

# “EMS” in Integrated Healthcare

## *The Changing Stakeholder Perceptions of Value*



**Matt Zavadsky, MS-HSA, NREMT**  
Chief Strategic Integration Officer  
MedStar Mobile Healthcare  
President-Elect, NAEMT  
Adjunct Faculty  
Univ. of North Texas, Health Science Center



# What we're gonna do....

- Overview of Healthcare 3.0
  - And what they want now from EMS
- Explain attributes of EMS 3.0
- Discuss the new economic models coming
  - Offering or asked to offer
- Demonstrate how you can help *prove value*

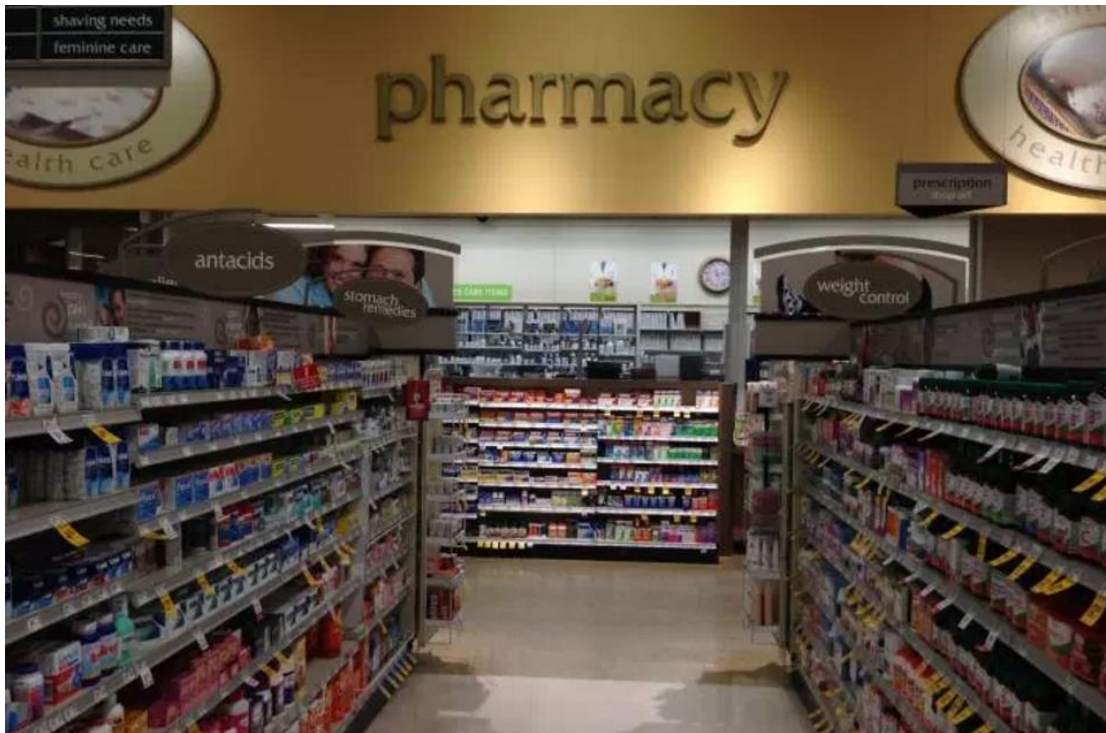


# And...

- Ask the *really tough* questions



*Why do supermarkets make the sick  
walk all the way to the back of the  
store to get their prescriptions...*

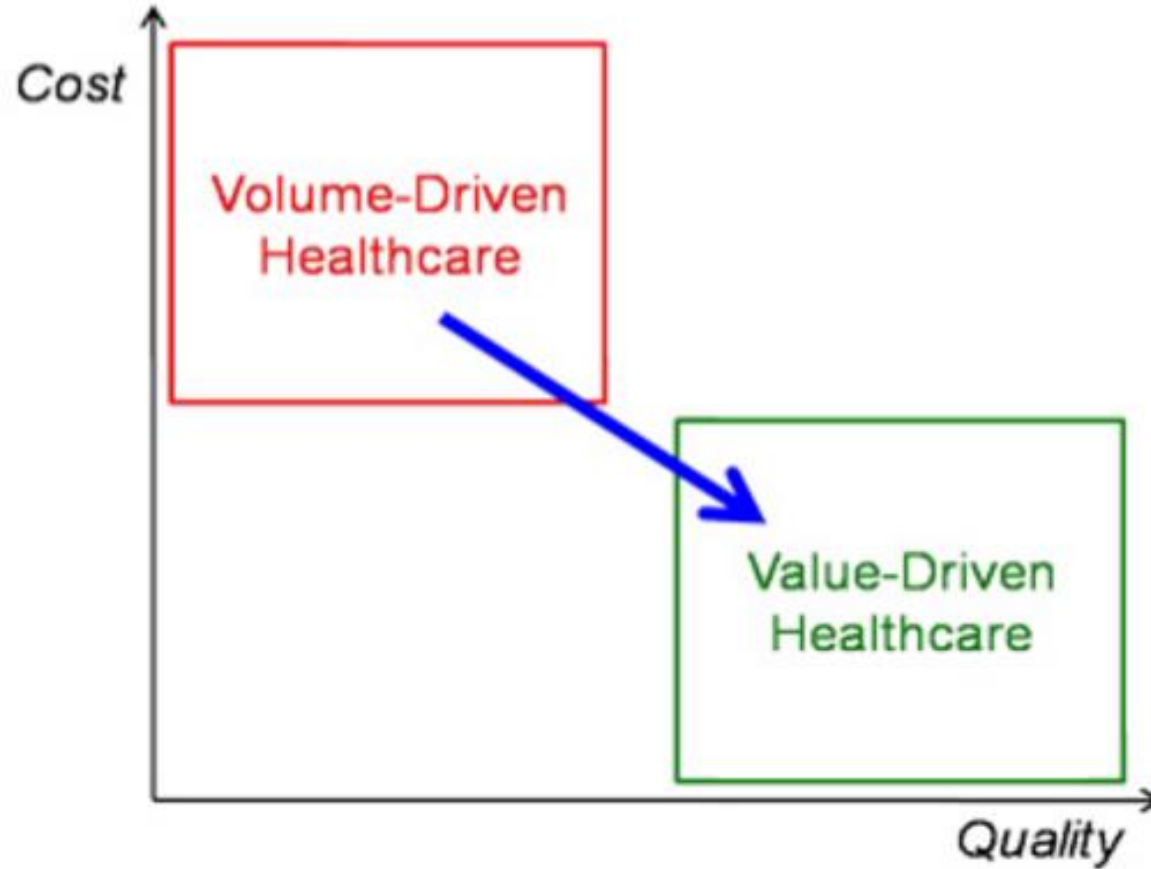


*...while healthy people can buy  
cigarettes at the front?*





# Healthcare 3.0





# Attention Please!

- \$10,372 per capita health expenditures (2016)!!
  - 18.1% GDP
- Due in large part to quantity-based payments





10 Rethinking Doctors' Pay 28 Reform: Far From Dead 33 **FOLDOUT:** Do You Promote Optimal Healing?

# H&HN

HOSPITALS & HEALTH NETWORKS®

DECEMBER 2010 WWW.HHN.MAG.COM



## IT'S ALL ABOUT THE **OUTCOMES**

Quality organizations want hospitals to collect more data that focus on patients and outcomes rather than processes and payments

# Value-Based Purchasing

Historical Domain/Category Weightings for Hospital Inpatient Value Based Purchasing

Category	2013	2014	2015	2016	2017	2018
Process	70%	45%	20%	10%	5%	--
Patient Satisfaction	30%	30%	30%	25%	25%	25%
Outcomes	--	25%	30%	40%	25%	25%
Spending Efficiency	--	--	20%	25%	25%	25%
Safety <sup>1</sup>	--	--	--	--	20%	25%

1: Prior to FY 2017, safety measures were included in outcomes. Table descriptive of general domain focus only, actual domain names differ and have been modified over several years.



# Healthcare 3.0

- **ACOs**
    - **923** in the U.S.
      - 1.3 million covered lives
  - **Payment based on VALUE**
    - **Shared Risk contracts**
  - **Bundled payments based on episode of care**
  - **MSPB calculations = 2015**
    - **Medicare Spending Per Beneficiary**
      - Hospital accountable for some outpatient post acute costs
  - **Merger and Acquisition activity**
- 







## Healthcare Services

Street Address  
Address 2  
City, ST ZIP Code

**PAYMENT SERVICE**  
Phone 604 276-3-684 233.8777  
Toll-free 1 888 427-8867 1 888 922-8867

**Payment information**  
Payee name (Enter Name here)  
Billing address (Street Address, City, ST ZIP Code)  
for payment  
Telephone 1 888 422-2224

**Service recipient information (worker or other person who received service)**  
Service recipient last name\*

**MAIL**  
Payment Services, EnergyBC  
PO Box 4790 Ste Terminal  
Vancouver BC V6B 1J1

Payee number\* (Number)  
Address (Street Address, City, ST ZIP Code)

### INVOICE

Service# A23-008  
Service Date 4/27/2018  
Contract ID 4102  
Authorization# 9086

GST Registration No.

(Registration No.)

Postal code (Code)

Service recipient personal health  
Number (Last name)



**H-CUP** HEALTHCARE COST AND UTILIZATION PROJECT

**AHRQ** Agency for Healthcare Research and Quality

**STATISTICAL BRIEF #174**

June 2014

**Overview of Emergency Department Visits in the United States, 2011**

Audrey J. Weiss, Ph.D., Lauren M. Wier, M.P.H., Carol Stocks, Ph.D., R.N., and Janice Blanchard, M.D., Ph.D.

Introduction

**Highlights**

- In 2011, there were about 421 visits to the emergency department (ED) for every 1,000 individuals in the population.
- More than five times as many individuals who visited an ED were discharged as were admitted to the same hospital.

<sup>1</sup> Tang N, Slein J, Hsia RY, Maselli JH, Gonzales R. Trends and characteristics of US emergency department visits, 1997–2007. *Journal of the American Medical Association*. 2010;304(6):664–70.  
<sup>2</sup> Goodell S, DeLia D, Cantor JC. Emergency Department Utilization and Capacity. 2009. Robert Wood Johnson Foundation Policy Brief No. 17. Princeton, NJ: Robert Wood Johnson Foundation.  
[http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2009/rwjf43566](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2009/rwjf43566). Accessed May 7, 2014.  
<sup>3</sup> Morganti-Gonzalez K, Baufman S, Blanchard J, Abir M, Iyer N, Smith A, et al. The Evolving Role of Emergency Departments in the United States. RAND RR 280-ACEP. Santa Monica, CA: Rand Corp; May 2013.  
<sup>4</sup> Ibid. Note: excludes live births.  
<sup>5</sup> Tang et al., 2010.

aged 45 years and older), and abdominal pain and back pain (all adult age groups except those aged 85+ years).  
 ■ Rural areas had a higher rate of ED visits resulting in discharge compared with urban areas.

1

## 131 Million ED Visits (2011)

- The most common reasons for ED visits resulting in discharge were fever and otitis media (infants and patients aged 1–17 years), superficial injury (all age groups except infants), open wounds of the head, neck, and trunk (patients aged 1–17 years and adults aged 85+ years), nonspecific chest pain (adults aged 45 years and older), and abdominal pain and back pain (all adult age groups except those aged 85+ years).

YEAR	% OF ED PATIENTS ARRIVING BY EMS	OVERALL ED ADMISSION RATE (%)	% OF EMS ARRIVALS WHO ARE ADMITTED	% OF WALK-IN PATIENTS ADMITTED
2013	17	16.5	39	12.5
2012	16	16.5	39	12.2
2011	17	17.6	42	12.6
2010	16	18.0	43	13.2
2009	16	17.3	43	12.4
2008	17	16.6	43	11.2
2007-2004	15	16.3	38	12.5

## ED Expenditure Analysis

All ED Visits (2011) (2)	\$	131,000,000
Average Expenditure (3)	\$	969
<b>ED Expenditure</b>	<b>\$</b>	<b>126,939,000,000</b>

% EMS ED Arrivals Discharged	61%
Patients Treated & Streetered	13,584,700
Average Expenditure (3)	\$ 969
<b>Total</b>	<b>\$ 13,163,574,300</b>

% EMS ED arrival (1)	17%
Patient Arrivals	22,270,000
Average Expenditure (3)	\$ 969
<b>EMS ED Expenditure</b>	<b>\$ 21,579,630,000</b>

% of EMS patients Alt. Dest.	15%
<b>ED Patients Referred</b>	<b>2,037,705</b>
Average Expenditure (3)	\$ 969
<b>Potential ED Savings</b>	<b>\$ 1,974,536,145</b>

### References:

1. <http://www.acepnow.com/article/emergency-medical-services-arrivals-admission-rates-emergency-department-analyzed/>
2. <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb174-Emergency-Department-Visits-Overview.pdf>
3. <http://www.cdc.gov/nchs/data/hsr/hsr12.pdf>
4. [https://meps.ahrq.gov/data\\_stats/summ\\_tables/hc/mean\\_expend/2014/table1.htm](https://meps.ahrq.gov/data_stats/summ_tables/hc/mean_expend/2014/table1.htm)



## Healthcare Services

Street Address  
Address 2  
City, ST ZIP Code

**PAYMENT SERVICE**  
Phone 604 276-3-684 233.8777  
Toll-free 1 888 427-4444 1 888 922-8887

**Payment information**  
From: (Enter Name)  
Billing: Street Address, City, ST ZIP Code  
Address:  
for:  
payment:  
to:  
Telephone: 1 888 422-2224

**Service recipient information (worker or other person who received service)**  
Service recipient last name:

**BILL**  
Payment Services, EnergyBC  
PO Box 4799 St. Terminal  
Vancouver BC V6B 1J1

Payee number:  
Address:  
Street Address, City, ST ZIP Code

## INVOICE

Service# 423-008  
Service Date 4/17/2018  
Contract ID 4102  
Authorization# 9086

(Number) GST Registration No.

(Registration No.)

Postal code (code)

Service recipient personal health  
Number (last name)



***Why do we leave cars  
worth thousands of  
dollars in our driveways***



***...and put our useless  
junk in our garage?***



# Anthem Blue Cross Nears 60% Value-Based Care Spend

By Bruce Japsen

April 27, 2017

*Anthem's top executive says the health insurer is paying out 58% of its reimbursements via value-based care models that are quickly dominating the U.S. medical system.*

[Anthem](#), which operates Blue Cross and Blue Shield plans in 14 states, this week opened a window into the health insurance industry's shift away from the traditional fee-for-service approach that is based on volume of care delivered and can lead to overtreatment and unnecessary medical tests and procedures. Rival insurers, including [Aetna](#) and [UnitedHealth Group](#), are also moving aggressively away from fee-for-service medicine.

*"Aggregate spend regarding value-based contracts tally up to about 58% of our total medical spend across all lines of business, and over 75% is represented by shared savings agreements, shared risk arrangements [and] population-based payment models," Anthem CEO Joe Swedish told analysts on the company's first-quarter earnings call earlier this week.*

Value-based pay is tied to health outcomes, performance and quality of care of medical care providers who contract with insurers via alternative payment vehicles like accountable care organizations (ACOs), a delivery system that rewards doctors and hospitals for working together to improve quality and rein in costs.

Forbes

<https://www.forbes.com/sites/brucejapsen/2017/04/27/anthem-blue-cross-nears-60-value-based-care-spend>

**EMSWORLD**  
EXPO

# Question??

- How has “EMS” done in proving value?



# Police transport a good bet for shooting victims, study finds

By Tom Avril, Inquirer Staff Writer

January 8, 2014

From 2003 through 2007, gunshot victims taken to city trauma centers by police survived two-thirds of the time - the same rate as those taken by emergency medical squads, according to a new University of Pennsylvania study.

*When the researchers took into account the severity of the injuries, the survival rate for those taken to emergency rooms by police was slightly better than for those delivered by ambulance.*

When the authors considered all cases of "penetrating trauma" - gunshots and stabbings - the survival rates for those taken by police and those going by ambulance were statistically equivalent.

The Philadelphia Inquirer philly.com



# Association of Prehospital Mode of Transport With Mortality in Penetrating Trauma

*Assessment of Private Vehicle Transportation vs Ground Emergency Medical Services*

Michael W. Wandling, MD, MS<sup>1,2,3</sup>; Avery B. Nathens, MD, PhD<sup>3,4</sup>; Michael B. Shapiro, MD<sup>1</sup>; et al

**Original Investigation**

**September 20, 2017**

## Key Points

Question: Does ground emergency medical services transport confer a survival advantage vs. private vehicle transport for patients with penetrating injuries?

Findings: In this cohort study of 103,029 patients included in the National Trauma Data Bank, individuals transported by private vehicle were significantly less likely to die than similarly injured patients transported by ground emergency medical services, even when controlling for injury severity.

**Meaning**: *Ground emergency medical services transport is not associated with improved survival compared with private vehicle transport among patients with penetrating injuries in urban trauma systems, suggesting pre-hospital trauma care may have a limited role in this subset of patients.*

The JAMA Network<sup>®</sup>

<http://jamanetwork.com/journals/jamasurgery/fullarticle/2654239>

**EMSWORLD**  
EXPO

# More Advanced Emergency Care May Be Worse for Cardiac Arrest Victims: Study

*Good CPR, getting to hospital fast resulted in better outcomes than using sophisticated methods*

Steven Reinberg, HealthDay Reporter

**Nov. 24, 2014**

Advanced life support given by paramedics to cardiac arrest victims may cost lives rather than save them, researchers report.

*The best treatment might just be good CPR given by paramedics or emergency medical technicians and getting the patient to the hospital as fast as possible, the Harvard University researchers noted.*

"We find survival is longer with basic life support than advanced life support, which calls into question the widespread assumption that advanced pre-hospital care improves outcomes in cardiac arrest compared with basic life support," said study author Prachi Sanghavi, a Ph.D. student in the Harvard Program in Health Policy.



# Need an ambulance? Why you may not want the more sophisticated version

By Lena H. Sun

October 12, 2015

Patients who are having a heart attack, stroke or other serious health emergency have a greater chance of surviving if they're taken to the hospital in a basic life-support ambulance rather than one loaded with sophisticated equipment, according to a study released Monday. ***The results were published in Annals of Internal Medicine.***

***Contrary to what most people might think, critically ill patients actually do better when transported in the more basic ambulances staffed by emergency medical technicians, instead of advanced life-support vehicles that have paramedics equipped to perform more invasive procedures.***

Research has shown that crews on advanced ambulances take longer to perform those invasive procedures, in part because they don't have as much practice as clinicians in hospitals, Sanghavi said.

By comparison, crews on basic life-support ambulance use more rudimentary techniques; their focus is getting patients to the hospital quickly. For someone in respiratory distress, for example, they would use a bag-mask respirator that is put over the individual's face.

**The Washington Post**

<https://www.washingtonpost.com/news/to-your-health/wp/2015/10/12/need-an-ambulance-why-you-may-not-want-the-more-sophisticated-version/>

**EMSWORLD**  
EXPO

# Modesto rejects \$1M paramedic, firefighter grant

October 6, 2016

*Speakers implored the council to take the grant, recounting stories of how firefighters trained as paramedics arrived just in time to help loved ones in distress*

MODESTO, Calif. — *The Modesto City Council on Tuesday turned down a \$1.08 million grant that would have paid for a dozen firefighters to become paramedics after an emotional roller coaster of a discussion that lasted more than two and a half hours.*

But the council majority followed the recommendation of City Manager Jim Holgersson and Fire Chief Sean Slamon not to accept the grant, over concerns of the grant's timing and cost.

Slamon told the council once the 12 firefighters had been trained as paramedics they would have cost Modesto about \$85,000 annually, which includes 6 percent incentive pay, supplies and continuing education.

Council members told audience members they appreciated what they had say and the value in providing the community with paramedics. ***But council members also said they had to look at the bigger picture and that included the cost to the city. "I support the paramedic program," Councilman Bill Zoslocki said. ... "But here's the problem. It's a worthwhile goal, but I don't see it as being sustainable."***

**The Modesto Bee**

<http://www.modbee.com/news/article106080287.html/>

**EMSWORLD**  
EXPO



# A healthcare expert explains why you should think twice before taking an ambulance to the hospital

Arielle Berger and Alana Kakoyiannis

Apr. 20, 2017

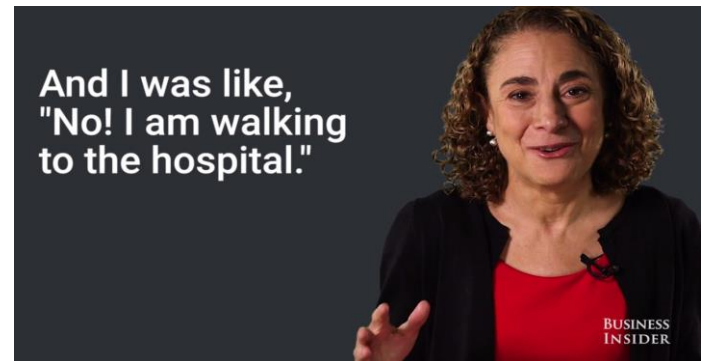
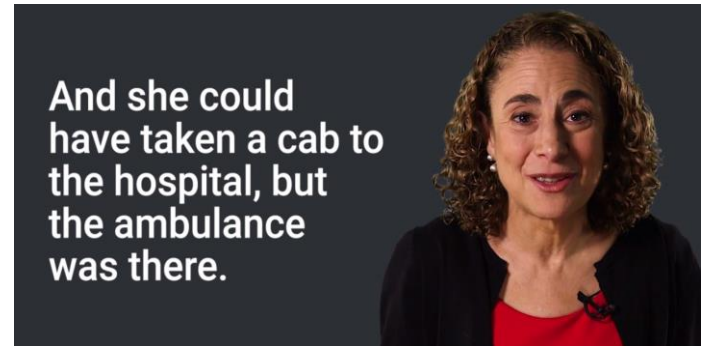
BUSINESS  
INSIDER

Dr. Elisabeth Rosenthal is the **editor-in-chief of Kaiser Health News**, author of "[An American Sickness](#)," and is a former physician herself. **We asked her how to avoid getting huge surprise medical bills.**

*"One of my favorite stories in the book is a woman who was in a minor bike crash. She knew she'd hurt something. Everyone said, 'Oh, let's call an ambulance.' And then, like a month later, she gets a bill from the ambulance company. And it was for, like \$800. And she said, 'Wait! There must be a mistake here. This was the fire department ambulance.'"*

*I'm a jogger, I was running in New York, and I tripped on the pavement and landed facedown, near Columbia. A bunch of students ran up to me and said, 'Oh, can we help you? Should we call an ambulance?' And I was like, 'No! I am walking to the hospital.'"*

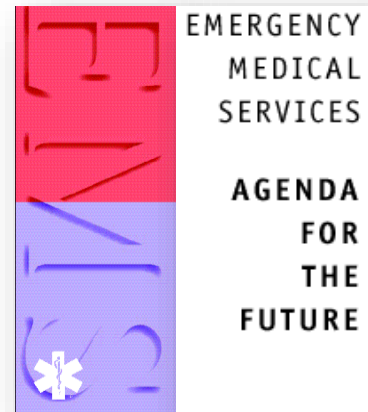
*When people call an ambulance, or think, why don't we just call an ambulance or get in an ambulance there may be financial repercussions.*





# 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.”*



# EMS Can Contribute

Emergency Care + Expanded Services = **Value**





# EMS-Based Mobile Integrated Healthcare

Community  
Paramedicine

911 Nurse  
Triage

Alternative  
Response

Alternative  
Destinations

*Courtesy of Dan Swayze*

# EMS is *Uniquely Positioned* to Help



EMS is available in every community.



EMS is fully mobile.



EMS can address patient needs 24/7.



EMS is an expected, respected and welcomed source of medical assessment and care in people's homes and throughout the community.

***Why do banks leave  
vault doors open...***



***...but chain the pens  
to the counters?***



# Publications Support the EMS 3.0 Transformation



<https://icma.org/articles/ems-era-health-care-reform>

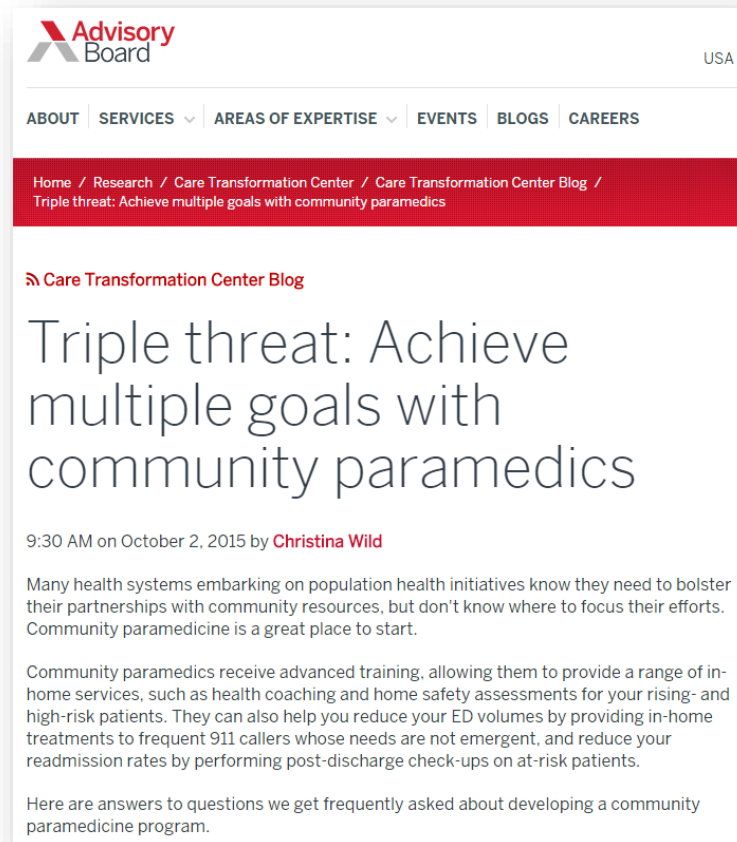
<https://www.phe.gov/ASPRBlog/Lists/Posts/Post.aspx?ID=191>

<https://efficientgov.com/blog/2015/12/24/ems-in-2015-demonstrating-value-in-a-changing-healthcare-system/>

<https://www.researchgate.net/publication/256082991> EMS at the healthcare table



# Publications Support the EMS 3.0 Transformation



**Advisory Board** USA

ABOUT SERVICES AREAS OF EXPERTISE EVENTS BLOGS CAREERS

Home / Research / Care Transformation Center / Care Transformation Center Blog / Triple threat: Achieve multiple goals with community paramedics

**Care Transformation Center Blog**

## Triple threat: Achieve multiple goals with community paramedics

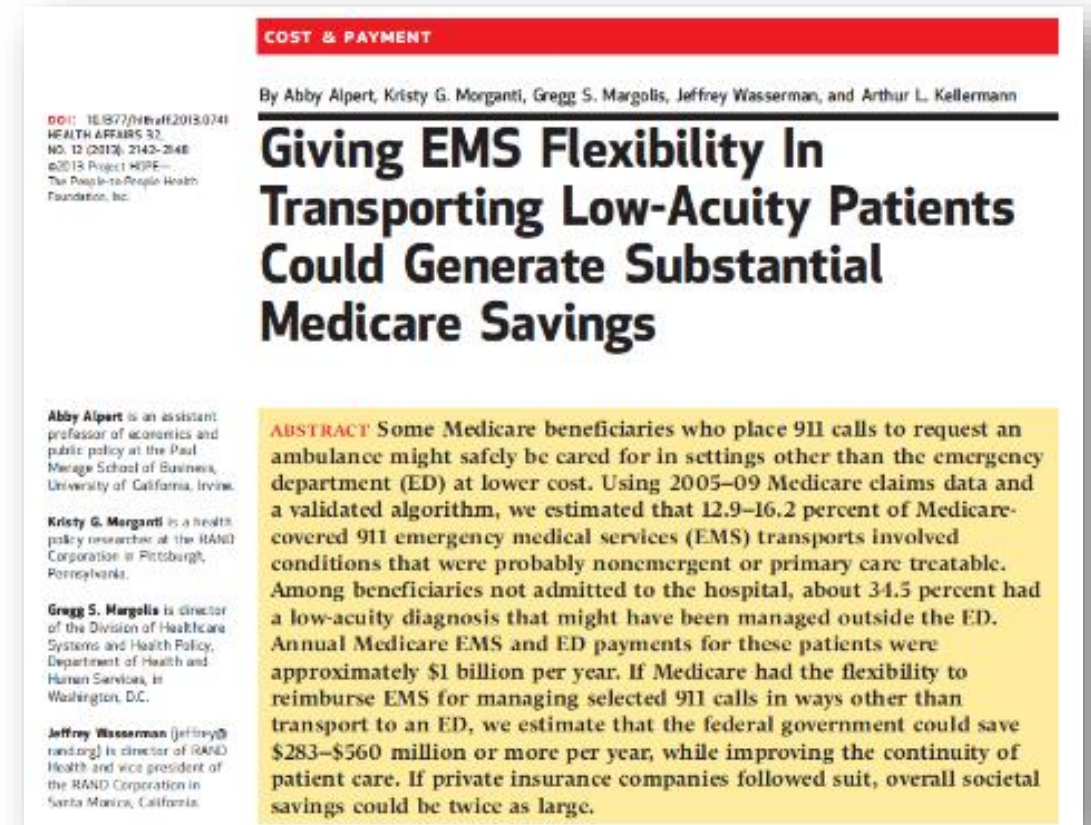
9:30 AM on October 2, 2015 by **Christina Wild**

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.

Here are answers to questions we get frequently asked about developing a community paramedicine program.

<http://content.healthaffairs.org/content/32/12/2142.abstract>



**COST & PAYMENT**

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

DOI: 10.1377/hlthaff.2015.0741  
HEALTH AFFAIRS 32  
NO. 12 (2013): 2142-2148  
©2013 Project HOPE—  
The People's Health Foundation, Inc.

## 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.

**Abby Alpert** is an assistant professor of economics and public policy at the Paul Merage School of Business, University of California, Irvine.

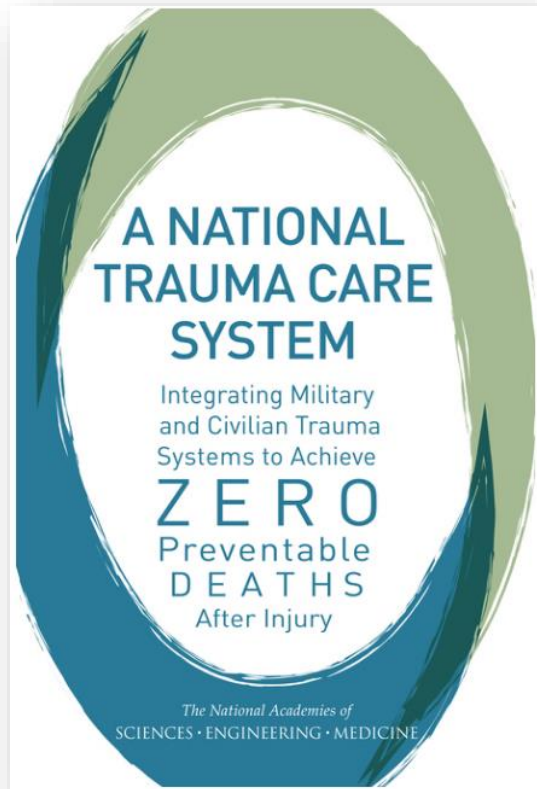
**Kristy G. Morganti** is a health policy researcher at the RAND Corporation in Pittsburgh, Pennsylvania.

**Gregg S. Margolis** is director of the Division of Healthcare Systems and Health Policy, Department of Health and Human Services, in Washington, D.C.

**Jeffrey Wasserman** (jwass@rand.org) is director of RAND Health and vice president of the RAND Corporation in Santa Monica, California.

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

# Publications Support the EMS 3.0 Transformation



**10: Congress, in consultation with the U.S. Department of Health and Human Services, should identify, evaluate, and implement mechanisms that ensure the inclusion of pre-hospital care (e.g., emergency medical services) as a seamless component of health care delivery rather than merely a transport mechanism.**

**Possible mechanisms that might be considered in this process include, but are not limited to:**

- *Amendment of the Social Security Act such that emergency medical services is identified as a **provider** type, enabling the establishment of conditions of participation and health and safety standards.*
- *Modification of CMS's ambulance fee schedule to better link the quality of pre-hospital care to reimbursement and health care delivery reform efforts.*
- *Establishing responsibility, authority, and resources **within HHS** to ensure that pre-hospital care is an integral component of health care delivery, not merely a provider of patient transport.* The existing Emergency Care Coordination Center could be leveraged as a locus of responsibility and authority (see Recommendation 4) but would need to be appropriately resourced and better positioned within an operational division of HHS to ensure alignment of trauma and emergency care with health delivery improvement and reform efforts

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

Anna Gorman, Kaiser Health News

May 10, 2015

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/>





# Paramedics Aren't Just for Emergencies

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

By Laura Landro

**Aug. 17, 2015**

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%.***

THE WALL STREET JOURNAL.

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

**EMSWORLD**  
EXPO

# 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.*



## Community Paramedicine Can Improve Your Hospital's Standing, Ease ED Burden

*This emerging care model uses local emergency medicine technicians and paramedics to provide services outside of their traditional emergency response and transport roles.*

**November 30, 2015**

Michael Milligan

ED overuse and misuse are major problems that not only lead to higher health care costs (and readmission penalties under health care reform), but also longer wait times and lower patient satisfaction.

Some hospitals have tried educating consumers about the importance of primary care and the appropriate use of urgent and emergency care. But as long as the ED remains a safety net for people — a place they can go for convenient care, emergency or not — ED misuse will continue.

However, there is an emerging care model that hospitals and health systems can implement to help alleviate overcrowded EDs: community paramedicine.

*Community paramedicine, also known as mobile integrated health care-community paramedicine, or MIH-CP, uses local emergency medicine technicians and paramedics to provide services outside of their traditional emergency response and transport roles. It shifts emergency medical services from being solely reactive to incorporating proactive measures that ensure the most efficient use of the EDs — all to reduce inappropriate use of local emergency care resources and improve the overall health of communities.*



<http://www.hhnmag.com/articles/6739-community-paramedicine-can-improve-your-hospitals-standing-ease-ed-burden>



According to a national survey presented by the National Association of Emergency Medical Technicians, 81 percent of MIH-CP programs surveyed that have been in operation for more than two years have reported success in lowering costs related to frequent 9-1-1 users.

### **Additional Benefits**

*An MIH-CP program also presents two important business development opportunities, especially for rural and critical access hospitals.*

*First, creating an MIH-CP program positions a facility as more than just an ED: It's a community health resource. Overall health and wellness is a significant component in today's health care environment, and it is a highly marketable message.*

*Second, an MIH-CP program establishes a strong connection between a hospital and the local EMS. This connection will help to ensure that rural facilities and critical access hospitals don't get passed up when emergencies occur.*

Through the partnership an MIH-CP program will create, emergency medical services will fully understand a rural facility's capabilities and will, therefore, feel comfortable bringing patients there for care. While the ultimate goal of MIH-CP is to decrease ED overuse, appropriate emergency care is still an important entry point for rural hospitals to connect with patients.



<http://www.hhnmag.com/articles/6739-community-paramedicine-can-improve-your-hospitals-standing-ease-ed-burden>





## ***Best Practices:*** Paramedics deployed as care navigators

By Steven Ross Johnson | *December 19, 2015*

Former paramedic Matt Zavadsky long believed that there was a broader role for his profession beyond simply responding to emergencies.

In line with a 1996 National Highway Traffic Safety Administration report, he envisioned a system in which paramedics functioned as navigators, steering patients to the most appropriate care setting to reduce use of hospital emergency departments.

But he encountered resistance. “Everywhere I went, people said, 'Why would we want to prevent 911 calls, ER visits and (hospital) admissions? That's how we get paid,' ” recalled Zavadsky, now public affairs director for the Fort Worth, Texas-based Area Metropolitan Ambulance Authority, a public agency also known as MedStar Mobile Healthcare.

*That attitude about ED treatment and hospital admissions was changing by 2009, as health systems focused on avoiding inappropriate, high-cost care.* That year, Zavadsky and his agency decided to see whether the idea, known as community paramedicine, could be a viable business model. His agency is the exclusive emergency medical services provider for the Fort Worth area, serving more than 900,000 residents.



<http://www.modernhealthcare.com/article/20151219/MAGAZINE/312199996>



# The Revolution in EMS Care

*Thanks to new technology, new life-saving techniques and new missions, ambulance crews are far from the 'horizontal taxicabs' they once were*

By Laura Lancro

**Sept. 25, 2016**

There's a revolution taking place in emergency medical services, and for many, it could be life changing.

From the increasingly sophisticated equipment they carry and the new lifesaving techniques they use, to the changing roles they play in some communities—providing preventive care and monitoring patients at home—ambulance crews today are hardly recognizable from their origins as “horizontal taxicabs.”

**Coming soon: preventive-care teams**

***In what could amount to a sea change for many EMS workers, health-care policy makers are looking at having so-called community paramedicine teams provide preventive care—and even make regularly scheduled house calls.***

***In a concept some are calling “EMS 3.0,” ambulance crews with advanced medical training in more communities already are treating patients in their homes, including frail or elderly patients, helping to manage chronic conditions like diabetes, and are checking on recently discharged hospital patients to ensure they are following their care instructions.***

THE WALL STREET JOURNAL.

<http://www.wsj.com/articles/the-revolution-in-ems-care-1474855802>

**EMSWORLD**  
EXPO

*Why don't you ever see the headline  
'Psychic Wins Lottery'?*



## ROI for primary care: Building the dream team

October 2016

*No longer viewed as a cost center, well-designed and smartly deployed primary care teams can yield a true return on investment in the evolving New Health Economy.*



**pwc**

<https://www.pwc.com/us/en/health-industries/health-research-institute/primary-care-new-health-economy-2015.html>

**EMSWORLD**  
EXPO



### Community paramedics

Best match for: *Frail elderly, complex chronic consumer markets*

Each year, half of consumers in the frail elderly and complex chronic disease markets make at least one trip to the emergency department. These individuals spend an average of \$434 per capita, or an estimated \$13 billion in total per year.<sup>27</sup> Many of these consumers are “frequent

flyers” who lack transportation and view 911 as a way to access care. Non-urgent services account for 37 percent of emergency department visits annually.<sup>28</sup>

While traditional paramedics primarily respond to emergencies and provide transportation to the hospital, community paramedics act at the nexus of community involvement and clinical ability. They take their skills to the homes of people who

need medical—but not emergency—care and provide guidance on the appropriate use of emergency services.

“It didn’t make sense to keep paying for merely transport services when we had these highly trained clinicians already out there to treat patients at home,” said Dan Swayze, vice president and chief operating officer at The Center for Emergency Medicine in Western Pennsylvania.

Case examples	What they did	The results
The Center for Emergency Medicine of Western Pennsylvania	Partners with local health systems to arrange transportation to appointments, offer medication counseling, make periodic check-ins	200-patient sample over one-year period, saved \$1.2 million (\$6,000 per patient) <sup>29</sup>
MedStar Mobile Healthcare (Fort Worth, TX)	Launched community paramedicine program in 2009; now provides consulting services to agencies that are setting up similar programs	Avoided 3,321 ED visits, 553 admissions, 4,593 ambulance transports. Reduced healthcare expenditures by \$10.8 million <sup>30</sup>
Geisinger’s Mobile Health Paramedic Program (Danville, PA)	Dispatches paramedics to patients’ home for in-home care, and uses audio-visual technology and mobile equipment to allow off-site doctors to address complex populations	Avoided 42 hospitalizations, 33 emergency department visits, and approximately 168 patient days over 15 months <sup>31</sup>



*In what settings have you interacted with the following healthcare workers in the last year?*



Frail elderly



Complex chronic



Chronic disease



Mental Health



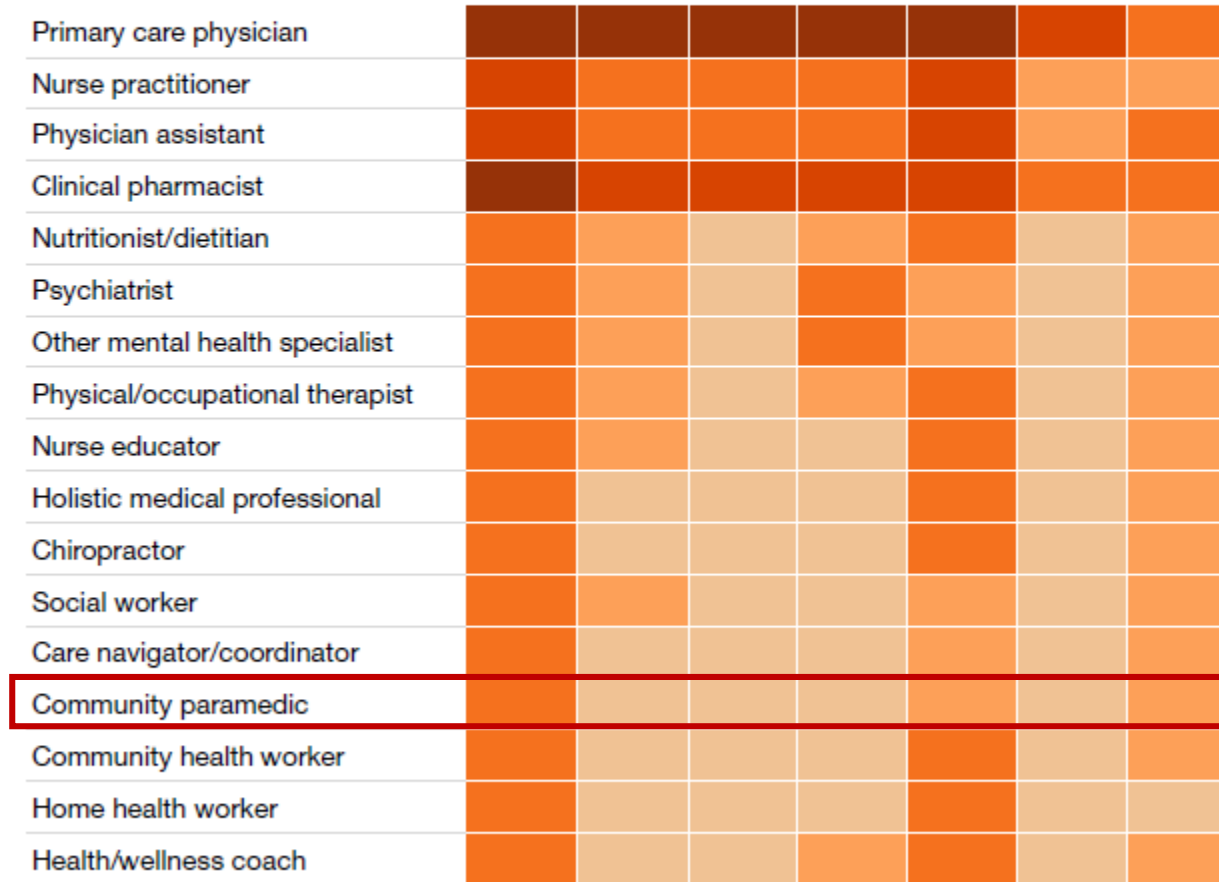
Healthy families



Healthy adult enthusiasts



Healthy adult skeptics



Percentage of consumers interacting with clinician

0-20%

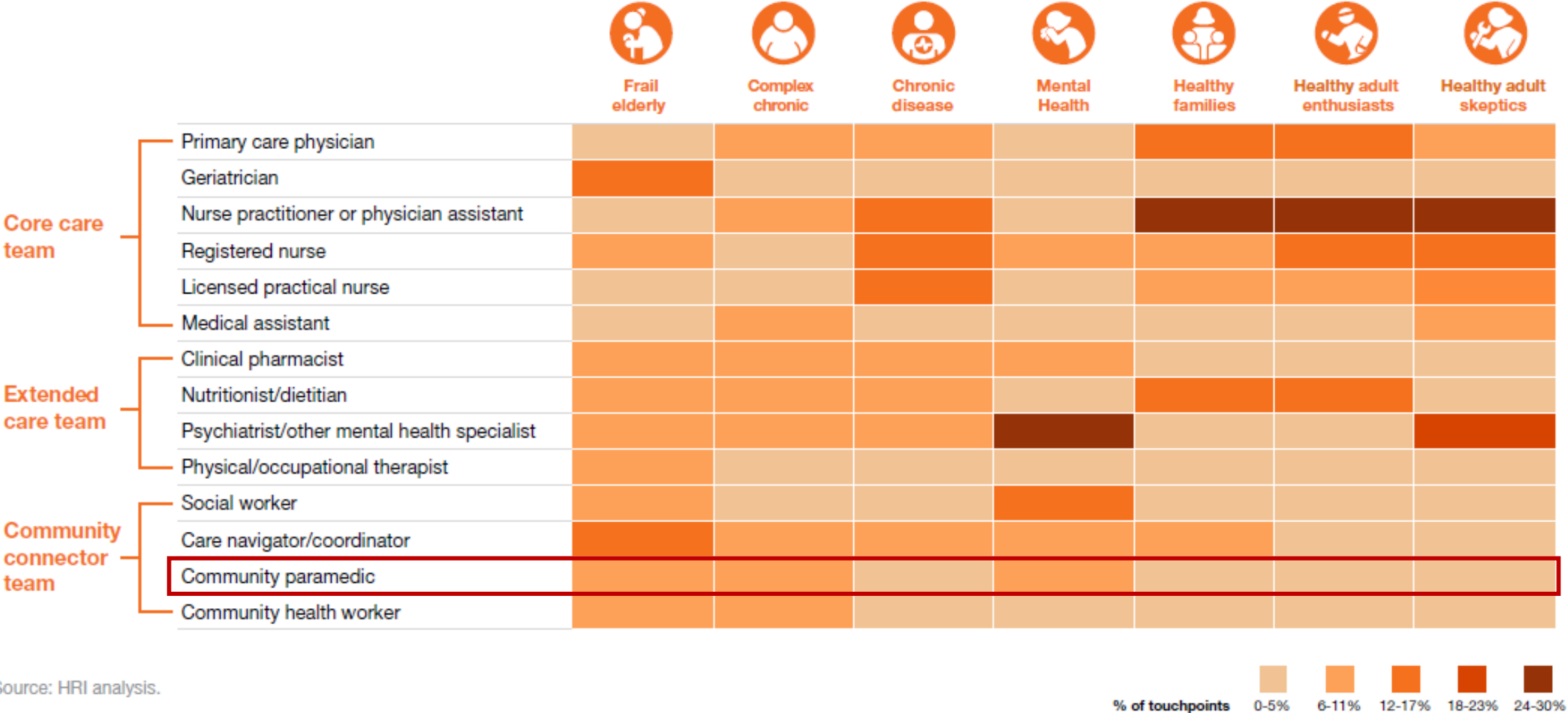
21-40%

41-60%

61-80%

81-100%

Distribution of patient touchpoints with the primary care dream team



## ***Appendix A: A guide to non-physicians on the primary care dream team***

Numerous studies herald the positive impacts that advanced practice professionals such as nurse practitioners and physician assistants have on expanding access to primary care. These care providers have been shown to save money and are in ample supply.<sup>17</sup> Expect to see more of them in the future. Registered nurses – especially those with a bachelor’s or master’s degree – likely will have increasing opportunities to assume roles in clinical education, team and workflow management and care navigation.

The prospect of having an even wider spectrum of clinicians and non-clinicians to support primary care is on the horizon, according to HRI’s survey. Here are profiles of the less familiar non-physicians on the primary care dream team.





# Meet A Paramedic Who Makes House Calls To Keep Patients Out Of The ER

By Lauren Silverman

January 18, 2017

Traditionally, ambulance crews arrive with sirens blaring — ready to rush someone to the hospital. In Fort Worth, some paramedics are doing the opposite and scheduling visits to treat patients in their homes. KERA's Lauren Silverman tagged along with a MedStar paramedic to find out why mobile integrated healthcare is gaining traction.

*Last year, Guevara went to the emergency department more than 20 times, occasionally needing a ventilator to breathe.*

*“My asthma has been going on since I was 14 years old,” she says. “My anxiety triggers it when I go places so I tend to shelter myself and stay home all the time.”*

Farris says from the perspective of the doctor in the emergency room, patients like Guevara are labeled as “non-compliant”. They’re seen as patients who won’t follow orders. If you spend time trying to understand the situation, that’s not usually the case, he says.

*“The mental health needs that [Guevara] has, tied in with her asthma, tied in with her allergic asthma, tied in with her clotting factor, all of this stuff together, even her dehydration, all of it together is combining factors to make her worse.*



<http://keranews.org/post/meet-paramedic-who-makes-house-calls-keep-patients-out-er>



# 'Urgent care on wheels': Fire departments rescuing patients from costly ER trips

By Lynh Bui and Clarence Williams

February 3, 2017

In the 15 minutes after firefighters and a nurse knocked at Thelma Lee's Maryland townhouse, they checked her blood pressure, told her what foods would keep her blood sugar from skyrocketing and set up an appointment — and a ride — to visit her primary care physician.

They also changed the battery in her chirping fire alarm and put a scale in her bathroom so she could monitor her weight before rolling out in an SUV to their next house call.

*In one of the more established programs, the Phoenix suburb of Mesa, Ariz., added nurses in its 911 center to help assess the urgency of calls and partnered with a hospital to send nurse practitioners with EMS staff on house calls. A combination of 911 nurse triage and preventive care for 15 cities in the Fort Worth area is credited with saving more than \$11.5 million over roughly the past four years in transport costs, emergency department visits and hospital admissions.*

Local hospitals cover the costs of the traveling nurses. Patients avoid unnecessary and costly emergency room visits, Zavadsky said, and the sometimes lengthy ER waits.

**The Washington Post**

<https://www.washingtonpost.com/local/public-safety/urgent-care-on-wheels-fire-departments-rescuing-patients-from-costly-er-trips/2017/02/02/>

**EMSWORLD**  
EXPO

# *Why is 'abbreviated' such a long word?*

abbrev. n. Short for "abbreviation."

abbr. n. Short for "abbrev."

ab. n. Shrt - "abbr"

a. n. "ab"

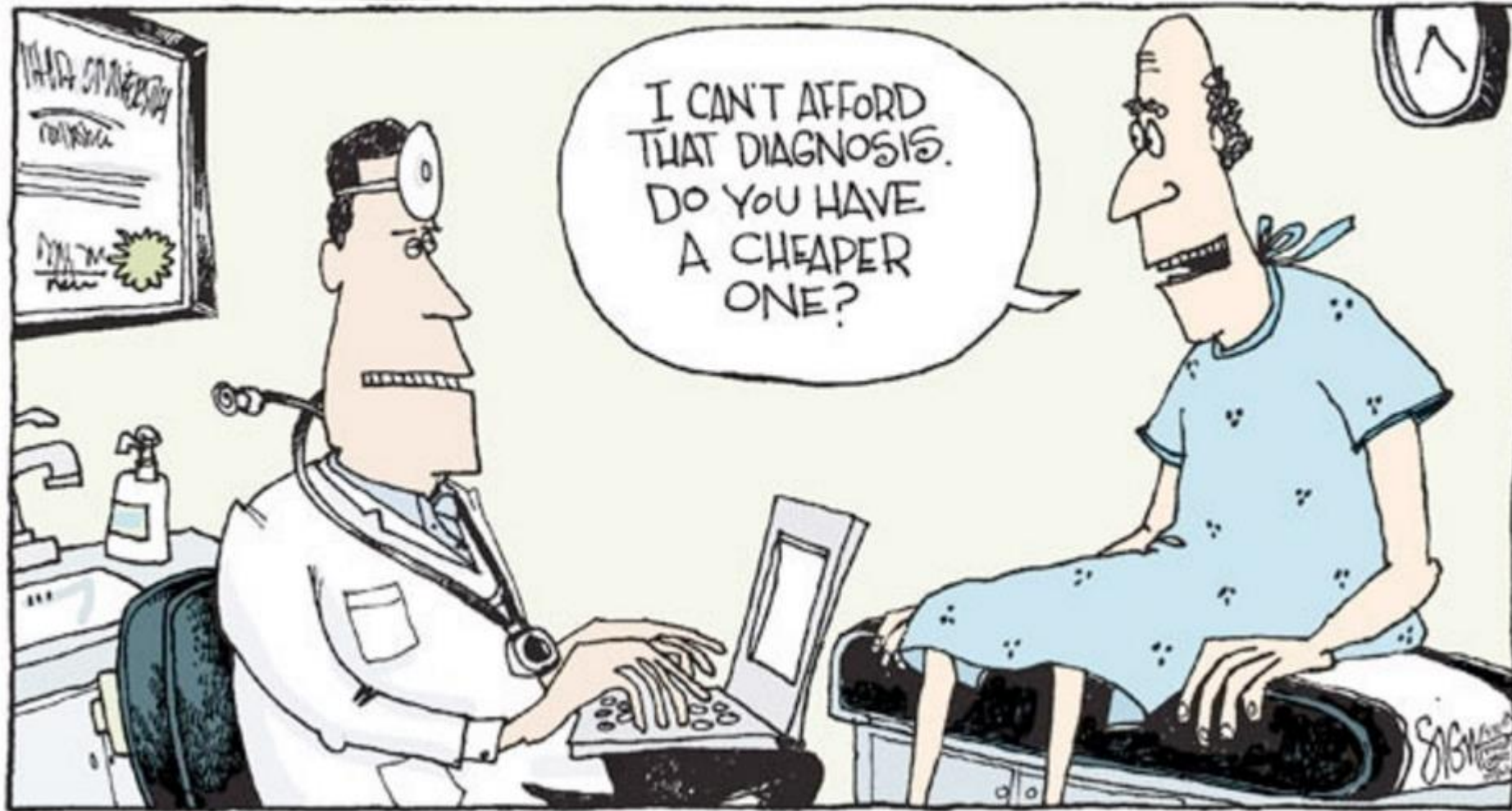


# The Economic Models...





EVERYONE AGREES TO HELP REDUCE HEALTH CARE COSTS!...





Humana®



# Blue Cross paramedic program cuts ER overuse

By Steve Sinovic / Journal Staff Writer

May 18, 2017

ALBUQUERQUE, N.M. — *Getting the people who overuse emergency services under control has been an uphill battle, but one major health insurer has been teaming with metro area emergency medical services agencies for over a year to put a dent in the numbers of ER visits by some of its Medicaid members.*

During that time, a handful of Albuquerque paramedics have been making house calls through a program designed to reduce hospital readmission rates while helping discharged patients stay on the road to good health.

It seems to be working.

*The insurer saw an almost 62 percent drop in emergency room visits and a 63 percent decrease in ambulance use by frequent flyers, many of whom live alone, have a limited support network, lack transportation or have a housing situation that's in flux.*

The insurer is in contract talks with ambulance and fire agencies to expand the program to other New Mexico communities.

AlbuquerqueJournal

<https://www.abqjournal.com/1005425/blue-cross-paramedic-program-cuts-er-overuse.html?prclt=ifWRWVO1>

EMSWORLD  
EXPO

# New Riders of the Purple Sage: Community Paramedicine

BCBS of New Mexico Blog

March 31, 2017

*Say the word “paramedic” and most people think of the men and women who respond with flashing lights and screaming sirens when someone suffers a medical crisis. **But what if there were a way to provide help before the crisis happens?***

Across the country, health care companies are implementing a new strategy to deliver help to the people who need it most, and in some cases prevent needless and costly trips to the emergency room. And it’s paramedics who are providing the help – without the drama of a speeding ambulance.

## Providing a Solution

Realizing that prevention and education are critical to reversing costly, inappropriate ER usage and hospital readmission, the team at BCBSNM had a hunch. In a pilot program, it contracted with two state-based emergency medical service companies to assign a paramedic to each of the 15 members. It was one of New Mexico’s first ventures into community paramedicine, and it was a perfect match. Since they had frequently relied on paramedics to get to the hospital, these members trusted their new medical guardians.

<https://connect.bcbsnm.com/making-it-work/b/weblog/posts/community-paramedicine>

*The clients saw paramedics as healers rather than paper pushers, Clear said. The results were impressive. We were able to reduce ER visits for all 15 members from 686 visits to an average of 115 visits per month within the first couple of months.*

BCBSNM has seen similar success. Since January, contracted paramedics have visited more than 1,100 high-ER users and Medicaid recipients recently discharged from the hospital. Of those visited, repeat visits to the ER have dropped 61 percent while hospital readmission rates have dropped to where just 9.7 percent of the members are readmitted. The company is hoping soon to expand community paramedicine to San Juan County and the cities of Santa Fe and Taos.

To serve its Medicaid members, BCBSNM has contracted with three ambulance companies – Albuquerque Ambulance, American Medical Response and Rio Rancho Fire Department. Currently 18 full- and part-time paramedics serve Medicaid recipients in areas most in need: Bernalillo County, which includes Albuquerque and the nearby East Mountains; parts of Sandoval County, which includes Rio Rancho, Corrales and Bernalillo; Valencia County to the southwest; and Doña Ana and Otero counties to the south, home to Las Cruces and Alamogordo.

Making the Health Care System Work



<https://connect.bcbsnm.com/making-it-work/b/weblog/posts/community-paramedicine>



# States Using Emergency Medical Techs to Expand Health Care Services

By Debra Miller

September 12, 2016

States are increasingly turning to community paramedicine to help fill the gap in the health care workforce. States have been experimenting with community paramedicine programs for the last five years or more. Expanding the role of licensed or certified emergency medical technicians—or EMTs—and paramedics to provide non-emergency preventive health care services directly to patients in their communities can be cost-effective and make up for health care work force shortages.

*“Community paramedics offer extensive background experience and will provide for better access to health care,” Oscarson said. “Nevada now has an opportunity to fill unmet or unrealized community primary care and health needs. Using EMS providers in an expanded role will increase patient access to primary and preventive care, save health care dollars and improve patient outcomes.”*

In late August, Nevada received approval of a state plan amendment from the Centers for Medicare and Medicaid to provide Medicaid reimbursement for medically necessary community paramedicine.

*Janet Haebler, senior associate director of state government affairs for the American Nurses Association, said community paramedicine “strives to fill in gaps in services that previously had been provided by public health and home care nurses but were lost with funding cuts.”*



<http://knowledgecenter.csg.org/kc/content/states-using-emergency-medical-techs-expand-health-care-services>



# A New Kind of Paramedic for Less Urgent 911 Calls

*Community paramedicine, which can drastically reduce unnecessary ER visits, could be the future of emergency care.*

by Mattie Quinn

**September 2016**

If there is one issue confronting our health-care system on which just about everyone agrees, it's this:

*Unnecessary emergency room visits are a significant driver of costs. But getting the people who most abuse emergency services under control has been an uphill battle.*

*Some of the big insurance players involved with government health-care programs are starting to get in on the action as well. Blue Cross and Blue Shield of New Mexico has begun pilot programs for its Medicaid patients in a few of the state's more urban areas.* The company says a group of patients identified in one of the programs has cut its ER use by 60 percent. One former super-utilizer hasn't been to the ER in the 11 months he's been enrolled in the program, says Kerry Clear, the company's manager of community social services.

**GOVERNING**  
THE STATES AND LOCALITIES

<http://www.governing.com/topics/health-human-services/gov-community-paramedicine-emergency-care.html>

**EMSWORLD**  
EXPO

***Why do they sterilize the needle used  
for lethal injections?***



# How Can You Demonstrate Value to Healthcare Providers and Payers?



# The Evidence Builds...







**Tip....**

**Use appropriate tools to **measure effectiveness in improving patient outcomes and lowering costs.****

**From:** Mark McDowell [[mailto:Mark T Mcdowell@XXXXXXX.com](mailto:Mark_T_Mcdowell@XXXXXXX.com)]

**Sent:** **Wednesday, October 4, 2017 9:56 AM**

**To:** Matt Zavadsky

**Subject:** RE: Follow-Up

Good morning Matt,

Thank you for the documents, Nanette is working with the internal team to move the contracting forward. At this time I believe we can leverage the information you currently track and report for inclusion into the contract language, we need to confirm what is covered in our standard contract language and then add any remaining specific metrics. ***The following is my suggested metrics for inclusion.***

**MIH Metrics (Mobile Integrated Healthcare Program – Measurement Strategy Overview)**

- Q5 – Unplanned Acute Care utilization (e.g.: emergency ambulance response, urgent ED visit)
- Q6 – Adverse Outcomes
- E1 – Patient Satisfaction
- U2 – Hospital ED Visits
- U3 – All-cause Hospital Admission
- U4 – Unplanned 30-day Hospital Readmission
- C1 – Ambulance Transport Savings
- C2 – Hospital ED Visit Savings
- C3 – All-cause Hospital Admission Savings
- C6 – Total Expenditure Savings

**MIH Metrics (Mobile Integrated Healthcare Program – 911 Nurse Triage – Measurement Strategy Overview)**

- S5 – Organizational Readiness Assessment – Medical Oversight
- S9 – Specialized Training and Education
- Q3 – Call Processing Safety
- Q9 – Adverse Outcomes

Once we have confirmed the time lines with IT and Network, we can schedule the follow meetings with Clinical Analytics and the IT team discuss any outstanding issues or deliverables.

Thanks, Mark



**Tip...**

**Integrate** all services into a **well-coordinated, medically directed** and **performance-measured** package of services provided by professionals at basic and advanced levels.

# EMS Metamorphosis



***Why don't sheep shrink when it rains?***









[MZavadsky@medstar911.org](mailto:MZavadsky@medstar911.org)

817-991-4487