

Community Paramedic Toolkit

AMBULANCE SERVICE SURVEY AND FOCUS GROUP RESULTS

February 2016

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Community Paramedic: Ambulance Service Survey and Focus Group Results

Minnesota Department of Health

Office of Rural Health and Primary Care Emerging Professions Program

PO Box 64882

St. Paul, MN 55164-0882

Phone: 651-201-3838

<http://www.health.state.mn.us/divs/orhpc/workforce/emerging/cp/index2.html>



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Upon request, this material will be made available in an alternative format such as large print, Braille or audio recording. Printed on recycled paper.

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I. Introduction

In December 2015, the Minnesota Department of Health commissioned a survey of 166 ambulance service agencies and a series of follow-up focus groups on Community Paramedicine programs in Minnesota to learn more about the current landscape, growth, and challenges of CP programs in the State.

The goal of the ambulance services agencies survey was to survey licensed Minnesota ambulance services agencies to determine which agencies were either operating community paramedicine (CP) programs, actively planning programs, considering but not yet planning programs, or not interested in providing CP services at the current time. For those agencies operating or developing a CP program, the survey included additional questions to learn more about their CP programs.

The second goal was to conduct follow-up focus groups with those agencies either operating, planning, or considering developing a CP program to identify any challenges or barriers they may have experienced in trying to implement a CP program and to get input on items to include in the CP Toolkit for employers that was being developed. This document provides the results of the survey and focus groups conducted in November and December 2015 by the Paramedic Foundation (TPF).

II. Methods

A. Survey of Minnesota Ambulance Services

An online survey using Survey Monkey, was developed by the Paramedic Foundation to survey licensed ambulance services in Minnesota regarding their CP operations or planned operations. The survey allowed Minnesota ambulance services to indicate their intentions regarding operating CP programs. The agencies that did not intend to pursue operating a CP program only had to answer a single question about their intentions. The agencies that were either operating or intending to operate CP programs answered a robust set of questions that helped describe the characteristics of the CP program they operate or plan to operate. A copy of the survey is available in Appendix A of this report.

The survey was sent to 166 unique Minnesota ambulance services entities. Minnesota’s Emergency Medical Services Regulatory Board (EMSRB) provided TPF with a list of 319 ambulance service licensees in Minnesota. There are a number of agencies in Minnesota that have more than one license issued by the EMSRB. TPF identified that, of the 319 licensed ambulance services, 153 of those licenses belonged to a parent agency or were licenses for a second level of care.¹ To avoid duplicate survey responses from the same agency, TPF only sent the survey to 166 unique entities. Since the survey was an online survey, and the EMSRB did not have e-mail addresses of those agencies, TPF contacted the Minnesota Ambulance Association for the e-mail addresses of the administrators and chiefs of the ambulance services agencies in Minnesota to send the survey to and encourage them to participate in a follow-up focus group discussion.

B. Focus Groups

Minnesota ambulance services completing the survey were asked to sign up for a focus group webinar if they already operated, were planning a CP program, or were interested in planning a community paramedicine programs. Participation was also sought from the entities that were identified from the group of agencies that applied for MDH grants as well as those identified through word of mouth.

The primary purpose of the focus group was to identify any challenges or barriers agencies experienced in trying to implement a CP program and to get direct input on the list of tools that would be helpful and important to include in the CP Toolkit. The focus group discussions provided the perspective of: what was valuable to those who have already implemented their program; what will help those currently planning their program, including being informed about what questions they are fielding; and the concerns of those who are in the early stages of planning their CP program. Also discussed were barriers and challenges the Ambulance Services agencies experienced when it came to hiring and integrating a Community Paramedic into their organization.

III. CP Programs

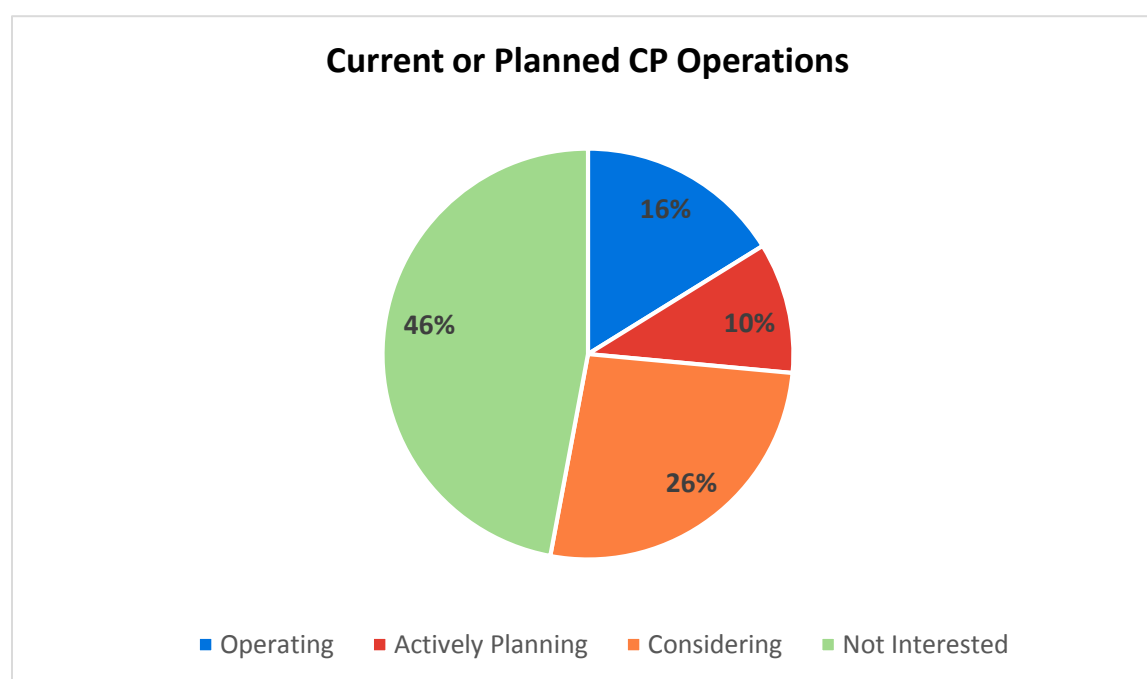
Of the 166 licensed ambulance services surveyed, 69, (42 percent), responded to the survey. All of the agencies currently operating a CP program (16) either participated in the focus group discussions or provided input to TPF individually. Four of the eight agencies currently developing a CP Program, and only a few of those agencies planning a CP program, provided input to TPF.

¹ Agencies have varied reasons for having multiple licenses. The two primary reasons are 1) they operate in multiple, often disconnected, geographic areas; or, 2) they operate at the Basic Life Support level when responding to 9-1-1 emergencies, but at the Advanced Life Support level when transferring patients from one facility to another

A. Number of CP Programs

Of the 69 respondents, 11 ambulance services (16 percent) reported operating a CP program. An additional five² programs were identified outside of the survey bringing the total number of operating CP programs to 16. These additional 5 programs were not included in the survey results, but some did participate in focus group discussions. Seven ambulance services (10 percent) and one health system reported they were actively planning a program. Eighteen ambulance services (26 percent) reported they were considering, but not yet planning, a program and 32 licensed ambulance services (46 percent) reported they were not interested in community paramedicine at this time. In total, 36 of the 69 respondents (52 percent) are either operating, actively planning to operate, or considering operating community paramedicine services (Figure 1-3).

Figure 1: Current or Planned CP Operations



Source: (TPF Ambulance Services Survey, 2015)

B. Distribution of CP Programs

Geographically, CP Programs are concentrated in the Twin Cities metropolitan area and in the central and northwest region of Minnesota, with some programs in the northeast and one in the southeast part of the State (Figure 2).

² These include North Memorial Ambulance – Brainerd; North Memorial Ambulance – Faribault as a collaborator in the Rice County program; Essentia Health – Ada; Cuyuna Regional Med Center – Crosby; and, the Scott County Mobile Clinic operated by Scott County Public Health and the Mdewakanton Sioux Tribe

Figure 2: Map of Existing and Developing CP Agencies



Date: October 2015

The active CP programs are roughly split between rural and urban settings, though more CP programs are currently in development in rural parts of the state and will soon outnumber their urban counterparts. As of October 2015 TOF discovered sixteen operating or nearly operating CP agencies in Minnesota. In addition to the sixteen there were eight agencies developing operations.

Figure 3: Urban and Rural distribution of active and developing Community Paramedicine Programs

Urban: Active community paramedicine programs	Rural: Active community paramedicine programs	Urban: Developing community paramedicine programs	Rural: Developing community paramedicine programs
Allina Health EMS, St. Paul	Bridges Medical Center d/b/a Essentia Health Ada	CentraCare Health Monticello	Essentia Health St. Mary's – Detroit Lakes
F-M Ambulance – Moorhead	Cuyuna Regional Med Ctr - Crosby	Essentia Health/Innovis Health Moorhead	Essentia Health Deer River
HealthEast Care System St. Paul	Lakewood Health System Staples Ambulance Service		Renville Ambulance Service
Hennepin County Medical Center Minneapolis	Meds 1 Ambulance Grand Rapids		Rice Memorial Hospital EMS – Willmar
North Memorial Ambulance – Robbinsdale	North Memorial Ambulance – Brainerd		Virginia Fire and Ambulance Department
St. Paul Fire – St. Paul	Perham Ambulance		Warroad Area Rescue
Scott County Mobile Clinic	Rice County – Faribault; North Memorial Ambulance is a collaborator in this program		
	Ringdahl Ambulance Fergus Falls		
	Tri County Hospital EMS Wadena		

Source: (EMSRB)

C. Types of Operating Agencies

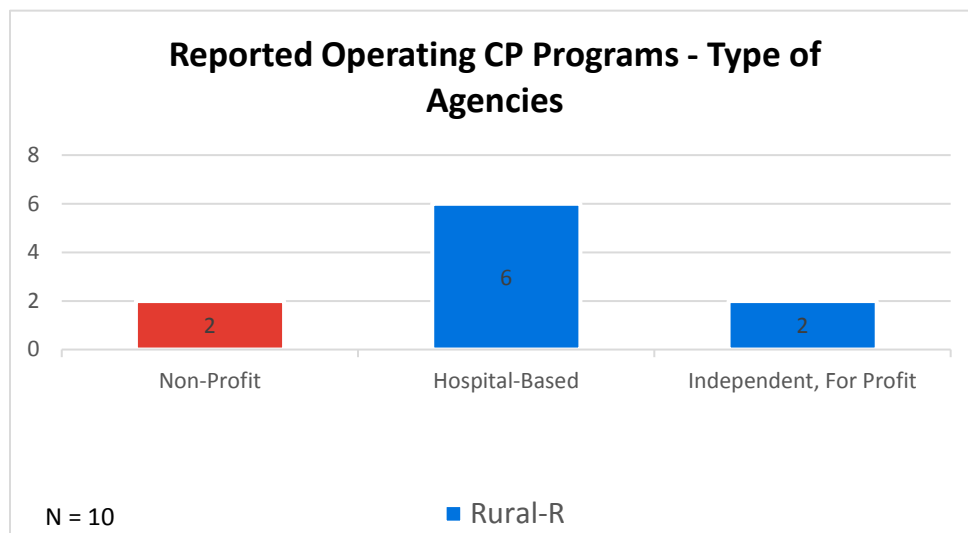
Eleven Minnesota unique ambulance service licensees reported operating CP programs and each responded to a series of questions about their agency, which are summarized below.³

Six of the 11 EMS agencies that responded to the survey, are currently operating a CP Program and described themselves as “hospital-based”. The remaining four Emergency Medical Services (EMS) agencies were evenly split between non-profit (2) and for-profit (2). In the focus group conference calls, the hospital-based agencies said they were better positioned to operate the program as a start up with no funding because they achieved system benefits that were identifiable and tangible.

One of the for-profit agencies described their program as “fully funded” through a series of contracts they had with healthcare, public health, or other government sources. Another for-profit agency had no outside funding and had to cover their costs from revenue generated by transporting ambulance patients to hospitals.

It is important to note that not all of the Minnesota CP programs are administered by a licensed ambulance services agency. TPF identified some programs from within the list of applicants for MDH CP grant programs or through other communications within the CP profession that are not administered by a licensed ambulance service agency. For example, administration of the St. Paul Fire Department’s CP program is provided by their medical control authority, Regions Hospital EMS in St. Paul. Additionally, some of the Essentia Health CP programs are administered by an Essentia hospital or the Essentia health system.

Figure 4: Types of EMS Agencies that Reported Operating CP Programs



Source: (TPF Ambulance Services Survey, 2015)

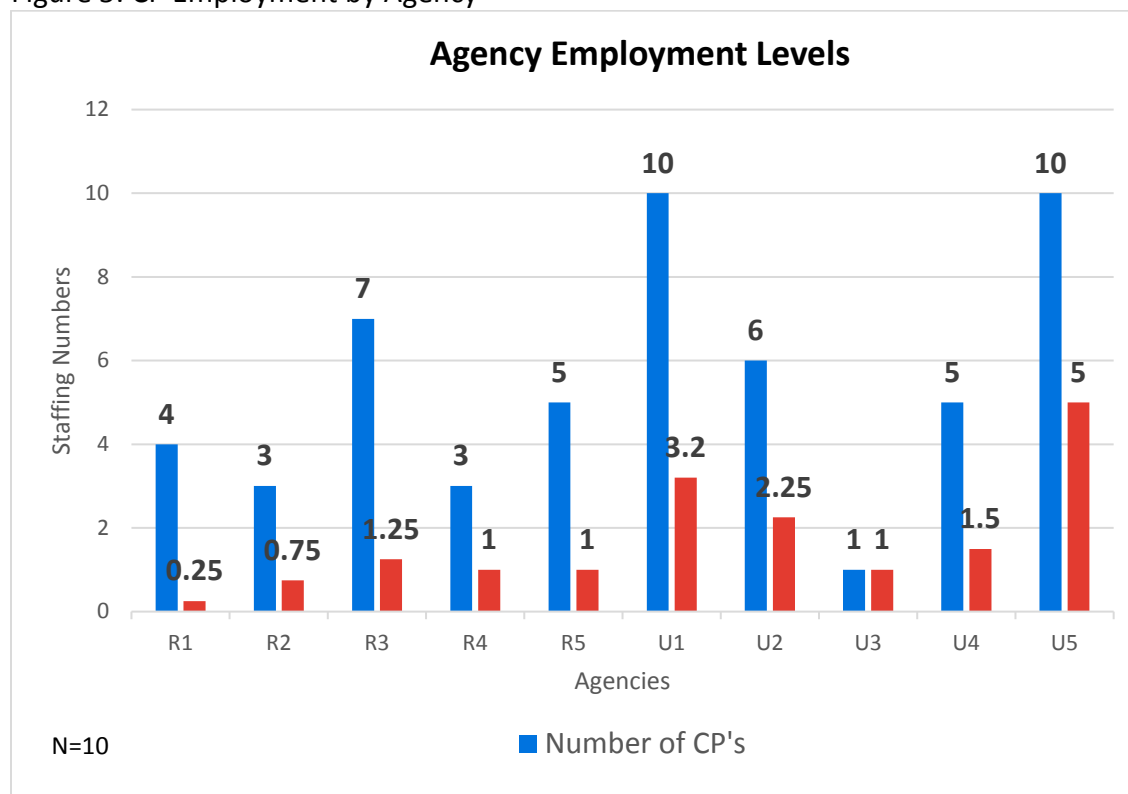
³ Only 11 of the 16 agencies completed the survey

IV. CP Staffing

A. Staffing Patterns

Of the 11 EMS agencies that responded to the survey and reported operating CP programs, the average number of employed CPs per employer, was 5.3. This includes both urban and rural CP programs. The CP responsibilities at all agencies are combined with paramedic duties, thereby creating a split role. None of the agencies use CPs in a dedicated CP only role. Almost all CPs are still doing ambulance shifts. Only a few agency administrators are not. It is important for CPs to continue responding to paramedic 9-1-1 calls in order to keep their paramedic knowledge and skills up to date. *Figure 5* displays the number of active CPs and the budgeted full-time equivalents (FTEs)⁴ for each agency. The rural agencies are identified with an “R” and the urban agencies with a “U”. Unfortunately, not all agencies reported their FTE counts.

Figure 5: CP Employment by Agency



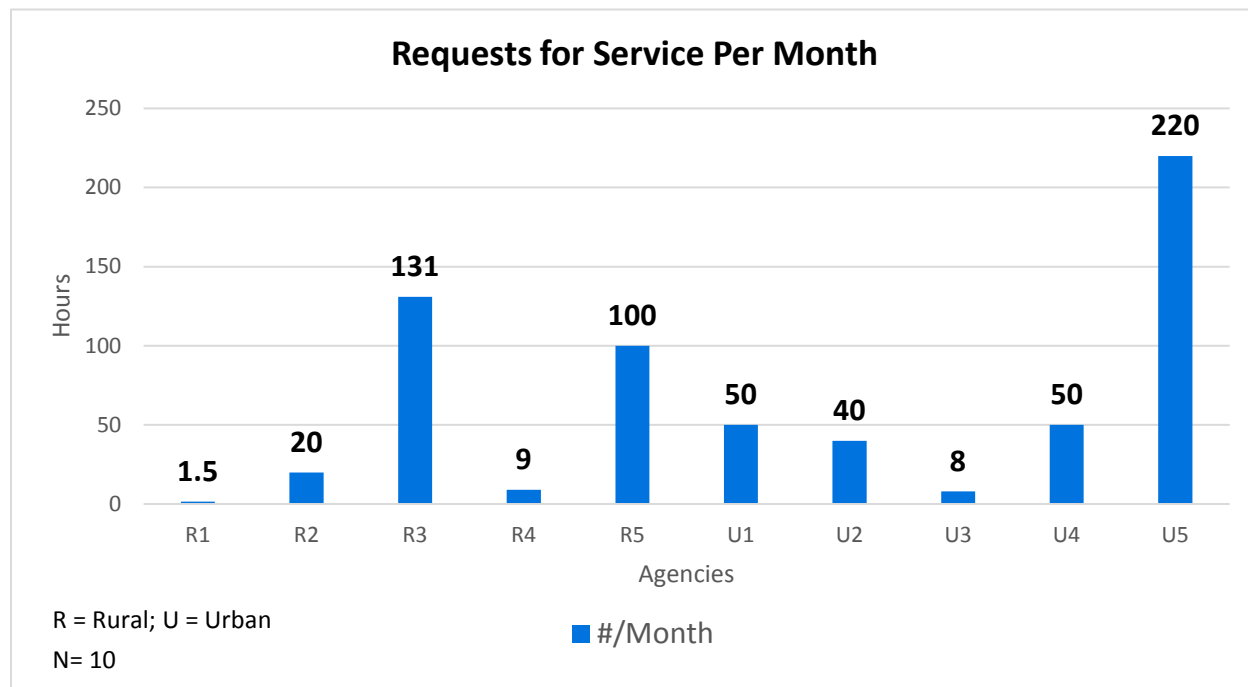
Source: (TPF Ambulance Services Survey, 2015)

⁴ The ratio of the total number of paid hours during a period (part time, full time, contracted) by the number of working hours in that period Mondays through Fridays. The ratio units are **FTE units** or **equivalent employees** working **full-time**. In other words, one **FTE** is **equivalent** to one **employee** working **full-time**.

B. Service Levels

There is a significant variation in the number of hours per weekday (Monday through Friday) CPs are on duty. One agency provides 24-hour service and another has more than one CP working each day. The number of service requests each agency receives per month also varies greatly. As expected, there is a direct correlation to the number of hours CPs are available and the number of requests for service.

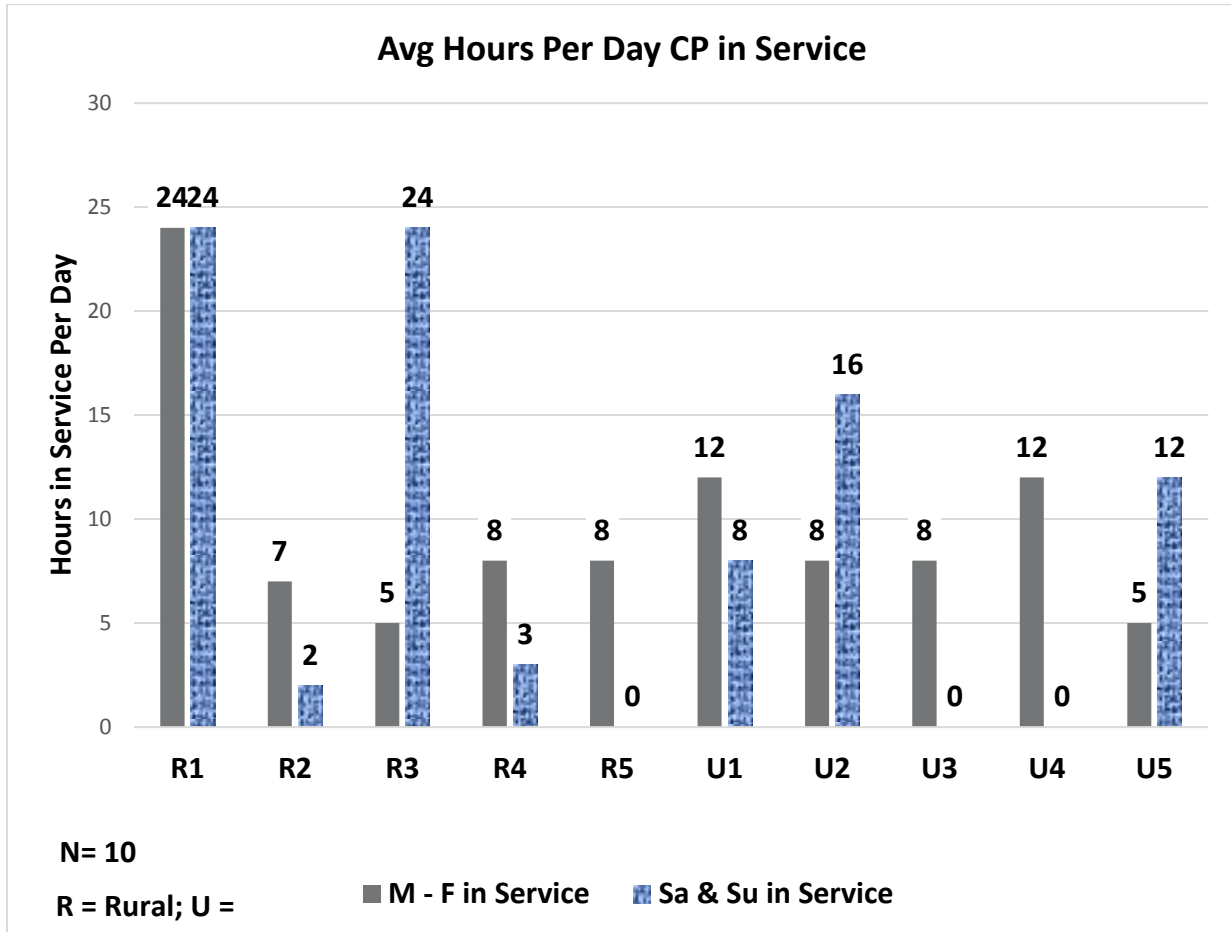
Figure 6: CP Service Requests per Month



Source: (TPF Ambulance Services Survey, 2015)

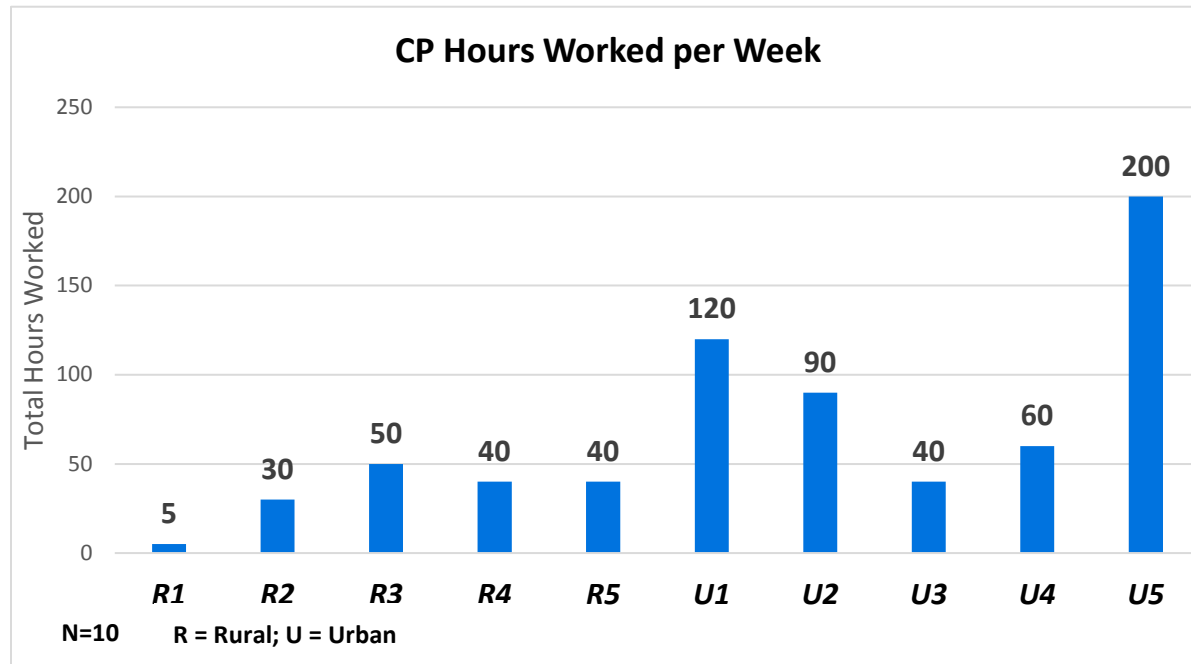
There is a large variation in the number of hours CPs are available for providing services which is dependent upon the number of CP service requests.

Figure 1: Average CP Hours Per Day



Source: (TPF Ambulance Services Survey, 2015)

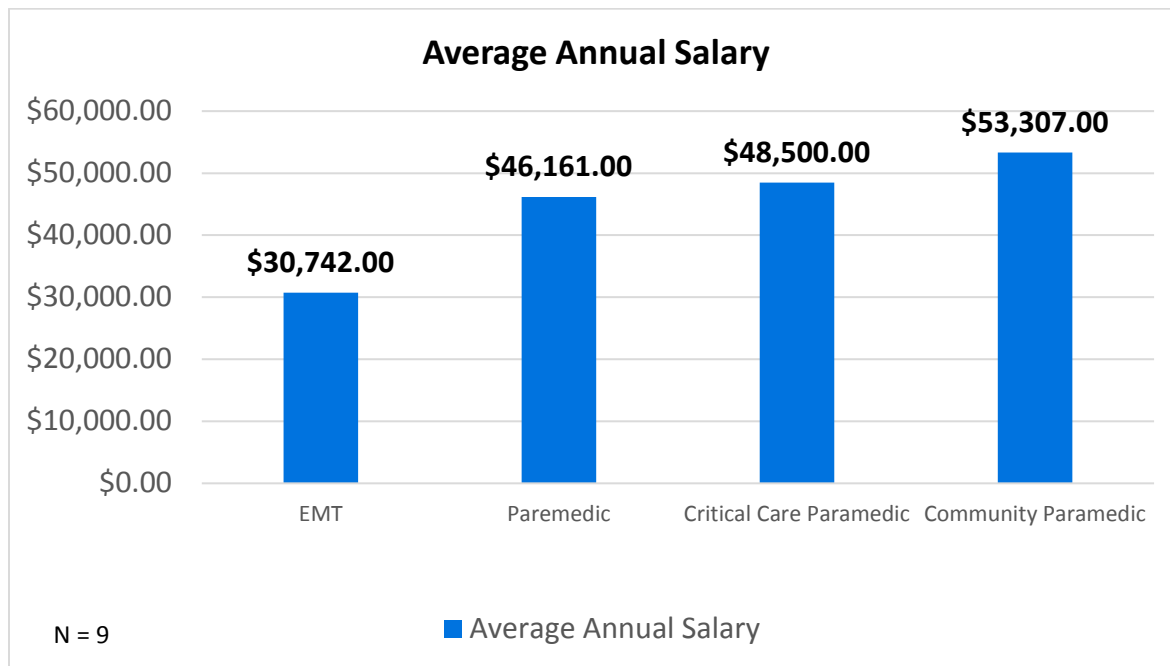
Figure 8: CP Hours Worked per Week



Source: (TPF Ambulance Services Survey, 2015)

C. Compensation

Figure 9 represents the annual mean for staff salaries by professional designation within the agencies with CP programs. Community Paramedic salaries may be at the top of the pay scale due to the increase in skills and responsibilities required to perform the job. There is only one EMS specific salary survey that is national in scope, it is produced by the Journal of Emergency Medical Services (JEMS). At this time, JEMS does not collect data on Community Paramedic salaries. The 2014 JEMS data reports the average Minnesota EMT salary is in the 50th percentile for the region and the average paramedic salary is just short of the 90th percentile.

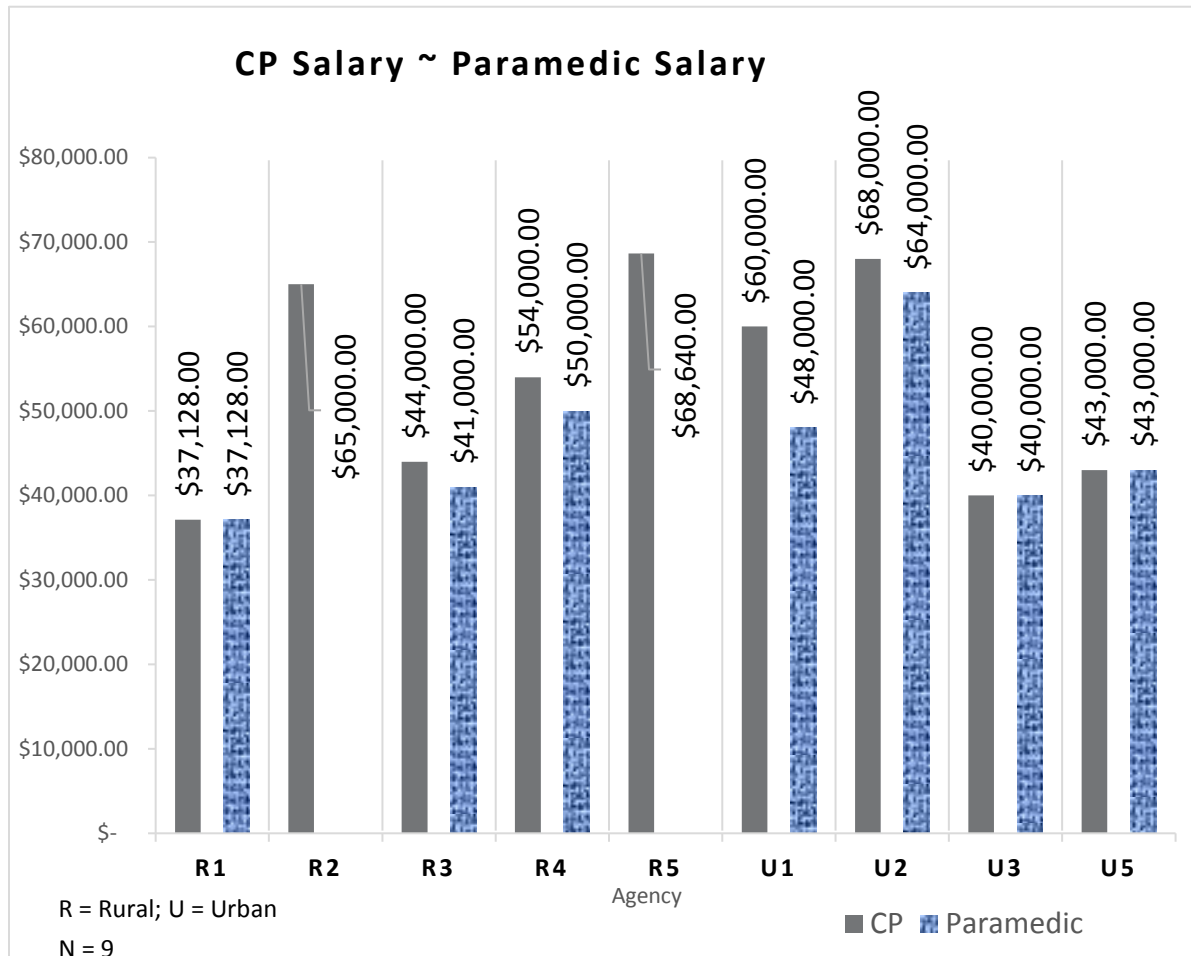
Figure 2: Average Annual Pay Comparison by Professional Designation

Source: (TPF Ambulance Services Survey, 2015)

While the average CP salary in Minnesota is over the 90th percentile compared to paramedics in this region of the country, the actual salaries vary significantly by agency by up to \$30,000 per year. We have heard anecdotally from some agencies that the paramedics currently seeking to become CPs are well seasoned and often have more than 20 years of experience in the field. That is likely one factor why the CP salaries are higher, on average, than paramedics. We have also found that there have been a certain amount of CPs changing employers, likely due to either the availability of more CP work and/or because of salaries.

We looked at whether the CP salaries varied consistently by urban or rural location, or by hospital-based, non-profit or for-profit. When evaluating the individual agency responses, we found no such correlations except for the most “remote” rural agencies where CPs were more likely to be on the lower salary scale end.

Figure 3: CP and Paramedic Salaries by Agency



Source: (TPF Ambulance Services Survey, 2015)

The US Department of Labor, Bureau of Labor Statistics (BLS) reports paramedic and EMT salaries together. However, the different specialties and provider types are not defined by the BLS. The 2014 annual average wage reported by the BLS for the State of Minnesota is \$39,110. The annual average wage and employment per 1,000 jobs by region is represented in *Figure 11*.

Figure 11: 2014 BLS Annual Mean Wage in Minnesota

Occupation: Emergency Medical Technicians and Paramedics (SOC code 29-2041)

Period: May 2014

Area name	Employment	Annual mean wage	Employment per 1,000 jobs
Duluth, MN-WI	170	\$ 33,020.00	1.342
Minneapolis-St. Paul-Bloomington MN-WI	1580	\$ 48,240.00	0.868
Northwest Minnesota nonmetropolitan area	590	\$ 31,430.00	3.179
Northeast Minnesota nonmetropolitan area	200	\$ 35,150.00	3.751
Southwest Minnesota nonmetropolitan area	690	\$ 32,550.00	5.62
Southeast Minnesota nonmetropolitan area	670	\$ 32,100.00	3.861

SOC code: Standard Occupational Classification code – see <http://www.bls.gov/soc/home.htm>

Data extracted on December 28, 2015

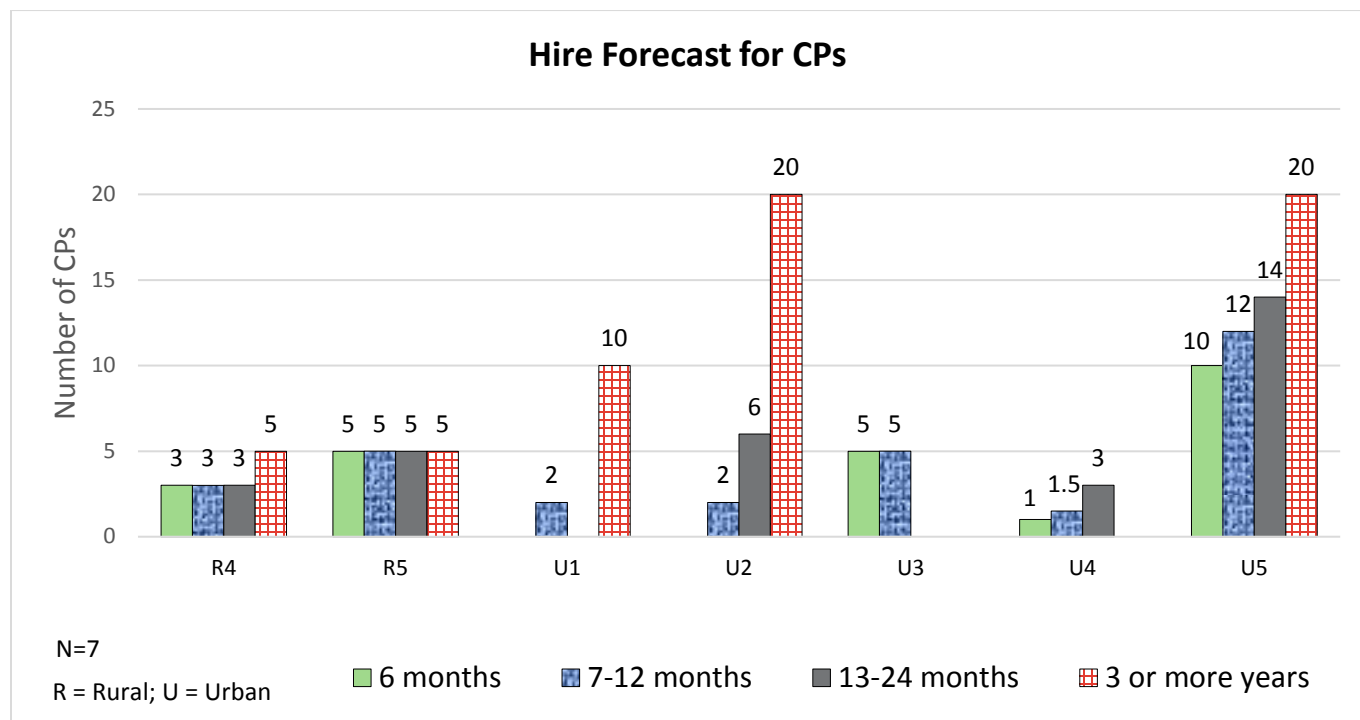
Source: (Statistics, n.d.)

V. Challenges to CP Growth

A. Employment Forecast

Seventy percent (70 percent) of the agencies that currently employ CPs are planning to add more CPs to their program in the future, some of them by significant margins. TPF's environmental scan showed that there were a fair number of CPs available for work, and a steady stream of new applicants to complete a course. It is too early to tell how demand will be positioned to supply in the long term, but it appears there are positions available for CPs currently looking for work and will continue to be for at least the next twelve months.

Figure 4: Hire Forecast for CPs



Source: (TPF Ambulance services Survey, 2015)

The US Department of Labor BLS is forecasting significant growth in the EMS professions through 2022, both nationally and in Minnesota. Because CP programs were scarce nationally in 2012, it is not likely the Department of Labor considered how CP employment would affect the profession. We learned that in Minnesota the CPs are almost universally still working some shifts on an ambulance. With the recent explosion of new CP programs in the country, the BLS forecast is probably conservative, because the part time CP shifts the paramedics used to work on an ambulance have to be filled by a replacement paramedic. Regardless, the growth that is projected will likely fare well for the livelihood of the EMTs and paramedics and place additional revenue pressure on agencies. These dynamics may lead more agencies to seek additional reimbursement or compensation by initiating CP programs. However, the goal of increased agency reimbursement will be constrained by CP services not yet being mainstream nationally.

Figure 5: US DOL, Bureau of Labor and Statistics Trends

State and National Trends

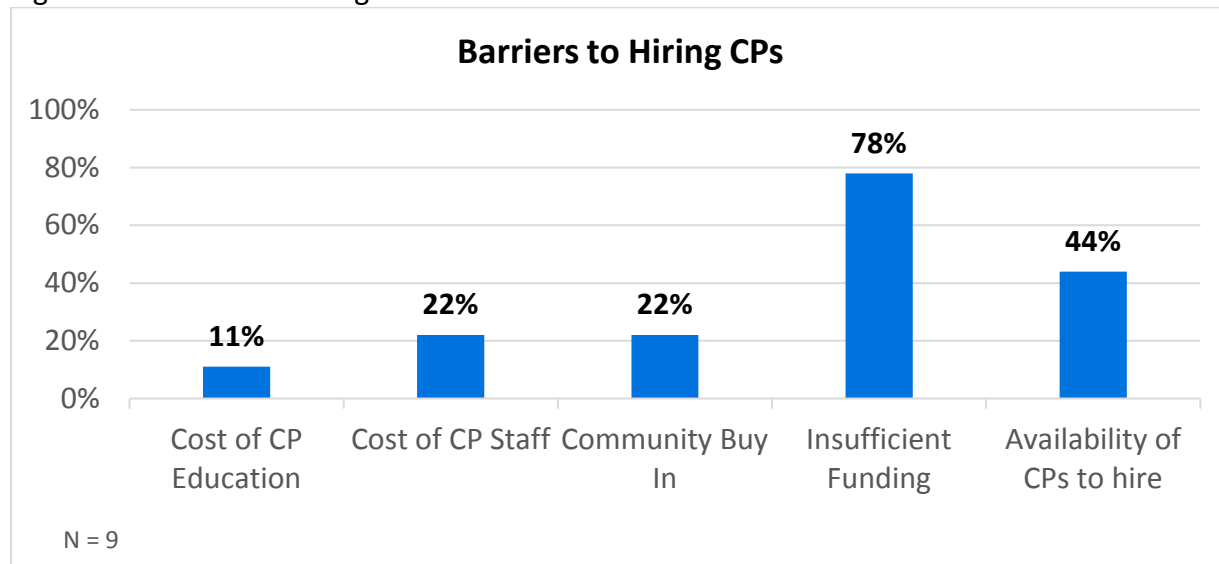
EMTs and Paramedics Projected Years	Employment 2012	Employment 2022	Percent Change	Projected Annual Job Openings¹
United States	239,100	294,400	+23%	12,060
Minnesota	4,400	5,050	+15%	190

¹Projected annual job openings refers to the average annual job openings due to growth and net replacement.
Source: (Statistics, n.d.)

C. Barriers to Growth

Insufficient funding is the most commonly cited reason why agencies are not hiring CPs as aggressively as they would like to. While the availability of CPs to hire was cited as an obstacle in this survey, the Environmental Scan that was conducted in October 2015 of CP enrollees and graduates, indicates that 70 percent of trained CPs are looking for work and are unable to find available positions. Further analysis indicates that supply and demand of CPs is dependent largely on geography, starting wage, and availability of funding.

Figure 14: Barriers to Hiring CPs



Source: (TPF Ambulance Services Survey, 2015)

The survey responses included a number of open ended comments regarding the barriers preventing employers from hiring CPs. Those comments are provided below:

- Experienced CPs will not want to start over in seniority, making it difficult to hire from the outside.
- We would certainly have more referrals if all of the [insurers] paid for the service.
- CP employment level at present is stable.
- We have no barriers to hiring or keeping CPs employed. Of course, funding streams need development to ensure viability of future CP programs.
- Reimbursement by [insurers] has been by far the biggest challenge that has hindered growth of the program and the need to hire additional CPs.
- Current payment structure forces hands on measuring of impact in risk populations, so until we improve Measurements & Results around population health we are limiting our growth.
- We have 5 CPs. The insurance plans don't "get it"; it is difficult to get physician buy-in; nurses are worried about being taken over; administrators look for the return on investment and are not fans of cost avoidance; and, administrators refuse to look at cost avoidance as a strategy.
- Risk to medical director's license.

D. Suggestions for Support

Agencies who operated CP Programs and participated in the interviews and focus group sessions were asked to review and provide comment on the list of tools or products below that were to be created and included in the CP Toolkit intended to support growth of the profession.

- Scope of practice for Minnesota Community Paramedics.
- Requirements for obtaining and maintaining Minnesota CP certification from the EMS Regulatory Board.
- Additional training necessary to transition into the workforce practice-ready.
- Services that are or can be performed by CPs and whether they are reimbursable.
- Policies and procedures for billing CP services.
- Salary ranges and estimates.
- Return on investment information.
- Potential community benefits of having CPs in the workforce.
- Successful models or use cases demonstrating financial stability.
- Existing models and/or use cases that illustrate how CPs can be used as a model to coordinate care for complex patients across settings of care.
- Examples and models of integrating CPs into ACOs, IHPs or other shared health care reform delivery models and payment reform arrangements.
- Examples or models that use CPs to bridge disconnected sectors of the health care system.

- Copies of applicable documents, specifically break-even and cash flow analyses, pro-formas, and any time studies or task-based analyses describing the basic components of the work for the CP.
- Other analyses and information that a potential employer would find useful such as: population based payment mechanisms that allow employers to contract their CP staff to a third party; productivity and volume estimates for a CP working in various clinical and non-clinical settings as well as for different types of providers; and, rural and urban differences in Minnesota.
- A written document that summarizes recommended policy proposals for removing existing barriers to the uptake of the CP profession.

All of the agencies who reviewed the above mentioned list and provided input to TPF believed that all of the tools and products were important. There were no requests for any of the planned items to be deleted from the list that MDH has identified as needing to be included in the CP Toolkit.

Besides the above mentioned tools, attendees suggested that the following additional items be included in the toolkit:

- Template(s) that can be used to describe to hospitals, primary care providers, accountable care organization administrators, and public health agencies about how they and their patients could benefit by supporting CP services (number one request by participants)
- Methods to document assessments and care provided in electronic medical records systems commonly used by ambulance services, hospitals and clinics.
- A guide on how to recruit physicians, physician's assistants, nursing, and other medical staff as advocates of the Community Paramedicine model.
- List of quality metrics that are standardized for cross agency comparison. The list should include all three parts of the Institute for Healthcare Improvement's Triple Aim approach.
- Samples of patient surveys
- Educational pieces for the community about the Community Paramedics themselves, including patient success stories.
Tips on contracting with public health, Veteran's Administration, and county-based Medicare and Medicaid purchasing contractors.
- A description of any advantages and disadvantages of operating a CP program as part of a Critical Access Hospital or Rural Health Clinic.
- Description of the continuum of care and how Community Paramedics, home health and visiting nursing providers fit together.
- Mechanical and logistical planning between multiple entities
- Methods on how to engage the medical director as a champion of the program.

VI. Conclusion

In Minnesota, healthcare organizations (in areas where they operate ambulance services and areas they do not) are leading the adoption of Community Paramedics, largely because they can realize system benefits that make them less reliant on reimbursement. Free standing non-profit and for-profit organizations are creating innovation on funding that is less dependent on reimbursement. Only one of the CP programs, a for-profit corporation, is currently covering all of their costs. They are doing so by way of contracting with governmental agencies. The lack of mainstream payment for services is the single biggest barrier agencies face.

While there are CPs looking for CP work in the state, and there are agencies wishing to hire CPs, there doesn't seem to be an effective method of connecting candidates to agencies that are hiring. Other barriers such as pay level (including taking agency longevity as a paramedic into consideration) and location are causing positions to remain unfilled. Meanwhile, there are paramedics who are interested in Community Paramedicine and are enrolling in those courses and the projected supply and demand in the short term appears to be evenly matched.

It is hopeful that the CP Toolkit will help providers overcome these barriers and increase the growth of Community Paramedic programs in Minnesota, especially in the rural areas to help with the sustainability of EMS services and primary care workforce shortages. The list of tools or products identified by the State for inclusion in the CP Toolkit was supported by those organizations participating in the interview and focus group discussions. Additional tools were also suggested by participants, especially templates that can be used for educating various audiences about Community Paramedicine and developing local healthcare champions. Coordination, quality and the need to measure patient outcomes and cost savings are all important program aspects that will assist with the sustainability of CP programs.

References

EMSRB. (n.d.). Minnesota Emergency Medical Services Regulatory Board.

Journal of Emergency Medicine. (n.d.).

Minnesota Department of Health. (n.d.). MN CP Agencies.

Statistics, U. B. (n.d.). *US Bureau of Labor & Statistics*.

TPF. (2015, October). Community Paramedic Environmental Survey. *The Paramedic Foundation CP Survey*.

Appendix: TPF Ambulance Service Survey, 2015

<http://www.health.state.mn.us/divs/orhpc/workforce/emerging/toolkit/cpamb2016.pdf>