



OPERATIONAL SAFETY

# Innovating emergency response

Harnessing mobile integrated health in EMS, fire and police, by Dan O'Connell, General Manager of Henry Schein Medical's EMS business

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**E**mergency response teams continue to evolve to help meet the ever-changing needs of communities, in particular through mobile integrated health (MIH). MIH is a coordinated, patient-centred, evidence-based, holistic model of care using collaborative, interdisciplinary teams to serve patient needs at the most appropriate level of care at a safe location of their convenience.

This is an exciting development in health care because it merges traditional and non-traditional care models. And there are many positive outcomes that MIH can bring for patients, providers, and communities across the country.

### Understanding MIH

MIH is a rapidly evolving care-delivery model. It includes services such as providing telephone advice to 911 callers instead of resource dispatch; providing community paramedicine care, chronic disease management, preventive care, or post discharge follow-up visits. It focuses on navigating the patient to the most appropriate social and/or medical resource. While this may mean ambulance transport to the hospital, it often includes transport or referral to urgent cares, mental health resources, or rehabilitation facilities.

The goal of MIH is to deliver high-quality and cost-effective out-of-hospital care in an effort to reduce unnecessary emergency department visits and unplanned hospitalisations. In rural areas, many times community paramedics serve as primary care physician extenders, providing health care services to medically complex patients.

### Benefits

The United States health care system continues to be impacted by high costs. According to a study from the National Library of Medicine, wasteful medical care spending is at least a \$600-billion-per-year issue — more than \$1,800 per person, per year.

Because of this, there has been a shift towards value-based care and reimbursement. That is where MIH comes in. One of the benefits of MIH is cost-effectiveness, and studies have shown that MIH and community paramedicine programs can save thousands of dollars per year, per patient, by helping individuals lead healthier lives. A study in Massachusetts, for example, showed that its community paramedicine model saved more than \$1,900 per case and nearly \$6 million in a year.

Not only can MIH contribute to reduced costs, but it can also help:

**Increase access to care for patients** – Care can be brought to patients who otherwise may not have easy access to a medical facility or doctor’s office.

**Lower hospital readmissions** – Preventive services can be provided inside the home.

**Enhance chronic disease management** – Education and resources can be provided to patients in a comfortable setting and chronic diseases can be monitored using remote patient monitoring tools.

**Strengthen community engagement and trust** – First responders and patients are building relationships that are maintained through ongoing conversations.

### The role of ambulance companies, EMS, fire and police

As MIH programs continue to be rolled out across ambulance and transport companies, and EMS as a whole, the collaboration and integration of EMS professionals, police, and fire will be instrumental. MIH enables a holistic approach to community health, which reinforces the need for these groups to work together more than they have before.

From an apparatus standpoint this can mean coordinating the use of vehicles and equipment when responding to various situations. ▶

EMS may require police assistance to ensure a safe environment when arriving at a high-risk call, as mentioned earlier. Also, fire departments often have advanced equipment that EMS agencies can leverage such as fire department vehicles for MIH critical care scenarios.

From a safety standpoint, MIH initiatives should include risk assessment strategies to mitigate potential hazards during home visits. By sharing knowledge between EMS, police, and fire departments, safety can be kept top of mind for patients and responders.

Additionally, co-responder models where community paramedics respond with police can provide more effective management of mental health crises. This can reduce/enhance call burdens for police, while optimising collaboration between the agencies.

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**Emerging technologies  
 and advancements**

The emergence of new technologies has helped advance MIH. Some of the key technologies in the world of MIH include:

**Telemedicine:** EMS professionals have the ability to connect patients with providers in real-time, helping to facilitate timely medical interventions.



**Remote Patient Monitoring(RPM):** Agencies equipped with RPM devices can track a patient's condition and intervene if necessary.

**Wearable Devices:** Smartwatches and fitness trackers, for example, can help agencies track vital signs, monitor activity levels, and detect potential health issues.

**Mobile Diagnostic Tools:** EMS professionals equipped with handheld devices such as portable ultrasounds, ECG monitors, and point-of-care lab analysers are able to perform rapid diagnostic tests and perform appropriate treatment measures in real-time without any delay.

Incorporating these technologies into MIH programs can help EMS professionals deliver more efficient, effective care. It is important to stay abreast of technological advancements, and agencies can lean on partners for access to, and guidance on, these advancements. Agencies embracing technology as part of new care delivery models can position themselves at the forefront of MIH.

In addition to these technologies, having the latest equipment and supplies also plays a role in the quality of care for patients. As mentioned

above, MIH programs aiming for the most innovative, highest quality care, may leverage tools such as portable ultrasounds like the GE HealthCare Vscan Air™, and point-of-care lab products like the Abbott i-STAT 1 handheld blood analyser and Piccolo Xpress portable diagnostic analyser.



New equipment could mean new growth for the team, and working with trusted partners is paramount. For example, Henry Schein Medical EMS works with fire, EMS, and ambulance agencies to understand each of their unique needs in order to provide the appropriate resources and equipment for their MIH programs.

As you focus on quality patient care and partnerships for your agency, here are questions to ask:

to explore strategic partnerships that are going to help achieve quality patient intervention.

Ultimately, there are nuances to providing care outside of traditional emergency settings, and by working with a knowledgeable partner, EMS agencies can receive valuable insights and tailored solutions that align with their goals.

### MIH models

MIH models encompass various approaches. One common type of MIH model we have seen amongst our customers is community paramedicine. This is where EMS providers, including emergency medical technicians (EMTs) and paramedics, operate in expanded roles to increase access to primary care and facilitate appropriate use of emergency care resources.

Community paramedicine provides services to individuals with chronic conditions who face challenging social determinants of health such as living in rural areas or having trouble getting to a provider's office.

Other models include mobile health clinics, hospital-at-home, and telemedicine. These are just a few examples of MIH models, and many include elements of each to deliver comprehensive care to patients.

### Implementing MIH

To establish an MIH program, agencies can start by leveraging resources such as the National Association of Mobile Integrated Health Providers (NAMIHP), which provides best practices in the industry of MIH, education, vendor relationships, conferences, and other tools. This serves as a valuable hub and nationwide network that can support agencies in navigating the complexities of MIH.

Additionally, assessing the community's health care needs and its existing resources can help agencies identify gaps in care and health issues amongst the community. This will inform the development of the program.

Establishing partnerships with local community health centres and other stakeholders will also help develop a coordinated approach and enhance shared resources. Training and education for agency personnel, implementing technology solutions, and protocols and guidelines to support MIH are also key elements teams will need to address.

Agencies can also rely on their distribution partner to assist throughout the process to provide access to specialised equipment and technical support.

### The future of MIH

The future of MIH is promising. With ongoing advances in the field, MIH can continue to evolve to meet the ever-changing needs of patients and communities. While MIH has already made significant strides in improving health care delivery, there are still opportunities to be uncovered. It is imperative that agencies remain proactive in finding ways to implement MIH practices, leverage innovative approaches, and utilise specialised equipment and technologies.

Our team is committed to helping our customers navigate the intricacies of MIH, community paramedicine, and the differences each model may bring. We understand that it will continue to evolve. But by embracing MIH and continuing to learn more about what it can do for patients and providers, fire, EMS, and police agencies can enhance their capabilities and drive positive change in health care delivery. ■



**Dan O'Connell**

1. Do your technology partners have experience in nonacute spaces, like surgery centres and integrated care networks?
2. Is your team ready to navigate challenges in MIH equipment supply chain, logistics and low unit of measure?
3. Have you researched what is needed to maintain cold chain, and laboratory testing compliance?



**HENRY SCHEIN  
MEDICAL EMS WORKS  
WITH FIRE, EMS AND  
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TO UNDERSTAND EACH  
OF THEIR UNIQUE NEEDS  
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THE APPROPRIATE  
RESOURCES.** ”

Henry Schein Medical EMS has invested time and resources to check boxes 1-3. If an agency hasn't evaluated its technology and equipment resources, it could be time