The Current State of Healthcare and the EMS System

It’s a pivotal time in the healthcare system of the United States. Over the last 2 decades, healthcare costs have spiraled out of control. Despite a level of healthcare expenditures that would have seemed unthinkable a generation ago, the health of the population in the United States has improved only marginally. Compared with other economically developed countries, the health status and life expectancy of the U.S. population have actually declined.

**Healthcare Expenditures**

In 2011 the United States per capita healthcare expenditures (which are the sum of public and private health expenditures, divided by the population) were $8,608, with an average life expectancy of 79 years (Figure 1-1). This compares to per capita spending of $3,609 in the United Kingdom, $4,952 in France, and $4,875 in Germany. In fact, most of the European Union spends less than $5,000 per capita on healthcare,¹ with an average life expectancy of 80 years. The United States spends two and a half times the Organisation for Economic Co-operation and Development (OECD) average. Generally, U.S. citizens lag behind in virtually every health statistic measured, including rates of obesity, infant mortality, and preventable illnesses such as diabetes (Figures 1-2 through 1-5). Obesity rates have increased substantially during the past 20 years and are highest in the United States. Some experts have predicted that if the current pace of expenditure growth continues, costs could reach $13,330 per capita by 2030, consuming 28% of total national gross domestic product (the market value of all goods and services produced in a country in a given year).²

The OECD provides a forum in which governments can work together to share experiences and seek solutions to common problems. The organization works with governments to understand what drives economic, social, and environmental change. The OECD forum measures productivity and global flows of trade and investment and analyzes and compares data to predict future trends.
Causes of High Costs

Experts credit the largely quantity-based payment system in the United States as the primary reason why healthcare costs are escalating. Healthcare providers are not given incentives to help patients navigate the healthcare system or keep them healthy. Instead, healthcare providers are rewarded financially by the number of billable procedures they perform as a primary source of revenue. The more patient procedures that are performed, the higher the revenues for the providers. Providers therefore have incentives to schedule visits and procedures.

Hospitals market services to attract patients to increase revenue. Drive along any highway in America and you will see billboards from hospitals that advertise everything from short waits in their emergency department to their excellence in cardiac care. When the number of patient procedures performed and the cost of those procedures are considered, it is clear why the United States healthcare system expenditures outpace every other country (Tables 1-1 and 1-2).

The Impact of Healthcare Costs on the World of EMS

The revenue structure of the emergency medical services (EMS) system is no different than that of doctors and hospitals. Medicare, Medicaid, and subsequently most commercial insurers recognize
emergency medical transportation as a benefit and therefore billable under health insurance plans. EMS providers have a revenue incentive to transport patients.

Historically, an EMS business development strategy has largely centered around increasing the number of patients transported to the hospital emergency department rather than taking steps to help patients navigate the healthcare system to ensure that they are provided the best, most appropriate resources for their care. The EMS system benefits financially from patients using one of the most expensive transportation resources, an ambulance, to deliver them to one of the most expensive settings for healthcare, an emergency department (ED). Hospital and ED staff have encouraged

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**Figure 1-2 Healthy life expectancy, international comparison.**
Data from: Institute for Health Metrics and Evaluation, Seattle.
EMS providers to promote transport as the best option for patients who call 9-1-1. This is the traditional “you call, we haul” mentality most EMS systems and providers have been operating under.

The EMS industry also faces financial pressures. Have you ever received a call from a hospital EMS coordinator wondering why you are not transporting more patients to their facility? Does your system have policies requiring you to tell patients, who need to acknowledge they’ve been told in writing, that if they refuse transport to the ED they could die? Were you ever told that you needed to transport more patients so that the agency could buy new equipment?

Other Factors that Affect Healthcare

The Now Generation

People have become accustomed to getting everything now. A letter sent in the mail is too slow, so email, text messaging, and instantaneous responses and service have become the norm. This expectation is found in all areas of the medical field as well. Why go through painful, long-term physical therapy to correct a knee condition when a knee replacement can be done? Why wait for an
appointment with a primary care physician who knows the patient well and can coordinate care, when a trip to the emergency department will get more immediate results?

The “now” expectation is one of the primary economic drivers behind urgent care clinics (some of which are developing franchises) and the explosion of free-standing emergency departments in urban areas across the United States. It’s also one of the primary reasons people call 9-1-1 to access the healthcare system. It’s simple, easy, and, in most areas, results in a healthcare provider in the patient’s home within 10 minutes.

The Growing Physician Shortage

Hospitals and Health Networks published a report in March 2013 highlighting the predicted physician shortage. The aging baby boomers requiring additional medical care and the predicted surge of insured patients as a result of healthcare finance reform are primarily driving this shortage. There’s a growing shortage of physicians that is only expected to get worse after full implementation of the Affordable Care Act. The Association of Medical Colleges anticipates
that the shortage in all specialties will grow from 7,400 in 2008 to 130,600 by 2025 (65,000 in primary care alone) (Figure 1-6).

Although the scope of practice for EMS providers is restricted, for decades they have been used as physician extenders, serving as the on-scene eyes and ears of the physicians. The mobile integrated healthcare model enhances this physician extension.
For 30 years the United States has been spending more on healthcare than any other economically developed nation. A positive return on this investment has not been realized in health status or life expectancy. Albert Einstein said that the definition of insanity is doing the same thing over and over while expecting a different outcome. To improve the healthcare of people in the United States, change in the system has to occur.

Currently the U.S. healthcare system is fragmented. Often, patients are not prepared to navigate the system to provide for their own healthcare needs, and the myriad of healthcare providers in the United States...
system are given financial incentives to do more to the patient, not more for the patient. A well-developed mechanism for quality care coordination between EMS providers, hospitals, and doctors is not in place. In the current landscape, healthcare is provided by the patient being treated at a healthcare facility, not by providing healthcare in the patient’s home. When patients become frustrated with how to navigate this complex system, they often go to the emergency department or call 9-1-1 to access the healthcare system.

In the current broken, overwhelmed healthcare system, people are uneducated about the care available to them so they are forced into using emergency care as their primary source of care. An emergency department is designed to handle episodic emergency events. The emergency department is currently being used to manage a variety of patient issues, including the care of chronic diseases such as diabetes. There is an opportunity now for EMS to be part of the solution as an integral provider within the healthcare delivery system.

**The Evolving Role of EMS in Healthcare**

For years, EMS providers have considered themselves providers of only emergency care. All levels of training focus on treating acute illnesses and injuries and transporting patients to the hospital emergency department.
John Peter Smith Health Network partnered with MedStar to expand the mobile integrated healthcare program for our patients because we saw first-hand the impact it was having on our patients. As the community’s safety net healthcare system, many of our patients have difficulty navigating a very complex healthcare system. Bringing the care to them, where they need it and when they need it, helps us improve patient outcomes and enhance the patient’s experience of care with our healthcare system. The paramedics in the field can see things the primary care providers may not see. They can also provide patient-centered education in the patient’s home environment, with the patient’s family present and part of the educational process. If the patient does call 9-1-1, the mobile healthcare provider can respond to the call and help navigate the patient to the best care setting for their individual healthcare need.

The integration of care across the continuum, from in-patient care to community care using a patient-centered medical home and mobile healthcare resources has had a major impact on 9-1-1, ED and readmission rates for the patients who have been enrolled in this unique partnership between JPS, the patient, and MedStar.

Dawn Zieger
Project Director, Community Health
JPS Health Network
Healthcare reform continually drives changes in the industry, and everyone is struggling to understand where the industry is headed and how EMS providers will need to adapt. What regulatory changes are coming? Will providers be prepared for those changes? The current state of healthcare is not well suited to evaluate the nonclinical needs of a patient in the community. As a result, EMS providers respond to a variety of calls, many of which are not an emergency.

In their 2012 annual report, the National Association of State EMS officials documented that EMS responds to 37 million house calls per year, and 30% of the responses did not result in a patient transport to an emergency department. And, in an analysis done of MedStar’s 9-1-1 call volume in 2013, 37% of 9-1-1 calls did not receive a HOT response (Table 1-3).

### Table 1-3 Percentage Change in Overall Call Volume, 2003–2013

<table>
<thead>
<tr>
<th>Call Type</th>
<th>% Increase</th>
<th>Call Type</th>
<th>% Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interfacility</td>
<td>11.32</td>
<td>Psychiatric</td>
<td>3.76</td>
</tr>
<tr>
<td>Sick person</td>
<td>10.37</td>
<td>Abdominal pain</td>
<td>2.83</td>
</tr>
<tr>
<td>Falls</td>
<td>5.87</td>
<td>Trauma injury</td>
<td>3.71</td>
</tr>
<tr>
<td>Unconscious person</td>
<td>5.20</td>
<td>Chest pain</td>
<td>7.97</td>
</tr>
<tr>
<td>Assault</td>
<td>4.21</td>
<td>Motor vehicle accident</td>
<td>10.38</td>
</tr>
<tr>
<td>Convulsions</td>
<td>4.16</td>
<td>Breathing problems</td>
<td>10.48</td>
</tr>
</tbody>
</table>

**Why People Call 9-1-1**

People call 9-1-1 because they want to know if they need to go to the hospital. They call to access the healthcare system, they call because it is what they’ve been taught to do in an emergency, and they call because it’s what their doctor’s recording tells them to do when they call after hours.

The high rate of low-acuity 9-1-1 calls is partly caused by the current structure of the emergency healthcare system. Patients are conditioned to call 9-1-1 and are often directed to 9-1-1 by other healthcare providers. A voicemail recording at most physician offices says, “If this is an emergency, hang up and call 9-1-1.” But what constitutes an emergency? If a parent is worried about his child’s escalating fever, stomach pains, or other symptoms, fear increases if he cannot get an appointment with the doctor that day. The alternative is to call 9-1-1 and go to the emergency department. But as mentioned earlier, 37% of the time the situation is not an emergency. Our healthcare system has created and reinforced this process.

Television shows have reinforced the idea that people should call 9-1-1 for any type of problem, and an ambulance and fire department will arrive within a few minutes, with maybe a helicopter shortly thereafter. Often, the depiction of the EMS system on television has given viewers an unrealistic expectation of the care they will receive in the healthcare system.
Regular trips to an emergency department for low-acuity ailments have a negative impact on the overall care the patient receives because typically the care that is given in an emergency department is not coordinated with a patient-centered medical home. In addition, the care of patients in an emergency department uses high-cost resources for conditions that could possibly have been more appropriately managed in a more cost-effective setting.

**Mobile Integrated Healthcare Defined**

What's in a name? There has been some discussion in the EMS circles about use of the terms *community paramedicine*, or *community paramedic*, versus the term *mobile integrated healthcare*. The National Association of EMTs convened a workgroup to focus on the transformation of EMS into something else. The workgroup had representation from the following national associations:

- National Association of Emergency Medical Technicians (NAEMT)
- National Association of State EMS Officials (NASEMSO)
- National Association of EMS Physicians (NAEMSP)
- American College of Emergency Physicians (ACEP)
- National EMS Management Association (NEMSMA)
- National Association of EMS Educators (NAEMSE)
- International Academies of Emergency Dispatch (IAED)
- Association of Critical Care Transport (ACCT)
- North Central EMS Institute (NCEMSI)
- Paramedic Foundation
- American Ambulance Association (AAA)

And this group collaborated to define mobile integrated healthcare. The consensus of the group, in its simplest definition, was: Mobile integrated healthcare (MIH) is the provision of healthcare using patient-centered, mobile resources in the out-of-hospital environment that are integrated with the entire spectrum of healthcare and social service resources available in the local community. MIH may include, but is not limited to, such services as:

- Providing telephone advice to 9-1-1 callers instead of resource dispatch
- Providing community paramedicine care, chronic disease management, preventive care, or postdischarge follow-up visits
- Transport or referral to a broad spectrum of appropriate care, not just hospital emergency departments.
The consensus of this group was also that to be successful mobile integrated healthcare programs should be:

- Fully integrated—A vital component of the existing healthcare system, with efficient bidirectional sharing of patient health information
- Collaborative—Predicated on meeting a defined need in a local community articulated by local stakeholders and supported by formal community health needs assessments
- Supplemental—Enhancing existing healthcare systems or resources, and filling the resource gaps within the local community
- Data driven—Data are collected and analyzed to develop evidence-based performance measures, research, and benchmarking opportunities.
- Patient-centered—Incorporating a holistic approach focused on the improvement of patient outcomes
- Recognized as the multidisciplinary practice of medicine—Overseen by engaged physicians and other practitioners involved in the MIH program as well as the patient’s primary care network/patient-centered medical home, using telemedicine technology when appropriate and feasible
- Team based—Integrating multiple providers, both clinical and nonclinical, in meeting the holistic needs of patients who are either enrolled in or referred to MIH programs
- Educationally appropriate—including more specialized education of community paramedics and other MIH providers, with the approval of regulators or local stakeholders
- Consistent with the Institute for Healthcare Improvement’s (IHI) Triple Aim® philosophy—Improving the patient experience of care; improving the health of populations; and reducing the per capita cost of healthcare. The Institute for Healthcare Improvement (IHI) is an independent, not-for-profit organization based in Cambridge, Massachusetts. They are a leading innovator, convener, partner, and driver of results in healthcare and healthcare improvement worldwide.
- Financially sustainable—including proactive discussion and financial planning with federal payers, health systems, accountable care organizations, managed care organizations, physician hospital organizations, legislatures, and other stakeholders to establish MIH programs and component services as an element of the overall IHI Triple Aim approach
- Legally compliant—Through strong, legislated enablement of MIH component services and programs at the federal, state, and local levels
MIH could incorporate the use of community paramedics. These practitioners may be paramedics provided with additional, specialized training with an expanded role of providing patient navigation services or preventive services designed to avoid unnecessary emergency services use or hospitalization. However, MIH programs may use practitioners other than paramedics in this role. They may use EMTs, registered nurses, nurse practitioners, physician assistants, or even physicians. These programs may also incorporate services that go beyond the point of care services in the field, such as programs based in a 9-1-1 call center that provide callers with healthcare advice from nurses.

For these reasons, the term mobile integrated healthcare is used to refer to the services provided, and in many, but not all cases, these services may be provided by community paramedics. Appendix A provides a comprehensive list of U.S. agencies developing their own MIH and community paramedicine programs.

**EMS Under Fire**

In April 2014, the Centers for Medicare and Medicaid Services (CMS) released charge and payment data for all Medicare Part B providers. The communication from CMS that accompanied the release contained the following notable quotes by Jonathan Blum, CMS Principal Deputy Administrator:

> In letters to the American Medical Association and Florida Medical Association, the Centers for Medicare & Medicaid Services (CMS) announced our intent today to take another major step forward in making our healthcare system more transparent and accountable.

> We plan to provide the public unprecedented access to information about the number and type of healthcare services that individual physicians and certain other healthcare professionals delivered in 2012, and the amount Medicare paid them for those services, beginning not earlier than April 9. Providing consumers with this information will help them make more informed choices about the care they receive.

With the release of ambulance service payment data, the good news is that the EMS profession is clearly being identified by CMS as a “healthcare service” with “healthcare professionals.” This is a major step toward validating that EMS professionals are healthcare providers. Given the incredible opportunities to implement programs that meet the IHI’s Triple Aim, which is discussed in the next chapter, this recognition positions the EMS profession as a participant in helping the healthcare industry achieve the Triple Aim goals.

The challenge for the EMS industry now, however, is much like the challenge that has been faced by the EMS system’s partners for the past 2 years since CMS started publishing charge and payment data for hospitals—how to understand fully what the numbers mean. The CMS charge
and payment data, which is the second release of data this year, continues to portray the profession in a less-than-positive light. The CMS Office of the Inspector General (OIG) released their findings on the ambulance industry on September 24, 2013. In the report, the OIG published statements such as:

- “Since 2002, Medicare Part B payments for ambulance transports have grown at a faster rate than all Medicare Part B payments.”
- “From 2002 to 2011, the number of beneficiaries who received ambulance transports increased 34%, although the total number of Medicare fee for service beneficiaries increased just 7%.”
- “The number of dialysis-related transports increased 269%.”

With EMS as the fastest growing Medicare Part B expense, it makes the profession an easy target for fraud investigators and even payers of our services.

In a December 2013 article in the *New York Times* reporting on the OIG’s findings, the EMS industry was challenged with the following statements:

> In such a fragmented system, it is hard to know how much high-priced ambulance transport contributes nationally to America’s $2.7 trillion healthcare bill.

> But Medicare, the insurance program for the elderly, does tabulate its numbers and has become alarmed at its fast-rising expenditures for ambulance rides: nearly $6 billion a year, up from just $2 billion in 2002.

Unfortunately, that was not the only national media story about the fraud and abuse in our profession. *Bloomberg BusinessWeek* reported7 the dark side of ambulance services with a headline that read “Medicare’s $5 Billion Ambulance Tab Signals Area of Abuse” and the following statements:

> The patient smoked cigarettes in the passenger seat of the ambulance every week, chatting with the driver while taxpayers foot the $1,000 bill to drive him four blocks for his dialysis treatment.

> The U.S. Department of Health and Human Services has identified ambulance service as one of the biggest areas of overuse and abuse in Medicare.

> To keep them coming back, Penn Choice ambulance drivers would hand out envelopes with $100 to $400 in cash every month to the passengers, many of whom were poor and unable to work because of their health condition, the government said. Leahy said she hasn’t prosecuted any of the patients since all have cooperated with the investigation.

At the core of ambulance service is the question of value. What value is the customer placing on EMS? If payers viewed EMS (ambulance transport) as valuable, the cost of the service would
be understood—that’s basic economic theory. The reality for the EMS profession, however, is that it has fallen short in demonstrating value to payers. There is a lack of any peer-reviewed, published studies that demonstrate that going to the hospital by ambulance, or providing an EMS first response, improves patient outcomes, improves the patient’s experience of care, or reduces the patient’s overall healthcare costs. At numerous conventions, conferences, and national presentations on mobile integrated healthcare, EMS professionals couldn’t identify such studies when asked.

The payers of our healthcare system are moving toward value-based purchasing (VBP). Hospitals have been under a VBP metric since 2012 when Medicare instituted bonuses or penalties based on the hospital’s ability to meet specific clinical and patient experience metrics. Physicians will soon be under a similar economic model starting in 2015. As healthcare providers, EMS needs to prepare for a VBP economic model. Among the many challenges with VBP for EMS will be the determination of outcome metrics to be measured and reported. EMS has not developed standardized metrics for a service delivery model that brings value to the payer. The only real metric in EMS, other than cardiac arrest survival, is response time, which has been proven through peer-reviewed scientific studies to not make a significant difference in patient outcome.

The mission of the EMS profession should be to transform the discussion with our payers away from a fee-for-transport model to a VBP model. The true value the profession can bring to the healthcare system most likely includes mobile integrated healthcare strategies that safely navigate patients through the complicated healthcare system to meet the IHI Triple Aim. CMS has funded programs such as the CMMI (Centers for Medicare and Medicaid Innovation) grant at the Regional Emergency Medical Services Authority in Reno, Nevada, and the 1115 Waiver project at MedStar Mobile Healthcare in Fort Worth, Texas. CMS is interested in MIH for positive reasons. During a meeting in March 2013 with the Chief Medical Officer for CMS, Patrick Conway, MD, expressed strong support for additional demonstration projects for EMS-based MIH programs in an effort to increase the numbers of patients enrolled in these programs. With a larger patient population, EMS can work together with CMS to shape the EMS payment model of the future.

The University of Pittsburgh Medical Center (UPMC) CONNECT Community Paramedic project in Pittsburgh, Pennsylvania, and the Community Paramedic program with Kaiser and MetroWest Ambulance in Portland, Oregon, have sparked keen interest in the value of MIH with large payer systems such as Highmark Blue Cross and Kaiser. The National Highway Transportation and Safety Administration (NHTSA) recently released a request for proposal to groups to work on a proposed redesign of the future economic model for EMS. The proposals sent back to NHTSA and the Office of the Assistant Secretary of Preparedness and Response will no doubt include ideas for VBP in EMS either with some type of global payment model or outcome-based payment system, regardless of whether or not the patient was transported to the hospital.
Innovation in Healthcare

Something radical must occur to interrupt the current healthcare model, and EMS providers can lead the charge. The solution involves innovation. In 2009 when MedStar started their mobile integrated healthcare program with Tarrant County, Texas, a quick response vehicle (QRV) responded to basic 9-1-1 calls instead of an ambulance. The program identified 21 patients who called 9-1-1 fifteen or more times in 90 days. These patients generated nearly 2,000 9-1-1 calls in 1 year alone. The implementation of the new mobile integrated healthcare model to educate this core group of frequent callers and to connect them with the appropriate healthcare resources resulted in a 78% reduction in 9-1-1 calls or the patients enrolled in the program.

One high-risk patient with heart failure called 9-1-1 forty-three times in 2012 because of congestive heart failure, emphysema, and diabetes. Her conditions made her an ideal candidate for the new program, which would bring healthcare into her home. The patient graduated from the 12-month program in January 2013 with a reduction in the number of ambulance transports to eight.

Mobile integrated healthcare brings healthcare to patients instead of relying on patients to manage their care on their own. The process is centered on prevention, education, and helping patients navigate the healthcare system. It offers individuals in need of a better patient experience onsite treatment for care such as checking vital signs, reviewing medical needs, and education about their medications—all in the comfort of their own homes.

“They come here and check my vital signs,” the patient said, “and if there’s something wrong, they tell me what to do and how to do it.”

The Future of Mobile Integrated Healthcare

MedStar’s mobile integrated healthcare program has already saved close to $1 million in healthcare expenditures and has the potential to save millions more. The program also improves patient care by helping patients connect with the resources they need to maintain good health and manage their conditions.

Although EMS personnel have traditionally considered themselves providers of emergency care, the types of calls that providers have been responding to paint a different picture. In the past, 9-1-1 has been a safety net for both emergency and nonemergency care. At MedStar’s communications center, an Accredited Center of Excellence, a quality review of 12 months of 9-1-1 requests coming to the call center revealed that 36.6% of the 9-1-1 requests did not get a light and siren response. Meaning, based on the Advanced Medical Priority Dispatch System®, these calls did not need a HOT response or require an emergency medical responder.

On the basis of accurate and dependable information obtained by the emergency medical dispatcher, therefore, more than a third of 9-1-1 calls are not classified as emergencies. Educating the public when not to call 9-1-1, however, is not a patient-centered solution. In most cases, the patient is the least prepared person to determine whether or not the situation warrants an emergency
response. It is far better to continue fielding 9-1-1 calls to determine what type of help is best for the patient. There is no such thing as an inappropriate 9-1-1 request, but there is such a thing as an inappropriate response to that request.

Under the previous model at MedStar, which still exists in communities all across the nation, patients are transported to the emergency department in the back of an ambulance after they have called 9-1-1. When they are discharged, they are sent home, and without adequate transitional care the cycle is often repeated. These patients are referred to in the industry as “frequent flyers” because they call 9-1-1 frequently and end up in the hospital system when often the situation is not an emergency. Abuse of the healthcare system is costly to payers, hospitals, doctors, and EMS providers, and the lack of care coordination is not optimal for the patient’s outcome. Patients need to receive education in a different way to manage their own healthcare.

Think about the following questions.

- What if a patient with a low-acuity 9-1-1 call were redirected to a triage nurse from the moment the call to 9-1-1 was received?
- What if there were a program in place for high-risk, frequent callers that focused on prevention?
- What if a patient who is not eligible for home health care could receive in-home healthcare that would enable self-monitoring of vital signs, heart rate, or blood sugar levels?
- What if a patient who is not eligible for home healthcare could receive education in self-administering medication properly?
- What if the patient were connected to a physician by the dispatch center nurse navigator and by specially trained EMS personnel creating a long-term relationship?

In the mobile integrated healthcare model, patients are educated in managing their own care better at home, and at the same time, their primary care physician and networks of other providers are brought into the process for a truly integrated healthcare approach. The crucial missing link that this model of care provides is the role of EMS in the coordination of care.

Making Mobile Integrated Healthcare Work

The healthcare process can be confusing and frustrating. When a patient enters the doctor’s office there is often a long wait and a brief visit. Under the current economic model, a doctor is aiming to treat enough patients in a day to keep the practice financially viable, which is not ideal for building long-term patient relationships.

One way that specially trained nurse navigators in the dispatch center and EMS personnel can provide care in a patient home setting is by facilitating communication between the dispatch nurse navigator, patient, and doctor. Everyone wins. By focusing on prevention, mobile integrated healthcare can reduce costs and better serve individual needs. The doctors and hospitals will benefit from
a reduction in preventable readmissions and unnecessary emergency department visits. When a patient is enrolled in a mobile integrated healthcare program, a provider routinely checks on the patient at home. The provider reviews the patient’s vital signs, diet, and medications and administers appropriate medical care to the patient. Often, the care can be as simple as reexplaining instructions given to a patient by a doctor to ensure patient understanding.

In the third year of MedStar’s mobile integrated healthcare program, the 38 patients enrolled in the high utilizer group had an 86% reduction in 9-1-1 calls. The reduction in emergency department visits and ambulance usage saved Medicaid a total of $820,000 in expenditures. By the fourth year, the enrollment in the program had grown to 184 patients, who continue to demonstrate an average of an 80–85% reduction in 9-1-1 usage. The financial benefit of the program is tangible and measurable. With the right focus and partnerships within the community, this model of providing healthcare can be duplicated.

The time for change is now. Patient-centered healthcare with a reduction of overall costs for the entire industry is the goal. With the passage of the Affordable Care Act, large amounts of funding have been made available for healthcare providers to implement programs that promote the goals of IHI’s Triple Aim.

New Emerging Models in Healthcare

The financial incentives that hospitals and doctors have received for treating a high volume of patients and performing large numbers of services are changing. The focus is shifting to payments based on the patient’s outcome. It won’t be long before EMS agencies are involved in a patient care performance-based payment model, not just the performance of response times. It would be difficult to point to a published, peer-reviewed study that demonstrates that because the patient came to the hospital by ambulance, the patient’s outcome was better, except perhaps for patients with a myocardial infarction or stroke.

Through the innovative and successful MedStar mobile integrated healthcare program, education has begun with all of the stakeholders that it is time to do something different. Creating a healthier industry overall is the higher goal, and mobile integrated healthcare brings the black bag back to the patient’s home, providing out-of-hospital care, and it is being provided by a new member of the healthcare team.

The services administered by a mobile integrated healthcare provider bridge the gap between the medical needs of the patient and the community, as well as addressing the social issues that prevent full realization of that medical care. For a physician who is unable to address the barriers limiting a patient’s access to care, a mobile integrated healthcare program can support this care and remove the barriers to improving the patient’s health. For example, a person with congestive heart failure whose condition is exacerbated after walking up three flights of stairs, resulting in rehospitalization, may
need assistance finding a first-floor living accommodation. Or a patient who visits the ED frequently for pain medication refills because family members are selling the patient's medications on the street may need a safe to keep medication locked up. Or a patient who does not visit a community clinic because of a fear of taking public transportation may need help in learning how to ride the bus.

**Pearls of Wisdom**

The integrated part of mobile integrated healthcare requires that you have a good understanding of the healthcare environment. To assist you with that, electronic subscriptions to daily news summaries from sources such as *Kaiser Health News*, *Hospitals and Health Networks*, *Modern Healthcare*, and *Fierce Healthcare* will help you stay informed on the current happenings in healthcare.

**Are You READY?**

- Become a student of the changes occurring in the healthcare system.
- Schedule periodic coffee or breakfast meetings with local key healthcare stakeholders to learn what’s happening in their world.
- Subscribe to email alerts from sources like *Hospitals and Health Networks*, *Kaiser Health News*, and *Modern Healthcare*.
- Start making a list of who the stakeholders are in your community who might have an interest in the development of an MIH program. As more ideas come to mind, add to the list.

**Summary**

The world of healthcare is changing, and EMS providers, dispatch centers, hospitals, doctors, and patients have to change with it. The solution must address and provide education, access, and navigation to appropriate care. It’s about the right care at the right time at the right place. One benefit of EMS organizations worldwide is the existence of communication dispatch centers where the initial call for service occurs, an already trained, 24/7 mobile workforce. EMS organizations have the operational structure in place to do so much more than just respond to 9-1-1 calls or transport patients. Who better to lead change?
References


