

Missouri Community Paramedic - Mobile Integrated Healthcare 2017



Prepared by Kim D. McKenna PhD EMT-P

Missouri Community Paramedic Mobile Integrated Healthcare 2017

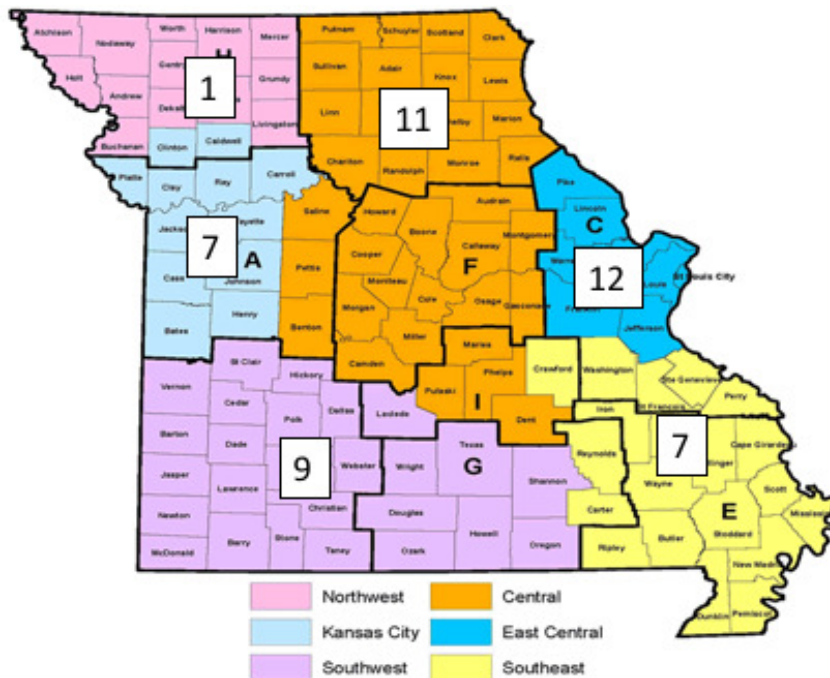
In 2013, Missouri EMS stakeholders conducted a survey to examine community health needs and the state of Community Paramedic/Mobile Integrated Healthcare within this state. This survey was designed to examine how these issues have changed.

The original 2013 was modified slightly. An email list of administrators for ground ambulance services was obtained from the Missouri Bureau of EMS. Duplicate records (8) were deleted. On July 21, the survey was distributed by email to 205 EMS administrators. Twenty-two emails returned as non-deliverable. This left 183 surveys delivered. A reminder was sent on July 28, 2017.

Results

In total 51 surveys were started. Thirty-five surveys (19%) were completed. At one response was received from each Missouri EMS region (fig. 1).

Figure 1. Responses by EMS Region



Missouri Department of Health and Senior Services
Bureau of Emergency Medical Services
Office of Emergency Coordination

Employees

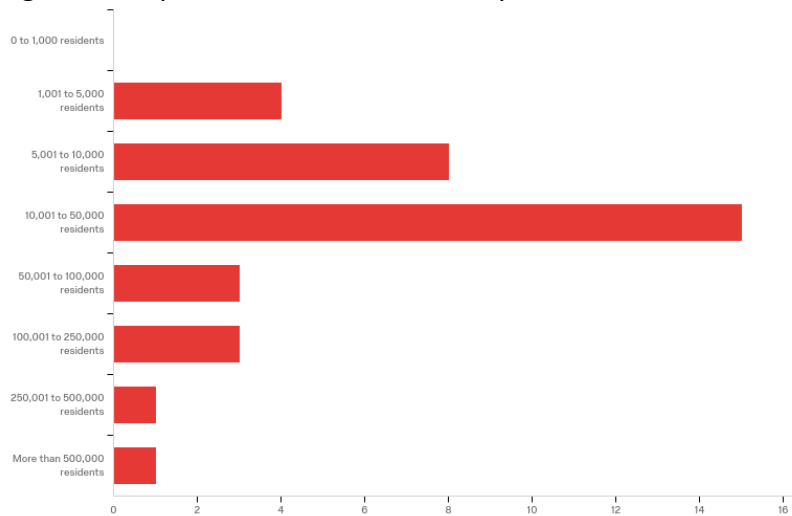
Respondents reported a range of 0 to 90 full-time employees with a mean of 18 (median [10], mode 8). Part-time employee numbers ranged from 0 to 27. Mean number of part-time employees 6 (median 5, mode 4).

Services

All of the services that replied report running emergency ambulance while 19 run non-emergency ambulance service. Fire services are provided by eight respondents.

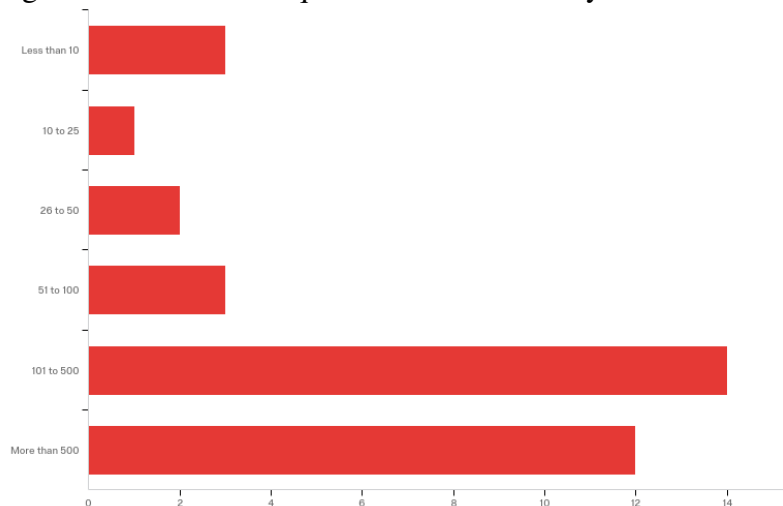
In terms of population served, the smallest departments reported 1,001 to 5,000 persons in their community and the largest more than 500,000. (fig. 2)

Figure 2. Population of the Community Ambulance Services Provided For



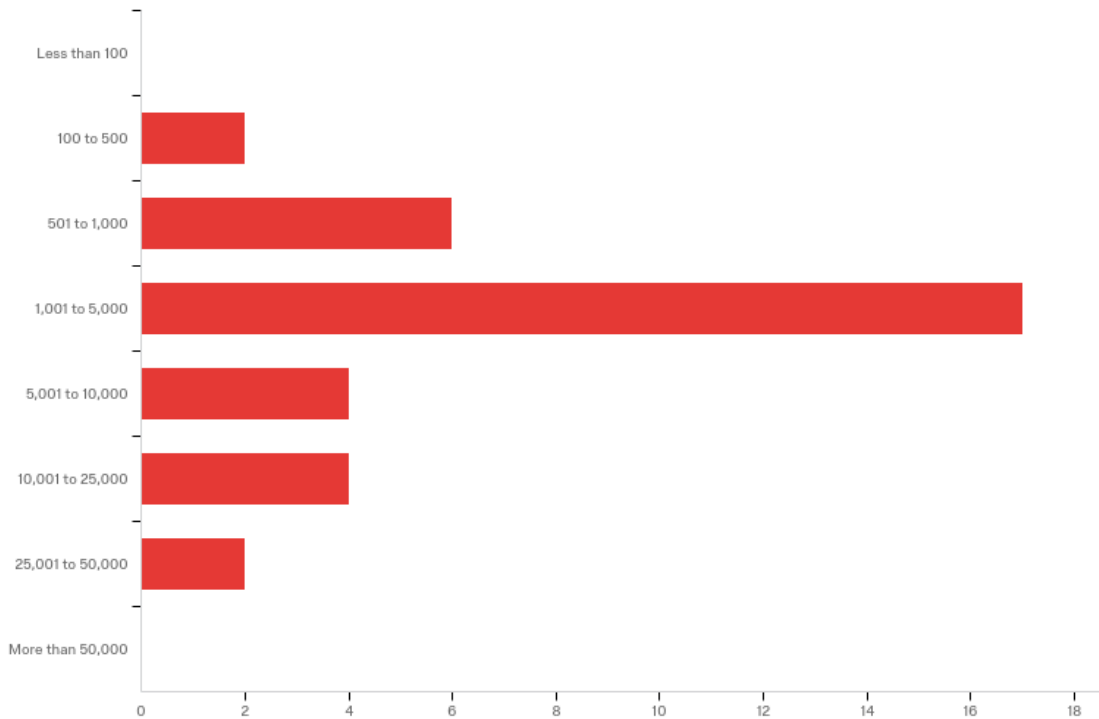
Three services report responding to less than 10 square miles while 12 cover more than 500 square miles (fig. 3)

Figure 3. Number of Square Miles Covered by Ambulance Service

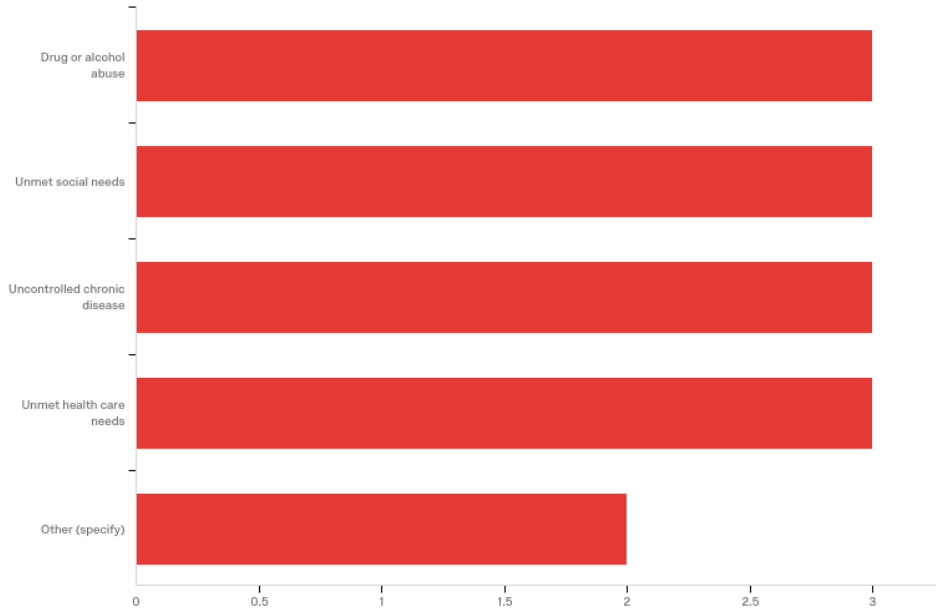


Calls dispatched in 2016 varied widely by service with the fewest reported between 100 and 500. The highest call volume fell in the range of 25,001 to 50,000 (fig. 4).

Figure 4. Ambulance Dispatches 2016



Characteristics of those who most frequently use the ambulance service were identified (fig. 5).



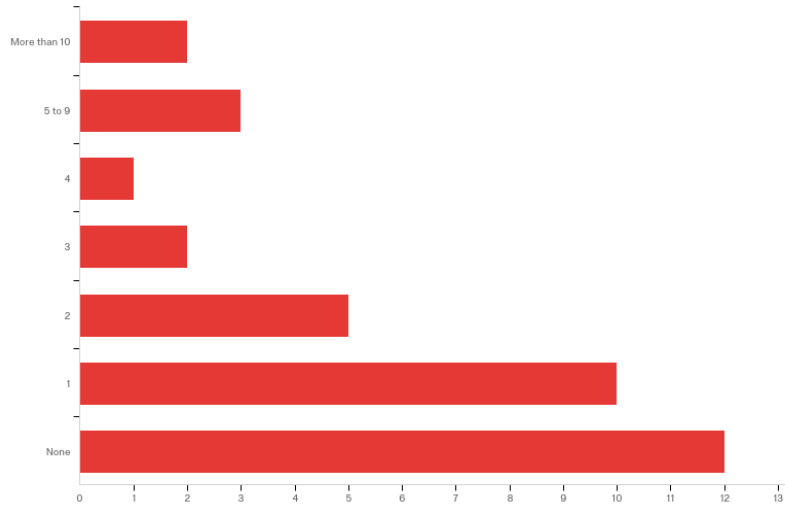
Other needs specified for frequent users were emergency medical care and acute illness.

Of the agencies responding, 23 (64%) indicate they track frequent user addresses.

Community Health Resources

Respondents were asked a series of questions related to the health services available within their response area. Twelve (34%) report no inpatient hospital within 10 miles of their service area (fig. 6).

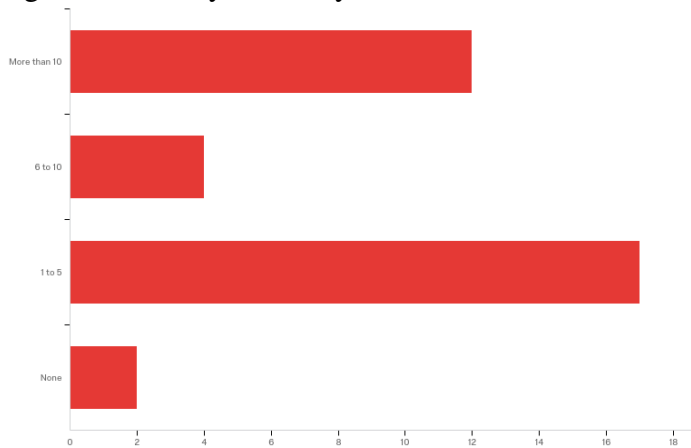
Figure 6. In-Patient Hospitals within 10 Miles of Ambulance Service Area



Of the in-patient facilities within their district, three respondents indicated there was at least one accountable care organization, nine said there were none and the remainder did not know.

Primary care physician offices were lacking in two (5%) agency service areas (fig. 7).

Figure 7. Primary Care Physician Offices Located within Ambulance Service Area

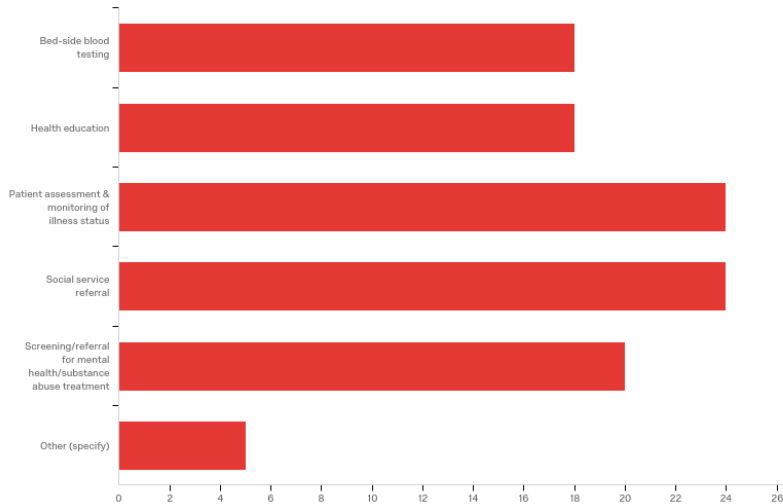


Most (32[91%]) agencies indicated there were unmet health needs within their ambulance service area. The most frequent unmet need specified was for mental health services which was identified by over a third of respondents. Other unmet needs included: unmet health needs with no access to care; need for more paramedics/EMS units; chronic disease management; need for transport to health care; prescription fulfillment; and social service needs.

When asked to specify the number one unmet health need mental health was reported as the top deficit, followed by access to care.

The agencies responding felt their paramedics could perform a number of services to help meet those needs (fig. 8). One respondent however indicated that while they already make referrals, the services often just are not there, and one said you “can’t squeeze blood out of a turnip, no resources available”.

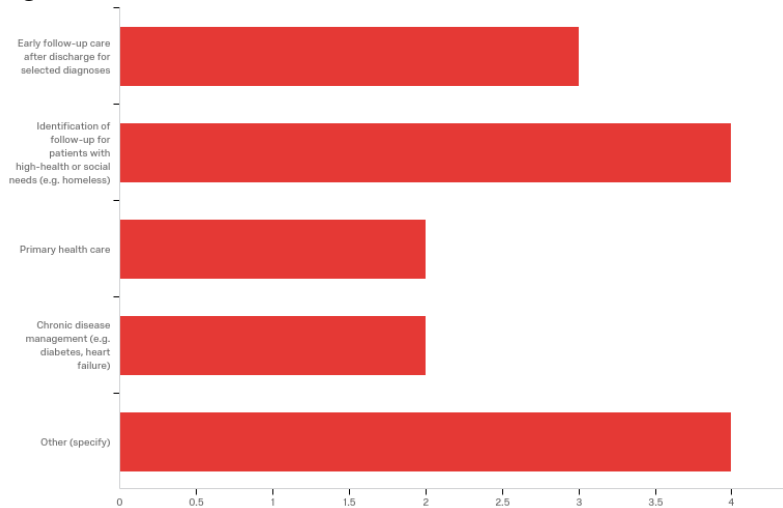
Figure 8. Ambulance Service Skills to Help with Unmet Health Needs



Community Needs

Eight (20%) respondents indicated they had conducted a community health assessment within the past two years. That assessment identified a range of gaps in healthcare (fig. 4).

Figure 4

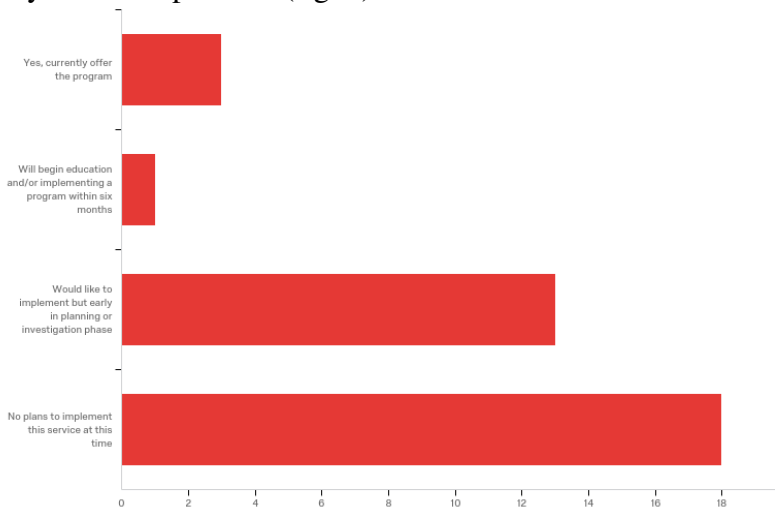


Other needs specified included mental health care including addiction and abuse; obesity; transplantation; and navigation through healthcare red tape.

When asked to specify the age-groups in which their community health assessment revealed the greatest unmet health needs exist, six (83%) reported adults 18 to 59 and one (17%) said adults over 60.

EMS Response to Community Health Needs

Seven agencies (20%) state they currently provide non-emergency, non-transport follow-up or preventative services. Less than 10% report a current Community Paramedic or Mobile Integrated Health Program although others are interested in doing so. Of those who would like to do so four (31%) indicated they plan to within two years while the others were unsure when they would implement (fig. 9).



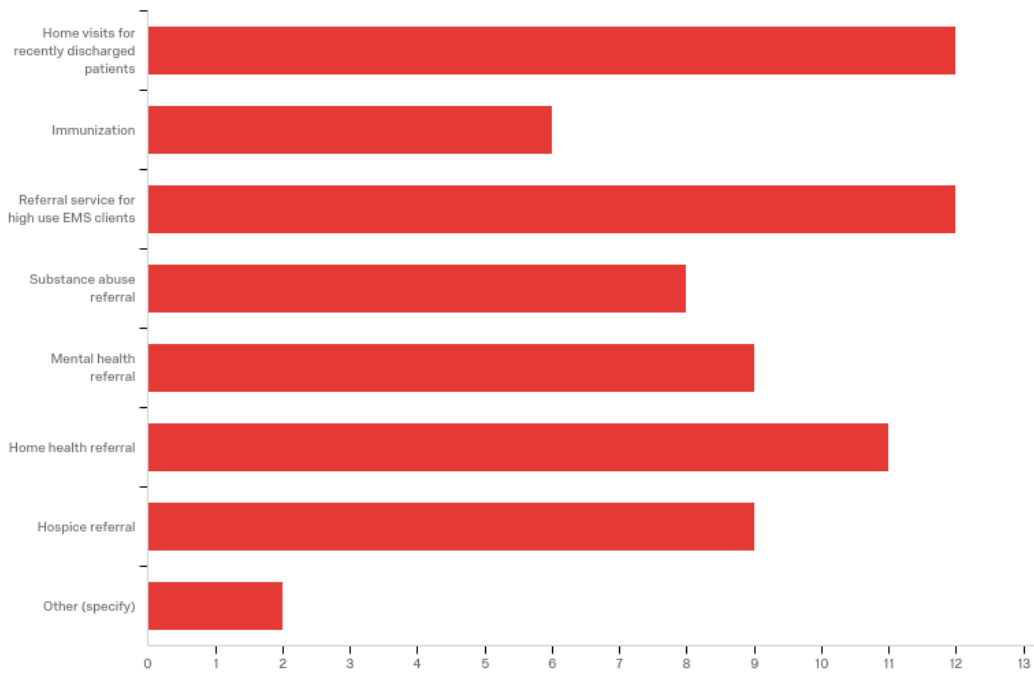
Funding for the existing or planned services is mixed with 11 (65%) services indicating they are unsure how the program will be funded. Three (18%) report that existing service funds are being used (or plan to use), two (12%) indicate a combination of funding sources and one received financial backing from a hospital.

Only three respondents report enrolling patients in their Community Paramedic (Mobile Integrated Health Program) in 2016. Patients in the programs included one each in the 50 to 100, 20 and 50, and less than 20 patients groups.

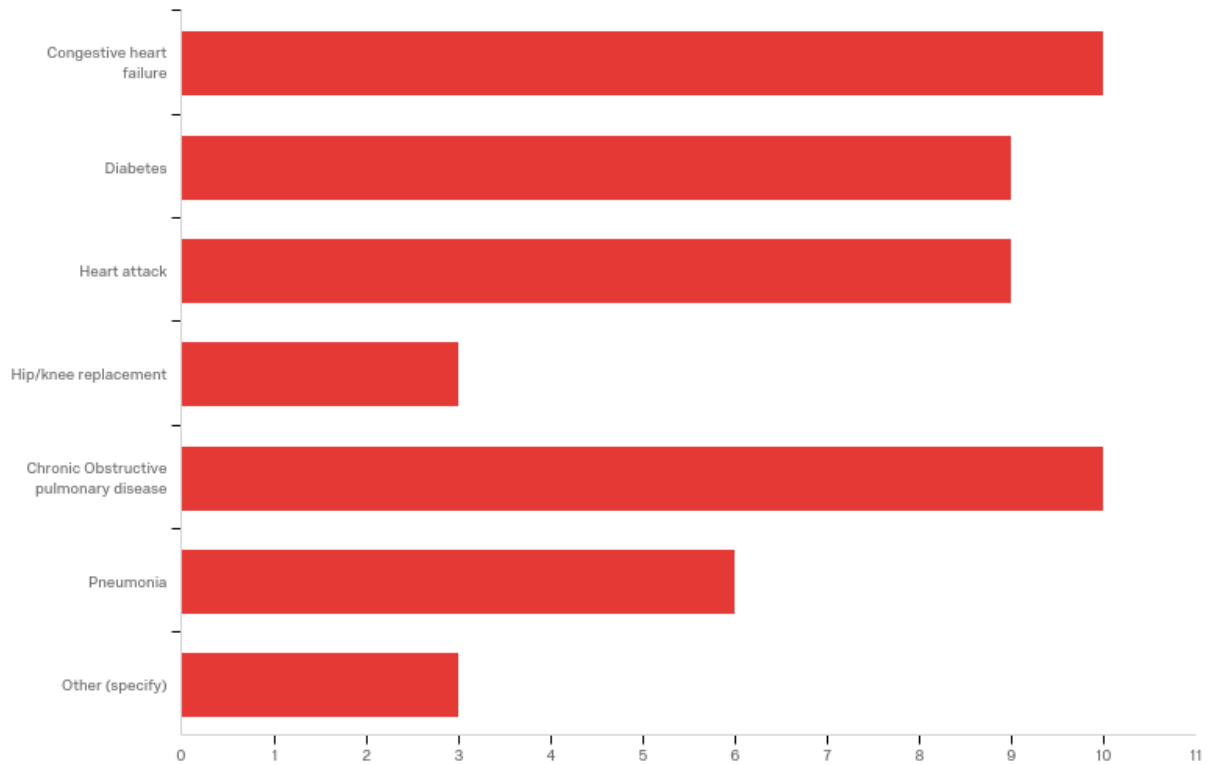
Programs noted two primary resources were needed to implement their CP (MIHP) programs. The top one was funding followed by education or training needs.

Services that existing or planned CP (MIHP) are offering or plan to offer vary widely. They cover a wide range (Fig. 10).

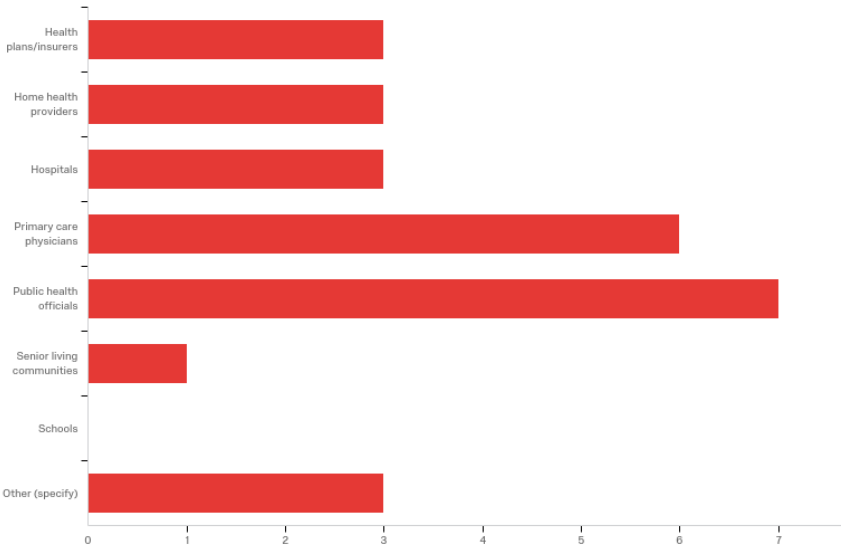
Figure 10. Services CP (MIH) Provide (or Plan to Provide)



A wide range of discharge diagnoses are (or will be targeted) in MO CP (MIH) programs (fig.11).



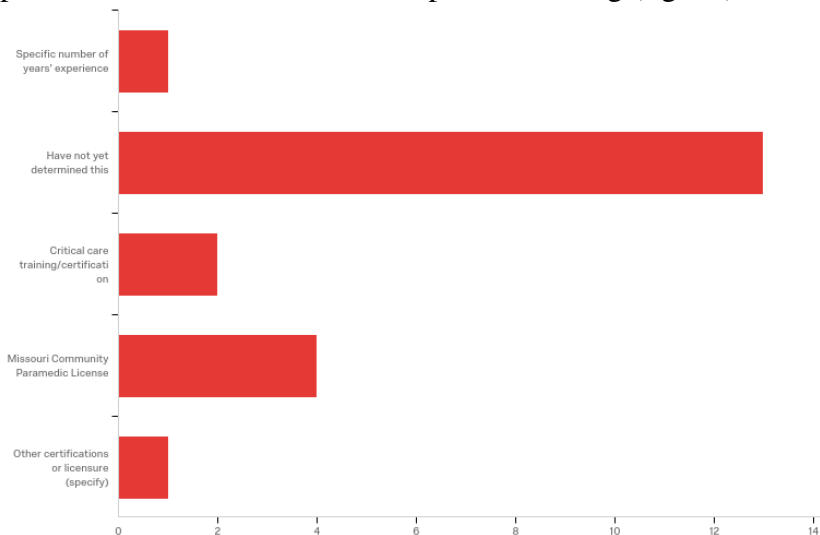
It appears from the survey that a variety of community stakeholders are consulted and collaborated with when planning or implementing a CP (MIH) program. (fig. 12)



Other consultants mentioned were a billing department as well as the state.

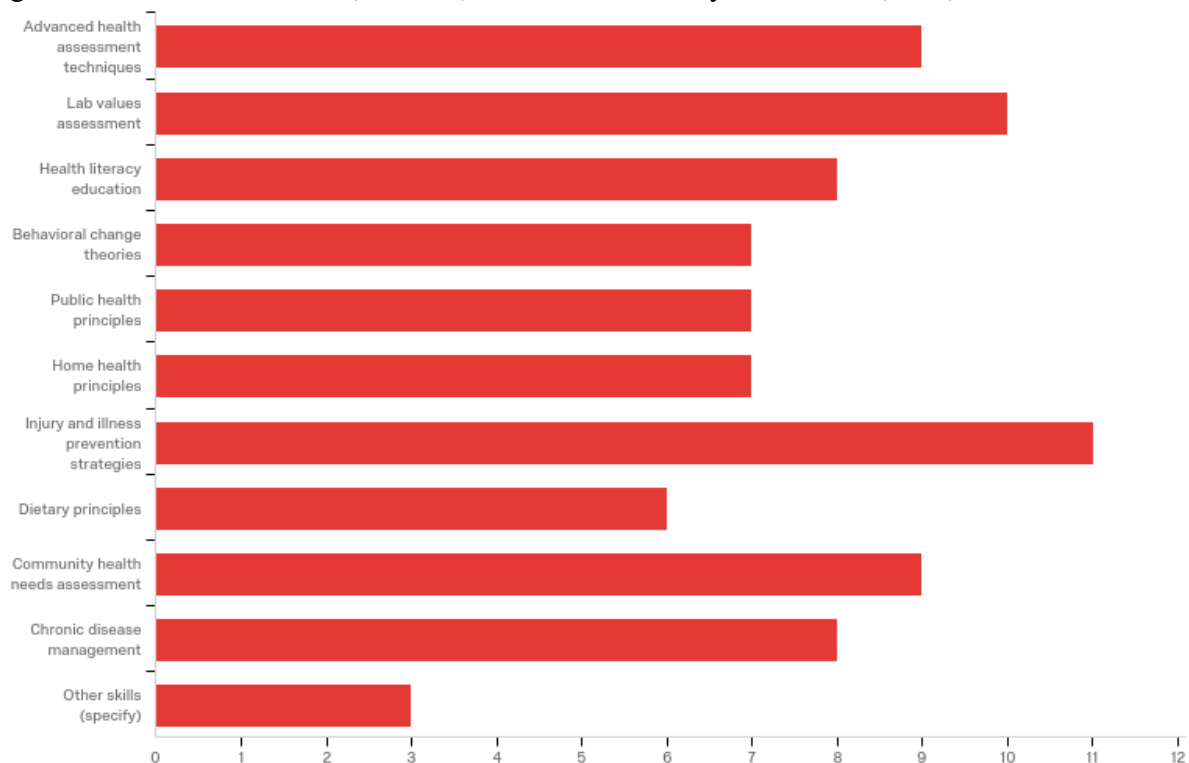
Education for CP (MIH) has not yet been determined by 11 (69%), one has developed their own and four have used other programs. The other programs used or planned to use were specified as Christian NE, CCEMTP Creighton, Mineral Area College and SFCAD.

Pre-requisites to work in the CP (MIH) program have largely not been developed. One program specified over 144 hours of MIH specific training (fig. 12)



Ten (63%) programs use or plan to use their current EMS program director as their CP (MIH) program physician advisor. The remainder have not yet determined the medical director for their proposed program.

A wide range of services are offered (or planned) for MO CP (MIH) services (fig. 13).
 Figure 13 Services Offered (Planned) for the Community Paramedic (MIH) Role



Limitations

This survey has several significant limitations. The most important is the low (19%) response rate. This compares to the 55% response rate to the similar 2013 survey. In addition, the survey was sent to the administrator of record at the MO Bureau of EMS. This individual may not have been the most knowledgeable about the specific details of the CP (MIH) program within their agency.

Discussion

It is clear that all respondents feel there are unmet health issues in the state of Missouri. Mental health service needs topped the list followed by a perceived lack of chronic disease management. In some areas, EMS agencies identify a lack of other health infrastructure to serve their community.

Based on the responses received from these agencies, it appears that implementation of Community Paramedic (Mobile Integrated Health) programs is early in Missouri. Funding, followed by education appear to be substantial barriers to adoption of these programs. At least one EMS agency felt lack of paramedics was a primary concern that needed to be addressed before they could consider adding other responsibilities. Those who have implemented or plan to implement programs identify a wide number of service areas.

