

Community Paramedic Toolkit Environmental Scan

October 2015

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Community Paramedic: Environmental Scan

Minnesota Department of Health

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This project is part of a \$45 million State Innovation Model (SIM) cooperative agreement, awarded to the Minnesota Departments of Health and Human Services in 2013 by The Center for Medicare and Medicaid Innovation (CMMI) to help implement the Minnesota Accountable Health Model.

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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Introduction

The goal of the Environmental Scan was to obtain data from higher education institutions, regulatory agencies, and employers detailing the emerging professional Community Paramedic workforce, including:

- The number of graduates in Minnesota;
- The number of current students in Minnesota;
- The projected number of future program graduates each year;
- If available for the profession, the number of graduates with proper credentialing, certification and/or enrollment in major health plans, including Medicaid; and,
- If available, the number of graduates who are currently employed in their trained profession, where they are working, and the scope of their work.

This document is a snapshot of the Community Paramedic (CP) workforce in Minnesota as of October, 2015.

Data Collection Methods

Information and data was obtained from the following sources:

- Minnesota Community Paramedic Training Schools
At the time of the survey, one community college offered the Community Paramedic (CP) course approved by the Minnesota State Colleges and University System, *Hennepin Technical College (HTC)*. Data was obtained on the number of students enrolled in the HTC CP course, the number who completed and graduated from the program and the number of students who did not complete the program.
- Minnesota EMS Regulatory Board (EMSRB)
This EMSRB is the state agency responsible for certifying and regulating CPs after they have completed the CP course and clinical work. Data was obtained on the number of certified CPs.
- The Paramedic Foundation (TPF) survey of Minnesota CP Students and Graduates, 2015
The survey was based on a national practice analysis done by the Board for Critical Care Transport Paramedic Certification (BCCTPC). With the permission of BCCTPC, TPF used the survey tool to gather the most up-to-date information about the current and future state of CP students and graduates in the state of Minnesota. The survey contained thirty-eight (38) questions which evaluated how much of the CP training program the student completed; if they did not complete the full CP course, including the clinical portion, what barriers prevented them from completing the course; if they did complete the CP course and were not working as a CP reasons why they are not working in the field; and if they are working as a CP the scope of services they provide, where they provide them, etc. The survey was sent to 99 CP students and graduates in October 2015 and received a 46 percent response rate. The survey tool is in Appendix A of this report. (TPF, 2015)
- Minnesota Ambulance Service Agencies
Ambulance services provided information about whether they were operating a CP program or planning to implement a CP program.

Education and Certification

Community Paramedic Education

Minnesota law requires that paramedics aspiring to become CPs have two years of experience as a paramedic and complete a CP college education program. The curriculum in use by the Minnesota State Colleges and University (MnSCU) system is a 14-credit (roughly 300 hour) course consisting of 114 didactic hours (classroom work) coupled with 196 hours of hands on (clinical) training in various healthcare settings. The clinical settings vary by the type of work the CP will do upon graduation.

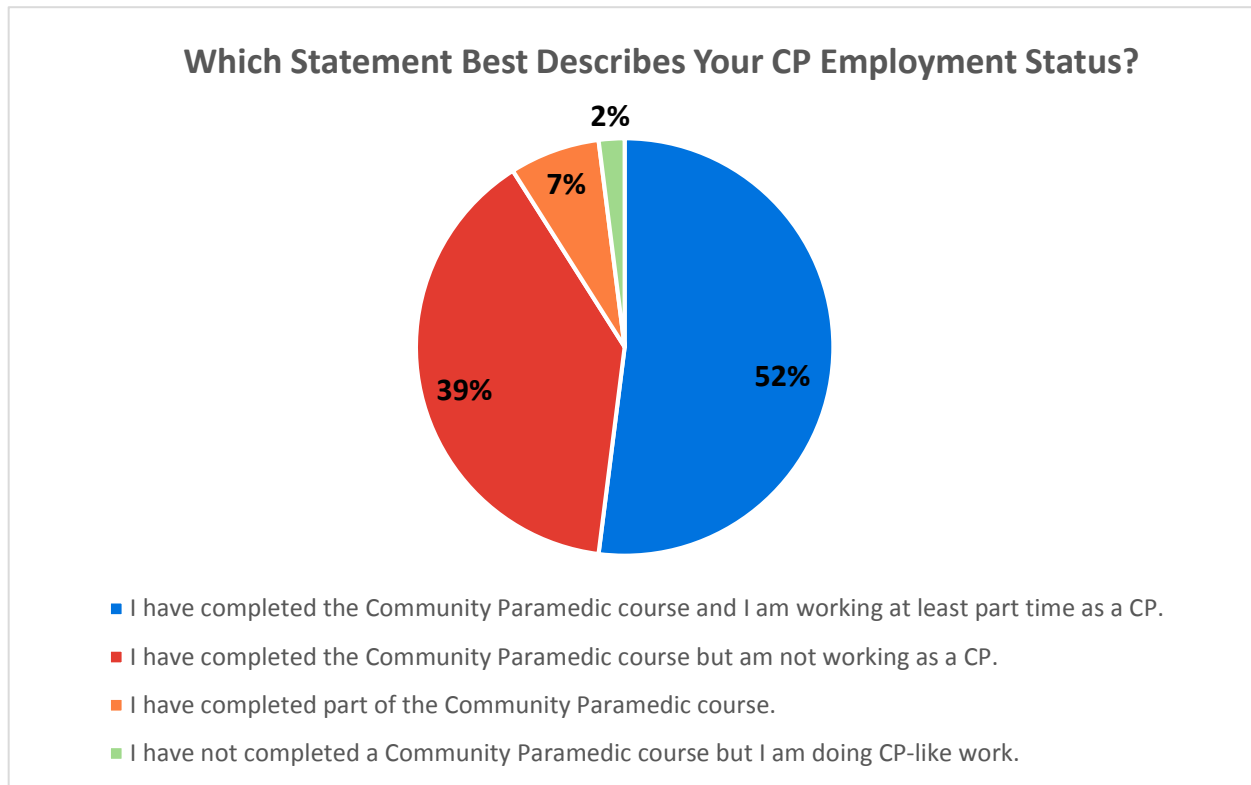
Community Paramedic Program Enrollment

As part of the survey, TPF evaluated HTC enrollment rates for the CP Education Program. The report indicated that since the program began in 2008, 123 students had completed or were currently enrolled in the HTC CP education program.

Community Paramedic Graduates (TPF, 2015)

Based on October 2015 data obtained by TPF from HTC, of the 123 students who enrolled in a course since inception in 2008, 90 students had completed the entire course, a 73 percent completion rate. The results of the survey of Minnesota CPs, highlighted in Figure 1 below, demonstrates that 52 percent or 24 of the 46 respondents said that they completed the CP course and are working at least part time as a CP. So we extrapolate that approximately 47 of 90 HTC CP education program graduates are actually working as a CP. The current employment status, as indicated by the survey results, are reflected in *Figure 1*.

Figure 1: Graduates Employed

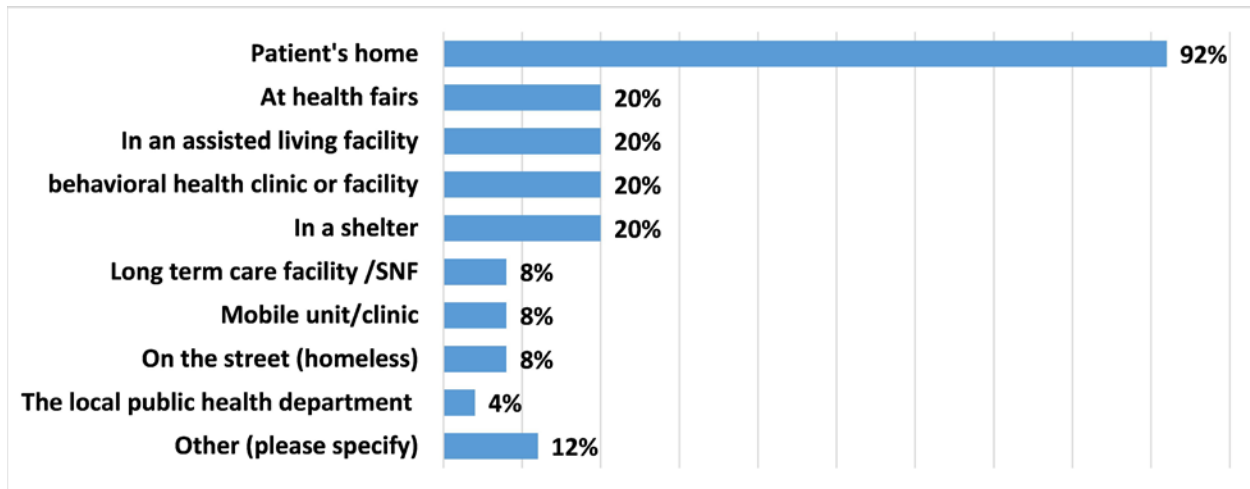


Source: TPF Survey, 2015

Community Paramedic Non-Graduates (TPF, 2015)

Approximately 33 of a total of 123 enrolled HTC students had not completed the clinical portion of the education program as of October 2015. The college source reported 20 of those 33 are still in clinical rotations and 13 are no longer interested in completing the course. The October 2015 TPF Survey of CP graduates and non-graduates asked about the barriers that prevented them from completing the full course (*Figure 2*). Comments made by the students included, *“I have most clinical requirements completed however I have not logged the hours”* and *“I took only the classroom portion by choice.”*

Figure 2: Reasons the student did not complete the full CP Program



Source: TPF Survey, 2015

State Certified Community Paramedics

Information collected from the EMSRB in fall 2015 indicated that a total of 101 CPs were certified, but nine of those are not Minnesota residents. Seven of the nine non-Minnesota CPs live adjacent to Minnesota in Wisconsin or North Dakota and are working for Minnesota ambulance agencies. Two of the certified CPs live and work in states distant from Minnesota. Therefore, 99 Minnesota EMSRB certified CPs are working for Minnesota ambulance services. As more colleges begin CP education courses, the number of certified CPs should increase. Hennepin Technical College has operated a CP education course since 2008, and in October 2015 is operating 3 courses simultaneously. In September 2015, Century College and Inver Hills Community College started admitting CP students into a jointly operated course.

A. Employment

TPF sought to obtain information on the number of Community Paramedic Programs currently operating or in the process of developing a program in Minnesota. Data was obtained from the ambulance organizations, MDH Emerging Professions Integration Grant Program, and TPF's knowledge of existing and developing programs.

1. CP Agencies in Minnesota:

As of October 2015 16 CP agencies are operating or nearly operating in Minnesota. In addition, eight agencies are developing operations.

Figure 3: Community Paramedicine Agencies in MN

Community Paramedicine Programs in Minnesota



Date: October 2015

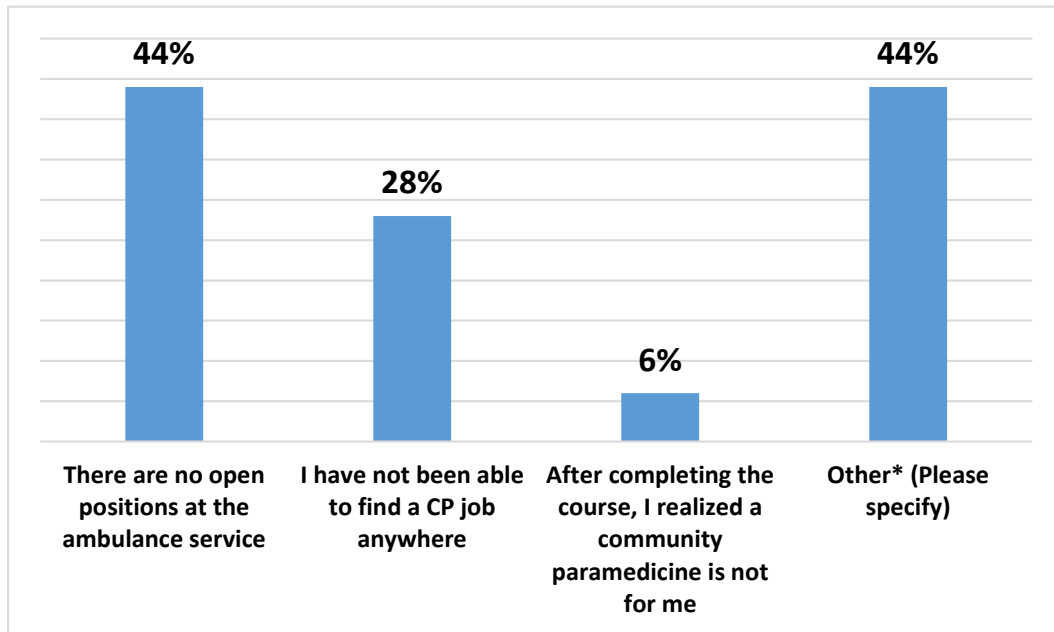
Figure 4: Community Paramedicine Agencies in Minnesota

| 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 | | |

2. Reasons trained Community Paramedics are not working for an agency

In the October 2015 Survey, participants were asked why they were not working as a CP. Over 70 percent of the respondents stated that there wasn't a current CP job opening or position available. Additional comments explained that programs are still being developed and agencies haven't made the positions permanent, causing the paramedics to work in multiple roles. The results are described in Figure 12 and under "Other Comments" below.

Figure 5: Reasons why trained CPs are not working as CPs



Source: TPF Survey, 2015

Other Comments

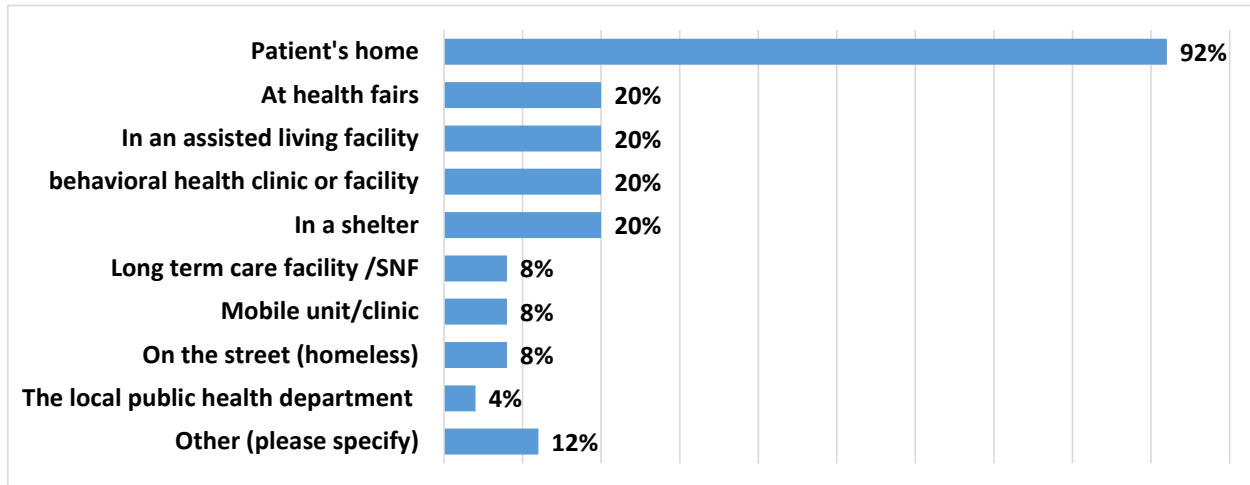
- *The available work with my employer is very far from home.*
- *I haven't actively been looking for a CP job. However, I'm open to the possibility.*
- *I developed, implemented and managed a CP program after 17 months I left the organization. I am an RN and fully believe Community Paramedics are the way to meet patients' needs. Circumstance is the reason I'm not currently connected to a program.*
- *The health system where I am employed wants to get the community paramedic program up and running; however, they cannot find a paramedic to fill my full time position working on the ambulance so until the current position can be filled I am unable to work as a CP.*

B. Settings

Work Settings

The most common place where CPs deliver care is in a patient's home. Ninety-two percent of CPs surveyed are delivering CP services in the patient's home. One-fifth of CPs surveyed are working in a shelter, assisted living facility, behavioral health facility, or at health fairs. Figure 5 details where care is being delivered.

Figure 6: Where CPs Deliver Care



Source: TPF Survey, 2015

C. Services

In the October 2015 TPF Survey, 100% of the participants said the following definition of a Community Paramedic described them:

“A paramedic who has completed a formal, standardized educational program and has demonstrated competency in the provision of health education, monitoring and services beyond the roles of traditional emergency care and transport primarily in an out-of-hospital setting of providing episodic patient evaluation, advice and treatment directed at preventing or improving a particular medical condition, within the scope of practice of the emergency medical services provider as specifically requested.

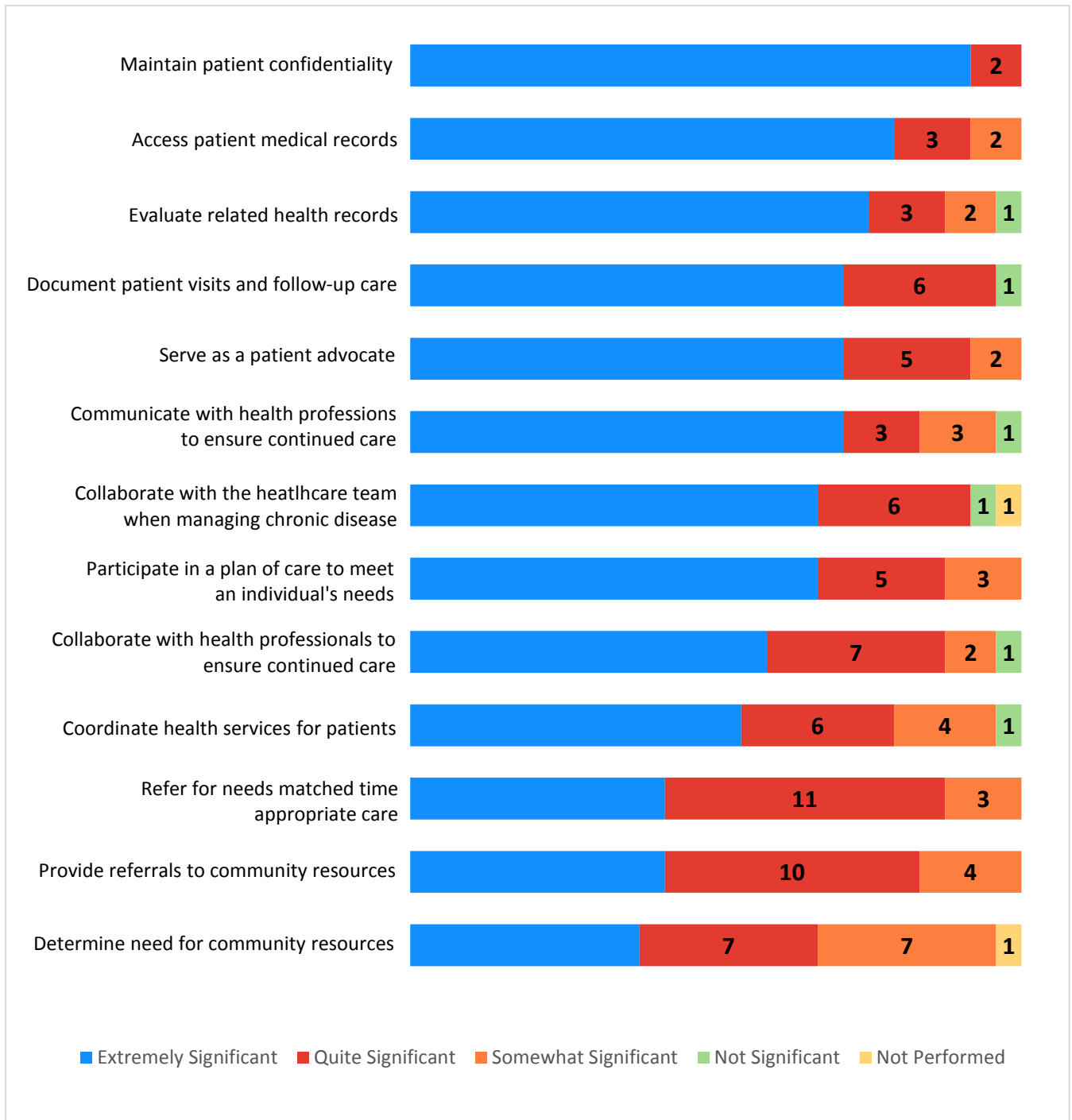
The Community Paramedic works in collaboration with medical or public health professionals with medical direction to improve the health and well-being of individuals by being patient advocates, care facilitators, healthcare liaisons, and resource coordinators.” (BCCTP, 2015)

Beyond the definition, and based on the survey data collected, figures 7-14 illustrate the types of services CPs provide to their patients and how frequently those services are provided. Measuring vital signs and performing an initial history and physical exam are the two most commonly performed tasks, whereas administering blood products and performing well-baby checks are the two least commonly performed tasks. Oral pharmacological agents are the most frequently administered, although administering these is overall fairly infrequent. Respiratory and psychiatric conditions are the conditions that most respondents selected as those treated quite frequently or at every encounter. Allergy and eye conditions were infrequently or never treated.

Overall, wound care was the only minor medical procedure that was treated quite frequently or at each encounter. Wellness and nutrition stood out as a task that one third of respondents said they performed only somewhat frequently.

Figure 7: Importance of each role as a Community Paramedic

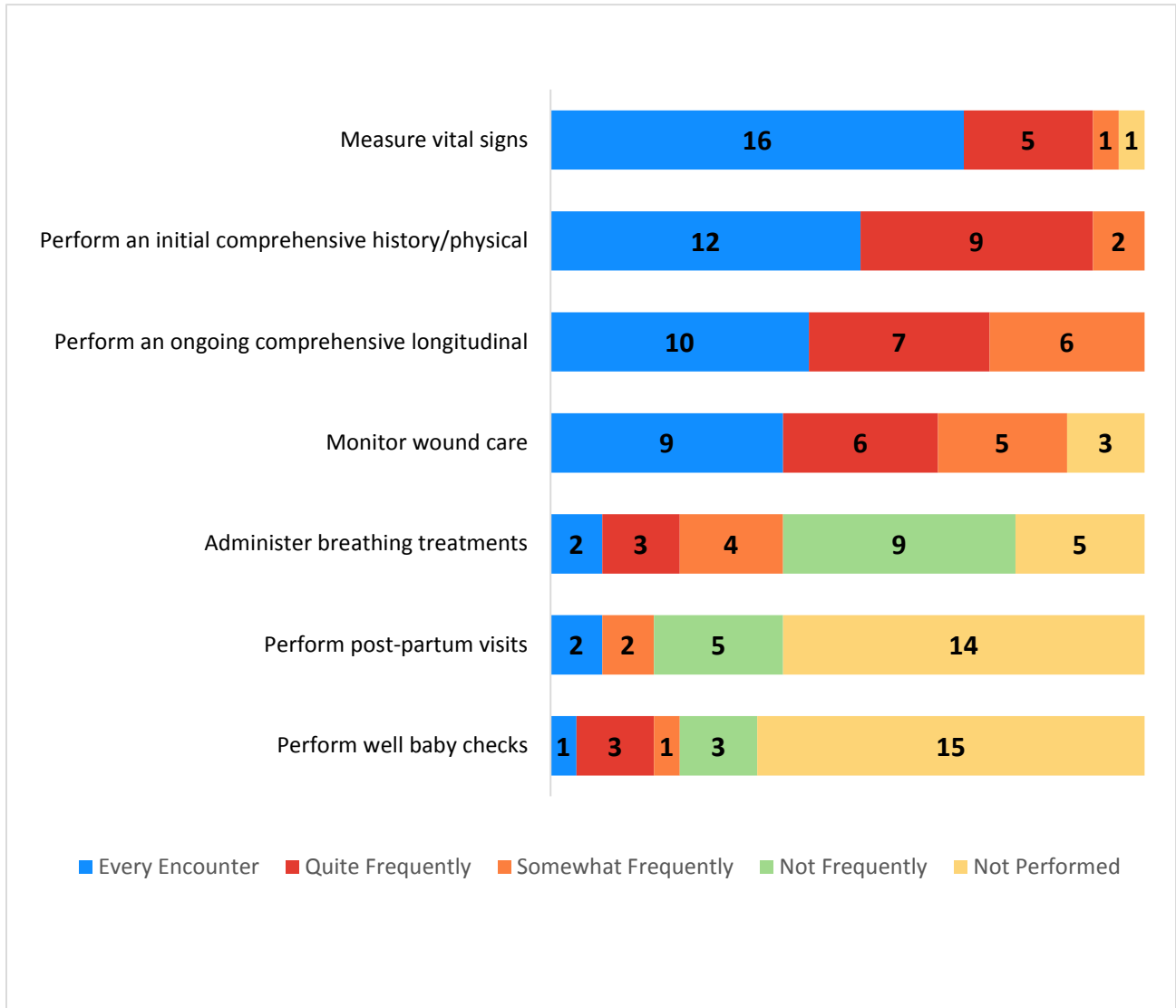
Number of each survey respondent indicating that they do each of the following activities in their work as a CP



Source: TPF Survey, 2015

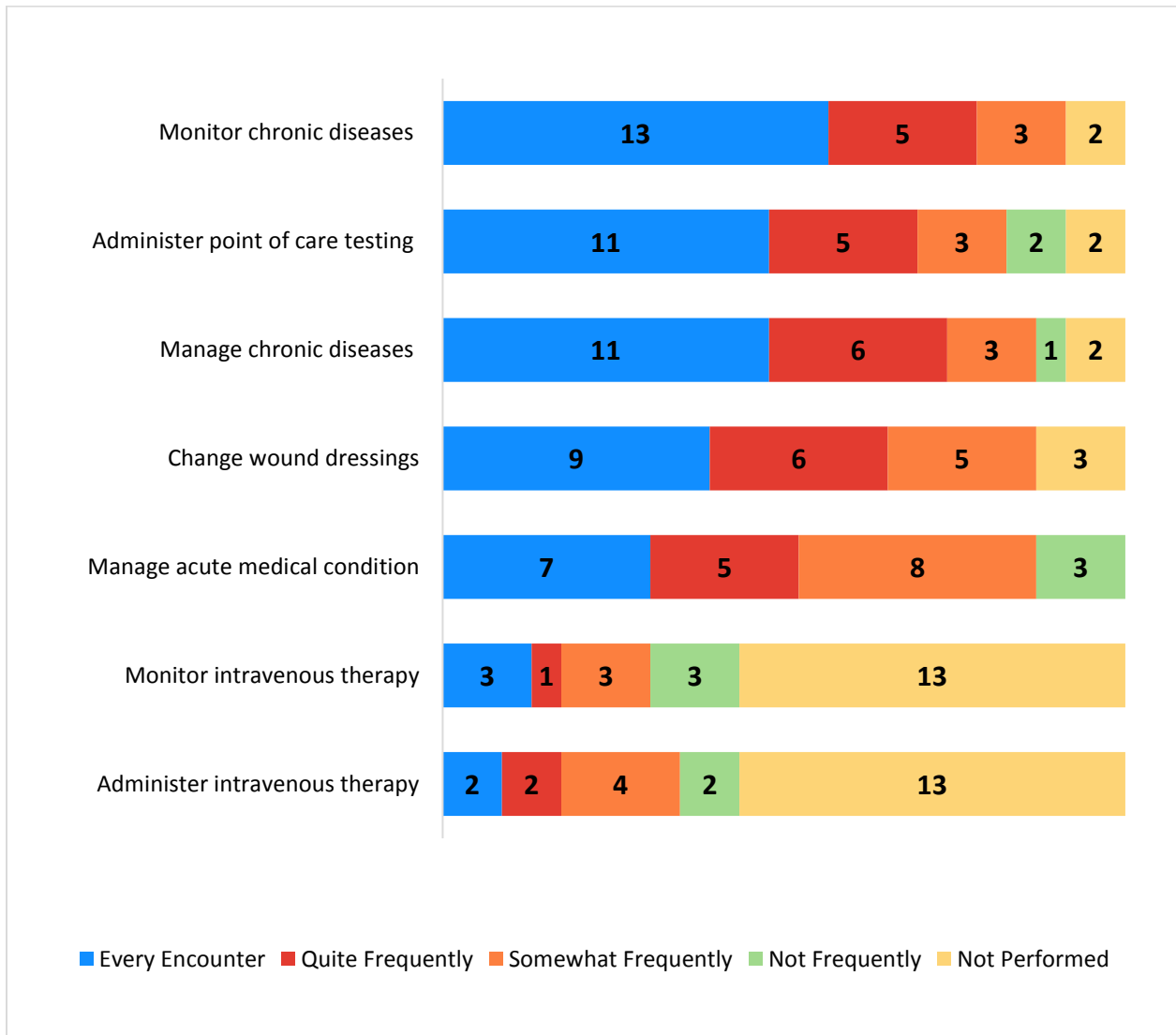
Figure 8: Services provided by Community Paramedics (continued in Figure 9-10)

Number of each survey respondent indicating that they provide the following services as a CP



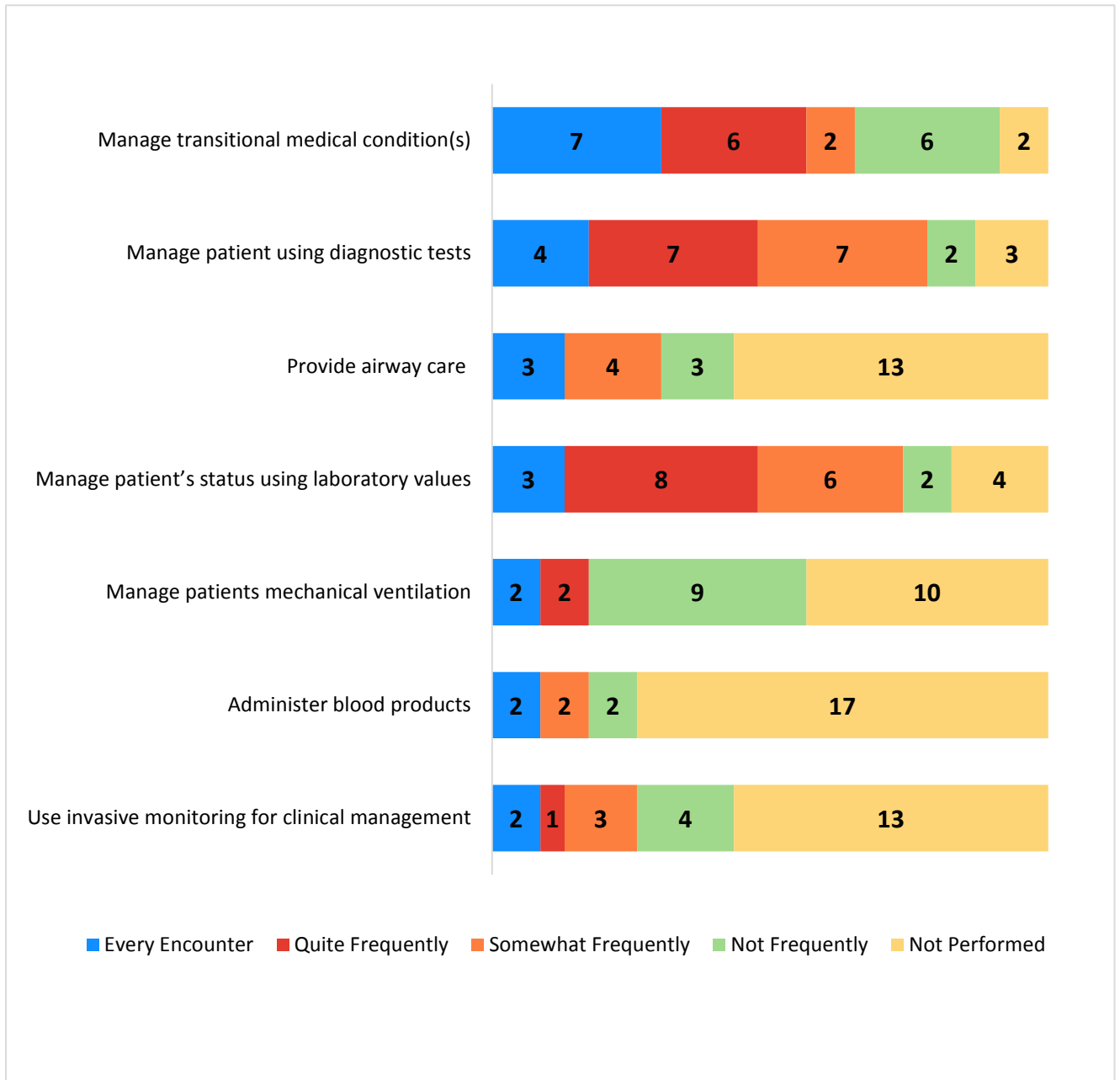
Source: TPF Survey, 2015

Figure 9: Services Provided by Community Paramedics, continued



Source: TPF Survey, 2015

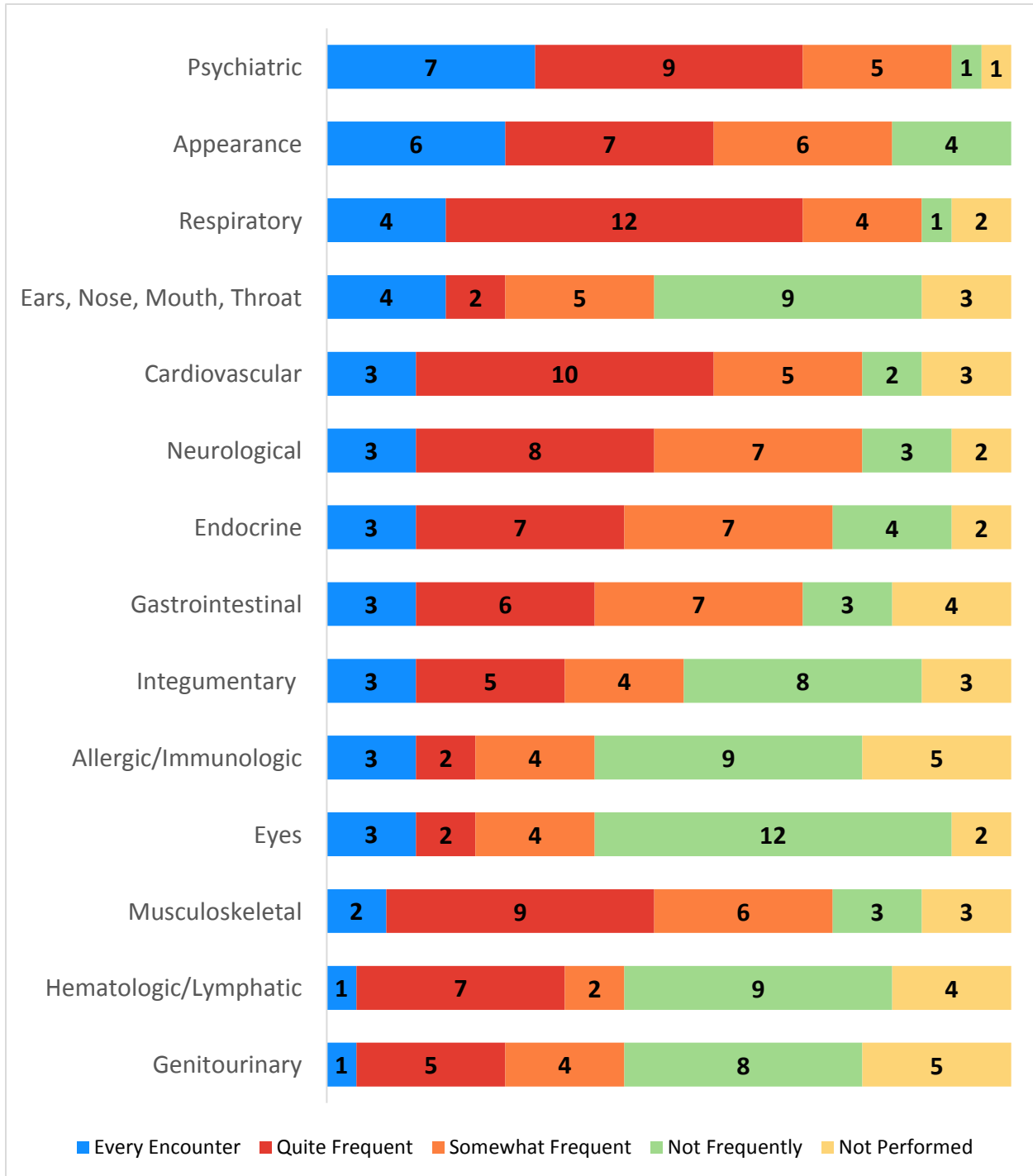
Figure 10: Services Provided by Community Paramedics, continued



Source: TPF Survey, 2015

Figure 11: Manage Patients' with conditions related to the following systems

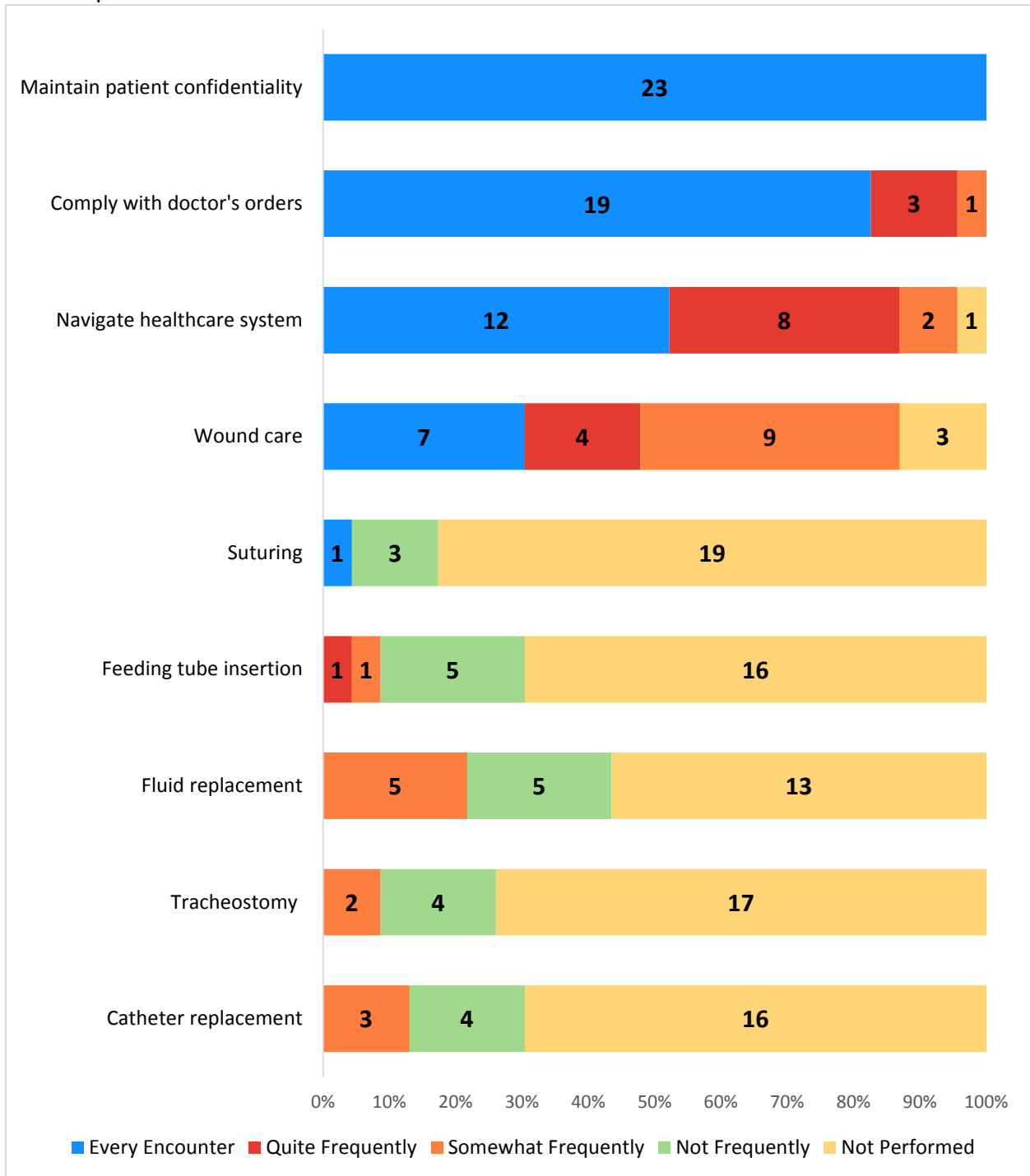
Number of each survey respondent indicating how frequently they manage conditions related to the following systems in their CP work.



Source: TPF Survey, 2015

Figure 12: Frequency of CPs Performing Minor Medical Procedures

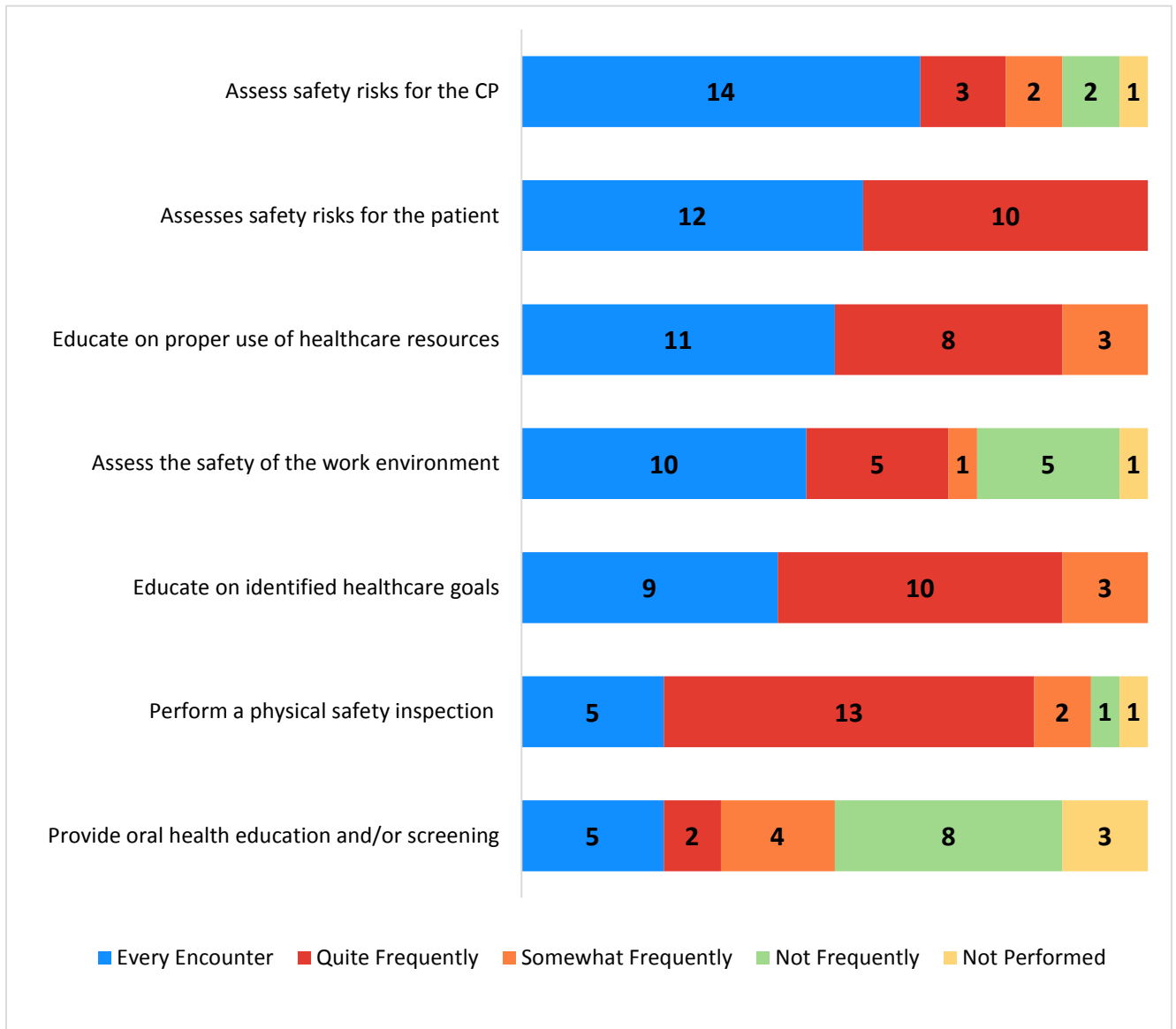
Number of each survey respondent indicating how frequently they perform the following minor medical procedures in their work as a CP.



Source: TPF Survey 2015

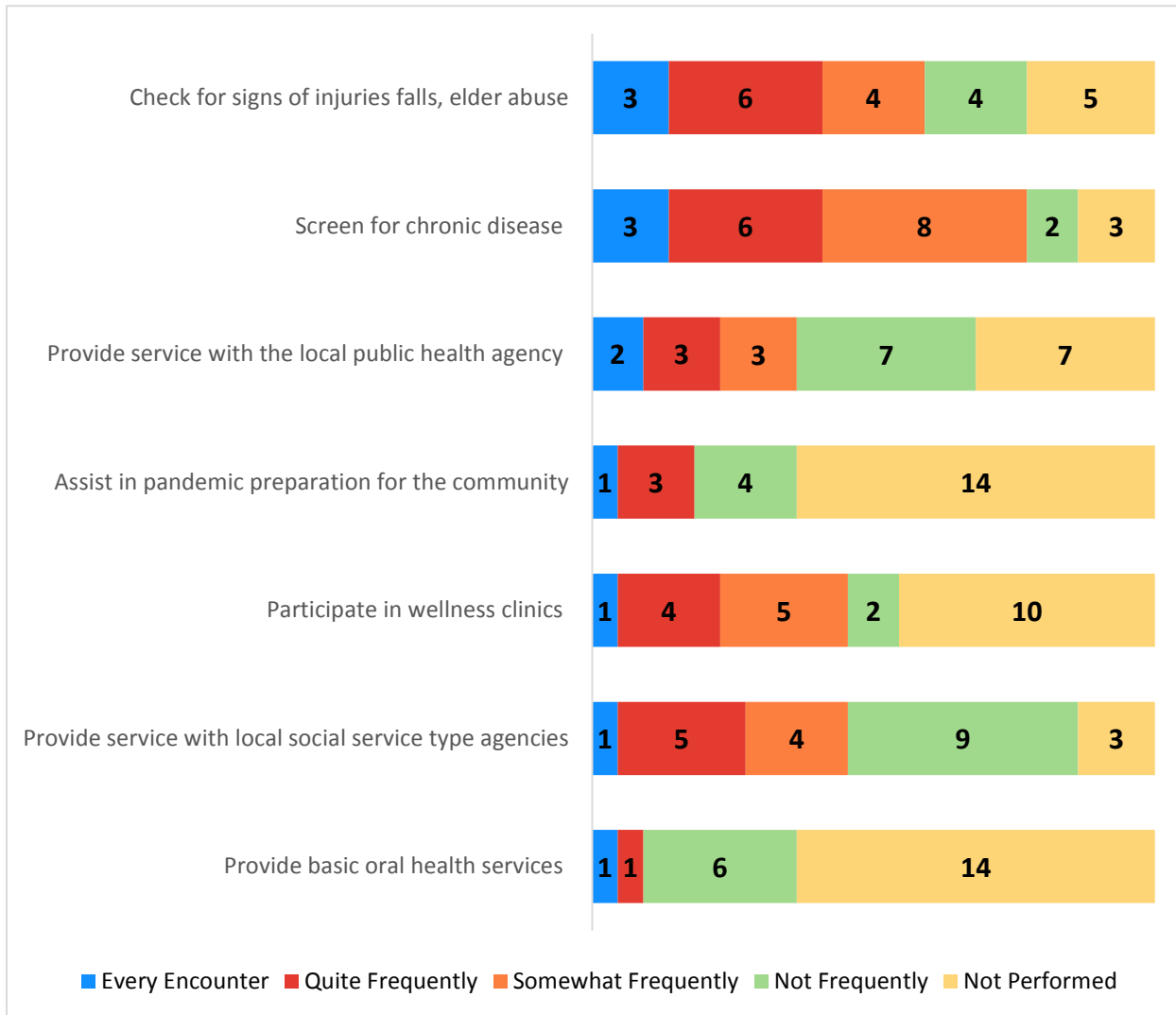
Figure 13: Frequency of CPs performing each task (continued in Figure 14)

Number of each survey respondent indicating how frequently they perform the following tasks in their work as a CP.



Source: TPF Survey, 2015

Figure 14: Frequency of CPs Performing each task, continued



Source: TPF Survey, 2015

Future Growth of Profession

Information obtained from the colleges in October 2015 indicated there were approximately 15-20 individuals who expressed interest in taking the next CP course. This number is consistent with the number of students who have been enrolling in the CP course over the past few years. It is expected that a gradual increase in CP enrollees and graduates will occur with additional programs offered at Hennepin Technical College; the new joint program offered by Inver Hills Community College and Century College; and programs offered by other colleges in the future. This growth is contributing to the changing paramedic profession. The industry is moving towards innovative ways to control costs, increase access to healthcare, reduce hospital readmissions, prevent un-necessary use of emergency rooms and improve the overall healthcare and quality experience for the patient.

Key Findings

Several significant findings demonstrate a possible opportunity for improvement in the future. The survey sent to 99 certified Community Paramedics revealed that 27 percent of students have not completed their course work due to barriers of completing the clinical portion. Finding clinical sites continues to be a challenge for nursing schools and Community Paramedics are evidently experiencing the same obstacle. The technology to log the clinical hours and simplify the reporting process will also need to be updated to ensure accurate reporting of the clinical experience. At the time of this report, solutions to these barriers have not been determined.

This survey indicates that 92percent of care provided by the CP is provided in the patient's home, where they primarily treat respiratory and/or psychiatric conditions. In addition, CPs are managing and monitoring patient's chronic diseases and administering point of care testing. A large percentage of the CPs act as their patient's advocate, which contributes to the care plan and provides necessary communication with health care team members about the patient's needs.

Job opportunities for CPs are not keeping pace with the growing educational programs. Minnesota has 16 active CP programs in the state and eight more still in development, but it was found that CPs are having trouble finding jobs in this emerging profession. Over 70 percent of respondents are either looking for a CP job, waiting for a position to open up at their current place of employment, or managing the operations of a Community Paramedic program but not working as a CP. As programs develop there will be a need to backfill the paramedic positions left by the CP, which will create more jobs for paramedics.

As the workforce shifts, so will the changes to the health care system. CPs are in a developing role within this evolving health care arena; therefore, it will become a priority for health care teams, including EMS, to understand the impact CPs can make to the system. Continued research and education will be necessary to support this process to continue the effective development of this emerging profession.

Appendix

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

References

BCCTP. Community Paramedic Position Summary. Board of Critical Care Transport
Paramedic Certification.