



A ROAD MAP TO ACHIEVING MOBILE INTEGRATED HEALTHCARE

How to develop, implement and sustain
MIH-CP programs in your community

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A Road Map to Achieving Mobile Integrated Healthcare

The rapid evolution into mobile integrated healthcare-community paramedicine (MIH-CP) has been one of the most discussed issues in the EMS arena in recent years. Virtually every national EMS association has an MIH or community paramedicine committee and programs are proliferating within agencies across the country.

Key to the success of MIH-CP programs is fiscal sustainability. Part of that process involves proving the value such programs offer in regard to patient outcomes and financial efficiencies for the healthcare system.

In this publication, we bring together key resources produced by EMS World that both identify the critical issues agencies should be addressing, as well as profile best practices for program development, implementation and sustainability.

We invite you to share your experiences with developing MIH-CP programs in your agency. E-mail editor@emsworld.com.

—Nancy Perry, Editorial Director, EMS World

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A Description of the Practice of MIH-CP Providers in the U.S.

MIHPs perform a variety of non-emergency tasks in the community, including in-home assessments and follow-up care

By Remle P. Crowe, BS, NREMT, & Melissa A. Bentley, BS, NREMT-P



Photo by Sean Boggs, www.seanfboggs.com.

A growing number of EMS systems are finding ways to leverage the skills of paramedics to perform non-emergency tasks in their communities through mobile integrated healthcare programs. The roles taken on by paramedics who serve as mobile integrated healthcare providers (MIHPs) vary widely from program to program. While some MIHPs may

work to keep patients who are at risk for repeat emergency department visits out of the hospital, others may provide routine follow-up care after hospital discharge. Importantly, we do not have a baseline evaluation of what the practice of an MIHP looks like on a national level.

In 2014, as part of the EMS practice analysis conducted every five years by

the National Registry of Emergency Medical Technicians (NREMT), a random sample of nationally certified paramedics was selected. Through an online survey, these paramedics were asked whether or not they work as a MIHP. They were then presented with a list of tasks, including 14 non-emergency or scheduled tasks. The paramedics were asked to indicate whether they

TABLE 1: PROPORTION OF MIHPs WHO PERFORMED SELECT NON-EMERGENCY TASKS

Task	%
Manage chronic wound care	23.7%
Perform a psycho-social needs assessment as part of a scheduled follow-up	21.9%
Perform an in-home assessment of frequent 9-1-1 users	21.1%
Perform a home safety assessment as part of a scheduled follow-up	15.0%
Coordinate care with available community services as part of scheduled follow-up care	15.0%
Perform a medication compliance assessment as part of a scheduled follow-up	14.9%
Weigh a patient as part of a scheduled follow-up	14.9%
Perform scheduled wellness visits following hospital discharge	14.9%
Coordinate care with a patient's nurse as part of scheduled follow-up care	14.9%
Insert a urinary bladder catheter	14.2%
Contact the prescribing physician to adjust patient medication	13.4%
Coordinate care with a patient's physician as part of scheduled follow-up care	13.2%
Remove drains as part of scheduled follow-up care	5.3%
Perform Foley irrigation as part of scheduled follow-up care	4.4%

were authorized to perform each task and, if so, how frequently they performed each one.

A total of 808 paramedics responded to the survey, of which 14.5% reported working as MIHPs. More MIHPs than traditional paramedics worked in rural communities of less than 25,000 residents (42.6% of MIHPs compared to 29.6% of traditional paramedics). Table 1 displays each of the non-emergency tasks included in the survey and the percentage of MIHPs who have performed each task. The task performed by greatest proportion of MIHPs was

managing chronic wound care (23.7%) followed by psycho-social needs assessments (21.9%) and in-home assessments of frequent 9-1-1 users (21.1%). Meanwhile, removing drains (5.3%) and performing Foley irrigation (4.4%) were much less common.

The results of this study serve as the first baseline national estimate of the prevalence of MIHPs in the U.S. and a description of MIHP practice. We saw that MIHPs are performing a variety of non-emergency tasks in the community, including in-home assessments and follow-up care that could help fill

gaps in the healthcare continuum and relieve strain on emergency departments. Nevertheless, future research is needed to better understand the practice of MIHPs as less than a third had performed each of the non-emergency tasks included in this study. ■

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MIH-CP Outcome Measures

Developing stakeholder consensus on measures that could prove value

By Matt Zavadsky, MS-HSA, EMT, Brenda Staffan & Dan Swayze, DrPH, MBA, MEMS

An increasing number of agencies within the federal Department of Health and Human Services, including the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare and Medicaid Innovation (CMMI), support efforts to advance healthcare innovation and value-based purchasing.

During recent updates provided to these agencies, officials have recognized the promising early results from several MIH-CP programs around the U.S. However, in order to help make the case for payment policy changes to support MIH-CP programs, we need to demonstrate with thousands of patients that the EMS-based MIH-CP service delivery model:

- Achieves the Institute for Healthcare Improvement's Triple Aim;¹
- Is scalable and replicable across many different communities and systems with common measures to be able to compare results across the country;
- Is structured for program integrity to help reduce the possibility of fraud and abuse.

Armed with this counsel, in April 2014 a group of directors of currently operating, mature MIH-CP programs embarked on an ambitious project to

develop outcome measures for MIH-CP to help address these three recommendations.

With the Round One Healthcare Innovation Award grants one year from expiration, as well as several other grant-funded MIH-CP programs underway, we knew we had a short window of six months in which to develop and seek stakeholder consensus on measures that could prove value and help make programs sustainable beyond the grant periods.

Framework and Reference Sources

We started by framing out the project and articulating early goals. The team wanted to ensure a focus on the IHI's improvement methodology and measurement strategy, and focus on measures that are consistent with the goals of the Triple Aim, as external stakeholders would be familiar with those goals.

It also became apparent that there are three basic types of measures:

- **Program Structure** (how the program is put together to meet the goals);
- **Process** (the way the intervention is carried out);

- **Outcomes** (what the result is from the intervention).

Program structure measures include components like executive sponsorship, community needs/gap assessment documentation, strategic plan and sustainability plan. Process measures would be things like time from referral to enrollment, patient to provider ratios and cost of the intervention. While we felt that process measures were important, given such a short time frame to demonstrate the value of MIH-CP services, we decided to focus first on outcome measures. Outcome measures include changes in healthcare utilization (which drives cost of care), patient health status and patient experience measures.

Since many of those on the Outcome Measures Tool team have had the opportunity to not only meet extensively with external stakeholders, but also present at numerous national conferences, we are familiar with key questions being asked and attempted to address in the Tool:

- Are these programs safe for patients?
- Are these programs providing quality services as defined by external stakeholders?

• What has been the impact on the rest of the healthcare system providers, such as primary care, specialty care and behavioral health, as a result of these programs?

- Do patients like the programs?
- Do providers conducting the MIH-CP services like the program?

Based on questions like these, and learning from healthcare and payer partners about the outcomes they want to track, we developed five outcome measure *domains*:

- Quality of Care and Patient Safety
- Experience of Care
- Utilization
- Cost of Care/Expenditure Savings
- Balancing Metrics.

Because one of the principle audiences for the Outcome Measures Tool is CMS, we desired to ensure that the “big four” measures routinely used by CMS to measure innovation effectiveness were included as a mandatory reporting requirement. In evaluating the impact on changes to the healthcare delivery system, CMS places a significant focus on hospital ED visits, all-cause hospital admissions, unplanned 30-day hospital readmissions and the total cost of care. We also researched measures that agencies such as AHRQ,² the National Quality Forum (NQF),³ and other resources had developed and felt we could not only incorporate much of their work (such as definitions and measurement calculations) into the Outcome Measures Tool, but we could also utilize a similar format, one the

healthcare system stakeholders would be familiar with.

We also recognized there has been much work done through a grant by the Health and Human Services, Health Resources and Services Administration, Office of Rural Health in the development of the Community Paramedicine Evaluation Tool published in 2012⁴ and wanted to incorporate as much of that work as possible into the MIH Outcome Measures Tool.

Program Integrity

We wanted to include program structure measures that demonstrate the MIH-CP program is more than simply payment for treat and release.

EMS and the ambulance industry have been recently identified as one of the fastest growing Part B Medicare expenditures and that the growth in this spending is inconsistent with changes in Medicare beneficiaries.⁵ In fact, the industry has been criticized for fraudulent billing, primarily for non-emergency repetitive patients.^{6,7} CMS has launched a demonstration project in Pennsylvania, New Jersey and South Carolina that requires that non-emergency repetitive services will require a preauthorization by CMS prior to being eligible for payment.⁸ Needless to say, we are on CMS’ investigative radar screen.

There were two excellent consensus documents we added to the resource list to help with the program structure measures: the September 2012 white paper *Mobile Integrated Healthcare*

Practice: A Healthcare Delivery Strategy to Improve Access, Outcomes, and Value,⁹ and the MIH-CP Vision Statement jointly developed by NAEMT and 10 other EMS associations.¹⁰ These two documents list several “pillars” that define the foundations MIH-CP programs should be built upon in order to be successful. You will see these principles used in the MIH Outcome Measures Tool to help establish that the program being measured is, in fact, a formally established MIH-CP program.

Which Intervention?

There may be numerous interventions—or components—to an MIH-CP strategy in a local community. These could include community paramedicine, 9-1-1 nurse triage, nurse help line, ambulance transport alternatives, transitional response vehicles staffed with a paramedic and a nurse practitioner, station-based clinics, house call physicians or any other intervention a gap analysis reveals could be of value in the local community. Each one of these interventions could and should have their own outcome measures.

Given the time frame in which we had to develop the initial draft, and the preponderance of interventions being conducted in communities across the country, the development team decided to first focus on developing the outcome measures for the *Community Paramedic* intervention.

As the measurement tool evolves as a living document, measures will be

TABLE 1: OUTCOME MEASURES FOR COMMUNITY PARAMEDIC PROGRAM COMPONENT DESCRIBES HOW THE SYSTEM IMPACTS THE VALUES OF PATIENTS, THEIR HEALTH AND WELL-BEING

Domain	Name	Description of Goal	Value 1	Value 2	Formula	Evidence Base, Source of Data
Quality of care and patient safety metrics	Q1: Primary Care Utilization	Increase the number and percent of patients utilizing a primary care provider (if none upon enrollment)	Number of enrolled patients with an established PCP relationship upon graduation	Number of enrolled patients without an established PCP relationship upon enrollment	Value 1 Value 1/ Value 2	Agency records
	Q2: Medication Utilization	Increase the number and percent of medication inventories conducted with issues identified and communicated to PCP	Number of medication inventories with issues identified and communicated to PCP	Number of medication inventories completed	Value 1 Value 1/ Value 2	Agency records
	Q3: Care Plan Developed	Increase the number and percent of patients who have an identified and documented plan of care with outcome goals	Number of patients with a plan of care communicated with the patient's PCP	All enrolled patients	Value 1 Value 1/ Value 2	Agency records
	Q4: Provider Protocol Compliance	Eliminate plan of care deviations without specific medical direction supporting the deviation	Number of plan of care deviations without medical direction support	All patient encounters/interventions	Value 1 Value 1/ Value 2	Agency records
	Q5: Unplanned Acute Care Utilization (e.g., emergency ambulance response, urgent ED visit)	Minimize rate of patients who require unplanned acute care related to the CP care plan within 6 hours after a CP intervention	Number of patients who require unplanned acute care related to the CP care plan within 6 hours after a CP intervention	All CP visits in which referral to acute care was not recommended	Value 1 Value 1/ Value 2	Agency records

developed that are specific for those additional interventions. Some of the measures, such as the “CMS big four,” will remain the same, but some will be different. For example, if you are doing an ambulance transport alternatives intervention (taking low-acuity patients who accessed the 9-1-1 system to a clinic or PCP as opposed to an ED), you should be tracking the repatriation

frequency, the frequency with which a patient taken to the alternative destination by ambulance ends up needing an ambulance to take them from that destination to the ED.

Calculation Basis and Methods

One of the most interesting parts of developing the MIH Outcome Mea-

asures Tool was the discussion regarding how the outcomes should be calculated.

We’ve all read the reports in the media or at conferences about MIH-CP programs that have reduced 9-1-1 call volume by x%, or saved the local healthcare system \$x million. We need to be very specific with how those numbers are calculated for two reasons. First, the results need to be verifi-

able by outside agencies and peer-reviewed journals, as well as comparable between programs. Second, the calculations need to reflect actual changes to important measures of healthcare delivery. Another one of the great development discussions was the issue of “cost.” Many programs use the avoidance of *billed charges* as the “cost savings.” The issue with this measure is that billed charges do not mean money paid/money saved. Similarly, just because you did not send an ambulance to a call does not really mean you saved any money to the EMS agency, unless you reduced staffing and therefore reduced your expenditures. The Outcome Measures Tool helps provide clarity to the cost-savings dilemma by defining expenditures and referencing several sources for published data on things like ED and hospital admission expenditures per episode.

Another great discussion was the calculation of changes in utilization. Should the measure be per capita (ambulance responses per capita this year vs. last year)? Or perhaps be an absolute number year to year (ED visits to Mercy Hospital this year vs. last year). What if Mercy sees 450 patients *a day* in the ED, but only enrolls *100 patients per year* into the program. The MIH-CP program may have little impact on the *overall* ED utilization, but for the 100 patients referred, there is a 75% reduction in ED use (more on that in the Strategic Goals section below). What if the population or demographics of the community is changing? How does that impact utilization? In fact, ED utilization in any given community could be impacted by many factors, including MIH-CP programs and other factors outside the control of the EMS provider.

The MIH Outcome Measures Tool attempts to resolve some of these issues by referencing the changes in utilization, health status and patient experience scores in *enrolled patients* over time. While comparing the patients’ utilization before their enrollment to their utilization after their enrollment is not the most robust way to calculate the impact from a statistical perspective, the team felt this was the only measure that could be universally captured by EMS agencies offering a community paramedic intervention.

Outcome Measures Based on Strategic Goals

The most important part of reporting outcomes for any program is a clear definition of the strategic goal of the program. In other words, what problem was the program trying to solve? What *was* the gap in the healthcare system that an EMS-based MIH-CP program is now filling, and what has been the outcome from filling that gap? How do the funders or potential funders define value? The Outcome Measure Tool has a Program Structure requirement of a strategic planning document, such as a driver diagram described in last month’s column. The specific strategic goals of the program are not as important as the fact that they have been identified and articulated so that success of the MIH-CP program can be measured against the goals for establishing the program.

There may be significantly different strategic goals upon which to measure success. Consider these two scenarios, which have completely different strategic goals, but both of which are valuable to the stakeholders.

Scenario #1: Mercy Hospital is strapped with a 2% readmission penalty costing them \$1.5 million in lost revenue this year. They want to reduce their 30-day unplanned readmission rate from their current 23% to 15% next year. They project this change will reduce their penalty from 2% to 0.7% and increase their revenue by \$750,000 next fiscal year. More important, it will get them from the “red bar” in the Hospital Compare data base to a “green bar.” The C-suite perceives that public perception as valuable. They fund your agency \$250,000 to enroll 100 of the highest-risk readmission patients and offer a \$100,000 bonus if you can reduce the planned 100% readmit rate for those patient to a 50% readmission rate.

Scenario #2: The local EMS chief is under significant budget pressures and the city manager is planning a ballot initiative next year establishing an EMS levy to fund EMS operations to avoid layoffs and service delivery challenges. Having read several articles this year on failed levies, the city manager wants to use this year to build the community’s perception of the EMS agency’s value to increase the

chances that the levy will pass. The EMS agency trains the existing staff to help their high utilizers navigate the complex healthcare system to find the most appropriate sources for care. The program has numerous high-profile successes, patients are interviewed in the media, and the local newspaper chronicles how the agency has improved patient outcomes and reduced the expenditures to the county's indigent care fund for ED visits by \$350,000 for the 35 patients enrolled in the program. The community's trust in the EMS agency and their perceived value from the services they provide are greatly enhanced. When the levy appears on the ballot in voting the booth, voters recall all the cool and valuable things the EMS agency is doing in the community and approve the levy 55% to 45%—jobs saved and service levels assured. Strategic goal accomplished—for this year!

Next Steps

Several of the agencies conducting MIH-CP programs have been asked to start inputting numbers from their programs into the Tool to determine: a) if they CAN track this data and b) if the formulas make any sense and yield the outcome measures we as an industry are seeking to demonstrate the value of these programs.

We will be holding additional meetings to review the progress of the Tool and present to external stakeholder groups such as AHRQ, NCQA, and the Joint Commission, as well as the national payers who have expressed interest in the outcome measures for these programs like CMS, Cigna, Humana and Aetna. We also plan to include large healthcare systems like Kaiser, HCA, Tenet, Baptist and Adventist to help determine their definition of “value” to help foster the growth of these programs in local communities.

We would like to invite agencies offering any component of an MIH-CP program in your community to participate in creating similar evaluation tools for these interventions. We also invite those who are not currently providing a program to provide feedback on the metrics as they are developed. If you would like more information on how to participate, contact any of the authors. ■

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Strategic Planning for Rapid Implementation

How to work with stakeholders to deploy an MIH program

By Matt Zavadsky, MS-HSA, EMT

Healthcare stakeholders such as hospitals, physicians, payers, home health agencies and hospice agencies are quickly learning the impact EMS-based MIH programs can have on patient outcomes and the cost of care. While that is great news, it is also scary. In some instances they may want an MIH program faster than you can comfortably implement one.

What would you do if one of your local healthcare stakeholders called you *today*, said they'd heard about EMS-MIH and wanted to meet with you next week to get a program started? What gaps would you fill? What's the right delivery model? What education will the providers need? What data metrics should you track to demonstrate the value of the program? This article walks you through the steps necessary to strategically plan and rapidly deploy an MIH program for your community.

The Phone Call

It's Tuesday morning. You're sifting through the field operations schedule, trying to fill those last openings for Saturday night, when your phone rings. It's Liz Harris, the CFO of Mercy Medical Center, the largest hospital in your service area. Liz explains she just received the hospital's 2015 readmission penalty notice, and it's increased from 0.51% last year to 1.89% this year. She recalls that last year you met with them to discuss readmission prevention programs, but at that time the payments they were getting for the admissions were higher than the penalties being assessed. With the change in the penalty this year, the reverse is now true, and the hospital wants to start a program with you as quickly as

possible. Liz invites you to a breakfast meeting tomorrow with her, the chief executive officer, chief medical officer, chief experience officer, chief nursing officer and vice president of care coordination. As your palms start to sweat, you accept the invitation, thank her for her call and hang up. *Game on!*

Your strategy for the meeting is crucial. As a savvy leader, you start assembling your innovation and integration team and invite them to a working lunch. The team includes your medical director, operations manager, communications manager, human resources manager, IT manager, clinical manager, compliance officer and billing manager. During lunch you work to frame out the questions you'll need to work through with the Mercy team in the morning:

- What's the problem Mercy would like to solve?
- Can EMS provide the right solution?
- What is the delivery model?
- Who all needs to be involved and committed?
- What training will be necessary for practitioners?
- Who will do the training?
- How will information be shared?
- What is the economic model?
- How will success be measured?

You agree to recommend to Mercy the use of a rapid implementation strategic plan using the "driver diagram" methodology (see *Figure 1*) recommended by the Center for Medicare & Medicaid Innovation.¹ A driver diagram depicts the relationship between the aim (the goal or objective of the program), the primary drivers that contribute directly to achieving it (the factors or components of a system that

influence achievement of the aim) and the secondary drivers necessary to achieve the primary drivers.

Clearly defining an aim and its drivers enables the team to have a shared view of the theory of change in a system because it represents the team members' current theories of cause and effect—what changes will likely cause the desired effects. It sets the stage for defining the “how” elements of a project—the specific changes or interventions that will lead to the desired outcome.

The Meeting

The next day your team is enthusiastically welcomed into Mercy’s c-suite. During breakfast the Mercy team offers pre-

liminary answers to the key questions your innovation team developed. They want to reduce 30-day CHF readmissions by a quarter. Together you come up with the strategic plan shown in *Table 1*.

All agree that in order to meet the goal, several joint Mercy/EMS task forces (*Table 2*) will need to be formed. The goal is implementation within 90 days.

With this plan you are well on your way toward a rapid implementation strategy. You agree to have weekly program implementation conference calls and face-to-face meetings every three weeks. During these meetings the task force leaders will report progress and everyone will help with accountability. The executive task force will work through

Figure 1: Driver Diagram

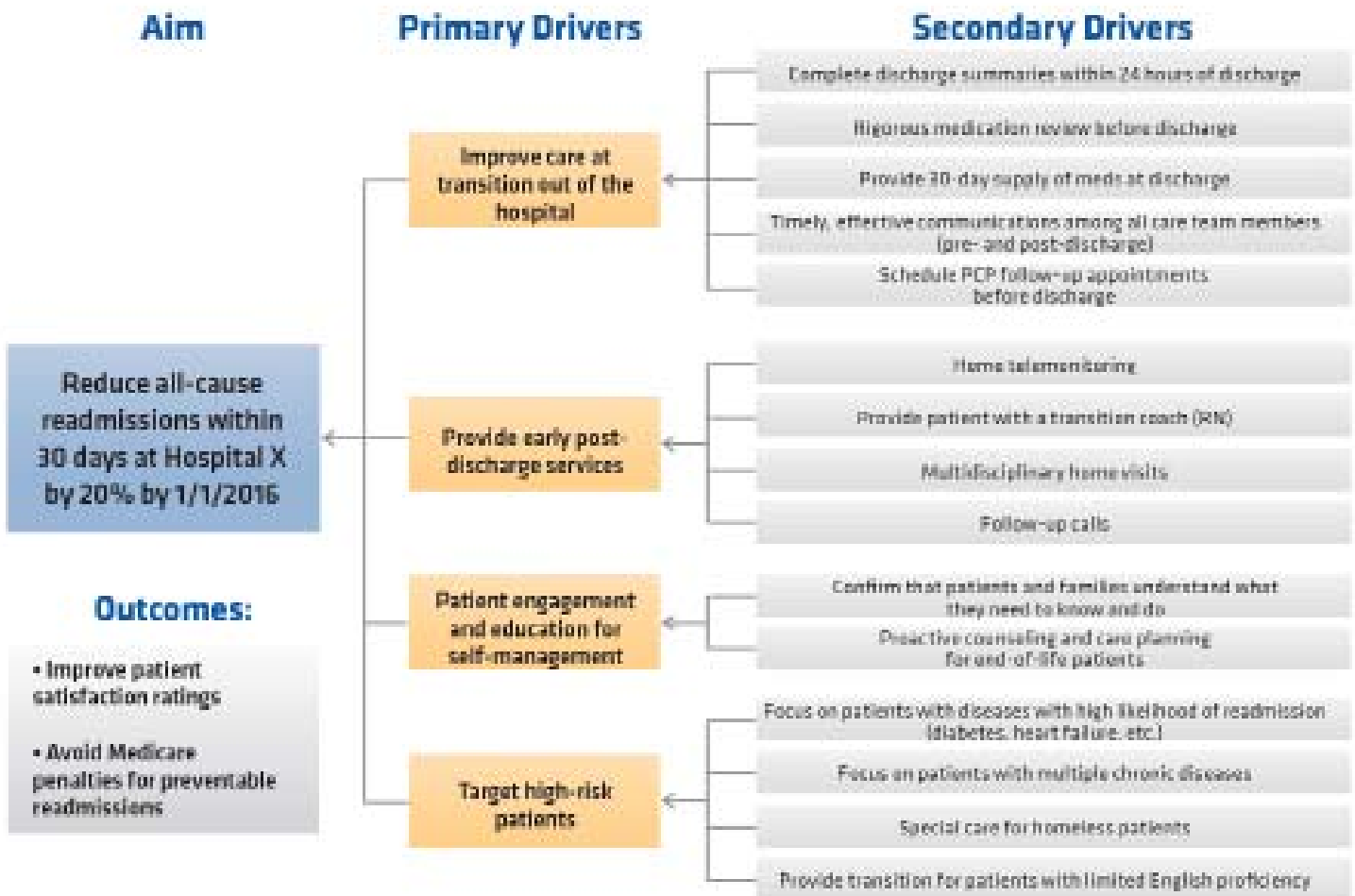


TABLE 1: STEPS TOWARD A STRATEGIC PLAN

QUESTION	SOLUTION
What's the problem Mercy would like to solve?	<ul style="list-style-type: none"> • Reduce 30-day readmissions for CHF discharges by 25% • Improve patient health status • Improve patient experience of care
Can EMS provide the right solution?	<ul style="list-style-type: none"> • Yes, with mobile resources, 24/7 availability and core competencies, as well as being a trusted partner in other projects and within the community
What is the delivery model?	<ul style="list-style-type: none"> • Care plans developed by PCP • Medical control shared between EMS medical director and PCP-cardiologist • Specially trained mobile healthcare practitioners in non-transport marked vehicles providing proactive home visits for education care integration • Enrolled patient access to 24/7 access to 10-digit medical call center for episodic needs • Patients identified as qualifying for home health referred to home health • Patients identified as appropriate for palliative care have a conversation initiated by MHPs and, if agree to, referral to hospice
Who needs to be involved?	<ul style="list-style-type: none"> • Mercy C-Suite • EMS agency innovations team • Discharge planning team • Cardiology team • Home health agencies • Hospice agencies • Local & state EMS agency regulator • State CMS Quality Innovation Network¹
What training is necessary for practitioners?	<ul style="list-style-type: none"> • 44 hours of focused CHF management, care transitions, motivational interviewing and The Conversation Project² • 20-hour classroom, 24-hour clinical rotations in CHF clinic and cardiology offices and hospice agency
Who will do the training?	<ul style="list-style-type: none"> • Cardiology nurse educators • Cardiologists • EMS medical director • Patient experience officer • Hospice nurses • Home health administrator
How will information be shared?	<ul style="list-style-type: none"> • Face sheets faxed to EMS agency with signed consents • Written record of each patient encounter sent electronically to hospital for upload to hospital EHR on shared platform with cardiologists • Related scoring tools conducted by EMS agency (health status, patient experience ratings)
What is the economic model?	<ul style="list-style-type: none"> • Budget developed by EMS agency and approved by Mercy • Mercy pays referral fee to balance EMS agency budget • Bonus payment to EMS agency by Mercy if goals are met or exceeded
What does success look like and how will it be measured?	<ul style="list-style-type: none"> • All-cause readmissions tracked by Mercy and the regional hospital council • 30-day post-discharge ED and admission data reported • Readmission ratio of expected to actual measured • Health status questionnaires completed • Patient experience surveys conducted

TABLE 2: TASK FORCE DEVELOPMENT

TASK FORCE	GOALS
Executive/Sponsorship	<ul style="list-style-type: none"> • Ensure organizational commitment • Reach out to other stakeholders and brief on the proposed project • Home health • Hospice • Remove roadblocks to success
Clinical	<ul style="list-style-type: none"> • Select providers • Develop/implement training and credentialing • Develop/approve protocols • Develop equipment list • Resolve CLIA issues for point-of-care testing • Develop CQI process
Operational	<ul style="list-style-type: none"> • Introduce concept and secure support from the EMS agency workforce • Develop schedules • Acquire assets • Develop process map for referrals and operations
Financial	<ul style="list-style-type: none"> • Develop/approve budget • Develop payment model and billing process • Draw in 3rd-party payers to the team as consultants
Health IT	<ul style="list-style-type: none"> • Develop/implement patient care reporting process • Develop/implement data exchange process
Compliance	<ul style="list-style-type: none"> • Review and resolve state/local regulator issues • Develop/execute contract

thorny issues such as HIPAA compliance, health IT integration and contracting. The cardiology and EMS medical control leaders will meet with their constituents and get various protocols approved and contact processes resolved. The finance task force will assist with financing asset acquisition and setting up the billing process. The CMS Quality Innovation Network (QIN) participants on the clinical task force will offer assistance in developing the quality improvement and patient safety reporting processes and facilitate the reporting of outcomes to the state Medicaid office and CMS Innovation Center.

Because you are a well-connected EMS leader and have kept abreast of the MIH movement, you also decide it's time to "phone a friend." There are several industry thought leaders

knowledgeable on this topic who have developed and implemented MIH programs, and you pick one to call. They are very helpful and offer to host the chairs of your task forces in a visit to see their programs in action, offer insight into the dos and don'ts of program implementation, and offer technical and strategic consulting help. The task force chairs are excited about the opportunity and select a date for the visit.

By working collaboratively with all the internal and external stakeholders, you successfully launch your program 90 days after the first call from Liz. This is an amazing feat by any measure. You recall reading in the new Jones & Bartlett book, *Mobile Integrated Healthcare: An Approach to Implementation*, about organizational readiness and community needs assessments, and you reopen the book to those chapters. A smile comes to your face as you reread the section describing that, in some cases, the need

comes to you faster than you thought, and you should to be ready to move quickly. "Yeah, I get that." ■

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Matt Zavadsky, MS-HSA, EMT, is the public affairs director at MedStar Mobile Healthcare, the exclusive emergency and non-emergency EMS/MIH provider for Fort Worth and 14 other cities in North Texas. Matt has helped guide the implementation of several innovative programs with healthcare partners that have transformed MedStar fully as a MIH provider.

Why You Should Accredite Your MIH-CP Program

As programs continue to mature, a logical next step in the evolution is program accreditation.

By Patricia Barrett

Accreditation is a review process an organization participates in to demonstrate the ability to meet predetermined criteria and standards of accreditation established by a professional accrediting agency. Achieving accreditation signifies the organization is credible, reputable and dedicated to ongoing and continuous compliance with the highest standard of quality.

Merriam-Webster defines accreditation as “the granting of power to perform various acts or duties.” When you hear the term “accreditation,” you envision things like expertise, professionalism, high standards and quality. Anyone who has gone through an accreditation process would agree those images are certainly accurate, because the process for accreditation requires demonstration that your performance is not only consistent with industry best practices, but that you can *prove* you are meeting high quality standards. Accreditation insignias are shown with pride on letterhead, websites, banners and vehicles.

Why Accreditation?

Accreditation is regarded as one of the key benchmarks for measuring the quality of an organization. Preparing for accreditation provides an organization with the opportunity to identify its strengths and opportunities for improvement. This process provides information for management to make decisions regarding operations in order to improve the effectiveness and efficiency of business performance.

There are many accreditation agencies that the emergency services community may be familiar with:

- The Commission on Fire Accreditation International (CFAI) provides accreditation programs for fire departments;
- The Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) is one of the accreditation agencies for law enforcement agencies;
- The International Academies of Emergency Dispatch (IAED) has accreditation programs for emergency communications centers;
- The Commission on Accreditation of Ambulance Services (CAAS) provides accreditation for ambulance services.

As EMS-based mobile integrated healthcare and community paramedic (MIH-CP) programs continue to mature, a logical next step in the evolution is program accreditation. Further, the Centers for Medicare and Medicaid Services (CMS) often requires certain organizations, programs and/or services to become accredited by an approved accreditor before they are able to participate with Medicare. Accreditation is also a key milestone in elevating an organization’s perception with key partner organizations. The conversation with a hospital, health plan, case management or home health CEO becomes much different when they recognize that your agency is accredited, often by the same body that accredits them.

Selecting the Right Accrediting Agency

While the agencies identified above have excellent programs for fire, police, ambulance and emergency communication services, MIH-CP programs don’t really fit the traditional accreditation models of these agencies.

Figure 1: Collecting Patient Experience Data

At least annually, the organization monitors five measures of patient experience, including:

1. One measure of patient-reported health outcomes.
2. A second measure of patient experience.
3. A third measure of patient experience.
4. A fourth measure of patient experience.
5. A fifth measure of patient experience.

Scoring	100%	80%	50%	20%	0%
	The organization meets all 5 factors	The organization meets 4 factors, including factor 1	The organization meets 3 factors, including factor 1	The organization meets 1-2 factors, including factor 1	The organization does not meet factor 1

Data source Reports.

Scope of review This element applies to patient-and practitioner-oriented accreditation and to patient-oriented accreditation (NCQA has two accreditation options).

NCQA scores this element once for the organization.

Look-back period *Initial Surveys:* The organization is required to complete the activity at least once during the prior year.

Renewal Surveys: 24 months.

Explanation Patient experience

This element assesses the organization’s collection of feedback from patients about their experience with and perception of the DM program. The organization may choose to use this information to make adjustments or improvements in its program.

This year, MedStar Mobile Healthcare in Fort Worth decided to apply to the National Committee for Quality Assurance (NCQA) for accreditation for its MIH-CP programs. MedStar selected NCQA because it is widely recognized as continually building consensus around important healthcare quality issues by working with large employers, policy-makers, doctors,

patients and health plans to decide what’s important, how to measure it and how to promote improvement.

NCQA’s programs and services reflect a straightforward formula for improvement: *measure, analyze, improve, repeat*. NCQA makes this process possible in healthcare by developing quality standards and performance measures for a broad

Figure 2: Reporting Cost or Efficiency

The organization annually:

1. Collects at least one measure of cost or efficiency;
2. Reports at least one measure of cost or efficiency to clients;
3. Provides clients with its methodology for calculating reported measures of cost of efficiency.

	100%	80%	50%	20%	0%
Scoring	The organization meets all 3 factors	No scoring option	No scoring option	No scoring option	The organization meets fewer than 3 factors

Data source Documented process, reports, materials.

Scope of review This element applies to patient- and practitioner-oriented accreditation and to patient oriented accreditation. (NCQA has two accreditation options)

NCQA scores this element once for the organization.

Look-back period *Initial Surveys:* The organization is required to complete the activity at least once during the prior year.

Renewal Surveys: 24 months.

Explanation **Process for reporting cost or efficiency**

NCQA reviews the organization’s documented processes for how it at least annually collects and reports measures of cost or efficiency to clients. The organization must annually report at least one measure of cost or efficiency to clients. NCQA looks for evidence that the organization reported at least one measure of cost or efficiency and examples of reports with measure explanations.

Reporting cost or efficiency

DM organizations use a variety of different methods for measuring and reporting the cost or efficiency of their programs to clients (e.g., cost trend, return on investment, utilization). While there is no industry standard for calculating cost or efficiency, it is important for organizations to report cost or efficiency in addition to clinical quality measures to demonstrate the value of their DM programs.

range of healthcare entities. These measures and standards are the tools organizations and individuals can use to identify opportunities for improvement. The annual reporting of performance against such measures has become a focal point for the media, consumers and health plans, all of which use these results to set their improvement agendas for the following year.

NCQA's disease management (DM) evaluation programs include accreditation for organizations that offer comprehensive DM programs with services to patients, practitioners or both, and certification for organizations that provide specific DM functions. The program standards are built on NCQA's years of experience, detailed market research and input from healthcare industry experts and other stakeholders. NCQA uses performance measures to assess the impact of programs on care for people with chronic conditions such as asthma, diabetes, chronic obstructive pulmonary disease (COPD), heart failure and ischemic vascular disease.

The Accreditation Process

Since MIH-CP in EMS is still in the incubation phase, MedStar began the road to accreditation by meeting with leadership at NCQA at our offices in Washington, DC, in April 2014. MedStar explained the transformation of EMS to MIH services and provided specific program summaries and outcome data for the various programs it conducts in its community. It became quickly apparent to us that this was, for the most part, an entirely new means of service delivery. While aspects of the MIH-CP program conceptually fit existing accreditation requirements, other features may require unique standards for accreditation.

After the initial discussions, MedStar was encouraged to go through the NCQA Disease Management (DM) accreditation process to see if the DM standards were the closest fit for the processes they were using to improve patient outcomes and reduce costs. Tim Penic, one of MedStar's seasoned MIH-CP practitioners, was selected as the project lead for the accreditation process. Tim led a team that put together documentation, process maps, outcome measures, surveys and answers to

specific questions to demonstrate compliance with NCQA's DM standards.

All organizations applying for NCQA DM accreditation or certification use an online survey tool. The tool guides the organization through documenting performance against the standards and enables electronic submission of informa-

These measures and standards are the tools organizations and individuals can use to identify opportunities for improvement.

tion, streamlining the accreditation or certification process. It contains fields for entering data and calculating results. The organization can use the tool to perform a readiness evaluation before the NCQA survey and determine the information it needs to demonstrate how it meets NCQA standards.

Off-Site Survey

Most of the survey process and NCQA's documentation review occurs during the off-site survey. The survey begins once NCQA formally receives the completed survey tool and supporting documentation. NCQA surveyors access and review the survey tool and supporting documentation

What Accreditation Shows

NCQA-accredited DM organizations show that they:

- Provide comprehensive programs delivering evidence-based care
- Make efficient use of resources
- Have high levels of customer satisfaction
- Deliver improved health outcomes.

NCQA-certified DM organizations demonstrate that they:

- Provide evidence-based content and systems to support comprehensive DM programs
- Drive quality care and services by addressing patient safety and delivering improved services.

NCQA Disease Management Standards

NCQA's DM standards are organized into seven categories:

1. EVIDENCE-BASED PROGRAMS

Organizations should use the best clinical evidence to develop program content. Program principles include:

- Using evidence-based guidelines or standards of care in developing program content for patients and practitioners
- Ensuring that all content is consistent with adopted guidelines
- Ensuring appropriate practitioner oversight of programs.

2. PATIENT SERVICES

Organizations should work with patients to encourage self-management behavior that enables good outcomes. Patient service principles include:

- Using available clinical data from the client organization or from eligible participants to identify potential participants and stratify them for assignment to different levels of service intensity
- Integrating relevant patient data to produce actionable patient-level information
- Enlisting and measuring active participation of eligible patients
- Supporting patient self-management with consumer-tested information, coaching, reminders and referrals
- Stating a commitment to patient rights, including the right to opt out of the program, and expectations of patient responsibilities

- Encouraging patient and practitioner communication.

3. PRACTITIONER SERVICES

Organizations should support the practitioner's care plans by providing actionable and timely information on their patients' conditions. Practitioner services principles include:

- Supporting practitioner decisions with evidence-based recommendations on care of chronic conditions
- Providing practitioners with feedback on care opportunities that must be addressed
- Stating a commitment to practitioner rights and encouraging practitioners to work with the program to coordinate patient care.

4. CARE COORDINATION

Organizations should make care plan information accessible to patients and practitioners. Care coordination principles include:

- Giving patients information about their progress toward treatment goals
- Giving practitioners information about the condition and progress of their patients
- Coordinating referrals and providing relevant information to case management programs and other health resources

5. MEASUREMENT AND QUALITY IMPROVEMENT

Organizations should measure patient and practitioner data to assess their experience and act to improve quality where necessary.

Standards are designed to impose principles of good measurement that include:

- Measuring quality across the organization and for each condition managed
- Ensuring that all eligible participants are included in the measured population
- Using evaluative patient and practitioner data to assess experience with the DM program for quality improvement
- Measuring cost or efficiency across each program
- Analyzing performance data, taking action for quality improvement and demonstrating improvement in performance.

6. PROGRAM OPERATIONS

Organizations should support and maintain their DM programs by:

- Ensuring convenient access to the organization for patients and practitioners
- Considering patients with special needs
- Employing qualified personnel and giving them the necessary training
- Disclosing marketing activities
- Responding appropriately to patient and practitioner complaints
- Using available information to address patient safety issues
- Protecting the privacy of patient information.

7. PERFORMANCE MEASUREMENT

Organizations should regularly assess their performance.

to evaluate the organization's responses and recommend a score for each applicable element and standard. All elements for which surveyors can clearly recommend a score are completed before the on-site survey.

On-Site Survey

During the on-site survey, NCQA surveyors review standards and elements that require access to confidential records, such as patient records, credentialing files and meeting minutes.

NCQA conducts the on-site file review in the presence of the organization's staff. NCQA may need to review additional information necessary to complete the survey. The onsite survey might include interviews with key staff members or system queries (as applicable), and concludes with a conference to summarize preliminary findings.

The survey team collects and documents its findings and submits them to the Review Oversight Committee, which makes final scoring decisions. The survey team does not make a final determination of the organization's score on any elements or draw conclusions regarding its accreditation or certification status during the on-site survey.

Reaccreditation

The length of time for which accreditation or certification is effective depends on the organization's status and under

These are very exciting times for the healthcare system, patients, EMS agencies and NCQA.

which program they are being accredited. Every two or three years, the organization undergoes a full survey to renew its accreditation or certification status. When the organization receives its results from a survey, NCQA assigns a date for the next required survey.

Accreditation Program Enhancements

As mentioned in the outset of this article, MIH-CP is still in the early development phase and is significantly different than any other service delivery model. It is likely that as MedStar goes through the process, we may identify several opportunities to modify and enhance our current accreditation products or even develop an accreditation model that is specific for EMS-based MIH-CP programs. These are very exciting times for the healthcare system, patients, EMS agencies and NCQA. We are happy to be part of the development of these programs and look forward to working with the EMS community to enhance your service delivery models and prove the value of the services you provide. ■

Patricia Barrett joined NCQA in 2008 and currently serves as its vice president for product design and support. In this role, she is responsible for exploring new product concepts and evolving existing products to meet the needs of a changing healthcare environment. She also ensures proper development, communication and interpretation of NCQA accreditation, certification and recognition standards, as well as Healthcare Effectiveness Data and Information Set (HEDIS) and other performance measures. Barrett attended the University of Michigan receiving her bachelor's degree in sociology and a master's degree in Health Services Administration from the School of Public Health.



The National Committee for Quality Assurance is a private 501(c)(3) not-for-profit organization dedicated to improving healthcare quality. Since its founding in 1990, NCQA has been a central figure in driving improvement throughout the healthcare system, helping to elevate the issue of healthcare quality to the top of the national agenda.

Building a Better Community Medic

An improved curriculum is helping the community paramedic profession grow up

By John Erich, Senior Editor

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.



Kevin Creek is a community paramedic with Eagle County (CO) Paramedic Services. Kevin was the first community paramedic in the nation to actually work in the role after completing the college course through Colorado Mountain College's one-semester course. For more information, see www.eaglecountyparamedics.com. Photo by Sean Boggs, www.seanfogg.com.

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.

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

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/>. ■

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Integrating Home Care, Hospice & EMS

Partnerships with MIH-CP programs can help avoid needless hospital visits

By Meredith Anastasio, J. Daniel Bruce & John Mezo

The rapidly changing dynamic of America's healthcare system has created new expectations for many providers. The drive to achieve the Institute for Healthcare Improvement's Triple Aim—improved care experience for the patient, improved population health and reduced costs—has fostered the creation of many innovative partnerships designed to enhance healthcare across the continuum. This column focuses on the synergistic relationships and integrations developing between EMS-based mobile integrated healthcare (MIH) and the home healthcare industry.

One of the main goals of EMS-based 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 partnership with the local EMS agency.

The following are some examples of how home health and hospice agencies have integrated with their local EMS provider to create significant benefits for both the agencies and their patients.

Increased Referrals

Home health providers are increasingly being challenged by hospitals and insurers to reduce preventable emergency department visits and hospital admissions. Patients receiving home health services tend to have multiple chronic diseases with polypharmacy and are at significant risk for ED visits and hospital admissions. Under the transitioning

healthcare system, hospitals are held financially accountable for certain unplanned readmissions. And, if the hospital is part of a risk-sharing financial arrangement such as an ACO, they are financially at risk for the admission. Consequently, they desire to refer eligible patients to home health agencies that can ensure the patient safely transitions to the home environment without returning to the hospital unnecessarily. A home care agency that can appropriately prevent unnecessary ED visits and admissions gains an advantage over other agencies in today's new healthcare environment.

MedPAC (the Medicare Payment Advisory Commission) is recommending to CMS that home health agencies also receive penalties for patients who return to the hospital. The policy recommendation outlines a savings to the Medicare program. The estimate for this savings, if approved in 2015, is between \$50 million and \$250 million. MedPAC suggests with the growth in healthcare utilization and the growing population that penalties to home health agencies for readmissions could save as much as \$1 billion dollars by 2020.¹ The financial penalties to hospitals from one of their primary referral sources as well as proposed changes related to hospital readmissions pave the way for partnerships in communities across the United States.

While home care agencies instruct patients to call them for any changes in their condition and routinely staff registered nurses 24/7, 365 days a year, often patients and families call 9-1-1 out of panic as opposed to true medical emergencies. Developing a partnership with EMS first responders in the home care service provides an opportunity for the home care

on-call registered nurse to be notified by the first responder while they are en route to the patient's residence.

Klarus Home Care has this type of innovative partnership with MedStar Mobile Healthcare in Fort Worth and surrounding areas. MedStar enrolls Klarus patients who are in their first-responder service area into their database, which allows the call center to identify that a patient who calls 9-1-1 is on home health services with Klarus. In addition to sending an ambulance, MedStar also dispatches a specially trained mobile healthcare paramedic (MHP) to the scene. The on-scene MHP then works directly on the phone with the Klarus Home Care RN to do real-time care coordination for minor medical issues. Perhaps the patient can be episodically managed at the scene with a follow-up visit by the nurse, thereby preventing an avoidable ED visit or hospital admission.

Hospitals are looking for home health providers who are utilizing innovative approaches and whose data can demonstrate a reduction in avoidable hospitalizations. Partnerships between EMS providers and home health companies can pave the way to providing a more value-based service that drives down overutilization, resulting in lower costs. Klarus Home Care absorbs the costs in their partnership

with the first responders to accomplish the goal of reducing hospitalizations from 9-1-1 calls.

In some cases, when EMS is going through the intake process, the mobile healthcare paramedic trained in patient navigation and program eligibility may identify that the patient qualifies for home health. In this case the MHP can suggest to the patient's physician that a referral to a home health provider may be appropriate.

Gained Operational Efficiency

Home care agencies not partnered with EMS are often unaware when their patients call 9-1-1 and are taken to the emergency room. The opportunity for the patient to be treated in the home, the least restrictive environment, is lost. This has a direct impact on the home care agencies' performance and the overall cost to the healthcare system. Additionally, many times the home health agency doesn't become aware the patient is in the hospital until the nurse goes to the house for a regularly scheduled visit. This creates lost productivity for the home health agency.

Further, it may at times be logistically difficult for a home care agency to make it to a patient's house at 2 a.m. or on

Klarus Home Care & EMS Partnership—Actual Patient Experience

- 67-year-old male, DX of cardiomyopathy, chronic heart failure, pleural effusion, diabetes type II.
- Exacerbation of CHF 2x in last 60 days; TX by RN using Klarus CHF protocols: 40 mg IV Lasix.
- Patient calls 9-1-1 due to exacerbation, does not call Klarus.
- Patient IDs as registered Klarus client in 9-1-1 computer system. Specially trained MedStar paramedic added to 9-1-1 response, on-call Klarus RN notified of response while units en route.

EMS CARE COORDINATION WITH KLARUS:

- Paramedic on scene assesses patient and contacts RN.
- Assessment reported to RN: patient short of breath, legs swollen, edema 3+.

- RN advises specially trained paramedic to use CHF protocol and administer 40 mg IV Lasix.
- MedStar verifies CHF orders in Klarus electronic medical record and consults EMS medical director.
- IV Lasix administered.
- MedStar provides follow-up visit later that night, checks potassium, consults on-call physician and adjusts patient's PO potassium.
- Klarus RN follows up with patient the next morning.

OUTCOME:

- CHF patient not transported to emergency room.
- CHF exacerbation signs and symptoms eliminated.
- Klarus Home Care & MedStar coordination prevents hospitalization.
- Healthcare system cost savings: \$9,203.

VITAS Hospice & EMS Partnership—Actual Patient Experience

- Priority 1 9-1-1 call from caller identified as VITAS hospice client in 9-1-1 CAD.
- Specially trained MHP added to response.
- MHP arrives on scene to find patient home alone.
- Patient relates she became anxious and short of breath and is unable to move from chair to turn on her oxygen.
- Client appears to be weak with limited mobility due to advanced Parkinson's.
- Paperwork for VITAS is laid out on table with signed DNR.
- She has around-the-clock care with providers obtained by her family, but they leave Saturday mornings and are not generally back until the afternoon.
- Patient relates her caregiver is off today and she is supposed to have a substitute arrive at 11 a.m., but they are late.

EMS CARE COORDINATION WITH VITAS:

- On-scene MHP speaks with VITAS triage nurse and discusses the situation.
- The client is on oxygen and relates that prior to EMS arrival she took something for her spasms but is unable to determine what.
- Relates she feels much better now that she has her oxygen on.
- MHP releases ambulance and FD unit, waits for caregiver to arrive and explains the situation.
- Also speaks with VITAS triage nurse.
- Patient left in care of caregiver.
- VITAS does a home visit later in the day.

OUTCOME:

- Patient stabilized and made more comfortable.
- Wishes of patient and family met.
- Transport to ED, admission and potential voluntary disenrollment avoided.
- Care coordinated with VITAS.

weekends for an unscheduled visit. Nurses available to make these visits in the middle of the night may also be concerned about safety in certain parts of the community. Working with EMS gives the home care agency additional support for their current services.

Consider the accompanying real scenarios of patients enrolled in the Medstar MIH programs with Klarus Home Care and VITAS Healthcare. Both of these examples demonstrate the value to the patient, the home health agency, the hospital and the overall cost to the healthcare system. Integrated mobile healthcare in the Fort Worth market changes the EMS incentive.

EMS-MIH and Hospice Care

The goal of the hospice agency is to help the patient at home transition to their afterlife with comfort and compassion. The family is instructed in the proper way to access the hospice nurse if the patient begins to struggle at home. Unfortunately, in the panic of seeing their loved one struggle, many

families call 9-1-1. This starts a domino effect. The EMTs and paramedics assess the patient and find them in clinical distress. The family is scared and cannot locate the DNR. EMS does what it's trained to do: Start treatment and take the patient to the ED. Once in the ED, the hospital initiates care and the family may decide this is all too overwhelming and voluntarily disenroll the patient from hospice. This is not in the best interests of the patient or the hospice agency. The patient's wishes are not fulfilled; the hospice agency now has ambulance and ED bills to pay and loses the per-diem fees normally available had the patient stayed on service.

In Fort Worth we see a different outcome from the same scenario thanks to an innovative partnership with VITAS Healthcare. When the family calls 9-1-1, the computer-aided dispatch system notifies the 9-1-1 call-taker that this patient is enrolled in the VITAS partnership. This causes an alternative domino effect: A hospice-trained MHP joins the ambulance response team, and the patient's hospice nurse is notified of the response. When the MHP arrives on the scene, they

assess the patient and determine if the clinical issue is part of the hospice plan of care. If so, they then access the patient's comfort pack, alleviating the patient's suffering; remind the family of the goal of hospice care and the wishes of the patient; and inform them the hospice nurse is on their way. They offer to wait with the family until the hospice nurse arrives and release the ambulance back into service. No transport, no disenrollment and the patient's wishes are achieved.

In the event the patient's condition on scene is such that management at home is not practical, care coordination occurs between the MHP on scene and the VITAS nurse

It is not a competitive relationship, but a cooperative one designed to meet the needs of the patient.

to have the patient transferred from home to an inpatient hospice unit.

Under this program, in place since 2013, 168 patients identified by VITAS as being at high risk for voluntary disenrollment have been enrolled by VITAS. These patients generated 49 EMS calls, but only 29 were transported. Twelve were transferred to an inpatient hospice unit; 17 were transported to the ED at the insistence of the family and subsequently voluntarily disenrolled from hospice (10%). The rest died peacefully at home in the presence of the hospice nurse and/or the MedStar MHP.

Another benefit for VITAS from this program has been increased referrals. The MedStar MHPs have been trained in the IHI Conversation Project and can work with patients enrolled in their other MIH programs (such as the service's high-utilizer or CHF readmission-prevention program) who may be appropriate for enrollment in palliative care. Often, as the relationship between the patient, patient's family and

MHP evolves over a series of home visits, the MHP can successfully introduce the conversation the patient or family was not ready to have while in the hospital.

These are just a few examples of how EMS-MIH and home health can work collaboratively. It is not a competitive relationship, but a cooperative one designed to meet the needs of the patient. ■

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Meredith Anastasio is the managing director at Lincoln Healthcare Group (LHG) and leads the planning of Home Care 100 and Home Care & Hospice LINK. Founded in 1998, LHG has created a successful formula for bringing together senior-level executives. Their conferences provide a private environment where business leaders can meet to discuss current events.

J. Daniel Bruce is the administrator of Klarus Home Care in Fort Worth, responsible for the ongoing relationship with MedStar, and a leader in the development of partnerships to create value-based services. His management experience of more than 25 years includes working as the hospital director of case management at Memorial Medical Center of East Texas; as CEO for SSC, a medical staffing company serving more than 150 counties in Texas; and the development of an innovative home health psychiatric and dementia care program called Safe Choices.

John Mezo is the general manager of VITAS Healthcare in Fort Worth. In this role he manages all aspects of VITAS' program, overseeing program operations, developing business opportunities, hiring and mentoring new staff and representing VITAS throughout the community. For 23 years John has worked in various management roles in hospice, home health and other healthcare fields. Prior to joining VITAS he served as executive director of Odyssey Hospice in Dallas and before that as regional vice president of CareSouth/MedCare at Home in Dallas.

The Payer's Perspective on MIH-CP Programs

How to make a case for funding your project

By Matt Zavadsky, MS-HSA, EMT

We may have reached the tipping point for EMS-based mobile integrated healthcare and community paramedic (MIH-CP) programs. That may seem like a bold statement, but consider the following:

- In 2009 there were only a handful of these programs across the country, in places like Pittsburgh; Wake County, NC; Eagle County, CO; and Fort Worth, TX. Today, according to the NAEMT MIH-CP survey, there are more than 130 active, formal MIH-CP programs in the United States.¹

- The Center for Medicare & Medicaid Innovation has granted over \$30

million for innovations that include various forms of MIH-CP.^{2,3}

- In the industry release announcing the formation of the Healthcare Leadership Alliance, Donald Berwick, MD, the developer of the Institute for Healthcare Improvement's Triple Aim, refers to community paramedicine as an example of a healthcare innovation that's emerging faster than the regulatory environment can address.⁴

- *USA Today*⁵ and *Kaiser Health News*⁶ profiled the REMSA Community Health Program in national publications.

- The Agency for Healthcare Research and Quality has profiled three

separate MIH-CP programs as part of its Healthcare Innovations Exchange.⁷⁻⁹

Despite growing evidence that these programs improve patient outcomes and reduce cost, many are threatened. The most common challenge for EMS-based MIH-CP programs continues to be financial sustainability. A recent survey of more than 100 EMS-based programs revealed that 89% of agencies operating them identified financial sustainability as a significant hurdle. Further, 62% reported they received no revenue from their programs, and 78% of programs generated less than \$100,000 annually.

Let's lay out the foundation of our healthcare economic environment today for each of the potential payers for MIH-CP services.

Hospitals

Hospitals are at risk for up to 4.5% of their total Medicare payments based on readmissions (3%) and value-based purchasing (VBP) measures (1.5%). All-cause readmissions are measured for patients discharged with MI, heart failure and pneumonia diagnosis related groups (DRGs). In October 2014, COPD and hip and knee replacements were



added to that list of DRGs. The three-year trend for most hospitals has seen increasing readmission penalties. The VBP measures are things such as the clinical process of care, patient outcomes and the patient's experience of care.¹⁰ This year CMS added the metric of Medicare spending per beneficiary (MSPB). This evaluates the average spent by Medicare for the three days preadmission, during the inpatient stay and for 30 days postdischarge. If the MSPB is higher than the state or national average, the hospital may face additional financial penalties. For some hospitals, the financial incentive to reduce high readmission penalties may outweigh the actual payments they receive for the admission.

The motivation to improve patient outcomes, reduce readmissions, improve the patient's experience and reduce the MSPB drives hospitals to fund EMS-based MIH-CP programs. Dawn Zieger, community health project director for Texas' John Peter Smith Health Network, explains why it's funding an MIH program: "JPS saw an opportunity to expand our reach into the community with [Ft. Worth-based EMS-MIH service] MedStar," Zieger says. "MedStar's community health program is able to assess things we will never see in the hospital, such as how people get to primary care. They are able to assess their diet and what's really going on in the home, not necessarily what they tell the doctor. They can extend the reach of the hospital to

meet people where they are and help change behaviors."

With specific regard to the economic model JPS uses to fund MIH-CP activities, Zieger explains: "We've really structured this program to be outcome-focused, so if we really get folks into primary care and avoid those unnecessary emergency department visits, we all share in an outcome pool that's shared between JPS and MedStar."

A further demonstration of the desires of hospitals to find and fund innovative ways to deliver effective postacute care comes from Valley Hospital in Ridgewood, NJ. It launched a mobile integrated healthcare program in August 2014 to provide proactive postdischarge home checkups to patients with cardiopulmonary disease who are at high risk for readmission and either decline or don't qualify for home care services. In the program, a team composed of a paramedic, an EMT and a critical care nurse conducts physical exams of the patient, offers medication education, reinforces discharge instructions, completes a safety survey of the home and confirms the patient has made a follow-up appointment with a physician.¹¹

Integrated Delivery Systems

An IDS is a coordinated group of providers, in some cases including a payer component, who have aligned missions to improve patient outcomes while reducing the cost of care. Many groups have the desire to improve

patient outcomes and right-size utilization. They are often in the unique position of being both a payer and a provider, such as with the University of Pittsburgh Medical Center (UPMC) or the Presbyterian Health System in New Mexico. The unique perspective of an IDS makes it a logical funder of MIH programs. One of the most recognized in the nation is Kaiser Permanente. In the recently published book *Mobile Integrated Healthcare: Approach to Implementation*, Rahul Rastogi, MD, director of operations for continuing care services and quality value management at Kaiser Permanente Northwest, highlighted the reasons it's been partnering with local EMS providers on MIH-CP programs:

"At Kaiser Permanente Northwest, we see expansion of our delivery system in the area of prehospital care, integral to and aligned with our mission to transform care and achieve the Triple Aim," Rastogi says. "We recognized there is a tremendous information gap between hospital and clinic-based care teams, and the scope and skills of the EMS and prehospital care teams. In order to close that gap and build trust, we used the 'plan, do, study, act' methodology. By using a series of PDSAs, we were able to develop much greater understanding, respect and team strength to launch our expansion and to see past the traditional 'Johnny and Roy' perception of EMS providers. By looking for small possibilities and taking small steps that centered on the needs of the patient and

healthcare system, pathways to success became clear, making alignment easier and increasing the chances for others to see successful opportunities and value.”

Home Health

Home health agencies have a unique set of challenges. Due to the focus on preventable readmissions, hospitals refer patients to home health agencies that can ensure a low readmission rate. Those agencies that, in the hospital’s perspective, are not achieving the goals of preventing readmissions may not receive referrals from the hospital. Further, the Medicare Payment Advisory Commission (MedPAC) recently recommended that home health agencies be placed on financial incentives to reduce preventable readmissions, much like the hospitals have been since 2013.¹²

This creates a logical alignment of incentives for home health agencies to partner with EMS-based MIH services to help navigate home health patients in the event they call 9-1-1. J. Daniel Bruce, administrator for Klarus Home Care in Ft. Worth, explains in a recent interview: “Our partnership with EMS allows us to enter into their database all our patients within their service area, so that when our patient calls 9-1-1, the EMS team knows it’s a Klarus home health patient, and they can call the Klarus nurse, whether it’s 3 in the morning or 2 in the afternoon. That nurse and the paramedic can work together to triage that patient in the most effective way to help them.”

Bruce goes on to explain the economic impact home health and partnerships between home health and EMS-based MIH programs can have on healthcare expenditures: “The average cost of a patient going back to the hospital in our area for congestive heart failure is \$9,203. So every time we can partner with EMS or have our nurse go see a patient for CHF and treat those symptoms and keep them in the home, we’ve saved the healthcare system \$9,203.”

Hospice Agencies

Hospice is one of the fastest growing components of our healthcare delivery system due to the recognition that palliative care is an appropriate and humane part of healthcare delivery. It also has a significant impact on healthcare system expenditures. Thirty percent of all Medicare expenditures are attributed to the 5% of beneficiaries that die each year, with a third of that cost occurring in the last month of life, often with little or no impact on the patient’s outcome.¹³ A recent study published in the *Journal of Clinical Oncology* found the average Medicare expenditure for a patient in hospice is \$6,537, while the Medicare expenditures for a patient who disenrolls from hospice total \$30,848.¹⁴

When a patient is enrolled in hospice, the hospice fee (typically a per-diem payment based on the care setting and patient diagnosis) covers all hospice-related care. The hospice provider is at financial risk if the cost of delivering the patient’s services in the hospice plan

of care exceeds the revenue generated from the hospice payment.

The clinical, emotional and economic incentive for home hospice is to help the patient transition to their next care setting peacefully at home. Consequently, ambulance trips to high-cost care settings such emergency departments or inpatient hospital stays for hospice-related episodes of care are not in the best interests of the patient, family or hospice agency.

These challenges also make a logical case for hospice agencies to partner with EMS to fund MIH programs designed to help patients transition to death comfortably.

In *Mobile Integrated Healthcare: Approach to Implementation*, Monica Cushion, director of market development for VITAS Healthcare, writes: “Over the past two years, MedStar and its mobile health paramedics have proven to be a great support for and partner to VITAS hospice staff as we endeavor to care for the community’s most medically complex patients in their own homes. The MedStar/VITAS community collaboration has enabled VITAS-Fort Worth to keep our revocation rates well below the national average and our family satisfaction high. We are grateful for our collaboration with MedStar.”

Summary

Here are some key points to consider when engaging in conversations with potential payers for EMS-based MIH-CP programs.

- The realignment of fiscal incentives within the healthcare system has created an environment that encourages providers and payers to work together to right-size utilization.

- Providers and payers are often unaware of the true value EMS agencies can bring to their patients through proactive and innovative patient navigation services. You need to tell them—or, better yet, show them. You may need to do a small demonstration project with a handful of patients to prove you can make a difference.

- In order to understand the new environment, you need to become well-versed in healthcare metrics, specifically as they relate to the partners to whom you'll be proposing. Be sure you know things like readmission rates and penalties, value-based purchasing penalties, HCAHPS scores, MSPB and other motivating factors you can use to help build the business case for your audience.

For many in EMS, crafting partnerships for payment of services not related to ambulance transport is a new and scary thing. Hopefully the examples provided here from payers paying for MIH services have demonstrated that their perspective is not much different from ours. We are all trying to do the right things for our patients, improve their experience of care and reduce the cost of the healthcare system. ■

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Matt Zavadsky, MS-HSA, EMT, is the public affairs director at MedStar Mobile Healthcare, the exclusive emergency and non-emergency EMS/MIH provider for Fort Worth and 14 other cities in North Texas. Matt has helped guide the implementation of several innovative programs with healthcare partners that have transformed MedStar fully as a MIH provider.

Bringing Telemedicine to Integrated Health Programs

East Baton Rouge EMS connects its program to doctors in the ED

By Jason Busch

Telemedicine isn't a new idea. But for many years, what seemed like a great idea in principle failed to live up to its potential in practice.

"Today we have a convergence of telemedicine and videoconferencing technology, smaller and more powerful mobile devices, widespread wireless broadband mobile data, and an emphasis on healthcare cost reduction, improved quality and patient satisfaction—the Triple Aim," says Curt Bashford, president of General Devices, a New Jersey-based provider of telemedicine and other communications solutions for emergency care. "The evolution of mobile integrated healthcare and community paramedicine also are driving need. Together these factors are allowing us to provide telemedicine tools in an easy-to-use, secure and cost-effective manner for enhancing patient care."

The potential for this realization is evident in the Parish of East Baton Rouge, LA, which launched an ambitious project more than a year ago with the help of General Devices and its e-Bridge Mobile Telemedicine and e-Net Messenger systems. The goal—equipping all of the parish's hospitals, ambulances and EMT/ED staff with mobile telemedicine capabilities—may sound modest, but the results speak to the future of EMS. Patient care, both in and out of the hospital, is being improved.

Head First

East Baton Rouge EMS actually started its foray into telemedicine in 2009, but according to Deputy Shift Supervisor Bryant Hernandez, AS, NREMT-P, it didn't get serious about using it until 2011. East Baton Rouge began with just two ambulances equipped with telemedicine technology and used



Medical director Dan Godbee, MD, receives the first telemedicine transmission when the program started.

Photo credit: General Devices

it exclusively for secure messaging of text, pictures and 12-lead data. The ability to videoconference between the ambulance and hospitals existed, but it was hampered by the 3G technology in place at the time. East Baton Rouge's telemedicine program has only really taken off more recently as it ramped up its Community Integrated Health Program (CIHP), which Hernandez also coordinates.

"The way all this took place was, our mayor took a trip to Israel back in the mid-2000s, and he saw a demonstration of the Israeli military using satellite phones and telemedicine from the front lines, so to speak, sending back information to the hospitals inside Israel. He was really intrigued by that and wanted to bring that kind of technology to Baton Rouge,"

Hernandez explains. “But it wasn’t until the technology got to the point where it is now, as far as 4G and advances in cellular devices and HIPAA-secure telemedicine apps, that we were really able to dive head-first into the telemedicine program.”

East Baton Rouge focuses its CIHP on its high-utilizer group, made up largely of COPD patients, diabetics and alcohol- and drug-abuse patients, says Hernandez. Psych patients also make up a sizeable portion.

“We mainly use it to be able to keep patients from going to the hospital unnecessarily,” Hernandez says. “We’ll contact our medical director Monday through Friday, and on weekends or after hours we’ll contact emergency departments for medical direction. And we’re working out the logistics with hospitals here in Baton Rouge where they’re going to refer us to patients who are high utilizers of their emergency department. Once that takes place, the main telemedicine contact to manage that group will be those particular emergency room physicians. In this way, a hospital that refers us a patient will provide the doctors who will be responsible for coordinating their care with our CIHP by telemedicine. Hopefully that can reduce unnecessary transports.”

Hernandez notes psych patients are the most difficult for the CIHP to accommodate, because there is currently no mechanism in Baton Rouge to permit alternative transport destinations. Until the law changes, EMS is bound to transport psych patients to the ED only, not to psychiatric centers which might be more capable of handling those patients’ unique needs.

But, says Hernandez, where East Baton Rouge EMS has been able to aid psych patients with its CIHP is by helping them adhere to their medications. “As long as they’re on track with their medicines,” he says, “they don’t seem to need the emergency room as much.”

Profound Effect

So far the CIHP, with the addition of telemedicine, has had a profound effect on reducing patient transports among the high-utilizer group. According to data from East Baton Rouge EMS, in a recent six-month period the agency saw

2,000 patients who had multiple 9-1-1 transports. In all during that period, that group accounted for 7,168 calls with 5,514 transports.

But September 2014 offers a perfect snapshot of the impact the CIHP has had. East Baton Rouge EMS started with 14 clients who had a combined 164 calls in the six months pre-CIHP enrollment. Those patients averaged 27 calls a month combined. After enrolling in the CIHP, their total combined calls dropped to just 11, and those patients needed only two transports during the month.

Now East Baton Rouge is on the verge of expanding its CIHP to include CHF patients, says Hernandez, and the sky’s the limit for the program bolstered by its integration of telemedicine. “We’re being pushed by the hospitals to include pediatric asthmatics,” he says, “and they also want us to start doing prison screenings, which is going to be a good realm for our telemedicine. Basically a police officer will go out and make an arrest, and in certain instances that prisoner will have to get clearance from a doctor prior to getting processed at our jail. So we’ll go out and do on-site medical screening for that prisoner. We’ll be able to do that via telemedicine by getting in touch with the emergency room physician and doing whatever needs to be done as far as treatment of that patient before they’re sent to the prison.”

The transition to widespread use of telemedicine throughout its CIHP has been incredibly smooth, adds Hernandez. “Really, the biggest issue we’ve found so far is with lighting and camera motion. We’ve been working with our local university engineering department, and they’re devising ways help us make it better, such as developing a stand that’ll hold the iPad in place, along with some proper lighting for areas where it’s kind of dark and affects the picture quality.”

None of that would be possible without the special partnership East Baton Rouge EMS shares with General Devices. “Mobile telemedicine is not traditional telemedicine on wheels,” notes Bashford. “EMS and mobile health have special needs that General Devices has served for over 25 years.” ■

Jason Busch previously served as associate editor for EMS World.

A Nurse's View of Community Paramedicine

An interview with Anne Robinson-Montera, RN, BSN

By Teresa McCallion, EMT-B

Anne Robinson-Montera, RN, BSN, received her BSN from Bethel College in Newton, KS. She has 17 years of nursing experience in public health, labor and delivery, neonatal, pediatrics, patient safety/quality assurance, and EMS coordination in urban and rural hospitals, clinic and community settings. In her current role as a public health nurse consultant, she works in grant coordination and implementation for various projects in Colorado and across the nation.

Anne is also the co-creator and public health partner for the first national Community Paramedic Pilot Program in rural Eagle, CO. Her job is to assist local and state community paramedic programs through different stages of program development, including state-wide stakeholder engagement, to local agency implementation. She has also been a leader in developing the community paramedic curriculum, serves as the college instructor for the second edition of the curriculum in Colorado, and leads a team of educators and experts in developing the 3.0 version of the community paramedic curriculum.

In May 2011, she received the Colorado Nightingale Luminary Award for Innovation for my work on the Colorado Community Paramedic Program.

Teresa McCallion spoke with Anne about community paramedicine and how EMS and nurses can work together.

Q: How does the Colorado Community Paramedic Program work?

A: The five-year pilot project was launched in 2010 as a collaborative effort between Eagle County's Public Health Department and the Western Eagle County Ambulance District (WECAD) to provide better, more cost-effective access to essential healthcare services. As part of the community paramedic model, patients are referred to emergency medical services (EMS) personnel by their primary care physician to receive services in the home, including hospital discharge follow-up, blood draws, medication reconciliation and wound care. The program, the first of its kind in the state, initially served individuals within the WECAD district, which encompasses 1,100 square



miles in western Eagle County and eastern Garfield County. Since then, the ambulance districts merged, creating Eagle County Paramedic Services and allowing all residents and visitors of Eagle County to receive access to the program. Read more at <http://eagle-countyparamedics.com>.

It made sense for the rural area because many of the most vulnerable patients live miles away from the hospital, where it can be difficult or costly for them to find transportation for regular visits or routine checkups.

The program is required to hold a home care license with the state. We were able to obtain a conditional license, but it's rare that states require that. Part of the difference is that, in Colorado, EMS agencies are licensed at the county level, not state.

There currently is no community paramedic designation in our state laws, so we are preparing to introduce a bill in the next legislative session to make that change. We are continuing to build

partnerships and look forward to full support in the 2015 session.

Q: In your opinion, why is there animosity between nurses and community paramedic programs?

A: In those instances where there is friction, it often comes down to a lack of understanding. Most healthcare professionals in general and nurses in particular don't understand how EMS works in the first place. Five years ago, when I worked in public health, I had to ask, "What's the difference between an EMT (emergency medical technician) and a paramedic?" I did ride-alongs to see how EMS managed patients and learned that both EMTs and paramedics respond to medical and traumatic emergencies in the prehospital setting. However, there is a big difference in amount of education and scope of practice. An EMT is trained to provide basic-level life support. Although it can differ state to state, EMTs can perform CPR, administer glucose, assist with inhalers, perform spinal immobilization, apply splints and take vital signs. Paramedics receive considerably more education in order to provide advanced-life support care, including advanced airway management, endotracheal intubation, IV fluid therapy, surgical airways and administer an array of critical care medications. Both providers are required to maintain their skills through on-going training and drills.

Part of the confusion arises because the naming conventions and scope of

practice are inconsistent throughout the country. EMS grew organically in the 1970's to address specific community needs. A number of professional EMS groups are working to come up with a consistent name. That will help. Other parts of the world, including Canada and Australia, have decided to call all EMS providers paramedics—similar to calling a nurse a nurse. Within that designation, there are variations depending on the level of education and scope of practice.

Q: How do nursing and EMS overcome these misunderstandings and ensure teamwork?

A: When EMS is asking for a seat at the table, nursing is asking if they even need a seat at the table. That's not helpful. On the other hand, EMS is building community paramedic programs within their own silos thinking that if they can make the program work, everyone will be okay with it. It doesn't work that way and the programs inevitably fail.

When initiating a community paramedic program, stakeholder engagement is key. Engage the nurses from the beginning. Meet them face-to-face. That means at the local and state level. Even if the local stakeholders are onboard, a program can still be killed if the state nursing and state hospital administrators are not included early on in the project design.

It may take some time. You have to educate people first. One helpful document is the recently released Guiding

Principle published by the American Nurses Association called *Essential Principles for Utilization of Community Paramedics*. See www.emsworld.com/11499425.

Once you have a nurse champion, you have entrée into the rest of the health-care system and a better understanding of how it works.

Q: You mentioned interdisciplinary team work. How does that work in the community paramedic model?

A: This is probably the biggest challenge for the nursing profession. Everyone is concerned about overlapping roles as if that is a bad thing. There are going to be overlapping roles. Instead of fighting that, we should be working together to achieve an interdisciplinary concept. Some functions need to work with nursing.

When an EMS agency is considering a community paramedic program, the first step must be to conduct a needs assessment or gap analysis to determine if there is an actual need for the program. If so, how would it work in their community? Where are the gaps in service and how would a community paramedic fill those gaps? Approach the nurses with a plan to help provide a recognized need goes a long way to getting their approval. They might even appreciate the help.

The community paramedic programs that have not succeeded are the ones that have taken a cookie-cutter approach. You can't transplant a successful pro-

gram from elsewhere. The community's needs may not be the same.

Give it time to be successful. The overriding consideration must be patient outcomes and patient safety. Don't let anyone push to ramp up a program just to have one.

Q: What are the primary concerns the nursing profession has regarding community paramedics?

A: A significant concern is that community paramedics don't have the appropriate education and training to do this work. While, education programs have been growing in size and number, they need to look similar to national standards for critical care paramedics, flight paramedics and technical paramedics. (See the Board for Critical Care Transport Paramedic Certification at www.bcctpc.org.) At the national level, the Paramedic Foundation is taking the lead. See www.paramedicfoundation.org.

In our program, we learned that this was a top priority and worked to evolve a curriculum that is based in a college or university. Some paramedics don't have a college degree. We determined that this college level course is necessary for the type of critical thinking needed for a community paramedic. Where a paramedic needs to know how to respond to a particular illness or trauma—stabilize, treat and transport the patient—a community paramedic must ensure an appropriate support system once the patient has returned home, review medication, understand

why the patient became ill or injured in the first place and look for ways to prevent future hospitalizations.

In order to get the respect and buy-in from nursing those education pieces need to be in place. Frankly, I think we are going to change the industry. The paramedic course of the future is going to evolve because of community paramedic programs.

Q: Are there other concerns?

A: Patient record-keeping is a challenge. EMS has been limited by system design. Because they are only reimbursed for each transport, they record each transport as a separate patient encounter. When they see a patient five times in one month, there are five separate patient care records. When a hospital or physician sees a patient five times, each visit gets added to a single patient record.

The ultimate goal is patient safety. But it's going to take a change in the reimbursement model for EMS to make significant changes in record keeping.

Q: What about other data collected?

A: The way EMS has tended to collect data is to document performance indicators, such as whether or not aspirin was given to a patient with chest pain, rather than track patient outcomes. In Colorado, we recently published 18 months of patient data on the community paramedics program. It is closer to the type of information that needs to be gathered by all of EMS. For exam-

ple, did community paramedics affect change, including avoiding a hospital readmission? We need to prove that what we are collecting is the right thing so we can standardize it.

Q: What role do physicians play in community paramedic programs?

A: Our push is to ensure that the medical directors who oversee these programs have some experience or background in primary care or public health. Typically, medical directors for an EMS agency are emergency department physicians. Because of the clinical component of their education, the community paramedics will need this added experience from the medical directors. The American College of Emergency Physicians (ACEP) is in support of this effort and recommends co-medical direction. This is going to push the envelope to require some medical directors be more hands-on involved.

Q: Looking back on the last five years of the community paramedics program in Colorado, do you have any advice for others looking to start a similar program?

A: Innovation is hard. It's tough to have people coming at you. My advice is to stay strong. Don't take the easy way out. In the end, the right way will be the standard. The challenge is getting there. ■

Teresa McCallion, EMT-B, previously served as the managing editor of Integrated Healthcare Delivery.

MIH Summit 2015 Report

Lessons learned from a fire-based MIH-CP program

by Michael Gerber, MPH, NRP

On Tuesday, April 28, 2015, more than 200 EMS leaders gathered in Arlington, VA, for EMS World's Mobile Integrated Healthcare Summit, held in conjunction with the National Association of Emergency Medical Technicians' EMS On The Hill Day.

The audience heard from several leaders and innovators discussing topics such as the need for reimbursement reform in EMS, how to fund MIH-CP programs and how to measure program performance.

The highlight of the program came when agency representatives from a diverse group of EMS providers described how they established MIH-CP programs and what lessons they learned along the way. One of those programs included the Dallas Fire-Rescue Department Mobile Community Healthcare Program.

Dallas recently completed the first year of its program, which aims to reduce 9-1-1 calls for EMS services among the most frequent users. According to Dallas Fire-Rescue Assistant Chief Norman Seals, a panelist at the MIH Summit, the program exceeded expectations during its first year.

"We've seen an 83.5% reduction in their 9-1-1 utilization over a year's time," Seals said of the 73 patients enrolled in the program. "We're monitoring them one year post-graduation or removal from the program, and it's sticking. It's working."

Seals shared some lessons learned during the development and implementation of Dallas's program, several of which were reiterated by other speakers throughout the day.

Empower the Team

One of the keys to Dallas' success, Seals says, has been the autonomy given to the group of paramedics chosen to plan,



implement and staff the Mobile Community Healthcare Program (MCHP).

"One of the most critical parts in doing one of these programs is you choose the right people, you train and educate them to the best extent possible, and then you empower them to make it their own program," says Seals.

In Dallas, department leaders chose five paramedics out of many who applied for the program; Seals described them as enthusiastic volunteers, some who nearly cried tears of joy when they were selected to be a part of the new initiative.

"They are invested wholeheartedly in this project and they love what they're doing," says Seals.

Not only did Dallas carefully select who would be a part of the MCHP team, the agency also gave those paramedics several months to learn about healthcare reform, MIH-CP programs, city resources and other critical pieces of putting a program together. The fire department then took its time putting together a program instead of rushing to start.

Learn Case Management

Many of the presenters at the MIH Summit discussed the importance of learning case management in order to find the best solutions for frequent utilizers' problems.

"It's not necessarily what we in the fire service or EMS as a whole do," says Seals, explaining that case management is

in some ways the antithesis of the traditional EMS model of rapid response and rapid transport. Mobile integrated health uses “completely different concepts” than fire departments are used to, adds Seals.

Find Community Partners

To learn the case management process in Dallas, the MCHP team reached out to people with experience who could teach the paramedics and help the team manage its patients. This was just one example of how Dallas Fire-Rescue reached out to community partners during the development and implementation of its program.

“Our network has grown exponentially,” says Seals. “It’s amazing to see the community respond to what we’re doing.”

Other speakers at the summit shared similar stories about discovering organizations in the community that provided services that their patients needed. By continuously attending meetings and discussing their MIH-CP programs, they successfully expanded their networks and found new partners.

“What we found in Dallas is that we have this huge number of resources that are available to help these people. There are hundreds of organizations,” says Seals. “Yet there’s been a huge gulf between [the organizations and the people who need their services]. Somehow these people fall through the cracks. We’re helping to bridge that chasm that lies between the two.”

Active Medical Direction

In addition to connecting with a network of city and community resources, the paramedics in Dallas also benefited from the support and advice of a medical director who was—and is—intensely involved in the program. Marshal Isaacs, MD, FACEP, has been actively advising the team, helping them create plans for patients and helping Seals communicate with the rest of the medical community.

“I had to learn a new language. [Hospital administrators] speak a different language than firefighters,” says Seals, crediting Isaacs with teaching him how to talk to hospital leaders,

advising the audience that the medical director should be “by your side every step of the way guiding and directing what you’re trying to do.”

Involve the Legal Team Early

Although the Dallas MCHP team has received strong support from city leaders, Seals recognized the importance of transitioning from a program subsidized by the fire department’s budget to one that is sustainable.

“Very early on, [the city manager] said ‘It sounds like a very good idea, we’ll fund it for a little while, but’—and y’all know what comes next—‘you’d better make it pay for itself as quickly as possible,’” says Seals.

Part of that process has involved negotiating contracts with hospitals—Seals said the department is close to inking its first deal. “Half a dozen hospitals right now are begging for a draft contract. They want to put money in my hand,” he said.

But Seals said the “biggest hurdle to date” has been educating the city attorneys. He advised others to bring their legal teams in during the early stages of planning, both to get their counsel on issues and to give them time to learn the aspects of healthcare law they may not be familiar with.

“Municipal attorneys are not specialists,” he says, “so they’re going to have to wrap their head around a whole new set of requirements.”

Despite some of the obstacles they’ve faced, Seals was optimistic about the future of the Dallas program. “I could easily see in a few years’ time having 40 or 50 paramedics in our program and a whole command structure,” he says, adding that the program presented an opportunity to make a difference in people’s lives unlike anything he’d done in the fire department before. “I’ve been doing this job for nearly 30 years and this is by far the coolest thing I’ve ever been involved in.” ■

Michael Gerber, MPH, NRP, is an instructor, author and consultant in Washington, DC. He is also a paramedic with the Bethesda-Chevy Chase Rescue Squad and previously worked as an EMS supervisor for the Alexandria (VA) Fire Department.

How New Hanover Regional EMS Built a CP Program

Facing big changes from the Affordable Care Act, New Hanover Regional EMS worked to develop a comprehensive CP program

By Jason Busch

It takes effort to start a community paramedic program, David Glendenning, EMT-P, EMS education coordinator for New Hanover Regional EMS (NC), said in a webinar titled “Hospital System and EMS Collaboration: Driving Population Health Management Through Community Paramedic Programs,” which was presented by HIMSS and HealthcareITNews. But the effort is worth it, especially since the Affordable Care Act has changed the way hospitals and EMS agencies will be reimbursed.

Glendenning walked his audience through the process of courting stakeholders, hiring and training community paramedics and finding funding, using New Hanover Regional EMS as an example. New Hanover is a hospital-based system, but Glendenning was quick to point out any type of EMS agency can build a CP program. Prior to starting its CP program, 29% of the 9-1-1 requests in New Hanover County were non-emergency. The top 10 users of its 9-1-1 system accounted for 702 EMS responses in 2012. ED turnaround times were increasing. Developing a CP



David Glendenning, EMS education coordinator at New Hanover Regional Medical Center, and Sarah Rivenbark, NHRMC community paramedic.

program to alleviate all of these problems made sense.

New Hanover developed its program based on its community needs, namely:

- Reducing unnecessary 9-1-1 utilization and ED visits by serving as a trained navigator of community resources.
- Improving hospital readmission rates by caring for high-risk patients.
- Partnering in healthcare system integration and care coordination by working in cooperation with other stakeholders/medical providers.

Next came funding. “We spent lots of hours working with the hospital administration, including the CEO,

vice president and leadership teams, showing where we could make a positive impact out in the community,” Glendenning explained. “They were pretty much sold on the idea and while we looked at ways to find creative funding inside the hospital, at the same time we were looking at grant funding and other outside funding opportunities.” New Hanover applied for and received a grant from the Duke Endowment to cover two full-time and one half-time community paramedics. Training and salary for two years was included in the grant, but not equipment costs.

Once funding for the CP program

was in place, New Hanover implemented a three-part interview process for applicants. The county has 109 paramedics, 12 of whom applied for a community paramedic position and seven of whom received interviews. Applicants were evaluated by a multidisciplinary panel of evaluators because, as Glendenning explained, “We took all this time to build bridges with partners and stakeholders, why wouldn’t we want to include them in the interview process?”

The three providers selected for the new community paramedic positions averaged 21 years of EMS experience, 15 years of which was spent as paramedics on average. Two were field training officers and one was a special operations paramedic.

The community paramedics modeled their training on programs already in place in Minnesota, with 308 total hours of didactic and clinical training.

Glendenning said some of the lessons New Hanover learned as part of its process included:

- Community paramedics have great opportunities for impact under existing ALS scope where other levels/agencies may not.
- Start small and collaborate with other stakeholders.
- These concepts can be applied in any county/EMS setting—it’s all about collaboration and getting together with the hospitals in your area.
- Go with the brand name that the public, healthcare providers and payers can already understand—“It’s why

we’ve stuck with community paramedicine under the mobile integrated healthcare umbrella,” he says.

And he offered a list of partners agencies should plan to collaborate with when putting together a community paramedicine program.

- Hospitals—including nurse triage, case managers, social workers, home care, behavioral health, transitionists/telehealth and ED leadership. Focus on readmission reduction strategies, decreasing ED bed hours for “familiar faces” and population health management.

- ACOs—focus on proactive services/preventative care to help patients achieve wellness; provide the tools, materials and outreach that help patients better manage their chronic diseases; help patients navigate care at the right level, at the right time, in the right setting; and improve the quality and costs of care

- Local government agencies—CPs can provide specialty care resources for seniors and children, as well as resources for community needs, such as immunizations, wellness checks and disaster preparedness.

- Hospice—especially filling home visit gaps

- Behavioral services community—CPs can provide medical screenings and alternative transportation destinations, monthly injections in place of daily oral medications, and can also make referrals to these services.

- Senior Care—supporting indepen-

dent living through home care and providing preventative screenings/services to include field labs and fall clearances.

- Primary care/specialty physicians—CPs have skills and procedures within the paramedic scope to help keep patients out of the ED, and can provide medical screenings/lab services (i-STAT testing), medication reconciliation and procedure discharge follow-ups.

- Non-profits and “familiar places”—CPs can offer mobile preventative healthcare with a CP and physician, as well as track the local homeless and transient patient population.

Updates

Since the webinar was broadcast, New Hanover has added two more community paramedics funded from a second Duke Endowment Grant that supports a new Transition of Care Program. Now, all five of the CPs work directly with a pharmacist and two case managers that collaborate with high-risk discharge patients.

The EMS Field Division now has a direct electronic referral system to the CPs for any patient who may meet criteria for a consult. It has been very successful so far in helping to direct appropriate 9-1-1 use.

The CHF 30-day readmission rate was held to 9.3% (vs 22% national average) during a pilot phase with the hospital. ■

Jason Busch previously served as associate editor for EMS World.

Health Care Innovation Grant Recipients Making Progress

Agencies seeing results already from their grant programs

By Jason Busch

This past summer, the second round of Health Care Innovation Awards was distributed by the Centers for Medicare & Medicaid Services (CMS). These are funding grants to applicants with compelling new ideas to deliver better health, improved care and lower costs to people enrolled in Medicare, Medicaid and the Children's Health Insurance Program (CHIP), particularly those with the highest healthcare needs. Following is an update on two of these recent grantees, the Mesa (AZ) Fire and Medical Department and the Mount Sinai Medical Center (NY).

City of Mesa Fire and Medical Department

- **Project Title:** "Community Care Response Initiative"

- **Geographic Reach:** Arizona

- **Funding Amount:** \$12,515,727.

The City of Mesa Fire and Medical Department received an award to test a model that offers comprehensive delivery systems and addresses the impact of chronic disease, falls prevention, self-management skills and medication adherence.

The model aims to reduce high-risk



What's In A Name?

The City of Mesa Fire and Medical Department is so serious about providing quality EMS care to its residents, the department changed its name to include medical. "We got so much praise for doing that it was incredible," Beck told an overflow crowd at the 2014 Firehouse World conference in San Diego. "Eighty percent of what we do in Mesa are EMS runs. Our city councilors were pleased that we finally accepted it." Read more at EMSWorld.com/11315858.

patient returns post-discharge, and the treatment and referral of low-acuity patients from the use of the 9-1-1 systems and the emergency department. The program provides low-acuity patients with on-site evaluation and treatment; and/or refers patients to more appropriate services, which reduces duplication efforts between emergency rooms and private physician providers. High-risk patients receive

follow-up evaluations after discharge to reduce the incidence of readmission.

Disease preventative services are provided, including immunizations, falls prevention, home safety inspections and education on the safe use of prescribed medications. The Community Care Response Initiative consists of four units operating 24/7 throughout the Mesa area. Also provided is a physician extender unit—a modified ambu-

lance that takes the team to perform low-acuity services or post-discharge hospital follow-up. The services provided by this unit are similar to services provided by an urgent care: in-depth patient evaluations, behavioral health evaluations, suturing, minor trauma evaluations, cardiac diagnostic capabilities, pain management, prescription services, immunizations, health education, referral services, primary care consultations, sepsis evaluations, post-discharge follow-ups and minor diagnostic testing.

According to Gary Smith, MD, MMM, FAAFP, “Mesa Fire and Medical Department is excited to report that we have experienced great success in integrating healthcare services with local partners, receiving facilities and healthcare systems.

“In 2014 we were able to exceed goals of insurance monetary savings, as we diverted 54% of ambulance transports to the emergency department among our 9-1-1 low-acuity patients who were evaluated by Community Care Units,” he continues. “These units are staffed with a captain/firefighter/paramedic and nurse practitioner, and Community Care Specialty Units that comprise of a captain/firefighter/paramedic and behavioral health specialist. These patients received an evaluation/assessment, treatment, referral to their primary care provider or other specialists, and/or alternative destination transport where definitive care was provided.”

While Smith notes Mesa is pres-

ently restricted by CMS grant guidelines from sharing additional numbers they’re currently collecting, the department remains excited about the successes it is experiencing and they believe they will exceed the goals they’ve set for themselves.

Icahn School of Medicine at Mount Sinai

- **Project Title: “Bundled Payment for Mobile Acute Care Team Services”**
- **Geographic Reach: New York**
- **Funding Amount: \$9,619,517.**

The Icahn School of Medicine at Mount Sinai project is testing Mobile Acute Care Team (MACT) Services, which utilize the expertise of multiple providers and services already in existence in most parts of the United States but seek to 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 treats patients requiring hospital admission for selected conditions at home. The core MACT team involves physicians, nurse practitioners, registered nurses, social work, community paramedics, care coaches, physical therapy, occupational therapy and speech therapy, and home health aides. The team provides 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 ensures a safe transition back to community providers, and provides referrals to appropriate services.

Kevin Munjal, MD, MPH, assistant professor of emergency medicine and assistant professor of Population Health Science and Policy at Mount Sinai Hospital, notes while the MACT program utilizes the expertise of multiple providers, including physicians, nurses, social workers, paramedics and others, the partnership with paramedics providing urgent, telemedicine-enhanced assessments and coordinated care with the MACT physician is critical to the

The services provided by this unit are similar to services provided by an urgent care.

success of the program to avoid unnecessary hospitalizations and emergency room visits during the MACT episode.

“We are excited about the paramedicine aspect of the program and have begun training both our paramedics as well as our physicians, who are specialists in internal medicine and/or geriatrics, for this new care model,” Munjal says. “The program is envisioned to work as follows: A nurse and physician will be available 24/7

Yale University

A third grantee during the second round, Yale University, is also implementing MIH practices as part of its grant program, although an update on their progress was not available at press. Following is a summary of their grant program.

- **Project Title: "Paramedic Referrals for Increased Independence and Decreased Disability in the Elderly (PRIDE)"**
- **Geographic Reach: Connecticut**
- **Estimated Funding Amount: \$7,159,977.**

Yale University is testing a model targeting elders and others with impaired mobility who contact 9-1-1 for falls or lift assists but choose to remain at home.

EMS providers are trained to perform enhanced evaluations during the initial 9-1-1 call. Paramedics are trained to make follow-up visits to perform detailed risk assessments, home medication reviews, and referrals to primary care doctors and skilled home services. The expanded paramedic workforce with advanced training is a community-based resource that will improve care coordination and health outcomes for elders staying in their homes. Pilot studies have shown that similar interventions decrease repeat ambulance transports, reduce inpatient hospitalizations and lower health care costs.

Because lift assist patients share many risk factors, such as advanced age, cognitive and physical disability, limited mobility, social isolation, and polypharmacy, with patients who fall, the program's community interventions are modeled after evidence-based fall prevention strategies.

to address any concerns the patient has over the phone. Experience with the hospital-at-home model elsewhere has shown that some proportion of these calls will not be resolved over the phone, and cannot safely wait for when a nurse practitioner, physician or nurse is available for an in-home visit. The on-call physician will activate the paramedic response when he or she decides the patient requires

urgent attention. Paramedics will visit the patient at home and operate under NYC regional ALS protocols but without automatically transporting to the hospital.

"With the help of eBridge, a video conferencing and telemedicine technology [from General Devices], paramedics will participate in real-time consultation with the MACT physician in order to make a collective and informed

decision as to the appropriate course of action," Munjal continues. "In this model, the paramedic will take medical direction from the MACT physician to administer medications and treatments in the paramedic's existing scope of practice to help with patient symptoms and disease. The physician and patient will engage in shared decision making regarding transportation to the hospital. Patients will retain their rights to be transported to the hospital if they so desire or will document their preference to stay home in writing."

Munjal says patients, caregivers and the general community have been very supportive of the overall MACT initiative. Patients seen in the emergency department are evaluated for inpatient admission through the usual pathways, and a patient will be considered for the MACT program only after the decision to admit has been made. He explains cases will be reviewed to identify patients who can be cared for safely at home. The following diagnoses will be considered: Community-acquired pneumonia; urinary tract infection; congestive heart failure; diabetes; chronic obstructive lung disease; cellulitis; venous thromboembolism; and asthma. ■

Jason Busch previously served as associate editor for EMS World.

Lessons From Down Under

Community paramedics in Western Australia fill a unique role

By Jason Busch

The U.S. is home to just about every type of EMS system imaginable; still, none are quite like St. John Ambulance in Western Australia (SJAWA).

St. John Ambulance in Western Australia covers the largest area of any single ambulance service in the world—2,525,500 square kilometers, a third of the total landmass of Australia. That's roughly 975,000 square miles, or almost six times the size of California. With about 2.4 million people, the population density of Western Australia is less than one person per square kilometer. That makes for some long and lonely ambulance rides, and it also necessitates some creative EMS work to address the unique challenges of providing statewide ambulance service.

St. John Ambulance has 160 locations operating throughout the rural areas of Western Australia, serviced by more than 3,500 dedicated volunteer EMS providers and 70 career paramedics. These providers travel in excess of 1.6 million kilometers within the country area annually. They transported more than 54,000 people in 2011–12, an increase of 23.8% over the previous year. It makes for an interesting case study in community paramedicine.

St. John Ambulance first trialed a community paramedic initiative in 2008. Following the successful trial, nine com-



SJAWA community paramedic Nic Chadbourne (left) working alongside a volunteer EMS provider in Meekatharra.

munity paramedics were appointed in early 2011. More have been added incrementally in the ensuing years, and SJAWA expects to see a total of 21 CPs operating through the Western Australia region by mid-2013.

Announcing the addition of two new community paramedics in March 2013, SJAWA General Manager of Country Ambulance Services Julian Smith said since the community paramedic role was introduced for regional Western Australia, local sub-centers have received more support, particularly with volunteer recruitment and training.

“The underlying role of the community paramedic is to provide support and mentoring for local sub-centers,” Smith said. “However, the full scope of the role varies according to the needs of the area in which they are based. With remote areas in particular, community paramedics will work closely with the WA Country Health Service (WACHS) to help achieve whole-of-community health goals.”

According to SJAWA’s 2011–12 annual report, with volunteer ambulance officers in the rural regions of Western Australia putting in more than “3 million hours over the course of the year to ensure local communities have received vital ambulance services,” its community paramedics are “fundamental in assisting us to improve ambulance services for communities living in regional and remote Western Australia.”

A Council of Ambulance Authorities (CAA) report from 2009 also described the role of SJAWA’s community paramedics as:

- Providing support in the local community to maximize the number of volunteer ambulance officers.
- Responding to ambulance calls as necessary as a complement to the volunteer operations.
- Providing an extended scope of practice to assist the community and Department of Health in areas where the provision of such services is not viable through the traditional health model.

The responsibilities of the SJAWA community paramedic are generally location-specific. Dependent upon health department resources in each location, the scope of practice could be modified to fill gaps at particular locations, including:

- Assisting local medical facilities in fulfilling community demand for services as required by the health department on a location-by-location basis.



SJAWA community paramedic Nic Chadbourne (left) with a volunteer EMS provider, Rueben, in Meekatharra.

- Assisting hospital staff at particular times or with specific skills in the absence of other appropriate medical staff.
- Providing health “cover” in a location when other health resources, e.g. local doctors and nurses, are unavailable.

Clearly one lesson U.S. EMS systems employing community paramedics can take from SJAWA’s model is that community paramedics can act effectively as a patient’s primary caregiver when no other is available. Additionally, community paramedics are ideal mentors for volunteer providers because their scope of care necessitates a broad knowledge of individual patients’ backgrounds and medical histories. Particularly in a super-rural setting such as the western United States, community paramedics who regularly see patients without easy access to primary physicians can be good teachers for volunteers who don’t get to respond to calls with the frequency of providers in more urban settings, allowing the volunteers to gain experience with a wider variety of medical conditions. ■

Jason Busch previously served as associate editor for EMS World.