there are almost no peer-viewed, published studies on MIH-CP outcomes. In addition, the EMS profession is still working toward a consensus on the best method for demonstrating value, including determining what to collect, how to report it and to whom.

3 Reimbursement reform – Today, EMS is paid via a transportation-based, fee-for-service model, specifically for delivering patients to an emergency department. “This provides a disincentive for EMS agencies to work to reduce avoidable visits to emergency departments, limits the role of prehospital care in the US health system, is not responsive to patients’ needs, and general downstream healthcare costs,” wrote Dr. Kevin Munjal in a Feb. 20, 2013 *JAMA* editorial. “Financial and delivery model reforms that address EMS payment policy may allow out-of-hospital care systems to deliver higher-quality, patient-centered, coordinated healthcare that could improve the public health and lower costs.”

Hospitals, physicians, and other medical providers are increasingly subject to value-based reimbursement, including receiving penalties for unnecessary hospital readmissions. Thus far, EMS hasn’t had its reimbursement tied to performance or outcomes measures, but it’s only a matter of time before CMS and private insurers will expect EMS to fall in line with the rest of healthcare.

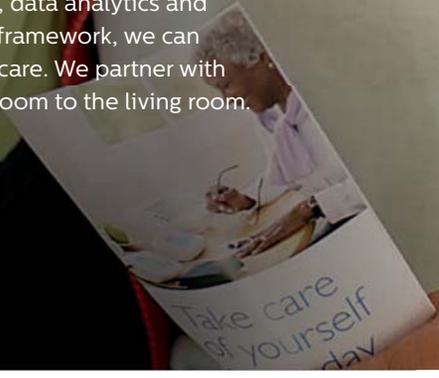
Individual EMS agency contracts with hospitals and other healthcare partners will continue to be an important source of revenue to support MIH-CP programs. But MIH-CP should also be included in healthcare policy change and reimbursement reform that transition EMS into a value-based health services provider that is adequately funded to continue its vital role in safeguarding the health and well-being of our nation’s population.



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Innovation Opportunities for Emergency Medical Services:

A Draft White Paper from the

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The process to develop this draft white paper, accomplished jointly among three federal agencies, included review, consultation and analysis by many staff members.

Foreword

The Departments of Health and Human Services (Assistant Secretary for Preparedness and Response and Health Resources and Services Administration) and Transportation (National Highway Traffic Safety Administration) have jointly collaborated on the development of this *draft white paper that presents one example of an analysis and model* (Model) along with background materials of the potential for cost savings if emergency medical services (EMS) systems adopted protocols and strategies to innovatively triage and treat patients. Ideally this Model or others, could be pilot-tested in various local and regional jurisdictions throughout the United States. There are many ways for EMS systems to more appropriately care for their patients while maintaining financial sustainability.

It is anticipated this draft White Paper and Model could be helpful as local, regional and state EMS and health system planners prepare frameworks, options and funding strategies/proposals for innovative collaboration among EMS systems, primary care providers, hospitals, public safety answering points, public health and others. Readers are encouraged to review this White Paper and to provide the agencies with comments, suggestions or additional data.

Applying the Model – a Practical Summary for EMS Stakeholders

The following are steps that an EMS agency could take to “operationalize” the Model in Figure 3 for an individual community:

- Using the Model in Figure 3 (page 11) conduct an analysis of the data in an EMS jurisdiction to calculate the percent of low acuity patients that could be safely and appropriately managed in a non-emergency department setting if available. The example analysis used the 5 percent CMS standard analytic file (SAF) but potential local data sources may include:
 - EMS data linked with local emergency department (ED) data to determine the percent of EMS transports that are discharged from the ED within 24 hours: depending on the sophistication of the agency’s data systems, one can either calculate patient acuity by applying the Billings algorithm (page 9) to electronically available data or conduct a chart review to determine the percent of low acuity patients.
 - State Medicaid data to conduct an analysis similar to what is proposed in the SAF example.
 - **NOTE:** the national example used in this paper found that approximately 15 percent of all Medicare ED transports could be safely treated outside of the ED if other options existed. Your numbers may be similar.
- Based on the dynamics in your community, determine how many of the patients treatable outside of the ED can be safely treated in clinics or urgent care, and how many can be treated and released by EMS providers.

Considerations for your system might include:

- The level of service (Basic Life Support-BLS versus Advanced Life Support-ALS) available and the education, skill and scope of practice of the clinicians.
 - The availability of clinic-based services: in many cases, you may need to contract with providers to incentivize them to take unscheduled patients or extend hours.
 - The culture of the urgent care centers and their willingness to accept patients, particularly those with Medicaid.
 - The presence of Accountable Care Organizations (ACO) in your area and their willingness to partner with you since they are already incentivized to reduce ED visits and total cost of care.
- Develop a theoretical framework for how to appropriately triage patients away from the ED and how it will work in your community. Then, design a demonstration for your community that may, for example, include:
 - Expanding the fee for service model to reimburse EMS providers for assessment and treatment (including transportation) provided on site or for transport to a non-ED location.
 - Design an evidence-driven protocol for appropriate disposition of patients who call 911 (this requires broad-based community input and support).
 - A shared savings model where EMS providers are incentivized to avoid unnecessary ED transports.
 - Utilize available mobile resources in your community to treat non-acute patients and reduce readmission or further use of hospital resources: partner with public health agencies, social service providers, hospitals and ACOs to provide mobile medical services in underserved communities.
 - Develop a robust evaluation strategy to ensure the quality of patient care and patient safety is maintained or enhanced, and to assess other system impacts of the implementation of the new protocols/system changes including patient satisfaction.

Introduction

In 2009, there were over 136 million emergency department (ED) visits in the United States and 15.8 percent of them arrived by a 911-response ambulance.¹ ED overcrowding is a well-documented problem that results in costly, delayed, and often sub-optimal care. Emergency medical services (EMS) contributes to this problem by unnecessarily transporting non-acutely ill or injured patients to EDs when more appropriate and less costly care settings, including the home, may be available. Since Medicare was established in 1965, ambulance suppliers have been reimbursed for the transport of beneficiaries to and between hospitals, dialysis clinics, and skilled nursing facilities (SNF). As the scope of practice of the emergency medical technician expanded, CMS updated the reimbursement policy to account for the level of care provided while en route. Though the current rule includes eight separate levels of service, the model still requires the *transport* of a beneficiary to one of the aforementioned locations to qualify for reimbursement. When someone calls 911 for a non-acute event, there is a financial incentive for suppliers to transport them to an ED when alternative care by EMS providers may result in higher quality patient-centered care at a significantly lower cost.

An analysis funded by the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) indicates that approximately 15 percent of Medicare patients transported to the ED by ambulance can be safely cared for in other settings if available in a community. National models suggest that if these patients were transported to a physician's office, Medicare could save \$559.871 million per year and if they were treated at home it is expected the savings would be significantly higher. Cost data for Medicaid are not available but expected to be even greater. In 2006, Medicare and Medicaid paid 20 percent and 21 percent respectively of ED charges.

The pre-hospital EMS system is uniquely positioned to care for 911 patients and assist less-emergent patients with transport to the most appropriate care setting based on medical and social needs. Such an approach may reduce the total cost of care, provide more patient-centered care and may reduce the burden on EDs, thus enhancing the quality of care received by all patients.

As the nation faces the possibility of increasing healthcare costs, there is significant opportunity for EMS systems to be *part of the solution* and help reduce the incidence of costly care for unscheduled patients. One could demonstrate that EMS services can reduce downstream emergency department and hospitalization costs while increasing patient care quality and safety by changing their service delivery. New initiatives may allow EMS systems to demonstrate several innovative strategies to reduce total cost of care and increase health outcomes, including: the triage of patients calling 911 without dispatch of an ambulance, treatment of patients without transport, transport of patients to a clinic or other provider for an unscheduled visit, and scheduled non-acute assessments and treatments, to name a few. Innovative financial models may include an expanded Fee-For-Service (FFS) system or an innovative model designed by the emergency care system.

Problem Statement and Background

ED overcrowding is a well-documented healthcare crisis that results in delayed and sub-optimal acute care.^{ii iii iv v} There are several causes of ED overcrowding, though one actionable concern is the fee-for-service payment model for 911-based emergency medical services (EMS) that currently requires the transport of a patient to a hospital in order to qualify for reimbursement. The Medicare program spends \$5.2 billion on 16.6 million ambulance transports annually and payments per beneficiary increased 19.1 percent from 2007 to 2010.^{vi} Of those, approximately seven million beneficiaries were transported to EDs. In 2006, the HHS Office of the Inspector General found that 25 percent of ambulance transports were either unnecessary or inappropriate, while other research has found that between 11 and 61 percent of ambulance transports to EDs could have been safely treated elsewhere.^{vii viii ix x xi xii} *The Medicare transport requirement incentivizes ambulance suppliers to deliver non-acutely ill or injured beneficiaries to EDs, one of the most expensive sites of care^{xiii}.*

In 2009, there were over 136 million ED visits in the United States and 15.8 percent of them arrived by a 911-response ambulance. Among patients aged 65 and older, there were close to 20 million ED visits with 38.6 percent arriving by ambulance.^{xiv} Among Medicare beneficiaries arriving by ambulance, 45 percent were not admitted to the hospital, but cost CMS \$1.98 billion (with an additional 20 percent out-of-pocket costs to the beneficiary). Medicare and Medicaid beneficiaries account for a disproportionately high utilization rate of EDs.^{xv xvi} Recent studies from the CDC reinforce conclusions that people utilize EDs more often because of a lack of access to other providers as opposed to the seriousness of their complaints.^{xvii} Almost 60 percent of non-elderly adults surveyed on public healthcare plans cited that a “doctor’s office or clinic was not open” and 40 percent of privately insured non-elderly adults cited “no other place to go.” *EMS contributes to ED crowding and high system costs by transporting some patients to EDs when more appropriate and less costly care settings, including the home, may be adequate and available.*

EMS is an essential component of the United States healthcare system.^{xviii} Ambulance transport to a hospital’s emergency department is often the first and only access point to the healthcare system for many Americans. Medicare reimburses ambulances through a fee-for-service (FFS) transportation benefit, as defined in Part B. Regulations require that a patient is transported from the scene of injury or illness to a hospital in order to be reimbursed. However a recently released study from the RAND Corporation indicates that the role of the emergency department in determining admissions and downstream costs is rising dramatically and that EDs account for almost half of all hospital admissions.^{xix} *There exists no financial incentive to treat a patient at the scene of their illness or injury or to transport them to a provider other than an emergency department.*

Given the low-acuity nature of many patients being transported, one may anticipate a better patient care experience when patients are either treated at the scene by EMS or taken to a clinic-based provider with shorter wait times than in the ED. Studies of patient-centered medical homes (PCMH) have found significant reductions in ED use, hospitalizations, and readmissions due to strong care coordination as well as increased quality of care.^{xx xxi} One PCMH pilot program in Seattle realized a 29 percent reduction in ED use and an 11 percent reduction in

ambulatory sensitive care admissions (i.e. admissions resulting from conditions that can be treated in an ambulatory care setting), resulting in \$17 per patient per year of savings.^{xxii}
Encouraging the use of medically appropriate alternative care settings can reduce both ED visits and hospitalizations.

The Balanced Budget Act of 1997 required that CMS convene stakeholders in the ambulance community and enter a negotiated rulemaking process to set a national prospective ambulance fee schedule. The schedule was finalized in 2002 and reimbursement is currently calculated by multiplying a nationally standardized base rate (or conversion factor) with the geographic practice cost index factor (GPCI), and a relative value unit (RVU). This amount is added to a calculated mileage payment for the transport. Previously, Medicare was charged a usual and customary rate for transport. This complicated fee-for-transport model, in place since the enactment of Medicare in 1965, *incentivizes a higher utilization of emergency and in-hospital services.*

The National EMS Advisory Council (NEMSAC) found in its 2012 report on EMS Performance-based Reimbursement that the average payer-mix for an EMS agency is:^{xxiii}

Medicare:	44%
Medicaid:	14%
Private Payer:	14%
Commercial Insurance:	21%
Other:	7%

Relative to the population distribution in the U.S., Medicare was billed for more ED visits resulting in admission and Medicaid was billed for more treat-and-release ED visits.^{xxiv}
Significant cost savings and increases in quality of care for acute and non-acute ED patients are possible if funding models are altered to incentivize fewer transports to EDs.^{xxv xxvi xxvii}

The NEMSAC report recommended that the federal government adopt methods to reimburse EMS systems based on performance and actual costs of 24/7 readiness as opposed to fee-for-transport. Alternative models of delivering pre-hospital emergency care could include payments to transport to urgent care centers, physician offices, or mental health facilities. Models could also include expanded services provided by EMS personnel at the site of injury or illness, referrals to specialty care, bundled payments for acute care services, or shared-savings models, to name a few.

Figure 1, below, illustrates the current trajectory of a patient who calls 911 and the costs to the Medicare program. Note: one could predict a similar pattern for Medicaid patients for whom national average cost data are not available.

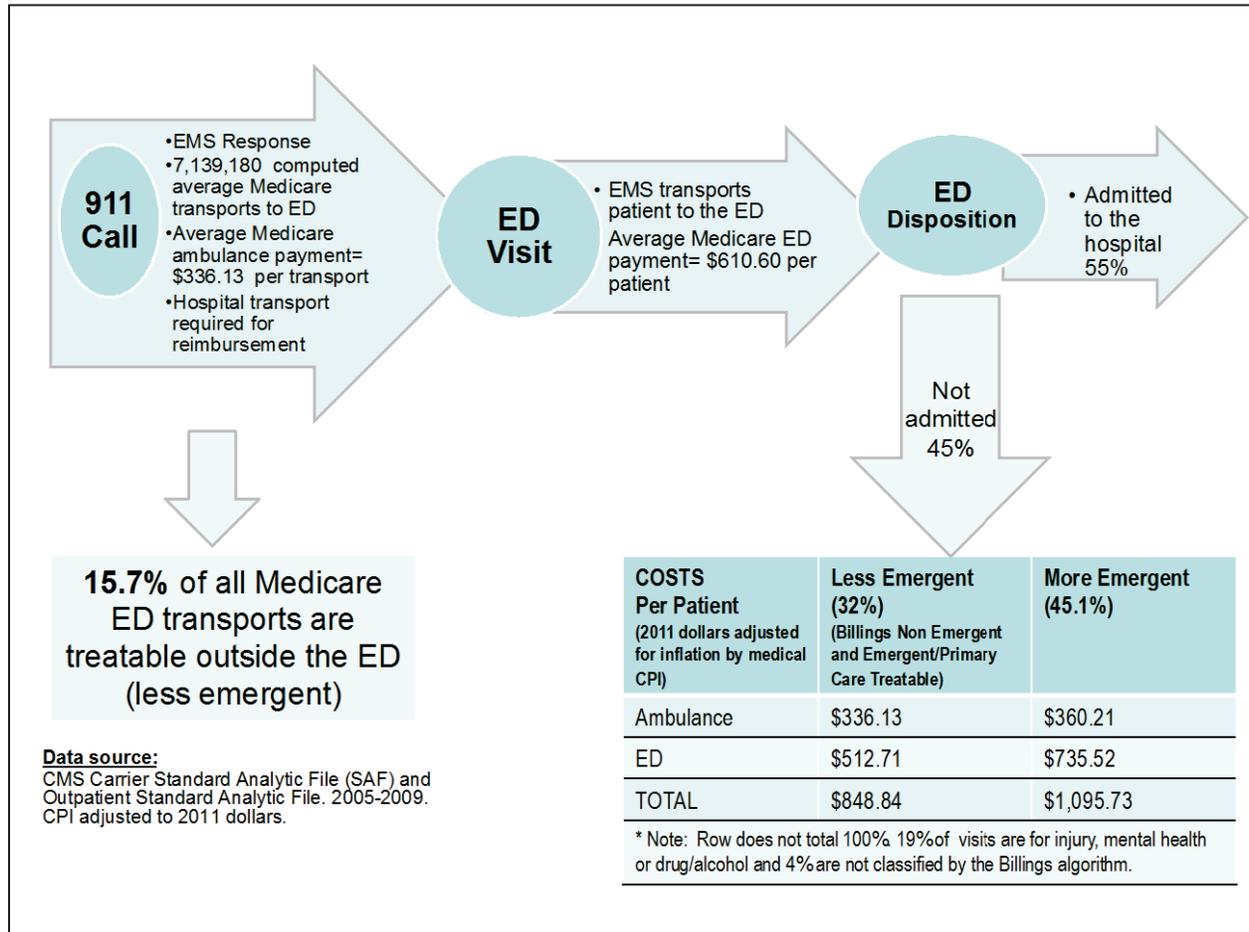


Figure 1. Disposition and Cost of Medicare Patients Accessing the 911 EMS System

As shown in figure 1, a recent analysis of the CMS data show that 45 percent of EMS transports of Medicare beneficiaries to an ED did not result in a hospitalization. Of these, 32 percent were less emergent according to the Billings criteria of non-emergency and primary care treatable visits. Note that the model excludes all injuries, mental health and alcohol related visits, and additional visits that could not be classified using the Billings algorithm. *This translates to approximately 15 percent of all Medicare ED transports that could be considered avoidable ED visits.*

More information on the Billings algorithm is available on the next page.

The Billings Algorithm Explained

The Billings algorithm classifies ED utilization of patients into the following categories:

- **Non-emergent** - The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours;
- **Emergent/Primary Care Treatable** - Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting. The complaint did not require continuous observation, and no procedures were performed or resources used that are not available in a primary care setting (e.g., CAT scan or certain lab tests);
- **Emergent - ED Care Needed - Preventable/Avoidable** - Emergency department care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., the flare-ups of asthma, diabetes, congestive heart failure, etc.); and
- **Emergent - ED Care Needed - Not Preventable/Avoidable** - Emergency department care was required and ambulatory care treatment could not have prevented the condition (e.g., trauma, appendicitis, myocardial infarction, etc.).

The algorithm was developed using a sample of 6,000 full ED records.

For more information, visit <http://wagner.nyu.edu/faculty/billings/nyued-background>

A Model for Innovation in Emergency Medical Services

It is important to demonstrate cost savings for any change to the existing delivery or reimbursement model. Unpublished research funded by the HHS Office of the Assistant Secretary for Preparedness and Response indicates that for **less emergent cases** (approximately 15 percent of Medicare transports to EDs), EMS agencies may be able to alter their service delivery model to more effectively:

- 1) Evaluate and treat the patient at the location of the 911 call,
- 2) Evaluate and transport the patient to a health care provider (physician) clinic, Federally Qualified Health Center (FQHC), or Rural Health Clinic (RHC), and
- 3) Evaluate and transport the patient to an urgent care center.

Calculations show between \$283,464,058 and \$559,871,117 in cost savings if all of the approximately 15 percent of preventable ED transports went to a physician's office (Figure 2).

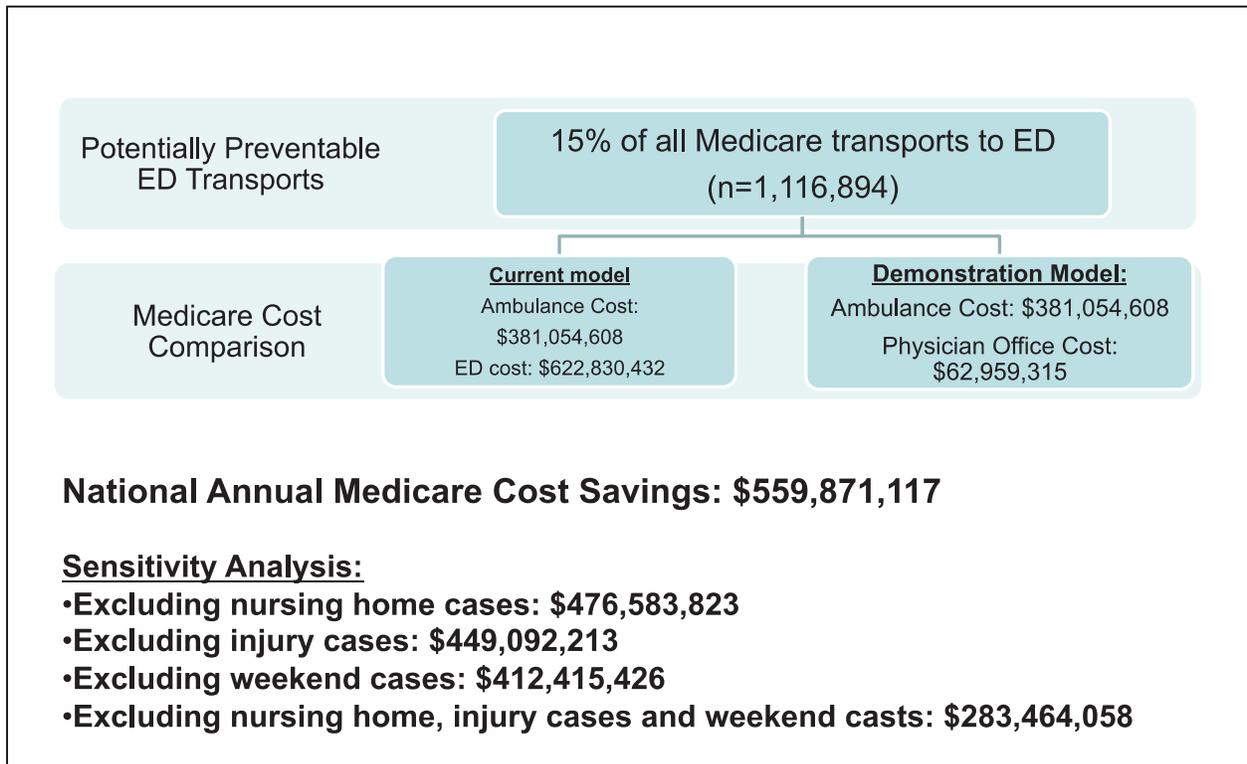


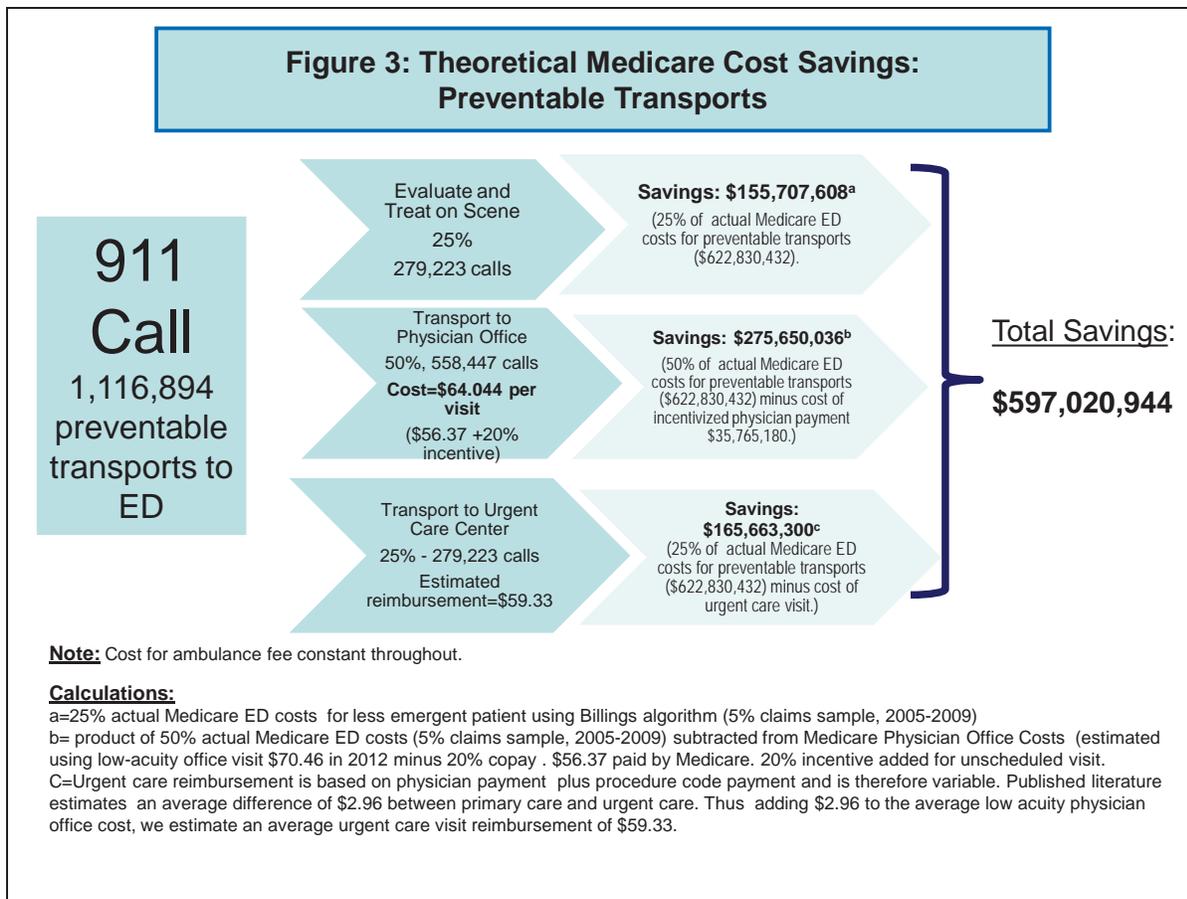
Figure 2: Calculated Cost Savings Transport to a Physician Office for Less Emergent Patients

The cost analysis in Figure 2 assumes that EMS would continue to transport all patients to a health care setting, in this case a physician’s office. However, prior experience with using trained personnel to triage patients by 911 dispatch centers and to determine the appropriate level of basic versus advanced life support has worked well.^{xxviii xxix xxx} Therefore, EMS may be able to meet the needs of callers without dispatching an ambulance or triage and treat some patients rather than transport all of them to a clinic-based practitioner.

As noted, not all preventable ED transports will require treatment or transport to a clinic. In addition, clinics are often closed on nights and weekends. For the sake of calculating cost savings for the model, it is estimated that of the preventable ED transports:

- 25 percent of patients can be evaluated and treated by EMS without transport;
- 25 percent may not have a physician available (even with incentives provided for physicians to take unscheduled patients) and would go to urgent care; and
- 50 percent of patients would be transported to an appropriately staffed clinic.

Further explanation of these estimated figures is below. Note that they may be significantly altered in different communities based on demographics and other characteristics. Figure 3 presents the projected national Medicare cost savings of \$597,020,944 annually (without a sensitivity analysis), of over 1 million preventable transports to the ED.



Based on the CMS SAF, a recent analysis shows 1,116,894 Medicare EMS transports (roughly 15 percent of transports) to the ED that are preventable (based on Billings criteria of non-urgent and primary care preventable). These translate to \$622,830,432 in Medicare ED costs. If 25 percent of these patients were treated onsite by EMS and released, Medicare would only pay the ambulance costs saving \$155,707,608 in ED costs.

It is reasonable that clinic based providers would need to be incentivized to accept unscheduled patients. Physician incentives range from 1 to 20 percent of a physician’s total compensation with many incentives in the 5 percent range.^{xxxix} Medicare pays \$56.37 for a low acuity office visit. Adding 20 percent to this fee would yield a \$64.04 incentivized payment. If 50 percent of ED preventable EMS calls were transported to clinical based providers, Medicare would save \$275,650,036 in ED costs after subtracting an incentivized payment of \$64.04 to the office.

Lastly, EMS may need to transport 25 percent of the avoidable transports to an urgent care center because a clinic-based provider is not available to accept the patient. Reimbursement for urgent care centers is based on procedure codes and therefore an exact fee is not available. However, a study of the average charges for urgent care centers when compared to primary care across all payers showed a \$2.96 difference in payment.^{xxxix} This analysis added \$2.96 to the low acuity physician reimbursement of \$56.37 to calculate an urgent care center payment of \$59.33 for an urgent care visit. Accounting for these costs, Medicare saves \$165,663,300 in ED costs.

While this overall Model shifts costs from ED’s to clinic based providers and urgent care centers, there are demonstrable cost savings from Medicare beneficiaries alone. If the entire Model is successful with all of the avoidable ED transports triaged to more appropriate care, Medicare alone can save \$597 million annually. Note: due to the lack of data, there is no analysis of savings for Medicaid but a similar theoretical model is projected for Medicaid beneficiaries.

Program Design Considerations

Currently when a 911 call is initiated, the responding ambulance generally transports the patient to the ED and care is provided en-route. A demonstration project could allow an EMS system to develop alternative treatment and triage protocol options that may include:

- Triage or self care instructions by call-taker without dispatching an EMS unit.
- Treatment provided in the home or location of patient.
- Transport to an appropriate clinic based health care provider.
- Transport to an urgent care center.
- Transport to an Emergency Department.
- Referral to an appropriate community service.
- Other community specific treatment or transport protocols.

Figure 4, below, illustrates the logic model for a possible demonstration project with the goal of improving health care safety, effectiveness, patient-centeredness, timeliness and efficiency by reducing unnecessary ambulance transports to the ED by 15 percent.

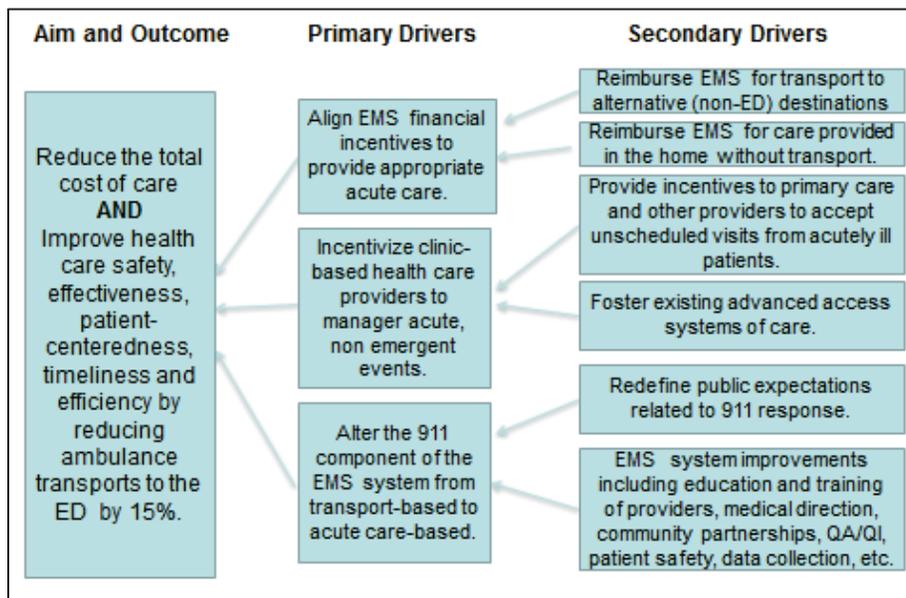


Figure 4 – Primary and Secondary Drivers of Innovation

One may anticipate that the primary drivers for reducing system costs by reducing ambulance transports to the ED by 15 percent will be to align financial incentives to EMS and to clinic

based providers. By incentivizing clinic based providers to take unscheduled patients and allowing EMS to receive reimbursement for providing treatment and transporting to a clinic provider, one can reduce downstream ED costs.

Demonstration projects should consider the following when determining new delivery and finance models:

- The operational components of the EMS system.
- Scope of practice for EMS providers and state licensure and certification related to provider roles, EMS service licensure and other legal authorizations such as the authority for treat and release.
- Reimbursement for EMS to treat at the most appropriate site when available.
- Incentives for clinic-based healthcare providers to accept unscheduled visits and extend office hours.
- Reimbursement for appropriate medical direction (including any increases).
- Development of data collection systems and impact on patient care quality metrics, measured both before and after the intervention.
- Continuous quality assurance and improvement function.
- Evaluation of impact on:
 - system cost analysis (pre/post) (EMS agency, physician services, ED costs, hospital costs, public health and other costs);
 - access to primary, specialty, and emergency care;
 - patient safety, outcomes and satisfaction; and
 - education, licensure and workforce issues.

Physician medical direction is an important component of all EMS systems and is currently supplied to EMS providers through written protocols and in real time via telephone or radio. Innovative approaches may require additional physician interaction and supervision of field providers; this practice is not currently reimbursed by Medicare, but may be under a demonstration.

Possible Demonstration Approaches

Several possible approaches for local EMS demonstration projects are presented based on the national analysis above. These are not mutually exclusive, nor are they exhaustive of the myriad innovative options that may be appropriate for local EMS systems.

Incremental approach

An initial step to a more comprehensive transformation of the local EMS system might be to encourage EMS agencies, and their partners, to identify viable alternatives to transporting patients to the ED. Several short-term options may be relatively easy to manage, have a short

time to impact, and lower costs through improvements to the emergency care system. These include:

- Expand the current fee for service model for EMS agencies with reimbursement for treatments at home as well as transport to alternative care settings. The focus may be to incentivize EMS agencies and physician offices to change service delivery for less emergent patients and reduce ED utilization.
- An alternative option would maintain the current FFS structure and integrate pre-hospital emergency services into the shared-savings model of an Accountable Care Organization (ACO). The current delivery model for EMS is predicated on a single financial incentive to transport acute or non-acute patients to the hospital. If one or more EMS agencies partnered with an ACO, their incentive would be to lower the total cost of care for beneficiaries, and agencies would be able to innovate in how triage, transport, or disposition decisions are made in the field. Under the ACO model, an EMS agency would be incentivized, through shared savings, to make the most appropriate (and often least costly) treatment and transport decision with the patient. This option would require some start-up funding, mainly in order to integrate data systems, educate EMS providers, ensure more appropriate online medical direction, and prepare for a thorough evaluation.

More innovative and long-term approach

This would provide novel strategies to emergency care reimbursement or variations to current approaches for entire regions which may include a broader array of health care providers in the emergency care system and models such as bundled payments, shared savings, or patient-centered medical homes. There may be new ways to incentivize less costly emergency care for EMS agencies, hospitals, physicians, urgent care centers, and clinics.

Possible Participants and Beneficiaries

There is significant interest in health services sectors to reduce ED utilization and save money. Demonstrations may directly target the unscheduled care system as a source of overutilization and overspending. Participants could include Accountable Care Organizations or other entities that bear financial risk and are incentivized to reduce utilization of costly services. Regionalized systems of emergency care, including EMS agencies, hospitals, physician groups, home health nurses, and local public health departments could partner under a convener to execute a geographically defined model. This could also be integrated into models being developed for patient-centered medical homes. State Departments of Health may also organize regional providers.

All Medicare, Medicaid, and CHIP beneficiaries (including dual eligible beneficiaries) may realize an increase in the quality and a decrease in the total cost of their unscheduled or acute care. In addition, providers of primary care services, including Federally Qualified Health Centers and Rural Health Clinics, as well as local or regional EMS agencies will benefit financially from a shift in reimbursement policy.

The following care providers may be included in a demonstration project:

- EMS providers and medical directors.
- Primary care, emergency, and other specialty care physicians.
- Primary care, emergency, and other specialty care physician assistants and nurse practitioners.
- Urgent care centers and providers.
- Hospitals and Emergency Departments.
- Accountable Care Organizations.
- Federally Qualified Health Centers (FQHC).
- Rural Health Clinics (RHC).

Demonstrations may also choose to engage local community and other care providers such as Fire Department personnel and other health workers. It may also be important to engage state partners including regulators of medicine and emergency medical services, state Medicaid Administrators, and state Public Health Departments.

Significant Assumptions for Consideration

Factors That May Increase Cost Savings

The Model does not include data from Medicaid and CHIP where more substantial savings are anticipated, particularly since a significant portion of Medicaid patients are “treat and release” from the ED.^{xxxiii} One major assumption of the cost savings presented is that all patients that were admitted to the hospital were not emergent. However, a percentage of these admissions may be avoided if the patient is transported to a specialist physician’s office. An 11 percent reduction in ambulatory sensitive care admissions has been demonstrated in a PCMH model.^{xxxiv}

Another assumption made in the Model is that patients with injury, mental health issues, or drug/alcohol issues are excluded from the less emergent analysis. In actuality, an unknown percentage of these patients may also be safely triaged away from EDs.

Factors That May Decrease Cost Savings

Clinic provider incentives—it is anticipated that an applicant may have to provide incentives to clinic providers who do not traditionally accept unscheduled or off-hours patients. This may be in the form of a per-patient-per-month payment or a lump sum. An ACO may not require any additional incentive if they believe more access to their primary care physicians will result in fewer ED visits and overall cost savings. A traditional fee-for-service practice may be incentivized by bonus payments when seeing a patient same day or after normal office hours.

The EMS community should carefully consider the following major assumptions from the nation model:

Assumption	Impact on Cost Savings
EMS providers can triage 15 percent of Medicare ED transports away from the ED	Neutral to potential increase in savings 15 percent as a number for less emergent ED visits is a very conservative estimate. Data are not available for the Medicaid population and it is anticipated that a far greater percent of those are less emergent visits. It is anticipated that cost savings will be greater than is calculated.
Clinic based health care providers will accept unscheduled patients	Decrease cost savings While the amount of incentive that would be required to have physician offices accept unscheduled patients from EMS is estimated, there is no literature to support the exact amount of incentive that may be required. Applicants will need to negotiate the exact amount of such incentives. If greater incentives are required to induce providers to take unscheduled visits, that may decrease cost savings.
Admitted patients are emergent	Increase cost savings Due to the lack of availability of specialty consult in many ED's, it is anticipated there are a number of unnecessary hospital admissions that may be avoided if transport to a specialty physician's office is possible. This is supported by the patient centered medical home literature where as much as 11 percent of ambulance sensitive conditions avoided hospitalization.
There will be cost savings in addition to those realized by ED utilization reduction	Increase cost savings Patients are often admitted to inpatient floors from the ED because of a lack of confidence that the patient will follow up with a PCP. It is anticipated there will be a more substantial cost savings from a reduction in admissions that is not calculated in this proposal.
Injured, mental health and alcohol related visits must be seen in the ED	Increase cost savings There are low acuity calls for these groups that may be handled with a visit to the specialty provider or treatment at site of injury.

Note that the financial models presented in figures 2 and 3 assume that only those patients that were *not* admitted to the hospital were potentially avoidable. However, as shown in the patient centered medical home literature there are ambulatory sensitive hospitalizations that may be avoidable.

Conclusion

There is significant potential for innovation in healthcare systems that may transform the delivery of emergency medical services, reduce the total cost of care, and increase health for a population well beyond CMS beneficiaries. Innovations may also change the model of acute care to one that is more patient-centered as many of those experiencing an acute event can be evaluated in their home (or current location) and triaged to an appropriate care setting that is congruent with their level of severity. Encouraging clinic based health care providers to accept more unscheduled visits will ensure greater continuity of care for patients.

The provision of unscheduled care, including EMS agencies, emergency departments, physicians, and urgent care centers, has not experienced significant innovation in delivery or finance models since the establishment of Medicare. Americans deserve a full *systems approach* to transforming the unscheduled care in a patient-centered manner that will save money, reduce the burden on the emergency departments, and increase the quality of care provided to beneficiaries.

Finally, the information presented in this draft “White Paper” is a theoretical model that will serve as a stimulus to engage local, regional, and state EMS systems and health care providers to seek funding to test the model. The challenge is for interested and innovative system managers to address the details and the intricacies – develop, modify, improve, or disprove the model.

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Pinch Hitting



Doctor shortages in rural America have paramedics stepping up to the plate when needed.

BY MICHELLE
ANCELL

Michelle Ancell is a freelance writer based in Denver.

Three years ago Robert's diabetes was so severe doctors planned to amputate his leg. But because Robert lives in Minnesota, one of the first states to launch a community paramedicine program, emergency medical technicians got involved. Three times a week they stopped by to care for his wound, share diabetes management tips and evaluate his overall health.

Today Robert still has his leg and credits the North Memorial Medical Center's community paramedics for saving it.

"He loves us," says Community Paramedic Supervisor Peter Carlson. "He welcomed us from the beginning. He's happy to see us and offers us candy. And we provide care, proping him up literally and figuratively."

Beyond Emergencies

Community paramedicine systems are popping up in Colorado, Maine, Minnesota, Missouri and Nevada to provide health care where few services exist. Often, they save money for patients, hospitals and insurance companies, mostly in avoided costs. A leg amputation, for example, costs around \$76,000. That's about what it would cost to fund community paramedic home visits to Robert for 11 years. Minnesota reported that because of the paramedicine program there, Medicaid providers serving 100,000 residents spent \$10.5 million less in 2014 than analysts projected they would.

Community paramedicine broadens the role of emergency responders beyond the traditional paramedic training that has existed since the 1970s and that focuses on stabilizing patients as they are transported to hospitals. Community paramedics can perform health assessments, monitor chronic diseases, ensure patients use medication correctly, give vaccinations and follow up after hospital discharges. They are also a great source of information and help educate patients on the care and treatment of their illnesses, injuries and diseases.

"Paramedics are highly trained, highly regarded, trusted health care providers in their respective communities," says Nevada Assemblyman James Oscarson (R), whose bill authorizing and regulating community paramedicine services was signed into law in May. "Community paramedics will have an expanded role in health care, not an expanded scope. Now they can complement the services of the other health care professionals in the health care system."



Assemblyman
James Oscarson
Nevada

A Rural Lifeline

Community paramedics usually work in rural and isolated areas where physicians are scarce. Patients are often from underserved populations, meaning they are typically, but



Typical Training Requirements

A high school diploma or equivalent and CPR certification are prerequisites for most emergency medical technician and paramedic training programs. Most licensing requirements, which vary by state, require the following:

EMT

Skills include determining a patient's condition, handling trauma and cardiac emergencies, clearing obstructed airways and using field equipment. Courses include about 150 hours of specialized instruction. Some instruction may take place in a hospital or ambulance setting.

Advanced EMT

Programs typically require about 300 hours of instruction, based on the scope of practice. At this level, students must complete more advanced requirements, such as using complex airway devices and administering intravenous fluids and some medications.

Paramedic

Paramedics earn the highest level of education, completing EMT and Advanced EMT training along with courses in advanced medical skills. Paramedics' scope of practice may include stitching wounds or administering IV medications. Programs typically are offered at community colleges and technical schools and require about 1,200 hours of instruction, which may result in an associate degree.

Sources: U.S. Department of Labor's Bureau of Labor Statistics and the National Registry of Emergency Medical Technicians.

not always, low-income, elderly people. In Minnesota, community paramedics are specifically trained to care for patients who visit hospital emergency departments frequently, are at risk of needing nursing home care or are close to being readmitted to a nursing home or hospital.

The growing number of community paramedics reflects a larger demographic shift. Only 15 percent of the country's population lived in rural counties in 2014, according to

the Department of Agriculture.

"Thirty years ago there were more health professionals in rural areas, there were more volunteer firefighters and EMTs, and the rural population was younger and healthier," says Gary Wingrove, president of The Paramedic Foundation, using the common abbreviation for emergency medical technicians. Today, there are fewer health facilities, fewer qualified people to work in them and fewer resources to fund them. Increasingly, community paramedics are stepping in to help fill that gap.

The Rural Assistance Center, part of the U.S. Department of Health and Human Services' Rural Initiative, reports that rural Americans suffer from higher rates of chronic illnesses and worse health overall than city dwellers. They are less likely to have employer-provided health care coverage, or to be covered by Medicaid even if they qualify for it. They seek treatment in hospital emergency rooms and call 911 for non-emergency situations—a costly practice. Nearly 80 percent of adults who visited emergency departments did so because

"Community paramedics will have an expanded role in health care, not an expanded scope."

Nevada Assemblyman James Oscarson

they didn't have access to other providers, according to a 2012 report on emergency room use from the Centers for Disease Control and Prevention.

"Basically we are taking the resources that already exist in a community and expanding upon them to offer broader health care coverage," Wingrove says. "The specifics of how these programs operate depend on the communities they serve."

Who Pays?

Providing these services, however, isn't free. Pilot programs have used grant funds from foundations and the federal government to cover costs. Some hospitals that



HEALTH CARE

own ambulance services, in places such as North Carolina and Missouri, have started funding programs in hopes that the savings from fewer readmissions will cover the added costs. Elsewhere, local agencies fund emergency medical services for their communities, absorbing the added costs in their budgets with slightly higher fees.

The additional costs come from the advanced training community paramedics must receive and the higher salaries they earn for their education and additional time spent on community services. In advanced training they learn higher level health concepts such as the social determinants of health. When working with an elderly person, for example, community paramedics ask, Does the patient own a car? Can the patient walk? If the answer to both questions is no, how is the patient getting prescriptions? Such determinants can make a difference in a person's health.

Community paramedics with advanced training may earn about 10 percent more than traditional EMTs. But in many cases, employers pay for the additional training without offering greater compensation.

Minnesota created its new community paramedic profession in 2011. To earn a community paramedic certificate, a person must hold an emergency medical technician-paramedic certification, have worked two years as a full-time EMT-P and have

graduated from an accredited EMT course.

Minnesota reimburses community paramedic services through Medicaid. It was the first state to use a Medicaid payment and delivery system that shares savings and risks directly with provider organizations. To qualify for Medicaid reimbursement, the services must be ordered by the recipient's primary care provider and include monitoring blood pressure, assessing fall risk, setting up medication profiles and delivery, and coordinating care, referrals and follow-up.

Nurses, Doctors Have Concerns

Nurses and home health care groups throughout the country have expressed concerns that the expanded paramedic role infringes on the duties of their respective professions.

The American Nurses Association initially lobbied against Minnesota's program because of the overlapping patient care responsibilities. The nurses argued that since patient-centered care coordination is a core professional standard for registered nurses, they are the best prepared to treat underserved, rural patients.

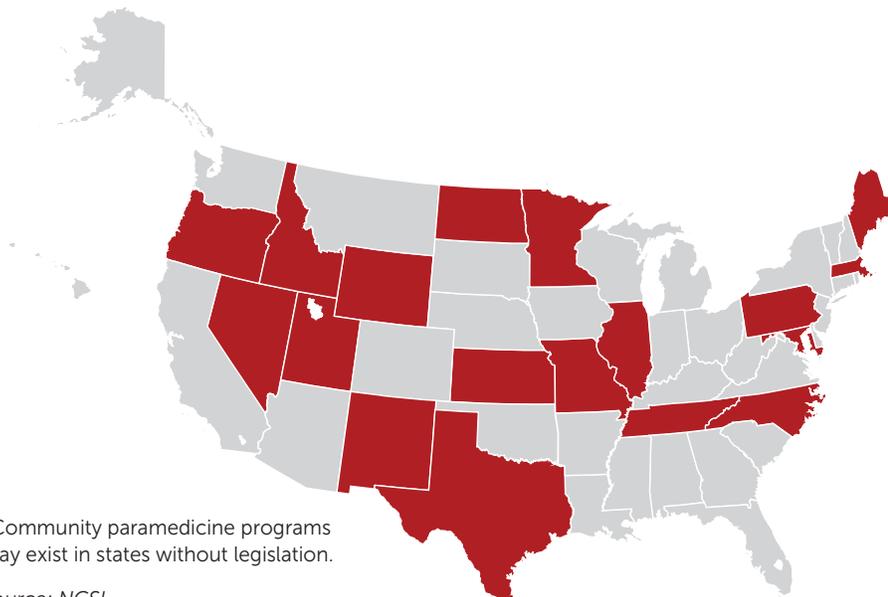
The nurses' association listed a set of principles for the community paramedicine industry to adopt and follow in order to gain its support. They included establishing minimum standards of education, clarifying roles between community paramedics



"We can provide people the care they need without the expense and inconvenience of going to a hospital."

Colorado Senator Leroy Garcia

States with Legislative Action on Community Paramedicine*



*Community paramedicine programs may exist in states without legislation.

Source: NCSL

and nurses and fostering interdisciplinary cooperation through appropriate regulatory models.

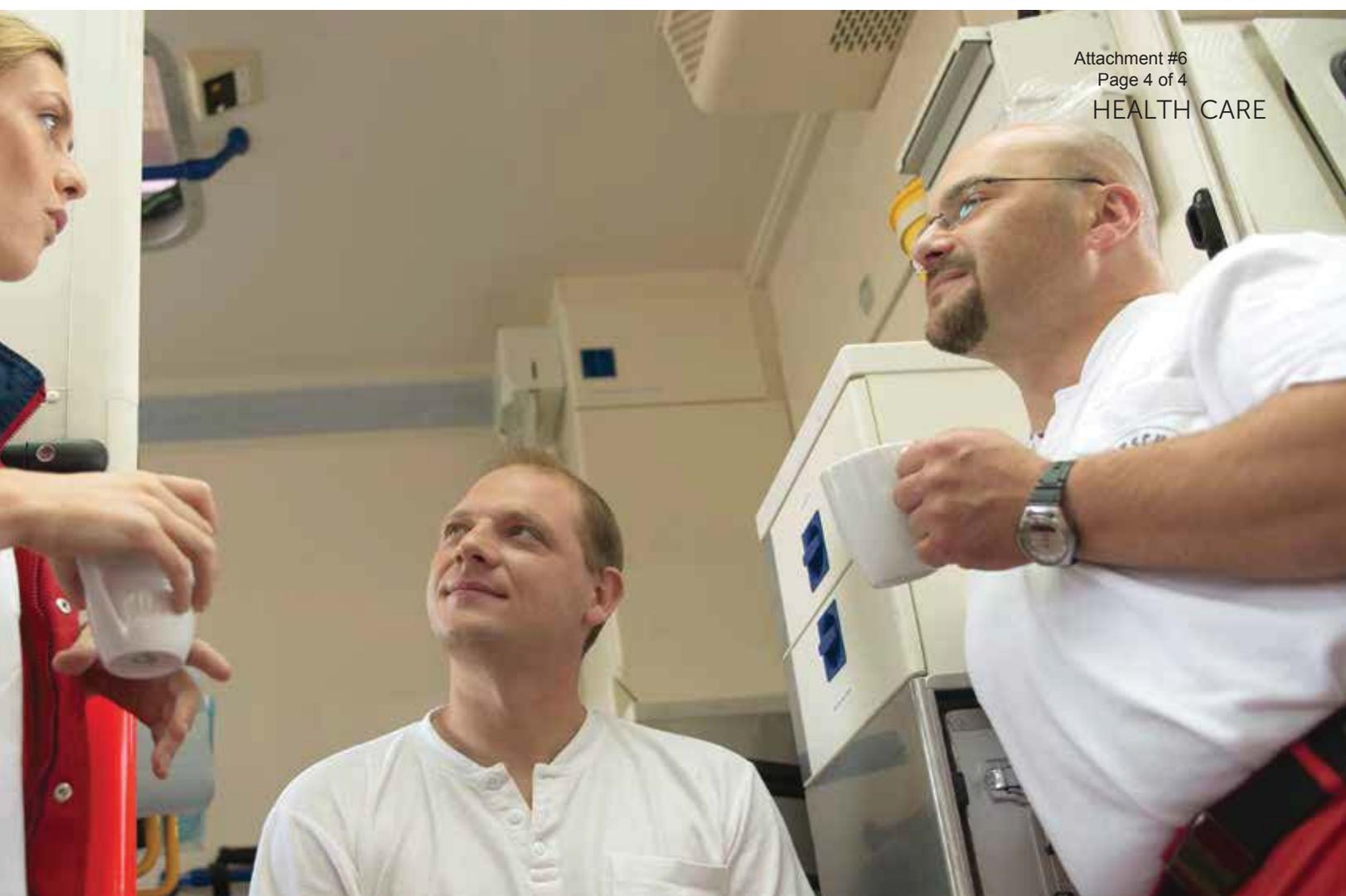
Minnesota community paramedic leaders agreed and still adhere to the nurses' principles.

Colorado Senator Leroy Garcia (D) works as a paramedic and as an emergency medical services instructor at his local community college.

As in Minnesota, paramedics in his community work with primary care doctors to care for residents in need.



Senator
Leroy Garcia
Colorado



Paramedics are involved from the minute a person dials 911. Current law allows them, in certain situations, to treat callers with a simple medication and a professional's reassurance that the patients will be fine until they can visit the doctor. Paramedics can even help set up the appointments.

"We can provide people the care they need without the expense and inconvenience of going to a hospital. They can recover comfortably at home, and it's a more personal connection," he says.

Garcia plans to draft legislation to develop the community paramedicine profession further in Colorado. The success of these programs hinges on the ability to tailor them to a community's needs, he says. The needs of a Vail ski resort community, for example, are very different from those of a small agricultural area.

"That is one of the challenges in creating legislation," Garcia says. "You don't want it to be so specific that it is limiting. You want it to be adaptive. This is a dynamic profession that needs to have some flexibility, especially as it develops."

Multifaceted Approach

In Nevada, where Oscarson's community paramedicine bill was recently signed into law, the program's multifaceted health care approach is designed to address rural and urban populations in very different ways. The bill:

- Allows licensed ambulance, air ambulance or firefighting agencies and certified personnel to qualify for an endorsement on their permits to provide community paramedicine services.
- Enables legislators to review how Nevada community paramedicine programs are addressing health care gaps in rural and urban locations throughout the state.
- Requires paramedicine departments to submit quarterly reports to the state outlining the services they provided and the estimated health and economic benefits of those services. Nevada's health department will summarize the reports and submit them to the Legislature and the Legislative Committee on Health Care.

Oscarson hopes the data collected will result in a compelling argument for a state

reimbursement component for community paramedicine in the future. Currently, community paramedics are paid by their governing agency, Oscarson says. In turn, those agencies submit data to regulatory bodies, such as the Nevada Division of Public and Behavioral Health emergency medical services office, with the objective of demonstrating cost savings.

"Agencies do this because it is the right thing to do as health care delivery changes based on the Patient Protection and Affordable Care Act of 2010," Oscarson says. The idea is to not put an hourly, monthly price on community paramedicine, but to determine a value based on savings in order to eventually pursue a reimbursement system.

"Community paramedicine and EMS as a whole are gaining a seat at the health care table," Oscarson says. "These programs have the ability to improve health care for the future because they navigate patients to the appropriate resource at the appropriate time, rather than to the highest cost entry point of the health care system—the emergency room." 

Integrated Healthcare

Building a Better Community Medic

by John Erich On Aug 21, 2014

Figure 1: California Community Paramedic Pilot Projects

LEAD AGENCY	LEAD EMS AGENCY	TYPE OF PROJECT	EMS AGENCIES PARTICIPATING
1. UCLA Center for Prehospital Care	Los Angeles	Alternative destination	Santa Monica, Glendale, Pasadena FDs
2. UCLA Center for Prehospital Care	Los Angeles	CHF follow-up	Burbank, Glendale FDs
3. Orange Co. Fire Chief's Assoc.	Orange Co.	Alternative destination	Fountain Valley, Huntington Beach, Newport Beach FDs
4. Butte County EMS	Sierra-Sac. Val.	EMS post-hospital follow-up	Butte County EMS
5. Ventura County EMS Agency	Ventura	Observed TB treatment	AMR Ventura, Gold Coast, LifeLine
6. Ventura County EMS Agency	Ventura, Sta. Barb.	Hospice support	AMR Ventura, Santa Barbara
7. Alameda County EMS Agency	Alameda County	Hospital follow-up, 9-1-1 users	Alameda City, Hayward FDs
8. San Bernardino County FD	San Bernardino Co.	Post-hospital follow-up	San Bernardino County FD
9. Carlsbad FD	San Diego	Alternative destination	Carlsbad FD
10. City of San Diego	San Diego	Frequent 9-1-1 users	San Diego City FD, Rural/Metro
11. San Joaquin Co. EMS Agency	San Joaquin Co.	Post-hospital follow-up	AMR San Joaquin County
12. Mountain Valley EMS	Stanislaus County	Alt. dest., mental health	AMR Stanislaus County
13. Medic Ambulance	Solano County	Post-hospital follow-up	Medic Ambulance

As a measure of the rapid recent growth of community paramedicine in the United States, consider this:

Half a year or so ago, 145 educational institutions had sought copies of the standardized community paramedic educational curriculum developed by the Community Healthcare and Emergency Collaborative (CHEC). By this summer, when national leaders in CP education completed a survey of such institutions and how they use the curriculum, the number had risen to more than 200. That's an increase of 38% in six months.

"The momentum is really just exploding," says Anne Robinson-Montera, RN, BSN, who led the team behind the latest curriculum update (version 3) and was part of the group that polled its recipients. "Since the paper there have been more than 100 additional institutions that have said they want to teach the course. We're really thinking that within the next five years, we can have as many as 167

colleges and universities around the world teaching it. I think if anything, the paper demonstrates that this is becoming a standard of education.”

As programs proliferate, such a standard is increasingly necessary. To institutionalize and advance the CP concept, an educational foundation that’s common across systems, yet pliable enough to accommodate local circumstances and emphases, is an essential step.

Who’s Using & How

The survey, the results of which were published in *International Paramedic Practice*,¹ went to 223 post-secondary educators and government officials. More than 30% responded—a rate that’s 2–3 times the average rate for external surveys.

Of those answering the direct question, roughly three-quarters said they’d already conducted, were conducting or planned to conduct a CP course in the next five years. Half of the rest just awaited state approval.

At the time of the survey, the authors concluded, many CP courses both domestic and international were still in planning stages, but the curriculum disseminated internationally “has been broadly accepted and will be widely utilized.”

Among the most notable adoptions here at home has been that of California, the first state to embrace the curriculum at the statewide level. The California EMS Authority has contracted with the UCLA Center for Prehospital Care to develop CP courses that will be taught at sites around California in advance of pilot projects being developed under the state’s Health Workforce Pilot Projects (HWPP) program. That should all start in January.

“We have two courses we’ll kind of be the ‘mother ship’ for at UCLA,” says Robinson-Montera, “and then we’ll have separate sites set up for students to come and receive content from subject-matter experts we’re bringing in from all over the nation. There are a variety of programs being set up; for instance, there’s one department helping people with asthma, and there’s another that helps administer tuberculosis medications.”

Leaders at the 12 pilot sites have spent the summer planning protocols, training and data collection. For a list of the planned projects, see Figure 1.

“For a state to really adopt this as its curriculum,” adds Robinson-Montera, “I think speaks volumes about its content.”

Basic Content

If you’re familiar with version 2 of the CP curriculum, that content was reorganized and bolstered in version 3, with added goals and objectives. The current iteration has seven sections:

- **Role of the community paramedic in the healthcare system**—The opening module covers the definition and practice scope of the CP as well as the relationships they'll need and locating organizations they can work with.
- **The social determinants of health**—This section examines the social characteristics of those likely to benefit from CP services, and how they correlate with health behaviors.
- **Public health and the primary care role**—This section describes a public health approach to areas like health promotion, injury prevention and chronic disease management, as well as risk mitigation and financial impact.
- **Cultural competency**—Subjects include the cultural impact on health and the distinction between culture and individual identity. This section helps students develop “cultural competence” and avoid stereotyping.
- **Role within the community**—This covers conducting a community needs assessment, developing profiles of patient candidates, and determining types and levels of care to be delivered.
- **Personal safety and wellness**—This examines well-being among CP providers, including the warning signs of stress and strategies to manage it and avoid burnout.
- **Clinical experience**—The clinical module requires students to compile histories on subacute, semichronic patients; perform physical exams and document their histories; utilize specialty equipment, including that of home healthcare; access and maintain ports, central lines, catheters and ostomies; obtain specimens and samples for lab testing; and interpret various results and reports.

The first six modules, basically core competencies, can be taught online. The clinical/lab portion is delivered in the community and tailored to the type of program being established. Expert reviewers vetted the curriculum once it was complete, then a pilot process in 2012 tested it across 23 agencies in 14 states.

“Version 2 had a lot of teaching material, and it was hard for one college or university to just pick it up and really know where to start,” says Robinson-Montera. “It had four modules, but some of them applied and some didn’t always, and there wasn’t much structure or framework for teaching it. So we just kind of stepped back and reorganized what was there. We added goals and objectives. Then what we’ve been doing is working with individual agencies and helping them further develop lesson plans and teaching materials.” Guidance for that is compiled in a resource manual that’s provided for instructors.

Establishing a Program

At ZOLL’s Summit 2014 in May, Robinson-Montera outlined steps for establishing and delivering a CP education program. Briefly those are:

1. Affiliate with an accredited college;
2. Request the curriculum (it’s free);

3. Gather champions for additional support (e.g., medical director, nurses, public health, hospital discharge planners, home health).
4. Assemble a multidisciplinary faculty; look to physicians, nurses, public health personnel, behaviorists, social workers, home health, hospice and others from related fields.
5. Establish clinical sites 6–8 months in advance, then develop a clinical guidebook. This should outline objectives and responsibilities and expectations of all participants.
6. Select appropriate learners. Not everyone in EMS is cut out to be a community paramedic. Look for experience, prerequisite knowledge and education, and an ability to devote the time and learn online.
7. Develop the course structure, including standards, grading criteria, etc.
8. Develop the course. Construct a syllabus for each module and provide a resource manual. Incorporate subject-matter experts.
9. Assess the learners: Are they getting what you're trying to teach them?
10. Evaluate all aspects of the program as you progress and when you're done. This should include student selection, system needs, technology, faculty, clinical sites and overall satisfaction.

A mistake some institutions have made is to keep their programs too EMS-centric. Successful efforts have to draw on a wider range of instructor expertise. "A program won't be successful if it's run just through an EMS type of faculty," says Robinson-Montera. "You need to make sure the faculty is diverse, with backgrounds in areas like public health, social work and nursing. You can't just have your typical paramedic instructors; the whole concept of community paramedicine is bringing together all these different healthcare stakeholders and having them work together."

Efforts are underway to establish an accreditation process to verify the quality of CP educational programs. Once that's in place, it will provide a mechanism for funding and making further refinements to future versions of the curriculum.

For more on CHEC and its community paramedic curriculum, see <http://communityparamedic.org/>.

Reference

1. Raynovich W, Weber M, Wilcox M, Wingrove G, Robinson-Montera A, Long S. A survey of community paramedicine course offerings and planned offerings. *International Paramedic Practice*, 2014 Apr–Jun; 4(1): 19–24.

