

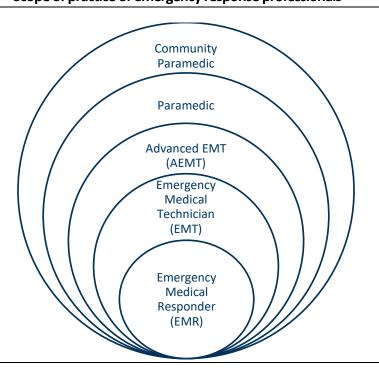
# Minnesota's Community Paramedic Workforce, 2017

HIGHLIGHTS FROM THE 2017 COMMUNITY PARAMEDIC WORKFORCE SURVEY

# Background

A community paramedic is a paramedic with additional training to deliver primary and preventive health care services and to connect patients to local community and public health resources. Community paramedics provide care in patients' homes and community settings, and can perform a variety of direct care services such as health assessments, chronic disease monitoring, medication management, hospital discharge follow-up, and minor medical procedures. These expanded roles are beyond the urgent treat-and-transport roles traditionally played by emergency services personnel, and are designed to expand access to preventive, primary care.

#### Scope of practice of emergency response professionals



Community paramedics were first authorized to practice in Minnesota in 2011. This new emergency medical service provider was introduced to help reduce the need for high cost services such as trips to the emergency room and hospitalizations, in part by providing care in locations more convenient to the patient than traditional ER/clinic settings. To become a community paramedic requires two years of full-time experience as a paramedic and successful completion of a certificate-level education program.<sup>1</sup> Currently, community paramedics are typically employed by ambulance services.

The scope of practice for community paramedics is defined by and in accordance with protocols and supervisory standards established by the ambulance service physician or the medical director of the service employing the community paramedic. The Minnesota Department of Human Services (DHS), under direction from the Minnesota legislature, determines which services performed by community paramedics are eligible for Medicaid reimbursement. Community paramedic services are billed under the assigned medical director, not by the individual community paramedic.

As of February 2019, there were 139 certified community paramedics in Minnesota, according to the Minnesota Emergency Medical Services Regulatory Board (EMSRB).

# **Summary of Survey Results**

In the fall of 2017, the Minnesota Department of Health (MDH) conducted the first survey of all community paramedics certified in Minnesota. The survey and this report of findings are part of an effort to expand knowledge of the profession, and to better understand this workforce and their needs as an emerging profession. The survey asked community paramedics to respond to questions about their current employment situation, future practice plans, educational background, successes and challenges.<sup>2</sup> Summary results are noted below:

- Community paramedics report they provide services in community settings, most commonly in patients' homes. They perform assessments and referrals, support chronic disease management, provide health education, and help manage medication compliance.
- Community paramedicine is emerging as a profession in Minnesota and in the nation. The
  survey found that community paramedics frequently do not work full-time in the profession,
  and often continue to work some of their hours as paramedics or EMTs. Many employers offer

<sup>&</sup>lt;sup>1</sup> To be eligible for certification by the Minnesota Emergency Medical Services Regulatory Board (EMSRB) as an emergency medical technician (EMT), Advanced emergency medical technician (AEMT) or a paramedic, an individual is required to: (1) successfully complete the United States Department of Transportation course, or its equivalent as approved by EMSRB; (2) pass certification-specific written and practical examinations approved by EMSRB; and (3) complete a board-approved application form. Source: Minnesota Statute 144E.28 Certification of EMT, AEMT, and Paramedic.

Emergency medical response providers receive increasing levels of training as roles become more complex<sup>1</sup>. Key areas of training include: airway, ventilation, and oxygenation; cardiovascular and circulation; splinting, spinal motion restriction, and patient restraint; medication administration; initiation and maintenance of fluids. Emergency Medical Responders' (EMRs) are trained to manage an emergency until higher level care is available or more advanced emergency staff arrive. Often police, fire, and security personnel receive this training. EMR training is often a single course. Emergency Medical Technicians (EMTs) are trained to assess and triage until patients have access to more advanced care. Advanced EMTs have even more training to respond. Paramedics play a decision making role at an emergency scene and during transport. Their education programs teach the widest range of medical and decision making skills. Educational programs often offer a diploma or associate's degree. As noted above, community paramedics are paramedics with additional primary and preventive training. Source: National EMS Scope of Practice, 2019. National Highway Traffic Safety Administration.

<sup>&</sup>lt;sup>2</sup> The report also supplements the MDH Community Paramedic toolkit which provides information on integrating the profession into an organization and can be found here: <a href="http://www.health.state.mn.us/divs/orhpc/workforce/emerging/cp/2016cptoolkit.pdf">http://www.health.state.mn.us/divs/orhpc/workforce/emerging/cp/2016cptoolkit.pdf</a>

positions that are divided between community paramedic and traditional paramedic roles, as 93 percent have just one employer. A few community paramedics have two separate jobs.

- Based on survey findings, the hiring demand for full-time community paramedics is not keeping
  pace with the supply of people choosing to train in community paramedicine. Still undetermined
  is whether the field intends to widely use full-time community paramedics or will continue to
  make use of a hybrid position where both paramedic and community paramedic skills are
  utilized.
- Nearly a quarter of the community paramedics surveyed reported that it took over six months
  to find a job as a community paramedic after completing their education, citing a lack of
  opportunities and the slow pace of community paramedic startups.
- Community paramedics are largely satisfied with their work and their education programs. Over 50 percent plan to stay in the field for 10 years or more. Four out of five community paramedics reporting having 11 or more years of related experience as a paramedic or EMT.
- Community paramedics noted some priority areas for action that would help further anchor and develop their profession. These recommendations included the need to increase awareness and acceptance of the community paramedic field, resolution of reimbursement issues, and better alignment of education and training with field skills and outcomes evaluation.

# **Survey Results**

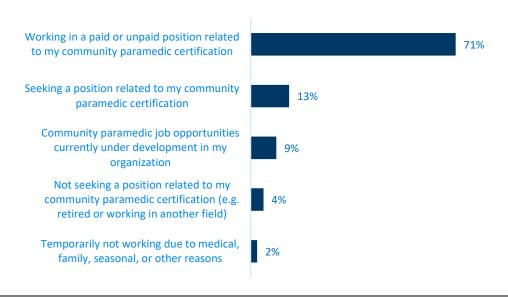
# **Demographics**

The majority (98 percent) of community paramedics are white. Eighty-six percent of community paramedics spoke only English for their work; 10 percent spoke Spanish, and three percent spoke French.

# **Employment**

**Employment and Hours.** Seventy-one percent of Minnesota community paramedics reported they were "working in a paid or unpaid position as a community paramedic." This compares to 91 percent of dental therapists in Minnesota, another emerging profession, reporting they were employed in their new field in 2016. Nine percent reported they had a job identified and were waiting to start work as a community paramedic as soon as the role developed within their organization. Thirteen percent reported they were looking for a job and four percent were not seeking a community paramedic position.

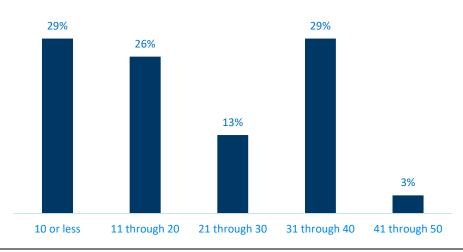
#### **Community Paramedics Work Status**



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 45 survey responses.

The study also focused on trying to better understand the work schedule of community paramedics. Most community paramedics were not working full-time in the field. Twenty-nine percent of community paramedics worked between 31 and 40 hours, while over half worked 20 hours or fewer per week. The median hours worked per week was 20.

#### Hours Worked as a Community Paramedic in a Typical Week



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 survey responses.

Study results show that 70 percent of community paramedics work as both a community paramedic and a paramedic or EMT. The majority have just one employer (93 percent), despite the multiple roles they play.

Community paramedics who also worked as a paramedic or an EMT reported spending a higher portion of their time in these alternative roles. Two out of five spent more than three quarters of their time as a paramedic or an EMT.

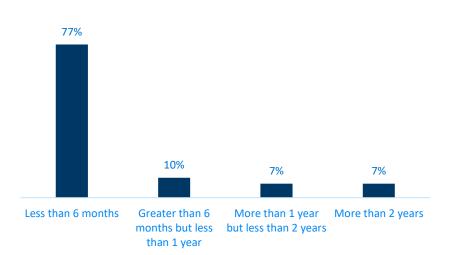
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"What percentage of time in a typical week do you work as a paramedic/EMT?"

Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 23 responses.

**Finding work.** Finding a job in a new profession can be more difficult than in the traditional role. To better understand how community paramedics got jobs, the survey included questions on job search experiences.

While most community paramedics (77%) found their jobs within six months, an additional ten percent took from six months to a year to find a job, and 14 percent took over one year. Those taking over a year to find a job reported the reasons were due to slow start-ups or lack of community paramedic job opportunities.

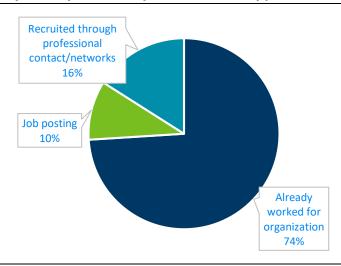


"How long did it take you to find a job as a community paramedic?"

Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 responses.

Most community paramedics went through training and found jobs within the organizations they already worked for (74 percent). The remaining found jobs through professional networks or job postings.

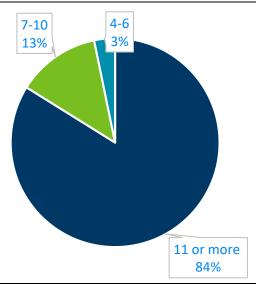
"How did you find your current job as a community paramedic?"



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 responses.

**Experience.** Community paramedics are required to have at least two years of experience as a paramedic, but most community paramedics have much more prior experience. Eighty-four percent of community paramedics had 11 or more years of experience working as a paramedic or an EMT. No community paramedic reported fewer than four years of experience.

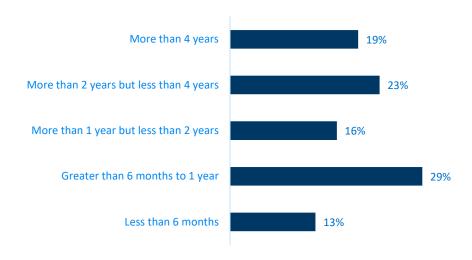
"How many years of experience do you have as a paramedic/EMT?"



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 responses.

Community paramedics have only been authorized to practice since 2011, so job tenure as a community paramedic is limited. Over half (58 percent) of community paramedics reported working fewer than two years as a community paramedic. Just 19 percent reported working for more than four years as a community paramedic.

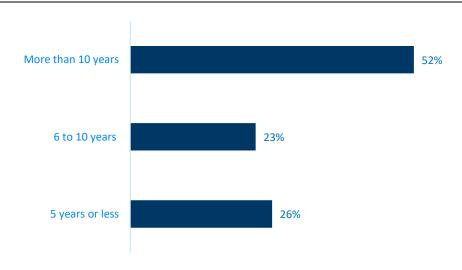
"How long have you been providing community paramedic services?"



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 responses.

**Future Plans.** Slightly more than half of community paramedics plan to continue to practice for more than 10 years. The remaining respondents were evenly split between plans to work between 6 to 10 years and those planning to work 5 years or less. Of those planning to leave the profession in 5 years or less, the majority planned to retire (75%), while the rest planned to pursue additional training to advance their career.

"How long do you plan to continue practicing as a community paramedic in Minnesota?"



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 responses.

**Care settings.** The survey asked community paramedics to identify patient care settings where they provide care. While a wide variety of settings were reported, community paramedics most often assisted patients in the patients' home or clinic. Thirteen percent said they provided services at "other" locations, which included jails and other correctional programs, libraries, restaurants or coffee shops, and the Minnesota State Fair.

**Care Settings: Primary Employer** 

Setting (select all settings that apply)	Share Providing Care 94%		
Patient's home			
Clinic	71%		
Hospital	52%		
Assisted living facility	52%		
Shelter	39%		
Long-term care facility/skilled nursing facility	39%		
On the street (homeless)	36%		
Health fairs	36%		
Workplace (for employees)	36%		
Mobile unit/clinic	19%		
Local public health department	16%		
Behavior health facility	10%		
Shopping mall	7%		
Other	13%		

Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 31 survey responses.

**Services provided.** Community paramedics provide a range of services to their patients. The majority of community paramedics (80 percent or more) say they perform assessments and referrals, manage chronic disease, provide health education, and support medication compliance "all the time" or "frequently."

#### **Services Provided and Frequency**

Service	All the time	Frequently	Occasionally	Never
Medication compliance	53%	40%	3%	3%
Health education	43%	37%	17%	3%
Treat no transport (on-site services without transport to a medical facility)	38%	17%	34%	10%
System navigation (help guide patient through health care system)	34%	34%	17%	14%
Chronic disease care (e.g., congestive heart failure, diabetes, COPD, asthma, stroke)	33%	47%	13%	7%
Care coordination	31%	41%	23%	3%

Service	All the time	Frequently	Occasionally	Never
Assess and refer (e.g., injury, risk assessment, oral health, mental health, fall prevention, social evaluation)	28%	52%	14%	7%
Care plan follow-up	27%	50%	20%	3%
Mental health support	17%	43%	27%	13%
Hospital discharge follow-up	17%	53%	13%	17%
Laboratory services	7%	53%	33%	7%
Medication administration	7%	33%	53%	7%
Clinical care (e.g. 12-lead EKGs, respiratory services)	0%	38%	45%	17%
Minor medical procedure	0%	37%	50%	13%
Immunizations/vaccinations	0%	10%	45%	45%

Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 30 survey responses.

**Career Satisfaction.** Understanding causes of career satisfaction and dissatisfaction are especially helpful as a new profession establishes itself, and are also indicators of worker retention. Community paramedics were asked how satisfied they have been with their career overall and in the last 12 months. Satisfaction is quite high for community paramedics, with the majority reporting being either "satisfied" or "very satisfied" (93 percent) with both their career overall and within the last 12 months. This is similar to other professions, including other emerging professions such as dental therapy.

The most common sources of satisfaction were working with and helping patients. Seeing patients improve was central to community paramedics' job satisfaction. Working with a good team, creating and nurturing positive relationships with patients and co-workers, and practicing with a team care approach that leads to successful patient outcomes were also important to community paramedics.

Sources of dissatisfaction included difficulties with funding and reimbursement, challenges with acceptance of a new profession and difficulties with communication. Other sources of dissatisfaction were the general lack of understanding in the health care industry about the profession's roles and impact on patient outcomes, the unsatisfactory pay, and the challenges related to working in a complex system.

#### "How satisfied have you been with your career..."



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 29 responses

### Education

Education Level. There are three steps to becoming certified as a community paramedic:3

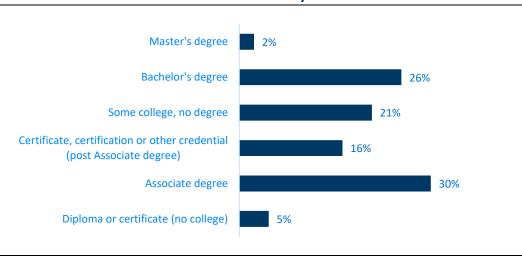
- 1. Certify as a paramedic and work for at least two years.<sup>4</sup>
- Complete a certificate-level accredited community paramedic course currently offered only by the Minnesota State Colleges and Universities system. The coursework consists of 114 classroom hours and 196 hours of hands-on clinic training to build on paramedic skills and develop community health knowledge.
- 3. Apply for certification by Minnesota's Emergency Medical Services Regulatory Board.

<sup>&</sup>lt;sup>3</sup> State of Minnesota Statute 144E.28, subdivision 9, available at: MS 144E.28, subd 9. https://www.revisor.mn.gov/statutes/?id=144E.28

<sup>&</sup>lt;sup>4</sup>To become a paramedic you must complete an accredited education program plus complete a US Department of Transportation course, pass written and practical examinations approved by the EMSRB, and complete and application to the EMSRB. The paramedic programs vary from a 9 to 12 credit certification programs to a two year degree.

Community paramedics come to their work with a variety of educational backgrounds. Survey respondents were asked to note the highest level of education completed. The highest percent of community paramedics have an associate degree (30 percent), followed closely by 26 percent with a bachelor's degree.

#### **Educational Attainment of Community Paramedics**

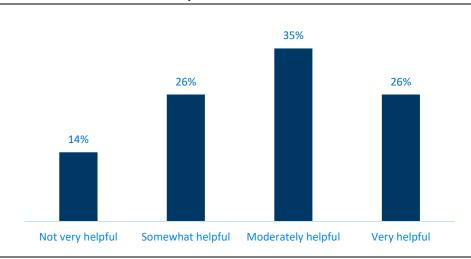


Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 43 survey responses.

**Educational Preparation.** Understanding how well education programs prepare professionals in emerging occupations is important for both the program's and the occupation's success. Community paramedics were asked how well the community paramedicine education program prepared them. Sixty-one percent of community paramedics said their education program was "very" or "moderately" helpful in preparing them to do their work.

Among those who rated their curriculum positively, many indicated that the programs were helpful, supportive, and provided good information. A common theme among those providing negative ratings was a lack of clarity on the most useful skills and abilities to focus on, leading to some gaps in knowledge. A few commented on the lack of opportunities for practical training, and suggested developing a greater focus on interpersonal skills to help with patient interaction.

"How helpful was your Community Paramedic education in preparing you to work as a community paramedic?"

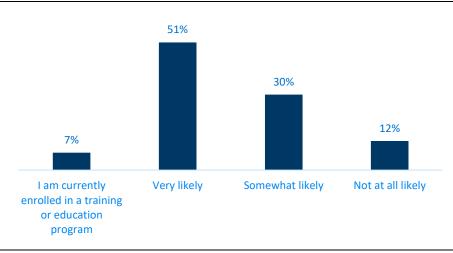


Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 43 survey responses.

Community paramedics were interested in furthering their education, with just over 50 percent "very likely" to enroll in an additional education program and seven percent already enrolled in a program.

Those seeking additional education were most likely to pursue a bachelor's degree. Other areas in which community paramedics would like to augment their skills included mental health, geriatrics, and understanding how to work best in rural settings.

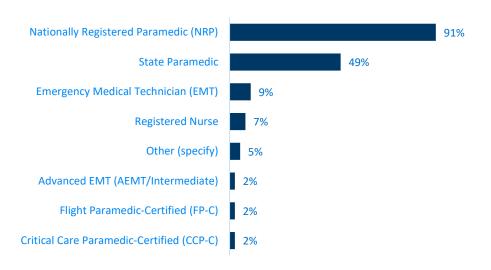
"How likely are you to pursue more education or credential to advance your knowledge as a community paramedic?"



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 43 survey responses.

**Certifications and Credentials.** Community paramedics hold a variety of other certifications and credentials. Almost all community paramedics were Nationally Registered Paramedics (NRPs). State Paramedic certifications were also common.

#### **Additional Certifications and Credentials**

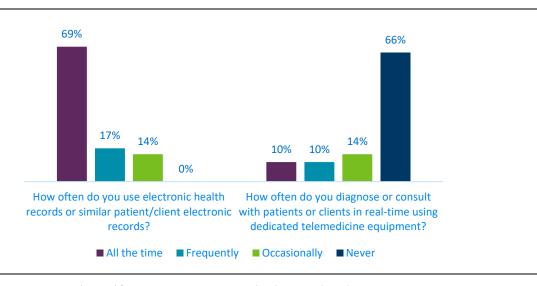


Source: MDH Community Paramedic Workforce Questionnaire, 2017. The chart is based on 43 responses.

# Technology at Work: The Use of EHRs and Telemedicine Equipment.

The survey included questions about the use of both electronic health records (EHRs) and dedicated telemedicine equipment. The results show that 86 percent of community paramedics use EHRs "all the time," or "frequently." Telemedicine equipment was not used as frequently, with only 20 percent using it "all the time" or "frequently."

#### Community Paramedics' Use of Electronic Health Records and Telemedicine Equipment

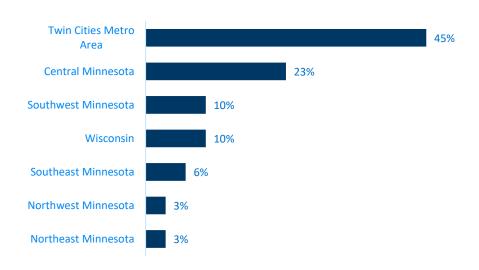


Source: MDH Community Paramedic Workforce Questionnaire, 2017. The charts are based on 29 survey responses.

# Distribution by Region.

Community paramedics were working throughout the state of Minnesota. The highest percentage of community paramedics (45 percent) were in the Twin Cities metro area, followed by 23 percent in the Central region. In comparison, 56 percent of Minnesota's population lives in Twin Cities, 13 percent in the Central region, and other regions of the state each include six to ten percent of the overall population.

#### **Community Paramedics by Region**



Source: MDH Community Paramedic Workforce Questionnaire, 2017. The charts are based on 31 survey responses.

# Recommendations for the Community Paramedicine Field.

Survey respondents were asked to recommend improvements to the community paramedicine profession to move it forward. Recommendations fell into five main categories: profession awareness and acceptance, reimbursement, evolving models of care, education, and evaluation.

- Profession awareness and acceptance: Many comments focused on the need to increase
  awareness and knowledge about the skills and unique roles community paramedics are trained
  to play, especially among physicians, hospitals and clinic staff. Community paramedics noted
  that they often needed to educate others about their work and role while at the job, which at
  times impacted their productivity and effectiveness.
- Reimbursement: Currently, only Medicaid reimburses services provided by community
  paramedics. Community paramedics reported challenges with the limited reimbursement
  sources. MDH is not aware of any third party payers that reimburse community paramedic
  services. Additional revenue streams, such as Accountable Care Organizations or other valuebased payment models may be important in working towards financial sustainability for this
  profession.
- Evolving care models: Some respondents recommended that community paramedics be
  hospital-based and not be tied to an ambulance service. Community paramedics see this as
  potentially making better use of their preventive care training and care coordination skills and
  increasing the stability of the profession.

- **Education**: A number of community paramedics suggested changes to the education programs, including continuing education. Specific suggestions included upgrading from a certificate to a bachelor's degree; and focusing the training on skill development, including topics such as case management, nutrition and connecting patients to resources.
- **Evaluation**: To truly assess the impact of community paramedics on health care access and cost, additional data collection, research and outcomes evaluation are necessary to capture measures such as avoidable hospitalizations and savings accrued to the health care system, care quality, patient satisfaction.

# Methodology

MDH routinely surveys a variety of licensed professionals such as doctors, pharmacists, dental therapists, and nurses. The survey includes information on demographics, education, practice location, career and future practice plans. Additional questions were included in the community paramedic survey to help better understand this emerging profession.

The community paramedic survey was conducted via email between September and November 2017. MDH compiled a list of community paramedics from the EMSRB and other key partners in the field. At the time of the survey, there were 96 certified community paramedics. MDH received 36 responses for a response rate of 38 percent. Although the response rate was low, the respondents were very similar in age and gender to the overall community paramedic population suggesting the survey results are generally representative.

#### **NOTES**

For more information about survey methods and regional breakouts used in this fact sheet: <a href="https://www.health.state.mn.us/data/workforce/method.html">https://www.health.state.mn.us/data/workforce/method.html</a>

Visit our website at https://www.health.state.mn.us/data/workforce/reports.html to learn about the Minnesota health care workforce.

The MDH Community Paramedic Toolkit provides additional information on community paramedics and is especially useful for employers trying to integrate community paramedics: <a href="https://www.health.state.mn.us/facilities/ruralhealth/emerging/cp/docs/2016cptoolkit.pdf">https://www.health.state.mn.us/facilities/ruralhealth/emerging/cp/docs/2016cptoolkit.pdf</a>

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