

How Apprenticeships are Helping Ambulance Services Meet their Workforce Needs in the Midst of an EMT Shortage

Executive Summary:

South Carolina, and the nation as a whole, are facing a critical shortage of trained Emergency Medical Technicians (EMT). In 2019, studies conducted by the South Carolina EMS Association found that the number of students signing up and graduating from EMT courses had declined by 40%. The same study also discovered that turnover was a huge problem, with more than 70% of EMTs leaving the profession after just eight years. With an aging population creating heightened demand for healthcare professionals, this shortage has become a crisis.

Medshore Ambulance Services knows this problem very well and describes the shortage as their own personal pandemic. As the largest privately-owned ambulance service in South Carolina, they have long explored creative options for how to find and retain quality employees. In February 2021, Medshore began providing transportation services for a large hospital system in the Midlands. This magnified their hiring needs significantly.

Medshore knew that they couldn't count on being able to meet these increased talent needs by just posting advertisements. They needed to find a way to expand their applicant pool and grow their own workforce. They approached Midlands Technical College (MTC) to develop a partnership to offer interested applicants the opportunity to become EMT Basic Apprentices.

Project Description:

Working hand in hand with Medshore, MTC was able to quickly adapt our standard EMT Basic course into an accelerated 8-week program that not only prepared students to become Nationally Registered EMTs, but also incorporated 16 hours of curriculum on Healthcare Professionalism and included additional time spent on Medshore specific onboarding training. Students were screened by MTC using an EMS testing platform. The results of the assessment were used to select and admit individuals with the best chances of success in the Emergency Medical Technician Program as well as determine what individuals would be best suited for the EMS profession. The assessment was a seven-part exam that assessed: Reading Level, Basic EMT Math, Current EMT Knowledge, Learning Style, Professional Characteristics, Student Motivation and Test Anxiety. The applicants, including assessment results, were then referred to Medshore for interviews. Chosen applicants were enrolled into the Medshore EMT course at MTC. The cost of tuition, supplies, and exams were covered by a grant through Apprenticeship

Carolina. And, the icing on the cake, Medshore paid the students an apprentice wage while they were in class.

When Medshore advertised this opportunity, they received more than 700 applications in just a few days. By creating an opportunity for interested candidates to have access to the necessary training, they made their career path a realistic possibility for a number of candidates who likely would not have applied because they didn't know how to become an EMT nor did they have the financial ability to pay for the training themselves. The first class of 12 Medshore Apprentices began in Mid-February and completed the EMT Basic course at the end of March. Upon completion, they were ready to take their national registry exam to become EMTs. Medshore was so pleased with the results of the first cohort that a second cohort of apprentices started in May and two more cohorts of apprentices are already scheduled for June and August of this year.

Partnerships and Collaborations:

The project is a collaboration amongst Midlands Technical College, Medshore Ambulance Services, and Apprenticeship Carolina. Midlands Technical College is a comprehensive, multi-campus, two-year public college located in Columbia, South Carolina. Through its programs and services, the college provides accessible, affordable, quality education that prepares a diverse student population to enter the job market. The college's Corporate and Continuing Education Division offers EMT Basic training as part of its standard course offerings.

Medshore Ambulance is the largest privately-owned ambulance service in South Carolina and has provided medical transport services to communities for more than 40 years. Medshore is the first ambulance service to be accredited in the state by the Commission on the Accreditation of Ambulance Services (CAAS), signifying the gold standard in operational and clinical performance in the industry. Medshore hires the apprentices and pays the apprentice a training wage while they are attending the job-related education portion of their apprenticeship. The receipt of apprentice wages while attending training removes a significant barrier for those unemployed or underemployed to participate in exploring a new career path.

Apprenticeship Carolina™, a division of the SC Technical College System, works to ensure all employers in South Carolina have access to the information and technical assistance they need to create demand-driven registered apprenticeship programs. At no cost to the employer, apprenticeship consultants are available to guide companies through the

registered apprenticeship development process from initial information to full recognition in the national Registered Apprenticeship System. Midlands Technical College is a subrecipient in grants received by Apprenticeship Carolina. The funds from the grant are able to offset the cost of tuition and testing for the job-related education up to \$2500 per apprentice. The assistance the grants provide removes barriers for the employers to participate. Amounts above the \$2500 per apprentice are the responsibility of the employer.

Economic Impact:

Wage increases, particularly for those at the bottom of the income spectrum, increase community-level economic activity and support local businesses. Participants in the Medshore apprenticeship opportunity were either unemployed or underemployed and included slightly more than 50% women and 50% minorities, which reduces the pay inequalities for women and people of color. A study in Florida found two multipliers for “Other Health and Medical Services, which includes EMS, employment and income impacts. The employment multiplier used in this study is 1.33, which provides the following impact for the first cohort of eleven and the cumulative impact from all 4 cohorts scheduled through August of this year.

Employment impact multiplier: 1.33 for Cohort 1

- *Direct impact is 11 jobs*
- *Secondary Impact 4 jobs ($11 \times .33$)*
- *Total Impact 15 jobs*

Employment impact multiplier: 1.33 for Cohorts 1-4 by August 2021

- *Direct impact is 48 jobs*
- *Secondary Impact 16 jobs ($48 \times .33$)*
- *Total Impact 54 jobs*

Income impact multiplier: 1.26 for Cohort 1

- *Pay is \$29,120, plus 25% benefits for a total of \$36,400*
- *11 employees*
- *Direct Impact $\$45,000 \times 11 = \$495,000$*
- *Secondary Impact $\$495,000 \times .26 = \$128,700$*
- *Total Income Impact \$623,700 (surge of money into the economy)*

Income impact multiplier: 1.26 for Cohorts 1-4 by August 2021

- *Pay is \$29,120, plus 25% benefits for a total of \$36,400*

- 48 employees
- Direct Impact $\$36,400 * 48 = \$1,747,200$
- Secondary Impact $\$1,747,200 * .26 = \$454,272$
- Total Income Impact $\$2,201,472$ (surge of money into the economy)

While these numbers are estimates based on one study, it is clear that in addition to solving a critical need in the community the economic impact is substantial.

Source:

<https://www.naco.org/sites/default/files/documents/Holmes%20County%20Economic%20Impact%20Report.pdf>

Program Results:

The program is in its infancy and data only exists for the first cohort, but the results are promising and already producing much needed EMT certified workers in our community. The first cohort enrolled 12 students and 11 students successfully completed the class and are eligible to sit for the National Registry of Emergency Medical Technicians certification exam (NREMT). The twelfth student had to postpone completing the class due to an injury, but is currently enrolled in the second cohort. Nine out of the eleven students who completed the program successfully completed their NREMT Psychomotor Exam and 5 out of eleven successfully completed their NREMT Cognitive Exam on the first try. Students who are not successful on either exam will be remediated and then eligible to take the exam a second and third time. All eleven completers are employed by Medshore Ambulance.

Replication:

Apprenticeships are making a difference for Medshore and it is able to make a difference for other organizations facing similar challenges. The key is showing prospective candidates a clear pathway into an industry and supporting them on that pathway by creating an opportunity for them to be exposed to the right training to make them successful. When that training is combined with paid employment, the real magic happens. The fusion of on-the-job training and job-related-education, combined with a clearly defined scalable wage plan, made Medshore's EMT positions incredibly attractive to potential candidates and that made the difference. As stated in the project description section, Medshore's initial cohort was so successful that we are already planning for three more cohorts by the end of the summer. The project's favorable outcomes have inspired three other ambulance services to replicate the Medshore program with multiple cohorts contributing to an even greater economic impact than stated in the economic impact section. The need for trained Emergency Medical Technicians (EMT) is so urgent

that all three organizations moved quickly to register their apprenticeship and schedule training that starts this summer. The model used to begin to lessen the workforce shortage of EMTs is one that can be adopted by any industry facing critical workforce shortages willing to adopt an apprenticeship model.

In fact, Josh Shore, Medshore Ambulance General Manager, is already exploring using the same model to fix the Paramedic shortage facing our region and nation.

“Our company historically has relied upon having certified EMTs and Paramedics. In recent years, we noticed a severe lack of people who were choosing to attend the necessary training programs to get these certifications. We saw this partnership as an opportunity to create a unique approach to get folks hooked on EMS that may not have ever considered it before. Our investment in paying trainee wages and providing a structured on-the-job learning environment, combined with the grant support from the technical colleges, has already helped to produce a significant number of trained EMT Basics in South Carolina. And we have more coming. This has been so successful at helping to tackle the staffing crisis in our industry that we are now exploring ways to apply a similar model aimed at fixing the Paramedic shortage. We are expanding our model across the state of SC to include other colleges as well. We are also very happy to see other companies in our industry following suit and implementing similar apprenticeship models for EMS as the problem isn’t a Medshore problem or a South Carolina problem. It is a nationwide, industry-wide problem. Partnerships like this are the only way this industry will survive long term.”