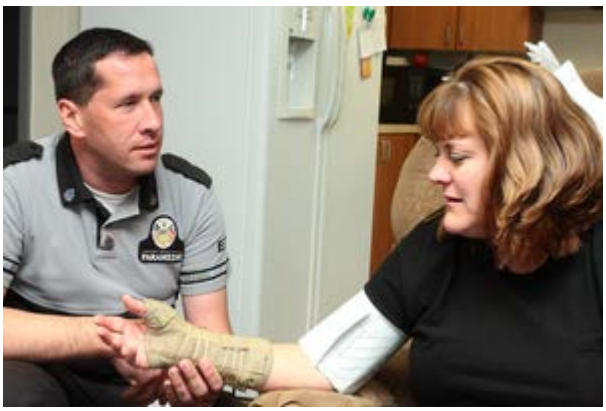
EMSWORLD

Is Community Paramedicine the Next Step for EMS?

by **Scott Tomek, MA, EMT-P**

October 27, 2011

The CP program has gained significant support in rural areas



Healthcare continues to be a significant point of discussion in Washington, D.C. and state capitols around the country. Emergency medical services, which for the last decade has been a technologically driven field, has now begun to look at how it fits, or better yet integrates into the existing and changing healthcare landscape. Over the last 10+ years we have seen EMS expand in the area of critical care transport (CCT), industrial healthcare—often in remote or isolated areas—and disaster response. More recently, some EMS systems have begun to look at the feasibility and cost savings of "community paramedics."

Community Paramedics

When community paramedics (CP) are first mentioned, many citizens say they already have paramedics where they live. So, what is a community paramedic? A CP is a paramedic or an EMT who already operates in their service area and/or community, and who has taken advanced didactic and clinical education in a number of areas enabling them to identify the healthcare needs in underserved communities such as the homeless, elderly or those living in rural or remote areas.These areas can include:

- Health and wellness
- Health screening assessments
- Health teaching
- Administering immunizations

- Monitoring of diabetic patients
- Monitoring of post-MI patients
- Advanced mental health issues and referral
- Wound care
- Safety programs.

The CP will work with other healthcare providers as a team to provide health teaching and disease management, and monitoring of the diabetic, congestive heart patient (CHF) or post-myocardial infarction (MI) patient in their home[1]. Other areas of involvement would be determined or identified by the needs of the community and healthcare organizations/providers within the community.

A CP program in one county might address significantly different healthcare needs than a program in another county based upon demographics, social-economic issues or distance to medical facilities. For example, the CP might staff a fast-response unit (FRU) working with a physician in a clinic, but be available to respond with basic life support units in a rural county to bring advanced life support to areas that otherwise could not support ALS in their community. In a suburban area, the CP might be trained in advanced procedures and respond on only critical calls while performing their regular CP duties between those calls. For example, the CP might respond in a FRU to a cardiac arrest and two weeks later when the patient is discharged perform an in-home follow-up.

The options and potential use of CPs are limited only by the creativity of the EMS provider, healthcare organizations and other healthcare providers in a community. The biggest misconception is that CPs are designed to replace other healthcare providers in a community. They are not! The role of the CP is to supplement and/or enhance the current organizations and providers in a community, in cases such as when a severe influenza outbreak sickens a significant number of home healthcare providers in a rural community; following a natural disaster when health screenings, immunizations, etc. are needed; and when a rural county is exploring the feasibility of providing ALS to an aging population in their community.

Existing Programs

The CP program is based off of similar existing and highly successful programs in both the U.S. and around the world. In the U.S., Alaska has utilized community health aides (CHA)[2] since the 1950s in response to a number of healthcare concerns, including the tuberculosis epidemic, rural trauma and high infant death rates. Nova Scotia's CP program centered on remote (small population) and isolated islands requiring 50 minutes of travel to the mainland via two ferries. The focus has been on diabetic patient management and in-home wound care. The program has resulted in a 23% decrease in emergency department visits by those living on the island[3] with a substantial cost savings to both

patient and provider. Australia's Rural and Remote Paramedic (RRP) program looks at the RRP as an integral part of their rural and remote primary healthcare program which consists of physicians, nurses and indigenous health workers[4].

The commonalities of these programs are first, they focus on primary healthcare with the ability of emergency response. Second, they are all remote and for the most part rural. For example, Alaska's population is 1.2 persons per square mile (PPSM)[5], Australia's is 0.55 PPSM[6], and Nova Scotia's Long and Brier Islands year round population of 1,240, which does swell with summer tourism[3]. These areas resemble a significant part of the U.S. which is close to 80% rural and/or remote[5] with many areas populations swelling seasonally with tourism. Roughly 9% of U.S. physicians practice in rural areas, which have 20% of the nation's population[7]. It is easy to see how CPs can play a significant role in supplementing and enhancing existing healthcare organizations/providers in communities throughout the U.S.

Education

The CP program is typically 115 to 146 hours in length, consisting of didactic and clinical hours[8] and is a certificate program. Since these programs are typically implemented for a specific area or community, the core courses or education will look the same, but following that, each program will add courses or education to address the specific needs of the community.[9] The benefit of this is that as a community's needs change, the CP can adapt to those changes by adding additional education. As with all fields, continuing education will play a role in maintaining knowledge, skills and addressing specific needs of the community.

The Future

The CP program has gained significant support in rural areas, and their utilization in metropolitan areas under other names, such as Washington, D.C.'s EMS "Street Calls" progra,[10] have been slowly increasing across the U.S. The three largest hurdles are delivery of the certificate program to rural providers; reimbursement for services provided; and a realization by healthcare organizations/providers that CPs are there to supplement and enhance healthcare delivery in a community, not to replace current organizations or providers. The CP, as part of a community's overall EMS system, has been—and will continue to be—ready to respond when the community calls on them.

The author would like to thank Brian Lacroix, president, AllinaTransportation; Gary Wingrove, government affairs, Mayo Clinic; Kai Hjermst, director CP program, Hennepin Technical College;

Dr. Mike Wilcox, medical director CP program, Hennepin Technical College, for their time and insight in preparing this article.

References

1. Community Paramedic **http://156.98.150.11/divs/hpsc/hep/transform/dec10documents/communityparamedic.pdf**

2. Alaska's Community Health Aide program **http://www.akchap.org/GeneralInfo.cfm**

3. Nova Scotia's Community Paramedics **http://www.gov.ns.ca/health/ehs/documents/Community%20Paramedicine%20Article.pdf**

4. Australia's Rural and Remote Paramedic program **http://www.micrrh.jcu.edu.au/News-Events/qas-launch-nov2006.html**

5. **http://quickfacts.census.gov/qfd/states/02000.html**

6. **http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/3218.0?OpenDocument**

7. **http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071163**

8. **http://communityparamedic.org/Colleges.aspx**

9. **http://www.hennepintech.edu/program/awards/394**

10. **http://www.washingtonpost.com/wp-dyn/content/article/2008/03/28/AR2008032803285.html**

Scott Tomek, MA, EMT-P, has been a paramedic for 25 years, 23 with Lakeview Hospital EMS in Stillwater, MN. He is a faculty member with the Century College paramedic program, and a curriculum development specialist.

Journal of Emergency Primary Health Care
www.jephc.com

ISSN 1447-4999

EDITORIAL

International Roundtable on Community Paramedicine

Gary Wingrove EMT-P
Rochester, Minnesota, USA

In January 2005 a single phone call from Halifax to Lincoln changed the world history of Paramedicine. At the time, neither Mike McKeage (the call maker from Nova Scotia) nor Dennis Berens (the call receiver from Nebraska) knew they were doing anything special. That first call led to a conference call, which led to more conference calls involving more nations, which led to the first gathering in July 2005 and the creation an informal organization called the International Roundtable on Community Paramedicine and Rural Healthcare Delivery (IRCP).

IRCP will conduct its seventh annual meeting in Sydney in October 2011, linked to the Paramedics Australasia conference and combined with the Council of Ambulance Authorities Rural and Remote Symposium. What began as a gathering of delegates from Australia, Canada, Scotland and the United States has also seen in subsequent years delegates from England, Israel, New Zealand, Qatar and the United Arab Emerates, and this year will include delegates from Germany and Switzerland.

There have been many changes around the world since that 2005 phone call. The EMS Chiefs of Canada[1] has joined the United States (US)[2] and the United Kingdom (UK)[3] in producing their vision of the future of EMS, a vision with Community Paramedics as a focal point. Community Paramedicine has expanded into the urban areas of many of the countries that had established its roots in rural and remote areas, which resulted in IRCP dropping "and Rural Healthcare Delivery" from its established name. Out of necessity IRCP has also adopted a naming convention for those formerly known as EMS workers so that we have a common language and understand each other when meeting over the internet, by phone or in person.[i]

Contemporary Community Paramedic programs were established to fill identified healthcare gaps, primarily in rural areas. Paramedic Services are really good at filling gaps. What we're not good at is recognizing that we've done something special, and then sharing our learning and experience with others. This is the particular niche that IRCP fills.

---

i. IRCP has established four levels of EMS providers, Primary Care Paramedics (PCP), Intermediate Care Paramedics (ICP), Advanced Care Paramedics (ACP) and Critical Care Paramedics (CCP). It also adopted Community Paramedic (CP) for those PCPs, ICPs, ACPs, and CCPs with specific CP training, and Paramedic Service as the term for agencies employing those providers.

IRCP is not incorporated; has no members or board of directors; has no telephone number, email address or postal address. IRCP does its work via those that choose to participate. That structure, while unfamiliar in the healthcare sector, has served IRCP very well. IRCP's mission and vision are to create a forum for the free exchange of information among participants and to foster the growth and collaboration of gap filling models.

Since the establishment of IRCP we have seen some really creative models for filling gaps emerge and we are starting to get some data about how these programs make a difference. The first Nova Scotia model of Community Paramedics was started nearly 10 years ago to meet the healthcare needs of a populated isolated island in the Atlantic Ocean. A five year review shows a reduction in ambulance transports to the closest hospital on the mainland of 40%. Early results of Nova Scotia's second program, targeted to the needs of long term care residents, shows the result of a decrease of ambulance transports for non-urgent patients of 68% (340 of the first 500 patients encountered). Nova Scotia's third model is slated to begin in July 2011 and involves paramedics staffing rural emergency rooms, supplemented by the oversight of an on-call physician.

Saskatchewan piloted a "health bus" staffed with a combination of nurse practitioners and paramedics that offers free clinic services throughout the city of Saskatoon. The pilot program, conducted in a make-shift motor home, was so successful that the Province is making it permanent and a brand new bus customized for this use is in production. We have a similar program in my home state of Minnesota.

A program in urban Texas was organized to address the specific needs of 21 patients who combined stressed the emergency care system 821 times in a one year period resulting in the consumption of 4,872 emergency room bed hours, 1, 218 ambulance unit hours and a $3 million revenue loss. By working directly with these 21 individuals, the Med Star paramedic service reduced their calls to the emergency dispatch center by 50% the first month. Their Community Paramedics provide direct primary care assessment and treatment; or, divert these patients to clinics (including mental health); activate mobile crisis intervention teams; provide public transportation passes; or, engage the service of a para-transit provider. Over the first year of the program, the paramedic service is responsible for diverting nearly $10 million in cost out of the emergency care system. A similar system, with specially trained paramedics working both ends of the care spectrum (high volume, low acuity and low volume high acuity) is in place in North Carolina. San Francisco has a similar program directed entirely to their homeless population.

In addition to these examples of great programs, IRCP has led to some related collaborations. Institutions in Nebraska, Minnesota, Nova Scotia and Australia have collaborated to create a Community Paramedic curriculum for free use by accredited colleges and universities worldwide. The curriculum is currently being revised from version 2.2 to 3.0 and the new version will be available this Fall. So far, the curriculum has been given to 42 colleges and universities in 5 countries, and to the US military. A six state pilot course of the new curriculum version is slated for this Fall in the US.

I look forward to interacting with you at the upcoming Paramedics Australasia (formerly Australian College of Ambulance Professionals) 2011 conference in Sydney. And, if you're interested in Community Paramedicine and want to mingle with an international group of likeminded paramedics and administrators from several countries, please plan to stay in Sydney for our meeting at the Menzies Hotel (near the Hilton), on October 10 and 11

(opening reception the evening of October 9th). Registration for IRCP is free and is available on the CAA website at http://caa.net.au/index.php/events/open-conference/registration-form.

References

1. EMS Chiefs of Canada; The Future of EMS in Canada: Defining the Road Ahead; EMSCC/DUSMCC; Calgary, Alberta, Canada; 2006.
2. McGinnis, KK; Rural and Frontier Emergency Medical Services Agenda for the Future; National Rural Health Association Press; Kansas City, MO; 2004
3. UK Department of Health; Taking Healthcare to the Patient: Transforming NHS Ambulance Service. COI Communications, 269299 1p 4k; 2005 (CWP)